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Federal Reserve
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FRBSF Weekly Letter

Another Oil-Price Shock?

Most of the world's major oil exporters are located in the world's most politically unstable area. So whenever trouble breaks out in that area, worldwide supplies tend to be seriously affected and prices shoot skyward. Prices quadrupled following the 1973 Middle East War, and they more than doubled again between late 1978 and early 1980 in the wake of the Iranian Revolution. Thus, when hostilities broke out last month between Iraq and Iran, the industrial world once again feared the worst outcome.

So far, it hasn't happened. As a result of the U.S. recession and the impact of past increases in prices, worldwide consumption had already slackened in relation to production, raising inventories to a very high level. Thus, the initial loss of production from the Middle East conflict affected prices only to a modest degree, and that situation may continue for the remainder of this year. But if the conflict should continue into 1981, world oil prices could rise considerably more than the 12-to-15 percent originally expected for the year. And if Middle Eastern oil should disappear completely from the market—for example, through a blockage of the Straits of Hormuz—major oil importing nations could be in for another serious oil-price shock.

Earlier crises

The present crisis actually began in late December 1978, when the revolt against the Shah led to the halting of Iranian crude-oil exports. This step eliminated Iran's normal supply of 5.5 million barrels a day from the world market. Other Middle East producers quickly offset some of this shortfall, and Iran itself partly restored its export potential, but the Iranian oil-supply shock nonetheless dramatically affected the world oil market. The average OPEC-contract price jumped 82 percent between the fourth quarter of 1978 and the fourth quarter of 1979, to $23.54 a barrel.

The price surge accelerated in the first quarter of this year, as the OPEC average soared at a 122-percent annual rate to $28.72 a barrel (see chart). This surge was somewhat surprising, because worldwide petroleum inventories were already approaching full storage capacity, consumption had dropped well below year-earlier levels, and spot prices had fallen substantially below their late-1979 peak of $42.00 a barrel. However, the wide differential still existing between the higher spot price and the OPEC contract price still provided the impetus for a further sharp advance in the average contract price.

As time wore on, however, the price rise decelerated to a 15-percent annual rate in the third quarter of the year. Inventories continued to build during this period, and spot prices dropped below at least some of the contract prices by OPEC cartel members. Indeed, at OPEC's September meeting in Vienna, Saudi Arabia was the only nation to announce a price increase, and it did that only as a means of narrowing the wide differential between its own and other nations' official price quotations. Other OPEC members were unable to post higher prices in the face of the worldwide glut, and most announced plans to cut production during the current quarter to help bring supplies back into line with demand.

Throughout the past several years, the energy component of the U.S. consumer price index has reflected these movements in OPEC contract prices. ("Energy" includes gasoline, fuel oil, electricity and other energy products purchased by consumers.) Energy prices rose almost 37 percent between the fourth quarter of 1978 and the fourth quarter of 1979, and then accelerated to a 53-percent annual rate in the first quarter of 1980. But the price advance then sharply decelerated, with only a 4-percent annual rate of increase in the third quarter of this year. (Moreover, the energy component of the producer price index

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actually declined in September). The slowdown in U.S. retail energy prices reflected a weakening of energy markets as a result of the massive inventory buildup which had occurred in the wake of the initial price upsurge and U.S. recession.

Effects of conflict
A new situation was created on September 21, when hostilities commenced between Iraq and Iran. Within a few days, those nations' crude oil exports had been cut off, reducing world oil supplies by 3.7 million barrels a day —roughly 9 percent of the non-Communist world's total consumption. The U.S. was not directly affected, but other nations (such as Japan, France, and Brazil) were heavily dependent on Iraq's normal exports of 2.7 million barrels a day, while Eastern European nations were heavily dependent on Iran's smaller export supplies.

Saudi Arabia, Kuwait and the United Arab Emirates took steps early this month to make up for at least part of the loss, by boosting their combined output to about 1.5 billion b/d above the pre-war level. Their action reduced the net shortfall resulting from the Iraqi-Iranian cutoff to about 2 million b/d—coincidentally, about the same amount that total non-Communist world production had been running in excess of consumption. This simply meant that worldwide inventories would no longer continue to grow as a result of excess production, and could decline seasonally during the winter due to the normal increase in cold-weather demand.

Even if the Arab producers reduced production to the pre-conflict level, however, worldwide inventories could be drawn down for months before shortages developed. World petroleum stocks reached a monumental 6.0 billion barrels before the conflict—roughly 500 million barrels above normal. That excess inventory would offset for five months the 3.7-million b/d shortfall created by the Iraqi-Iranian cutoff.

Worst-case scenario
A very serious situation would arise, however, if the world lost access to all Persian Gulf supplies. This could happen if Saudi Arabia and other major neighboring producers became involved in the conflict, or if the Straits of Hormuz were closed. Prior to the conflict, Persian Gulf producers exported 17 million b/d through that 24-mile waterway—roughly 40 percent of the non-Communist world's total oil consumption. The U.S., although less dependent than others, obtains about 9 percent of its total consumption from that troubled area.

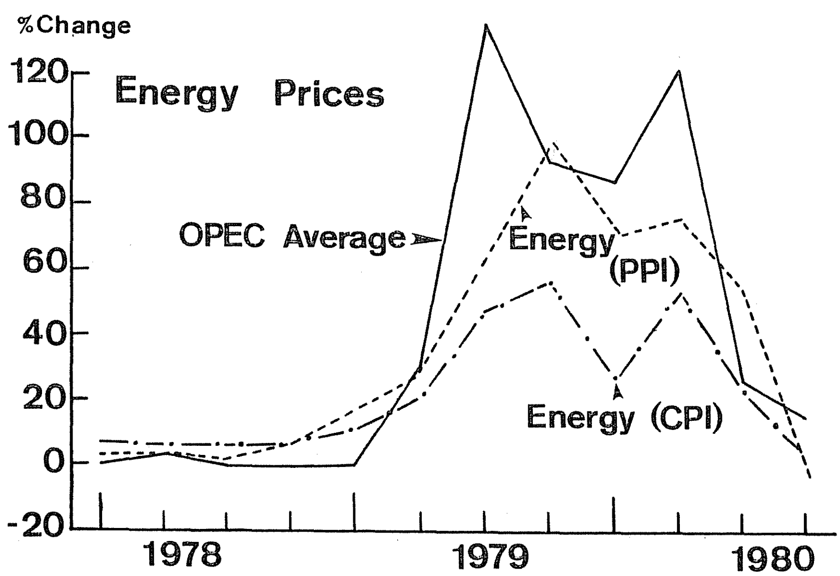
The U.S. thus would be better able to sustain such a cutoff than most other oil-importing nations. At the end of September, U.S. stocks of crude and refined products reached about 1.40 billion barrels, compared with a minimum acceptable level of 1.15 billion barrels. That excess inventory—in the amount of 250 million barrels—would offset for six months a total loss of Persian Gulf imports, which recently have been running at 1.5 million b/d. The U.S. doesn't live in a vacuum, however, but rather in a tightly interrelated world market. Any major loss of Persian Gulf oil would trigger sharing arrangements among major oil-consuming nations, and would create severe pressure on spot and contract prices.

Actual situation
In actuality, spot crude-oil prices have firmed only moderately since September 24, when Iraqi oil disappeared from the market. The Rotterdam quotation for Arabian light crude has risen from $33 to $37 a barrel, or $7 above the Saudi Arabian official price. But there has been no panic buying, and the transactions volume has remained rather light. Indeed, the market seems capable, at least through the fourth quarter, of handling a 2 million b/d net loss of supplies. And with the situation stabilized at the producer level, the energy component of the CPI could be expected to rise at a relatively modest pace, although more than the 4-percent annual rate of increase recorded during the third quarter.

Prior to the Iraqi-Iranian conflict, many analysts had been expecting world oil prices to rise about 15 percent during 1981, a relatively modest increase in the context of the past decade. But that modest rise could be expected only on the assumption that sluggish growth in the world economy, together with strong conservation efforts, held non-Communist oil demand at about the 1980 level or lower. Moreover, prices could skyrocket, if the Middle East conflict continued for a prolonged period, or if Iraq and Iran were unable to bring their damaged facilities back into production within a short period of time.

In the worst-case situation, the industrial nations could experience a complete cutoff of all Persian Gulf exports, and OPEC contract prices could reach perhaps as much as $100 a barrel within several months' time. A supply shock of that magnitude would cause severe economic disruption, force drastic conservation, and add several percentage points to the U.S. overall inflation rate. Still, although the overall situation remains worrisome, the most striking point to date has been the adequacy of supplies and the stability of prices in the face of a destabilizing conflict in this crucial area.

Yvonne Levy



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BANKING DATA—TWELFTH FEDERAL RESERVE DISTRICT

(Dollar amounts in millions)

Selected Assets and Liabilities Large Commercial Banks	Amount Outstanding 10/15/80	Change from 10/8/80	Change from year ago Dollar	Percent
Loans (gross, adjusted) and investments*	141,338	67	6,679	5.0
Loans (gross, adjusted) — total#	119,379	39	8,019	7.2
Commercial and industrial	34,851	81	3,329	10.6
Real estate	48,555	221	6,934	16.7
Loans to individuals	23,707	– 80	215	0.9
Securities loans	1,130	145	– 751	– 39.9
U.S. Treasury securities*	6,577	95	– 1,060	– 13.9
Other securities*	15,382	– 67	– 280	– 1.8
Demand deposits — total#	48,107	2,006	3,694	8.3
Demand deposits — adjusted	34,957	973	3,061	9.6
Savings deposits — total	29,770	– 68	– 441	– 1.5
Time deposits — total#	64,533	– 194	8,876	15.9
Individuals, part. & corp.	55,900	– 215	8,710	18.5
(Large negotiable CD's)	24,222	– 240	3,404	16.4

Weekly Averages of Daily Figures	Week ended 10/15/80	Week ended 10/8/80	Comparable year-ago period
Member Bank Reserve Position			
Excess Reserves (+)/Deficiency (–)	139	– 38	28
Borrowings	94	38	127
Net free reserves (+)/Net borrowed(–)	45	– 76	– 98

* Excludes trading account securities.
\# Includes items not shown separately.

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