

Brussels, 13 February 1979.

SEC(79) 194

Working paper

Subject : Trend of private investment in the developing countries by
Community Member States

The difficulties involved in making a detailed analysis of private investment flows from Community Member States to the developing countries and of why those flows follow the trend they do are mainly due to the lack of statistical data on the subject. These data cover only a few countries and give only a limited idea of the geographical and/or sectoral breakdown of capital flows.

In addition, it is difficult to compare the data that are available as Member States vary in their definitions of direct investment and their accounting methods (1).

-
- (1) A very thorough study was carried out some ten years ago into this problem of investment statistics and capital flows in general by a group of government experts convened by the Council Working Party on Financial Questions.

After this work had been completed, the Commission submitted a report (SEC(69)274 of 30 January 1969) to the Council pointing to shortcomings and inadequacies and suggesting practical improvements. There was no practical follow-up to this report.

The fact that this problem is still relevant today was borne out recently in a proposal by the German delegation to the OECD aimed at improving statistics on direct international investment (IME(78)14 of 22 June 1978) and in a memorandum by the OECD Secretariat in response to this proposal reviewing the statistics on direct investment available in Member States and pointing to deficiencies (IME(78)25 of 10 October 1978).

Nevertheless it is possible to study the overall capital flows from the Community to the developing countries by comparing them with capital movements from other industrialized countries and taking a closer look at investment trends in the mining sector, which have been studied by a number of public and private bodies such as the UN, IBRD and European Group of Mining Companies.

I. General trend of direct investment in the developing countries

(tables 1 - 4)

The net flow of direct private sector investment in the developing countries by the DAC member countries rose during the period 1970-1977 from USD 3 700 million to USD 8 800 million at current prices and from USD 5 700 million to 8 000 million at 1976 prices.

However, the respective contributions of the DAC countries towards this growth varied considerably. A comparison of the figures for recent years with those for the early 1970's shows significant differences in the capital flow trend of the United States and Japan, on the one hand, and that of the Community taken as a whole, on the other.

With a base index of 100 for 1970, viewed in terms of 1976 prices and exchange rates the Community (1) stood at 87.9 in 1977 compared with 130.8 for Japan and 205.1 for the United States.

The index for other countries which are major exporters of private capital to the developing countries - although admittedly they started at a fairly low base level in 1970 - had risen by 1977 to 305 (Canada), 155 (Sweden) and 153 (Switzerland).

Table 3, which sets the annual averages of the amounts indicated in table 2 (a), gives a clearer picture of the trend of capital flows during this period, given that these flows were fairly irregular in the case of most countries and even showed sharp ups and downs, e.g. flows in the United States between 1974 (largescale outback in investment in the oil sector) and 1975 (record volume of US investment).

(1) With the exception of Denmark, for which data are not yet available for 1977

European investment in the developing countries has tended to stagnate in recent years after rising in 1972/73, while US capital flows fell in 1972/73, but then made a vigorous recovery to almost double their 1970/71 value in 1976/77. The trend of Japanese investment is less clearcut but in general can be said to be more dynamic than that of the Community.

The unfavourable trend of Community investment is borne out by its declining share of new investment in the Third World by the industrialized countries as a whole : since 1973 this share has amounted to less than a third of the total direct capital flow from the OECD countries (table 4) as opposed to over 50 % in the early 1960s.

II. Trend of direct investment in the developing countries by Community Member States

(tables 5-7)

Private capital flows to the developing countries have varied from one Member State to another. France's contribution has dropped sharply and, in terms of 1976 prices and exchange rates, has never risen above its 1970 base but "stabilized" from 1975 onwards at around 55 % of that by no means remarkable level. Simultaneously, the French share of the overall European capital flow to the developing countries declined by almost half between 1970 and 1976/77. Italian investment too dropped back to a relatively low level, after increasing between 1971 and 1973, and is now no more than 7 % of the European total.

Capital flows from the Netherlands, Belgium and Denmark have followed a fairly regular curve if only the two-yearly averages are considered (table 7), which neutralize the effect of peaks (Netherlands in 1972, Belgium in 1976 and Denmark in 1971) that are particularly impressive for countries with a relatively modest volume of overseas investment.

German and United Kingdom investment has increased by 25 % and 50 % respectively in recent years compared with the early 1970s and in each case amounts to a third of total European investment in the developing countries.

A tendency towards stabilization of German investment at around USD 800 million (at 1976 prices and exchange rates) can, however, be observed during the past three years compared with over USD 900 million in 1972 and 1973. The 1977 figures for the United Kingdom are very low.

This decrease in the capital flow from the Community as a whole to the developing countries has meant that the latter's share of overseas investment by the EEC Member States has dropped from 40 % and 43 % in 1970 and 1971 respectively to 37 % in 1975 and 1976 (1).

The International Monetary Fund statistics, which are based on balance of payments (and therefore do not take account of reinvested profits), show a similar outback in Community investment in these countries : from 36 % in 1969/70 (annual average) to 30 % in 1975/76 (2).

According to this source of information, the developing countries' share of total French overseas investment fell from 80 % in 1969/70 to 23 % in 1975/76 while their share of Netherlands investment dropped from 29 % to 21 %.

On the other hand, this share rose from 32 % to 68 % in the case of Belgium, from 20 % to 26 % for the United Kingdom, from 61 % to 72 % for Italy and from 32 % to 35 % for Germany.

(1) See reply to written question No. 773/77 by Mr Cousté (European Parliament)

(2) IMF Balance of Payments Yearbook, volume 28
OECD/DAC statistics on financial flows to developing countries

Destination and sectoral breakdown of European investment in the developing countries

The data available on the geographical breakdown of European investment in the developing countries (table 8) give only a rough idea of the situation since the period covered is very short and large amounts, especially in the case of Germany and Belgium, are not accounted for in detail.

Latin America is a major focus of investment, both in absolute and growth terms, while investment in Africa seems to be stagnating though the 1976 drop in French and German investment was partly offset by exceptionally large-scale capital flows from Belgium and the Netherlands.

Only four Community Member States supplied statistics on the sectoral breakdown of their overseas investments and these data are in any case incomplete and difficult to compare. Not only are economic sectors defined differently in the Member States but in a number of cases the criterion adopted for determining the investment sector was the investor's economic activity in the country of origin and not the host country, though these activities might come into entirely different categories.

It should also be noted that the German statistics relate to declared investment and therefore do not necessarily reflect actual investment during the reference period.

Therefore, table 9, which incorporates data from various sources (national statistics, OECD, etc.) inevitably gives only a very general and approximate idea of the sectoral breakdown of private investment by a few Community Member States.

III. Trend of European mining investment in the developing countries

(tables 10-13)

It is vital for the Community to maintain a satisfactory level of investment in the mining sector in the developing countries as it relies on these countries for its supplies of certain essential minerals.

For seven essential minerals in respect of which Community dependence on overseas sources varies between 96 and 100 %, the Third World supplies from 38 % to nearly 100 % of these requirements (table 10).

This situation is unlikely to change in the short or medium-term. Known world reserves are distributed in such a way that the developing countries will have to be called on to meet the needs of the industrialized countries. The IBRD estimates that by 1985 the developing countries should be providing 52 % of world production in the case of copper, for instance, 65 % in the case of manganese, 90 % in the case of tin and almost 50 % in the case of nickel and phosphates (1).

(1) Minerals and energy in the developing countries, Report n° 1588, World Bank, 4 May 1977

To satisfy the western world's mineral requirements, investment will be necessary on an increasingly large scale. Various studies have been carried out in recent years (in particular by the World Bank) to achieve realistic estimates of the investment required. The most important is perhaps the study carried out by the United Nations Centre for Natural Resources, Energy and Transport in 1977 for the United Nations Panel on International Mining Finance (5-8 December 1977) (table 11).

This study gives as a "probable" estimate of investment requirements the figure of USD 158 000 million at 1975 prices for the period 1977-1990 approximately a third of which USD 55 000 million would be in the developing countries (1). Average annual investment in the developing countries should therefore be around USD 4 200 million or even higher if allowance is made for the capital necessary to maintain existing production capacity.

Yet there seems to be a widening gap between the medium or long-term requirements of the industrialized countries (in particular the Community Member States) and the exploration and investment policies of Western mining concerns vis-à-vis the Third World. This gap was observed in the IBRD report on the projected International Resources Bank (2). The UN Panel referred to above concluded that though financing is available for mining projects, it is distributed in such a way that mining investment is concentrated in the industrialized countries, with the exception of a very small number of developing countries with an established mining industry and good access to the international capital market (3).

-
- (1) Projected investments in bauxite, copper, iron ore and nickel mining account for 90 % of the total figure.
 - (2) Minerals and energy in the developing countries, Report No 1588, World Bank, 4 May 1977.
 - (3) Meeting of the UN Panel on International Mining Finance, N.Y. 5-8 December 1977. Summary of conclusions and recommendations of the panel and summary of discussion on major points of concern.

This is particularly true of the operations of European mining concerns. The trend of their exploration expenditure (table 12) shows that in recent years they have been hesitant about investing in developing countries other than those considered to be "stable" and that they are tending to concentrate their exploration operations on the industrialized countries. The developing countries' share of total expenditure for such purposes therefore dropped from around 40 % in the late sixties to an average of 13 % between 1972 and 1977, the higher figures in 1975 (15 %) and 1977 (19 %) being due to investment in two Latin American countries (Brazil and Mexico). The cutback in exploration expenditure in black Africa is particularly significant. It is indeed dramatic (uranium being the exception) since exploration expenditure has averaged only USD 222 000 (1976 prices) over the past 4 years (0 in 1976 !) compared with a figure that was twelve times as high throughout the period 1966-1973.

The situation regarding capital expenditure by European concerns in the mining sector in the developing countries at first sight seems less serious than the situation for exploration expenditure as the developing countries' share of total investment does not show a similar cutback (table 13).

It should be noted, however, that capital flows in connection with the large-scale projects that are a feature of mining operations are spread over a relatively long period with the result that any slowdown in the adoption of new projects does not become apparent until several years afterwards since the overall trend is maintained by investment in connection with earlier projects.

It is therefore helpful to compare the amounts invested by European concerns in the developing countries (an annual average of USD 112 million during the period 1974-1977) with the overall investment requirements referred to above, i.e. USD 4 200 million per annum, bearing in mind the Community's dependence on overseas supplies of essential minerals.

In the circumstances investment clearly falls far short of the amounts necessary for Europe to improve - or even maintain - its position with regard to supplies of most leading metals.

IV. Reasons for trend of Community investment in the developing countries

1. The statistical data contained in this paper shed little light on the causes of the unsatisfactory trend of Community investment in the developing countries.

Even if far more detailed and more comparable statistics were available, it would still not be possible to pinpoint the various factors that influence firms investment decisions. In the long run only very extensive, ongoing surveys of these firms' activities accompanied by complete and reliable statistics of the investments effected could achieve such results.

In the circumstances it is only possible to make a few general comments on the likely reasons for the drop in European investment in the developing countries.

2. Economic, commercial and financial factors undoubtedly exercise a decisive influence on investment decisions. There is therefore a temptation to attribute the relatively low level of European investment in the developing countries in recent years to the effects of the general economic crisis, lower profits than expected, the introduction of restrictive trade measures, financing difficulties and - with specific reference to mining investments the trend of the prices of the main raw materials. The fact remains that these factors ought logically also to have affected the volume of European investment in the industrialized non-Community countries yet in the latter case a far more dynamic trend has been evident. European investment in mining operations has undergone a major swing away from the developing countries towards the industrialized countries though this swing is not justified either by geological conditions (see Section III) or economic considerations.

In addition, the economic factors referred to above ought to have had a negative influence on US and Japanese investment in the Third World yet this investment is growing at a significantly faster rate than European investment, which is all the more surprising as - in the case of the United States - the declining value of the US dollar could certainly not have been expected to encourage this trend.

3. Economic and commercial considerations above would therefore not seem sufficient to explain the reluctance of Community firms to invest on a large scale in the developing countries.

These firms fear that they will be exposed in many Third World countries to political risks, which are a particularly decisive factor when the firms concerned have no previous experience of the Third World or when it is a question of a large-scale operation for which it is furthermore becoming increasingly difficult to assure banking financing.

This explains why most capital exporting countries - including six Community Member States - have found it necessary to set up schemes to protect their investments in the developing countries against non-commercial risks such as expropriation, war or restrictions on transfers.

These schemes have undoubtedly played a valuable part in promoting European investment as they help to keep clashes between host countries and firms to a minimum or at any rate compensate the latter for any damage they sustain.

However, they are not entirely satisfactory, as has often been pointed out by the firms concerned, especially when it comes to geographical scope, definition of risks, etc.

Some of these shortcomings can be remedied and certain improvements have been made in the past to national schemes so as to deal in a more satisfactory manner with the practical problems that arise. No answer has yet been found, however, to the problem of providing cover for large-scale investments, especially joint projects involving firms in a number of Member States.

The cause of these difficulties is the differing practices of the Member States and it is hard to see how they could be harmonized or even coordinated in the short term, mainly because of the fact that there is no scheme in some countries, the failure to cover certain sectors, inadequate insurance ceilings, differing terms (duration, premium, nature of investment, etc.) and varying assessments of the risk or of the importance of the investment for the national economy.

The inadequacies of national investment promotion and protection schemes is not of purely "theoretical" interest when it comes to explaining trends in private flows to the developing countries. Representatives of European industry (UNICE and certain European sectoral organizations) have referred to specific cases where inadequacy of nationally organized protection has been a major factor in a firm's decision not to invest.

Table 1

Net direct private investment
in the developing countries by the industrialized countries
during the period 1970-1977

USD million

	1970	1971	1972	1973	1974	1975	1976	1977
EEC	1.254	1.159	1.892	2.172	2.077	2.364	2.688	(1) 2.345
United States	1.888	1.686	1.736	895	-2.172	7.241	3.119	4.866
Japan	262	222	204	1.301	705	223	1.084	721
Canada	64	76	176	125	193	300	430	390
Switzerland	55	66	73	81	128	208	226	211
Sweden	37	40	42	22	49	82	125	166
Others	131	60	112	124	143	76	153	123
All DAC countries	3.689	3.307	4.234	4.719	1.124	10.494	7.824	8.791

Source : OECD Development Assistance Committee

(1) The 1977 figures for Denmark are not available

Table 2

(a) Net direct private investment in the developing countries by the industrialized countries during the period 1970-1977, at 1976 prices and exchange rates

USD million

	1970	1971	1972	1973	1974	1975	1976	1977
EEC	2.442	2.042	2.956	2.760	2.353	2.330	2.688	(1) 2.146
United States	2.171	1.829	1.815	880	-1.907	5.626	3.119	4.452
Japan	506	416	323	1.589	739	234	1.084	662
Canada	117	127	278	184	237	336	430	357
Switzerland	126	132	124	106	149	209	226	193
Sweden	74	74	70	31	62	87	125	115
Others	292	124	205	176	161	79	153	118
All DAC countries	5.728	4.744	5.771	5.726	1.794	8.901	7.824	8.043

Source : OECD Development Assistance Committee

(b) Index of trend of net direct investment in the developing countries by the industrialized countries during the period 1970-1977, at 1976 prices (base 1970 = 100)

	1970	1971	1972	1973	1974	1975	1976	1977
EEC	100	83,6	121,0	113,0	96,3	95,4	110,1	(1) 87,9
United States	100	84,2	83,6	40,5	-87,8	259,1	143,7	205,1
Japan	100	82,2	63,8	314,0	146,0	46,2	214,2	130,8
Canada	100	108,5	237,6	157,3	202,6	287,2	367,5	305,1
Switzerland	100	104,8	98,4	84,1	118,3	165,9	179,4	153,2
Sweden	100	100	94,6	41,9	83,8	117,6	168,9	155,4

(1) The 1977 figures for Denmark are not available

Table 3

(a) Annual average net direct private investment in the developing countries by the industrialized countries during the period 1970-1977 at 1976 prices and exchange rates

USD million

	1970/71	1972/73	1974/75	1976/77
EEC	2.242	2.838	2.406	2.432,5(1)
United States	2.000	1.347,5	1.859,5	3.783,5
Japan	461	956	486,5	874
Canada	122	231	286,5	393,5
Switzerland	121	115	179	209,5
Sweden	74	50,5	74,5	120

Source : OECD Development Assistance Committee

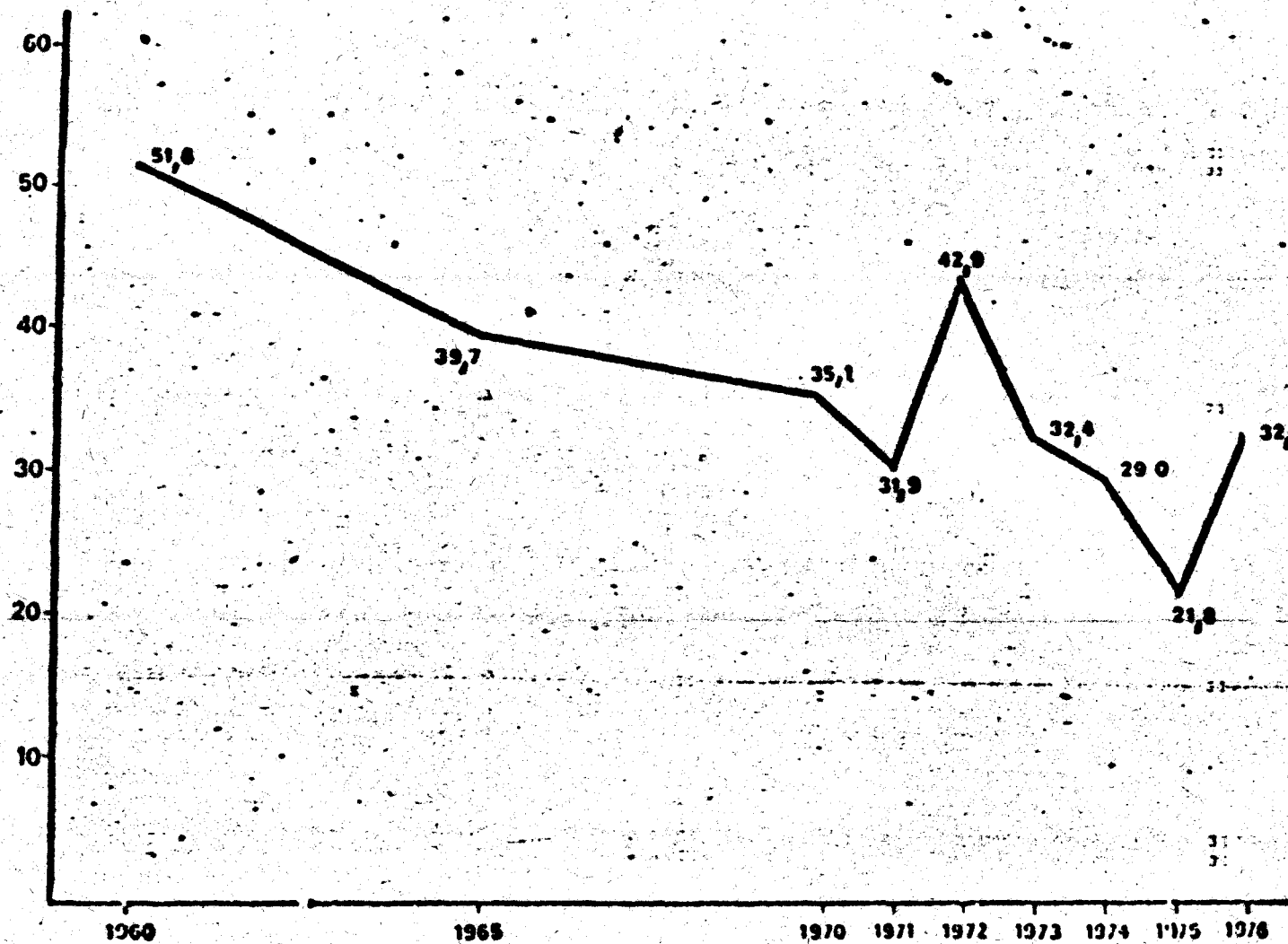
(b) Index of trends (base 1970/71 = 100)

	1970/71	1972/73	1974/75	1976/77
EEC	100	127,5	107,3	108,3
United States	100	67,4	93,0	189,3
Japan	100	207,4	105,5	189,6
Canada	100	189,3	234,8	322,3
Switzerland	100	89,1	138,8	162,4
Sweden	100	68,2	100,7	162,2

(1) 1976 figures only available for Denmark

Table 4

**DIRECT INVESTMENT BY COMMUNITY MEMBER STATES IN THE DEVELOPING COUNTRIES
COMPARED WITH INVESTMENT BY OTHER DAC COUNTRIES (1960-1976)**



Source : 1977 study by the OECD Development Assistance Committee

Table 5

Net direct private investment by Community Member States in the developing countries during the period 1970-1977

USD million

	1970	1971	1972	1973	1974	1975	1976	1977
Belgium	46	29	58	48	50	69	236	-25
Denmark	8	25	10	16	26	30	30	..
France	235	170	231	287	239	274	245	265
Germany	318	358	601	787	701	816	765	846
Italy	123	214	280	246	100	150	213	16
Netherlands	183	130	321	89	242	229	245	486
United Kingdom	341	233	391	699	719	796	954	611
Total EEC	1.254	1.159	1.892	2.172	2.077	2.364	2.688	2.345

Source : DAC (OECD)

Table 6a

Trend of net direct investment by Community Member States in the developing countries during the period 1970-1977
at 1976 prices and exchange rates

	1970		1971		1972		1973		1974		1975		1976		1977	
	mio \$	%	mio \$	%	mio \$	%	mio \$	%	mio \$	%	mio \$	%	mio \$	%	mio \$	%
Belgium	98	4,0	54	2,6	98	3,3	66	2,4	60	2,6	69	3,0	236	8,8	-23	-1,1
Denmark	18	0,7	53	2,6	19	0,6	23	0,8	32	1,4	31	1,3	30	1,1
France	451	18,5	311	15,2	370	12,5	372	13,5	269	11,4	261	11,2	245	9,1	213	11,3
Germany	620	25,4	623	30,5	923	31,2	959	34,8	772	32,8	837	35,9	765	28,5	774	36,1
Italy	223	9,1	359	17,6	419	14,2	318	11,5	118	5,0	141	6,0	213	7,9	146	6,9
Netherlands	415	17,0	259	12,7	552	18,7	125	4,5	294	12,5	237	10,2	245	9,1	445	20,7
United Kingdom	617	25,3	383	18,8	575	19,5	897	32,5	808	34,3	754	32,4	954	35,5	559	26,1
Total EEC	2.442	100	2042	100	2.956	100	2.760	100	2.353	100	2.330	100	2.688	100	2.146	100

Source : DAC (OECD)

Table 6b

Index of trend of net direct investment in the developing countries by Community Member States during the period 1970-1977 at 1976 prices and exchange rates (base 1970 = 100)

	1970	1971	1972	1973	1974	1975	1976	1977
Belgium	100	55,1	100	67,3	61,2	70,4	240,8	-23,4
Denmark	100	294,4	105,5	127,8	178,8	172,2	166,7	..
France	100	69,0	82,0	82,5	59,6	57,9	51,3	53,9
Germany	100	100,5	148,9	154,7	124,5	135,0	123,4	124,8
Italy	100	161,0	187,9	142,6	52,9	63,2	95,5	66,4
Netherlands	100	62,4	133,0	30,1	70,8	57,1	59,0	107,2
United Kingdom	100	62,1	93,2	145,4	131,0	122,2	154,6	90,6

Table 7

Annual average net direct private investment in the developing countries by Community Member States during the period 1970-1977 at 1976 prices and exchange rates

(a) Annual averages

USD million

	<u>1970/71</u>	<u>1972/73</u>	<u>1974/75</u>	<u>1976/77</u>
Belgium	76	82	64,5	106,5
Denmark	35,5	21	31,5	30 *
France	381	371	265	244,0
Germany	621,5	941	804,5	769,5
Italy	291	368,5	129,5	181,0
Netherlands	337	338,5	265,5	345,0
United Kingdom	500	736	781	756,5
Total EEC	2.242	2.858	2.406	2.432,5
United States	2.000	1.347,5	1.859,5	3.785,5
Japan	461	956	486,5	874,0

* 1976 figures

(b) Index of trend of net direct private sector investment in the developing countries during the period 1970-1977 (base 1970/71 = 100)

	<u>1970/71</u>	<u>1972/73</u>	<u>1974/75</u>	<u>1976/77</u>
Belgium	100	107,9	84,9	140,1
Denmark	100	59,2	88,7	84,5
France	100	97,4	69,6	64,0
Germany	100	151,4	129,4	123,8
Italy	100	126,5	44,5	62,2
Netherlands	100	100,5	78,8	102,4
United Kingdom	100	147,2	156,2	151,3
Total EEC	100	127,5	107,3	108,5
United States	100	67,4	93	189,3
Japan	100	207,4	105,5	189,6

Source : DAC (OECD)

Table 8

Net direct private investment in the developing countries by Community Member States by region, during the period 1974-1976

USD million

		Europe	Africa		America			Asia			Oceania	Not specified		
			Total	North of the Sahara	South of the Sahara	Total	Central	South	Total	Middle East	Southern Asia		Far East	
Belgium	1974	16	-18		-18	17		17	8	1		7		26
	1975	13	6		6	14	4	10	10	1		9		26
	1976	5	176	52	124	38	24	13	-3			-2		20
France	1974	88	66	23	89	40	3	37	18	4	1	13	1	28
	1975	54	216	25	191	61	5	56	-59	-62		3	1	
	1976	32	-4	12	-17	78	24	54	137	54	1	83	3	
Germany	1974	135	45	33	11	191	32	146	42	17	2	22		289
	1975	114	43	32	10	217	40	177	60	24	2	33		383
	1976	7	2	-6	8	328	107	221	73	23		50		356
Netherlands	1974	11	7	1	5	183	144	39	40	10		30		
	1975	41	4	-1	5	157	135	22	27	14		13		
	1976	19	37	1	36	154	114	40	35	30		46		
United Kingdom	1974	100	204	-1	205	164	36	128	201	27	56	118		50
	1975	66	292	1	291	303	127	177	107	-7	20	94	28	x
	(1)1976	58	265			275			101			11		-

- Source : DAC (OECD)

(1) As no regional breakdown is available for United Kingdom investment in 1976, these have been apportioned provisionally on the basis of the 1975 breakdown.

Table 9

SECTOR BY SECTOR BREAKDOWN OF DIRECT PRIVATE INVESTMENT BY CERTAIN COMMUNITY MEMBER STATES IN THE THIRD WORLD

Sector	France			Italy			United Kingdom		Germany		
	74	75	76	74	75	76	74	75	74	75	76
Raw materials (1)	27	38	41	65	53	16	6 ⁽²⁾	3 ⁽²⁾	13	20	11
Manufacturing industries	44	25	25	17	8	30	56	42	55	59	65
Transport and services	29	37	34	18	39	54	38	55	32	21	24
Total	100	100	100	100	100	100	100	100	100	100	100

(1) A large proportion of this private investment relates to oil exportation operations

(2) This figure does not cover investment in "oil and liquid fuels"

Table 10

	CHROMIUM	COBALT	COPPER	MANGANESE	NICKEL	PHOSPHATES	TIN	TUNGSTEN :
<u>Degree of dependence</u> (imports as % of consumption)								
from: United States	-	4	3	-	1	24	1	2
Canada	-	-	8	-	55	-	-	1
Australia	-	-	2	7	7	-	3	8
South Africa/Rhodesia	30	2	7	47	5	-	2	6
Other industrialized countries	1	2	6	1	22	-	1	2
<u>Subtotal for the industrialized countries</u>	<u>31</u>	<u>8</u>	<u>28</u>	<u>55</u>	<u>90</u>	<u>24</u>	<u>1</u>	<u>19</u>
Africa	17	92	27	31	1	66	10	5
Latin America	-	-	17	10	-	-	23	31
Asia	21	-	13	1	1	2	47	22
<u>Subtotal for the developing countries</u>	<u>38</u>	<u>92</u>	<u>57</u>	<u>42</u>	<u>2</u>	<u>68</u>	<u>85</u>	<u>58</u>
State-trading countries	31		11	2	8	8	7	23
<u>Overall degree of dependence</u>	<u>100</u>	<u>100</u>	<u>96</u>	<u>99</u>	<u>100</u>	<u>100</u>	<u>99</u>	<u>100</u>
<u>Distribution of world reserves</u>								
South America	-	23 ²⁾	31	2	19 ¹⁾	20	16	3
Africa	96	42	10	50	2	37	7	1
Asia	2	10 ²⁾	8	2	63 ¹⁾	2	65	66
Industrialized countries	2	25	41	46	16	41	12	30
Share of world production that would have to be provided by the developing countries in 1985 to meet the requirements of the free world (IBRD estimates, report No 1588, May 1977)			52	65	48	48	90	
1) including Cuba								
2) including New Caledonia								
Source : Commission Services								

Table 11

DEVELOPING COUNTRIES' SHARE OF PROJECTED MINING INVESTMENT, 1977-1990 (1)

(millions of 1975 US dollars)

	LOW		PROBABLE		HIGH	
	developing	industrial	developing	industrial	developing	industrial
Iron ore	15,997	33,993	21,674	46,056	28,231	59,991
Copper	13,193	12,178	15,764	14,552	18,537	17,112
Aluminum						
Bauxite	1,277	688	2,042	1,100	2,924	1,575
Alumina	1,708	5,125	2,800	8,400	4,058	12,175
Aluminum	5,971	19,992	7,982	26,722	10,299	34,480
Zinc	920	1,868	1,180	2,397	1,460	2,964
Nickel	1,533	2,501	2,189	3,571	3,037	4,954
Lead	1,179	723	1,318	808	1,414	866
TOTAL	41,778	77,068	54,949	103,606	69,960	134,117
Annual average	3,214	5,968	4,227	7,970	5,382	10,317

(1) Predicted consumption growth rates :

	LOW	Probable	High
Iron ore	3	4	5
Copper	3	3,5	4
Aluminum	5	6	7
Zinc	2,5	3	3,5
Nickel	3,5	4,2	5
Lead	2,5	2,8	3

Source : Financial Requirements for Mining in Developing Countries (New York : United Nations Centre for Natural Resources, Energy and Transport, 1977), background paper n° 1 for the United Nations Panel on International Mining Finance. Tables 9 and 20.

Table 12a

Trend of exploration expenditure by European mining concerns (including uranium) during the period 1966-77 at 1976 prices (USD thousand)

A. DEVELOPED COUNTRIES

	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
AFRICA	2417	2553	4003	6046	10413	5097	4556	5750	6120	6811	7290	7727
AUSTRALIA	4386	6727	14351	20472	25161	35033	33471	30201	20367	28135	30925	32859
EUROPE	13079	18095	22075	23666	25266	49623	50337	48175	42386	56620	60635	62665
NORTH AMERICA	5742	13907	9959	14053	26231	14266	17202	16705	34860	33688	47775	48343
NOT SPECIFIED	3764	5985	10198	14308	20250	23748	38000	38112	32773	30230	34310	43619
SUB TOTAL	30180	47268	60667	78546	107321	127767	143647	147104	146515	163404	180943	195713

B. LESS DEVELOPED COUNTRIES

AFRICA	3734	1007	2173	6935	4377	3138	2661	4674	1437	1806	700	463
ASIA	701	3030	5946	10444	7242	4298	2006	2393	2899	3085	4123	6063
LATIN AMERICA	0	0	0	655	621	1025	1175	1257	3555	8779	7247	14072
OCEANIA	3984	8056	8601	22339	0	0	0	0	0	0	375	1247
NOT SPECIFIED	15775	16464	16159	14640	16151	23844	11377	11664	12859	14814	9620	25524
SUB TOTAL	24193	28580	32958	55022	26351	32304	17210	19908	20750	29293	22065	47369

TOTAL 54301 75826 93625 133567 133712 140071 160865 167092 167265 192768 202308 243002

PERCENTAGE DISTRIBUTION BY COUNTRY GROUP

DEVELOPED	56	62	65	59	79	80	89	88	88	85	89	81
LESS DEVELOPED	44	30	35	41	21	20	11	12	12	15	11	19
TOTAL	100	100	100	100	100	100	100	100	100	100	100	100

NOTE: "NOT SPECIFIED" FIGURES TO EXPENDITURE IN THE CATEGORIES IDENTIFIED ABOVE ARE LISTED AS TO THE BEST AVAILABLE SOURCE. THESE FIGURES ARE NOT NECESSARILY BALANCED.

Source: European Group of Mining Companies

Table 12b

Trend of exploration expenditure by European mining concerns (not including uranium) during the period 1956-77 at 1976 prices (USD thousand)

A. DEVELOPED COUNTRIES

	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
AFRICA	2417	2553	1804	1744	2195	2674	4246	5750	6128	6811	7298	7727
AUSTRALIA	4339	5769	13315	19729	24553	33574	31397	36274	26603	25823	28260	28428
EUROPE	13879	18095	16464	17938	20944	45126	42832	37250	28763	37407	38440	37903
NORTH AMERICA	4768	11027	7981	10369	23453	12072	15332	13966	20538	20430	31195	26747
NOT SPECIFIED	3764	5985	8741	10277	12053	18921	32183	20711	18516	17250	15900	18381
SUB TOTAL	29167	43430	48305	60557	85199	112267	125991	113752	100547	107721	121101	119106

B. LESS DEVELOPED COUNTRIES

AFRICA	3734	1007	1813	3930	2509	2028	2127	3598	400	119	0	368
ASIA	701	3030	5946	10444	7242	4299	2006	2393	2784	3780	3623	5396
LATIN AMERICA	0	0	0	655	621	1025	1175	1257	3439	8147	6347	12834
OCEANIA	3984	8056	8681	22339	0	0	0	0	0	0	375	1247
NOT SPECIFIED	15775	16464	7634	7172	8398	14994	6764	7027	8198	9050	6270	7714
SUB TOTAL	24193	28558	24074	44568	10760	22244	12071	14275	14822	21095	16615	27559

TOTAL 53360 71988 72379 105125 101757 134511 138062 126227 115370 120316 137716 146745

PERCENTAGE DISTRIBUTION BY COUNTRY GROUP

DEVELOPED	55	60	67	50	82	83	91	89	87	84	88	81
LESS DEVELOPED	45	40	33	42	18	17	9	11	13	16	12	19
TOTAL	100	100	100	100	100	100	100	100	100	100	100	100

Source: European Group of Mining Companies

NOTE: 'NOT SPECIFIED' RELATES TO EXPENDITURE IN THE CATEGORIES IDENTIFIED
WHILE DISCUSSING AS TO THE DISTRIBUTION BETWEEN COUNTRIES IS NOT AVAILABLE.

Table 13

Trend of capital expenditure by European firms (including uranium) during the period 1966-1977
at 1976 prices (USD thousand)

A. DEVELOPED COUNTRIES

	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
AFRICA	19557	25046	27338	29585	25042	25687	19350	19699	26718	53016	41725	20251
AUSTRALIA	129308	124674	67376	58080	106988	104743	84604	51327	50043	45305	32295	115849
EUROPE	70389	69955	70808	21159	32219	75519	52003	27605	26360	63659	49614	70241
NORTH AMERICA	30745	54328	30036	33435	46758	71173	28749	20855	54422	103940	114662	126296
OCEANIA	54059	9392	10222	83140	146508	80982	57661	8892	11728	13408	22200	42305
SUB TOTAL	312059	281295	285599	285399	357514	438103	244367	128378	167511	220207	266896	302942

B. LESS DEVELOPED COUNTRIES

AFRICA	77703	24003	39435	26721	29394	19326	24325	18628	34411	49244	107790	62971
ASIA	0	4217	1151	156	83	2857	1842	1375	92	536	2200	8381
LATIN AMERICA	9225	6077	9353	15225	22788	9047	9288	11970	11507	37813	42530	35419
OCEANIA	0	0	0	0	138564	145557	11300	16553	3797	6430	17244	19524
NOT SPECIFIED	0	0	0	0	0	0	0	922	3508	3286	0	0
SUB TOTAL	86928	34378	49917	42102	196870	177790	26755	49508	53396	98777	167744	126275

TOTAL 398987 317672 255513 267501 549344 614893 291122 177885 222707 378904 430460 509237

PERCENTAGE DISTRIBUTION BY COUNTRY GROUP

DEVELOPED	78	89	80	84	65	71	84	72	76	74	61	75
LESS DEVELOPED	22	11	20	16	35	29	16	28	24	26	39	25
TOTAL	100	100	100	100	100	100	100	100	100	100	100	100

Source : European Group of Mining Companies

NOTE: IN 7 SPECIFIED REGIONS INVESTMENTS IN THE CATEGORIES MENTIONED

WERE NOT AVAILABLE FOR PERCENTAGE DISTRIBUTION BY COUNTRY GROUP AS NOT AVAILABLE