

both these sources could still turn an unexpected short-term source of income into an important investment for the future.

Finally, the growth in migration ties Pakistan's future more closely to the Gulf than ever before. The process began following the 1971 civil war when the loss of East Pakistan focused the attention of Pakistan's rulers away from the subcontinent and toward Southwest Asia and the Gulf. It was accelerated with the oil price hikes of 1973-1974, when increasing oil revenues made significant economic ties and large-scale migration possible. It is now demonstrated by the presence of hundreds of thousands of Pakistanis in the Gulf, by the rapid increase in trade and aid, and by the evolving political relationship between the two regions. The ties between Pakistan and the Gulf have also taken on a military manpower export dimension with the sending of Pakistani army and air force advisers to several Gulf states and the possible stationing of two Pakistani army divisions in Saudi Arabia.<sup>39</sup> Links such as these, initially as unforeseen as large-scale migration from Pakistan to the Gulf, have increased dependency and drawn the two regions still closer.

## Energy and Security in the Developing Countries

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In the West we most often view the importance of developing countries in terms of the balance of power between the superpowers, and assume that these economies have very little need for the oil that drives our giant industrial economies. These assumptions are wrong. The oil import burden on most developing countries

now poses a critical problem of energy and security for the world. The insecurity of the eighty-five oil-importing developing countries (OIDCs) that are net importers of oil indirectly threatens the stability of OPEC, our allies, and ourselves.<sup>1</sup>

39. See *New York Times* (6 February 1981); and *The Christian Science Monitor* (20 February 1981).

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1. The group of OICDs does not include the thirteen members of OPEC — Algeria, Ecuador,

World War, a battle for Europe, and upheaval in the Persian Gulf are not the only threats to our national security. We must also avert regional disruptions and conflicts that are triggered by energy-related social and political stresses. National cohesion can be shattered by sudden economic contractions (the threat to the OIDs) as well as by rapid economic growth (the threat to the oil-exporting nations). Vital U.S., as well as local and regional, interests are at stake. Disruption in Turkey, for example, undermines the NATO alliance and weakens our ability to reinforce the Persian Gulf; turmoil in the Philippines could end our use of the critical naval base in Subic Bay; and war in South Korea, Central America, or the Caribbean is likely to involve the United States directly. Furthermore, political upheaval or military conflict in bordering countries could directly or indirectly stop oil exports from producers such as Indonesia, Gabon, Libya, Algeria, and Nigeria.

The OIDs face the same general national security threats from energy as do other oil-importing countries: disruption of normal social and economic conditions due to oil shortages, economic and political turmoil caused by unexpected and rapid increases in oil prices, and foreign policy costs, including war. Unlike most developed countries, however, many OIDs would be severely threatened by even continued, moderate increases in the real price of oil.

### *Economic and Political Effects*

The threat of economic and political upheaval of OIDs arises from the effects, both direct and indirect, of oil price increases. Although most OIDs import relatively small amounts of oil, these imports are as essential to the economy of a one or two-crop agricultural-exporting nation, such as Ghana, as they are to a newly industrialized nation like South Korea. Within the group of eighty-five OIDs, almost fifty depend on imported oil for 90 percent or more of their commercial energy use. With exceptions, such as India, Pakistan, South Korea, and Zambia, all of the OIDs depend on oil imports for between 50 and 90 percent of consumption.

The economic situation of numerous OIDs today is precarious. While attempting to adjust their economies after the worldwide recession and inflation experienced in 1974 and 1975, they confronted a new round of recessionary and inflationary forces brought about in part by the real oil price increases and the economic slowdown of 1979 and 1980. Oil price increases, from about \$13 per barrel in 1977 to \$35 per barrel in 1979 and 1980, were rapid and enormous in

Iran, Iraq, Gabon, Indonesia, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela — and the other energy self-sufficient or oil-exporting less-developed countries: Angola, Bahrain, Brunei, Congo, Egypt, Malaysia, Mexico, Oman, Syria, Trinidad and Tobago, Tunisia, and Zaire.

absolute terms. The recessionary and inflationary pressures will continue at least through the early 1980s. Many experts forecast continuously tight oil markets and real price increases, perhaps five percent per year, over the next five to ten years, and their estimates rely on the highly unlikely assumption that oil markets will not be disrupted again in the 1980s.

The oil price increases have five critical effects. First, and most important, is the reduced economic growth rates of the industrial nations which adversely affects the growth of two-thirds of the OIDs' export markets. These markets are the most important element in the developing nations' overall economic growth and their only real hope of absorbing the new oil import burden. A second and related problem is that of weakening terms of trade. The third adverse effect is that oil payments pose a severe structural balance of payments problem and represent an increasing share of the importers' foreign exchange earnings. Fourth, the shortage and increased cost of energy have forced OI DC government officials to raise the price of gasoline, diesel fuel, kerosene, and other products and slowed national economic growth rates. Finally, lower growth rates in OECD countries and a decline in the real price of oil received by OPEC countries from 1975 to 1979 have undercut OECD and oil exporting countries' foreign aid programs while making commercial banks in the developed countries more cautious about loans to the OIDs.

Since growth rates in the OECD countries are now predicted to be no higher than two percent per year in the 1980s, or at least until 1985, the growth in demand for primary products will be weak, and access to the markets of developed countries for manufactured goods may be restricted by protectionist measures. In the meantime, rapid real price increases continue for imported goods, especially food, petrochemicals, machinery, and manufactured products. The OIDs will have to devote an increasingly large fraction of their foreign exchange earnings to imports during a period when their rates of growth in exports will be decreasing. The price booms experienced by some OIDs in their commodity exports of 1973-1975 were not available in 1979 and 1980 to help compensate for the higher prices of oil and other products.

The direct burden of increasing real prices for oil imports threatens to create enormous — perhaps even insoluble — balance of payments and debt service problems. Current balance of payments deficits in the OIDs jumped by about \$34 billion, from \$36 billion in 1978 to \$70 billion in 1980. What is more disturbing about current imbalances is that while OECD countries are generally able to even-out their trade deficits over time, OI DC deficits continue to deteriorate steadily.<sup>2</sup> The overall annual debt service of the OIDs grew from about \$10 billion in 1973 and 1974 to over \$30 billion in 1978. Furthermore,

2. For an excellent discussion of the problem, see Benjamin J. Cohen, *Banks and the Balance of Payments* (Montclair, New Jersey: Allen Osmond, forthcoming 1981).

the level of reliance on external financing, especially from private sources, has skyrocketed at a time when intermediate and longer term prospects for commercial borrowing appear to be declining.<sup>3</sup> Annual debt service is rapidly becoming a drain on the economies of many OICDs. As oil price increases consume more of their export earnings, countries are borrowing on increasingly harder terms to fund unmanageable annual debt service and oil import requirements. These strains are reflected in an increase of debt service problems in the 1970s. The number of countries that fell behind in their multilateral debts jumped from three in 1974 to eighteen in 1978, and this increase occurred even before the oil price shock of 1979 and 1980. This inability to cover oil imports with export earnings is already a serious problem for several countries which, as it continues and spreads, may pose a severe structural dilemma for the international financial system.

Yet another reason for a pessimistic prognosis for the OICDs in the 1980s is the combination of high and persistent world and OICD inflation and high interest rates. Aggregate average inflation levels over the period 1974 to 1977 increased from 7 to 11 percent for the oil exporters, and from 7.7 to 25 percent for the OICDs.<sup>4</sup> Brazil, for example, faced an inflation rate of 41 percent in 1978 and over 80 percent in 1979. Higher interest rates now limit the previously positive effects of inflation in increasing real government revenues and reducing foreign debt.

It is tempting to underestimate the serious plight of the very low-income OICDs because of their small size and relative unimportance in international financial and commercial markets. Although they raise less attention and concern, their balance of payments problems and economic growth-rate problems are the most virulent of all the oil-importing countries. Their primary commodity export markets are the weakest and most vulnerable to disruption by oil price increases and other fluctuations in the international economy. Official aid from developed countries, which these countries desperately need, consistently declines when their need is greatest. Countries such as Kenya and the Philippines are now being forced to drop or drastically revise economic development plans built on years of economic expectations and political commitment. When cuts must be made, human service programs are among the first to be abandoned.

As economic conditions change, and especially when they do so abruptly, they affect and are affected by a range of political variables. Economic factors lead directly or indirectly to such political events as protests, demonstrations, strikes, coups and revolutions, crises, conflicts, and wars between nations. One

3. Debt service on commercial loans to the OICDs grew from less than \$6 billion in 1973 to over \$23 billion in 1978.

4. See, for example, *World Bank Rural Development Report* (Washington D.C., 1980).

working hypothesis to explain this phenomenon is that economic deterioration aggravates regional, ethnic, and religious tensions within a society. Abrupt fluctuations in real wages and inflation — whether up or down — seem to be particularly conducive to political change.<sup>5</sup>

It is possible to isolate economic conditions or indicators that warn of impending political change. Rapid increases in the price of oil imports, for example, may or may not be passed on to consumers by a national government. If passed on, price increases in essential commodities such as kerosene for heating and cooking, or diesel fuel for transport and electrical generation could trigger a range of actions from political protest to violence. When such increases are only partially passed on, or not passed on at all, oil import costs are subsidized by governments. In many OIDs, these subsidies are causing increasingly severe drains on government revenues, public and private investment (especially in energy resource development), the foreign exchange available for imports, the balance of payments, and debt service burdens. Governments are thus forced to reduce economic growth rates, or, borrow heavily in international capital markets, or both. Most OIDs have only one option — to borrow as much as possible from the IMF and then cut economic growth as necessary.

In short, when higher energy prices are not passed on to the consumer, the resulting economic problems undercut the political system's ability to maintain normal social and economic activity and public order. When these costs are passed on, protests and demonstrations against the government frequently result. Specific examples of this pattern are numerous: the demonstrations in the Philippines in the early and late 1970s and in Jamaica in 1979, strikes in Jamaica and Peru in 1979, and violent protests in the Philippines in the 1970s and in Brazil and Jamaica in 1979.

### *Foreign Policy Costs*

Internal political change interacts directly and indirectly with foreign policies and international political events.<sup>6</sup> A weakened coalition government, for example, may be more likely either to invite coercion by another country or to take similar action against a neighbor to gain control of domestic political events. Such actions may, in turn, induce direct or indirect intervention by a regional power or a superpower. Regional balances of power and disputes, especially over boundaries, are also aggravated by the location of energy

5. See James C. Davis, "Toward a Theory of Revolution," *American Sociological Review*, vol. XXVII (February 1962), pp. 5-9.
6. See Glen H. Snyder and Paul Diesing, *Conflict Among Nations* (Princeton, New Jersey: Princeton University Press, 1977), pp. 510-530; and Jack A. Goldstone, "Theories of Revolution: The Third Generation," *World Politics*, vol. 32, 1980, pp. 425-453.

resources. Crises and even conflict in the Third World may now become increasingly visible and threatening to international security.<sup>7</sup>

For the OIDs, the foreign policy costs of their energy dependence include heavy pressure for acceptance of Arab political positions as a price for special concessions and aid. Perhaps most important for the longer term bargaining power of the OIDs is their gradual split with OPEC over oil price increases. Their unique foreign policy challenge is to maintain alignment with the oil exporters on general resource management issues while trying to prevent and cope with the effects of oil price increases. Political instability and foreign policy costs in the OIDs can also affect U.S. foreign policy and security. At stake are vital U.S. trade and financial interests, rights to military bases and facilities, foreign policy objectives, and the overriding commitment to avoid war.

If growth continues to be constrained in the OIDs, trade will suffer worldwide. The fastest growing trade sector for many industrialized countries is with the less-developed countries. In fact, U.S. exports to the Third World reached \$42 billion in 1977, including 50, 60, and 70 percent, respectively, of wheat, cotton, and rice exports. Over the 1970s these U.S. exports grew at an average annual rate of 22 percent, as compared to 15 percent for exports to industrialized nations.

No matter what conditions prevail in the oil market, balance of payments financing and international monetary stability link the vital foreign policy interests of the OIDs with those of the industrialized countries. The United States has special powers, responsibilities and risks, in the commercial banking institutions, the public international banks, and even the Eurocurrency market. Creditworthiness and liquidity already demand attention as threats to the economic stability of several OIDs. In the event of a major disruption of oil supplies, this problem would be severely aggravated, forcing many OIDs to curtail economic growth drastically and face potential political turmoil. The result would be a severe strain on the international financial system, with strong pressure on U.S. government — through U.S. banks and the multilateral institutions — to support the rescheduling of debt for many OIDs.

Revolutions, coups, or even cabinet changes in countries such as Turkey, the Philippines, and Panama could end or severely limit American use of critical military bases. Communications stations and air force bases in Turkey, air stations and a large naval base in the Philippines, and many other facilities worldwide could be shut down as abruptly as the U.S. bases in Iran. In many OIDs, especially those with severe economic problems, foreign military bases are themselves a political liability for the governing regime since they provide a continual target for use in mobilizing political opposition groups.

7. See Gerald W. Hopple and Paul J. Rossa, "International Crisis Analysis: Recent Developments and Future Directions," Annual Convention Paper, *International Studies Association*.

Third World crises, instability, or shifts in alignment caused by economic or energy problems and by pressure from OPEC nations can be factors controlling U.S. foreign policy objectives. Our ability to muster votes in the U.N., mediate the Middle East peace negotiations, verify strategic arms control treaties, and maintain military alliances depend on the economic and political capacity of OIDs such as India, Turkey and Brazil. Our supreme foreign policy objective of avoiding war also demands that attention be paid to numerous territorial disputes such as those in the South China Sea or the Aegean Sea, which are aggravated by energy resources, and to regional crises and conflicts involving countries such as Pakistan, Thailand, and the Sudan.

#### POLICY RESPONSES

Given the economic structure and needs of most OIDs over the next decade, energy self-sufficiency may be an unrealistic, if not a counter-productive, goal. Most OIDs will continue to rely on current or even higher levels of petroleum locally. More energy can and must be produced locally, however, and much remains to be done in the management of demand, especially product pricing. A combination of domestic, bilateral, and multilateral policy measures must be tailored to the specific circumstances of each OID.

#### *Domestic Responses*

Each OID should develop a domestic energy security program with at least four components. Most important are preparations for a short-term disruption of oil supplies. Developing substitutes for oil is a critical element in these preparations. There should be continuing efforts to displace gasoline and diesel in the transportation sector and new emphasis placed on substitutes in industrial and agricultural uses and in electricity generation. Small-scale and large-scale hydroelectric power and even coal can displace oil in future power stations and a limited number of existing plants. Nuclear power stations may also eventually replace oil for electrical generation in a few OIDs, but not on a time scale relevant to the energy security problem.

It may be expensive to hold large stockpiles of crude or oil products, but the option should be considered seriously. Direct embargoes by oil producers against OIDs may be unlikely, but producers do use oil exports as tools of their foreign policies and accidental interruptions affect OIDs at least as quickly as they do other oil-importing countries. Brazil, for example, lost 400,000 barrels of oil per day from Iraq — almost one-half its imports — as a result of the war with Iran in 1980. India lost a staggering 80 percent of its oil

imports from Iran and Iraq. In all OIDs, but particularly where large stockpiles are financially difficult, preparations should also be made for emergency taxes to reduce demand and for short-term emergency distribution plans to allocate oil for essential uses such as fire, police, and medical services.

The second set of advisable energy security measures addresses demand management. There may well be serious political opposition to energy price increases in many OIDs; but realistic pricing policies that, could, for example, be phased in gradually are absolutely essential to macroeconomic management. Low prices distort both demand and supply and help create shortages, which are politically explosive. If prices do not approach world levels, it is extremely difficult for many countries to maintain current oil production levels and to attract foreign investment for new exploration and production. There may be clear cases for exceptions, such as kerosene or naphtha used by the poor for heating, but even here some price signals may become necessary to encourage improved efficiencies in consumption and the introduction of substitute fuels.

Access to crude oil refining capacity, required refined products, and transportation for crude and products forms yet another set of issues. The OIDs must improve both their own capabilities and their access to foreign capabilities in all three areas. In the cases where OIDs have some local refining capability most of the refineries are based on simpler technology which produces a greater proportion of heavier products. This makes the OIDs highly vulnerable to disruptions in types of crudes and oil product imports, especially the lighter products — as well as in quantities of imports. During supply disruptions, they may be quickly forced into spot markets for access to the most expensive products. This calls for upgrading of local refineries or arrangements for access to products or refinery capacity elsewhere.

The trend of increasing government-to-government and other direct contracts is particularly strong in the OIDs. During past supply interruptions, OIDs have generally had access to oil in producing countries if they could find adequate tankers and refining capacity. They must, therefore, also pursue arrangements now that would provide emergency transportation.

The final domestic response to the energy security emergency should be to permanently control or reduce oil imports. In many cases, OIDs will be hard-pressed over the next decade to do so. For the middle-income countries in particular, economic growth rates are high and energy use per unit of production is much greater than in the industrial nations. As income levels rise and urbanization and industrialization accelerate, many OIDs will demand more energy.

Finally, the accelerating shift away from traditional fuels toward oil in many developing countries requires that better forestry and land management programs be instituted to halt environmental degradation which could do much to preserve traditional energy sources.



### *Bilateral Responses*

Beyond the prudent management of energy security policies at home, the most important remedial OIDC actions, are bilateral. Three, in particular, demand urgent attention: concessional oil prices; access to trade markets; and guarantees of oil supplies during emergencies. Iraq provided over \$170 million in long-term interest-free loans to poor OIDCs in 1979 to offset surcharges on oil contracts. Other OPEC producers kept sales to OIDCs at official contract prices in 1979 to help on access and price. Venezuela and Mexico now have in place a program of loans to offset 30 percent of the annual oil import bill for Caribbean and Central American countries. This is an important example, but it is only a start.

Trade questions are also best handled bilaterally. In negotiations with the oil exporters, OIDCs must work to uncover new export markets and create every possible opportunity for barter deals and local investment. With OECD and Council for Mutual Economic Assistance (COMECON) countries, the dedeveloping nations must increase current exports and new ones, work even harder to gain access to markets for manufactured products, and do the best they can to promote reasonably steady demand for traditional exports. None of these areas offers bright prospects due to slowed economic growth in industrial countries and conservative financial and monetary policies in most oil-producing nations. Even so, more may be gained between countries than on the broader multilateral level. Continuing increases are also essential in the growing trade and investment between OIDCs.

Bilateral assistance should also be accelerated in developing renewable and commercial energy resources and in managing traditional fuels. Producing countries can be drawn on for increasing technical assistance, especially in oil production and contract negotiations with the multinational companies. This assistance should also be extended to refining industries and transportation arrangements. OECD countries can do much more in terms of training of OIDC officials in energy security planning and management.

### *Multilateral Responses*

Broad international efforts toward operational activities are frequently inefficient or impossible, but less ambitious multilateral agreements can become invaluable catalysts of much-needed reform. OPEC in particular is a crucial forum for negotiations to avoid sharp price increases for OIDC oil imports, to support bilateral or even broader concessions on oil prices, and to motivate increasing purchases by oil producers of real and financial assets in the OIDCs.

The OECD, including the International Energy Agency, can at least clarify and emphasize OIDC needs for help from the industrial countries. OECD ef-

forts in comparative data collection and distribution can improve information on aid flows, macroeconomic policies, trade policies, and foreign investment affecting the OIDs. The OECD should be used more extensively by Western industrial governments as a forum for exchanging commitments to avoid behavior harmful to the OIDs, especially strongly deflationary policies; protection by OECD governments of weak traditional sectors in their industry and agriculture; and decreasing aid flows. It can also be used to offset the harmful policies of other organizations, such as the severe European Community barriers to agricultural imports from Turkey and other oil-importing countries.

The effects of oil price increases on OIDs leads to the urgent requirement for careful monitoring of balance of payments financing and international debt management. Although the magnitude of the financing requirements in the 1980s can only be met by the commercial banks, the International Monetary Fund and the World Bank must clearly become more involved. Reductions in the conditions and increases in the volumes of IMF balance of payments financing can help. Yet allowing countries to continually roll over debt service with loans on harder terms will not solve the problem. Unless there is real progress in increasing OIDC exports, gaining concessional oil-import pricing, and improving bilateral foreign aid flows, the international financial institutions are unlikely to be able to handle the recycling burden alone. Recycling was handled surprisingly well in the mid-1970s, but strains on the system are accumulating in unprecedented fashion. New oil supply interruptions in the 1980s, which are quite likely, will further strain the system. Advance preparations for larger, if temporary, international financial assistance are absolutely essential if these interruptions are not to have disastrous consequences.

Foreign aid and cooperative resource development projects form another set of multilateral responses. The new World Bank program in commercial fuels development can be important if it facilitates local OIDC initiatives, multinational corporate investments, regional development bank projects, and bilateral assistance. Arguments that OIDC absorptive capacity is saturated in energy programs and investments do not stand up to empirical evidence. Much more can be done, especially with programmatic rather than specific project assistance. The OECD, the European Community, OPEC, Arab development funds, U.N. organizations such as the UNDP, and various cooperative arrangements among the OIDs must also stimulate private sector investment and contribute badly needed funds to energy development in the OIDs.

These institutions are also essential catalysts for multilateral and bilateral programs in technology transfer, such as in solar energy and in energy planning and management. Even when the institutions themselves cannot provide assistance directly, they can stimulate government tax incentives, local business ventures, and loans from regional development banks.

## CONCLUSION

Energy resources are, more than ever before, international commodities. Their rates of production, consumption, and conversion affect the economic growth and social well-being of people around the world. Pricing of and access to petroleum now dominate the activities of nations in the international economy. However, the socio-political economic and security implications of the world oil market for the OIDs, must be brought to the fore in international and national arenas.

It was not until the late 1970s that some of the industrial countries and non-governmental organizations began to focus on energy problems in the OIDs. For various reasons, most of the OECD, centrally planned, and OPEC countries had been obsessed with nursing their own economies since the oil embargo of 1973. Even now, many OECD countries are only concerned about possible competition from the OIDs for scarce oil in the next decades.

The OIDs themselves, in order to assert solidarity with OPEC on broad international economic and political principles, avoided any public discussion of energy issues until after the second round of price increases in 1979.

Under both normal and disrupted oil market conditions, issues of credit-worthiness and liquidity in the OIDs link their vital foreign policy interests with those of the OECD nations, especially the United States — a factor which must be recognized. The OIDs are finally calling for assistance from other countries, the private sector, and international organizations in managing energy problems. The importance of cooperation in such areas as developing and marketing new energy technologies, for example, is now apparent. What may not yet be clear is that the OIDs, as well as the OECD nations, must be prepared for new and worse oil supply and price disruptions in the 1980s.

For at least the next decade, OIDs will remain extremely vulnerable to external energy price and supply shocks. Countries such as Turkey and the Philippines will face severe pressure to adopt foreign policies sympathetic to the goals of the oil exporters, especially to cut all ties with Israel and to support an independent Palestinian state. Weaker economic growth in the OECD and COMECON nations will only make OIDC problems worse: the growth of OIDC export earnings is unlikely to keep pace with increasing import costs, especially for petroleum, and harder economic times will weaken foreign aid flows from the industrial nations. Aggravated by increased energy costs, economic pressures on OIDs will intensify. Even with prudent macro-economic management, governments may face untenable political opposition to the direct and indirect effects of increasing energy prices. As increasing crime rates, student and union protests, and violent rioting confront governments, it may become increasingly difficult to hold governing coalitions together and to enact sound fiscal and monetary policies.