CIAOER IM 75-003 Mar 75 OUO 1 of 1

Proj. World Oil Demand and OPEC Current Accounts, 1975-77 ER IM 75-3

FOR OFFICIAL USE ONLY

Intelligence Memorandum

Projected World Oil Demand and OPEC Current Accounts, 1975-77

ER IM 75-3
March 1975

Copy No. 167

Preface

This paper estimates the likely demand for OPEC oil and the balance of payments for OPEC members during 1975-77. It is an estimate in the sense that we make reasoned judgments based on analysis of all available information about trends in economic activity, on the relationship of GNP growth to energy consumption, and on the supply of alternative forms of energy. We use this total demand estimate as a constraint on cartel exports and then take into account political considerations like the domestic economic objectives of OPEC member states and the desire of OPEC governments not to disrupt the cartel. Uncertainties during this time period are probably small enough to keep errors within reasonable bounds. We discuss the period beyond 1977, but the uncertainties are much greater.

This is essentially a market analysis. We do not attempt to factor in the results of possible major political initiatives, which could bring shifts in oil policy on the part of some key OPEC members.

Projected World Oil Demand and OPEC Current Accounts 1975-77

SUMMARY

The economic performance of the major industrial countries will be the single most critical factor determining Free World oil demand over the next three years. Output currently is falling in nearly all industrial countries, but recovery generally is expected to begin by yearend. Barring petrodollar recycling difficulties, we expect output in OECD countries to rise by about 4% next year and 7% in 1977, as the recovery gains momentum. This growth -- combined with continuing consumer reactions to high oil prices and the impact of any policy decisions to suppress oil demand -- will determine the demand for OPEC oil.

The pattern of oil import demand this year will be significantly different from that in years past. Consumers will enter the spring season with full stocks. As a result, import demand will slump sharply during the second and third quarters -- to only about 25 million b/d, compared with about 27 million b/d this past February. Import demand will then rise sharply to about 29 million b/d for the fourth quarter. Demand for OPEC oil during 1975 as a whole will be down about 8%, to 27 million b/d.

In 1976 and 1977, economic recovery will cause demand for OPEC oil to increase above the 1975 level. Demand for OPEC oil should grow by about 2%, or by 600,000 b/d in 1976. In 1977, more rapid economic growth will cause OPEC sales to increase by a further 7%, or by 1.8 million b/d. OPEC's export volume, however, will still be lower in 1977 than it was in 1973.

Had it not been for the Saudi production cutback, the next few months would have been somewhat difficult for OPEC because of declining consumer demand. The Saudi action has largely eliminated the threatened surplus. In any event as fall approaches, OPEC's task will shift from one of informally allocating production cuts to determining in the same informal way the members' share of the production

25X1A9a

Note: Comments and queries regarding this memorandum are welcomed. They may be directed to [redacted] of the Office of Economic Research, Code 143, Extension 7884.

March 1975

increases that are certain to occur. With the demand for OPEC oil increasing in the next two years, the contentious issue of production cuts will not recur. We do not see the issue of determining the share of increased demand as a problem for the cartel. We believe that those countries that need more revenue will be tacitly allowed to raise output by the large producers who will meet less of the new demand from their own production.

During 1975-77, OPEC countries collectively will accumulate surplus funds averaging US $60 billion a year. Only Algeria, Ecuador, Indonesia, Venezuela, and perhaps Libya will have current account deficits. Other OPEC members will continue to accumulate large surpluses. By the end of 1977, OPEC states will have accumulated a total investable surplus of about $265 billion. We see no particular stress on the cartel through 1977 so long as Saudi Arabia continues to be supportive of OPEC pricing policy.

Beyond 1977, the situation is much less certain. OPEC exports clearly will slump sharply by 1980 – probably to only about 22-24 million b/d. At this level, only Saudi Arabia and Kuwait will have sizable surplus earnings. Such a situation would put substantial stress on the cartel. Pressures will be strong on OPEC countries collectively to boost the real price of oil substantially and on some members to attempt to solve their problems by raising output. Which course is the more likely, we cannot now estimate, because the outcome will be heavily influenced by political developments both within and outside the cartel.

DISCUSSION

The Growth Outlook

1. Aside from the impact of any policy decisions that might affect oil consumption, the economic performance of the major industrial countries is the single most critical factor determining Free World oil demand over the next three years. Economic output is currently falling in nearly all the major industrial countries. Recovery, however, is generally expected to begin by the end of this year or early next year in most countries. US GNP is now expected to fall by 3% to 4% in 1975,[1] while Japanese and the major West European GNPs will grow little if at all. Because inflation is easing and political pressures arising from growing unemployment are mounting, many OECD nations are expected to institute strongly stimulative economic policies during the year. Barring any major financial upsets as a result of recycling problems, the most important OECD economies -- the United States, Japan, and West Germany -- should be well on the road to recovery by early in 1976.

2. The initial recovery, however, seems likely to be slower than has been the case for most other postwar recessions. Stimulative policies will boost consumer demand fairly quickly, but other sectors will lag. We believe that OECD growth in 1976 will be only about 4%,[2] or well below long-run growth rates. West European GNP appears likely to grow at about 4% or perhaps slightly less, while the Japanese should grow about 5%. Because the gap between output and productive capacity is very wide, fixed investment by manufacturing industries and utilities not only will be slow to respond but probably will continue to fall during most of 1976. The economies and import capacity of the smaller developed countries and the non-OPEC LDCs will remain depressed at least until the recovery in the major countries increases the demand for their exports. In addition, the need and/or desire of many nations – particularly Italy, France, the United Kingdom, and most smaller OECD states – to improve their trade balances will cause their policymakers to moderate the increase in domestic demand until recovery is firmly established in the more important countries.

3. OECD economic growth in 1977 will likely accelerate. The smaller industrial countries should by then be recovering, and in the larger OECD countries the lagging sectors -- fixed investment in plant and equipment and export demand -- should have begun growing strongly. As a result of these factors, we expect OECD

1. The range of estimates for 1975 is -3% (CEA) to -4.5% (OECD). We approximate the CEA estimate in this memorandum. For other countries, we make our own estimates, which conform closely with those of the OECD for 1975.

2. US growth in 1976 is assumed to be 4%. We have estimated the 1976 GNP for other OECD countries. There are no official OECD growth estimates beyond 1975.

growth to increase to about 7% in 1977, or well above the long-term growth rate.[3] Growth in Western Europe should sum to about 6.5%, in Japan it could easily reach 11%. US GNP growth is assumed to be about 6%. Beyond 1977, growth should continue to be strong for a year or so if only because unemployment is likely to remain unacceptably high in many countries well into 1977.

4. We estimate that for each 1% change in OECD output, world energy consumption will shift by the equivalent of about 500,000 b/d of oil. Because marginal energy supplies are provided almost exclusively by OPEC countries, we can expect their oil revenues to rise or fall by about $2 billion for each 1% variation in gross OECD output.

Demand for OPEC Oil, 1975-77

5. The factors that will determine the demand for OPEC oil for the rest of this year are already set and are not likely to change. For seasonal reasons, demand for OPEC oil should reach its nadir this summer. The drop from February will be unusually rapid, but so will the recovery.

6. Normally there is a swing in consumption in a given year of about 5-1/2 million b/d because of seasonal factors. Import demand, however, is usually only slightly affected because stocks drawn down in the fall and winter are replenished in spring and summer. Because both warm weather and precautionary imports have kept storage tanks nearly full this winter, this summer's import demand will more closely approximate consumption. The decline from February should be about 2 million b/d. Conversely, import demand will rise sharply this fall. Even if the coming winter's stock drawdown were normal, import demand would rise by nearly 2 million b/d. But we expect consumers will again be reluctant to draw down their stocks. Moreover, economic recovery may also begin to boost oil demand by then. In these circumstances, we estimate that imports will probably rise by about 3-1/2 million b/d from the third to the fourth quarter to reach a level about 1.5 million b/d higher than this past February (see Appendix Table A-1). For the year as a whole, however, the demand for OPEC oil will be about 27 million b/d, compared with 29 million b/d in 1974 and 30 million b/d in 1973 (see Table 1).

3. Although this estimated rate may seem rapid, it was exceeded during the recovery of 1972-73 and equaled in 1954-55; in both periods the downturn was much less.

TABLE 1

FREE WORLD DEMAND FOR OPEC OIL

MILLION B/D

	1973	1974	1975	1976	1977
NET OIL IMPORT REQUIREMENTS	28.9	27.6	26.7	27.5	29.2
UNITED STATES	5.9	5.8	6.0	6.7	8.0
WESTERN EUROPE	14.7	14.0	13.3	13.4	13.5
JAPAN	5.4	5.2	5.0	5.1	5.4
OTHER COUNTRIES (NET)	2.9	2.6	2.4	2.3	2.3
NET IMPORTS FROM COMMUNIST COUNTRIES	0.6	0.7	0.9	1.1	1.3
IMPORTS FROM OPEC COUNTRIES	28.3	26.9	25.9	26.4	27.9
BUNKER USE AND CHANGE IN FLOATING STORAGE	+1.4	+2.2	+0.9	+1.0	+1.1
TOTAL OPEC EXPORTS	29.7	29.1	26.8	27.4	29.0

7. Beginning in 1976, economic recovery should clearly lead to a rise in energy demand. Prior to 1973, economic activity and energy consumption grew at nearly equal rates. In economic terms the GNP elasticity of energy consumption was about 1.0 for the major Free World countries as a group. During 1970-73, OECD economic output grew at an average annual rate of 4.6%, while energy consumption grew by 4.7% a year. Growth in GNP, energy consumption, and oil consumption in 1970-73 was as follows at annual rates.

	Percent			
	GNP	Energy	Oil	GNP Elasticity of Energy
United States	3.7	3.6	5.1	0.97
Japan	9.1	8.4	12.5	0.92
Western Europe	4.7	5.2	7.3	1.10
All industrial countries	4.6	4.7	6.9	1.02

Now, because high prices will cause consumers to practice conservation, this relationship will change. We think it likely that energy consumption will rise only about 70% as fast as economic output.[4] Even so, demand for OPEC oil will rise in 1976 and 1977 because production of alternative energy will not grow fast enough to supply all of the rise in demand.

4. Most observers now expect that because of continuing reactions to higher energy prices the relationship between energy consumption and GNP growth should change. The OECD long-range study concludes that the GNP elasticity will fall to about 0.7 during the period until 1980. In this memorandum, we use 0.7, but if economic growth in 1976 and 1977 is more rapid than our scenario assumes, this elasticity would rise because more rapid recovery would bring less efficient, marginal capital equipment into use sooner. Studies by major oil companies use an elasticity of 0.8 to 0.9.

8. In 1976, OECD energy production will rise by nearly 1.3 million b/d of oil equivalent, but economic recovery of about 4% will boost energy consumptions by some 1.9 million b/d, or 3%, leading to a 2% rise in OECD oil import requirements.

9. In 1977, with even more rapid economic recovery expected -- some 7% for all of OECD – consumption will likely rise by 3 million b/d of oil equivalent, or 5%. OECD's internal supplies should rise by more than 1 million b/d of oil equivalent, but demand for imported oil will rise by 2 million b/d, or 6%. Because non-OPEC LDCs and China will be boosting output rapidly and gaining markets at OPEC's expense, OPEC sales volume will rise by 2% in 1976 and 7% in 1977.

10. Even with the rise in demand for OPEC oil, total OPEC exports in 1977 will still fall short of their pre-embargo level. While we have not made a definitive estimate for 1978-80, OPEC sales may rise slightly in 1978 -- depending upon the rate at which Alaskan output comes on stream – and then will fall sharply until 1980. Preliminary work on estimating 1980 demand for OPEC oil indicates that cartel exports will fall by 5-7 million b/d between 1978 and 1980, to only some 22-24 million b/d, mostly as a result of expanding North Sea and Alaskan output. This would represent a dropoff of 6-8 million b/d from the 1973 level.

OPEC Production

11. We expect the Persian Gulf countries and Venezuela to absorb most of the production cuts required this year. The sharpest cuts probably will be taken by Saudi Arabia between the first of the year and mid-summer. After the expected upturn in demand at the end of the third quarter, however, the volume of Saudi output should rise much more sharply than that of the other Persian Gulf states unless external political considerations cause the Saudis to impose a production ceiling. Barring that, average Saudi output for the year will be only some 300,000 b/d below last year's 8.5 million b/d. Saudi output will still be about 3 million b/d below capacity. Indonesia, Ecuador, and Iraq will probably increase production over last year's levels.

12. For the next few years, OPEC members should be able to allocate output on a cooperative basis without formal prorationing. Rising demand for OPEC oil in 1976 and 1977 will allow those countries that need additional revenue – such as Algeria, Libya, and Indonesia – to increase output in line with their productive capacity and financial needs. Others that also want to boost output, like Iraq and

Abu Dhabi, are likely to do so, but not at a maximum rate. Venezuelan output will continue to decline in line with that country's diminishing oil reserves. Because they will face no revenue constraints, Saudi Arabia, Kuwait, and Iran will probably adjust their production during these years in a manner designed to maintain their positions of leadership and keep the other OPEC states reasonably happy.[5]

13. We think the projected allocation of OPEC oil exports given in Table 2 is a reasonable one. Other allocations consistent with an internally cohesive OPEC could also be made, but would cause no significant change in the overall OPEC payments position.

TABLE 2

VOLUME OF OPEC OIL EXPORTS

THOUSAND B/D

	1974	1975	1976	1977
ALGERIA	893	855	950	1045
ECUADOR	129	165	160	155
INDONESIA	1175	1211	1341	1470
IRAN	5770	5365	5420	5395
IRAQ	1606	1880	2160	2540
KUWAIT	2560	1975	1970	1965
LIBYA	1451	1210	1455	1700
NIGERIA	2198	1935	2030	2275
QATAR	513	497	495	490
SAUDI ARABIA	8462	8170	7860	8300
U.A.E.	1675	1390	1485	1680
VENEZUELA	2707	2110	2090	1965
TOTAL	29139	26763	27416	28980

Value of OPEC Oil Exports

14. In estimating OPEC's oil earnings in 1975, we set the average price equal to the price on 1 January (see Table 3). OPEC has already frozen prices through

5. We allocated the projected total OPEC oil exports to the individual producers through an iterative process that took into consideration their economic needs and objectives, oil resources and productive capacity, and financial flexibility.

TABLE 3

PRICES OF OPEC OIL EXPORTS*

US $ PER BARREL

	1974	1975	1976	1977
ALGERIA	13.741	11.860	12.801	13.436
ECUADOR	11.266	10.895	11.737	12.305
INDONESIA	11.930	12.600	13.374	13.896
IRAN	10.162	10.483	11.319	11.883
IRAQ	10.361	10.933	11.747	12.325
KUWAIT	9.690	10.363	11.162	11.710
LIBYA	12.774	11.935	12.833	13.465
NIGERIA	11.382	11.820	12.721	13.345
QATAR	10.396	11.280	12.166	12.765
SAUDI ARABIA	10.231	10.440	11.259	11.812
U.A.E.	11.652	11.030	11.896	12.481
VENEZUELA	10.430	10.940	11.775	12.339

* INCLUDING GOVERNMENT REVENUES, PRODUCTION COSTS, AND COMPANY PROFITS.

September and has hinted at an extension through December. Even if prices were raised 5% for the final quarter, the average annual price would not increase much.

15. For 1976 and 1977, we increase the nominal oil price 8% and 5%, respectively – or slightly less than our projected rate of inflation for OECD countries. This seems reasonable because OPEC countries are likely to resist substantial erosion of the real price of oil. Moreover, demand will increase in 1976-77, and competition from new non-OPEC oil supplies will be limited.

16. Our projections of oil export volume and prices point to a 6% decline in the value of oil exports in 1975, followed by 11% increases in both 1976 and 1977 (see Table 4). We thus foresee a 15% rise in OPEC oil export earnings from 1974 to 1977.

TABLE 4

VALUE OF OPEC OIL EXPORTS

BILLION US $

	1974	1975	1976	1977
ALGERIA	4.5	3.7	4.4	5.1
ECUADOR	0.5	0.7	0.7	0.7
INDONESIA	5.1	5.6	6.5	7.5
IRAN	21.4	20.5	22.4	23.4
IRAQ	6.1	7.5	9.3	11.4
KUWAIT	9.1	7.5	8.0	8.4
LIBYA	6.8	5.3	6.8	8.4
NIGERIA	9.1	8.3	9.4	11.1
QATAR	1.9	2.0	2.2	2.3
SAUDI ARABIA	31.6	31.1	32.3	35.8
U.A.E.	7.1	5.6	6.4	7.7
VENEZUELA	10.3	8.4	9.0	8.8
TOTAL	113.5	106.2	117.5	130.5

Non-Oil Exports

17. OPEC's non-oil exports are relatively unimportant. In 1974, they were 5% of total OPEC exports, and only in Ecuador and Indonesia did they exceed 15%. We estimate these exports will nearly double during 1975-77, to $11 billion -- or 8% of total exports by 1977 (see Table 5). Most of the expected average annual increases of about 25% reflect exports of LNG from Algeria and Iran and sales of raw materials by Indonesia. These three countries probably will account for nearly two-thirds of OPEC's non-oil exports in 1977.

OPEC Import Growth

18. The uncertainties created by the sudden surge in oil revenues make import projections difficult. Many OPEC countries are enjoying a highly favorable financial situation for the first time and thus are greatly accelerating their development efforts. Others that have had large revenues for some time are stepping up spending because of the magnitude of their surplus funds. On the whole, OPEC countries have expanded imports at a much faster rate than most analysts anticipated a year

TABLE 5

VALUE OF OPEC NON-OIL EXPORTS

BILLION US $

	1974	1975	1976	1977
ALGERIA	0.6	0.7	0.7	1.7
ECUADOR	0.3	0.3	0.4	0.4
INDONESIA	2.1	2.5	3.1	3.7
IRAN	0.9	1.2	1.6	2.0
IRAQ	0.1	0.2	0.3	0.4
KUWAIT	0.3	0.4	0.6	0.6
LIBYA	0.1	0.1	0.1	0.1
NIGERIA	0.7	0.9	1.0	1.1
QATAR	0.0	0.0	0.0	0.0
SAUDI ARABIA	0.0	0.0	0.0	0.0
U.A.E.	0.5	0.6	0.8	0.9
VENEZUELA	0.4	0.5	0.5	0.5
TOTAL	6.0	7.4	9.1	11.4

ago. All, however, face severe physical and human constraints in absorbing rapidly growing imports, and some simply are not interested in spending their oil revenues at the highest possible rate. Ports, internal transport facilities, and trained manpower already are being heavily utilized. Whether recent import growth will continue or will soon slow sharply because of bottlenecks is the key question in preparing import projections.

19. Past performance provides some guidance. Kuwait and Saudi Arabia have had considerable surplus funds for some time but have favored gradual modernization. Their volume of imports grew an average of only 5% annually in 1966-72. Libya, on the other hand, has pursued more expansionary programs, increasing imports nearly 20% a year over the same period. In the more populous countries of Nigeria and Indonesia, where oil exports began to rise rapidly in the late 1960s, the volume of imports increased 20%-25% per year from 1969 to 1973.[6] Sustained growth in import volume averaging 20% or more annually clearly is possible.

6. Similar large gains were achieved by Taiwan and South Korea in 1966-73 as a result of their ability to rapidly increase exports of manufactures.

20. We estimate that aggregate import volume will grow by 25% in 1975 – about the same as in 1974 – and by 16% in both 1976 and 1977.[7] As Table 6 indicates, these projections reflect a wide variety of trends in individual countries. For example:

- Algeria's imports will rise sharply in 1975 because drought will bring large purchases of foodstuffs; import growth will be much slower in 1976-77 because of financial constraints.

- Ecuador's projected large increase in 1975 is the result of military purchases.

- Iraq's large gain in 1975 reflects elimination of many restrictions on imports from OECD countries.

- Rates of import growth in Saudi Arabia and the Persian Gulf sheikhdoms fall each year because of absorption constraints.

- In Iran the projected decline from a 25% increase in 1974 to a 16% increase in 1976 and 1977 in part reflects transport limitations; the country has few major seaports and a grossly inadequate road and rail network. We could be somewhat low on this. A truly heroic effort could overcome these obstacles.

- Venezuelan import growth will drop sharply because of a tightening of import controls to offset falling oil export revenues.

- We expect import growth to accelerate in Nigeria as a result of an expanded development effort and the growing availability of funds.

- Kuwait has the lowest projected growth in import volume – 6% a year – because the population is too small to justify a major industrialization effort and already has a higher standard of living than the populations of most developed countries.

7. We have taken account of long-term development programs and short-term fluctuations caused by specific events. We have analyzed development policies and plans, the governments' records in achieving plan goals, the available supply of skilled manpower, infrastructural constraints, the size of government oil revenues, and the time needed for them to work their way into the general economy. For certain populous countries such as Nigeria, Indonesia, Venezuela, and Iran, we also consider import restrictions designed to protect fledgling industries from foreign competition.

TABLE 6

INCREASE IN VOLUME, PRICE, AND VALUE OF OPEC IMPORTS

PERCENT

	1974	1975	1976	1977
VOLUME				
ALGERIA	22	43	18	8
ECUADOR	15	34	12	11
INDONESIA	17	17	17	17
IRAN	25	20	16	16
IRAQ	88	39	16	19
KUWAIT	9	6	6	6
LIBYA	35	22	18	19
NIGERIA	7	12	16	18
QATAR	25	25	25	25
SAUDI ARABIA	36	30	25	25
UNITED ARAB EMIRATES	35	30	25	25
VENEZUELA	26	25	15	10
TOTAL	27	25	16	16
PRICE--Total	30	12	9	6
VALUE--Total	65	40	27	23

21. We have estimated the value of OPEC imports by assuming a price increase of 12% in 1975, 9% in 1976, and 6% in 1977. These price forecasts seem reasonable given our economic growth projections, but they would be too low in the event of major crop failures. As Table 7 shows, the projected value of OPEC imports reaches $74 billion in 1977, or more than twice the 1974 level. Iran remains by far the largest market for foreign goods, accounting for nearly 20% of the OPEC total.

Services and Private Transfers

22. The OPEC net deficit for services and private transfers is expected to drop from $8-1/2 billion in 1974 to $3-1/2 billion in 1977 (see Table 8). Estimates for the four main categories of activity were obtained as follows:

TABLE 7

VALUE OF OPEC IMPORTS*

BILLION US $

	1973	1974	1975	1976	1977
ALGERIA	2.2	3.5	5.6	7.2	8.2
ECUADOR	0.4	0.6	0.9	1.1	1.3
INDONESIA	2.5	3.8	5.0	6.4	7.9
IRAN	4.0	6.5	8.7	11.0	13.6
IRAQ	1.1	2.7	4.2	5.3	6.7
KUWAIT	1.2	1.7	1.9	2.3	2.6
LIBYA	1.7	3.0	4.1	5.2	6.6
NIGERIA	1.8	2.5	3.1	4.0	5.0
QATAR	0.2	0.3	0.4	0.4	0.5
SAUDI ARABIA	1.8	3.2	4.7	6.3	8.4
UNITED ARAB EMIRATES	0.8	1.4	2.0	2.8	3.7
VENEZUELA	2.8	4.6	6.4	8.0	9.4
TOTAL	20.5	33.7	47.1	60.1	73.8

* INCLUDING MILITARY GOODS; VALUED F.O.B.

Freight and Insurance – The cost of moving goods from the ports of foreign suppliers to the various OPEC countries ranges from 10% to 15% of the f.o.b. prices. For each OPEC country, we assume that freight and insurance costs equal 12% of the f.o.b. value of imports.

Investment Income Receipts – Annual earnings on foreign assets are assumed to equal 8% of the value of assets.

Profit Repatriation – These outflows include repatriation of profits by foreign oil companies and service payments to such companies to operate government-owned oil fields. The dollar amount estimated for these payments does not affect the projected current account balances of OPEC countries, because a corresponding inflow is included in the estimate of export earnings.

Other – This category includes a wide range of flows, including fees paid for foreign technology and services, interest payments on OPEC debts, and both inflows and outflows of remittances. Algeria, for example, has a considerable inflow of remittances from nationals working chiefly in France, while most other OPEC countries have a large outflow because of their numerous foreign oil workers. In general, these miscellaneous flows are estimated to rise at the same rate as merchandise imports. Somewhat higher rates are used for Iran and Saudi Arabia because a rapidly growing number of foreign technicians are expected to be working in these countries.

TABLE 8

OPEC BALANCES FOR SERVICES AND PRIVATE TRANSFERS

BILLION US $

	1974	1975	1976	1977
ALGERIA	-0.3	-0.7	-1.3	-1.7
ECUADOR	-0.1	-0.1	-0.1	-0.2
INDONESIA	-3.3	-3.6	-4.0	-4.5
IRAN	-1.0	-0.6	-0.5	-0.2
IRAQ	-0.2	-0.3	-0.3	-0.1
KUWAIT	0.4	1.0	1.5	2.0
LIBYA	-1.0	-1.0	-1.4	-1.5
NIGERIA	-1.0	-0.8	-0.7	-0.5
QATAR	0.0	0.1	0.3	0.4
SAUDI ARABIA	-0.9	0.7	2.0	3.3
U.A.E.	-0.1	0.2	0.4	0.6
VENEZUELA	-1.0	-0.9	-1.1	-1.4
TOTAL	-8.6	-6.1	-5.2	-3.7

Grant-Type Assistance

23. We expect grant-type assistance disbursed by OPEC countries, which jumped from $1 billion in 1973 to $4 billion in 1974, to fall to $2 billion in 1977[8] (see Table 9). The large increase in such aid disbursements last year reflects mainly emergency assistance pledged by Saudi Arabia and other Arab oil producers to Egypt, Syria, and Jordan during and after the Middle East war of October 1973.

8. Grant-type assistance is defined as the value of goods, services, and financial flows provided by OPEC countries to other countries with little or no expectation of repayment. We also include loans with a large concessionary element but exclude flows that the OECD Development Aid Committee (DAC) defines as Other Official Flows (OOF), which embraces portfolio investments such as World Bank bonds.

TABLE 9

OPEC DISBURSEMENTS OF OFFICIAL
GRANT-TYPE ASSISTANCE

BILLION US $

	1973	1974	1975	1976	1977
ALGERIA		0.1	0.1	0.1	0.1
ECUADOR		0.0	0.0	0.0	0.0
INDONESIA		0.0	0.0	0.0	0.0
IRAN		0.4	0.3	0.3	0.2
IRAQ		0.4	0.2	0.2	0.2
KUWAIT		0.7	0.5	0.3	0.3
LIBYA		0.3	0.2	0.2	0.2
NIGERIA		0.0	0.0	0.0	0.0
QATAR		0.1	0.1	0.1	0.1
SAUDI ARABIA		1.6	1.0	0.5	0.5
UNITED ARAB EMIRATES		0.5	0.4	0.3	0.3
VENEZUELA		0.1	0.2	0.2	0.2
TOTAL	1.0	4.2	3.0	2.2	2.1

Flows to these countries are expected to begin to fall in 1975. The decline probably will be partly offset by increases in assistance to help LDCs pay for oil imports and finance their development projects.

Current Account Balance

24. The sum of the above estimates indicates that OPEC will run current account surpluses averaging about $60 billion annually in 1975-77 (see Table 10). The surplus will drop from $73 billion in 1974 to $57 billion in 1975 and then trend upward to $62 billion in 1977 with the recovery in world economic activity. We forecast that by the end of 1977 OPEC states will accumulate $264 billion in foreign assets.[9] This sum includes $25 billion in foreign assets ($21 billion public and $4 billion private) that OPEC states held at the end of 1973 plus $61 billion received in 1974. The foreign exchange buildup in 1974 is $12 billion less than the current account surplus because of lags between oil shipments and payments. A comparable lag in payments is assumed for 1975-77.

25. The overall current account surplus of OPEC countries indicates the magnitude of the petrodollar recycling problem but conceals sharp differences in the prospective financial positions of individual countries. Our projections suggest

9. These foreign asset accumulations do not consider capital account movements, such as net repayments by OPEC member states of foreign debts. For OPEC as a whole, these flows are expected to be relatively small.

TABLE 10

OPEC CURRENT ACCOUNT

BILLION US $

	1974	1975	1976	1977
EXPORTS (F.O.B.)	119.5	113.6	126.6	141.9
OIL	113.5	106.2	117.5	130.5
NON-OIL	6.0	7.4	9.1	11.4
IMPORTS* (F.O.B.)	-33.7	-47.1	-60.1	-73.8
TRADE BALANCE	85.8	66.5	66.5	68.1
NET SER. + PVT. TRANS.	-8.6	-6.1	-5.2	-3.7
FREIGHT AND INSURANCE	-4.0	-5.7	-7.2	-8.9
INVESTMENT INCOME REC'TS	4.3	9.8	14.2	18.9
OTHER	-8.8	-10.2	-12.2	-13.7
GRANT-TYPE ASSISTANCE	-4.2	-3.0	-2.2	-2.1
CURRENT ACCOUNT BALANCE	73.0	57.4	59.1	62.3

* INCLUDING MILITARY GOODS.

that seven OPEC states – Saudi Arabia, Iran, Kuwait, Nigeria, the United Arab Emirates, Iraq, and Qatar – should be free of balance-of-payments constraints (see Table 11). The current account surplus of Saudi Arabia is expected to rise gradually to $30 billion in 1977 – or nearly half of the OPEC total. Despite a reduced volume of oil exports and rapidly rising imports, the Saudi surplus continues to rise because of the substantial growth in investment income. By the end of 1977, Saudi Arabian earnings from investment will be approaching $8 billion, or nearly as much as the projected value of imports.

26. The remaining five countries probably will have current accounts in near balance or a small deficit by 1977. None are likely to encounter serious balance-of-payments problems over the next three years. To break even, Libya will have to raise oil exports from 1.2 million b/d in 1975 to 1.7 million b/d in 1977, as we have estimated. Expansion of Libyan oil exports will require competitive pricing policies. In 1977, Ecuador and Indonesia are projected to run small deficits that can easily be financed by foreign borrowing or aid receipts – or that could be avoided by increasing oil exports a little more than we have forecast.

27. Venezuela has a projected deficit in 1977 even though we have assumed that Caracas will tighten import restrictions. The Venezuelan current account surplus, which reached $5 billion in 1974, will plummet in 1975 and disappear

TABLE 11

OPEC CURRENT ACCOUNT BALANCES

BILLION US $

	1974	1975	1976	1977
ALGERIA	1.2	-2.0	-3.5	-3.2
ECUADOR	0.2	0.0	-0.1	-0.4
INDONESIA	0.1	-0.6	-0.7	-1.2
IRAN	14.4	12.1	12.2	11.4
IRAQ	2.8	3.0	3.8	4.8
KUWAIT	7.3	6.3	7.5	8.1
LIBYA	2.5	0.1	0.1	0.1
NIGERIA	6.3	5.3	5.8	6.7
QATAR	1.6	1.7	1.9	2.0
SAUDI ARABIA	25.9	26.2	27.5	30.3
U.A.E.	5.6	4.0	4.5	5.2
VENEZUELA	5.0	1.4	0.2	-1.6
TOTAL	73.0	57.4	59.1	62.3

in 1976 unless Caracas eases up on its oil conservation efforts. In any case, the expected deficit in 1977 can readily be financed by capital inflows and/or some drawdown of reserves, which should amount to about $12 billion by the end of 1976.

28. Algeria is expected to have annual deficits of $2-$3.5 billion in 1975-77, which we believe it will be able to cover with capital inflows.

Sensitivity of Our Conclusions to Alternative Assumptions

29. The projections in this memorandum reflect our current assessment of the most likely course of events, but they are clearly not the only ones that seem feasible or even reasonable. Given the number of current account components considered, uncertainties concerning the recovery in world economic growth, and trends in the price of oil and other goods, numerous alternative projections can be devised. It is important to note that the more plausible variations do not much affect the projected magnitudes for OPEC countries as a group or alter the basic conclusions.[10]

10. Numerous alternative projections were made based on other reasonable assumptions to examine the sensitivity of our conclusions. Only a few are presented in this memorandum, but the remainder are machine programmed and we can provide the results upon request.

30. Our current account projections are most sensitive to our estimates or assumptions concerning oil export volume, oil prices, and the volume and price of imports. Any plausible reduction in the projected value of oil exports would still leave the seven OPEC states with large current account surpluses and the other five with manageable deficits. If, for example, OPEC were unable to increase the nominal price of oil above the 1 January 1975 level and the real price fell by the estimated level of inflation, the cumulative surplus for 1975-77 would be $25 billion less than we have estimated. In this case, the seven surplus countries would still run large surpluses and the other five would have somewhat larger deficits than we have forecast (see Appendix Table B-8). Saudi Arabia would have a surplus of $26 billion instead of $30 billion in 1977, while Algeria would have a deficit of $3.8 billion instead of $3.2 billion.

31. If consuming nations undertook conservation measures that cut imports of OPEC oil by 2 million b/d in 1976 and 4 million b/d in 1977, Saudi Arabia plus one or more of the six other surplus countries could absorb the reduction and still have substantial current account surpluses.[11] As shown in an illustrative case in Appendix Table B-6, Saudi Arabia would have a 1977 surplus of $22 billion and Algeria a deficit of $3.7 billion. Although such reductions in demand for OPEC oil can readily be absorbed if OPEC acts rationally in economic terms, the cooperation of Saudi Arabia and a few other key surplus producers would be essential.

32. Expansion of oil production would make economic sense only for the five countries with the weaker payments positions. Since we have already assumed that these countries will be operating near capacity levels, their actual production cannot be much higher than we anticipate.

33. It is possible that the oil export volume and price will be lower than forecast. This combination, highly plausible under normal market conditions, would be possible only if the cartel were to weaken considerably or fall apart or be driven to lower prices by one or more of the major producers.

34. Higher oil prices and export volumes would only add to OPEC surpluses. If the world economic recovery is stronger than we now anticipate, the volume of OPEC oil exports will be larger than projected.

---

11. The conservation policy case is roughly equivalent to the lowest possible demand estimate for OPEC oil we could conceive of short of a world depression. If OECD economic growth were only 1% in 1976 and 3% in 1977 our projected oil demand would drop by 1.6 million b/d in 1976 and 3.3 million b/d in 1977.

35. Our current account projections are not very sensitive to plausible changes in our assumptions concerning OPEC import volume. For most countries, we have projected high rates of import growth. Although the rates could be somewhat higher than we foresee, the current account situations of the seven surplus countries would not be changed materially. Most of the others probably will not increase imports much faster than estimated because we have already assumed oil output near capacity levels. The only exception is Venezuela, which could give up its conservation efforts and use the increased revenues to pay for more imports.

Comparison with Other Current Account Estimates

36. Our projected current account surplus for OPEC compares as follows with those of the OECD Secretariat and the Morgan Guaranty Trust of New York.

	Billion US $				
	1975	1976	1977	Total 1975-77	Comparison with CIA Projection
CIA	57	59	62	178	....
OECD Secretariat	53	52	49	154	-24
Morgan Guaranty Trust	57	54	40	151	-27

37. We made two changes in the OECD and Morgan projections to ensure comparability and to permit disaggregation of estimated imports for comparison.

a. We have applied our price factors to the OECD data, which are expressed in constant 1974 dollars, to obtain values in current dollars.

b. Since Morgan Guaranty Trust does not allocate imports between goods and services, we have used our data to make the division for 1974. The bank's own assumptions concerning growth in import volume and changes in import prices, however, are used to project for 1975-77.

38. The $24 billion difference between our estimate of the OPEC current account surplus in 1975-77 and that of the OECD reflects mainly differences in projected non-oil exports and imports. The OECD estimate for non-oil exports

in 1975-77 is $14 billion lower than ours. The Secretariat assumed that the value of non-oil exports was the same in 1974 as in 1972 -- this is not so -- and that it would expand at a comparatively low rate through 1977.

39. OECD projects a 42% increase in OPEC import volume in 1975, compared with our estimate of 25%. This higher increase in the first year of the projection also raises the level of the OECD estimates for 1976-77, even though its projection of percentage changes in those years is close to ours. As a result, the OECD estimate of cumulative OPEC imports is $17 billion higher than ours. We doubt that the OPEC countries can raise import volume by as much as 42% in 1975, on top of a very large increase in 1974.

40. The $27 billion difference between our estimate and that of Morgan Guaranty Trust is due essentially to the bank's projection of a much larger net outflow for the services and private remittance account, as the following tabulation shows:

	Billion US $					
	1974	1975	1976	1977	Total 1975-77	Comparison of 1975-77 Total with CIA Projection
CIA	-6	-5	-4	-2	-11	....
OECD Secretariat	-12	-4	....	....	-4	7
Morgan Guaranty Trust	-14	-11	-11	-17	-39	-28

41. The Morgan Guaranty estimates of the net outflow for services and private transfer also are very high compared with those of OECD, and the change in 1977 runs in the wrong direction by a substantial amount. The differences cannot be explained by our estimates of investment income, which are similar to those of the bank.

Postscript: The Outlook Through 1980

42. In 1978-80, the demand for OPEC oil is likely to decline as a result of a surge in oil production outside the cartel. The extent of the decline in OPEC exports is difficult to pinpoint because uncertainties about the energy market multiply beyond 1977. We cannot forecast with much confidence the rate of world

economic growth, the impact of high energy prices, the extent of energy conservation programs, or the amount of non-oil energy then available. Adding to the uncertainty is the possibility of technological breakthroughs and of substantial production from energy resources yet to be discovered.

43. Some things nonetheless are clear about the 1978-80 period.

- In 1978 or 1979, world economic expansion will slow from the rapid pace of the recovery phase, moderating the growth in energy demand.

- By 1980, oil production in the North Sea, Alaska, Egypt, Mexico, Malaysia, Peru, China, and other non-OPEC areas will total perhaps 7-8 million b/d more than at present. Most of this new production will come in after 1977, cutting substantially into OPEC's market share.

- High prices will be having more impact on oil demand than at present. New autos will be more efficient energy-users, energy requirements for space-heating will be held down by higher insulation standards, and some industrial processes will have been modified to cut energy consumption per unit of output.

44. Working with very conservative assumptions, we obtain a projected demand for OPEC oil in 1980 of about 27 million b/d – 2 million b/d less than estimated for 1977. We believe that a considerably larger drop is likely. A demand of roughly 24 million b/d is indicated, if one assumes an OECD-wide economic growth rate in 1978-80 of 4.5% -- the long-term average – and a continued GNP elasticity of energy demand of 0.7. In its long-term energy assessment, the OECD Secretariat projects oil imports of member countries at 22 million b/d in 1980. Adjustment of this forecast to account for imports of OPEC oil by other countries and for oil exports by non-OPEC countries raises the figure to about 25 million b/d.

45. The prospective need for a sizable cut in OPEC exports by 1980 suggests that the countries will encounter problems in prorationing production. OPEC expenditure levels will then be much higher than at present, and almost all the producers will have much less flexibility than now to reduce output. Only Saudi Arabia and Kuwait are certain to still have substantial surplus revenues. Several countries probably will be incurring current account deficits.

46. We think it likely that OPEC will materially increase the real price of oil toward the end of the decade, so that no member will feel compelled to raise exports at a time of declining demand for OPEC oil. Developed countries will still depend on OPEC states for about half of their oil supply in 1980 and have little short-term alternative to paying more for it. By that time industrial countries will have adjusted in many ways to the new level of energy prices and OPEC probably will feel it has been reasonable in merely maintaining the real price for five years or so. Although a few countries may raise oil output in spite of the ebbing demand for OPEC supplies, we believe that most members will see that it is very much in their interest to reduce output while raising prices.

TABLE A-1

FREE WORLD: PROJECTED OIL DEMAND, PRODUCTION AND IMPORTS, 1975

MILLION B/D

	TOTAL FREE WORLD	UNITED STATES	WESTERN EUROPE	JAPAN	OTHER
			FIRST QUARTER		
CONSUMPTION	48.1	17.5	15.0	5.1	10.5
DOMESTIC PRODUCTION	19.2	10.8	.4	--	8.0
STOCK CHANGE	-1.9	-0.8	-1.0	-0.1	--
IMPORT DEMAND	27.0	5.9	13.6	5.0	2.5
			SECOND QUARTER		
CONSUMPTION	43.5	15.6	12.6	4.7	10.6
DOMESTIC PRODUCTION	19.4	10.7	0.6	--	8.1
STOCK CHANGE	+1.9	+0.8	+1.0	+0.1	--
IMPORT DEMAND	26.0	5.7	13.0	4.8	2.5
			THIRD QUARTER		
CONSUMPTION	43.7	15.8	12.6	4.7	10.6
DOMESTIC PRODUCTION	19.4	10.6	0.6	--	8.3
STOCK CHANGE	+0.9	+0.3	+0.5	+0.1	--
IMPORT DEMAND	25.1	5.5	12.5	4.8	2.3
			FOURTH QUARTER		
CONSUMPTION	50.0	18.0	16.0	5.3	10.7
DOMESTIC PRODUCTION	19.6	10.5	0.7	--	8.4
STOCK CHANGE	-1.6	-0.5	-1.0	-0.1	--
IMPORT DEMAND	28.8	7.0	14.3	5.2	2.3

TABLE A-2

ENERGY SUPPLY AND DEMAND IN MAJOR CONSUMING COUNTRIES

MILLIONS B/D OF OIL EQUIVALENT

UNITED STATES

	1973	1974	1975	1976	1977
CONSUMPTION	35.6	34.9	35.0	36.1	37.6
OF WHICH OIL	17.2	16.7	16.7	17.2	18.4
DOMESTIC PRODUCTION AND NET NON-OIL IMPORTS	29.7	29.1	29.0	29.4	29.6
OF WHICH					
OIL 1/	11.3	11.0	10.7 2/	10.5 2/	10.4 2/
NATURAL GAS	11.3	10.8	10.4 3/	10.1 3/	9.7 3/
COAL	6.2	6.2	6.4 4/	7.0 5/	7.5 5/
HYDRO	0.5	0.6	0.6	0.6	0.6
NUCLEAR	0.4	0.5	0.9	1.2	1.4
OIL IMPORT REQUIREMENTS 6/	5.9	5.7	6.0	6.7	8.0

WESTERN EUROPE

	1973	1974	1975	1976	1977
CONSUMPTION	23.5	23.6	23.4	24.1	25.2
OF WHICH OIL	15.0	14.4	14.1	14.5	15.1
DOMESTIC PRODUCTION AND NET NON-OIL IMPORTS	8.8	9.6	9.9	10.7	11.7
OIL	0.3	0.4	0.6	1.1	1.7
NATURAL GAS	2.6	2.9	3.2	3.5	3.8
COAL	5.2	5.6	5.4	5.4	5.5
HYDRO	.6	.6	.6	.6	.6
NUCLEAR	.1	.1	.1	.1	.2
OIL IMPORT REQUIREMENTS	14.7	14.0	13.3	13.4	13.4

JAPAN

	1973	1974	1975	1976	1977
CONSUMPTION	6.9	6.9	6.8	7.0	7.4
OF WHICH OIL	5.4	5.2	5.0	5.1	5.4
DOMESTIC PRODUCTION AND NET NON-OIL IMPORTS	1.5	1.7	1.8	1.9	2.0
NATURAL GAS	0.1	0.2	0.2	0.2	0.3
COAL	1.1	1.1	1.2	1.2	1.2
HYDRO	0.3	0.3	0.3	0.3	0.3
NUCLEAR	---	0.1	0.1	0.2	0.2
OIL IMPORT REQUIREMENTS	5.4	5.2	5.0	5.1	5.4

1/ INCLUDING NATURAL GAS LIQUIDS AND PROCESSING GAIN
2/ FEA ESTIMATES
3/ PROJECTED FROM UNPUBLISHED FPC ESTIMATES FOR 1980
4/ NATIONAL COAL ASSOCIATION ESTIMATES
5/ PROJECTED ON BASIS OF 7% OUTPUT GROWTH
6/ NET IMPORTS FOR CONSUMPTION; EXCLUDES STOCK CHANGES

TABLE A-3

ORIGIN OF OPEC IMPORTS*

	1973				1974			
	FROM OECD COUNTRIES (BILLION $)	FROM NON-OECD COUNTRIES (BILLION $)	TOTAL (BILLION $)	OECD SHARE (PERCENT)	FROM OECD COUNTRIES (BILLION $)	FROM NON-OECD COUNTRIES (BILLION $)	TOTAL (BILLION $)	OECD SHARE (PERCENT)
ALGERIA	2.0	0.2	2.2	91	3.2	0.3	3.5	91
ECUADOR	0.4	negl.	0.4	85	0.5	0.1	0.6	83
INDONESIA	2.1	0.4**	2.5	84	3.1	0.7**	3.8	82
IRAN	3.3	0.7	4.0	82	5.5	1.0	6.5	8[illegible]
IRAQ	0.5	0.6	1.1	45	1.8	0.9	2.7	67
KUWAIT	0.8	0.4**	1.2	67	1.0	0.7**	1.7	59
LIBYA	1.5	0.2	1.7	88	2.5	0.5	3.0	83
NIGERIA	1.4	0.4	1.8	78	1.9	0.6	2.5	76
QATAR	0.2	negl.	0.2	75	0.3	negl.	0.3	75
SAUDI ARABIA	1.5	0.3	1.8	83	2.6	0.6	3.2	81
UNITED ARAB EMIRATES	0.6	0.2	0.8	75	1.1	0.3	1.4	79
VENEZUELA	2.3	0.5	2.8	82	3.7	0.9	4.6	79
TOTAL	16.6	3.9	20.5	81	27.2	6.6	33.7	80

* INCLUDING MILITARY GOODS; VALUED f.o.b.

** INCLUDING IMPORTS FROM ENTREPOT COUNTRIES SUCH AS SINGAPORE AND UAE; OECD COUNTRIES ARE THE ORIGINAL SOURCE OF MUCH OF THESE GOODS.

TABLE A-4

ALGERIA: CURRENT ACCOUNT

BILLION US $

	1974	1975	1976	1977
EXPORTS (F.O.B.)	5.1	4.4	5.1	6.8
OIL	4.5	3.7	4.4	5.1
NON-OIL	0.6	0.7	0.7	1.7
IMPORTS (F.O.B.)*	-3.5	-5.6	-7.2	-8.2
TRADE BALANCE	1.6	-1.2	-2.0	-1.4
NET SER. + PVT. TRANS.	-0.3	-0.7	-1.3	-1.7
FREIGHT AND INSURANCE	-0.4	-0.7	-0.9	-1.0
INVESTMENT INCOME REC'TS	0.1	0.1	-0.1	-0.4
OTHER	0.0	-0.1	-0.3	-0.3
GRANT-TYPE ASSISTANCE	-0.1	-0.1	-0.1	-0.1
CURRENT ACCOUNT BALANCE	1.2	-2.0	-3.5	-3.2

* INCLUDING MILITARY GOODS.

TABLE A-5

ECUADOR: CURRENT ACCOUNT

BILLION US $

	1974	1975	1976	1977
EXPORTS (F.O.B.)	0.8	1.0	1.1	1.1
OIL	0.5	0.7	0.7	0.7
NON-OIL	0.3	0.3	0.4	0.4
IMPORTS* (F.O.B.)	-0.6	-0.9	-1.1	-1.3
TRADE BALANCE	0.2	0.1	0.0	-0.2
NET SER. + PVT. TRANS.	-0.1	-0.1	-0.1	-0.2
FREIGHT AND INSURANCE	-0.1	-0.1	-0.1	-0.2
INVESTMENT INCOME REC'TS	0.0	0.0	0.0	0.0
OTHER	0.0	0.0	0.0	0.0
GRANT-TYPE ASSISTANCE	0.0	0.0	0.0	0.0
CURRENT ACCOUNT BALANCE	0.2	0.0	-0.1	-0.4

* INCLUDING MILITARY GOODS.

TABLE A-6

INDONESIA: CURRENT ACCOUNT

BILLION US $

	1974	1975	1976	1977
EXPORTS (F.O.B.)	7.2	8.1	9.6	11.2
OIL	5.1	5.6	6.5	7.5
NON-OIL	2.1	2.5	3.1	3.7
IMPORTS (F.O.B.)*	-3.8	-5.0	-6.4	-7.9
TRADE BALANCE	3.4	3.1	3.3	3.3
NET SER. + PVT. TRANS.	-3.3	-3.6	-4.0	-4.5
FREIGHT AND INSURANCE	-0.5	-0.6	-0.8	-0.9
INVESTMENT INCOME REC'TS	0.1	0.1	0.0	-0.1
OTHER	-2.9	-3.1	-3.2	-3.5
GRANT-TYPE ASSISTANCE	0.0	0.0	0.0	0.0
CURRENT ACCOUNT BALANCE	0.1	-0.6	-0.7	-1.2

* INCLUDING MILITARY GOODS.

TABLE A-7

IRAN: CURRENT ACCOUNT

BILLION US $

	1974	1975	1976	1977
EXPORTS (F.O.B.)	22.3	21.7	24.0	25.4
OIL	21.4	20.5	22.4	23.4
NON-OIL	0.9	1.2	1.6	2.0
IMPORTS* (F.O.B.)	-6.5	-8.7	-11.0	-13.6
TRADE BALANCE	15.8	13.0	12.9	11.8
NET SER. + PVT. TRANS.	-1.0	-0.6	-0.5	-0.2
FREIGHT AND INSURANCE	-0.8	-1.0	-1.3	-1.6
INVESTMENT INCOME REC'TS	0.6	1.7	2.6	3.5
OTHER	-0.8	-1.3	-1.8	-2.1
GRANT-TYPE ASSISTANCE	-0.4	-0.3	-0.3	-0.2
CURRENT ACCOUNT BALANCE	14.4	12.1	12.2	11.4

* INCLUDING MILITARY GOODS.

TABLE A-8

IRAQ: CURRENT ACCOUNT

BILLION US $

	1974	1975	1976	1977
EXPORTS (F.O.B.)	6.2	7.7	9.6	11.8
OIL	6.1	7.5	9.3	11.4
NON-OIL	0.1	0.2	0.3	0.4
IMPORTS* (F.O.B.)	-2.7	-4.2	-5.3	-6.7
TRADE BALANCE	3.5	3.5	4.3	5.2
NET SER. + PVT. TRANS.	-0.2	-0.3	-0.3	-0.1
FREIGHT AND INSURANCE	-0.3	-0.5	-0.6	-0.8
INVESTMENT INCOME REC'TS	0.2	0.5	0.7	1.1
OTHER	-0.1	-0.2	-0.3	-0.4
GRANT-TYPE ASSISTANCE	-0.4	-0.2	-0.2	-0.2
CURRENT ACCOUNT BALANCE	2.8	3.0	3.8	4.8

* INCLUDING MILITARY GOODS.

TABLE A-9

KUWAIT: CURRENT ACCOUNT

BILLION US $

	1974	1975	1976	1977
EXPORTS (F.O.B.)	9.4	7.9	8.6	9.0
OIL	9.1	7.5	8.0	8.4
NON-OIL	0.3	0.4	0.6	0.6
IMPORTS* (F.O.B.)	-1.7	-2.0	-2.3	-2.6
TRADE BALANCE	7.7	5.9	6.3	6.4
NET SER. + PVT. TRANS.	0.4	1.0	1.5	2.0
FREIGHT AND INSURANCE	-0.2	-0.2	-0.3	-0.3
INVESTMENT INCOME REC'TS	0.9	1.5	2.0	2.6
OTHER	-0.3	-0.3	-0.2	-0.2
GRANT-TYPE ASSISTANCE	-0.7	-0.5	-0.3	-0.3
CURRENT ACCOUNT BALANCE	7.3	6.3	7.5	8.1

* INCLUDING MILITARY GOODS.

TABLE A-10

LIBYA: CURRENT ACCOUNT

BILLION US $

	1974	1975	1976	1977
EXPORTS (F.O.B.)	6.9	5.4	6.9	8.5
OIL	6.8	5.3	6.8	8.4
NON-OIL	0.1	0.1	0.1	0.1
IMPORTS* (F.O.B.)	-3.0	-4.1	-5.2	-6.6
TRADE BALANCE	3.9	1.3	1.7	1.8
NET SER. + PVT. TRANS.	-1.0	-1.0	-1.4	-1.5
FREIGHT AND INSURANCE	-0.4	-0.5	-0.6	-0.8
INVESTMENT INCOME REC'TS	0.2	0.4	0.4	0.4
OTHER	-0.9	-0.9	-1.1	-1.1
GRANT-TYPE ASSISTANCE	-0.3	-0.2	-0.2	-0.2
CURRENT ACCOUNT BALANCE	2.5	0.1	0.1	0.1

* INCLUDING MILITARY GOODS.

TABLE A-11

NIGERIA: CURRENT ACCOUNT

BILLION US $

	1974	1975	1976	1977
EXPORTS (F.O.B.)	9.8	9.2	10.4	12.2
OIL	9.1	8.3	9.4	11.1
NON-OIL	0.7	0.9	1.0	1.1
IMPORTS* (F.O.B.)	-2.5	-3.1	-4.0	-5.0
TRADE BALANCE	7.3	6.1	6.5	7.2
NET SER. + PVT. TRANS.	-1.0	-0.8	-0.7	-0.5
FREIGHT AND INSURANCE	-0.3	-0.4	-0.5	-0.6
INVESTMENT INCOME REC'TS	0.3	0.7	1.2	1.6
OTHER	-1.0	-1.2	-1.4	-1.6
GRANT-TYPE ASSISTANCE	0.0	0.0	0.0	0.0
CURRENT ACCOUNT BALANCE	6.3	5.3	5.8	6.7

* INCLUDING MILITARY GOODS.

TABLE A-12

QATAR: CURRENT ACCOUNT

BILLION US $

	1974	1975	1976	1977
EXPORTS (F.O.B.)	1.9	2.0	2.2	2.3
OIL	1.9	2.0	2.2	2.3
NON-OIL	0.0	0.0	0.0	0.0
IMPORTS (F.O.B.)*	-0.3	-0.4	-0.4	-0.5
TRADE BALANCE	1.6	1.6	1.8	1.7
NET SER. + PVT. TRANS.	0.0	0.1	0.3	0.4
FREIGHT AND INSURANCE	0.0	0.0	-0.1	-0.1
INVESTMENT INCOME REC'TS	0.1	0.2	0.4	0.5
OTHER	0.0	0.0	0.0	0.0
GRANT-TYPE ASSISTANCE	-0.1	-0.1	-0.1	-0.1
CURRENT ACCOUNT BALANCE	1.6	1.7	1.9	2.0

* INCLUDING MILITARY GOODS.

TABLE A-13

SAUDI ARABIA: CURRENT ACCOUNT

BILLION US $

	1974	1975	1976	1977
EXPORTS (F.O.B.)	31.6	31.1	32.3	35.8
OIL	31.6	31.1	32.3	35.8
NON-OIL	0.0	0.0	0.0	0.0
IMPORTS (F.O.B.)*	-3.2	-4.6	-6.3	-8.4
TRADE BALANCE	28.4	26.5	26.0	27.4
NET SER. + PVT. TRANS.	-0.9	0.7	2.0	3.3
FREIGHT AND INSURANCE	-0.4	-0.6	-0.8	-1.0
INVESTMENT INCOME REC'TS	1.2	3.4	5.4	7.6
OTHER	-1.7	-2.1	-2.7	-3.3
GRANT-TYPE ASSISTANCE	-1.6	-1.0	-0.5	-0.5
CURRENT ACCOUNT BALANCE	25.9	26.2	27.5	30.3

* INCLUDING MILITARY GOODS.

TABLE A-14

UAE: CURRENT ACCOUNT

BILLION US $

	1974	1975	1976	1977
EXPORTS (F.O.B.)	7.6	6.2	7.2	8.6
OIL	7.1	5.6	6.4	7.7
NON-OIL	0.5	0.6	0.8	0.9
IMPORTS* (F.O.B.)	-1.4	-2.0	-2.8	-3.7
TRADE BALANCE	6.2	4.2	4.5	4.9
NET SER. + PVT. TRANS.	-0.1	0.2	0.4	0.6
FREIGHT AND INSURANCE	-0.2	-0.2	-0.3	-0.4
INVESTMENT INCOME REC'TS	0.3	0.7	1.0	1.4
OTHER	-0.2	-0.2	-0.3	-0.3
GRANT-TYPE ASSISTANCE	-0.5	-0.4	-0.3	-0.3
CURRENT ACCOUNT BALANCE	5.6	4.0	4.5	5.2

* INCLUDING MILITARY GOODS.

TABLE A-15

VENEZUELA: CURRENT ACCOUNT

BILLION US $

	1974	1975	1976	1977
EXPORTS (F.O.B.)	10.7	8.9	9.5	9.3
OIL	10.3	8.4	9.0	8.8
NON-OIL	0.4	0.5	0.5	0.5
IMPORTS* (F.O.B.)	-4.6	-6.4	-8.0	-9.4
TRADE BALANCE	6.1	2.5	1.4	0.0
NET SER. + PVT. TRANS.	-1.0	-0.9	-1.1	-1.4
FREIGHT AND INSURANCE	-0.6	-0.8	-1.0	-1.1
INVESTMENT INCOME REC'TS	0.3	0.6	0.7	0.6
OTHER	-0.8	-0.8	-0.8	-0.9
GRANT-TYPE ASSISTANCE	-0.1	-0.2	-0.2	-0.2
CURRENT ACCOUNT BALANCE	5.0	1.4	0.2	-1.6

* INCLUDING MILITARY GOODS.

TABLE B-1

VOLUME OF OPEC OIL EXPORTS

CASE 1: ASSUMING 1 MILLION B/D SAVINGS IN 1976 AND 2 MILLION B/D SAVINGS IN 1977 FROM GOVERNMENT CONSERVATION MEASURES

THOUSAND B/D

	1974	1975	1976	1977
1. *ALGERIA*	893	855	950	945
2. *ECUADOR*	129	165	160	155
3. *INDONESIA*	1175	1211	1391	1470
4. *IRAN*	5770	5365	5320	5495
5. *IRAQ*	1606	1880	1960	2140
6. *KUWAIT*	2560	1975	1970	1965
7. *LIBYA*	1451	1210	1455	1700
8. *NIGERIA*	2198	1935	2030	2125
9. *QATAR*	513	497	495	490
10. *SAUDI ARABIA*	8462	8170	7310	7150
11. *U.A.E.*	1675	1390	1385	1480
12. *VENEZUELA*	2707	2110	1990	1865
TOTAL	29139	26763	26416	26980

TABLE B-2

OPEC CURRENT ACCOUNT

CASE 1: ASSUMING 1 MILLION B/D SAVINGS IN 1976 AND 2 MILLION B/D SAVINGS IN 1977 FROM GOVERNMENT CONSERVATION MEASURES

BILLION US $

	1974	1975	1976	1977
EXPORTS (F.O.B.)	119.5	113.6	122.5	133.0
OIL	113.5	106.2	113.4	121.6
NON-OIL	6.0	7.4	9.1	11.4
IMPORTS (F.O.B.)*	-33.7	-47.1	-60.1	-73.8
TRADE BALANCE	85.8	66.5	62.4	59.2
NET SER. + PVT. TRANS.	-8.6	-6.1	-5.3	-4.2
FREIGHT AND INSURANCE	-4.0	-5.7	-7.2	-8.9
INVESTMENT INCOME REC'TS	4.3	9.8	14.1	18.2
OTHER	-8.8	-10.2	-12.2	-13.6
GRANT-TYPE ASSISTANCE	-4.2	-3.0	-2.2	-2.1
CURRENT ACCOUNT BALANCE	73.0	57.4	54.9	52.9

* INCLUDING MILITARY GOODS.

TABLE B-3

OPEC CURRENT ACCOUNT BALANCES

CASE 1: ASSUMING 1 MILLION B/D SAVINGS IN 1976 AND 2 MILLION B/D SAVINGS IN 1977 FROM GOVERNMENT CONSERVATION MEASURES

BILLION US $

	1974	1975	1976	1977
1. *ALGERIA*	1.2	-2.0	-3.5	-3.7
2. *ECUADOR*	0.2	0.0	-0.1	-0.4
3. *INDONESIA*	0.1	-0.6	-0.5	-1.2
4. *IRAN*	14.4	12.1	11.7	11.8
5. *IRAQ*	2.8	3.0	2.9	2.9
6. *KUWAIT*	7.3	6.3	7.5	8.1
7. *LIBYA*	2.5	0.1	0.1	0.1
8. *NIGERIA*	6.3	5.3	5.8	5.9
9. *QATAR*	1.6	1.7	1.9	2.0
10. *SAUDI ARABIA*	25.9	26.2	25.2	25.0
11. *U.A.E.*	5.6	4.0	4.1	4.2
12. *VENEZUELA*	5.0	1.4	-0.3	-2.1
TOTAL	73.0	57.4	54.9	52.9

TABLE B-4

VOLUME OF OPEC OIL EXPORTS

CASE 2: ASSUMING 2 MILLION B/D SAVINGS IN 1976 AND 4 MILLION B/D SAVINGS IN 1977 FROM GOVERNMENT CONSERVATION MEASURES

THOUSAND B/D

	1974	1975	1976	1977
1. *ALGERIA*	893	855	900	945
2. *ECUADOR*	129	165	160	155
3. *INDONESIA*	1175	1211	1291	1320
4. *IRAN*	5770	5365	5120	4995
5. *IRAQ*	1606	1880	1860	1940
6. *KUWAIT*	2560	1975	1770	1765
7. *LIBYA*	1451	1210	1455	1700
8. *NIGERIA*	2198	1935	1930	1925
9. *QATAR*	513	497	495	490
10. *SAUDI ARABIA*	8462	8170	7060	6600
11. *U.A.E.*	1675	1390	1385	1280
12. *VENEZUELA*	2707	2110	1990	1865
TOTAL	29139	26763	25416	24980

TABLE B-5

OPEC CURRENT ACCOUNT

CASE 2: ASSUMING 2 MILLION B/D SAVINGS IN 1976 AND 4 MILLION B/D SAVINGS IN 1977 FROM GOVERNMENT CONSERVATION MEASURES

BILLION US $

	1974	1975	1976	1977
EXPORTS (F.O.B.)	119.5	113.6	118.2	124.1
OIL	113.5	106.2	109.1	112.7
NON-OIL	6.0	7.4	9.1	11.4
IMPORTS (F.O.B.)*	-33.7	-47.1	-60.1	-73.8
TRADE BALANCE	85.8	66.5	58.1	50.2
NET SER. + PVT. TRANS.	-8.6	-6.1	-5.3	-4.6
FREIGHT AND INSURANCE	-4.0	-5.7	-7.2	-8.9
INVESTMENT INCOME REC'TS	4.3	9.8	13.9	17.5
OTHER	-8.8	-10.2	-12.0	-13.3
GRANT-TYPE ASSISTANCE	-4.2	-3.0	-2.2	-2.1
CURRENT ACCOUNT BALANCE	73.0	57.4	50.6	43.5

* INCLUDING MILITARY GOODS

TABLE B-6

OPEC CURRENT ACCOUNT BALANCES

CASE 2: ASSUMING 2 MILLION B/D SAVINGS IN 1976 AND 4 MILLION B/D SAVINGS IN 1977 FROM GOVERNMENT CONSERVATION MEASURES

BILLION US $

	1974	1975	1976	1977
1. *ALGERIA*	1.2	-2.0	-3.7	-3.7
2. *ECUADOR*	0.2	0.0	-0.1	-0.4
3. *INDONESIA*	0.1	-0.6	-0.9	-1.8
4. *IRAN*	14.4	12.1	10.9	9.5
5. *IRAQ*	2.8	3.0	2.5	2.0
6. *KUWAIT*	7.3	6.3	6.6	7.2
7. *LIBYA*	2.5	0.1	0.1	0.1
8. *NIGERIA*	6.3	5.3	5.3	4.9
9. *QATAR*	1.6	1.7	1.9	2.0
10. *SAUDI ARABIA*	25.9	26.2	24.1	22.5
11. *U.A.E.*	5.6	4.0	4.1	3.3
12. *VENEZUELA*	5.0	1.4	-0.3	-2.1
TOTAL	73.0	57.4	50.6	43.5

TABLE B-7

OPEC CURRENT ACCOUNT

CASE 3: ASSUMING CONTINUATION OF NOMINAL OIL PRICES AT THE 1975 LEVEL

BILLION US $

	1974	1975	1976	1977
EXPORTS (F.O.B.)	119.5	113.6	118.2	126.9
OIL	113.5	106.2	109.1	115.5
NON-OIL	6.0	7.4	9.1	11.4
IMPORTS* (F.O.B.)	-33.7	-47.1	-60.1	-73.8
TRADE BALANCE	85.8	66.5	58.0	53.0
NET SER. + PVT. TRANS.	-8.6	-6.1	-5.5	-5.0
FREIGHT AND INSURANCE	-4.0	-5.7	-7.2	-8.9
INVESTMENT INCOME REC'TS	4.3	9.8	13.9	17.6
OTHER	-8.8	-10.2	-12.2	-13.7
GRANT-TYPE ASSISTANCE	-4.2	-3.0	-2.2	-2.1
CURRENT ACCOUNT BALANCE	73.0	57.4	50.3	46.0

* INCLUDING MILITARY GOODS.

TABLE B-8

OPEC CURRENT ACCOUNT BALANCES

CASE 3: ASSUMING CONTINUATION OF NOMINAL OIL PRICES AT THE 1975 LEVEL

BILLION US $

	1974	1975	1976	1977
1. ALGERIA	1.2	-2.0	-3.8	-3.8
2. ECUADOR	0.2	0.0	-0.2	-0.5
3. INDONESIA	0.1	-0.6	-1.1	-2.0
4. IRAN	14.4	12.1	10.4	8.4
5. IRAQ	2.8	3.0	3.1	3.4
6. KUWAIT	7.3	6.3	6.9	7.0
7. LIBYA	2.5	0.1	-0.4	-0.9
8. NIGERIA	6.3	5.3	5.1	5.3
9. QATAR	1.6	1.7	1.8	1.7
10. SAUDI ARABIA	25.9	26.2	25.0	25.7
11. U.A.E.	5.6	4.0	4.0	4.2
12. VENEZUELA	5.0	1.4	-0.5	-2.7
TOTAL	73.0	57.4	50.3	46.0