

To appear in Foreign Policy  
Spring 1978

*Archival*

OPEC, Oil Prices, and the Western Economies\*

by

Robert S. Pindyck

Massachusetts Institute of Technology  
January, 1978

#MIT-EL 78-001WP

\*The author appreciates the comments and suggestions of M.A. Adelman, H.D. Jacoby, and S.F. Singer, as well as the support of the NSF, under Grant No. AER-075-00739-A61, and the MIT Center for Energy Policy Research.

## OPEC, Oil Prices, and the Western Economies

What kinds of changes should we expect to see in the prices and availability of world energy supplies during the next fifteen years? Will oil prices increase slowly over time, or is another large and sudden OPEC hike likely? Will energy supplies be available even at higher prices, or should we expect worldwide shortages? And how will these changes in energy prices and availability affect the economies of the industrialized countries?

According to recent projections by the CIA, a crisis is likely to occur in the early 1980's as world energy demand exceeds supply, resulting in shortages of energy, rapidly rising prices, and economic contraction in all of the industrialized countries. By the early 1990's, the Agency believes, the crisis will be apocalyptic in magnitude. This view of the world has had an important role in forming the rationale for the Carter Administration's energy program. However, it is a view that is highly unrealistic, in that it ignores the impact of past and future changes in energy prices on energy supply and demand. I will argue here that this kind of "crisis" is very unlikely to occur, but another kind of crisis - an oil embargo or OPEC production cutback - could occur quite easily, and needs more attention in the design of energy policy.

I will try to provide some answers to the questions listed above different from those given by the CIA. Since the evolution of world energy markets hinges on the OPEC cartel, I will begin by describing OPEC's most likely pricing and production behavior. This will provide the basis for discussing the kinds of energy "crises" that should or should not be of concern to us, and the implications for domestic and international energy policy. Finally, I will discuss the likely impact of rising energy costs on economic growth, inflation and unemployment in the industrialized countries.

## OPEC and the Price of Oil

With the power to set the world price of oil, OPEC is a driving force behind world energy markets, and its decisions have profound implications for the economies of all the industrialized countries. It is therefore important to understand the ways in which OPEC is likely to change the price of oil in the future.

In fact OPEC's pricing behavior is surprisingly predictable, since the cartel is most likely to take only those actions that are in its best economic interest. Of course considerations other than economic ones might influence OPEC pricing decisions, but economic interests have dominated in the past and are likely to dominate in the future, and provide the best basis for "predicting" oil prices. We must therefore put ourselves in OPEC's position, and ask what is the best price to charge for oil.

First, let us be clear about what we mean by the "best" price. We often think of the "best" price as that which maximizes profits, or equivalently for OPEC, where production costs are insignificant, that which maximizes revenue. But a price that maximizes today's revenues, ignoring future revenues, is clearly not "best." As several OPEC members have already made quite clear, the depletion of existing reserves and its impact on future revenues must also be considered in determining today's price. It makes most sense, then, to adjust the price so that it always maximizes the flow over time of all current and discounted future revenues. Just as the stockholders of a company hope that its management will act to maximize the company's equity value, i.e. its flow of current and future discounted profits, so too should OPEC determine and set price in a way that maximizes the equity value of its oil reserves.

There are three important issues that OPEC must consider in determining its best price. First, the cartel must recognize that the demand for its oil is in effect a "residual" demand - i.e. the difference between the total (non-Communist) world demand for oil and the supply of oil from non-cartel countries. This residual demand is particularly sensitive to price; a growing body of statistical evidence indicates that increases in price tend both to decrease total demand as well as to increase non-cartel supply. Of course, the impact of a price change occurs only slowly, since total demand and non-cartel supply depend on stocks of energy-consuming and energy-producing capital that cannot be converted or shifted rapidly. This would suggest that OPEC might try to make a "quick killing" by steeply increasing the price, taking advantage of the fact that the demand for its oil would fall only after a delay of several years. Although such a strategy would certainly increase current revenues, it would diminish future revenues much more, and would therefore be undesirable (unless OPEC members are extremely short-sighted, and there is no evidence to indicate that this is the case).

OPEC's second important consideration is the fact that its oil resources are finite, and will eventually run out. This has led to speculation that OPEC might sharply increase price and cut production in order to conserve its resources for the future. But over-conservation is as bad as under-conservation. Producing a resource too slowly reduces the total flow of current and future revenues that it can potentially yield, thereby reducing its net value to the owner. OPEC's problem is to choose just the right rate of resource use that balances revenue obtained today from current production with the (discounted) revenues that could be obtained from future production. This, in fact, is just the problem facing any producer of an exhaustible resource, and its solution usually calls for smooth and gradual changes in price.

OPEC's third major consideration is the fact that its membership is not homogeneous, but instead consists of countries that have somewhat different objectives and operate under different constraints. In particular, some OPEC members - which I call "saver" countries - have less immediate need for cash, and therefore could tend to value future revenues more heavily in calculating the equity value of their resources. These "saver" countries, which include Saudi Arabia, Libya, and the Emirates, also happen to have rather large reserves of oil, so that resource depletion is less of a constraint for them. Other OPEC members - the "spender" countries - have a greater immediate need for cash, and thus value current revenues more heavily. These countries, which include Iran, Venezuela, Algeria, Indonesia, Nigeria, and Ecuador, also have much smaller reserves of oil, reserves that will begin running out in the next twenty years.

This division of OPEC's membership leads to a clear-cut conflict over what is the "best" pricing strategy. "Spender" countries would prefer somewhat higher prices than would "saver" countries, first because they prefer larger revenues today, even if that means much smaller revenues five years later as residual demand falls. Part of the OPEC bargaining process involves reconciling this conflict. Although the outcome of this bargaining process cannot be predicted exactly, we have every reason to expect the interests of the "saver" countries to dominate, since it is these countries (and particularly Saudi Arabia) that have the greatest production capacity and at the same time absorb most of the necessary production cutbacks. In fact, the interests of the "saver" countries dominated after the round of OPEC meetings in May 1977 that resulted in a "split" price increase: Saudi Arabia simply increased her production slightly, so that the price increase was effectively limited.

What do these three considerations - the way that demand for OPEC oil responds to price changes, the problem of resource exhaustion, and differences in objectives among OPEC members - imply about OPEC's "best" price? This best price can in fact be calculated through the use of a small computer model that quantitatively describes the characteristics of total world oil demand (and its response to income growth and price changes), non-OPEC oil supply (and its response to price changes as well as resource depletion), resource depletion within OPEC, and the different levels of reserves and different rates of time discounting among OPEC members. I have used such a model to calculate OPEC's current and future "best" prices, and found the results to be rather insensitive to assumptions about demand and supply response, the size of the resource base, etc.<sup>1</sup>

The analysis determined that OPEC's best price for 1977 was between \$12.50 and \$13.00 - slightly below the actual posted price. Furthermore, in real (constant dollar) terms, this price should grow by no more than two percent per year over the next ten years. Prices rising more rapidly than this would simply cause a loss of revenue for OPEC, as the resulting loss in sales more than offsets the resulting increase from the higher price. Thus, even allowing for six percent inflation and about a four percent drop in the value of the dollar with respect to all other currencies, OPEC's best price for 1978 is probably around \$14.00 or \$14.50 - close to the current posted price.

It is therefore not surprising that at its Caracas meeting in December of 1977, the cartel decided to freeze the price of oil, postponing consideration of a price increase to June, 1978. Although the freeze was explained in terms of lack of agreement among OPEC's members, in fact it was quite predictable on economic grounds. The disagreement occurred largely because Algeria, Libya, and Iraq wanted a significant price increase - not for economic reasons, but for

<sup>1</sup>The assumptions about supply and demand elasticities that are used in the model are based on consensus estimates that are consistent with the OECD's Energy Prospects to 1985 (Paris, 1974). The solutions of the model for OPEC's optimal price path are surprisingly robust with respect to these assumptions. For example, doubling the assumed price elasticity of total world oil demand results in less than a 10% change in the optimal price, and virtually no change in the growth rate of the optimal price. The model is described in detail in R.S. Pindyck, "Gains to Producers from the Cartelization of Exhaustible Resources"

political ones. The price freeze was clearly in the economic interest of Saudi Arabia, Kuwait, and The Emirates (as well as Libya and Iraq, for that matter), and as long as Saudi Arabia was determined to pursue her economic interests, the outcome was assured.

What about oil prices in the longer term? OPEC will meet again regularly, and these sessions could indeed result in price increases, but I would expect such increases to be small. Assuming 5 percent inflation in the U.S. and relative stability in the value of the dollar, OPEC should increase prices by no more than 5 or 10 percent per year. In later years, prices should continue to rise, but again only slowly: around 1 percent to 3 percent per year in real terms through 1990, and around 2 percent to 4 percent between 1990 and 2000. Although the reserves of some spender countries (particularly Iran and Venezuela) will be largely depleted by the 1990s, Saudi Arabia and many of the other saver countries will still enjoy vast reserves well into the twenty-first century.

Of course we cannot be sure that OPEC will always pursue its economic objectives rationally, or that it will not at some time pursue non-economic objectives. Political events - such as another Mideast war, the destruction of oil-producing facilities by terrorists, or the overthrow of one of the key OPEC governments - might lead to a production cutback and steep increase in price, or, if it results in the dissolution of OPEC itself, a steep decrease in price. It is the possibility of such an event - and only the possibility of such an event - that makes our imports of OPEC oil so problematical. Barring such an event, oil prices and their impact on energy markets are surprisingly predictable.

#### Energy Markets and Energy "Crises"

The Carter Administration has based its energy policy in part on a CIA report that predicts an energy "crisis" in which, beginning in the early 1980's, energy demand will exceed energy supply. According to the CIA report, this crisis will occur because the demand for OPEC oil will grow steadily as world oil demand increases faster than non-OPEC oil supply. OPEC production capacity,

on the other hand, will remain fixed or even fall gradually, so that eventually there will be excess demand for OPEC oil. At this point the crisis begins; there is a shortage of oil, and what oil is available is sold at prices that increase dramatically. The result is an induced recession and inflation, very much like what occurred during the embargo and oil price increase of 1974.

The United States certainly needs a coherent and comprehensive energy policy for reasons unrelated to the CIA's concerns, and perhaps the CIA's scenario is useful as a means of mobilizing public opinion to make such an energy policy politically possible.<sup>2</sup> The scenario itself, however, is grossly unrealistic. It essentially ignores two important facts. First, the demand for OPEC oil and (to a lesser extent) OPEC production capacity are highly sensitive to the price of oil. Second, OPEC will gradually and steadily increase the price of oil over time, and at such a rate that capacity constraints will never become binding.

It is important to recognize that OPEC is now operating well below its production capacity, and also has considerable room for capacity expansion in the future. 1977 OPEC production, for example, has been about 28 or 29 million barrels per day (mb/d), while capacity has been over 35 mb/d. How is this capacity likely to change in the future? The CIA correctly predicts that the capacity of such low-reserve countries as Iran and Venezuela will decline during the 1980's as reserves are depleted. The CIA incorrectly predicts, however, that such high-reserve countries as Saudi Arabia, Kuwait, and the Emirates will keep their capacity fixed (justified, according to the CIA, by reasons of conservation). In fact, Saudi Arabia and some of her high-reserve neighbors could as much as double their capacity, particularly if there is a revenue

<sup>2</sup>For a discussion of the domestic aspects of U.S. energy policy, see R.E. Hall and R.S. Pindyck, "The Conflicting Goals of National Energy Policy," The Public Interest, Spring 1977.

incentive to do so. And, as long as these countries are interested in pursuing their economic interests, they should increase their capacity, and exploit their oil resources at the optimum price. To do otherwise would be to waste the economic value of their resources.

What can we expect the world oil market to look like, then, in 1985? Given moderate economic growth in the industrialized countries, the demand for oil imports will certainly grow significantly over the next seven years. For all of the OECD countries, total imports from OPEC can easily reach 38 to 40 mb/d, as compared to about 26 or 27 mb/d in 1975. Adding in OPEC consumption and the imports of the LDC's, total required OPEC production should be in the range of 43 or 44 mb/d.<sup>3</sup> According to estimates of the International Energy Agency and estimates constructed at MIT, by 1985 total OPEC production capacity will probably have expanded to about 43 to 45 mb/d, and that of other exporters to 5 or 6 mb/d. Thus there should be no capacity constraint pushing up price, or if prices in consuming countries are held fixed, creating shortages as the CIA report has suggested. The more likely scenario is, as I have argued earlier, slow but steady increases in world oil prices (at an annual rate that is probably not more than 2 percent or 3 percent in real terms), and perhaps somewhat more rapid growth in wholesale and retail product prices in various consuming countries if stiffer taxes are imposed, or, as in the case of the U.S., existing price controls are removed.

Again, all of this assumes that the OPEC countries pursue their best economic interests, and it is a breakdown in this assumption that would permit a "crisis" to occur. As discussed earlier, unforeseen political events could indeed result in a sudden change in OPEC production and in the price of oil. If, perhaps as

<sup>3</sup> This estimate is a modification of the projections made by the International Energy Agency in their publication, World Energy Outlook (OECD, Paris, 1977). The IEA projected about 39 mb/d of required OPEC production, but this is based on what I consider to be unrealistic estimates of installed nuclear capacity in OECD countries. The IEA is in fact now in the process of revising their projections of nuclear capacity downwards.

the result of an embargo, OPEC production were suddenly cut back, this could have a seriously disruptive impact on the industrialized economies. But such a crisis could occur as easily next year as in 1985, and it is not this kind of crisis that has been a primary concern of the CIA and the Carter Administration.

The possibility of such a crisis should be of greater concern to the Administration, however, and it is an important reason for pursuing a domestic energy policy directed at reducing or at least limiting oil imports. Another Arab oil embargo could indeed occur, and the U.S., as well as the other industrialized importing countries, should take measures to reduce their potential vulnerability.

For the United States, the most important measure is the development of a strategic oil reserve. We are now beginning to implement a program that calls for storing oil in underground salt domes near the Gulf Coast. The total stockpile would be one billion barrels of oil, which could provide us with 6 mb/d for six months. Given today's level of imports, this stockpile is probably adequate. However, our imports of Arab oil are growing rapidly, and even if the more important components of the Administration's energy program are passed by the Congress, these imports will continue to grow in the future. It is quite likely that by 1981 we could be importing 8 mb/d from the Arab members of OPEC, and another 4 or 5 mb/d from other OPEC and non-OPEC countries. Furthermore, we are scheduled to reach the one billion barrel stockpile only in 1984. In 1981 the stockpile would be only a half-billion barrels, and should an embargo occur next year, we could expect little relief from the stockpile. If we really fear a "crisis," it might be wise to speed up and expand our stockpile program.

Even with a fully implemented stockpile program, the U.S. would still be vulnerable to an oil embargo. The reason for this, paradoxically, is that an oil embargo cannot really be directed against the U.S. or any other single country. Oil producing countries can dictate the quantity of oil to be produced but they cannot dictate where that oil will ultimately be shipped. For this reason the announced Arab oil embargo against the U.S. and the Netherlands in the Fall of 1973 had little impact on those countries' imports. (Gasoline lines in the U.S. were caused by price controls and the misallocation of regional supplies by the FEA.) Although political objectives may be served by claiming that an embargo is directed against a particular country, in reality an embargo means cutting back production and thereby reducing the oil available to all importing countries.

An embargo which in name was aimed at the U.S. would be in fact just as damaging to the European countries and Japan - more so in fact, since these countries are more dependent on imports, and lack any kind of storage programs. Recessions in these countries also place a burden on the United States by causing a reduction in the demand for its exports. Furthermore, the U.S. is now committed to participate in the "Sharing Arrangement" of the International Energy Agency. Under this agreement, when an embargo occurs, all of the participating countries must share oil (by re-directing oil shipments) in order to equalize the burden of import shortfalls. In fact, if an embargo occurred during the next five years, it would be the U.S. that would do most of the sharing. Thus, even with a sizable stockpile of its own, the U.S. is vulnerable to an embargo (production cutback) as long as Europe and Japan are vulnerable.

The European members of the International Energy Agency have been chiding the U.S. for failing to increase domestic energy prices and decrease energy consumption. This criticism is valid; since 1973 energy consumption has fallen by 5 percent or more in various European countries, while in the United States, where energy prices have been held far below world levels, it has risen by nearly 10 percent.<sup>4</sup>

<sup>4</sup> Providing cheap energy to consumers has been a paramount objective of American energy policy. The main instruments for keeping prices low have been price controls on natural gas and the price controls-entitlements program for crude oil. These programs have caused energy demand to rise much more rapidly than production, and imports to rise to fill the gap. See R. E. Hall and R. S. Pindyck, op. cit.

On the other hand, the U.S. should begin to chide the European countries for failing to develop sufficient strategic reserves of oil of their own. Given the realistic limits of the ability of these countries to reduce their use of energy, they will always be heavily dependent on OPEC oil, and always vulnerable to a production cutback. They must therefore develop their own reserves, and thereby reduce the vulnerability of the U.S., through the Sharing Arrangement, to a cutback. If they fail to do so, we should reconsider our commitment to the Sharing Arrangement.

#### Higher Energy Prices and Economic Growth

We have argued that the kind of energy crisis of concern to the CIA and the Carter Administration is very unlikely to occur, and while energy prices will probably continue to rise over time, the increases will be only gradual. On the other hand, energy prices are already quite high, at least relative to what they were in the 1950's and 1960's. There is no question that higher energy prices have had a significant negative effect on economic growth, unemployment, and inflation in most of the industrialized countries. The question is how these higher prices will affect economic growth in the future.

Higher energy prices have a recessionary impact for two reasons. First, rising energy prices contribute directly to general inflation, and governments often try to fight this added inflation with contractionary macroeconomic policies, thereby inducing a recession. Second, higher energy prices directly reduce the total productive capacity of the economy. Whenever a particular factor of production - in this case energy - becomes more scarce (i.e. more costly), this necessarily reduces the economy's production possibilities. Thus even if an expansionary monetary and fiscal policy were pursued so that the economy could operate close to its full-capacity level, the resulting GNP would be lower than would be the case if energy prices had not increased.

These phenomena can be illustrated more clearly by considering what happened when energy prices rose dramatically in 1974. First, sharp increases in oil prices contributed directly to increased rates of inflation, particularly in 1974. In the U.S., for example, a good three to four percent of 1974's 11 percent inflation can be directly attributed to the increases in oil prices that occurred that year. Another 1½ to 2 percent can be attributed to the higher food prices that resulted from increased demand for wheat and other food exports. This means that only 5 or 6 percent of our 11 percent inflation was of the demand-pull variety that we are used to, and that is responsive to conventional macroeconomic policy measures. And in Japan and some of the European countries, the inflationary impact of higher oil prices was even greater.

The problem occurred when most countries mistakenly responded to this added inflation with strongly contractionary monetary and fiscal policies. The result was sharp recessions in 1975 in the U.S., Canada, and most of the European countries. Thus economic growth in 1974 through 1976 has been lower in large part because of misguided macroeconomic policies - policies that might work well against the ordinary demand-pull inflation that we are used to, but that cannot possibly have an impact on the kind of exogenously generated inflation that we experienced in 1974. In fact the economic impact of higher oil prices need not have been as serious as it was had we responded with different monetary and fiscal policies.

The second reason for reduced economic growth - the reduction in the total productive capacity of the economy resulting directly from higher energy prices - is more basic, and has broad implications for the future of the industrial economies. The increase in energy prices drove up the total cost of production, and with labor and capital inputs fixed, this means a drop in real output.

The question now is the extent to which output must fall. The answer depends in part on the extent to which energy is substitutable with other factors of production. If the possibilities for substitution are great, less expensive factors can be used in greater quantity in place of energy. Unfortunately, recent statistical evidence indicates that energy and labor are substitutable in both the short-run and long-run, but that energy and capital are complementary, at least in the short-run. There is some evidence that in the long-run energy and capital may also be substitutable, but only weakly so. This means that there is little or no room for a shift towards more capital-intensive production as energy prices increase. Instead the use of energy and capital will decrease, but with little net reduction in cost, since the substitutable alternative - labor - is already very expensive. Thus the total cost of output is driven up - by nearly as much as the percentage increase in the cost of energy times energy's share in total cost.

I have recently completed a study of industrial energy use in the industrialized countries, and the results of this research indicate that in the long run a doubling in the cost of all energy would result in a 3 percent increase in the cost of manufacturing output in the U.S., a 5 percent increase in Canada, a 6.5 percent increase in Japan, and increases in the European countries ranging from 4.5 percent to 7 percent.<sup>5</sup> This variation in cost increase is only in small part due to differences in factor substitutability in different countries, but is due much more to differences in the existing shares of energy as percentages of total costs.

Assuming that we are correct in our prediction that the sharp jump in energy prices that occurred in 1974 will not be repeated, and that over the next decade energy prices will rise only slowly in real terms, what does this mean for economic growth? Our interest here is in the intermediate-term, i.e. the next

<sup>5</sup> These results are reported in R.S. Pindyck, "Interfuel Substitution and the Industrial Demand for Energy: An International Comparison," MIT Energy Laboratory Working Paper No. 77-026WP, August 1977.

five to eight years, since for the next year or two economic growth will be much more a function of the monetary and fiscal policies adopted in various countries. However, even if most countries adopt sensible macroeconomic policies that push their actual GNPs closer to their "potential" (or full capacity) levels, there is still the question of the extent to which today's higher energy prices will be depressing the level or growth rate of future potential GNP.

For the OECD countries as a whole, average energy prices (aggregating all fuels) have increased more than 100 percent in real terms since 1972, which means that even in the long-run the total cost of output must rise by at least 5 percent or so, depending on the particular country. This means a corresponding reduction in real potential GNP. After this reduction has been made, growth can continue at its old rate (4 percent to 4.5 percent a year in the U.S., and higher or lower rates in other countries). Even with constant energy prices, however, it will be several more years before we adjust to this lower level of potential GNP, and in the interim, actual growth will be reduced.

It is for this reason that many economic forecasters are predicting real GNP growth in the U.S. of only 3.5 percent to 3.75 percent per year over the next 5 years. This prediction and other like it for Canada and the European countries are quite reasonable, and they mean that even if we tolerate a moderate amount of inflation, the industrialized countries will probably face slower growth and higher unemployment rates than they have been used to. There is no way around the fact that by driving up the price of oil, OPEC has made the rest of the world a little poorer.

### The Implications for Policy

I have argued that the kind of worldwide energy crisis of concern to the CIA and the Carter Administration is unlikely to occur, and instead the prices of oil and other fuels are likely to increase slowly over time, thereby limiting the increase in the demand for OPEC oil, and at the same time providing an incentive for certain members of OPEC to increase their production capacity during the 1980's. On the other hand, the possibility of a different kind of crisis - a short-term production cutback of the Arab members of OPEC - cannot be ruled out. But even if another crisis never occurs, the increases in oil prices that have occurred already will dampen economic growth and increase unemployment in all of the industrialized countries during the next five to ten years.

This view of the world has important implications for both energy policy and economic policy. In the case of energy policy it means recognizing that the real problem of growing imports is an increased vulnerability to an embargo. Letting energy prices in the U.S. rise to world levels is important, and should be a primary objective of energy policy. Higher prices will considerably reduce our dependence on imports, as the demand for energy is reduced, as the domestic production of oil and gas is increased, and as the price incentive results in the introduction of alternative non-conventional energy sources. But even with higher prices, the U.S., Europe, and Japan will continue to import OPEC oil. There is no problem with this, as long as steps are taken to limit the vulnerability to an embargo. This is why strategic reserves, not only for the U.S. but also for the other importing countries, are so important.

In the case of economic policy, it means recognizing that the effects of fiscal and monetary policy will be different in a world where inflation is in part generated by mechanisms outside of our control, and where unemployment is likely to be higher even when the economy is operating near to capacity. If another embargo should occur, the U.S. and the other industrialized countries should be prepared to respond with expansionary macroeconomic policies. The extra stimulus from such policies will be needed to counteract the adverse short-run effects of an embargo on unemployment and GNP - adverse effects that are much more costly than the temporary burst of inflation that must inevitably accompany an embargo.

The higher unemployment rates that have persisted worldwide since the increase in energy prices is in part due to a greater dependence on capital and energy - and a reduced dependence on labor - as inputs to production. This shift occurred gradually between 1950 and 1972 as labor became much more expensive relative to capital and energy. During those two decades, increased energy production worldwide reduced energy's real cost, while tax and social welfare policies in many countries made labor much more expensive relative to capital. Since energy and capital tend to be complementary, the shift away from labor and towards more capital- and energy-intensive production has exacerbated the increased unemployment and reduced GNP that result from higher energy prices. Now the industrialized countries must begin to reverse that shift. For the U.S., this means reworking our fundamental tax structure to deal directly with our employment problems, reversing the increases in social security and payroll taxes, and perhaps replacing tax credits for investment with credits for employment.

OPEC has made us all poorer, but how much poorer will depend in the end on our ability to shift our energy and economic policies. The appropriate changes in policy will help to soften OPEC's impact on us all.