



Telephone: (212) 686-6470

Facsimile: (212) 686-6558

PETROLEUM INDUSTRY RESEARCH FOUNDATION, INC.

3 PARK AVENUE-26TH FLOOR

NEW YORK, NY 10016-5989

A Presentation

By

**John H. Lichtblau, Chairman
Petroleum Industry Research Foundation (PIRINC)**

At The Session

**The Past As Prologue? A Twenty-Five Year
Retrospective Of The First Oil Crisis**

IAEE

21st Annual International Conference

Château Frontenac

May 13 - 16, 1998

The Past As Prologue? A Twenty-Five Year Retrospective Of The First Oil Crisis

I have been asked to focus my remarks on the impact of the Arab oil embargo of 1973/74 on the US, the prime target of the embargo. But before turning to the US I would like to make a few general comments about the 1973 embargo.

Global Impact

It was clearly the most dramatic and lasting turning point in the post World War II history of the world oil market. In the 25 years ending in October 1973 world oil prices remained in the \$2-3 range in nominal dollars and trended downwards in real dollars while world oil demand rose rapidly and consistently, about 7.5% annually. By contrast, in the 25-year period since 1973 nominal WTI prices averaged almost \$19/bbl. which in real (inflation-adjusted) dollars was double the average 1950-1973 price, while world oil demand rose at an average annual rate of just 1.2%.

Yet, the oil embargo lasted only 5 months (from mid-October 1973 to March 1974) after which all restrictions on export destinations were unconditionally removed and never reimposed or even threatened to be reimposed.

Thus, in retrospect, it is clear that the permanent changes in the world oil market triggered by the Arab oil embargo were based on much more fundamental factors than the short-lived embargo.

Absent the embargo, the transition to higher prices and slower growth would certainly have been more gradual and less disruptive and thus would have avoided the global trauma of 1973/74. However, the need for substantially higher prices was there, even though it was generally not recognized at the time. Most forecasts in 1970/72 projected continuing rapid growth in demand at stable real prices.

There were two reasons why the price did not retreat after the end of the embargo but continued to rise moderately in nominal dollars: World demand kept growing at an annual rate of 4.2% from 1975 through 1979 and supplies were effectively controlled by OPEC to protect the new price structure. Only the second oil shock (1979-82), caused by extraneous political and military events*, brought on an extended *decline* in world oil demand in the first half of the 1980's. Following the historic 55% price crash of 1986, world oil demand has again grown every year. Through 1997 the average annual rate was respectively 1.6% globally and 2.5% excluding the Former Soviet Union.

* The Iranian revolution of 1979 and the early phase of the Iran-Iraq War of 1980-88.

Impact On The US

Now let me turn to the US's reaction to the Arab oil embargo.

The initial reaction was one of shock and disbelief at every level, from street consumption to national strategic planning. Since in 1973 the US per capita automobile ownership far surpassed that of any other nation, the consternation and shock at the physical shortages at the pump was stronger in the US than in Europe which also had supply disruptions at the consumer level. There was resentment both against the foreign countries imposing the sanctions and the oil companies which transmitted the shortages to consumers while at the same time reporting sharply increased earnings because of the oil price increases triggered by the sanctions. At a Senate hearing in 1974 the increases were called "obscene profits."

At the national strategic planning level where the principal evaluation of any international issue was how it would affect the Cold War which was then still at full strength, the embargo was viewed with much dismay since it potentially weakened the US which was then importing 37% of its oil requirements, while strengthening the Soviet Union which had become a major oil exporter. Henry Kissinger who was then Secretary of State says in his memoirs that in December 1973 he hinted publicly at the possibility of some form of US armed intervention if the embargo lasted much longer.

Meanwhile President Nixon in December 1973 came out with his famous *Project Independence* which was supposed to free the US of any oil import dependency "by the end of the decade." Later there were other proposals such as the Synfuels Corporation and in early 1977, three years after the end of the Embargo, newly elected President Carter gave a national address in which he called the need to reduce US oil import dependency "the moral equivalent of war."

None of these projects ever materialized. Instead, our net oil import dependency has risen from 37% in 1973 to about 50% this year, while our net import volume has increased from 6 million B/D in 1973 to about 9 million B/D this year. Yet, neither our economy nor our national security has been adversely affected by this increase in oil imports.

However, the embargo did bring on some new policies intended to better manage our import dependency. The first was legislation to construct the Alaskan pipeline. The pipeline had been strongly opposed by environmental interests and prior to the embargo in October 1973, there was little chance of passing the required legislation. The embargo quickly gave priority to domestic oil supplies over environmental considerations. As a result, Alaskan oil started to flow in 1977 and by the time of the oil crisis in 1980, it delivered about 1.7 million B/D to the US market.

Another legislation in reaction to the embargo was the establishment of a US Strategic Petroleum Reserve (SPR), administered by the Department of Energy, to be used exclusively for emergency purposes as determined by the White House. The SPR was not yet operative during the 1979/80 oil crisis but it was used at the beginning of the Gulf War in February 1991 and while the volume actually purchased was quite small, the SPR's declared ready availability of

some 500 million bbls was definitely a factor in the historic price crash in February 1991. Currently, the SPR contains about 560 million bbls of crude oil, equal to 30% of US commercial crude stocks. Thus, it provides not only a significant draw-down potential in an emergency, but it is also likely to discourage future sanctions threats by any oil exporter.

Another historic response to the 1973 embargo has been the establishment of the International Energy Agency (IEA) in Paris in 1974. Its initial assignment was for the world's industrial countries to cooperate in their energy policies, both during normal times and during crisis conditions. In part, this reflected the fact that during the 1973-74 crisis some of these countries had outbid each other rather than cooperate. Secretary Kissinger was a major advocate for the IEA.

Rising Prices And Domestic Production

Regarding US domestic production, the world price increases of 1973/75 were not fully passed on to domestic producers because of price controls until 1980. However, the controls still permitted substantial price increases. Thus, the average wellhead price doubled from \$3.39 in 1972 to \$6.87 in 1974 and continued to rise every year thereafter until its peak of \$32 in 1981.

As expected, the price increases brought about a sharp rise in drilling activities and drilling costs but, unexpectedly, very little additional production in the lower-48 states. US oil wells drilled rose from a post-war low (until then) of 10,250 in 1972 to a record high of 42,840 wells in 1981, with an increase every year. Yet lower-48 oil production kept declining throughout that period, from 9.2 million B/D in 1972 to 6.9 million B/D in 1981. The reasons for these seemingly contrarian movements were partly price controls and partly price expectations. US government controls kept oil from old wells below world market prices until 1981 but oil from new wells was uncontrolled. As an additional incentive, for each barrel of "new" oil a barrel of "old" oil was removed from price control. This, together with the expectation of steadily rising prices provided both the cash flow and the incentive for the extraordinary increase in oil drilling from the early 70's to the early 80's. However, the national interest was probably not served by this policy since the vast increases in drilling expenditures did not significantly slow down the decline in production or reserves in the lower-48 states.

The Arab oil embargo affected the US economy beyond the energy sector. It contributed substantially to the recession of 1975 when the US GNP declined by 1.8%. A much deeper recession -- a 2.5% GNP drop -- occurred in 1982, caused in large part by the second oil disruption and price explosion.

Is The Past Prologue?

Let me end my presentation with the question in the title of this session, "Is the past prologue?"

The Arab oil embargo of 1973 was not a success for the countries which imposed it. As I mentioned earlier, there has not been another oil export embargo since then. The globalization of the world oil market, the stand-by emergency program of the IEA, the large SPR in the US and several other major importing countries, the ongoing diversification of oil supply sources, which is part of the US energy strategy, would all make the use of oil exports as a political instrument even more difficult now than it was in 1973. Furthermore, it would now be impossible to limit the impact of an export embargo to the targeted country. The impact would instantly be global and generate global reactions.

Another major difference from 1973 is Saudi Arabia's 2 million B/D readily available spare producing capacity which has been officially designated for alleviating temporary world oil shortages. Its use in 1990/91 during Iraq's occupation of Kuwait was the single most important factor in preventing a global shortage.

Thus, while we will continue to see oil disruptions in producing countries caused by military or political events or by natural disasters, politically motivated selective export embargoes are unlikely and would be ineffective if imposed.

Sanctions By Importers

However, we are now seeing another form of embargo, one imposed on the exporting countries by restricting their exports through sanctions from the importing country. Currently, the US is carrying out this form of sanctions through the widely disputed Iran Lybian Sanctions Act (ILSA).

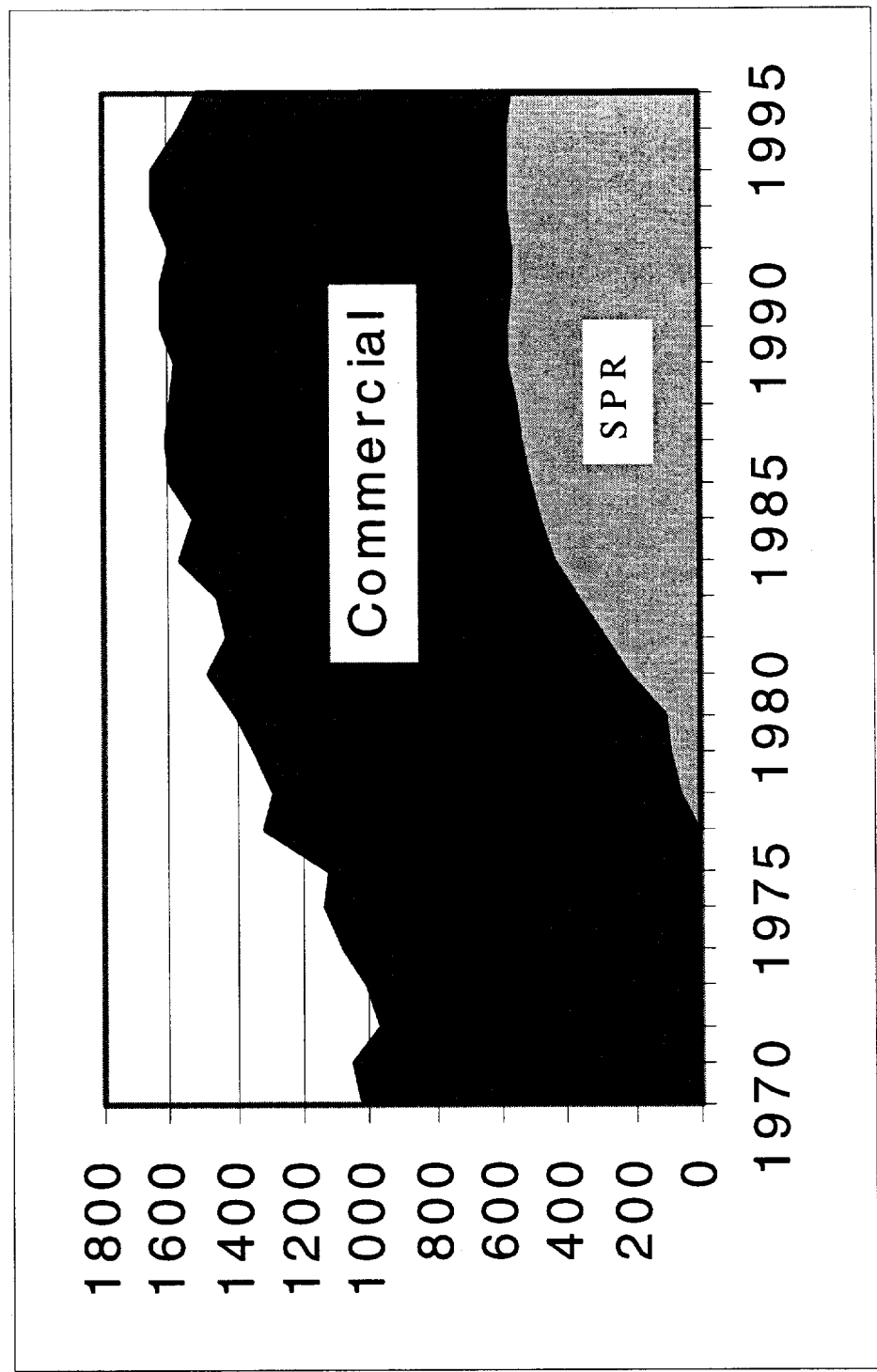
ILSA is designed to force policy changes in both these countries by severely restricting foreign investments in their oil and gas sectors. No other country is supporting the US position on Iran. In Libya, the UN Security Council has already imposed limited multilateral sanctions to bring about the desired policy change.

The Act contains measures to penalize foreign companies which ignore the investment restrictions contained in ILSA. If these sanctions are effective they will reduce world oil supplies and counter the diversification of supply sources. Meanwhile, ILSA is creating hostile reactions towards the US among actual and potential foreign investors and their governments in Europe and Asia and puts US corporations at a competitive disadvantage abroad.

In the post-Cold War world unilateral oil sanctions in peace time are obsolete and counter-productive whether they are imposed by exporters or importers and could hurt those that impose them more than their intended target.

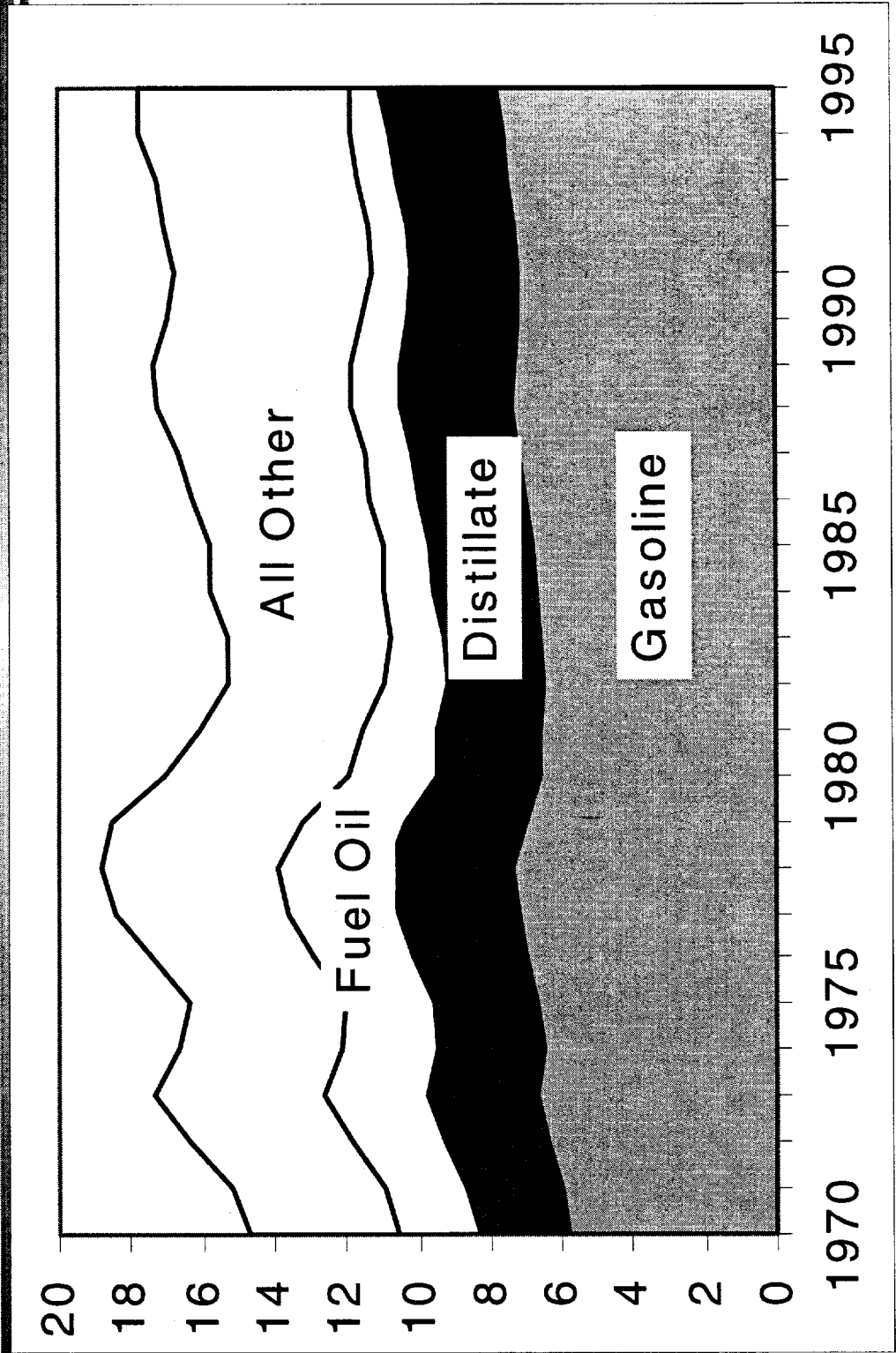


US Oil Inventories - MB



No strategic stocks for first oil crisis. Build during second added to competition for supply.

Trends in US Oil Consumption Since 1970 - MBD



Rapid oil growth only interrupted by first crisis. Decisive change came only after second. Most readily substitutable product, fuel oil, kept growing after first crisis. Now at minimal levels.



Trends in US Crude and Condensate Production - MBD

