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**THE INTERNATIONAL OIL MARKET --  
PERSPECTIVES ON PRICES**

**A Speech by  
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**at the**

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Any observer of oil price trends over the past 15 years would be right in concluding that oil prices are inherently unstable: every few years they either explode or collapse. Yet, if one were to go back a little further one would find that the current period of instability was directly preceded by 25 years of remarkably stable prices in nominal dollars and slightly declining ones in real dollars. Thus, the extreme volatility with which we have become so familiar is not necessarily the natural habitat of oil prices. In fact, given the slow changes in supply and demand fundamentals a relatively stable state would seem more natural for oil prices in the long run than the breathtaking roller coaster rides since 1973.

But a return to this state is probably still some time off. Last year's 50% drop, which was the first major oil price decline in over 50 years, was compressed into just three months in the early part of the year. It has been widely referred to as the "Third Oil Shock". In terms of the magnitude of the decline the description is certainly appropriate. Last year's decline wiped out the entire price explosion of 1979/80. Prices have moved up recently but the current \$18 level, if it is maintained, would still represent a very substantial drop from the 1985 price of about \$27, particularly after adjustment for inflation and for the decline in the dollar exchange rate.

But except for its magnitude, the price collapse of 1986 was not symmetric with the two upward price shocks of the 1970's. Both of these caused, or at least contributed substantially to, the economic stagnation and recession in the industrial countries, directly following the oil price increases. So far, the price decline has had only a very small effect in the opposite direction on the economy of these countries. A report by the U.N. Industrial Development Organization in 1986 estimated that an oil price decline to \$15 would cause the GNP in the industrial market economies (the developed countries) to grow just 0.2% faster in 1986 and in 1987 than if the price has not collapsed. In fact, the collective GNP growth rate of the OECD nations was lower in 1986 than in 1985.

The U.S., the world's largest oil consumer and importer and second largest oil producer, provides an illustration of this relatively small impact of the price decline on the economy. Last spring many U.S. econometric models, including those of the government, predicted that the positive effect of the oil price decline, including the accompanying decline of other fossil fuel prices, would more than offset its negative impact on the domestic energy industry. Yet, as we know now, the U.S. economy grew at a slightly slower rate in 1986 than in 1985 despite the oil price collapse and will probably grow slower this year than last. Of course, one can always say the decline would have been even larger had it not been for the lower energy prices. Nevertheless, in the second year of the great downward oil price shock its positive impact on the economies of the industrial nations is still minimal compared to the severe negative impact of the two upward price shocks of the 1970's.

World oil demand (exclusive of the Soviet Bloc and China) did of course increase significantly in 1986, by 1 million B/D or 2.2%, with the industrial countries fully participating in the increase. It was the largest annual demand increase since 1978 (if we adjust the 1984 increase for the impact of the British coal miners strike in that year). But it was apparently not the beginning of a new trend, at least not yet. For in 1987 demand is likely to increase only fractionally if at all. The principal reason is that 20-25% of last year's increase was caused by fuel switching from gas and coal to oil in industrial and electric power plants. This was economically attractive when the delivered cost of crude oil was below \$14 and residual fuel oil prices were correspondingly low. But with crude prices back to the \$17-18 range, last year's gains are now being reversed and world fuel oil demand will once again show a decline in 1987, with the U.S. accounting for the bulk of the decline, as it did for the bulk of the increase in 1986. The demand for other products will increase slightly this year but generally less than last year.

On the supply side, too, 1986 was a good year for OPEC but 1987 is likely to be less good. Total non-OPEC production (excl. the Soviet Bloc and China) declined by about 1%, or 250-300,000 B/D, in 1986. This may seem like a small drop but it was the first decline for non-OPEC oil production since 1975. Last year the U.S. was the largest but not the only significant contributor to the decline. This year it will be virtually the only one as other non-OPEC production is rising again. Thus, OPEC's public assumption, and apparent private hope, that non-OPEC production this year will be significantly smaller than last is unlikely to materialize. It probably would have materialized if prices had remained in the \$14-15 range because U.S. oil well drilling would have declined further this year instead of apparently increasing slightly. That would have accelerated the decline in U.S. production.

Thus, this year OPEC will have even less support from the market than last year. Hence, it must rely even more on self-help by further reducing its output. So far, it has apparently succeeded in doing so. But the testing period is far from over. Still, as of now the chances of the world oil price returning to last year's average of about \$14.50 during the remainder of this year are much less, in my opinion, than that it stays in the \$17-19 range.

Now let us look at the more distant future. There is currently much public discussion of another oil crisis in the 1990's. Given the present low prices, very high excess producing capacity and OPEC's desperate struggle to survive as a functioning cartel, the fear of another oil shortage seems quite out of place. In fact, it is difficult to even conceive of an oil shortage in the next several years. However, given the long-term cyclical swing movements of the world oil market, it is quite plausible, though definitely not inevitable, that during the 1990's the world's dependence on OPEC oil will once again

rise to the level where OPEC can for sometime dictate oil prices at will. The organization succeeded twice in using temporary price explosions, caused by brief extraneous supply disruptions, to maintain oil prices for extended periods vastly above their market value. Thus, the argument goes -- and must be taken seriously -- that under similar circumstances, or even without an extraneous trigger, OPEC would do so again. However, it must also be recognized that this proposition contains the facile assumptions that history repeats itself, that the 1990's will essentially resemble the 1970's and that none of the major players on the supply or demand side has learned a lesson from the past.

The strongest point underlying the present Cassandra warnings about the looming energy crisis is the almost inevitable return to the Middle East for incremental world oil supplies from about 1990 on. How rapidly this return will take place depends primarily on the future price of oil as well as the present perception of the future price. The lower the price or the price perception, the faster it will occur and vice versa. But at any realistic price assumption the share of Middle East oil supplying the world's import markets will grow significantly from now on through the 1990's. This should not come as a surprise. Total Middle East oil production dropped from 22.5 million B/D in 1977 to 10.9 million B/D in 1985, thereby absorbing the bulk of the global decline in oil demand as well as the increase in non-OPEC supply throughout that period.

Now that world demand is starting to rise again and total non-OPEC supplies are likely to level off within 4-5 years, the Middle East inevitably will provide the bulk of the required growth in supplies. Given its practically unlimited existing and potential productive capacity, it can remain the world's incremental oil supplier for a very long time.

How fast this return to the Middle East will take place is illustrated in a new study, Energy Security, by the U.S. Department of Energy. The study projects that under its low price scenario which assumes a real price (in 1985\$) of \$22 by 1995, compared to the actual price of \$27 in 1985, total Middle East production will amount to 23 million B/D in 1995. Under any higher price it will be lower. The 23 million B/D level would be about the same as in 1977 which was still somewhat below the then sustainable productive capacity. By 1995 this capacity could easily be much higher if the region's producers want it. Thus, resource availability will not pose a problem for world oil supplies by the mid-1990's nor by the end of the century.

However, once the Middle East has reestablished its position as the world's incremental producer with control over virtually all actual and potential spare capacity, its exporters would collectively be in a position by the mid-1990's to raise prices temporarily almost at will if they so choose. In a rising market the marginal supplier has this power.

Whether these exporters will actually do so is of course the multi-billion dollar question. If they take a long-term rational approach based on their current 100-year reserve/production ratio, they will not let prices rise to the point of depressing world consumption once again and stimulating high cost oil and other energy production, particularly since such production will continue once the investment has been made, even if prices decline again. Thus their short term gains from monopolistic price maximization could well be more than offset in the medium to long term by market losses which would be difficult to reverse. This has certainly been the case in the recent past.

How successful the Middle East countries will be in this rational economic approach to pricing depends to a significant extent on political and strategic factors and considerations that have little to do with the economics of oil. In other words, the very low cost and superabundance of Middle East oil may not be the principal future determinants in setting its price, just as they were not in the past.

But let us assume for a moment that things move into the opposite direction and the OPEC cartel, rather than regaining strength, falls apart and is not put together again. It is at least a useful exercise to look at this end of the spectrum which, incidentally, was given wide credence last year. If OPEC does collapse, market forces could drive prices down to or below the \$10 level which we briefly saw last summer and keep them there for at least 4-5 years. During that period non-OPEC oil production, particularly in the U.S., Canada and the North Sea, would drop so rapidly and oil demand would rise so rapidly because of fuel switching that another price explosion could eventually be expected. But since much of the oil and gas producing industry in these countries would be substantially reduced by then, there would be an extended time lag between the price explosion and the producing industry's ability to respond to it. Overall, this totally unrestrained, sustained free market, whose untenably low price path leads inevitably to the next price explosion, is a highly unlikely scenario and certainly not a desirable one even from the consumer point of view. Still, some prominent free-market theologians in the U.S. and elsewhere continue to pray for it under the presumption that its second phase is not an inevitable sequel to the first.

A more plausible long term price path would be the following: the current price level is approximately maintained this year then rises about in line with inflation to 1990 and slightly faster to the late 1990's. While this is a realistic scenario, if the current OPEC price system approximately holds, it is probably on the low side.

Under this scenario non-OPEC production outside the U.S., which amounted to nearly 16 million B/D in 1986, will rise by 1.5-2.0 million B/D over the next few years but start declining modestly during the first half of the 1990's. The largest single factor in the decline will be the drop in North Sea production.

U.S. production will continue its current decline. By 1990 it will have dropped by 1.0-1.5 million B/D from its 1986 level of 8.7 million B/D. By 1996 it will be down by another 1.0-1.5 million B/D. Net Soviet Bloc oil exports will decline from 1989-90 on, and by 1996 may well be half of last year's nearly 2 million B/D. Chinese oil exports which peaked in 1985 will also decline somewhat during this period. Thus, OPEC exports from about 1991 on must (1) offset the decline in non-OPEC production and net Soviet Bloc and Chinese exports, and (2) provide for the entire growth in world oil demand.

The combination is likely to be quite large from the early 1990's on, since under our assumed price scenario world demand can be expected to grow by 4-5 million B/D between 1990 and 1996, following a 2-2.5 million growth from 1986 to 1990. However, physically or technically, OPEC should not have the slightest difficulty in meeting the required demand over the next 10 years at least. I don't want to go into all the calculations of OPEC reserve-to-production ratios and historical and current excess capacity. But we know that OPEC's existing excess capacity amounts to at least 11 million B/D and will increase substantially within a year following the end of the Iran-Iraq war. There is a vast low-cost potential to increase producing capacity further, particularly in the Middle East. Thus, the required increase in OPEC output between 1986 and 1996 could be met under our price scenario without straining OPEC's productive facilities. The question therefore is not whether these volumes can be supplied at those prices by OPEC but whether they will be supplied, particularly during the later phase of this period.

But even if supplies are available at approximately those prices into the late 1990's, the rising share of Middle East supplies in the world oil trade and the Middle East's future key role as the world's marginal oil producer in a rising market will inevitably create a new economic interdependence between that region and its customers, particularly from the mid-1990's on when there will be very little spare producing capacity outside the Middle East. Since trade and politics go hand in hand, the new interdependence will probably also extend into the arena of foreign policy.

Finally, as the world's dependence on Middle East oil grows, so will the risk and impact of temporary oil disruptions. The reason is the region's aforementioned excess producing capacity. Currently it accounts for almost 70% of OPEC's total excess producing capacity. By the mid-1990's it is likely to exceed 90%. Thus, if some export volumes outside the Middle East were to become temporarily unavailable for whatever reason, they could probably be offset by drawing on the Middle East's export capacity. On the other hand, if Middle East supplies became unavailable so would the region's excess capacity. Which means the importing countries would then have no choice but to deal with the disruption directly by reducing consumption and/or drawing down emergency reserves.

Let me conclude with the prediction that last year's oil price was the lowest annual price for the remainder of the century and that this year's price will also be exceeded from 1988 or 1989 on, absent a sustained world economic recession. This implies that OPEC will function effectively throughout this period. Whether this is bad for consumers depends on whether OPEC's policy will reflect its members' long term economic interests or their myopic short term desire for revenue maximization. In the latter case, consumers will be hurt. But over time OPEC producers will be hurt more because for the indeterminate future their economic welfare will depend primarily on their ability to export oil to the industrial countries. Yet, the latter, once their commercial and technological genius is challenged, can reduce reliance on these imports substantially and irreversibly without seriously affecting their economic welfare. The last ten years provide a convincing demonstration of this ability.