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The Surge in Oil Prices: Anatomy of a Non-Crisis

J.W. Anderson¹

Crude oil prices tripled over the past year. Gasoline, at the high point in late March, was up 68 per cent to \$1.529 a gallon for regular grade. In February, in New England, home-heating oil was briefly more than double the year before price from the year before.

But by mid-spring the market was declining again. Spot prices for crude oil had fallen sharply in the six weeks following the peak, and the average price of gasoline was down five cents a gallon. These drastic swings in price invite questions about the underlying causes, and the public policy response—if any—that might be warranted.

Last winter was the fourth time in 30 years that oil prices had suddenly, without warning, shot upward. The sudden price spike was caused by two miscalculations by OPEC, the Organization of Petroleum Exporting Countries. OPEC expanded production just as East Asia was going into a recession; however, OPEC and most observers underestimated its severity. That produced a glut of oil, which forced prices down, in early 1999, to a level lower, adjusted for inflation, than they had been for a generation. Then, to correct that glut, OPEC cut production in late 1999 just as East Asia was coming out of the recession much faster than expected. With demand rising and production falling, prices shot up.

The point is not that Saudi Arabia, the dominant force in OPEC, should have been smarter. The point is that a lot of genuinely unpredictable things happen in the world, and the markets for commodities like oil are inherently unstable.

The three previous oil shocks were related to great military and political events: the Arab-Israeli War of 1973, the Iranian Revolution of 1979, and the Iraqi attack on Kuwait in 1990. The recent experience demonstrates that this kind of shock can also occur in peaceful times, in the absence of any unusual political tension.

In the oil markets, elasticities—at least in the short term—are low. Relatively small imbalances in volume can result in very large price movements. In the last three months of 1999 and the first three months of 2000 demand for crude oil was greater than supply by perhaps 2.5 million barrels a day (mbd) (the shortfall was filled by drawing down stocks).² This shortfall, 3.4% of world oil

¹ The author wishes to acknowledge the many useful comments provided by Joel Darmstadter, senior fellow, Resources for the Future.

² Estimate by the Energy Information Administration (EIA), U.S. Department of Energy, *Short-term Energy Outlook - March 2000*, Table 3, p. 54. Other analysts have suggested that the figure for the first quarter of 2000 is overestimated, but in any case substantial draws on stocks continued through early 2000.

production, was sufficient to propel the price of crude from \$9 a barrel in early 1999 to more than \$30 a barrel in February 2000.

The chronology of this episode begins in fall 1997. World demand had been rising rapidly, and OPEC expected that rise to continue. It had been coming from two regions, North America and East Asia, reflecting the long economic boom in both. The planners did not fully comprehend the force of the financial crisis that had begun in July with Thailand's drastic devaluation. But the crisis in Thailand led to similar currency troubles in several other countries. Because oil is priced in dollars, the devaluations had the immediate effect of hugely increasing the cost of oil in Asian economies that had accounted for a large part of the increase in world consumption.

While misjudgment of the East Asian financial crisis was the primary cause of the glut in 1998-99, there were other factors that aggravated it. They were all coincidental, but they all pushed in the same direction.³ One contributor was the weather. The winter of 1997-98 was unusually warm in North America, Europe and Japan. Another was Russia's financial distress—the country had defaulted on some of its debt in August 1998, leading to a sharp depreciation of the ruble. That both depressed internal demand for fuel and greatly increased the incentive to sell Russian oil abroad.

And then there was Iraq. Upon its defeat in the Gulf War of 1991, the United Nations (UN) Security Council placed Iraq under sanctions that cut off its exports of oil. As social conditions in the country deteriorated, the UN began negotiating a procedure under which the Iraqis could sell limited amounts of oil to pay for necessary imports. These limits were progressively expanded as the UN tried to defend itself from charges that the sanctions were causing great suffering among Iraq's people and particularly its children. One consequence was to add to the oversupply on world markets. Because the limits were set in dollars, they permitted increasing amounts of oil to be sold as the market fell.

Although OPEC agreed in December 1997 to increase production, within weeks it realized that it had miscalculated. But the cartel does not make decisions easily or quickly; it suffers many internal divisions, and discipline has always been intermittent. After prices declined through the winter, the cartel met again in March 1998 to announce a substantial cut in production. Several members—Saudi Arabia, Kuwait, and Venezuela—dropped their production a little. But others—Iraq and Iran—raised theirs, and OPEC's total output was unchanged.

In June, the cartel tried again. It announced another large cut, and there was a stronger response by its members. But the price continued to sag. Finally, in March 1999, with the price bouncing around \$10 a barrel, the cartel agreed again to cut. Desperation stiffened the member governments' resolution and this time production fell substantially. With that, the market at last began to tighten.

Incidentally, it is useful to note that while OPEC's three announcements of production cuts in 1998-99 add up to 4.3 mbd, the actual cuts came to about 1.6 mbd.⁴ The relationship between the announcements and reality is a loose one at best.

³ Lawrence Goldstein, president of the Petroleum Industry Research Foundation, Inc., has made this point, among other places, in his paper *Market Factors Not Price "Dumping," an Analysis of the 1998 Oil Price Collapse*, August 1999.

⁴ Author's calculation, from the U.S. EIA's Monthly Energy Review, Table 10.1a.

Over these years two non-OPEC exporters, Mexico and Norway, also cut production to support the falling price.

During 1999, the East Asian economies began growing strongly again and their oil demand was up. By the end of the year, the price had more than doubled to over \$20 a barrel—higher, but still in what the world regards as the normal range. The rapidly rising momentum of the oil market, clear in retrospect, was not obvious at the time. In particular there was great uncertainty about oil stocks. The production statistics of the previous two years implied that someone must be holding huge oil stocks, but whether they actually existed was an open question. It was clear that some traders were holding unusually large stock against the possibility of Y2K disruptions in the market at the turn of the year. The upward movement of prices was not continuous. Prices actually dropped for a couple of weeks in October. In view of all these conflicting signals, OPEC decided at its December 1999 meeting to make no change in production.

By February of this year, the price was over \$30 a barrel and vehement protests were arising from consumers, particularly those in the United States where a presidential election campaign was under way.

Iraq had significantly reinforced the price run-up in the late autumn. Quarrelling with the UN Security Council over the terms of the semiannual extension of the oil-for-food regime, Iraq had shut down exports entirely for a couple of weeks in late November and early December. In December, the Security Council revised the sanctions and dropped the limits on oil sales altogether. Iraqi export volumes since then have been erratic, varying hugely from week to week. It is unclear whether this performance is due to technical constraints on production, or to politics—that is, a deliberate tactic of disrupting the market to force a loosening of the sanctions.

The International Energy Agency recently concluded, "The answer is probably mid-way between the two explanations. The technical problems are real. But politics have led the Iraqis to be less willing to risk permanent reservoir damage than they were last year, particularly when they perceive that the time is right (high prices and tight supply) to try to exert pressure."⁵

Consumers sometimes ask why it is OPEC that controls oil prices. The answer is that in a commodity market, prices can be moved up or down by producers who lower or raise production. Worldwide, there are about eight exporting countries that are willing to produce substantially below their capacity in order to retain influence over prices. The most important are the five big Persian Gulf exporters: Saudi Arabia, Kuwait, the United Arab Emirates, Iraq and Iran. However, they are hardly a unified bloc. Iraq in recent years has been at war with two of its neighbors, Iran and Kuwait. Iran has frequently differed with Saudi Arabia. Outside the Gulf region, Venezuela has often run below capacity, and two countries that are not members of OPEC, Mexico and Norway, also frequently do so. The other oil-producing countries, including the United States, run at or close to full capacity. That makes them price-takers rather than price-makers. The United States used to hold its wells

⁵ International Energy Agency, *Oil Market Report*, March 10, 2000, p. 16. The IEA, not to be confused with the U.S. EIA, is an adjunct of the Organization for Economic Cooperation and Development, based in Paris.

below capacity to stabilize prices during the Great Depression of the 1930s, but that policy gradually eroded and, in the crisis of the early 1970s, was finally abandoned.

Among OPEC's 11 member governments, there is no enduring consensus about pricing policy. In general the countries with large populations and urgent requirements for development financing tend to favor the highest possible prices now. But the countries with large reserves and small populations—above all, Saudi Arabia and Kuwait—take a longer view and try to manage prices to maximize total return over a period of decades. That means holding prices down in a range that most consumers will regard as reasonable, so that they will continue to rely on oil rather than turning to other fuels, and so that non-OPEC producers will not be given incentives to develop high-cost oil sources to compete with OPEC. (There is no indication, incidentally, that the price strategists have begun to take seriously the possibility that environmental considerations, and policies to limit the emissions of greenhouse gases including carbon dioxide, will constrain future consumption of oil.)

In the absence of unusual emotional circumstances like those generated by the 1973 Arab-Israeli War, the Saudi-Kuwaiti pricing strategy usually prevails. When it became clear last winter that prices had indeed moved above the reasonable range, OPEC, led by the Saudis, did not delay. The cartel did not try to hold prices high through the winter to scoop up additional billions of revenue in the high-demand season, instead moving to reassure its customers that prices would come down. And prices did start to fall several weeks before OPEC's announcement on March 28 that it would increase production.

What to Do About High Oil Prices?

As prices rose over the winter, many political leaders called for action by the federal government to protect consumers. But experience in the earlier oil shocks strongly indicates that intervention in the market can cost far more than it saves. Price controls in the 1970s caused disruptive shortages and long lines of frantic motorists at filling stations in 1974 and 1979.

Recessions accompanied the first three oil shocks, and for a time it seemed evident that the shocks had caused them. But careful analysis has demonstrated the opposite.⁶ The danger of macroeconomic disruption has diminished over the years, as the consumption of oil in relation to the size of the whole economy has fallen. The impact of oil price changes on the rest of the economy is significantly less now than in, say, the 1970s.

In the 1970s, the unprecedented leap in oil prices caused widespread public panic and hoarding that made the disruptions far worse, while in the 1990 case, the public reaction was much more moderate. Over the past winter, there has been grumbling and irritation with oil and gasoline prices, but none of the fear that met the first oil shocks. According to the automobile manufacturers, the high prices have

⁶ See Bohi, Douglas R., *Energy, Price Shocks and Macroeconomic Performance*, Resources for the Future, Washington, 1989. Bohi wrote before the 1990 price spike and recession, but his conclusions would apply to that case as well.

hardly affected the sales of low-mileage models like sports utility vehicles. Gasoline consumption is still rising, although not as rapidly as in the recent past.⁷

There is one circumstance in which a sudden rise in oil prices can create serious social distress, and that is among low-income families who depend on oil to heat their homes. Congress recognized this need long ago and has made Low-Income Home Energy Assistance Program (LIHEAP) grants available through the states. In the past winter, the highest prices were in New England because of distribution difficulties peculiar to the region. Most of the New England States also have assistance programs of their own to supplement the LIHEAP grants.

Except this special case, the arguments for government intervention in the oil market are not persuasive, in the range of prices predicted and experienced last winter. At one point, when gasoline was at its peak nationwide average of \$1.529 a gallon for regular grade, there was talk of its going up to \$2 a gallon. Even at that level, the policy errors of the 1970s suggest that intervention in the market would bring little benefit to consumers and potentially harm to the economy.

Some leaders in Congress have called for cutting the gasoline tax by 4.3 cents a gallon (the total federal tax is 18.4 cents a gallon). That proposal has run into opposition because the tax funds road construction, and 4.3 cents a gallon raises \$5.5 billion a year. Another reason for opposing a reduction in the gasoline tax is that any short-term benefit to American consumers could soon be redirected to producers, as the higher demand led to higher prices.

There have also been proposals to use oil from the domestic United States' Strategic Petroleum Reserve (SPR) to increase the supply and lower the price. But the market for oil is worldwide and the draw on the SPR would have to be measured in relation to demand worldwide, not merely demand in the United States. The SPR currently contains about 570 million barrels of oil, hardly enough to make a large difference to world oil supply over any prolonged period. If it were used to moderate oil prices that are merely uncomfortable and unexpected, it would not be available for its original purpose of meeting the greater emergency that would arise if there were an interruption of exports from major suppliers.

Surely, there is a point at which rising oil prices could threaten damage to the economy, but prices this past winter came nowhere near it. The high prices of the past winter were an annoyance for most consumers and a hardship for some. But for the country as a whole they never constituted a real economic crisis, and they are now declining.

Where Are We Headed Now?

At a contentious meeting in late March, OPEC decided to raise its production quotas 1.7 mbd. That announcement does not appear to be a firm commitment, but rather a signal that the exporting countries acknowledge their customers' complaints and intend to respond. The formal statements were followed by explanations that the organization's president will have the authority to request

⁷ American Petroleum Institute, news release, April 19, 2000. The API reported that gasoline demand in March was 0.8 per cent higher than in the same month a year earlier, about half the trend rate of increase.

countries to make adjustments as necessary to hold prices in the agreed range. It is the price, not the volume, which guides policy, and no one knows exactly what volume will produce a given price. That's what the argument in the OPEC meeting was about.

One OPEC oil minister, an Algerian, described the desired price range as \$22 to \$28 a barrel. Another minister, a Saudi, somewhat more precisely spoke of \$20 to \$25 for North Sea Brent crude.⁸ By April 19, the spot price for Brent crude was \$22.54, down from \$30.05 six weeks earlier. Crude oil futures for May delivery were down \$5 a barrel from a high of \$32.57, and the futures market showed a steady decline to less than \$20 a barrel by the end of 2002. The unexpectedly rapid drop in prices during April was a reminder that just as a rising price is an incentive to hoard, a falling price is an incentive to dump. The effect is to reinforce the volatility of the market.

American gasoline prices usually rise during the summer, when consumption is high. In April, the EIA forecast a price by September of about \$1.39 a gallon for regular grade,⁹ although meeting the projected demand for gasoline this summer without further price surges would require running American refineries at close to full capacity. The rising environmental requirements for gasoline used in this country make it more difficult than in the past to depend on imports to meet seasonal surges in demand. The trend in gasoline consumption in this country over the past decade has been a rise of about 1.5 per cent a year, but that accelerated significantly in the late 1990s. The effect has been to put unexpected pressure on the refining industry. In this situation accidents or other outages could send gasoline prices upward, even while the underlying crude oil price was steady.

No long-term trend in oil prices exists. Since 1973 prices have fluctuated wildly but without any sustained direction. Even at \$30 a barrel, oil was slightly less expensive than the average, adjusted for inflation into today's dollars, over the past quarter of a century. (The peak, in today's dollars, for crude oil was \$67 a barrel in 1980, and for gasoline, \$2.57 a gallon in 1981.)

The only really reliable prediction is that the oil markets are very difficult to stabilize, and from time to time there will be surprises. Consumers are not defenseless in dealing with an unstable market. Many of them can go elsewhere. Industrial consumers have often responded over the years by switching to natural gas. A generation ago American electric utilities used to depend heavily on oil. They have now all but eliminated it, partly for environmental reasons but also to avoid price bumps that they have difficulty passing on to their customers. Other large consumers have taken out insurance by buying futures. Most residential customers have also switched to gas.

Two-thirds of the oil this country now uses is highway fuel. The anxiety and discomfort caused by fluctuating gasoline and diesel oil prices is another good reason to pursue the development of vehicles that run on other fuels, giving drivers alternatives. Some of these alternative technologies would offer important environmental benefits as well, mitigating air pollution and reducing greenhouse gases.

⁸ New York Times, March 31, p. C-4; Wall Street Journal, March 30.

⁹EIA, U.S. Department of Energy, *Short-Term Energy Outlook*, April 2000.

The most sensible course now appears to be no change in present policy—that means continuing to hold the Strategic Petroleum Reserve for dire emergencies, not for tweaking minor changes in the market. It also means encouraging improvements in the fuel economy of the country, both for heating and for transportation; supporting research on alternative fuels, to provide consumers with choices; and reminding consumers not to count on stable prices of oil products. From time to time, unexpectedly, the world's oil market will swing the price dramatically up or down for reasons that are not visible until after it happens.