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PROBLEMS IN OIL SUPPLY

Opening Address

by

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at the

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The subject assigned to me for the opening address of your conference is "Problems in Oil Supply." Perhaps a good starting point for this theme is last week's OPEC ministerial meeting in Geneva. Despite global media attention it was really a non-event. For well over two months prior to the meeting there was a strong and frequently voiced expectation among professional OPEC watchers that prices would not be changed at the meeting, with the possible exception of those for Saudi crudes. For economic reasons it seemed highly unlikely that prices would be raised in the midst of a global oil surplus of unprecedented dimensions. At the same time, there was no doubt that even in this surplus market OPEC still had the collective power to prevent a price decrease if it had the political will to do so. Since 12 of OPEC's thirteen members opposed a price decline while OPEC's most powerful member favored it but did not want to risk a break-up of OPEC over the issue, one could predict with some confidence that the meeting would be likely to agree to a status quo on prices for the time being, since they could not agree on much else. This was one of the rare instances where most oil experts could justly claim their foresight was as good as their hindsight.

The big question is of course, what will happen next? I don't propose to spoil my forecasting record by speculating now on the OPEC prices adopted next December, except to point out that the freeze of OPEC prices for all of 1981 must be viewed against the

background of continued substantial inflation during this period. This is likely to create a more favorable atmosphere for price increases at the December OPEC meeting than was the case last week. In the meantime export requirements for the most expensive category of OPEC oil, the African crudes, will continue to decline most rapidly, putting further downward pressure on the prices of these crudes.

But rather than guess at the magnitude and diversity of the next OPEC price increase I propose to examine briefly what would happen if the price of OPEC oil were to continue to increase significantly in real terms through the 1980's. Please note that I am not predicting such a development. But following an increase of more than 700% in the real OPEC oil price during the last nine years, the question of whether this trend will continue on any significant scale over the next nine years is of course of the utmost importance to both producers and consumers. Let us consider the hypothesis that it will, so that we may examine its consequences. Let us further agree that the significance (in monetary terms) of future price increases can not be measured by the yardstick of the historically unique increases of the last nine years. Thus, a real (inflation adjusted) percentage increase in the OPEC marker crude price between now and 1990 of just one tenth of that experienced in the last 9 years certainly fits our concept of significant.

I would like to start my analysis with my conclusion, namely that while significant further real oil price increases would

obviously hurt the importing countries which would have to pay them, in the longer run--say 7-10 years--they could hurt oil exporting countries even more. If this conclusion is correct then further significant real price increases would obviously not be in anyone's interest, for we would no longer play a zero-sum game in which one side's loss is the other side's gain. Instead, all players would lose but, over time, the producers more than the consumers.

One may ask why has this not been the case in the period since 1973. OPEC price increases caused the transfer of hundreds of billions of dollars from the importing countries, enabling the OPEC economies to grow at rates not deemed possible prior to 1973. The economies of the importing countries, on the other hand, registered significant declines in their growth rates, due partly to the higher oil prices.

There were of course many reasons for the world's remarkable compliance with OPEC's price edicts. But an important one was undoubtedly the fact that directionally the price increases were in line with emerging market developments. It is now generally accepted that the 7.5% growth rate in non-Communist world (NCW) oil demand during the 1960's and early 1970's was well in excess of what the world's oil producing structure could have technically supported much longer. Had it continued for just 5 more years (at 7% annually), NCW oil demand in 1978 would have been 67 million B/D, 16 million B/D more than was actually consumed. There would

have been no way of coming anywhere near to meeting such a demand level even if all OPEC members had produced at capacity rates in 1978.

Thus, while one can argue, correctly, that the 1973/74 OPEC price increases were too abrupt and too large, there is no question that substantial real price increases were required from about 1974 on to balance future world oil supply and demand.

As we know, OPEC real prices declined for several years following the 1973/74 increase. In the U.S. the decline of the OPEC marker crude over the 4½ year period between the 2nd quarter of 1974 and the last quarter of 1978 was about 12.5%. In countries whose currencies appreciated relative to the dollar during this time the decline was substantially more. Partly because of that price decline and partly because of the revived strength of the world economy, NCW oil demand after 1976 seemed to settle into an underlying annual growth rate of about 3%. This was the actual rate in 1977 and 1978 and the generally predicted rate for 1979 prior to the Iranian revolution. Had this growth rate continued to 1985 it would have resulted in an NCW oil demand of nearly 63 million B/D, 11-13 million B/D more than is currently forecast for 1985.

The resource base is certainly there for a 3% growth rate into the mid-1980's,but the rate would have run afoul of the announced production policies of several OPEC members (even if there had been no Iranian revolution) as well as some non-OPEC oil exporters. Thus,

some further real price increases would probably have been required in the early 1980's to reduce the world oil growth rate somewhat more. This requirement was sharply strengthened by the Iranian revolution which took at least 2.5 million B/D, equal to 5% of NCW oil demand, out of the market for an indefinite period. This was accomplished by the production policy adopted and practiced by the revolutionary regime as soon as it came to power in early 1979.

Hence, once again, market forces would have raised real oil prices substantially from 1980 or 1981 on to reflect the new reality of the market place. And, once again, OPEC raised prices probably earlier and certainly higher than the market would have done. But its actions were clearly supported by the underlying market conditions.

This brings us to the present. It differs from the past, as I have just described it, in one essential aspect: market forces do not support any substantial further real price increases. In fact, there is now strong evidence that current prices are too high in relation to the underlying market structure. The indications of this are seen most clearly in the industrial countries, i.e. the OECD area. Demand peaked at near 41 million B/D in 1978. This year it will probably be down to 37 B/D. Some of that decline is undoubtedly due to general economic recessions in several OECD countries and to the after effect of the 1979 price shock. But the bulk of the decline appears to be structural and irreversible: Japan, which had a healthy economic growth rate last year, registered

nevertheless a 10% decline in oil demand; Germany, which had a modest economic growth rate, registered a 12% decline in oil demand; the U.S., whose economy was stagnant last year, had an 8% decline in oil demand. The same has been true so far in 1981. Decline in oil demand was on the order of 6% in the U.S. in the first four months in the face of a significant increase in the GNP. A similar development has occurred in Japan.

Another significant indication is that the decline in OECD oil demand since 1979 has not been part of a decline in total energy requirements but has almost everywhere been limited to oil. Thus, in 1979 when oil demand declined by about 0.5%, non-oil energy demand rose by 4.0%. The same divergent movements seem to have occurred in 1980. They reflect the fact that conservation and substitution have increasingly forced oil into the role of the marginal energy supply source.

There is good reason to assume this trend will continue for quite some time. Certainly, the potential for oil conservation and substitution is far from exhausted. It apparently took the economic stimulation of the second oil price shock to really trigger it, although the groundwork for it was laid by the first shock.

To be sure, this trend may not be strong enough to offset an increase in oil demand brought about by the expected economic recovery in Europe and accelerated economic growth in the U.S. in 1982-83. We may therefore see the decline in oil demand temporarily halted or even reversed after this year. But when the economic

improvement starts to level off, as it invariably does, the on-going long term process of oil conservation and substitution is likely to reassert its domination over demand. Thus, the historic peak for OECD oil demand reached in 1978 may very well remain unsurpassed throughout the 1980's.

To complete our picture of an extended period with no sustained upward market pressure on OPEC prices, it should be pointed out that non-OPEC crude oil supplies, which increased on average by nearly 1 million B/D in each of the last three years, are expected to continue to rise by around half this volume over the next 5-6 years.

Now let us return to our hypothetical proposition that despite these market conditions the real composite price of OPEC oil is significantly raised. By maintaining tight collective pricing discipline together with production controls in the principal member countries, OPEC could in fact enforce such an increase, at any time, given its share of world oil production. Or it may decide to impose such an increase during a temporary reversal of the underlying market trend and maintain it when the long term trend reasserts itself. One has become familiar with this type of OPEC price setting. In the short run --say about 5-7 years--OPEC would probably derive a net benefit from its action, since short term price elasticity of oil is certainly below unity which means that the demand would fall by a smaller percentage than the increase in the price so that OPEC's export earnings would improve. But we have been told repeatedly that one basic difference between OPEC and the private multinational oil

companies is that while the latter are guided largely by the goal of short term profit maximization, the former's chief aim is to maximize oil's long term contributuions to its members' national economies. If that is OPEC's true aim, further significant real oil price increases are likely to prove counter-productive and not just in the very long run, particularly for those countries with high reserve/production ratios.

The reason why the first OPEC price explosion has had only a relatively mild impact on reducing oil consumption is the basic resistance to change which is built into our system, technically as well as psychologically. The reason for the surprisingly strong impact of the second oil price shock on consumption is that the stimulus of that shock succeeded in overcoming the earlier inertia by creating strong additional economic incentives for reducing oil consumption. As a result, the momentum for change now appears to be gathering speed. Further price increases would inevitably accelerate it even more.

What these increases would do, and have already done on a considerable scale, is to mobilize the entire technological and economic genius of the industrialized world for the task of reducing oil imports by another few million B/D over the next decade or so. The task is feasible but difficult at present oil prices. Add another $20-25/bbl in real prices over the next 8-9 years and its success is assured. Take synthetic fuels as an example. Technologically and economically, this industry (particularly shale oil) is at the take-off stage in the U.S. But of late, several potential

producers have had serious second thoughts before plunging ahead. One reason is that the new U.S. Administration appears for the time being less interested than the previous one in assisting with the birth of this industry. A second reason is that the current high interest rates on capital, combined with the long construction time for these projects, have lowered the potential attractiveness of the investment. Finally, looking at the declining market demand for oil, some companies are beginning to wonder whether conventional oil would not be available in sufficient quantities at lower cost than the synfuels. This does not mean that there won't be a synfuels industry in the U.S. But its birth will take longer and its growth will be slower than had been expected. All this could change within a very few years, if the real oil price continues to rise significantly.

OPEC's current technically sustainable crude oil producing capacity is rated at 34 million B/D. Actual production is nearly 10 million B/D less. If real OPEC prices remain approximately where they are, requirements for OPEC oil may increase slightly but will remain well below 30 million B/D on an annual average. Thus, the organization will have significant spare capacity throughout the 1980's under any realistic market assumption. If the real price should rise by, say, 60-70% during this time it is not unreasonable to assume that the export demand for OPEC oil will drop by some 5-6 million B/D, given the fact that the worldwide reduction in oil demand resulting from the price increase would be

concentrated on imported oil and within the import sector on OPEC oil. This means that total OPEC oil demand could fall below 20 million B/D. OPEC would then operate at only 59% of its technical capacity. This could make it very difficult for the organization to continue to maintain its price cohesiveness. With 14 million B/D of readily producible OPEC oil overhanging the market, some members may not be able to resist the temptation to sell more oil by offering hidden or open discounts to their customers. Once this process spreads it would rapidly undermine OPEC's floor price defense and cause prices to tumble, at least temporarily, since actual production cost of all OPEC and most other oil is only a fraction of its sales price. The potential for a price decline in the absence of any enforceable restrictions is enormous.

I do not believe such a scenario will really occur. On the contrary, I think OPEC will still be a functioning organization by the end of this decade with substantial direct influence in the determination of petroleum prices. But this is based on the hypothesis that the real price for OPEC's marker crude will remain at or near its present level throughout the 1980's.

I have limited my discussion so far largely to the impact on OPEC from changes in OECD oil import requirements. In 1979 75% of OPEC's exports went to OECD countries. Most of the balance went to less developed countries (LDC's). In addition, OPEC members last year consumed about 2.7 million B/D, or 10% their total output,

domestically. Both of these--the LDC's and the domestic economies--are growth markets. The point has sometimes been made that a large part of the loss in sales to the OECD area will be offset by increased sales to these two markets. In fact, officials of some OPEC countries have repeatedly warned their industrial customers that within a decade or so a large portion of the oil produced in these countries may no longer be available for export since it will be required domestically.

If true, this is not good news for OECD importers. But it is far worse news for the exporting countries, which would have given up a hard currency foreign market at world prices for a soft currency domestic market at highly subsidized local prices. A few OPEC members may have enough oil reserves to meet the requirements of both markets. Most oil exporters, however, will sooner or later be forced to curtail the growth rate in domestic oil consumption in order to protect their foreign exchange earnings. Thus, growth in domestic oil demand can hardly be considered an offset to a decline in exports to the OECD countries.

The growth in the import requirements of the LDC's presents a somewhat similar problem. These countries are already spending 40% of their total export earnings for oil imports. If the real price of oil continues to increase, their ability to import this commodity will decline, regardless of their underlying need for it. To maintain their LDC market outlets in the face of rising real prices, oil exporters would have to subsidize these sales through lower prices or preferential financing. To some extent this

is already done. It is desirable from the point of view of reclycling OPEC's current account surplus--as long as there is one. But, again, it is not a substitute for the decline in exports into OPEC's prime market, the OECD area.

To sum up, OPEC is now at an historic turning point. Its past policy of raising prices usually coincided at least directionally with underlying market forces. In the foreseeable future further real price increase would clearly run counter to underlying market trends. OPEC's survival as a policy making organization may well depend on the extent to which it will reflect or ignore these market trends in its future pricing decisions.