No OPEC

*By Morris A. Adelman**

How would the market look without OPEC?

Since 1973, world oil has been upside down. Low-cost sources have been the suppliers of last resort. They restrain output to support the price while high cost producers have expanded.

With no cartel, the industry would come right side up. Every seller would produce to the point where more expansion cost too much. As before 1973, lower-cost producers would grow faster.

The spot price of oil would drop, as the ex-OPEC put all their current capacity to work. Past the short term, as consumption grew, the price would be determined by investment and output in ex-OPEC and in non-OPEC.

In ex-OPEC, there would be an investment surge. Higher output would save something from the wreck of lower revenues. Even a lower price would afford high returns on incremental investment.

But expansion would not be smooth because most OPEC output is by governments. In 1975-1987, Middle East-African OPEC members spent 1.7 percent of revenues on oil production investment. They would need more today, but still a pretty small percent. Yet even then they were chronically short of investment funds.

OPEC governments run big deficits because they cannot reduce spending on subsidies, consumption, and weapons. Oil investment, even maintenance, must get in the queue with other spending, and is postponed. It is a painful, absurd position: they struggle to find relatively small sums of money for hugely profitable investment. They also lack management-engineering know-how.

OPEC nations have for years tried and failed to attract foreign investment which requires foreign ownership of producing capacity and freedom of sale. Ownership of the in-ground resource is superfluous. "Sovereignty" was settled in 1950, when taxes were unilaterally hiked.

By 1970, taxes were nine-tenths of profits. Expropriating the companies in the 1970s made people feel good. "Throw the rascals out!" Should they now bring the rascals back? Insiders would lose jobs, contracts, perks and payoffs. There is also what the Italians call "sacro egoismo." Oil is a symbol, a fetish. These barriers to investment would not disappear, but they would be eroded by lower prices.

A look now at non-OPEC. Always it was about to shrink because of "limited reserves." In 1986, Petroconsultants Inc. of Geneva revealed to an anxious world that a decline in non-OPEC output was "imminent and unstoppable . . . well before the end of the decade." That is, well before 1990. This was based on "analysis of reserves;" data and analysis proprietary, of course. In the three years after 1986, outside of the USA and the Former Soviet Union (FSU), non-OPEC grew. Their growth supplied 16 percent of what the industry refers to as "the call," i.e., world consumption growth plus declines in the USA and the FSU. In 1989-92, their growth supplied 44 percent of the "call," in 1992-1995, 76 percent. In 1996-1997, the IEA expects the fraction will be even larger. I would not extrapolate those trends. But non-OPEC is a lively corpse, worth a pause to think about the basics of supply.

But what about 2010 AD – can you prove that something awful won't happen by then? Of course not. In 1789, there was worry about British coal. As production rose, so did worry. A famous book was written in 1865 to warn of coal shortage ahead. Similarly, people knew 30 or 15 or 10 years ago that we would run short of oil. They now know it for the next 10 or 30 years. God give us patience!

Predictions of shortage are driven by estimates of "ultimate" reserves. They are implicit forecasts of the amount which will be profitable to find, develop, and produce in the future. The estimators are doing economics without knowing it. They also assume they know what drives future cost and supply – future technology and future knowledge of the earth. In fact, nobody knows, and nobody ought to pretend to know.

The limits are set by cost and price. The industry will never run out of oil, not in 10,000 years. Some day, it may run out of customers.

Every mineral industry is a perpetual tug-of-war between diminishing returns and increasing knowledge. From place to place, we win a few, lose a few, but overall, humanity has won big – so far. In technical language, as the industry moves up its supply curves, the curves mostly shift to the right.

The non-OPEC surge is an example. In 1995, the real price was about one-fourth of 1981. Yet in 1995, the industry in non-OPEC areas installed nearly twice as much new capacity as in 1981. That massive rightward shift was not a uniform trend. Some areas, above all USA crude oil (but not natural gas), slid back or just held on.

Some of the rightward supply curve shift is due to the growth of knowledge. But not the whole. The price decline was a bucket of cold water on non-OPEC government and public opinion: stop dreaming of riches, start thinking of tax and regulatory reform, and privatization.

Much has been done, but the non-OPEC countries are still under-achievers, slouching toward their potential. Production taxes will be lowered and aimed more at net profits, less at gross revenues. The supply curves will keep moving rightward.

The Former Soviet Union (FSU) is the worst under-achiever. The pieces of the old national monopoly were given to insiders skilled in maneuvering to seize wealth, not investing to create it. Production fell. The FSU governments have been unable to discard an irrational system, and create the laws and taxes needed for private investment, especially by foreigners leading the way. The end of OPEC, and lower prices, would remind them for whom the bell tolls.

A basic fact in a world without OPEC is the cost differential between the Persian Gulf and the rest of the world, due largely to the discrepancy in oil flows per well. The differential has shrunk, but so has our knowledge as data become more scarce. On one side: there has been gold plating and mismanagement. On the other: costs seem to have come far down in the North Sea, and must have dropped elsewhere, but not as much. Instead of knowledge of

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*Morris A. Adelman is Professor of Economics Emeritus, MIT, Cambridge, MA. This paper was given at the 17th Annual USAEE/IAEE North American Conference, October 27-30, 1996, Boston, MA. Much of this paper is based on Dr. Adelman's Book, *The Genie Out of the Bottle*, Cambridge, MA, MIT Press, 1995.

investment per unit of reserves or capacity, we have incoherence: so-called "finding costs per barrel of oil equivalent." In fact, nobody knows what was found in any recent year; and there is no such thing as "oil equivalent."

In summary: a world without OPEC would soon see lower prices. They would be stable, not rigid. Consumption would grow faster. The ex-OPEC nations would expand output greatly. They would also raise internal product prices to cut consumption and raise exports. In non-OPEC, lower crude prices would push down the supply curves, but improved laws and technology would push the curves to the right. With lower output in some areas, higher output in others, on balance non-OPEC would grow. The ex-OPEC nations would gain market share, but not, I think, enough to permit a return of the cartel.

AIEE Has a Busy Fall

The Italian Association for Energy Economics (AIEE) had a very busy Fall.

In early October it held two meetings. The first was a joint round table meeting with ENEA and the Trilateral Commission to discuss the latest report of the Commission on *Maintaining Energy Security in the Global Context.* The next was a Conference on *The Perspectives of Energy Policy in Italy*. This was held in Rome at the Great Hall of LUISS-Guido Carli University as part of the postgraduate course the AIEE has jointly organized with the University. Finally, in late October, the AIEE and Unione Petrolifera, the Italian Association of Oil Companies, jointly organized a meeting/reception to present the latest book by Marcello Colitti and Caludio Simeoni, *Perspectives on Oil and Gas; The Road to Interdependence*. The book is now in the AIEE library.

In early December, the AIEE and IEFE held a round table meeting at Bocconi University in Milan to introduce the book, *The Energy Code* by Pier Giuseppe Torrani and to discuss the theme *Constraints and Possibilities for Italian Energy Policy*. In mid-December the affiliate jointly organized a conference on an *Overview and Perspective on the Oil Industry in the former USSR and Implications for Europe.* ENI-Enrico Mattei Foundation was the joint sponsor of this meeting, held in Milan. This was followed by a workshop on *1996 Balances and Short-term Forecasts,* held at the IRI Management Auditorium in Rome.

A busy Fall, indeed!!

Edgardo Curcio

1997 Directory

The 1997 Membership Directory will be published in April for mailing in early May. By now members should have recevied *Directory Information Forms* either directly from Headquarters or through their Affiliate head. Members are urged to complete the forms and return them to Headquarters as soon as possible. If you have changed your address, phone, fax or e-mail address since submitting the form, simply drop a note to Headquarters advising of any changes and they will be made.

European Foundation for Cooperation in Energy Economics

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