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Fluctuations of Oil Price and Energy Policies in the ESCWA Region

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I. Structure of oil trade and impact on prices

The scenarios pertaining to future oil prices tend to vary in certain respects. The degree of price changes and their expected years of occurrence constitute the main elements of divergence. Yet, these scenarios generally agree that a future price rise is anticipated sometime around the mid-nineties and that a future price shock is not expected to occur.

The analysis of supply and demand of oil takes certain structural shifts into consideration. Much more attention should be given to this aspect of oil trade. It is useful at this juncture to elaborate on some of these shifts because they have a bearing on ESCWA region policies. A medium to long-run approach necessitates the assumption that factors affecting the oil market are ipso facto variable. Thus, the relaxation of any conditions on the length of the period under consideration would render the analysis more dynamic.

On the demand side, there are structural shifts in the population of the West, where demand for oil may be considered as a "cash crop". Population growth in the West is static, if not declining, and the average age is increasing. As a result, the demand tends to even out vis-a-vis population in terms of size and composition.

The other demand shift variable is the change in the sectoral structure of the economies of the developed countries. The technological achievements therein have enabled these countries to diversify their economies away from energy-intensive activities. Therefore, the industrial demand for energy is going to decline even more in the future. This tendency is buttressed by two complementary factors: the aging populations which prefer to work in activities requiring a high level of skill and education, and the growing recognition of environment related problems provoked by oil-generated pollution. The environmentalist movement is picking up political and social momentum. On the other hand, the structure of the demand for oil in the advanced countries has been deeply affected by the oil price shock of the 1970s which revealed the degree of vulnerability of the developed countries vis-a-vis the oil-producing countries. Thus, momentous efforts were exerted to conserve energy, and to diversify energy sources by intensifying nuclear electricity generation and coal burning facilities and the encouragement of the use of renewable energy sources. The oil price shock has advanced the cause and stature of oil substitutes to the point where these countries would not wish an oil price decrease to below \$10 to 12 per barrel.

However, one must remember that the structural shifts causing a decline in the demand for oil operate in such a way as to cause a dampening effect on the demand for the sources of energy such as coal and nuclear energy. Both pollute and are more expensive. Thus the demand for oil which may not witness an increase, will not decline as fast as users would like. Moreover, renewable sources of energy are still far from being close substitutes for oil and gas. The other important fact is that the demand for oil still displays sensitivity to its price in the short run. Seasonal and weather factors also play an important role.

The demand for oil in developing countries reveals a different picture. Oil consumption is still very low and on average it is about 10 barrels per day (bpd) per thousand of population as compared with 67 in the United States of America (USA), 37 in Western and Northern Europe and Japan, and 24 in the centrally planned countries.

Moreover, the industrial and transportation patterns in these countries reveal a high growth potential, especially if the international division of labour makes it more imperative to transfer energy-intensive bulky industries from North to South. This is actually taking place and the comparative advantage rational substantiates its continuation. The population growth in developing countries is still high and the bulk of the population is relatively young. Thus, all shift variables indicate a substantial increase in demand for oil in these countries.

However, the growth in demand in the short-run does not reinforce the prediction of greater demand. Most developing countries face deep economic problems and in the short-run most of them are embarking on a expenditure-saving adjustment process. Yet, once they are committed to specific projects to meet development needs, the demand for oil will become a top priority.

In general, the global demand for oil will eventually increase and the developed and developing countries will find themselves in competition for oil from the ESCWA region, which is the largest oil depot in the world. The developing countries may not be able to pay in cash and thus they may insist that a partial settlement of their oil bills with the exporting countries be made in kind. Barter and countertrade arrangements may become much more important in the future. Moreover, oil producing countries may face increasing pressures to recycle their petro earnings in the forms of soft loans, and direct and indirect investments in oil-importing developing countries.

If this scenario is acceptable, the expected patterns of future oil trade may put developed countries in a "Catch-22" situation. For one thing, they will see greater South-South trade developing at their expense, and for another, they will face higher oil prices without being able to contain the harmful effects such prices could cause to their current socio-economic modus operandi. On the other hand, if they use their position of strength, namely the need of developing countries for technology, trade barriers, the prevention of heavy industry transfers, and refusal to reschedule or soften the terms of loans extended to developing countries. If developed countries undertake such measures they would run the risk of impoverishing developing countries. This could eventually cause conflict, interrupted trade flows to the South and deterioration of the already slack North-South relations. Such an outcome is not in the strategy nor is it in the interest of the North. Therefore, greater pressure may be applied on the oil-producing countries in order to take the interests of the North into account. Such pressures could take a stream of alternatives ranging from refusal to sell spare parts to interventions which may seriously affect the economic and social development of developing countries.

II. Options for the consideration of ESCWA countries

In the event of a rise in oil prices and a shift in the demand for oil, the oil producers in the ESCWA region may consider the following courses of action:

1. The first aspect pertaining to fluctuating oil prices which oil-producing countries should take into account when drafting their energy policies is to consider the impact on their economies resulting from shifts in the geographical structure of demand. The basic shift parameters in the demand for fossil fuel may favour developing countries. Thus, the payment mechanism for oil exports may change. It may not be in cash in total. Importing developing countries will probably utilize their emerging bargaining power to ask for lines of credit to pay for oil imports, concessionary development loans, balancing trade exports to oil producing countries and direct investments. Therefore, the oil trade may become a more complex operation. Such a possibility should be envisaged in the energy pricing policy. The opportunity cost of repayment may become higher in the future. Optimal pricing may need to be reviewed in the light of this possible shift in trade.

2. The second important factor which needs to be taken into consideration is the gradual shift in the demand for gas at the expense of oil. It is very difficult to assess the amount of increase in the demand for gas, but recent trends indicate that it would increase particularly for electricity generation and household uses. Gas is less of a polluting agent than oil and its carbon emission is much lower. Recent studies revealed that the 1987 estimates of gas reserves in the Arab World were 21 trillion cubic meters in both associated and non-associated forms. Moreover, this figure is likely to double in the future which will leave the Arab World in control of about 30% of total world resources. Gas is basically located in Algeria, Qatar, Saudi Arabia, Iraq, Bahrain, Egypt and Syria. This shift in the demand for the different fossil fuel elements may impose new facts. First, gas is much more expensive to transport and distribute to ultimate clients and this affect its competitiveness. It could also require greater infrastructure projects of local and regional dimensions.

The distribution of available gas reserves is different from that of oil, and a shift in the demand favouring gas may lead to a new ranking among fossil energy exporters. This may require a new pricing arrangement. Will gas be treated outside OPEC or will it become an integral part of the quota-price-total production scenarios? A package of fossil fuels pricing and quota system may be the better option notwithstanding the difficulties it would add to the OPEC dialogue.

3. The basic fact to be reckoned with in the future is the increase in the relative importance of ESCWA countries in total world fossil fuel resources. The rate of depletion and the new discoveries favour the ESCWA region. By the end of this century, ESCWA oil producing members will control 60 to 70% of world oil reserves, and as time goes by, this percentage will increase dramatically. Time preference analysis should dictate the search for an optimal formula between present and future. A closer look at the policies of individual oil producing countries indicate that their views diverge on this

matter. The degree of divergence depends on a number of factors and, inter alia, these factors are: the present need for foreign exchange to meet revenue needs and repayment of loans, the size of proven reserves, existing oil production capacity and the relative importance of oil exports to the total commodity exports of the country. It is obvious that a country with smaller oil reserves can afford to sell now at higher prices especially if its indebtedness is low and its foreign reserves are high. Moreover, if demand for gas picks up, countries which do not have large reserves of nonassociated gas may want to increase their oil production to produce more associated gas. Therefore, time preference analysis may be a source of inertia in the attempt of oil producing countries to agree on production and price policies.

In this respect, oil producing countries could create some sort of "foreign exchange pool" where countries who may sacrifice in terms of oil exports to ensure a unified price policy are compensated by a soft loan which they may repay in the future once they are allowed to increase their production. In this pool, each country would contribute about 5 to 10% of its foreign exchange earnings from oil. This will eventually become an "oil price stabilization fund". Such a fund will not be without problems, but it could be worthy of serious consideration in the light of the advantages which could result from it.

4. The fourth parameter which may be of importance is the use of oil as an industry input. There are more than 62 thousand oil derivative products. The world is gradually becoming more cautious about many of these commodities because of their polluting and anti-health effects. Chloro-Flouro-Carbons (CFCs) are being banned, and this ban could eventually affect the demand for oil-based-products whose use depends on CFCs. Other products may follow. However, the shift in this industrial demand for oil may not reach a threatening limit in the near future. Oil producing countries may want to take this possible development into account and expand their own downstream production capabilities of oil-based products. Thus, pricing of oil for these industries may become an issue among ESCWA member countries. However, if domestic demand for oil constitutes a notable share, then domestic oil prices may become an OPEC issue. Domestic oil prices (especially oil derivatives) may occupy greater importance in their effect on international oil prices.

5. Part of the oil cost to the ultimate user is shipping and distribution. Making larger investments by oil producing countries in the refining shipping and distribution business could prove to be a very important factor affecting oil and gas pricing policies in the future.

6. Oil producing countries may have to make a choice whether to consider substantial investment in the development of renewable energy resources. The Western developed countries are keen about fully exploring the chances of overcoming the technological difficulties they face in utilizing renewable energies. Their motives are obvious. These sources are cleaner, import-saving and could prove to be of great profit particularly in developing countries. Yet, so far, the problems of capital investment in energy conversion and storage devices are the areas where breakthroughs are yet to be made. Oil producers may be concerned with the possibilities of achieving a

success in the utilization of solar energy because of the impact such a success on the market size and prices of oil. But, the oil-exporting countries themselves have abundant solar energy potential which could be utilized in the ESCWA region, particularly in rural areas, and for water pumping, desalination and purification purposes.

The short sighted intuitive approach could lead to resistance to the encouragement of renewable energy sources. However, the approach to participate actively in the utilization of renewable technologies is worth considering. Oil producing countries should invest in renewable energy, bearing in mind that certain levels of oil prices may be a different factor to such energy policy orientation.

III. Conclusions

In summing up the various issues discussed consideration should be given to the following:

1. A possible shift in world's demand for oil in favour of developing countries.
2. The gradual change in demand for gas at the expense of oil.
3. The relative increase in the importance of the ESCWA region's oil reserves relative to the world's total.
4. The on-going pressure to discourage the proliferation of polluting oil-based industries.
5. Changing patterns which affect the cost of oil shipment and distribution.
6. The possibilities of achieving breakthroughs in renewable energies.

These factors affect both the supply of oil in the ESCWA region and the demand for it in a mixed way. It is therefore difficult to assess the exact future of oil prices. Moreover, the economic conditions prevailing in particular in oil producing countries affect their oil pricing policies to varying degrees. Countries in immediate need of foreign exchange may wish to get the highest returns. The optional oil price they would like to get depends on the price of their reserves. Thus, a unified position should be developed among oil producing countries. The September 1989 OPEC meeting in Geneva revealed the extent of divergence among oil producing countries, especially those in the ESCWA region. They need to develop mechanisms to resolve differences among them if they want to turn the oil market into a sellers market.

