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CEEP, CENTRO STUD/O POLITICA ECONOMICA

the outlook for supply, demand and prices in the oil market; political developments in Iran and their consequences on oil politics

organized by CEEP CENTRO STUDI DI POLITICA ECONOMICA

TURIN MARCH 16 TH 1979, ISTITUTO BANCARIO SAN PAOLO piazza San Carlo, 156

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CERTAIN CONSIDERATIONS AFFECTING ACCESS TO OIL:

THE NEXT TWENTY YEARS

by M.A. CONANT

SUMMARY

- 1. Continuing importance of the Middle East as the most critical source of oil in world trade over the next twenty years. There is no reasonable prospect of the region's basic significance diminishing sufficiently as a consequence of new giant discoveries elsewhere, or of unanticipated success in exploiting the heavy oils and "unconventional" crudes of Canada, Venezuela, etc. One should assume that for the balance of this century the Middle East will contribute about 50 percent of the oil in world trade.
- 2. One must also assume that there will be additional, important claimants for some share of the oil in world trade the U.S.S.R. (in its own behalf, or East Europe) and China. The developing world will require more and states such as Brazil may be among the most important.

Opinions vary as to how large a demand these countries will make on world oil; at least we can anticipate their entry into the world market will put great pressure upon Middle East sources. Moreover, we have to ask how these countries will meet the cost of imports – or whether, if their demands are large, they may seek "special relationships" and one or more may even attempt to control a particular source.

Competition amongst oil importers for access to Middle East oil could thus involve all of the great industrial states – including the "superpowers" – an unprecedented situation.

3. The United States is likely to remain the energy producing and consuming colossus, and the single largest importer of oil. The U.S. is likely to continue to be the principal factor in defense arrangements for nations outside the Soviet or Chinese constellations. But over this period, Japan may reacquire a respectable military capability.

- 4. These likelihoods lead us to reflect on the following observations:
 - a) European and Japanese dependence on Middle East (and North Africa) oil now approximates 80 percent of their oil imports, or about 14 mmb/d, the U.S. presently obtains about 30 percent of its imports from the Middle East (and North Africa) or about 3 mmb/d. Are these proportions likely to change? The vital importance of Middle East and North Africa oil to Europe and Japan, both in percent of origin of imports and in volumes, has to be considered in the context of the politico-military role of the U.S.
 - b) The U.S. has its "special relationship" with Saudi Arabia and along with it an assumed access to Saudi oil of 7 mmb/d.
 - c) What implications are to be drawn from this "imbalance" in oil dependency, a possible "privileged" U.S. access to Saudi oil, and the singular U.S. defense role in the region? Is there a complementary set of interests served by these different stakes and roles? Under what circumstances might this continue, or be challenged?
 - d) Is it the case that the industrial nations, dependence on Middle East oil is now, and will remain, so consequential that they have no real leverage to affect regional developments?

5. There are additional aspects to be discussed:

- a) Is there a renewal of hope and effort for a meaningful Euro-Arab dialogue which might create a greater sense of mutuality of interest?
- b) Are the Japanese efforts to link Middle East processing with domestic market demand likely to accomplish a similar objective?
- c) Will these efforts be independent or exclusive of the U.S.?
- d) What changes within the Middle East may affect continuity of supply? Role of Iraq, Saudi Arabia? Iran, Egypt?

These questions suggest we should think not in terms of present interests prevailing through this century but whether there is a possibility of change in ten years? Or are we locked into a situation in which any improvement must await the following decade?

6.

3.

If the implication is that we are locked into a situation unlikely to be affected soon ,

- a) how will the Middle East nations accommodate to political, social and economic change (and thus offer the prospect of continuity of supply)?
- b) how will the principal nations outside the region cope with these inevitable changes some of which may be interpreted as threatening supply?



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THE OUTLOOK FOR SUPPLY, DEMAND

AND PRICES IN THE OIL MARKET

by J. LICHTBLAU

SUMMARY

- 1. The world oil supply and demand outlook prior to the Iranian supply interruption.
 - a) A slow but clearly perceptible movement in successive forecasts during 1974-78 from a crisis scenario for the mid-1980's to a more balanced supply-and-demand scenario at "reasonable" prices for the same period.
 - b) The principal reasons for this shift from pessimism to cautious optimism in oil forecasting were (1) a recognition (or assumption) that the impact of higher energy prices on general economic activity would not be as disastrous as it had been assumed earlier; and (2) a continuing downward revision of future oil demand growth requirements for a variety of economic, demographic and technological reasons. Simultaneous downward revisions of future energy supply availabilities were generally of a lesser magnitude than the downward revisions in the demand growth.
- Accomplishments and failures during 1974-78 in improving long term world oil supply and demand balance.



The impact of the Iranian supply interruption

a) The short term outlook, i.e. the next 12 months.
Our ability to cope with the maximum interruption
- U.S. policy
- I.E.A. policy

- Industry policy

3.

b) The longer term outlook, i.e. to 1985-90.

- Impact on allowable oil export levels.

- OPEC's post Iranian pricing policy: its effect on world economic growth, the development of alternate energy sources, and energy conservation.

2.

. Brief discussion of the U.S. oil and energy scene pre-Iran and post-Iran

- a) Policies and politics
- b) Market factors and fiction
- c) Balance of Payments considerations
- d) Oil imports and the dollar exchange value
- e) Opportunities and limitations of U.S. energy options
- f) Oil and gas policies of America's neighbours Canada and Mexico.

ORGANISATION FOR ECONOMIC COOPERATION AND DEVELOPMENT

Department of Economics and Statistics

DES/NI(79)1

CONFIDENTIAL

Paris, 8th February, 1979

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GLOBAL FINANCIAL FLOWS:

THE EXTERNAL POSITION OF MAJOR

WORLD ZONES TO 1985

(Note by the Secretariat)

-I. Introduction and Summary

1. This note reports on the most recent of the Secretariat's periodic re-assessments of the external positions of the OECD area and major non-OECD country groupings(1). Apart from differences in initial conditions (or the starting position), this note differs from the previous exercises (which projected a single "base case" accompanied by a sensitivity analysis), in that two scenarios, based on alternative Secretariat assumptions on OECD growth, are elaborated. These naturally involve different medium-term growth paths for OECD and non-OECD trade volumes, trade prices and the terms of trade between traded manufactured goods and primary commodities. One scenario corresponds to the "adjusted" high growth path elaborated by the Secretariat for discussion at the 25th/26th January meeting of Working Party N°2(2). The other, "lower growth", scenario is based broadly on an extrapolation of OECD growth since mid-1976.

- (1) Previous work was presented in <u>Economic Outlook</u>, OECD, July, 1974, pp. 94-6, DES/NI(75)1, CPE/TWP(76)1, DES/NI(77)1 and DES/NI(78)3. As in earlier work, this note draws on the work of the Development Cooperation Directorate, the Combined Energy Staff, and the Capital Markets Division.
- (2) Presented in CPE/WP2(78)4. "Adjusted" high growth embodies growth rates slightly lower than those required to restore full employment by the mid-1980's. It might be noted that the methodology of the "growth scenario" system is described in detail in DES/NI(78)15.

DES/NI(79)1

In presenting two complete sets of projections, the Secretariat is attempting to meet the criticism of some national authorities that in earlier notes it was difficult to see the full implications of differences in assumptions from those underlying the "base case" because the accompanying sensitivity analysis was, necessarily, only partial.

2. The methodology used in this note is the same as that employed in previous exercises. In the absence of major shocks (e.g. world-wide crop failures), the evolution of real demand and domestic inflation in OECD countries is assumed to be the main influence on world trade volumes and prices, and especially on the exports of goods from non-OECD countries and the terms of trade between manufactured goods and primary products. Capital flows between major world zones and import volumes of non-OECD countries are determined jointly. In the first instance, estimates are made of probable capital flows between major This, along with projections of terms of trade and world zones. demand for non-OECD goods, allows for estimates of the likely development of the ability of non-OECD country groupings to finance imports, i.e. a preliminary estimate of their import volume growth is obtained. To the extent that this is below "satisfactory" growth rates, it is assumed that the countries in question will make a greater effort to obtain external finance and both capital flows and import volumes are adjusted up. On the other hand, if a given non-OECD country grouping appears to be in a comfortable financial position relative to its import requirements, it is not assumed that all external revenues are spent automatically on imports(1). This is particularly the case for the "low absorber" group of OPEC countries, but it also applies (though with less force) elsewhere.

3. The following qualifications should be borne in mind when examining the projections:

- the projections are intended to have indicative value only in the context of a <u>smooth</u> evolution of world demand, at least after 1979.
- though the adoption of two alternative real growth hypotheses provides some measure of the sensitivity of the results to changes in the assumptions, changes in other assumptions could have equally powerful effects.

 For non-oil developing countries (as a group), it is assumed that reserves will be increased to maintain a constant ratio between gross reserves and total imports. - the analysis here is concerned with the interrelationships among large groups of countries. However, the general conclusions applying to a particular group do not necessarily apply to each of the individual countries within that group.

4. The projections described a year ago in DFS/NI(78)3 were based on an assumed medium-term average growth rate of just over $4\frac{3}{4}$ per cent over the period 1977-85(1). This growth rate has been lowered to $(4\frac{1}{2})$ per cent(2) in the "adjusted" high growth scenario for Working Party N°2 (CPE/WP2(78)4) and used in scenario A in the present note. To illustrate the effects of lower growth, scenario B is based on OECD GNP growth one percentage point lower (annual average growth of $(3\frac{1}{2})$ per cent). It is strongly emphasized that neither scenario represents Secretariat forecasts of what growth rates are likely to be over the 1978-1985 period. As noted in CPE/WP2(78)4, the scenario presented to Working Party N°2 are designed to "... pinpoint possible inconsistencies between postulated demand developments and constraints arising from the dynamics of wage-price formation, supply bottlenecks, financial flows and external balance" for individual OECD countries. The projections given here should be seen in this context.

The main assumptions of the two scenarios and corresponding 5. implications for world trade are given in Table 1. The different real growth rate assumptions give rise to different estimates of the likely evolution of trade prices and the terms (The assumptions underlying the estimates of trade of trade. prices of non-manufactured goods are described in more detail in Part III.) In summary, trade prices are assumed to rise more quickly in the "adjusted" growth case (scenario A) than in the "lower" growth case (scenario B). In scenario A, it is assumed that the terms of trade between manufactured goods and non-oil primary commodities will move in favour of the latter, whereas in scenario B, a move in the other direction is projected. In both scenarios, the purely technical assumption is made that the terms of trade between oil prices and those of manufactured goods will remain at their projected end-1979 level up to 1985(3).

- (1) More precisely, the assumed growth rate of OECD GDP was put at 3 per cent (annual rate) in the second half of 1978, rising to 5 per cent (annual rate) by the second half of 1979, and remaining at that level thereafter.
- (2) Made up of the 3 per cent forecast for OECD GNP in 1979 by the Secretariat in December, and $4\frac{3}{4}$ per cent thereafter.
- (3) It is argued by some observers that there is a <u>range</u> of OECD growth rates consistent with a single oil price evolution.

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Table 1

Summary of Medium-Term Projections

(Average per cent change per annum. 1978-85)

	"Adjusted"High Scenario	Growth A	Lower Growth Scenario B
OECD-GNP	4 <u>1</u>		3늘
<u>Trade Prices</u> (in dollar terms)			
Manufactures	5불	· · · · · · · · · · · · · · · · · · ·	5
Non-oil commodities	6	· · · ·	43
Oil(a)	6		5월
Trade volumes	n An an State and An An	· · ·	
OPEC		and Andreas and Andreas Andreas and Andreas	
Structure of which oil:	4 <u>+</u> 32.		2글 1호
Imports	5 <u></u> 2		4 <u>3</u>
Non-cil developing countries		• •	
Exports of which: manufactured goods	6 9-10		4 <u></u> 7
Imports	5孝		43
ISSR and Eastern European Countries	<u>.</u>	· ·	· · ·
Exports (to OECD)	6		4호
Imports (from OECD)	4	-	2월
OECD (trade with non-OECD)		· · · ·	· · · · · · · · · · · · · · · · · · ·
Exports			· · ·
Imports from non-OECD countries of which: manufactured goods non-oil commodities oil	10 4 ¹ / ₄ 3		7 3 2 1

(a) As announced by OPEC for 1979, after which assumed to be unchanged in real terms.

Together with assumptions regarding the evolution of services and transfers, the implied world pattern of current balances in current and constant prices is given in Table 2. In the table, it is assumed that balance of payments accounting practices do not change substantially over the medium-term. Hence, the recording discrepancy ("total" in Table 2), which is in part related to the level of current account transactions, is forecast to increase. The Secretariat will shortly be circulating a note reporting on a detailed examination of the sources of the world discrepancy. The broad conclusion of this work is that the major proportion of this discrepancy con be ascribed to under recording of invisible credite by OECE countries.

Under scenario A, the OECD's current position is 6. projected to be broadly in balance in 1985. This is similar to the previous projections in DES/NI(78)3 (which employed a roughly similar OECD GDP growth rate): an adverse movement in the terms of trade assumed in the present projections is offset by the depressed <u>level</u> of primary commodity prices in 1978 (the base year) - the projected improvement in their terms of trade vis-à-vis manufactured goods still leaves them below their 1977 level in 1985(1). Recent changes in accounting practices in the United States, which have had the effect of improving that country's current balance by about \$6 billion, without offsetting changes elsewhere would add that amount to the overall total. OPEC countries' surplus position would increase from its 1973 level, even in constant prices, but would be far below the levels reached in the mid-1970s. This aggregate picture conceals a very different evolution of the external positions of "low" and "high" absorbers: the detailed analysis of Part II indicates that the latter group of countries may be running large deficits throughout the projection period. Non-oil developing countries are projected to run increased deficits, even in constant prices. But these deficits could represent a lower proportion of their aggregate GNP in 1985 than was the case in 1978. And although individual countries might face financing problems, for the group as a whole a deficit of this size would seem sustainable. Finally, the current balance of Sino-Soviet and other countries may hardly change in current prices, and could therefore decline both in constant prices and relative to these countries' imports from the rest of the world. In summary, the projected external positions under scenario A appear relatively comfortable. On the assumptions adopted, it would appear that during the first half of the 1980's major world zones could have achieved the necessary adjustment to higher oil prices, while OECD countries as a group could be taking up slack without coming against balance of payments constraints.

(1) The projections in DES/NI(78)3 assumed broadly unchanged terms of trade over the projection period.

DES/NI(79)1

<u>Table 2</u>

Current Balances in 1985

(\$ billion)

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(1)	Current \$ billion	<u> </u>	Scenario A	Scenario B
	OECD	2호	0	40
	OPEC	11	18	-7
-	Non-oil developing countries	-34	-55	-69
	Sino-Soviet and other	-12	-13	-10
	Total	-32 <u></u>	(-50)	(~45)
(2)	Constant 1978 \$ billion(2)			
	OECD	•	O	28
	OFEC	a" -	13	~4
	Non-oil developing countries		-38	- 49
	Sino-Soviet and other	·	-9	7
	Total		(-35)	(-32)

(a) Deflated by prices of exports of manufactured goods

7. The projections made under the assumption of relatively low OECD growth, those of scenario B, suggest a large surplus for OECD countries as a group reflecting their persistent high levels of unemployment. The projected position of OPEC countries conceals an external financial position of high absorbers in which the growth of their import volumes is likely to be constrained. The projected position of non-oil developing countries involves both lower growth of import volumes than under scenario A(1) and a current deficit that begins to reach levels at which questions of sustainability could be raised.

(1) Lower than past historical trends and with ensuing consequences for investment and GNP growth.

Table 3

Projected World Demand for OPEC Oil (millions of barrels per day)

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• •	-	(1,1,2)	 ·	••	٠				•			

	1978	1979	Scena 1980	rio A 1985	Scena 1980	rio B 1985
(Projection without U.S. National Energy Act)						
OECD GNP/GDP growth (%)	3 2	3	4 <u>3</u>	4 <u>3</u>	31/2	3눌
Elasticity of Total Energy Requirements with respect to GNP (Ratic)	0.9	0.7	0.8	0.8	0.8	0.8
Total Energy Requirement	75.5	77.0	79.9	96.3	79.2	90.9
Non-oil energy	36.4	37.2	38.7	47.6	38.5	46.1
Oil including NGL	39.2	39.8	41.2	.48.7	40.7	44.8
Change in inventories	-0.5	0.5	0.2	0.2	0.2	0.2
OECD Indigenous Production of oil	14.0	14.8	15.2	16.5	15.2	16.5
OECD Net Imports of oil in- cluding Marine Bunkers	26.0	26.8	27.6	34.2	27.1	30.2
Effect of U.S.Energy Act on Net Imports of oil	**	-	-	-2.5	e •	-2.5
Non-OECD Net Imports of oil including Marine Bunkers	1,4	1.2	- 1.4	2.9	1.4	2.5
of which Centrally Planned Economies	-1.2	-1.1	-0.9	0.6	-0.9	0.4
Non-oil Developing Countries and Other Countries	2.6	2.3	2.3	2.3	2.3	2.1
World Demand for OPEC oil	27.4	28.0	29.0	34.6	28.6,	30.2
OPEC Domestic Consumption of Oil including	2.4	2.6	2.8	4.1	2.7	3.8
OPEC Oil Production	29.8	30.6	31.8	38.7	31.3	34.0
of which Low Absorbers	14.7 -	15.1	15.2	19.5	14.7	16.0
High Absorbers	15.1	15.5	16.6	19.2	16.6	18.0
OPEC Net Exports of Dil	27.4	28.0	29.0	34.6	28.6	30.2
of which Low Absorbers	14.1	14.4	14:5	18.4	14.1	15.0
High Absorbers	13.3	13.6	14.5	16.2	14.5	15 2
						1

II. Oil and OPEC

3. This section presents an up-dated assessment of the evolution to 1985 of the demand for and production of oil and the corresponding implications for OPEC's external position, taking account of the general assumptions outlined above and recent work of the Combined Energy Staff (CES) concerning the world energy balance. Apart from the assumptions outlined in Part I and Table 1, it is assumed here that:

> - International oil prices in 1979 rise in line with the increases announced in December and thereafter are unchanged in real terms (relative to manufactured prices).

- The recent United States National Energy Act is assumed to reduce net oil imports in 1985 by 25 mbd from what otherwise would have been the case.
- The present situation in Iran is temporary supply from this source will be restored in sufficient time so as not to affect medium-term projections.

9. The major conclusions (developed in detail in the text which follows) are:

- World demand for OPEC oil (including OPEC's own domestic use) could increase from 30 mbd in 1978 to some 38% mbd by 1985 in scenario A or 34 mbd in scenario B.
- Projected OFEC oil production in 1985 in scenario A (383 mbd) falls within the range of CES estimates for the probable OFEC oil supply in 1985 and is therefore not necessarily inconsistent with the assumption of an unchanged real price of oil in the first half of the 1980s.
- In scenario A, the growth of low absorbers' oil export earnings may marginally surpass that of the value of their imports so that, in this case, their large surplus may remain an enduring feature in the 1980s. In scenario B, with lower oil revenues, their surplus could be reduced substantially by 1935. On the other hand, in both scenarios high absorbers import volume growth may be constrained by financing considerations so as to contain their current deficit at about the same order of magnitude recorded in 1973 (some \$10 billion)(1). Hence, the OPEC current balance might evolve as follows.

(1) In 1978 high absorbers' current deficit appears to have been some 22 billion and reserves fell some \$5 billion. Over the medium term it is assumed that net capital inflows will increase such that a slightly smaller deficit can be sustained with only a modest run-down of reserves. DES/NI(79)1

Table 4

· - 10

OECD GNP and OPEC Oil Production

	1978	1979	1980 -	1985
I. Scenario A	· · · ·	. · ·		
A. Indices, $1976 = 100$	· · · ·			
OECD GNP, volume	100	103.0	107.9	136.1
OECD cil imports volume	100	103.1	106.2	121.9
OPEC cil exports volume	100	102.2	105.8	126.3
Oil prices	- 100	110.0	118.0	150.6
Nanufactured, prices	100	109.0	114.5	146.1
B. Million barrels per day	a ha a sa a a	· · · · · · · · · · · · · · · · · · ·	sur eu	. ·
CECD oil imports	26.0	26.8	27.5	31.7
OPEC oil exports	27.4	23.0	29.0	34.6
OPEC oil production	29.8	30.6	31.8	38.7
II. Scenario B				·
A. Indices, $1976 = 100$				•
OECD GNP, volume	100	103.0	106.6	126.6
OECD sil imports volume	100	103.3	104.2	106.5
OPEC bil exports volume	100	102.2	104.4	110.2
Cil prices	100	110.0	117.4	145.2
Manufactured, prices	100	109.0	113.7	140.7
B. Million barrels per day	•		·,	
OECD oil imports	26.0	26.8	27.1	27.7
OPEC cil exports	27.4	28.0	28.6	30.2
OPEC oil production	29.8	30.6	31.3	34.0

(3 billion)

	High Absorbers	Low Absorbers	Total	
1973	-11 ¹ /2	223	11	
Scenario A		ý • •		·
1980	· -8- ·	23	15	
1985 ·	-10	28	13	-
1985 (constant 1978 \$)	-7	20	13	
Scenario B	·	· · ·	·	
1980	-7	19	12	3,
1985	-11	5	-6	
1985 (constant 1973 \$)	-7	5	-4	· .

Demand for oil

10. The projected OECD energy balance in 1930 and 1935 under both scenarios is given in the top half of Table 3 (further information on OECD demand for oil and OFEC production is given in Table 4). The projections are derived by applying the Combined Energy Staff medium-term framework and methodology to the OECD GNP growth rates assumed in the two scenarios. These projections are based on a "no policy change" assumption with respect to energy policy. However, to facilitate an examination of the effects of the United States National Energy Act enacted in October, 1978, these are given separately(1). Taking them into account, OECD net oil imports (including marine bunkers), could increase from just under 27 mbd in 1978-80 to 31-32 mbd (scenario A) or some 27-20 mbd (scenario B) by 1935.

11. In looking at the differences between the two scenarios, it should be noted that it is assumed that, non-oil energy developments in the medium term would reflect differences in growth rates. Here it has been assumed that a more rapid growth of demand would induce more growth in the production of non-oil energy - OECD consumption of non-oil energy, equivalent to 37-38 mbd in 1978-80 is projected to increase to 47-48 mbd equivalent in scenario A and 46 mbd equivalent in 1905 in scenario B.

(1) The United States estimates could, by 1985, reduce net oil imports between 2.4 mbd and 2.9 mbd from what otherwise would have been the case. The Secretariat has conservatively (and arbitrarily) used a figure towards the lower end of this range in the projections here. DES/NI(79)1

12. Turning to non-OECD country groupings, real growth and hence demand for energy will be somewhat different in the two scenarios. However, the important question here is the extent to which this demand is likely to be met out of indigenous production. This is not likely to be particularly sensitive to differences in assumptions between the two scenarios. Hence in discussion below, energy production by countries outside OPEC and the OECD are assumed to be the same in both scenarios.

- Non-OPEC developing countries are expected to require net oil imports of 2-2½ mbd in 1985. Their combined oil production is expected to increase from 4.6 mbd in 1978 to some 9 mbd by 1985. Production is concentrated in Mexico, Egypt, Brazil, India and Argentina. Over one-third of their total 1985 production is likely to be in Mexico (its oil production may reach 3½-4 mbd by 1985(1)). Egypt's oil production might be raised to close to 1 mbd by 1985, placing this country among the rank of oil exporters.
 - Eastern European countries as a whole will probably be in a net import position of at least 1 mbd by 1985, although the Soviet Union itself may be in a position of approximate balance - (either through increases in indigenous production or control of oil exports to Eastern European countries).
- China may be a net exporter to the tune of ½ mbd by 1985. Published oil production in 1977 was 2 mbd, of which 0.2 mbd was exported. China appears to have ambitious plans for developing its oil reserves. However, availability of oil exports depends both on its rising internal consumption needs and on the priority assigned by the Government to oil exports to provide external finance.

- The other area (South Africa, etc.) may require net oil imports of $\frac{1}{2}$ mbd by 1985.

13. Finally, consumption of oil in OPEC countries themselves is on a rising trend. Following the projections of CES, OPEC domestic consumption of oil (including marine bunkers) may be running at some 4 mbd by mid-1980s. Adding this to other projections given above, OPEC oil production in 1985 is projected to reach 38½ mbd in scenario A and 34 mbd in scenario B.

(1) Mexico's oil production target is 2¹/₄ mbd by the end of next year (compared to 1¹/₂ mbd in recent months). Increases in production to the mid-1980s may be moderated by concerns of severe inflation and economic distortion resulting from an "oil boom".

OPEC oil supply and the oil price

14. The above projection of demand for OPEC oil production in 1985 in scenario A (38½ mbd) is some 2 mbd lower than those presented by the Secretariat a year ago in DES/NI(78)3. The main reasons for the downward revision are significantly lower OECD net imports in 1978 (the starting point) and OECD GNP some 2 per cent lower in 1985 chiefly resulting from lower growth in the late 1970s. On the supply side, the Combined Energy Staff's present mid-range estimate put the probable OPEC oil supply in 1985 at 37-38 mbd. Therefore, it appears that the projected demand for OPEC oil falls within OPEC's production capacity(1).

15. The next question is how the projected OPEC oil production in 1985 is likely to be allocated between low absorbers and high absorbers. It is assumed that high absorbers will wish to maximise current revenues (i.e. minimise current deficits) and therefore produce oil at their maximum sustainable supply level. In scenario A this production level is set at the top of their estimated supply potential: some 19 mbd(2). This would leave about 19 mbd to be supplied by low absorbers in 1985, a figure close to Combined Energy Staff estimates of their "probable supply". Because such an output level would result in rising external surpluses for these countries, despite quickly growing imports, questions about willingness to produce oil at the requisite levels might arise. In any case, the balance between supply and demand would be delicate, and prices rather firm, even in the absence of major supply shocks. In scenario B, a more conservative estimate is made of high absorbers' oil production: the mid-point of the Combined Energy Staff's estimated range (18 mbd compared to the top of the range - 19 mbd - taken in scenario A). It is assumed that Low absorbers are assumed to take the residual demand for OPEC oil (16 mbd). In this case there are unlikely to be physical supply problems. However, there may be some question as to whether demand might not be sufficiently weak as to exert downward pressure on the real price of oil.

- (1) Installed capacity in 1985 is estimated to be 43 mbd.
 For technical reasons sustainable output is reckoned to run at 90 per cent of capacity, putting maximum sustainable output at 38³/₄ mbd.
- (2) The share of the high absorbers' proven reserve in the OPEC total is some 35 per cent at the year end of 1977 according to World Oil journal. It is noted that in order to keep present level of proven reserves (135 billion parrels) up to 1985, or to replenish their reserves by more than their annual production, new discoveries of the equivalent of 1/3rd of the presently estimated proven reserve must be made between 1978 and 1985. Needless to say, a wide margin of error is attached to the estimate of their reserves, and their behavioural reaction to accumulating current balance deficits and overall increase of demand for OPEC oil in the earlier part of 1980s is not known.

DES/NI(79)1

Table 5

Projections of OPEC Import Growth

(percentage increase per annum)

	Hig	h absorbers	Low	absorbers
	197 to 198	4 1980 to 0 1985	1974 to 1980	1980 to 1985
DES/NI(75)1	(17) •••	(13출)	••
CPE/TWP(75)7(a)	17	61	13. :	13
CPE/TWP(76)1	(17) (6)	(15)	(13불)
DES/NI(77)1	12 - 12	<u>3</u>	23	8
DES/NI(78)3	ديني، ڪيڪرو آيون 11 ليو جيسري ۽ پيري	6	23	7
Present projection		•	2.	· · · · · · · · · · · · · · · · · · ·
Scenario A	9	<u>Ý</u>	20	8
Scenario B	9	3	20	7

(a) Submission of United States authorities.

OPEC Export Earnings

16. Assuming a relatively buoyant increase in non-oil export earnings (from 48 billion in 1978 to 420-25 billion in 1985 in the case of high absorbers and from 42 to 44-5 billion for low absorbers), and on the basis of the above assumptions about oil revenues, total OPEC export earnings could evolve as follows (§ billion):

	High Absorbers	Low Absorbers	<u>Tota</u>
Scenario A 1978	: 71 <u></u>	70	140
1985	: 135 to 140	140	275
Scenario B 1985	: 125	110	235

It should be noted that oil exports are still dominant foreign exchange earners among high absorber countries in 1977 (the share was over 90 per cent for Algeria, Iran, Iraq and Venezuela and it is only for Ecuador (40 per cent), Gabon (78 per cent) and Indonesia (67 per cent). that the oil export share is relatively low). In 1985 even if the share of nonoil exports rises to above 15 per cent of their total exports, the scope for an increase of their imports is crucially dependent upon increased sales of oil and the terms of trade of oil relative to manufactured goods.

OPEC imports

A high degree of uncertainty attaches to the projection 17. of imports by OPEC countries. The high absorber group of countries registered a substantial deficit of \$10 billion in 1978, and their reserves fell by some \$5 billion. It is assumed that although net capital flows to these countries may increase over the medium-term they will be unwilling (and may find it difficult) to sustain deficits any greater than this order. Thus, even if they produce oil at maximum sustainable levels (scenario A), the growth of their import volumes would be relatively modest: around 4 per cent annually(1). Together with the assumed growth of export revenues given above, this would imply a combined current deficit of high absorbers of some \$10 billion in 1985. Pro-jecting the import demand of low absorbers presents greater Prodifficulties: because they will be facing no financial constraints, their import volumes largely reflect their perceived medium-term development requirements(2). On this

- In this context, it should be noted that the growth of their import volumes since 1975 has been lower than that of the low absorber group each year.
- (2) Short-term transportation difficulties and handling bottlenecks may still be exercising a marginal breaking effect on import growth of "low absorbers".

<u>Table 6</u> Summary OFEC Current Balances(a)

current \$ billion

	•	1974	1978	1979	Scenar 1980	io A 1985	Scenar 1980	io B 1985
Low absorbers			-		1997-1997 - Marine Arriston, 1998-1997 - 1998-1998 - 1998-1998 - 1998-1998 - 1998-1998 - 1998-1998 - 1998-1998			
Nerchandise exports Merchandise imports Trade balance Invisibles, net		55 11素 43素 -9素	70 371 325 -10	78월 44 34월 - 10월	85 50 35 -12	139 93 45 -17	82 49 33 -14	110 85 25 -20
Current balance		34 }	221	. 24	23	28	. 19	5
Memorandum Items: Change since 1973 in: Net stock of foreign assets Investment income		34 <u>1</u>	149 9쿨	173 11	196 11	317 _18	192 10	240 13
High absorbers			· · · ·			;	······································	
Merchandise exports Merchandise imports Trade balance Invisibles, net		71 27 <u>1</u> 352 -9	711 611 10 -211	79 <u>1</u> 69 101 -23	91 74 17 -25	138 116 22 -32	91 74 17 -24	126 106 20 -31
Current balance		24 <u>}</u>	11 <u>↓</u>	-155 :	8	-10	-7	-11
Memorandum Items: Change since 1973 in: Net stock of foreign assets Investment income	• • •	24 <u>1</u> 1	17 2	, 5 1	-3 0	-45 -2	-3 0	-44 -2
OPIEC	······································						· · · · · · · · · · · · · · · · · · ·	
Merchandise exports Merchandise imports Trade balance Invisibles, net		116 39* 77 -18	141 93 42 -31	158 113 45출 -33호	176 124 52 -37	277 209 68 ~50	173 123 50 38	236 191 45 -51
Current balances		59	11	12	15 .	18	12	-6
Memorandum Items; Change since 1973 in: Net stock of foreign assets Investment income		59 2	166 11불	178 12	193 11	272 16	185 10	196 11
OPEC 1978 \$ billion						, <u></u>	· · · ·	
Merchandise exports Merchandise imports Trade balance Invisibles, net			141 98년 42년 -31호	145 104 42 -31	154 108 45 -32	190 143 47 -34	152 108 44 -33	168 136 _ 32 -36
Current balance			11	11	. 13	13	11	-4

DES/NI(79)^

basis, in the longer run, their imports may grow relatively slowly, reflecting their small populations, restrictions on immigration, and conservative social structures. In this note as in the two previous exercises of this type (see Table 5) import volumes are projected to grow by some 8 per cent annually up to 1985 in scenario A. Within this aggregate figure, import volumes of Saudi Arabia and Kuwait could be expanding at close to 10 per cent annual rates. Other countries would be registering rates of 5-6 per cent.

18. In scenario B, to match the much slower demand for OPEC oil, the import volume growth of both groups of oil exporting countries is projected to be one percentage point lower than in scenario B (3 per cent per annum for high absorbers between 1980 and 1985 and 7 per cent per annum for low absorbers).

OPEC trade and current balance position

Pulling the various strands of the above argument 19. together, it would appear that under the assumptions of scenario A, OPEC exports would be \$275-280 billion in current prices by 1985 (Table 6), with high absorbers and low absorbers each accounting for roughly half of the total. (The value of oil exports within the total would be approximately 90 per cent). This figure is nearly double that of 1978. The value of imports meanwhile could more than double, but due to the initial imbalance, the trade balance itself could expand to around @70 billion, well above the 1978 figure, and nearly as high as the figure reached in the year after the oil crisis. (In real terms, of course, the trade surplus would be considerably smaller than in the mid-1970s). Even for high absorber countries, their combined trade surplus would be well over double the 1978 level. However, the deficit on services and official transfers of OPEC countries is also projected to rise, by \$15-20 billion up to 1985, with the high absorbers accounting for most of the increase(1): Consequently, OPEC countries as a group may register current surpluses of \$15-20 billion by 1985 under scenario A. Low absorbers could be running surpluses of \$25-30 billion, while high absorbers are assumed to constrain their import growth to rates which would yield them a current deficit of about (10 billion.

20. In scenario B, export revenues of OPEC countries are projected to be some \$40 billion lower in 1985, with the cuts falling disproportionately on low absorbers who, because of comfortable external financial positions are assumed to be more willing to reduce oil production. Indeed, it was noted above that in scenario A a conflict could arise between the continued large current surplus of low absorbers and their villingness

(1) The growing gross payments for services and transfer payments by low absorbers may be partially offset by an estimated 37-8 billion increase in their investment income. to provide oil at levels required to satisfy the world demand. Hence, low absorbers export revenues are projected to be some \$30 billion lower in scenario B, reflected to a limited extent in \$5-10 billion lower imports. In view of the assessment that, in scenario A, high absorbers are in a relatively tight financing position, their \$10 lower expert revenues projected in scenario B are assumed to be totally reflected in lower imports, leaving their current deficit broadly unchanged. Hence, in scenario B, OPLC is projected to be in deficit of \$5-10 billion in 1985.

Sensitivity

21. To a large extent, the sensitivity of the projections to different assumptions can be seen by comparing the two scenarios. Sensitivity to changes in certain single assumptions may be summarised as follows:

> - If sustainable production of high absorbers were 1 mbd higher, it is likely, given their tight external financial position, that they would export that much more oil. (Low absorbers, as noted above are likely to be willing to produce 1 mbd less). As the oil revenue involved here would be spent on exports, the OPEC current balance would be some \$5-7 billion worse in 1985.

On the other hand, if OECD oil imports were l mbd higher, this would have to be met out of increased production of low absorbers and the OPEC current balance would be \$5-7 billion better in 1985.

- However, if lower absorbers' real imports grew l percentage point more rapidly than projected here, their current surplus in 1985 would be \$5 billion lower.

- As a rough rule of thumb, differences in the price of oil from that assumed here would be worth 2-2 billion on oil revenues (or some al billion on the current balance) for every percentage point of difference in 1985.

III. Non-oil developing countries

22. In projecting the external position of non-oil developing countries (Table 7), the major assumptions are (apart from the general assumptions outlined in Table 1):

- The elasticity between OECD demand growth and imports from non-oil developing countries is assumed to be 1.4 in scenario A and 1.3 in scenario B, the difference reflecting a lower elasticity for manufactured goods (see Table 8 for details)(1). Both figures are lower than those employed in DES/NI(78)3, reflecting recent Secretariat work on the subject.
- The import elasticity of non-oil developing countries with respect to the purchasing power of their exports is now assumed to be higher (and closer to unity) than held likely one year ago. This also reflects recent Secretariat work.
- The volume of exports from non-oil developing countries to non-OECD countries is assumed to grow by 4-5 per cent per annum.
- The terms of trade for non-oil developing countries <u>vis-à-vis</u> their imports of manufactured goods are assumed to improve somewhat over the period in scenario A, but to deteriorate in scenario B.
- The projected import growth for the non-oil developing countries has, where necessary, been adjusted to provide a reasonable balance between their development requirements and financing limits on current deficits.

23. The main implications flowing from the assumptions outlined above may be summarized as follows:

- In scenario A, export volumes of non-cil developing countries could rise by 6 per cent annually over the 1978-1985 period.
- With a slight improvement projected in their terms of trade in scenario A, import volume growth in line with historic trends (above 6 per cent) for this group of countries could be accommodated within a current deficit of some \$55 billion in 1985 (\$43 billion in 1978 dollars, compared to \$34 billion estimated for 1978).

(1) Table 8 also details the assumptions underlying and the results obtained from recent IBRD work in this area.

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DES/NI(79)1

<u>Table 7</u>

I. Non-oil Developing Countries' Trade Volumes and Prices

Percentage changes

	Average	Average	Average	Avera	ge 1978-85
	1965-72	1970-74	1974-78	Scenari	o A Scenarió B
Volume Exports	б	14호	6-6 1	6	4쿨
Imports Price(a)	6 <u>1</u>	10 1	3	5출-6	4월-5
Exports	2	16½	5	5늘-6	4章-5
Imports	2 <u>늘</u>	16	7출-8	5눌	5

(a) Average values in \$ terms

e de la companya de l Presente de la companya de la company

-II. Current Account of Non-Oil LDCs

• • •

19701973197519771978 $\begin{array}{c} 1935\\ Scenarios\\ A\\ \end{array}$ In 1978 \$ prices-20-12-45-26 $-34\frac{1}{2}$ -38-49In current prices-8-7 $-38\frac{1}{2}$ -24-34-55-69	/0							
In 1978 \$ prices -20 -12 -45 -26 -34½ -38 -49 In current prices -8 -7 -38½ -24 -34 -55 -69		1970	1973	1975	1977	1978	19 Scena A	35 rios B
In current prices -8 -7 -38 ¹ / ₂ -24 -34 -55 -69	In 1978 \$ prices	-20	-12	-45	-26	-34½	- 38°	-49
	In current prices	-8	-7	-38½	-24	34	- 55	-69

- 20 -

- In scenario B, non-oil developing countries' export volumes may rise by only 4½ per cent annually and terms of trade may deteriorate. Hence, despite development needs, financial constraints may keep their import volume growth below 5 per cent - with the current deficit rising to almost \$70 billion in 1985 (\$50 billion in 1978 dollars).

24. As the assumptions regarding OECD import demand elasticities for various categories of goods and the behaviour of primary commodity prices are critical to the analysis, it is worth examining each in some detail. The overall elasticities of 1.4 (scenario A) and 1.3 (scenario B) for OECD imports from these countries represent a weighted average for primary . commodities and manufactured goods. In line with historical experience and for both scenarios, the elasticity with respect to food imports is assumed to be $\frac{2}{2}$, that for non-food commodities slightly greater than 1, and for oil 1.2. (The latter figure is heavily influenced by an assessment of oil export possibilities for Mexico - see Part II.) The assumed elasticity for imports of manufactured goods in scenario A is $2\frac{1}{4}$, and under scenario B, 2. This is in line with a tendency for this elasticity to decline in the 1970s from the elasticities of 3-4 estimated in the 1960s. It is assumed that the concentration of non-oil developing countries' manufactured exports in relatively few commodity groups limits the scope for market penetration at previous historical rates. On the supply side, a less spectacular expansion of the non-oil developing countries' industrial base may be expected. Still, the assumed elasticities imply an increasing share for non-oil developing countries in world trade of manufactures. However, it should be emphasized that this assessment depends on the assumption that trade restrictions are not introduced. Were this not to be the case, export volumes of non-oil developing countries would, of course, be weaker with corresponding effects on their import volumes, investment and GNP.

Commodity prices

25. Assessment of the likely medium-term development of terms of trade - which will have crucial implications for the external position of non-oil developing countries - has to contend not only with the wide margins of error involved in any medium-term projection of commodity prices, but also with peculiarities of the starting year. In 1978, prices of most primary commodities appeared to be abnormally depressed, not only when measured against a basket of OECD currencies but even in dollar terms. The weakness of commodity prices in 1978 can be related to the effects of sluggish demand on prices of industrial raw materials, the effects of good harvests for temperate zone foodstuffs, and the sharp decline in the price of tropical foodstuffs from shortage-induced levels of 1976-77. However, DES/NI(79)1

Table 8

- 22 -

Non-oil Developing Countries

Main Assumptions and Results

Comparison with Recent IBRD work(a)

(percentage changes per annum)

		Presen Scena <u>A</u>	t note rios B	IBRD(b)
Α.	OECD GNP 1978-85 OECD GNP deflator 1978-85 Price of manufactures exports Non-oil commodity prices Non-oil LDCs' total export unit values Non-oil LDCs' total import unit values	4년 7 5년 5년-6 5년-6	3출 5 4출-5 4출-5 5	4 ¹ 4 ** 5 ¹ 2-6 6 -7 6 5 ¹ 2-6
В.	OECD import elasticities (with respect to GNP) Total Manufactures Manufactures from LDCs Total imports from LDCs	3 1 1-4	2 1-3	1 ¹ -1 ¹
С.	Volume growth of non-oil developing countries Exports of manufactures Total exports Total imports	9~10 6 5 ^늘 -6	7 4출 4출-5	5호-6 5-5호

- (a) From World Development Report, 1978 IBRD, June 1978
- (b) Estimated by the Secretariat. Some of the figures are not strictly comparable because of differences in coverage etc.

it is uncertain whether these factors fully explain the extent of the weakness in 1978. Hence, over the medium term, it would be normal to expect a recovery in the real prices of primary commodities - even if demand grew only modestly.

26. Food prices may continue to decline in the immediate future, but then grow at least as quickly as these of manufactured goods, even in the absence of major supply shocks. On this basis, the terms of trade between food and manufactured goods prices would still be below the levels of the 1960s by 1985. Prices of non-food agricultural raw materials have been on an upward trend, and this can be expected to continue under scenario A. A growth rate in dollar terms of 7 per cent over the 1978-1985 period is assumed(1); their terms of trade <u>visà-vis</u> manufactured goods, though improving, would not regain the average level of the 1970s by 1985. Under scenario B, it is assumed that the behaviour of food prices will be broadly similar to that in scenario A, whereas the rise in non-food agricultural prices will be more subdued.

The case of industrial raw materials is more complex. 27. The high commodity prices of the late 1960s and 1973-74 encouraged and permitted an investment boom, the effects of which are still being felt, because of the long lead-times involved. Since 1975, though, prices and investment have been very depressed. Because of the highly capital intensive nature of the production process, prices can remain at low levels relative to average total costs for prolonged periods without permanently reducing installed capacity. The other side of the coin is that prices must then rise very much above these levels in order for investment in new capacity to be assured of a reasonable return. Any positive growth rate of demand for these products - even a low one - could therefore entail very big price increases as a growing (and inelastic) demand eventually comes up against stagnant capacity limits. In this note, it is assumed that in scenario A, prices of industrial raw materials will rise slowly at first, but accelerate sharply in the early 1980s, easing off somewhat by 1985 as new capacity comes on-stream. In scenario B, it is assumed that supply/ demand imbalances will be delayed by a year or so. Nevertheless, it is projected that prices of the materials will, on average, over the period grow significantly faster than those of manufactured goods.

Scenario A

28. Given the assumptions outlined above under <u>scenario A</u>, the total export volume of non-oil developing countries may expand at an average rate of 6 per cent per year in the period under review, with exports of manufactures growing 9-10 per

(1) In the medium-term projections here, the technical assumption is made of unchanged nominal exchange rates.

									•		•
								€) <u>.</u> .	• •	• •	
	1970	1971	1972	1973	1974	1975	. 1976	1977	1978	19 Scenaric A	985 Scenario B
Exports fob Imports fob	38 44	39 <u>}</u> 49	47 531	671 75	98 1211	92 130 <u>1</u>	115 140	135) 159	151	340 398	288 361
Trade <u>Onlance</u> Sorvices and private transfers, not Dalance on above Official transfers, net (ODA)	6 51 -111 -31	-9] -5 -14] 4	-6k -4k -11 5	-71 -51 -13 6	-23 <u>}</u> -9 -32 <u>}</u> 7	~38) -10 -48) 10	-25 -10 -35 9	-231 -10 -331 95	-34 -101 -445 101	-58 -21 -79 24	-73 -18 -91 22
Current Balance	-8	-101	-6	-7	-211	-30)	-26	-24	- 34	-55	-69
Direct invostment Aid (ODA) Other official flows (OOF) Portfolio investment Export credits Other capital including errors and omissions(b)	1 2 1 1 3 1 2	14		3 4 2 3 1	20 31 5 31 31 31 11 91	258 3 7 4 8 2 15	55 31 7 41 5 31 12	352 4 67 4 66 4 10	45¢ 41 71 47 75 16	67 (\$ 10 16 11 13 11 6	78 10 15 10 12 10 21
<u>Net transactions of monetary authorities</u> Other official financing	2.1 0.3	0.9 0.7	4.8 1.0	7.5 0.1	1.5	-2.9 1.8	9.6	12.4 -0.4	11 <u>3</u> -11	12	9 -
Changoa in international resorves	2.4	1.6	5.8	7.6	2.8	-1.1	11.6	12.0	10	12	9.

TABLE 2

Balance of payments of non-oil developing countries(a)

그르의/거리(^ 후)

1 24 1

(Current \$ billion)

(a) Scenetarial estimates and projections of overall balance of payments of non-oil developing countries. See DES/N1/F(70)3, p. 97 or Economic Outlook Nº 24, p. 124 for precise definition of this country grouping.

(b) Includes europorrowing

cent per annum. Exports to OECD countries are projected to grow around 6-6 per cent per annum, with exports to non-OECD countries rising by 4-5 per cent annually. Total export unit values may increase slightly faster than import unit values (reflecting the projected price developments of industrial raw materials outlined above), giving the non-oil developing countries a terms of trade gain of a quarter of a per cent per year on average to 1985.

29. With the purchasing power of their exports increasing somewhat more strongly than their export volumes, total imports of non-oil developing countries may expand at close to 6 per cent annually. In broad terms, this could be consistent with a growth in total economic activity in the non-oil developing countries' area of perhaps 5-6 per cent.

30. After a decline in real terms since 1975, the deficit on services and private transfers is expected to resume its upward trend in the projection period(1). A steep rise in interest payments may outweigh increasing inflows of workers' remittances and tourist earnings. Official transfers (recorded on current account) are assumed to grow slightly faster than the GNP of the OECD area(2). By 1985 the non-oil developing countries as a group may thus see a small surplus on their invisibles balance.

31. The resulting current account deficit of some \$55 billion (in current prices) is somewhat lower than the peak deficit of 1975 (measured in 1985 prices) and, of course, much lower than that when expressed as a ratio of non-oil developing countries' GDP. Further, the financing of such a deficit would not, in general, appear to pose problems: the rate of growth of debt service implied in this projection would fall progressively to 1985.

32. This assessment is based on the following detailed projection of capital flows (Table 9). Concessional loans (ODA) and other official flows (mainly official export credits) are assumed to grow slightly faster in real terms than GNP of OECD countries which supply the bulk of this capital through bilateral

- (1) The figures here for invisibles do not compare directly with those given in previous exercises. Historical figures for the non-oil developing countries' invisibles balance are adjusted here so as to avoid possible double counting of technical assistance (reducing the invisibles deficit by some \$3 billion in 1977).
- (2) The increases in ODA flows from OECD countries assumed in these projections imply an increase in relation to GNP from 0.31 in 1977 to 0.35 per cent in 1985. The ODA data shown in this report are not directly comparable to those used by the DAC, especially because of different geographical coverage.

and multilateral channels. Private export credits are expected to grow broadly in line with the non-oil developing countries' growth in imports. The projected increase in exports of manufactures from developing countries implies a continuously rising flow of private direct and portfolio investment contributing to the financing of the required increases in productive capacity. No further change in the use of IMF resources is expected.

33. It is assumed that non-oil developing countries will maintain the ratio of international reserves to imports unchanged to 1985: implying reserves increasing by some \$12 billion per annum in 1985. However, taking all these elements into account, in 1985 other capital inflows would have to amount to \$6 billion in 1985 - implying a decline in net borrowing on international capital markets. To the extent that this is held to be unlikely (and assuming the projections of the other elements in the capital accounts are realised), gross reserves would increase more rapidly - or imports could increase more rapidly.

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. . . .

Scenario B

34. In scenario B, lower medium-term OECD GNP growth is assumed to be accompanied by a lower OECD import elasticity for goods from non-oil developing countries, resulting in an annual growth of non-oil developing countries' total exports of some 45 per cent. In the face of a marginal terms of trade loss projected in scenario B (see above), non-oil developing countries may still try to keep up the growth of imports as far as possible to meet development needs. If imports were to grow at one percentage point less per annum than in scenario A, a markedly larger current account deficit would still result perhaps \$65-70 billion in 1985. In real terms, this would be larger than the peak level in 1975, but probably lower as a share of these countries' GDP.

An aggregate deficit of this size would still lie within 35. the margin of sustainability provided, however, that the implied debt burden continues to be spread over a larger number of non-oil developing countries - a process which started in 1977/78. For most debtor countries the (presently low) debt service ratios would then be only marginally higher, and would be somewhat lower for large dectors on which the bulk of external debt is presently concentrated. A more balanced dis-tribution of the debt burden may imply marginally lower growth rates than in the past for a few large and fast growing debtors. The heavier private borrowing implied in the scenario B would not necessarily increase the exposure by individual banks to non-oil developing countries since a larger number of banks may get increasingly involved in lending to developing countries. Given the moderate prospects for growth in the OECD area, the danger of non-oil LDCs being "crowded out" may be relatively unimportant.

Further considerations

The results above, even in scenario A, assumed that the 36. terms of trade of primary commodities vis-à-vis manufactured goods would be well below their average level of the 1960s, despite improvements to 1985. This may appear an unduly con-servative assessment. It should, however, be recollected that the 1960s were a veried of steady high growth at rates well in excess of those in scenario A. The rate of expansion of output that was necessary to sustain this prolonged boom required prices to remain at levels (in real terms) that were historically very high. Nevertheless, it cannot be ruled out that prices of raw materials could rise more sharply than assumed (Nuch lower commodity prices than assumed would be above. inconsistent with the growth rates postulated in the two scenarios.) It is difficult to assess the effect of higher commodity prices. Very sharp concentrated increases as in the 1973-74 boom would certainly have a marked impact on the current balances of both the OECD area and non-oil developing countries in the years in which they occurred and immediately after. In that case, though, the assumptions underlying the OECD growth scenarios would have to be revised, since they assume a steady and unspectacular terms of trade development. If commodity prices rose at rates somewhere in between a fully fledged boom and the sort of development postulated in scenario A, the effects on current balances might not be very marked. In these circumstances, non-oil developing countries might increase the volume of their imports of manufactured goods at rates above those projected in scenario A, while their overall current deficit might be somewhat smaller. The terms of trade deterioration for OECD countries implied by such a development would, of course, result in a widening gap between GDP and real income in OECD countries.

Table 10 Trade of Sino-Seviet countries by paler commodity groupings and world tonas (percentages of total)

		Average 1971-73 Average 1974-76 . 1977						1977							
	Hanu- fac- tures	011	Food	Other	Tytal	llanu- fac- biras	011	Sood	Other	Total	fac- tares	211	Ford	Jiher	Total
and Pastern Foropean countries](a)				+				•	· [- <u>-</u>		<u></u> †			<u> </u>
Exports to OFCD(b)	43	14	16	21	100	38	233	34	27	100	3.14	201			1 100
Imports from OFOD(c)	15	1 1	16	81	100	30	ł	13	61	100	31		1 114		100
China and selected other Aslan countries				1.			[}	1		ł			ļ .	100
· Exports to OSCD(b)	423	1.1	201	36	100	41	193	11	224	100	1 115	1.0	1.	1	
· imports from OECD(c)	693	0	191	11	-100	701	U	13	75	100	75	1.5	10	232	190
[1932 and Eastern Suropean countries(a)]				†])	·})- <u></u>	<u>}</u>	<u></u>
Exports to:		(e)					(e)		1	1	ļ		1	1	
OECD	111	47	. 38	44	24	117	97	27	41	28		I .			27
0P2C	2	0	0	0	2	21	0.	1	1	3	1.		· .		34
Non-oil developing countries	87	1	1	3	16]	71	17	1	1	10			1		<u>111</u>
liitra-trade	1 152	5	42	1 11	591	411	63	37	31	55		1		1	55
Other	53				4	21	0.	1 2	1	31				1	3
Total	701	10}	91	91 -	100	65	171	8	9	100		1	Ĺ		100
Imports from:].	· .]				1	1	(· ·	I .			
0 EC D	207	1	43	21	271	27	0	41 .	2	54	F	1 ·			
OPEC .	0	1	ł	1	. 13	n	2	1	1	21					21
Non-oil developing countries	11	1 +	34	21	7	11] ‡	11	21	8]) ·	1	. 71
Intra-trade	48	5	41	43	62	401	61	32	- 31	54				l I	57
Other	{ ì	0	2	1	2	ŧ	0	1 1	. 0	1	•				. 2 .
Total	11	61	13	93	100	70	33	131	. 8	100			I		÷100
China and selected other Asian countriesd	3]		1										1		
Secondaria de la	ł .	ļ		ľ		ļ		1	1.		1	{	{	{	
2200115.10:	151		72	1,2,	12	163	n t						.		
OPEC .	34			124	27	124	01	11	1 1	39	Į			1 .	36 ·
Non-oil developing countries	201		151	22	42 381	167	11	161	21	17				l	
Other	113	0	43	41	20	91	1	4	31	174					294
Total	501	1	28	201	100	461	10	29	143	100					100
Importe from.	İ	{		1					· ·		{		÷ -	·	ł
OFCD	371	0	101	41	52}	504	0	81	43	634	1		1.	1	571
OPEC		0			11	0	1			,	ł	1			
Non-oil developing countries	2	Ō	24	83	131	27	0	21	51			· ·			
Other	26	23	23	12	38	193	2	11	14	25	1	ł			70
Total	677	23	15	141	100	73	2.	h 2 2	12	100	1	· ·	1	1	100
	1		1				1 ·		1	· ·		1	1		

(d) Excluding intra trade for which no data are available.
 (e) Shares below are on the basis of total energy trade rather than oil trade.

 (a) Calculated from OECD import data.
 (c) Calculated from OECD export data.
 (a) Excluding trade between the German Democratic Republic and Germany (F.R.) . DEG/NI (77) t.

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Other non-OECD zones(1) IV.

Compared with OPEC and non-oil developing countries, 37. the combined weight of the other non-OECD countries in OECD external transactions is relatively small. In 1977 this group accounted for less than one-fifth of OECD trade with non-OECD and only about 6 per cent of total OECD trade (Table 10). Nevertheless, their importance as trading partners has grown over the 1970s, in particular the USSR and Bastern Buropean countries (whose share in total OECD merchandise exports has increased by about 25 per cent since the beginning of the decade). Hence, the focus of this section is on the future development of the external position of the USSR and Eastern European countries.

With regard to China and the few other selected Asian 38. countries in that group, the potential for an intensification of trade relations over the medium-term may be important. It seems possible that China could become a major borrower on international capital markets over the long term. Here, however, it is assumed (perhaps conservatively) that there will be an acceleration of China's trade but only a moderate worsening in its current balance. For the other non-OECD countries in this group the assumption of an unchanged external position by 1985 is adopted (without any specific analysis).

Over the 1970s, trade of the USSR and Eastern Europe 39. has been marked by rapid growth and the emergence of an imbalance with the OECD (see Table 11 for more detail). 1975, the deficit with the OECD had reached an unsustainable \$8 billion giving rise to a necessary adjustment: between 1976 and 1977 the volume of imports by this group from the OECD fell some 8 per cent with only a modest recovery in 1978 (see Table 11). Nonetheless, this group continued to incur significant deficits in contrast to the period before the mid 1970s, when a broadly balanced aggregate external position was maintained.

40. By the end of 1977, the USSR and Bastern Europe group's total net external debt is estimated to have amounted to some 40. \$40 to \$50 billion. In the short term (i.e. through 1979), there seems little prospect of a significant increase in export earnings, given the expected below-average growth of economic activity in the OECD. Hence, concern about the rising level of foreign debt may lead the group to a rather cautious policy

(1) This group of courtries is divided into the following three sub-groups (in line with usual Secretariat practice): (a) the Union of Soviet Socialist Republics and Eastern Muropean countries; (b) the People's Republic of China and selected other Asian countries; (c) Gibraltar, Malta, Yugoslavia and South Africa. For a detailed listing of countries in this and other groups, see Economic Outlook 24, page 124 - *****-

Table 11

Trade of other non-OECD zones

(Percentage changes except as indicated)

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	1		<u> </u>	<u> </u>	<u> </u>	٨٧٥	rages (a)
	1975	1976	1977	1978	1979	1971-	1978-1	85
USSH and Eastern European countries		· · ·			{	- 73		<u>II(c)</u>
Value in US dollars				-				
Exports to OECD Imports from OECD	63 32	18 6	. 10 }	13 20	14 <u>1</u> 10	21 25	12 9±	91 71
Total exports Total imports	19 ¹ 32	9 5	17 9	13) 14)	••	18 <u>)</u> 19 <u>1</u>	13 12	$\frac{11}{10\tilde{l}}$
Volume					· ·		· ·	
Exports to OECD Imports from OECD	-12 25	15 · 11	-1 -8	4 4½	2 4 <u>k</u>	5 12	6 4	41 21 22
China and selected other Asian countries						1		
Value in US dollars								
Exports to OECD Imports from OECD	111 9호	-1 -27	6 11	20 40-50		24 25	••	••
Other non-OECD countries	•							
Value in US dollars		· · .	· · ·				· · · ·	
Exports to OECD Imports from OECD	-7 -21	12½ -11	22 8½	18 10	••	$17\frac{1}{2}$ 8		••
Total exports Total imports	4	$-\frac{1}{2}$ -8	18 <u>1</u> 9	19½ 10		••	••	
Trade balance with OECD (in \$ billion)]				•			ĺ
USSR and Eastern European countries	-8	-63	5 _	~7	-7	••	•• *	
China and selected other Asian countries	-3	-11	-1;	-21		••		
Other non-OECD countries	-5ª	-3	-2	-1	••	••	••	•••

Note: Historical data on trade with OECD from OECD Foreign Trade Statistics, and data on total trade from United Nations' statistics.

(a) At compound annual rate.
(b) "Adjusted" high growth scenario.
(c) Low growth scenario.

with respect to expansion of imports from the OECD; indeed there are recent indications of short-term policies aiming at substituting intra-Eastern trade for imports from the OECD. On balance, this would seem to strengthen the likelihood of some improvement in the group's current external position this year.

41. In the projections here the most important assumptions are (apart from the general assumptions given in Table 1):

- Economic growth in the USSR and Eastern Europe through 1985 may be some one percentage point per annum lower than over the past several years (given emerging deficiencies in labour productivity);
- The level of net indebtedness (or rather Eastern countries' attitudes with respect to that level) is likely to be a limiting factor in their planning of import expansion. Some moderate further annual increase in the debt ratio through 1985 has been assumed. There is likely to be a continuation of strong demand for OMCD capital goods and technology on the part of the Eastern countries. And the size of the estimated current net debt position may give an exaggerated picture of the true burden of external finance to the extent that future counter-deliveries resulting from the growing practice of compensation agreements in trade would substitute for visible financial debt service.
- The evolution of intra-Eastern trade is assumed to expand faster than extra-trade although slowing down somewhat from the growth experienced recently;
- The Soviet Union's current position as a net oil exporter is assumed to change over time with a possible swing to a net balanced position by 1985 only partly offset by increased exports of natural gas. Quantified assessment of the Mastern countries' import capabilities, of their pattern of intra-trade, and of trade levels with the OECD cannot be attempted with any precision. The area's trade with the OECD may at best result in a two-way reduction in the growth rate leaving a broadly unchanged current external position. Unless the Eastern countries' attitudes toward the level of their external debt were to change, one implication could be intensified competition with the OECD on third markets.
- USSR gold sales are assumed to continue at moderate levels.

42. Attitudes towards debt accumulation (in relative terms) are assumed to be the same regardless of the rate of expansion of the Eastern countries' export earnings. In both scenarios the ratio of estimated total net debt to exports to countries

fable 12

The Balance of Payments Position of the USSR and Eastern European countries combined(a)

(\$ billion)

1-		1970	19 71	1972	1973	1974	1975	1976	1977	1978	1979	Scen Λ 1985	ario(b) (B 1985
USSR and Eastern Euro countries	pean												**
Exports		31	34	40	53	65 <u>‡</u>	78½	85 1	99	112	1261	263 <u>늘</u>	240
Imports		31歳	34월	42 <u>늘</u>	56	70 ¹ 2	92	96 1	106월	122	135	269	244
Trade balance		-12	$-\frac{1}{2}$	$-2\frac{1}{2}$	-3	-5	-13 ¹ / ₂	-11	$-7\frac{1}{2}$	-9 ¹ / ₂	$-8\frac{1}{2}$	-6	-4
Invisibles, net Current balance		0 -12	$0 - \frac{1}{2}$	$-2\frac{1}{4}$	0 -3	$-4\frac{1}{4}$	0 -13½	-호 -11호	-1 -8½	$\begin{vmatrix} -1\frac{1}{2} \\ -11 \end{vmatrix}$	-2½ -11	-6 -12	-5 -9

 (a) Great uncertainty attaches to these estimates; comprehensive balance of payments records are not published by this group of countries. Judging from OECD reported data on trade with the USSR and Eastern European countries the estimates given here for their trade balance (based on UN sources) may exaggerate their deficit by as much as \$2 billion a year.

(b) A = "Adjusted" high growth, and B low growth scenario.

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with convertible currencies is assumed to increase moderately from 1.9 in 1978 to 2.2 in 1985. Total net debt would then reach a level of around \$150 billion by 1985 under scenario A. It should be noted that, as is currently the case, a significant part of that debt can be assumed to be repayable in counterpart deliveries on the basis of previous trade compensation agreements (barter deals). A debt level of this size results from cumulation of yearly current external deficits only moderately larger than those incurred on average during the 1975-78 period. Yet, such a development in the Eastern countries' current deficits would permit an annual average growth (1973-35) in their import volume from the OECD of less than 4 per cent, a growth rate that is only one-third of that achieved in the preceding seven-year period. Although in scenario A, terms of trade would move in their favour, the negative influence from interest payments on their external debt would, by 1985, account for a much larger proportion of their current deficit than currently is the case. On balance, the trade deficit of some \$10 billion in 1978 would improve by about \$3 billion by 1985 but would be offset by a somewhat larger deterioration on invisibles account. The current deficit would, therefore, increase marginally between 1978 and 1985 (Table 12).

43. In scenario B, the likely development of the USSR and Eastern Europe's export volume to the rest of the world might average 4% per cent per annum between 1978 and 1985 - 1% points below scenario A. Hence their "hard" export earnings would be lower. As these countries are assumed to be constrained in the expansion of net cumulative indebtedness by these earnings, the current deficit they could afford to run would be less in scenario B. In addition, a terms of trade gain would be less likely, hence their capacity to import would be substantially (and adversely) affected.

44. Policies on the part of Eastern countries based on changes in attitudes towards debt accumulation could, however, conceivably result in a further turning inward with an even more pronounced slowdown in their import growth from the OECD.

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