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Structural Changes in World Trade since the Oil Crisis

by Hajo Hasenpflug and Mathias Lefeldt, Hamburg *

The sudden shock of the fivefold increase of the price of oil in the autumn of 1973 has been reflected since in the world trade by structural changes in its composition by categories of goods and its regional distribution. How has the international trade coped with this shock, and which more recent tendencies can be observed in the structure of world trade, not least as a result of cyclical impulses?

Since the early seventies the development of world trade has been influenced by three tendencies: the evident shift in real incomes in favour of the OPEC states since late 1973, the world recession which has still not been fully overcome, and the mounting clamour for higher commodity prices by the developing countries. It is difficult to interpret the resultant trends — in part they are complementary, in part counteractive — the more so as the picture is distorted by differences in the bases of evaluation resulting from flexible exchange rates. All that can be said with any assurance at the present time is that the smooth advance along a consistent trend-line which was characteristic of the sixties has definitely come to an end.

The outstanding feature of the international trade in the sixties was continuous growth attended by subdued price movements. As growth of the world economy has in general a positive trade orientation (incomes elasticity > 1), the world exports rose in the 1960–1970 period, in real terms, from 100 to 215 index points whereas the production increased only to 170.

The development parameters changed however early in the seventies already. Between 1971 and 1973 and again between 1973 and 1974 the world trade was caught by the vortex of inflation — at first for industrial products and later also for primary products. Through the hoisting of the crude oil prices the latter gained a decisive influence on the further movements of the world trade prices. These in turn conduced to a strong uptrend of the prices for industrial products. In 1975 the rise of world trade prices was down to 10 p. c. — after 24 p. c. in 1973 and 41 p. c. in 1974 — but this rate was still five times the average of the sixties.

It is a remarkable fact that the world trade expanded only nominally in 1975: in real terms it contracted by 4 p. c. This was mainly due to the heavy depression in the first half of 1975. The world trade fluctuations induced by the economic down-

Table 1
Development of World Exports and
World Production in 1960–1975

	1960	1971	1972	1973	1974	1975
World Exports (in \$ bn, fob)						
Total	129	350	417	578	839	880
Agricultural Products	40	69	82	121	148	150
Minerals ¹	22	57	65	97	216	205
Industrial Products	65	217	260	347	459	500
Index of Export Prices (1960 = 100)						
Total	100	119	130	161	223	245
Agricultural Products	100	111	126	190	236	230
Minerals ¹	100	131	142	187	435	445
Industrial Products	100	123	133	152	180	205
Index of Export Volume (1960 = 100)						
Total	100	229	249	279	291	275
Agricultural Products	100	155	163	158	156	165
Minerals ¹	100	202	213	242	231	215
Industrial Products	100	273	302	352	393	375
Index of World Production Volume (1960 = 100)						
Total	100	177	186	201	208	205
Agriculture	100	134	133	139	141	145
Mining	100	172	180	192	197	190
Industry	100	196	211	230	239	230

¹ Incl. fuels and metals.

Source: GATT: International Trade 1975/1976, p. 4.

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turn in this phase again indicated a high degree of positive elasticity: world trade suffered a greater setback in percentage terms than world production.

After the strong expansion of world trade last year (by 11 p. c. in real terms, by 14 p. c. nominally) a somewhat slower real growth rate — of about 7 p. c. — may be anticipated for 1977, on which new international price rises — also by about 7 p. c.¹ — will be superimposed.

Changes in Composition

Up to the time of the oil crisis the distribution of international trade over the various categories of goods was distinguished by a steady rise of the proportion of industrial products and a corresponding decline in agricultural and mineral raw materials. The raising of the oil price however lowered the share of the industrial products in 1974 to 40.4 p. c. while that of the mineral fuels increased accordingly, from 9.9 to 20.1 p. c. The share of other raw materials was however also brought down (cf. Table 2).

¹ Cf. Günter Großer and Wiebke Jensen, Welthandel in verlangsamer Expansion (Deceleration of the world trade expansion), in: Konjunktur von morgen, No. 489, June 23, 1977, p. 3.

Quite different tendencies emerged in the various industrial product groups. Mechanical engineering and road vehicles, the most important group, in 1964 accounted for 25.3 p. c. of the world's exports. Until 1972 the share of this group expanded strongly — to 32 p. c. This was followed by a slight decline in 1973/74 which however was largely made good in 1975 when the group's share of the world trade was nearly 30 p. c. The fitful movements were due not so much to the showing of the mechanical engineering and road vehicles group as to wide fluctuations of other industrial products, for instance the non-ferrous metals groups which recorded a 45.3 p. c. growth of exports in 1974 followed by a 25.8 p. c. fall in 1975. The exports of iron and steel and of chemical products also declined in the latter year, probably chiefly because of the economic depression in the Western industrialized countries. That the mechanical engineering and road vehicles group still recorded a substantial advance in 1975 (+ 18.3 p. c.) was in great measure due to larger deliveries to developing countries, especially OPEC states. The trade in industrial products between the industrialized countries rose in 1975 by no more than 1 p. c., which means that it actually declined in real terms.

Table 2
World Trade by Categories of Goods: Exports (fob) in 1964–1975 *

Group of Goods	1964		1972			1973			1974			1975		
	US \$ bn	p. c. of total	US \$ bn	aver. change p. c.	p. c. of total	US \$ bn	aver. change p. c.	p. c. of total	US \$ bn	aver. change p. c.	p. c. of total	US \$ bn	aver. change p. c.	p. c. of total
Food, Drinks and Tobacco (0, 1, 4, 22)	33,05	19,19	59,26	13,4	14,2	85,98	45,09	19,9	107,00	24,45	12,8	114,50	7,0	13,1
Raw materials (2 excl. 22, 27, 28)	15,03	8,73	23,13	12,6	5,5	34,71	50,10	6,0	40,98	18,10	4,9	37,00	— 9,7	4,2
Ores and Minerals (27, 28)	5,89	3,42	10,57	1,2	2,5	15,19	43,70	2,6	21,22	39,70	2,5	19,20	— 9,5	2,2
Mineral Fuels (3)	17,04	9,90	42,04	22,0	10,3	65,04	51,10	11,3	169,03	159,90	20,1	169,50	0,3	19,3
Primary Prod. (0-4)	71,01	41,24	136,00	14,7	32,6	200,92	47,70	34,8	339,23	68,80	40,4	340,20	0,3	38,8
Non-ferrous Metal Prod. (68)	5,77	3,35	11,56	2,3	2,8	17,16	48,40	3,0	24,93	45,30	3,0	18,50	— 25,8	2,1
Iron and Steel (67)	8,65	5,02	10,02	8,5	4,8	28,35	41,60	4,9	46,37	63,60	5,5	44,80	— 3,4	5,1
Chemical Prod. (5)	10,88	6,32	29,75	15,3	7,0	40,34	37,90	7,0	63,79	58,10	7,6	61,40	— 3,8	7,0
Mechan. Engineering and Electrot. Prod., Metal Goods (7 excl. 732, 69)	43,63	25,34	101,87	17,7	24,4	134,84	32,40	23,3	173,15	28,40	20,6	203,60	17,6	23,2
Road Vehicles (732)			31,79	20,0	7,6	40,68	28,00	7,0	48,59	19,40	5,8	58,20	19,8	6,6
Yarns, Fabrics and Clothing (65, 84)	10,38	6,03	26,65	20,0	6,4	35,61	33,60	6,2	42,60	19,60	5,1	44,00	3,3	5,0
Other Industrial Products (6 excl. 65, 67, 68, 69; 8 excl. 84)	18,80	10,92	49,52	16,5	11,9	66,89	35,10	11,6	84,33	26,10	10,1	89,00	5,5	10,2
Other Products	3,08	1,79	10,54	22,5	2,5	12,71	20,60	2,2	16,91	33,00	2,0	19,40	14,7	2,2
Total	172,20	100	417,20	15,6	100	577,50	38,40	100	838,90	45,3	100	876,10	4,4	100

* Decimal notations marked by commas.

Source: GATT: International Trade, various years.

The new parameters of world trade had of course also the effect of changing the regional structure of imports and exports. On the *import* side the *industrialized countries* did not suffer a significant decline of the share which they had gained for themselves in the sixties until the economic downturn in 1975: their share declined in that year by 4 percentage points, from a little under 72 p.c. to a little under 68 p.c. The slight upturn which was evident in 1976 will probably hold in 1977 (cf. Table 3).

The downturn in 1975 showed very considerable differences from country to country. The imports showed an *absolute decline* chiefly in the USA (– 3.9 p.c.), Japan (– 6.8 p.c.) and Italy (– 6.3 p.c.) whereas the Federal Republic (+ 7.6 p.c.), the Netherlands (+ 6.0 p.c.), Denmark (+ 5.0 p.c.) and even France (+ 2.4 p.c.) were still recording higher figures. Quite divergent movements occurred again in the group of the industrialized countries in 1976. Growth rates of around 20 p.c. were achieved by a few countries only, above all by the USA (+ 25.1 p.c.) and also by Denmark (+ 19.8 p.c.), France (+ 18.7 p.c.) and the Federal Republic (+ 18.0 p.c.). The big increase of imports into the USA – and the similar movements in other industrialized countries – occurred definitely in response to the economic upturn; it also reflected increasing US dependence upon imports of mineral oils. This trend will continue in future.

The growth of the import demand from the *OPEC* states also slackened in 1975 compared with the record result of 1974 (+ 58.1 p.c. after + 145.3

p.c.). Their persistent strong demand for import goods sustained the international trade. In 1976 however *OPEC* imports grew at a lower rate (21 p.c.), and in 1977 they may be expected to stabilize at this level.

The *state trading countries*, in contrast, are showing as yet little evidence of an import revival. In 1976 their imports advanced by no more than 6.5 p.c. whereas they had still increased by 26.4 p.c. in 1975. This is however to be attributed mainly to developments in intra-CMEA trade which reflect the effect of adjustments of the contract prices for mineral oil and raw materials to the world trade level.²

Somewhat different regional trends emerged in regard to the structure of the world's *exports*. The share of the *industrialized countries* which had risen from a little under 68 p.c. in the early sixties to nearly 72 p.c. before the oil crisis showed a downward trend in 1972 already. In 1974 their share fell to a low of 65 p.c. of the world market. In 1975 the total exports from industrialized countries increased by 6.4 p.c., chiefly owing to larger deliveries to the *OPEC* states. The trade between industrialized countries was almost stagnating (+ 1.2 p.c.). Japan's shipments to other industrialized countries actually dropped by 10.5 p.c. Beside the shipment to the *OPEC* states, the exports to state trading countries were of importance to the industrialized countries, especially in North America (+ 39.8 p.c.). Despite the relatively low growth rate the industrialized countries' share of

² Cf. Günter Großer and Wiebke Jensen, op. cit.

Table 3
Regional Distribution of World Imports (cif) in 1960–1977 *

Countries	1960		1972		1974		1975		1976	
	US \$ mn	p.c.	US \$ mn	p.c.	US \$ mn	p.c.	US \$ mn	p.c.	US \$ mn	p.c.
Western Industrialized Countries:	88 900	66,84	312 600	72,16	612 100	71,57	614 300	67,87	701 500	68,59
USA	15 071	11,33	55 282	12,76	107 112	12,52	102 984	11,38	128 872	12,60
Japan	4 491	3,38	23 470	5,42	62 110	7,26	57 881	6,39	64 805	6,34
EC:	44 347	33,34	152 950	35,31	291 780	34,12	297 850	32,91	341 010	33,34
Belgium/Luxembourg	3 957	2,98	15 489	3,57	29 868	3,49	30 691	3,39	35 354	3,46
Denmark	1 805	1,36	5 097	1,17	9 868	1,15	10 366	1,15	12 419	1,21
France	6 276	4,72	26 887	6,20	52 992	6,20	54 247	6,00	64 402	6,30
Fed. Rep. of Germany	10 104	7,60	39 763	9,18	68 975	8,07	74 208	8,20	87 570	8,56
Ireland	633	0,48	2 091	0,48	3 812	0,45	3 768	0,42	4 102	0,40
Italy	4 725	3,55	19 282	4,45	40 924	4,79	38 366	4,24	43 428	4,25
Netherlands	4 531	3,41	17 265	3,99	32 629	3,82	34 573	3,82	39 590	3,87
United Kingdom	12 319	9,26	27 817	6,42	54 142	6,33	53 487	5,91	55 928	5,47
Developing Countries:	30 000	22,56	71 900	16,60	163 000	19,06	189 600	20,95	213 400	20,87
OPEC Countries	—	—	13 900	3,21	34 100	3,99	53 900	5,95	65 200	6,38
other Dev. Countries ²	—	—	2 700	0,62	5 100	0,60	5 500	0,61	(<5 000)	0,49
State Trading Countries ¹	14 000	10,53	48 711	11,24	80 091	9,37	101 272	11,19	107 808 ³	10,54
World ¹	132 900	100	433 211	100	855 191	100	905 172	100	1 022 708	100

* Decimal notations marked by commas.

¹ Excl. People's Republic of China.

² Afghanistan, Bangladesh, Benin, Bhutan, Botswana, Burundi, Central African Republic, Chad, Ethiopia, Gambia, Guinea, Haiti, Laos, Lesotho, Malawi, Maldives, Mali, Nepal, Niger, Rwanda, Samoa, Somalia, Sudan, Uganda, Tanzania, Upper Volta, Yemen and P.R. Yemen. Bangladesh has been included from 1972 onwards.

³ Authors' own estimate.

the world trade rose once more slightly in 1975 (from 65 to 66 p.c.). The further growth in 1976 — by 11 p.c. which was below the world average — was chiefly due to a revival of the trade between industrialized countries which increased more than their exports to OPEC states while the business with the East was almost stagnant (cf. Table 4).

After their big jump due to the price hoist in 1974 the export earnings of the *OPEC states* fell in 1975 by 8 p.c. This was due to the reduction of oil imports by the Western industrialized countries by 9.5 p.c. (Japan — 12.0 p.c., EC — 15 p.c.) which was occasioned by the economic downturn. The increase of OPEC shipments to state trading countries — by 18 p.c. — did not suffice to stabilize their total exports. In 1974 they had gained a 14.5 p.c. share of the world's export market. In 1975 this fell to 12.7 p.c. In 1976 it rose as a result of the economic recovery sustained by the industrial nations to 13.4 p.c.

The exports of the *state trading countries* increased in 1975 by 18.8 p.c. which brought their share of the world trade almost back to the 10 p.c. or so which it had been before the oil price explosion. This movement is also chiefly attributable to the effect of price adjustments in intra-CMEA trade which has already been mentioned. An effective growth was achieved only in 1976 when business with the West revived.

In regard to the regional structure of world trade the medium-term outlook on the export side sug-

gests that the industrialized countries will tend to increase their share of the world trade once more, if only slightly, because their exports will develop nominally more favourably than those from the raw material-exporting developing countries. This view is based on the assumption that the inflation rates of some Western industrial nations will exceed slightly the changes in raw material prices whether established in the market or, in the case of the OPEC, fixed by an official body. In the light of the wages policies pursued — for instance by indexation — and the attitude of the trade unions in some Western industrialized countries it may be surmised that the export prices for industrial products will rise by over 7 p.c. on average. The assumption that the further rise of the export prices for raw materials will be moderate presupposes that the Saudi Arabian advocacy of restraint in the raising of oil prices will be heeded by the OPEC.

The exports from the industrialized countries may possibly be impeded in the medium term by constraints on the recycling of petrodollars: socio-economic factors and limitations of absorptive capacity may curb the flow of goods. There are states with a high absorptive capacity where socio-economic factors are standing in the way of a 100 p.c. use of the oil revenues. The principal obstacles of this kind are inadequate infrastructures — as exemplified by the overburdened harbour of Lagos where hundreds of cargo ships are lying in the roadsteads at any one time — and lack of qualified labour and technical know-how.

Table 4
Regional Distribution of World Exports (fob) in 1960–1976 *

Countries	1960		1972		1974		1975		1976	
	US \$ mn	p.c.	US \$ mn	p.c.	US \$ mn	p.c.	US \$ mn	p.c.	US \$ mn	p.c.
Western Industrialized Countries:	85 400	67,81	298 700	69,33	543 600	65,02	578 600	66,23	642 400	65,32
USA	20 383	16,18	48 968	11,72	97 144	11,62	106 157	12,15	113 378	11,53
Japan	4 055	3,22	28 591	6,84	55 536	6,64	55 844	6,39	67 275	6,84
EC:	41 602	33,03	153 510	36,74	273 970	32,77	294 960	33,76	323 730	32,92
Belgium/Luxembourg	3 775	3,00	16 152	3,87	28 328	3,39	28 807	3,30	32 846	3,34
Denmark	1 493	1,19	4 511	1,08	7 718	0,92	8 716	1,00	9 113	0,93
France	6 862	5,45	26 078	6,24	45 852	5,48	52 214	5,99	55 817	5,68
Fed. Rep. of Germany	11 415	9,06	46 208	11,06	89 166	10,67	90 021	10,30	101 846	10,35
Ireland	428	0,34	1 613	0,39	2 630	0,31	3 177	0,36	3 313	0,34
Italy	3 648	2,90	18 548	4,44	30 253	3,62	34 821	3,99	36 969	3,76
Netherlands	4 028	3,20	16 783	4,02	32 810	3,92	35 075	4,01	39 721	4,04
United Kingdom	9 953	7,90	24 345	5,83	38 639	4,62	44 110	5,05	45 913	4,67
Developing Countries:	27 300	21,68	74 100	17,73	220 400	26,36	209 500	23,98	246 100	25,03
OPEC Countries	—	—	27 400	6,56	121 000	14,47	110 800	12,68	131 700	13,39
other Dev. Countries ²	—	—	2 300	0,55	3 200	0,38	3 100	0,35	(<3 000)	0,31
State Trading Countries ¹	13 240	10,51	45 040	10,78	71 990	8,61	85 520	9,79	94 840 ³	9,64
World ¹	125 940	100	417 840	100	835 990	100	873 600	100	983 340	100

* Decimal notations marked by commas.

¹ Excl. People's Republic of China.

² Afghanistan, Bangladesh, Benin, Bhutan, Botswana, Burundi, Central African Republic, Chad, Ethiopia, Gambia, Guinea, Haiti, Laos, Lesotho, Malawi, Maldives, Mali, Nepal, Niger, Rwanda, Samoa, Somalia, Sudan, Uganda, Tanzania, Upper Volta, Yemen and P.R. Yemen. Bangladesh has been included from 1972 onwards.

³ Authors' own estimate.

Limited absorptive capacity is also a medium-term factor affecting the exports of some of the OPEC states. In countries like Iran, Indonesia, Algeria and Venezuela the absorption rate is 100 p.c., but Saudi Arabia and the sheikhdoms on the Gulf will find it even more difficult in the future to convert their revenues into industrial imports.

Trade Policy Prospects

Arrangements which may grow out of the North-South dialogue and protectionist currents in the industrialized countries will have a decisive influence on the future development of world trade.

The demands of the developing countries in the sphere of raw material policy have the aim of helping them to improve their earnings from what are to them important export commodities and thereby to stabilize or enhance the world trade shares of these primary products. Achievement of the latter aim however presupposes the existence of commodity agreements and a steady raising of the price level of raw materials which is for instance an element of the demand for the indexation of commodity prices. Prices imposed by administrative fiat cannot however survive on a world-wide level for more than a limited period in disregard of the effective market conditions. Market reactions of a technical nature which may

go as far as the emergence of grey markets make it unlikely that the demands of the developing countries will prove effective in the long run. Besides, the cartelization efforts of the Third World states have hardly any chance of success because, mineral oils aside, no raw material will in the foreseeable future offer the ideal conditions for cartelization (a scarce and exhaustible commodity, few suppliers, scant opportunities for substitution).

One result of the intensification of the North-South dialogue since 1973 is that less anxiety is felt now about disruptions of the trade between industrialized countries. The exchanges of goods between the industrial nations are however crucial as a source of our prosperity. For this reason it would be wrong to lose sight of the so much graver consequences of a renascent protectionism in the industrial nations while concentrating on the North-South dialogue. In the light of the current account deficits of the OECD states (\$ 26 bn in 1976, an estimated \$ 18 bn in 1977) and the increasing evidence of conflicting interests of the EC and the USA on the one hand and Japan on the other as well as in regard to the trans-Atlantic goods exchanges it seems advisable to pay again more attention to the relations between the industrialized countries.

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Hajo Hasenpflug

NICHT-TARIFÄRE HANDELSHEMMNISSE

Formen, Wirkungen und wirtschaftspolitische Beurteilung

(Non-tariff Trade Barriers, Forms, Effects and Economic Assessment)

In addition to customs duties a great number of non-tariff trade barriers are influencing the international flow of goods. Together with a progressing reduction of tariffs these so-called NTBs (non-tariff barriers) are becoming increasingly significant. The present study offers a clear arrangement of the very complex and heterogeneous matter by a systematization in ten NTB-types obstructing imports and three NTB-categories favouring or impeding exports. (In German).

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