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OPEC'S IMPORT COSTS AND CRUDE
OIL PRICE INCREASES

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Introduction

OPEC plans to meet in Doha, the capital of the sheikhdom of Qatar, on December 15 to discuss the establishment of a new price for the organization's "marker" crude oil which is used as a reference for setting the prices for all other crude oils produced by OPEC members. Since these members account for nearly 90% of all crude oil traded internationally, the conference will in effect establish a new level for world crude oil prices.

The practice of unilateral price determination by OPEC, as contrasted to prices negotiated between oil companies and producing country governments, started in Kuwait in October 15, 1973. In that and various subsequent OPEC meetings the sales price for OPEC marker crude was raised from about \$2.90/bbl, in effect just prior to the Kuwait conference, to the current level of \$11.51/bbl which was set on October 1, 1975. This represents an increase of 300% over a three year period. Concomitant with the price changes, government revenue on OPEC marker crude was raised from about \$2.00 to \$11.00/bbl, a 450% increase.

There is a general expectation, based on implicit and explicit statements by responsible government officials of several OPEC members, that the price will be raised once again at the Doha meeting. The principal justification for such action is the same as was given for the price and unit revenue increase in October 1975, namely a

deterioration in the terms of trade of OPEC oil -- the relationship between oil export prices and the prices of goods imported by OPEC. Thus, in June 1975 at the OPEC conference in Gabon a communiqué was issued which stated that the members had "decided to readjust crude oil prices as of October 1, 1975, in view of increasing inflation, the depreciation of the value of the dollar and the consequent erosion of the real value of the oil revenues of member countries." This was followed at the next OPEC meeting, held in September 1975 in Vienna, by a 10% increase in the official sales price of OPEC marker crude and a 9% increase in the government unit revenue derived from it.

Echoing the sentiments of the 1975 Gabon communiqué, the United Arab Emirates Minister of Petroleum and Mineral Resources stressed last month that oil prices will be reviewed at the December 1976 meeting of the OPEC Conference in "light of the changes which have taken place with regard to the world economy, inflation, the value of the currencies in which our revenues are paid, the materials we import, and the technology we obtain from the industrialized countries." "The question," he continued, "is...of maintaining the purchasing power of our oil revenues." A similar view was voiced by Mr. M.O. Feyide, Secretary General of OPEC who said in a press interview on October 15 that oil "exporting countries will strive to maintain the real value (or purchasing power) of their earnings." At the recent International Monetary Fund (IMF) meeting in Manila, Mohammed Yeganeh, Iran's Minister of State and head of OPEC's governing committee, declared that "oil today is at a bargain price."

While the actual price increase will of course not be known until the Doha conference, some indications of the possible magnitude have been made public. Thus, the Shah of Iran in a German television interview called for a minimum increase of 15%, saying that Iran's oil revenues had dropped by 40% because inflation had increased the cost of imports. The editor of the authoritative Middle East Economic Survey estimated the increase between 10% and 20%, while an OPEC spokesman said member countries had proposed increases ranging from 10% to 25%. The annual amount of money involved in these increases ranges between \$12 and \$31 billion at next year's expected OPEC rate of exports of about 29.5 million b/d.

In evaluating the justification for another OPEC oil price increase one could of course argue, correctly, that the enormous increases imposed in October and December 1973 plus the increases in government participation in production decreed in early 1974 retroactive to January 1 put oil values and unit revenues well ahead of world inflation for a number of years, almost regardless of how world inflation is measured or defined. However, OPEC has made it clear that it intends to maintain the real value of the increases effectively achieved by January 1974 and has, so far, demonstrated its power to do so. On the other hand, OPEC's stated price and revenue policy since then has not been to achieve further real gains in its prices and unit income but rather to protect the previous gains from erosion by inflation and currency devaluation.

If this is OPEC's policy, it is of great importance to determine whether and, if so, to what extent OPEC's terms of trade have actually deteriorated. Accordingly, we have attempted to make such a determination by analyzing changes in the unit cost of imports into OPEC and relating them to changes in the per barrel value of oil exports.

Summary of Findings

1. From the third Quarter of 1975, the time of the last OPEC price increase, to the third Quarter of 1976 the composite f.o.b. price index of imports into OPEC (in U.S. dollars) has risen by 2.7%. Published figures through the second Quarter of 1976 show an actual fractional decline in the price of OPEC imports but this appears to have been reversed in the third Quarter, on the basis of partial data. Thus, if the dollar purchasing power of the OPEC oil price established on October 1, 1975 were to be preserved, the price would have to be raised by not quite 3%. On the basis of the most recent export data trends and current future-dollar exchange rates it would appear that in the fourth Quarter of 1976, when the Doha meeting takes place, the import price index and, thus, the need for oil price adjustment, will not differ significantly from the third Quarter.

2. If the first Quarter of 1974, the period immediately following the exceptional price increases of late 1973, is used as a base, the composite price index of OPEC imports rose 25.8% by the third Quarter of 1976. This consists of a 22.5% increase to the third Quarter of

1975 plus the nearly 3% increase since then, discussed in the previous paragraph. Government revenue on marker crude (Saudi Arabian Light) has risen by 18%* or 41%* since January 1, 1974, depending on whether one assumes government participation in Aramco's crude oil production at the 25% share actually in existence in January 1974 or the 60% share decreed in March 1974 retroactive to January 1. Based on the 18% increase, a further increase of 7.8% in OPEC marker crude revenue would now be required to offset increases in import prices since the first Quarter of 1974. The 41% increase from the level actually in existence on January 1, 1974 would of course not justify any price increase at this time.

Our findings are summarized in the following two tables which show the changes in the index in OPEC import prices from our two chosen base periods as well as the changes in government oil revenue during these periods.

*From \$9.32 or \$7.80 to \$11.00/bbl.

INDEX OF OPEC F.O.B. IMPORT PRICES
SELECTED BASE PERIODS.

1974	1st Q	100.0	
1975	3rd Q	122.5	100.0
1976	2nd Q	121.0	98.8
1976	3rd Qp	125.8	102.7

p - provisional

INDEX OF GOVERNMENT REVENUE ON OPEC
MARKER CRUDE (Saudi Arabian Light)

		<u>A</u>	<u>B</u>
1974	1st Q	100 (\$ 9.32/bbl.)	100 (\$ 7.80/bbl.)
1975	3rd Q	118 (\$11.00/bbl.)	141 (\$11.00/bbl.)
1976	3rd Q	118 (\$11.00/bbl.)	141 (\$11.00/bbl.)

Note: Includes (A) or excludes (B) the retroactive increase in government participation. (See page 5).

Evaluation of Findings

As pointed out in the Summary of Methodology (p. 9), the OPEC Import Index must be read with several qualifications in mind. It is entirely in dollar values. This fact, more than any other, explains why OPEC's import costs showed such a minute increase in the last twelve months despite continuing substantial inflation in many industrial countries. In the U.K. and Italy, for instance, the export price index in local currencies rose by 16% and 19% respectively between the third Quarter of 1975 and the second Quarter of 1976. But expressed in dollars the U.K. export index fell by almost 2% and the Italian one by over 9%. Since all OPEC oil prices are set in dollars or dollar terms, the strengthening of the dollar during the last twelve months has largely protected OPEC from the impact of world inflation.

For the U.S., which last year accounted for about 18% of

total OPEC imports, the general export price index rose by 20.2% between the first Quarter of 1974 and the second Quarter of 1976, about in line with our OPEC import index.

Another qualification is that all import prices are on an f.o.b. (port of export) basis. On a c.i.f. (landed) basis the index could conceivably be higher, because the rapid increase in import purchases in most OPEC countries has engendered port congestion in some of them almost unrivalled in the modern world, according to several reports. Sixteen months ago Thomas O. Enders, former U.S. Asst. Secretary of State, writing in Foreign Affairs (July 1975), mentioned that "limitations on port facilities and resultant demurrage and delay in the Persian Gulf are already significant and growing." Since then the volume of Persian Gulf imports has registered substantial further increases. To what extent this factor has raised the cost of imports is not clear, since few Persian Gulf countries publish up-to-date import price indices. The one country that does, Iran, has only a 4% increase between the years 1974 and 1975 and a 4.9% decline between the third Quarter of 1975 and the second Quarter of 1976, as is shown in the following table.

IRANIAN IMPORT (C.I.F.) PRICE INDEX
(in \$)

1974	year	160.2
1975	year	166.2
1975	3rd Q	171.0
1976	2nd Q	162.7

Source: International Monetary Fund, International Financial Statistics, October 1976

A final qualification is the exclusion of most military equipment from the OPEC import price index. For at least two OPEC members -- Iran and Saudi Arabia -- these imports are substantial. However, no index exists for these items and it would probably be very difficult to construct one, since the design and type of military equipment often changes from contract to contract so that the military imports of one period may not be comparable to those of another.

Comparison To Other Foreign Trade Price Indices

For the period third Quarter 1975-second Quarter 1976 and also for the month of July 1976, the latest month for which complete published data are available, our composite OPEC Import Price Index is very close to the three other reasonably comparable indices shown below.

		<u>PIRINC INDEX I</u>	<u>PIRINC INDEX II</u>	<u>IMF INDEX I</u>	<u>IMF INDEX II</u>
1975	3rd Q	100.0	100.0	100.0	100.0
	4th Q	98.3	96.3	98.5	98.9
1976	1st Q	97.9	99.6	98.8	100.5
	2nd Q	98.8	99.8	99.3	101.1
	July	101.4	101.9	99.8	102.7

PIRINC Index I, which is used in this study to measure OPEC import price changes, is weighted by the price changes in each of ten major export commodity classifications (SITC*) in each industrial (OECD) country and by the share of each OECD exporter in OPEC imports. (OECD

*Standard International Trade Classification.

countries accounted for more than 80% of OPEC's imports last year).

PIRINC Index II measures changes in OPEC import prices on the basis of global changes in the price of food-related goods and industrial goods, each weighted by its share in OPEC imports. (Together the two groups accounted for 91% of total OPEC imports in 1974.)

IMF Index I is the index of export prices of industrial (OECD) countries, as published in International Financial Statistics, weighted by the share of each country in OPEC imports.

IMF Index II is the composite export price index of industrial (OECD) countries, as published in International Financial Statistics. This index is perceptibly higher than the three others for 1976, indicating that OPEC's import pattern during this period differed somewhat from the OECD countries' export pattern.

Summary of Methodology

1. We have compared quarterly rather than monthly data since the former fluctuates more moderately than the latter.
2. We have measured changes from two basic periods: the first Quarter of 1974, the period immediately following the exceptional price increases of the last Quarter of 1973; and the third Quarter of 1975, the period of the last OPEC price increase.
3. We have measured changes from the respective base period to the second Quarter of 1976 on the basis of published data and have estimated changes for the third Quarter of 1976 on the basis of partial and

preliminary data and current dollar exchange rates.

4. Our principal sources of data are (1) the IMF's monthly publication International Financial Statistics which gives the total value of exports to OPEC as well as export price indices for most countries; (2) the OECD publication, Economic Outlook, July 1976, which gives the dollar value of the exports of each OECD country to OPEC for 1975, the latest available data; (3) the UN Monthly Bulletin of Statistics, August and September 1976, which gives annual imports into OPEC by major commodity classification for 1970-1974; and (4) the OECD monthly publication Statistics of Foreign Trade which gives monthly price changes for major commodity classifications by country.

5. A combination of the above data, supplemented by individual country data, has enabled us to measure reasonably accurately changes in OPEC merchandise import costs in dollar values by country of origin and type of commodity. Imports of services and military items are not included in our calculations, since no data on price changes are available.

The changes in cost of merchandise imports have been related to changes in government revenue per barrel of "marker" crude oil, i.e. Saudi Arabian light crude, since government revenue, rather than oil market prices, provides the funds for oil-financed imports. We have assumed that all other OPEC members adjust their oil revenues in line with changes in the marker crude.