PROBLEMS OF TRADE IN CERTAIN NATURAL RESOURCE PRODUCTS

Background Study on Lead and Lead Products

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INTRODUCTION

The present study on lead forms a part of the series of factual background papers prepared by the GATT secretariat on non-ferrous metals. These studies were undertaken in accordance with the Decision taken by Ministers at the Thirty-Eighth Session of the CONTRACTING PARTIES in November 1982 in relation to Problems of Trade in Certain Natural Resource Products. The Decision called for the examination of problems relating to trade in certain natural resource products including in their semi-processed and processed forms, falling under the competence of the General Agreement relating to tariffs, non-tariff measures and other factors affecting trade with a view to recommending possible solutions.

This study provides information on lead and lead products covering the following CCCN positions: ex 26.01, ex 26.03, 28.27, ex 28.30, ex 28.35, ex 28.38, ex 28.39, ex 28.42, ex 28.48, 78.01, 78.02, 78.03, 78.04, 78.05, 78.06. Section I gives background information on some of the salient features of the lead industry. Section II briefly reviews developments with regard to production, consumption and prices since 1960. Section III provides information on world trade in lead ores and concentrates, lead bullion, and refined lead for the period 1975 to 1985 as well as the direction of trade of these products by main exporting and importing countries in 1985. Section IV provides detailed information on trade flows on tariff line basis together with tariff treatment in fifteen developed-country markets and some developing countries. Section V describes activities in some international organizations, notably the International Lead and Zinc Study Group.

SUMMARY

1. After rising substantially during the 1960s and early 1970s, world consumption of lead was affected, like other major non-ferrous metals, by the slower growth of the world economy since the first world energy crisis. There have also been significant changes in the pattern of consumption, particularly in developed countries which are the major consumers of lead. The battery industry has continued to strengthen its position as the dominant user of lead, now accounting for well over 50 per cent of total lead consumption. Technological changes and competition by alternative materials have affected consumption in some of lead's other traditional markets such as cable sheathing, lead piping and type metal for the printing industry, while environmental regulations are restricting increasingly the use of lead additives in gasoline. Future growth in consumption will therefore be linked closely to the activity in the battery industry unless any major new uses of lead are developed. Although improved battery technology has reduced the quantity of lead used in typical automobile batteries (while at the same time improving their performance), the increasing use of specialized battery-driven vehicles, notably for airport and dockside equipment, and other expanding markets for batteries (load levelling and small portable batteries) should help to sustain lead consumption. The combination of such developments and continued expansion of consumption in developing countries could result in continued growth in world consumption.

2. World primary lead production has been increasingly influenced by price movements of zinc and silver as most lead is produced in combination with these metals. The major lead mines developed since the early 1970s include the Black Mountain mine in South Africa, the West Fork and Casteel mines in the United States and several mines in Morocco. All other new mines such as Tara in Ireland, Polaris in Canada, and Woodlawn and Elura in Australia are lead and zinc mines where zinc is the principal product, together with significant quantities of silver as a by product. It is probable that in the future the output of primary lead will continue to be influenced by market trends in silver and zinc as well as by demand for refined lead. In 1985, four countries - the USSR, Australia, the United States and Canada - were responsible for about 50 per cent of world mine output which amounted to 3.5 million tons. Among developing countries the major mine producers of lead were Mexico, Peru, the People's Republic of China and Morocco.

3. In contrast to stagnating primary lead production, production of refined lead from secondary sources has increased. In recent years, recycling of secondary lead materials, principally from lead batteries, has represented about 40 per cent of total lead production. Most secondary lead is produced in developed countries which generate large domestic supplies of lead scrap. New secondary lead plants have been

built in some developing countries as the quantities of locally-available scrap materials have become sufficient to justify them. It is expected that the volume of secondary output will continue to vary from year to year in relation to demand for refined lead and movements in the price level for scrap materials compared with those for refined lead.

4. In 1985 the volume of trade in lead ores and concentrates represented 17 per cent of world production, and about 6 per cent and 14 per cent of world smelting and refining production, respectively (without trade among centrally-planned economies and intra-EEC trade). On the basis of existing market conditions, and commercial and trade policies, no major changes are anticipated in the present pattern and structure of world trade in lead. Peru, South Africa, Australia and Canada will remain the major exporters of lead ores and concentrates. However, the development of Alaska's Red Dog project and other planned Alaskan projects are likely to make the United States a significant lead concentrates exporter. With respect to refined lead exports, Australia, the EEC and Canada will continue to be the major exporters of this product. Nevertheless, most of the increase in refined lead exports are expected from developing countries, particularly Peru and Mexico, and from Australia. Major importers of lead ores and concentrates will remain developed countries, namely the EEC, Japan, and the USSR. The United States and the USSR are likely to continue to be the principal importers of lead metal.

SECTION I

MAIN FEATURES OF THE LEAD INDUSTRY

Properties of lead[1] and lead reserves

5. Lead is one of the oldest metals used by man. Its universal use has been conditioned by its important properties, including its low melting temperature, its excellent castability and malleability, its density and metallic impermeability. Of the common metals, lead is the most corrosion-resistant to acids, chlorine and water. It has a low electrical conductivity and is suitable for use in alloys and compounds with specific properties. According to the classification of industrial materials, lead belongs to heavy metals.[2]

6. From the geochemical point of view, lead is closely associated with zinc and presently about 63 per cent of lead produced comes from lead-zinc ores. The most important lead ore for recovery of the metal is lead glance or galena (PbS, containing about 86.6 per cent of Pb), which is often associated with sphalerite (ZnS), pyrite (FeS_2), chalcopyrite (Cu Fe S_2), and other sulphides or sulphosalts, any of which can be recovered to yield by-products or co-products. The relatively high value of silver in recent years has given added importance to the recovery of lead from silver-lead ores.

7. Lead resources are widely scattered and abundant throughout the world. Table 1 indicates that in 1985 world lead reserves[3] were estimated at 95 million tons[4]. The United States has the largest reserves of lead with over one-fifth of the world's total. Other most important lead deposits are located in Australia (16.8 per cent), the Soviet Union (12.6 per cent) and Canada (12.6 per cent). In Latin America, lead deposits are found in Mexico, Peru, Honduras, Brazil and Bolivia and in Asia, in the People's Republic of China, India, Burma, Thailand and Japan. Africa has lead deposits in the Republic of South Africa and Morocco as well as in Tunisia, Algeria, Zaire and Zambia. European countries with extensive deposits of lead are Yugoslavia, Bulgaria, Spain, Poland, Portugal, Sweden and Ireland.

Lead processing

8. Over 80 per cent of the lead-producing mines in the world are underground operations. Many of the remainder also have underground operations integrated with the open pits, such as Old South Mine at Broken Hill in Australia. The only large open lead mine in the world is at Khemfra, Morocco, but several very large open pit zinc-lead mines are located in Australia, Canada, Spain and the USSR.[5]

TABLE 1

WORLD LEAD RESERVES[1] (1985 ESTIMATES)

	Million tons lead content	% of total
World	95.0	100.0
Developing countries	15.0	15.8
Honduras	0.5	0.5
India	2.0	2.1
Mexico	3.0	3.2
Morocco	1.5	1.6
Peru	2.0	2.1
Yugoslavia	4.0	4.2
Other	2.0	2.1
Developed countries	61.0	64.2
Australia	16.0	16.8
Canada	12.0	12.6
Ireland	1.0	1.1
Portugal	1.5	1.6
South Africa	4.0	4.2
Spain	2.0	2.1
Sweden	1.5	1.6
United States	21.0	22.1
Other	2.0	2.1
Centrally-planned economies	19.0	20.0
Bulgaria	3.0	3.2
China, P.R.	2.0	2.1
Poland	1.5	1.6
USSR	12.0	12.6
Other	0.5	0.5

[1] Reserves are that part of the reserve base that could be economically extracted or produced at the time of determination and include only recoverable materials (according to United States Geological Survey Circular 831, Principles of a Resource/Reserve Classification for Minerals, 1980).

Source: United States Bureau of Mines, Department of the Interior, "Lead - A Chapter from Mineral Facts and Problems", 1985

9. Ore dressing and concentration processes of various types separate the metal-containing mineral from the barren rock. Presently, the flotation process is applied to about 60 to 70 per cent of lead ores. Lead concentrates are then shipped to smelters for further processing which includes the following stages:

(a) The roast-reduction process effects the removal of sulphur by roasting in air, which converts lead sulphide to lead oxide.

(b) The sintered product is smelted along with coke, fluxes and dross to produce lead bullion, slag and fume.

(c) Drossing reduces impurities and removes zinc and copper from the bullion by controlled cooling.

The operation of reduction and smelting is performed in the shaft furnace. The Imperial Smelting (IS) Process developed in the 1960s is an improved shaft furnace process and is particularly suitable for the processing of lead-zinc concentrates. In recent years, new direct pyrometallurgical processes have been developed to laboratory or pilot plant scales in which roasting of the sulphides, and reduction and smelting of the charge are accomplished simultaneously in the same reactor. These await application in plants of commercial scale.

10. About 70 per cent of lead bullion is refined by pyrometallurgical methods and 30 per cent by electrolysis. Refining removes all impurities which remained in the lead bullion, and at the same time extracts different elements such as zinc, silver, copper, gold, bismuth and antimony. The production of lead is so closely inter-related with that of other elements that both its production rate and market price are influenced to a large degree by the supply and demand situation of these related elements. Energy requirements for lead production including mining, concentration, smelting and refining processes are the lowest of any of the major metals. Approximately 29.5 million British thermal units (Btu) is required to produce 1 metric ton of refined lead, which is about 25 per cent of that required for copper, and less than one-half that of zinc. About one-third of the energy is consumed in the mining and beneficiation stages for lead.[6] The major problem facing the lead industry in many countries is the high costs of controls to meet standards promulgated by governments related to worker health and environment.

11. Pure refined lead with the minimum purity from 99.85 per cent to 99.9999 per cent is commonly referred to as "soft lead". Most of the soft pig lead consumed in the world is specified at the London Metal Exchange (LME) Grade Pure Lead minimum of 99.97 per cent (however, almost all primary refineries achieve 99.99 per cent purity in the desilverization process). Unwrought lead at its different degrees of purity, from impure lead bullion or argentiferous lead to electrolycally

refined lead, may be obtained in cast blocks, ingots, slabs, cakes and similar forms. Most of these forms are used for rolling and extrusion of lead semi-manufactures, for manufacture of alloys[7], or for casting into shaped articles.

12. Secondary lead production, i.e. lead recovered from finished products which have been scrapped after use and from scrap materials arising during fabrication, plays an important rôle in the supply of lead. Recycling of secondary materials is economical because it uses much less energy than primary metal production. It is also important as an anti-pollution measure for the environment. It is estimated that secondary materials, including purchased product and metal process waste (new scrap), have provided nearly 50 per cent of the total world's use of lead in recent years and over 40 per cent of consumption of fully refined lead.[8] Because of corrosion resistance, many lead products remain virtually unchanged during their lifetime and the recovery of lead content is not difficult. The main sources of scrap - between 85 per cent and 90 per cent - are worn-out, damaged or obsolete fabricated products such as battery plates and oxides, cable covering, pipe, sheet, and strip and solder.

Industrial application of lead

13. Lead uses may be divided into two categories: metallic, where it is used alone or alloyed with other elements; and chemical, where lead is used in the form of chemical compounds. The largest use of lead is in storage batteries for vehicles, communications, and electric utilities. Another significant use of lead as an anti-knock additive to gasoline (lead tetraethyl) has been declining due to the regulations now in force in many countries restricting the lead content of gasoline. Lead is also used in the manufacture of bearings because of its qualities of lubrication and resistance to wear. Although there has been some decline in the use of lead in construction as a result of substitution. consumption of lead in roofing, fittings, etc., is still large notably in the United Kingdom. Lead is the most impervious of all common metals to x-ray and gamma radiation and for this reason it is widely used in the medical field and structures containing nuclear material. Sheet lead is also used in the chemical industry to provide corrosion protection for process vessels, transportation equipment, and toxic waste storage. Lead continues to be the major metal used for sporting ammunition. Lead is also used in packaging, glass, porcelain enamel, the glaze of ceramics and as P.V.C. stabilizers. Oxides of lead are used as oxidising agents in the manufacture of dyes, matches, rubber substitutes, adhesives, and in oil refining.

Substitutes of lead

14. No commercially viable replacement to the lead acid storage battery has so far been developed despite research into a number of alternative

combinations of metals and non-metals such as nickel-iron, nickel-zinc, zinc-bromine, zinc chloride, lead-chloride, lithium-chloride, lithium-sulphur, and lithium-iron sulphide. Most of these can potentially match or exceed the specifications of the lead-acid cell. However, the cost of components, including the economies of recycling, as well as difficulties that include safety in some cases which would arise in operating such batteries, have precluded large-scale commercial development. In construction, lead competes with plastics, galvanized steel, copper and aluminium. Copper, plastic and cement-asbestos piping are substitutes for lead in piping. Iron and steel are alternative materials for lead in shot for ammunition. Plastics, aluminium, tin and glass are substitutes for lead in tubes and containers. Depleted uranium metal and steel replace lead for storage containers and transportation of radioactive materials.[9]

Structure of the lead industry

15. The primary lead industry is highly integrated in the United States where Asarco and the Doe Run Company are now the only two producers of primary refined lead. In general, outside the United States, the primary lead industry tends to be less integrated as many producers are relatively small consumers and export a large part of their output as concentrates, bullion or refined metal. Many European metal producers are indirectly integrated with overseas mines or smelters through long-term or run-of-mine contracts. ASARCO of the United States has similar overseas relationships. Many primary smelters and refiners, particularly those in developed countries, also recover lead from secondary materials in addition to primary concentrates and bullion. Moreover, there are a large number of independent secondary lead plants using scrap materials only. Lead production in centrally-planned economies is State-owned. There are State-owned mining and/or smelting and refining companies in some other countries also (Bleiberger Bergwerks-Union AG in Austria, Corporacion Minera de Bolivia in Bolivia, Hindustan Zinc Ltd. in India, Centromin in Peru, Industria Minera in Mexico, RMHK Olovaicinka Trepca in Yugoslavia and Zambia Consolidated Copper Mines in Zambia).

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[1] Physical properties of lead:
Symbol: Pb (Plumbum)
Density at 20°C g/m^3: 11.34
Atomic number: 82
Atomic weight: 207.19
Melting point: 327.4°C
Boiling point: 1,751°C
Electricity conductivity/m ohm $^{-1}$cm^{-1}: 0.0484
Frequency ppm: 12.5

[2]According to the criterion of use as industrial materials, the technically most important non-ferrous metals, excluding the precious metals, may be classified as follows:

(a) heavy metals: lead, copper, zinc and tin;
(b) light metals: aluminium, magnesium and titanium;
(c) steel improving agents (as alloying metals) or special metals (as base metals): chromium, cobalt, manganese, molybdenum, nickel, vanadium and tungsten;
(d) other alloying or special metals: antimony, cerium, hafnium, cadmium, lanthanum, lithium, niobium, mercury, rhenium, silicon, tantalum, bismuth, yttrium and zirconium.

Source: Non-ferrous metals. Metallgesellschaft AG

[3]Resources as distinct from reserves are defined as total known deposits regardless of whether or not they can be mined at profit under current economic conditions. Reserves are the proportion of identified resources that are economic to extract given current prices and costs. Large fluctuations in costs and prices, especially the latter, which occur over relatively short periods, may lead to large fluctuations in the level of reserves, particularly for those countries with large marginal deposits. Source: The United States Bureau of Mines and the United States Geological Survey Resource and Reserve Classification for Minerals

[4]The quantities used throughout this study are metric tons unless otherwise specified.

[5]United States Department of Interior, Bureau of Mines: Mineral Facts and Problems, 1985 Editions.

[6]United States Department of Interior, Bureau of Mines: Mineral Facts and Problems, 1985 Edition.

[7]Because of its low melting point lead is easily alloyed with other elements. The principal lead alloys which may fall within Chapter 78 are the following:

(1) lead-tin alloys used, for example, in lead based soft solders, in terne-plate and in foil for the packing of tea;
(2) lead-antimony-tin alloys used for printing type and in anti-friction bearings;
(3) lead-arsenic alloys used for lead shot;
(4) lead-antimony alloys (hard lead), used for bullets, accumulator plates, etc.
(5) lead-sodium, lead-antimony-cadmium, lead-tellerium alloys.

[8]International Lead and Zinc Study Group

[9]United States Department of the Interior. Bureau of Mines: Lead - A Chapter from Minerals Facts and Problems, 1985 Edition.

SECTION II

PRODUCTION, CONSUMPTION AND PRICES[1]

Mining

16. World mine production of lead increased fairly rapidly until the early 1970s, from about 2.4 million tons in 1960 to a peak of 3.7 million tons attained in 1973. Since then, lead mine production has remained generally stagnant at around 3.5 million tons annually and has shown little tendency to vary according to changes in demand for lead. Substantial declines in output occurred in 1981 and 1984 mainly due to losses from industrial disputes in the United States and Canada. Available data for 1986 indicate that lead mine production further declined and was at its lowest level since 1968. The fall of 130,000 tons (3.5 per cent) was principally in the United States where the Buick mine was closed temporarily, and in Australia where output was affected by an industrial dispute. There was also some fall in production of Morocco where the Zaida mine was closed in late 1985. As can be seen from Table 2, between 1960-1985, mine production of developing countries increased by 22 per cent. However, in the same period their share in total world production declined by 8 percentage points, to 24 per cent in 1985. The mine production of developed countries increased by 48 per cent in the same period, though their share in world mine production in 1985 was at the 1960's level of about 47 per cent. In contrast, mine production of centrally-planned economies was estimated at around 1 million tons in 1985, almost twice as high as in 1960. This resulted in an increase of their share in world mine production, from 24 per cent in 1960 to over 28 per cent in 1985. In 1985, four countries - the Soviet Union, Australia, the United States and Canada - were responsible for about 50 per cent of world mine production of lead (16.7 per cent, 13 per cent, 12.3 per cent and 8.2 per cent, respectively). Other principal mining countries were Mexico, Peru, the People's Republic of China, South Africa, Morocco, Yugoslavia, Bulgaria, Spain, the People's Republic of Korea, Sweden, Poland, Japan and Ireland. Chart I shows the major lead mine producers in 1960 and 1985.

17. According to the International Lead and Zinc Study Group[2], the two main factors governing lead mine production are:

(1) the high proportion of lead mine output produced in combination with other metals, notably zinc, silver and to a much smaller extent, copper[3];

(2) movements in prices of zinc, silver and other by-products as well as of lead and hence the combined return secured by mines based on mixed ore bodies.

TABLE 2

WORLD MINE PRODUCTION OF LEAD, 1960-1985

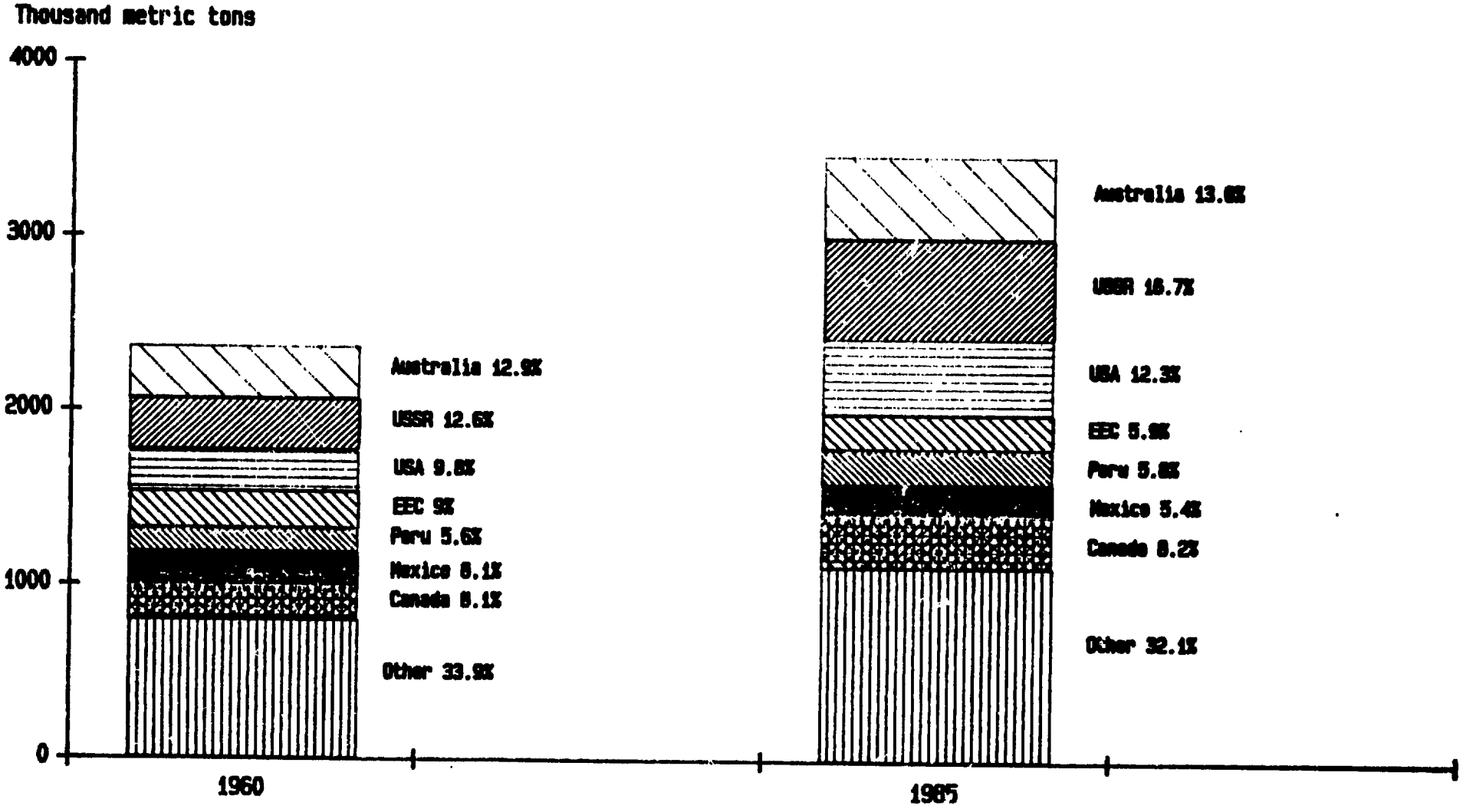
	Thousand metric tons										Percentages of world production									
	1960	1965	1970	1972	1975	1979	1980	1982	1984	1985	1960	1965	1970	1972	1975	1979	1980	1982	1984	1985
World	2372	2784	3443	3673	3560	3585	3569	3555	3365	3479	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Developing Countries of which:	685	731	808	885	772	815	787	804	824	840	32.8	28.3	25.6	25.8	21.7	22.7	22.1	22.6	24.4	24.1
Algeria	10	10	7	4	2	4	4	5	4	4	0.4	0.4	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Argentina	27	32	36	35	30	32	33	33	29	28	1.1	1.2	1.0	0.9	0.8	0.9	0.9	0.9	0.9	0.8
Bolivia	21	18	26	24	18	16	16	12	7	6	0.9	0.7	0.7	0.7	0.5	0.4	0.5	0.3	0.2	0.2
Brazil	10	24	20	27	22	28	25	19	19	18	0.4	0.9	0.6	0.7	0.6	0.8	0.7	0.5	0.6	0.5
Honduras	4	9	15	21	22	16	13	15	20	21	0.2	0.3	0.4	0.6	0.6	0.4	0.4	0.4	0.6	0.6
India	5	4	3	7	12	15	14	13	19	26	0.2	0.1	0.1	0.2	0.3	0.4	0.4	0.4	0.6	0.7
Iran	17	12	23	38	50	15	12	25	20	22	0.7	0.4	0.7	1.0	1.4	0.4	0.3	0.7	0.6	0.6
Korea, Rep.of	1	4	13	13	12	12	12	12	10	9	0.1	0.1	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3
Mexico	191	169	172	179	162	161	152	168	193	187	8.1	6.1	5.0	5.6	4.6	4.5	4.3	4.7	5.7	5.4
Morocco	95	77	76	93	70	111	115	105	99	107	4.0	2.8	2.2	2.5	2.0	3.1	3.2	3.0	2.9	3.1
Peru	132	171	174	204	155	184	189	176	196	201	5.6	6.1	5.0	5.6	4.4	5.1	5.3	5.0	5.8	5.8
Romania*	12	15	40	45	34	34	23	27	30	35	0.5	0.5	1.2	1.2	1.0	1.0	0.7	0.8	0.9	1.0
Tunisia	18	15	23	15	11	9	8	5	4	4	0.8	0.5	0.7	0.4	0.3	0.3	0.2	0.1	0.1	0.1
Yugoslavia	91	106	127	119	127	130	121	113	102	98	3.8	3.8	3.7	3.2	3.6	3.6	3.4	3.2	3.0	2.8
Zambia	15	35	33	37	26	17	15	24	25	22	0.6	1.3	1.0	1.0	0.7	0.5	0.4	0.7	0.7	0.6
Other	36	30	20	24	19	31	35	52	47	52	1.5	1.1	0.6	0.7	0.5	0.9	1.0	1.5	1.4	1.5
Developed Countries of which:	1116	1344	1820	1894	1737	1756	1790	1782	1564	1652	47.1	48.3	52.8	48.7	48.8	49.0	50.1	50.2	46.5	47.5
Australia	306	361	441	395	395	402	382	438	418	474	12.9	13.0	12.8	10.8	11.0	11.2	10.7	12.3	12.4	13.0
Austria	5	5	5	5	6	5	4	4	4	6	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.2
Canada	193	275	357	401	353	342	297	341	307	285	8.1	9.9	10.4	10.9	9.9	9.5	8.3	9.6	9.1	8.2
EEC[1]	214	175	256	241	229	293	283	213	227	206	9.0	6.3	7.4	6.5	6.5	8.2	7.9	6.0	6.8	5.9
Denmark (Greenland)	7	-	-	6	23	32	29	26	18	18	0.3	-	-	0.2	0.6	0.9	0.8	0.7	0.5	0.5
France	18	18	29	25	22	30	29	6	2	3	0.8	0.6	0.8	0.7	0.6	0.8	0.8	0.2	0.1	0.1
Germany, F.R.	51	52	43	40	39	33	31	30	27	26	2.2	1.9	1.2	1.1	1.1	0.9	0.9	0.9	0.8	0.7
Greece	13	9	9	19	14	22	22	19	22	20	0.5	0.3	0.3	0.5	0.4	0.6	0.6	0.5	0.7	0.6
Ireland	1	3	63	57	37	69	58	39	37	35	0.1	0.1	1.8	1.5	1.0	1.9	1.6	1.1	1.1	1.0
Italy	50	35	35	27	29	28	23	16	21	15	2.1	1.3	1.0	0.7	0.6	0.8	0.6	0.5	0.6	0.4
Spain	73	56	73	64	59	74	87	73	96	86	3.1	2.0	2.1	1.7	1.7	2.1	2.4	2.1	2.9	2.5
United Kingdom	1	2	4	3	6	5	4	4	4	3	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1
Finland	2	6	5	2	1	1	1	2	3	2	0.1	0.2	0.1	0 1	0.1	0.1	0.1	0.1	0.1	0.1
Japan	40	56	64	53	51	47	45	46	49	50	1.7	2.0	1.9	1.4	1.4	1.3	1.3	1.3	1.5	1.4
Norway	3	4	3	3	3	3	3	4	4	3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
South Africa[2]	65	110	71	63	53	42	132	124	137	123	2.7	3.9	2.1	1.7	1.5	1.2	3.7	3.5	4.1	3.5
Sweden	55	69	78	76	69	84	70	80	80	76	2.3	2.5	2.3	2.1	1.9	2.3	2.0	2.3	2.4	2.2
United States	233	284	540	570	577	537	573	530	335	427	9.8	10.2	15.7	15.5	16.2	15.0	16.0	14.9	10.0	12.3
Centrally-planned Economies of which:	571	709	815	979	1051	1014	992	969	977	987	24.0	25.4	23.7	26.7	29.5	28.3	27.8	27.2	29.0	28.4
Bulgaria	95	100	99	105	108	108	100	95	95	97	4.0	3.6	2.9	2.9	3.0	3.0	2.8	2.7	2.8	2.8
Poland	39	41	57	68	77	57	48	45	53	51	1.6	1.5	1.7	1.9	2.2	1.6	1.3	1.2	1.6	1.5
USSR*	300	400	470	570	600	590	580	575	570	580	12.6	14.3	13.6	15.5	16.9	16.5	16.3	16.2	16.9	16.7
China, P.R.*	80	100	110	130	140	155	160	160	165	175	3.4	3.6	3.2	3.5	3.9	4.3	4.5	4.5	4.9	5.0
Korea, P.R.*	50	60	70	100	120	100	100	90	90	80	2.1	2.1	2.0	2.7	3.3	2.8	2.8	2.5	2.7	2.3
Other	7	8	9	6	6	4	4	4	4	4	0.3	0.3	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1

1) For comparative purposes, total figures for the EEC include twelve member states for the whole period.
2) Including Namibia.
* Estimates.

Source: International Lead and Zinc Study Group.

Definition: Lead content by analysis of lead ores and concentrates plus the lead content of other ores and concentrates known to be intended for lead recovery.

CHART I - WORLD MINE PRODUCTION OF LEAD



Source: GATT based on statistics compiled by the International Lead and Zinc Study Group.

As with all mines, there is also the desire to utilize capacity as fully as possible in order to reduce operating costs. From the major producers, only the United States, Morocco and more recently, South Africa obtain lead predominantly from lead ores. In contrast, production in other countries is almost entirely from mixed ores. Therefore, the rising levels of zinc and silver production, result in "involuntary" lead production, regardless of the state of the lead market.

18. In the period under consideration, the major developments in lead mine capacities were the opening of the Missouri lead mines in the United States in the mid-1960s, the Black Mountain mine in South Africa, completed in 1980, and several mines in Morocco. All the other substantial new mine capacities which were established after the Missouri mines, such as the Tara Mine in Ireland, the Polaris Mine in Canada, and the Woodlawn and Elura Mines in Australia, are zinc/lead mines in which zinc is the major metal and with important quantities of silver as a by product. Thus, the more recent new mine capacity for lead coming into operation has just offset the reductions in capacity from mine closures and, except for South Africa, has been linked largely to expansion of zinc mine capacity.

Production of refined lead

19. World smelting and refining capacities expanded substantially in the 1960s and early 1970s. Consequently, as Table 3 shows, world production of refined lead increased from 3.2 million tons in 1960 to almost 5 million tons in 1973, at an annual rate of growth of 3.5 per cent. World production of refined lead reached a peak of 5.6 million tons in 1979; however, its annual growth rate averaged only 2.1 per cent between 1973 and 1979. Subsequently, world production fell sharply in the early 1980's but recovered to the 1979 peak by 1985. According to available data, in 1986 refined metal production in market-economy countries fell by 200,000 tons mainly as a result of lower output in the United States, Europe (mainly in Spain), and Australia, and to a lesser extent, in Mexico and Japan.

20. The smelting and refining of lead is mainly performed in developed countries whose share in world production of refined lead fluctuated between 60 per cent and 64 per cent in the period under consideration. In 1985, developed country production of refined lead amounting to about 3.4 million tons was almost 1.5 million tons higher than their production in 1960. In the same year, production of refined lead in centrally-planned economies was estimated at 1.4 million tons, twice as high as their production in 1960. In this period, the share of these countries in world production rose by about two percentage points to 24 per cent in 1985. Between 1960 and 1985, refined lead production of developing countries grew about 2.1 per cent annually. The major increase

TABLE 1

WORLD PRODUCTION OF REFINED LEAD, 1960-1985

	Thousand metric tons										Percentages of world production									
	1960	1965	1970	1973	1975	1979	1980	1980	1984	1985	1960	1965	1970	1973	1975	1979	1980	1980	1984	1985
World	3277	3718	4688	4991	4846	5622	5405	5272	5437	5618	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Developing Countries	488	589	567	699	663	773	783	684	739	835	15.1	13.7	12.1	12.2	13.7	14.0	13.0	13.0	13.4	14.8
of which:																				
Algeria	4	4	4	4	4	5	5	5	5	4	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Argentina	29	39	38	48	64	53	42	31	31	35	0.9	1.0	0.8	1.0	1.3	1.0	0.8	0.6	0.6	0.6
Brasil	10	20	36	59	63	98	85	48	64	73	0.3	0.3	0.8	1.2	1.3	1.7	1.6	0.9	1.2	1.3
India	4	3	2	9	15	21	26	29	24	24	0.1	0.1	0.1	0.2	0.3	0.4	0.5	0.6	0.4	0.4
Korea, Rep.of	2	2	4	4	6	13	15	16	19	20	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.3	0.4
Mexico	173	164	175	167	176	208	159	153	172	203	5.4	4.4	3.7	3.3	3.6	3.7	2.9	2.9	3.2	3.6
Morocco	31	17	25	1	9	37	42	59	48	63	1.0	0.5	0.5	0.0	0.2	0.7	0.8	1.1	0.9	1.1
Peru	74	87	74	86	75	90	87	80	72	83	2.3	2.3	1.6	1.7	1.6	1.6	1.6	1.5	1.3	1.5
Romania*	12	16	35	40	45	41	41	46	46	47	0.4	0.4	0.7	0.8	0.9	0.7	0.8	0.9	0.8	0.8
Taiwan	4	4	5	5	6	20	24	35	44	49	0.1	0.1	0.0	0.1	0.1	0.4	0.4	0.7	0.8	0.8
Tunisia	20	15	23	27	24	17	19	15	8	4	0.6	0.4	0.5	0.5	0.5	0.3	0.3	0.3	0.1	0.1
Yugoslavia	89	101	97	98	130	111	102	99	112	129	2.7	2.7	2.1	2.0	2.7	2.0	1.9	1.9	2.1	2.3
Zambia	15	22	27	27	19	13	10	15	9	10	0.5	0.6	0.6	0.5	0.4	0.2	0.2	0.3	0.2	0.2
Other	21	25	22	34	27	46	46	59	76	91	0.6	0.7	0.5	0.7	0.6	0.8	0.8	1.1	1.4	1.6
Developed Countries	1953	2313	3081	3232	3019	3566	3421	3285	3377	3413	60.5	62.3	65.7	64.8	62.3	62.4	63.3	62.2	62.1	60.8
of which:																				
Australia	209	219	213	221	193	248	234	247	219	216	6.5	5.9	4.5	4.4	4.0	4.4	4.3	4.7	4.0	3.8
Austria	11	12	13	15	15	17	17	22	26	25	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.4
Canada	164	209	221	237	216	252	235	239	254	260	5.1	5.6	4.7	4.7	4.5	4.5	4.4	4.5	4.7	4.3
EEC[1]	723	803	1165	1230	1166	1407	1348	1294	1392	1382	22.4	21.7	24.9	24.7	21.9	22.6	22.5	22.0	22.4	24.6
Belgium	87	101	89	98	103	92	106	94	120	105	2.7	2.7	1.9	2.0	2.1	1.6	2.0	1.8	2.2	1.9
Denmark	8	11	16	13	14	30	24	18	10	1	0.2	0.3	0.3	0.3	0.3	0.5	0.4	0.3	0.2	0.0
France	110	128	180	206	169	220	219	209	206	224	3.4	3.5	3.8	4.1	3.5	3.9	4.1	4.0	3.8	4.0
Germany, F.R.	223	256	356	359	316	373	350	350	357	356	6.9	6.9	7.6	7.2	6.5	6.6	6.5	6.7	6.6	6.3
Greece	4	7	16	21	16	22	21	3	12	14	0.1	0.2	0.3	0.4	0.3	0.4	0.4	0.1	0.2	0.2
Ireland	4	4	4	5	5	7	7	10	9	9	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2
Italy	52	53	101	100	90	126	134	134	140	135	1.6	1.4	2.1	2.0	1.8	2.2	2.5	2.5	2.6	2.4
Netherlands	14	16	25	42	37	35	32	33	34	37	0.4	0.4	0.5	0.8	0.8	0.6	0.6	0.6	0.6	0.7
Portugal	2	1	1	1	2	5	6	4	6	7	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Spain	71	54	90	120	101	129	124	133	160	168	2.2	1.5	1.9	2.4	2.1	2.3	2.3	2.5	2.9	3.0
United Kingdom	148	172	287	265	313	368	325	306	338	327	4.6	4.6	6.1	5.3	6.5	6.6	6.0	5.8	5.2	5.8
Finland	3	4	4	4	4	6	3	4	4	5	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Japan	136	174	275	305	252	283	305	302	363	367	4.2	4.7	5.9	6.1	5.2	5.0	5.6	5.7	6.7	6.5
New Zealand	2	4	4	4	5	9	7	6	6	6	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1
Norway	2	2	1	1	1	0	0	0	0	0	0.1	0.1	0.1	0.1	0.0	0	0	0	0	0
South Africa[2]	-	66	68	68	68	72	78	71	67	73	-	1.7	1.5	1.4	1.4	1.3	1.5	1.4	1.2	1.3
Sweden	55	55	55	42	37	41	39	50	73	71	1.7	1.5	1.2	0.8	0.8	0.7	0.7	1.0	1.3	1.3
Switzerland	4	4	5	5	5	5	5	3	2	2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0
United States	644	761	1057	1100	1057	1226	1150	1047	971	1025	20.0	20.5	22.5	22.0	21.8	21.8	21.3	19.9	17.9	18.3
Centrally-planned Economies	796	807	957	1070	1164	1283	1281	1303	1330	1370	21.9	21.9	20.4	21.4	24.0	22.8	23.7	24.8	24.5	24.4
of which:																				
Bulgaria*	95	100	99	100	110	120	118	118	114	116	2.9	2.7	2.1	2.0	2.3	2.1	2.2	2.3	2.1	2.1
Czechoslovakia	15	15	18	17	18	19	20	21	21	22	0.5	0.4	0.4	0.3	0.4	0.3	0.4	0.4	0.4	0.4
Germany, D.R.*	25	25	30	35	39	42	41	45	47	55	0.8	0.7	0.6	0.7	0.8	0.8	0.8	0.9	0.9	1.0
Poland	40	41	55	68	76	82	82	79	83	87	1.2	1.1	1.2	1.4	1.6	1.5	1.5	1.5	1.5	1.5
USSR*	390	460	580	650	700	780	780	800	800	810	12.1	12.4	12.4	13.0	14.4	13.9	14.4	15.2	14.7	14.4
China, P.R.*	90	110	120	130	140	170	175	175	200	215	2.8	2.9	2.5	2.6	2.9	3.0	3.2	3.3	3.7	3.8
Korea, P.D.R.*	50	55	55	70	80	70	65	65	65	65	1.5	1.4	1.2	1.4	1.6	1.2	1.2	1.2	1.2	1.2
Other	1	1	-	-	1	0	0	-	-	-	0.1	0.1	-	-	0.0	0	0	-	-	-
Unreported Production[3]	80	85	83	80	-	-	-	-	-	-	2.5	2.3	1.8	1.6	-	-	-	-	-	-

1) For comparative purposes, total figures for the EEC include twelve member states for the whole period.
2) Including Namibia.
3) Estimates of production of refined lead and lead alloys recovered from secondary materials not included in reported data.
* Estimates.

Source: International Lead and Zinc Study Group.

Definition: Total production by smelters and refineries of refined pig lead, including the lead content of antimonial lead and including production on toll in the reporting country - regardless of the type of source material, i.e. whether ores, concentrates, lead bullion, mattes, residues, slags or scrap. Pig lead and lead alloys recovered from secondary materials remelting alone without undergoing further treatment before re-use are excluded.

took place in 1985 largely as a result of higher production in Mexico, Morocco and Peru. Consequently, in 1985, the share of developing countries in total production attained almost 15 per cent, about the same level as in 1960 after having been below that level in the whole interim period. Chart II gives the percentage shares of main producing countries in world production of refined lead in 1960 and 1985. It shows that the EEC (mainly the Federal Republic of Germany, the United Kingdom, France and Spain), the United States and the USSR remained the major producers of this product accounting for about 57 per cent of world production in 1985 (24.6 per cent, 18.3 per cent and 14.4 per cent, respectively). Other principal producing countries were Japan, Canada, Australia, the People's Republic of China, Mexico, Yugoslavia and Bulgaria.

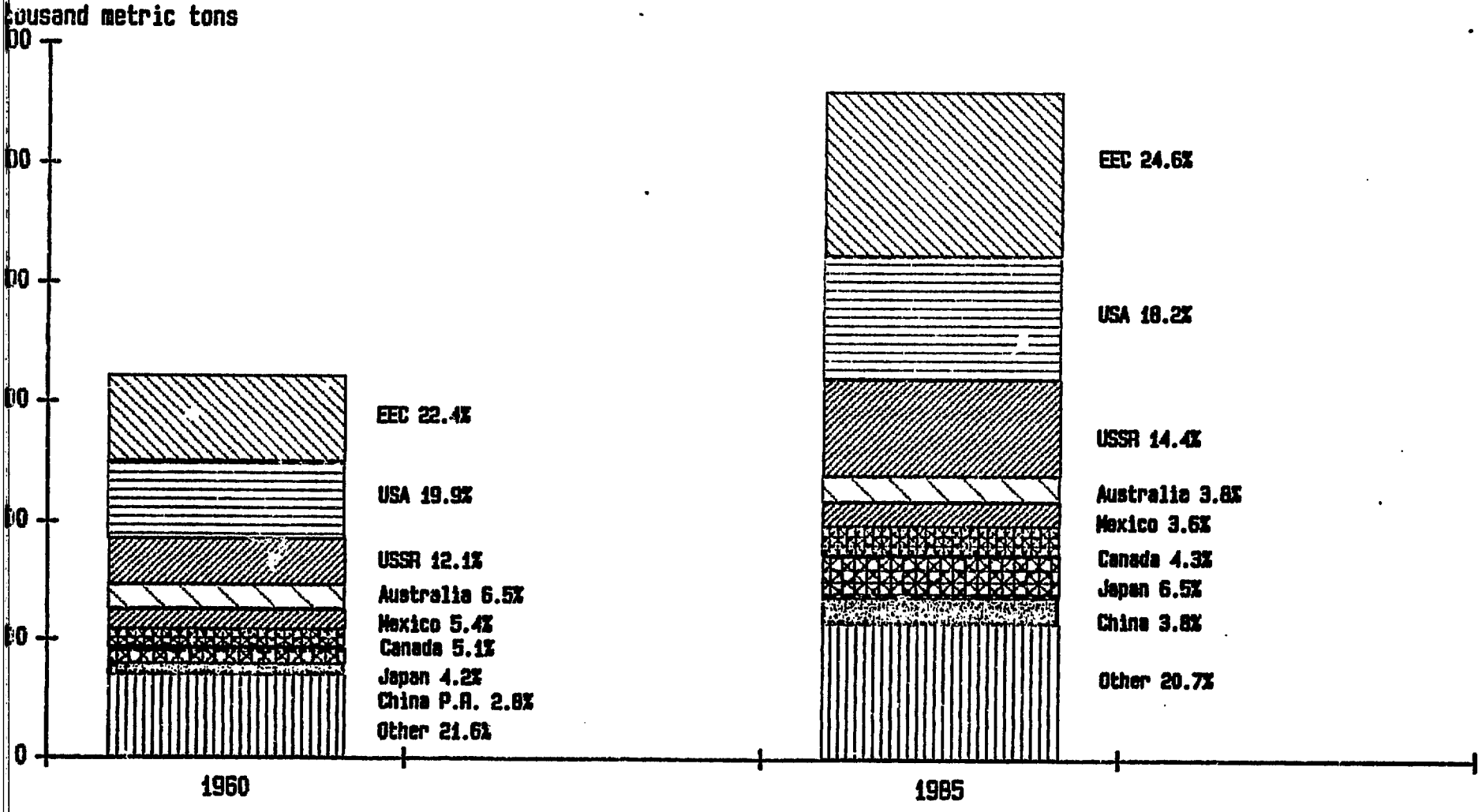
21. As mentioned in paragraph 12, secondary lead production plays an important rôle in world lead supply. The output of refined lead from secondary sources steadily increased, both in tonnage and as a proportion of total refined metal production, in the 1960s and 1970s. In 1985 the secondary sector was responsible for about 43 per cent of total lead metal production compared to less than 30 per cent in the early 1960s. According to the International Lead and Zinc Study Group[4], the share seems likely to remain at about this level. Although national policies of developed countries based on environmental and economic considerations may encourage the recycling of secondary lead materials generated in their countries, the availability and costs of scrap materials in relation to the operating margins of secondary plants will continue to be the main factors influencing the extent of recovery and output of secondary metal.

22. Table 4 indicates that in 1985 recovery of secondary lead as refined metal in market-economy countries[5] amounted to 1.8 million tons or about 43 per cent of total metal production of these countries. Including remelted lead and lead alloys which are re-used without undergoing a full refining process, total recovery was 2.1 million tons. Most secondary recovery is carried out in developed countries which generate sufficient supplies of scrap materials. Thus, the United States is the major secondary producer with a share of over 52 per cent of secondary lead in total domestic refined production in 1985. In the same year, the secondary recovery from old scrap was 49 per cent in the EEC and 36 per cent in Japan.[6] In recent years, some secondary smelter plants have been constructed in South East Asia and to a lesser extent in the Middle East, as sufficient supplies of locally generated scrap become available to support these plants.

Consumption

23. There has been a change in the pattern of metal consumption over time. Consumption of lead, once the most used non-ferrous metal, has fallen in relation to that of other metals. In 1985, the share of

CHART II - WORLD PRODUCTION OF REFINED LEAD



Source: GATT based on statistics compiled by the International Lead and Zinc Study Group.

TABLE 4

WORLD SECONDARY REFINED PRODUCTION OF LEAD

(in thousand metric tons, including secondary refined antimonial lead)

	1975	1978	1979	1980	1981	1982	1983	1984	1985
World Total 1)	1,295.0	1,737.6	1,899.1	1,816.6	1,768.6	1,655.0	1,562.6	1,873.0	1,834.2
Developing Countries	79.8	172.8	212.0	218.7	199.0	221.7	228.9	257.8	281.3
Algeria	-	3.0	3.0	5.0	5.0	5.5	5.0	5.0	4.0
Argentina	10.7	6.0	6.0	18.5	15.6	14.6	16.1	15.0	18.0
Brazil	25.2	33.2	43.0	40.4	31.3	27.4	28.4	37.7	43.1
India	10.2	10.9	10.8	10.7	11.1	8.8	6.0	7.1	8.4
Korea,Rep.of	-	-	5.8	10.0	12.0	7.5	10.2	8.9	9.2
Mexico	n.a.	49.3	58.0	44.0	38.0	34.0	29.0	30.0	30.0
Peru	-	-	5.0	5.0	5.0	5.0	1.4	1.2	1.5
Venezuela	6.0	9.0	10.0	10.0	10.0	15.0	15.0	17.0	20.0
Yugoslavia	16.7	19.0	19.0	17.0	12.5	36.7	38.0	37.4	40.0
Others	11.0	42.4	51.4	58.1	58.5	67.2	79.8	98.5	107.1
Developed Countries	1,215.2	1,564.8	1,686.1	1,597.9	1,569.6	1,433.3	1,333.7	1,615.2	1,552.9
Australia	33.7	35.1	42.0	32.6	32.3	33.4	27.0	21.5	15.9
Austria	5.5	10.5	11.9	10.2	11.6	11.1	11.5	16.2	15.5
Canada	44.8	50.0	68.6	69.0	69.7	64.6	63.9	79.4	66.8
EEC:2)	524.2	688.7	741.9	679.4	677.6	624.9	607.0	681.5	668.3
Belgium	55.0	30.0	27.0	30.0	28.0	28.0	30.0	30.0	30.0
Denmark	13.7	26.2	29.8	24.5	26.5	15.8	10.0	13.0	-
France	67.7	82.3	90.6	92.0	99.4	85.9	82.3	87.8	90.6
Germany,F.R.	85.2	179.1	178.5	159.2	158.8	148.9	135.5	165.3	175.3
Greece	1.9	1.5	1.5	0.9	0.7	-	-	-	-
Ireland	-	2.1	5.0	7.0	13.0	10.0	8.0	9.1	9.0
Italy	56.8	85.1	101.0	91.6	97.4	97.3	89.4	102.9	96.7
Netherlands	23.9	20.6	20.0	19.8	19.7	27.7	23.6	33.6	37.3
Portugal	-	0.3	4.5	5.6	2.0	4.0	6.0	6.0	7.0
Spain	24.5	38.6	39.8	37.4	34.1	32.1	36.9	42.5	43.3
United Kingdom	195.5	222.9	244.2	211.4	198.0	175.2	185.3	191.3	179.1
Finland	-	5.0	6.0	3.2	4.5	4.4	6.0	4.5	4.6
Japan	100.2	105.0	106.5	129.8	141.6	119.1	118.3	129.1	133.3
New Zealand	-	8.0	7.0	7.0	7.0	7.0	6.0	6.0	6.0
Norway	0.4	0.3	0.4	0.3	0.2	0.1	0.1	-	-
Sweden	15.4	18.3	24.0	22.0	22.0	19.9	18.8	27.7	25.9
South Africa	13.2	23.6	23.3	35.4	26.9	30.4	23.6	28.9	34.1
Switzerland	-	-	5.0	7.0	7.0	3.0	2.0	2.0	2.0
United States	477.8	620.3	647.5	602.0	569.2	515.4	449.5	618.4	580.5
Centrally-Planned Economies									
Bulgaria	n.a.	5.0	4.0	4.0	n.a.	n.a.	n.a.	n.a.	n.a.
Czechoslovakia	n.a.	19.0	19.0	20.0	n.a.	n.a.	n.a.	n.a.	n.a.
Germany,D.R.	n.a.	38.0	40.0	40.0	n.a.	n.a.	n.a.	n.a.	n.a.
Hungary	n.a.	0.3	0.1	0.1	n.a.	n.a.	n.a.	n.a.	n.a.
Poland	n.a.	25.0	25.0	24.0	n.a.	n.a.	n.a.	n.a.	n.a.
USSR	n.a.	100.0	100.0	100.0	n.a.	n.a.	n.a.	n.a.	n.a.
China,P.R.	n.a.	20.0	20.0	20.0	n.a.	n.a.	n.a.	n.a.	n.a.
Korea,P.R.	n.a.	5.0	5.0	5.0	n.a.	n.a.	n.a.	n.a.	n.a.

e - estimated n.a. - not available

1)World total does not include production in centrally-planned ecoconies. Romania is included with developing countries.
2)For comparative purposes total figures for the EEC include twelve member States for the whole period.
Source: World Metal Statistics, various issues

lead in total world consumption of the six quantitatively most important non-ferrous metals declined to 14 per cent from over 17 per cent in 1960.[7]

24. World consumption of refined lead reached the highest level of 5.6 million tons in 1979, about 83 per cent over world refined lead consumption in 1960. It fell in the early 1980s and in spite of the recovery in 1984-85 it remained about 145,000 tons below the peak level in 1979. Compared to the 1960s, in the 1970s the annual rate of growth of world consumption declined by half, to about 2 per cent; consumption has stagnated since 1980. This slowdown in growth may largely be attributed to four factors. First, recessionary conditions and subsequent slowing down in world economic growth adversely affected demand. Secondly, the consumption of lead was subject to strong substitution pressures by other products such as plastics, other metals and various compounds in its traditional markets such as cable sheathing, sheet and pipe and chemical applications. Thirdly, technological changes in use industries led to the loss of markets (e.g. type metal in the printing industry) or reductions of the quantities of lead in finished products (e.g. reductions in the lead content of batteries and new soldering techniques in the automobile and electronic industries). There have not been any important new uses for lead to offset reductions in existing uses. Finally, environmental regulations have led to a fall in the consumption of lead additives for gasoline and, in some countries, restrictions on the use of lead in other applications, e.g. paints for domestic uses.

25. Table 5, indicating world consumption and regional and country shares in world refined lead consumption in the period from 1960 to 1985, shows that in 1985 developed countries consumed about 59 per cent of refined lead, developing countries about 16 per cent and centrally-planned economies about 26 per cent. This Table also shows that in this period the share of both developing countries and centrally-planned economies in world lead consumption, increased considerably while the share of developed countries declined. Although the United States remained the principal refined lead consuming country, its consumption has been stagnating at about 1.1 million tons since 1980 and its share in world consumption decreased to about 20 per cent in 1985 from about 26 per cent in the 1960s. The EEC and Japan which experienced lower losses in the recession than the United States, maintained their consumption at around 1.3 million tons to 1.4 million tons and 400,000 tons, respectively. In contrast to the EEC whose market share decreased by about 6 percentage points from 1960 to 25 per cent in 1985, Japan's share in world consumption of refined lead increased by two percentage points and was 7 per cent in 1985. The share of the Soviet Union in world refined lead consumption is also estimated to have increased, from about 12 per cent in 1960 to about 15 per cent in 1985. In the latter year, its consumption was estimated at about 800,000 tons. Consumption of refined lead also increased in some developing countries namely, Brazil, India, the Republic

TABLE 5

WORLD CONSUMPTION OF REFINED LEAD, 1960-1985

	Thousand metric tons										Percentages of world production									
	1960	1965	1970	1973	1975	1979	1980	1982	1984	1985	1960	1965	1970	1973	1975	1979	1980	1982	1984	1985
World	3088	3671	4582	5218	4757	5484	5404	5250	5449	5479	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Developing Countries of which:	176	267	360	480	555	666	689	684	765	844	5.8	7.2	8.2	9.4	11.6	11.8	12.8	13.3	14.0	15.5
Algeria	(NA)	(NA)	1	5	5	5	16	19	18	10	(NA)	(NA)	0.0	0.1	0.1	0.1	0.3	0.4	0.3	0.2
Argentina	29	39	42	36	53	56	46	29	31	33	0.9	1.1	0.9	0.7	1.1	1.0	0.9	0.5	0.6	0.6
Brazil	18	18	37	79	76	98	82	55	64	73	0.6	0.5	0.8	1.5	1.6	1.7	1.5	1.0	1.2	1.3
Egypt	(NA)	(NA)	6	8	10	15	14	16	28	30	(NA)	(NA)	0.1	0.1	0.2	0.3	0.3	0.3	0.5	0.5
India	25	37	42	41	45	59	54	67	60	70	0.8	1.0	0.9	0.8	0.9	1.0	1.0	1.3	1.1	1.3
Iran	2	2	8	6	14	10	16	30	20	17	0.1	0.0	0.2	0.1	0.3	0.2	0.3	0.6	0.4	0.3
Korea, Rep.of	2	2	5	7	16	33	30	32	46	63	0.1	0.0	0.1	0.1	0.3	0.6	0.6	0.6	0.8	1.2
Malaysia	2	2	3	4	7	12	13	11	16	19	0.1	0.0	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.3
Mexico	32	56	75	88	77	96	85	93	110	125	1.0	1.5	1.7	1.7	1.6	1.7	1.6	1.8	2.0	2.3
Morocco	(NA)	(NA)	3	3	4	4	6	5	3	5	(NA)	(NA)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Peru	3	6	7	13	13	20	26	19	16	14	0.1	0.2	0.2	0.3	0.3	0.4	0.5	0.4	0.3	0.3
Romania*	12	11	32	40	48	49	51	41	51	51	0.4	0.3	0.7	0.8	1.0	0.9	0.9	0.8	0.9	0.9
Taiwan	3	4	5	10	14	18	26	29	41	40	0.1	0.1	0.1	0.2	0.3	0.3	0.4	0.5	0.8	0.7
Thailand	1	2	3	7	10	10	16	14	17	20	0.0	0.1	0.1	0.1	0.2	0.2	0.3	0.3	0.3	0.4
Tunisia	(NA)	(NA)	3	3	5	5	5	4	3	4	(NA)	(NA)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Turkey	1	3	8	9	8	7	11	10	19	27	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.4	0.5
Venezuela	3	4	5	7	10	11	14	20	24	26	0.1	0.1	0.1	0.1	0.2	0.2	0.3	0.4	0.4	0.5
Yugoslavia	23	4	46	70	83	84	105	114	115	115	0.7	1.2	1.0	1.3	1.7	1.5	1.9	2.2	2.1	2.1
Zambia	1	4	6	6	6	3	3	3	2	3	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.0	0.1
Other	19	34	32	46	51	69	72	73	79	99	0.6	0.9	0.7	0.9	1.1	1.2	1.3	1.4	1.4	1.8
Developed Countries of which:	2182	2568	3063	3529	2948	3567	3383	3140	3291	3216	70.8	70.0	68.0	67.6	61.8	63.4	61.1	59.8	60.4	58.6
Australia	57	60	62	74	72	74	71	56	59	59	1.8	1.6	1.4	1.4	1.5	1.3	1.3	1.1	1.1	1.1
Austria	21	21	30	30	29	47	53	53	62	62	0.7	0.6	0.7	0.6	0.6	0.8	1.0	1.0	1.1	1.1
Canada	66	85	87	114	92	122	113	99	122	100	2.1	2.3	1.9	2.2	1.9	2.2	2.1	1.9	2.2	1.8
EEC[1]	955	1075	1268	1416	1226	1475	1431	1326	1392	1356	31.0	29.3	28.1	27.1	25.8	26.1	26.4	25.3	25.6	24.7
Belgium	55	51	61	68	50	58	59	61	71	66	1.8	1.4	1.4	1.3	1.1	1.0	1.1	1.2	1.3	1.2
Denmark	20	22	27	19	19	30	23	16	15	13	0.6	0.6	0.6	0.4	0.4	0.5	0.4	0.3	0.3	0.2
France	161	145	200	223	190	211	212	194	209	208	5.2	4.0	4.4	4.3	4.0	3.7	3.9	3.7	3.8	3.8
Germany, F.R.	258	302	358	351	283	361	333	333	357	345	8.4	8.2	8.0	6.7	6.0	6.6	6.1	6.4	6.6	6.3
Greece	5	8	24	44	23	27	28	22	20	23	0.2	0.2	0.5	0.8	0.5	0.5	0.5	0.4	0.4	0.4
Ireland	5	5	7	7	7	7	7	11	9	10	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2
Italy	78	92	191	234	192	258	275	243	233	230	2.5	2.5	4.2	4.5	4.0	4.6	5.1	4.6	4.3	4.2
Netherlands	51	58	50	55	44	56	62	53	47	45	1.7	1.6	1.1	1.1	0.9	1.0	1.1	1.0	0.9	0.8
Portugal	6	8	10	12	9	19	22	19	27	26	0.2	0.2	0.2	0.2	0.2	0.3	0.4	0.4	0.5	0.5
Spain	29	72	78	121	103	115	114	102	107	116	0.9	2.0	1.7	2.3	2.2	2.0	2.1	1.9	1.9	2.1
United Kingdom	287	312	262	282	306	333	296	272	295	274	9.3	8.5	5.8	5.4	6.4	5.9	5.5	5.2	5.4	5.0
Finland	14	12	10	17	18	21	23	24	9	24	0.5	0.3	0.2	0.3	0.4	0.4	0.4	0.5	0.4	0.4
Japan	163	209	271	348	266	365	393	354	390	395	5.3	5.7	6.0	6.7	5.6	6.5	7.2	6.7	7.1	7.2
New Zealand	8	10	10	11	14	15	14	13	12	10	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2
Norway	9	10	13	14	15	13	14	13	13	13	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.2	0.2
South Africa, Rep. of	13	17	24	27	41	50	53	57	42	60	0.4	0.5	0.5	0.5	0.9	0.9	1.0	1.1	0.8	1.1
Sweden	44	52	47	34	29	22	25	28	27	27	1.4	1.4	1.1	0.6	0.6	0.4	0.5	0.5	0.5	0.5
Switzerland	23	28	31	21	18	19	19	11	10	11	0.7	0.8	0.7	0.4	0.4	0.3	0.4	0.2	0.2	0.2
United States	809	989	1210	1423	1120	1344	1094	1106	1143	1099	26.3	26.9	26.9	27.3	23.5	24.0	20.2	21.1	21.0	20.1
Centrally-planned Economies of which:	642	751	987	1121	1262	1393	1412	1426	1393	1419	20.8	20.5	21.9	21.5	26.6	24.8	26.1	27.1	25.6	25.9
Bulgaria*	35	40	77	85	95	108	110	120	114	115	1.1	1.1	1.7	1.6	2.0	1.9	2.0	2.3	2.1	2.1
Czechoslovakia	42	43	44	49	53	60	60	51	48	50	1.4	1.2	1.0	1.0	1.1	1.1	1.1	1.0	0.9	0.9
Germany, D.R.*	65	80	80	85	91	100	100	100	90	95	2.1	2.2	1.8	1.6	1.9	1.8	1.8	1.9	1.6	1.8
Poland	51	52	69	85	95	87	86	85	90	94	1.6	1.4	1.5	1.6	2.0	1.5	1.6	1.6	1.6	1.7
USSR*	360	405	525	610	700	780	800	810	790	800	11.7	11.0	11.7	11.7	14.8	13.9	14.8	15.4	14.5	14.6
China, P.R.*	70	100	160	170	185	210	210	215	215	220	2.3	2.7	3.5	3.3	3.9	3.7	3.9	4.1	4.0	4.0
Other*	19	31	32	37	43	48	46	46	45	45	0.6	0.9	0.7	0.7	0.9	0.9	0.9	0.8	0.9	0.8
Unreported Consumption[2]	88	85	83	88	-	-	-	-	-	-	2.8	2.3	1.9	1.5	-	-	-	-	-	-

1) For comparative purposes, total figures for the EEC include twelve member states for the whole period.
2) Estimates of consumption of refined lead and lead alloys recovered from secondary materials not included in reported data.
* Estimates.

Source: International Lead and Zinc Study Group.

Definition: Total consumption of refined pig lead, including the lead content of antimonial lead, regardless of the type of material from which produced, i.e. ores, concentrates, lead bullion, lead alloy, residues, slags or scrap. Pig lead and lead alloys recovered from secondary materials remelting alone without undergoing further treatment before re-use are excluded.

of Korea, Mexico, Romania, Taiwan and Yugoslavia, mainly in relation to the expansion of domestic battery production. However, the recent recession reduced or halted the growth in consumption of lead in most of these countries. Major world refined lead consumers in 1960 and 1985 are illustrated in Chart III.

26. Table 6[8] and Chart IV indicating principal uses of lead, show that the battery industry is the dominant user of lead, accounting for 60 per cent of total lead consumption in six major consuming countries in 1985. The increase in the number of batteries produced, and the growing volume of industrial batteries and batteries for specialized applications largely offset the reduction in the amount of lead in SLI[9] batteries as a result of improved battery technology. In 1985, the manufacture of pigments and other compounds represented 12.1 per cent of total consumption, followed by semi-manufactures, (rolled and extruded products and ammunition), alloys and cable sheathing, accounting for 10.6 per cent, 4.4 per cent and 4.1 per cent, respectively. In contrast to the battery industry, lead consumption in the above uses has been affected by substitution and competition of other materials and has slowly declined, both in volumes and shares. Also, consumption of lead used for gasoline additives fell continuously as a result of regulations affecting the use of lead in gasoline in many countries and was 4.7 per cent of total consumption in 1985.

Prices and stocks

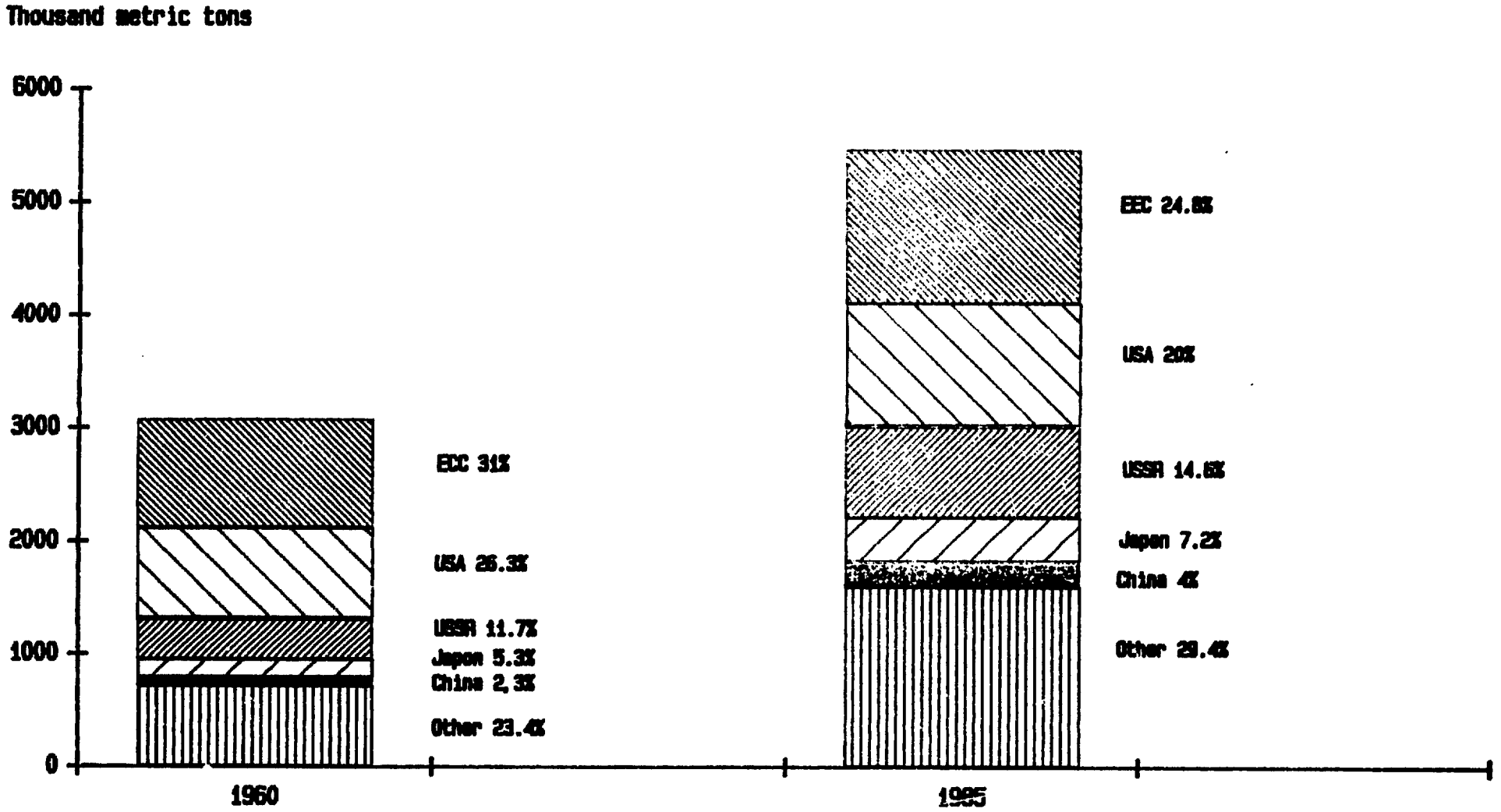
27. There are two internationally recognized price quotations for lead:

(1) the daily cash and three month prices fixed by the London Metal Exchange;

(2) The North American Producer Mean Price published by "Metals Week", which reflects a weighted average of prices quoted by individual North American producers, delivered.

The LME prices are in pounds sterling per metric ton and are an important indicator of day-to-day market conditions. The LME lead contract applies to refined pig lead of minimum 99.97 per cent purity. The United States producer price is quoted in United States cents per lb. Most sales of lead concentrates and lead metal are made under annual contracts negotiated directly between producers and their customers. The volume of physical lead metal traded through the LME is small in relation to total world trade but as a terminal market, its daily prices are an indicator of the short-term balance between metal supply and demand, while use of its hedging facilities provides a valuable safeguard against price variations. The United States producer price reflects demand for lead metal in the United States, still by far the largest single consumer of lead. In the short term, trends in the United States producer price may differ at times

CHART III - WORLD CONSUMPTION OF REFINED LEAD BY COUNTRY



Source: GATT based on statistics compiled by the International Lead and Zinc Study Group.

TABLE 6

PRINCIPAL USES OF LEAD[1]

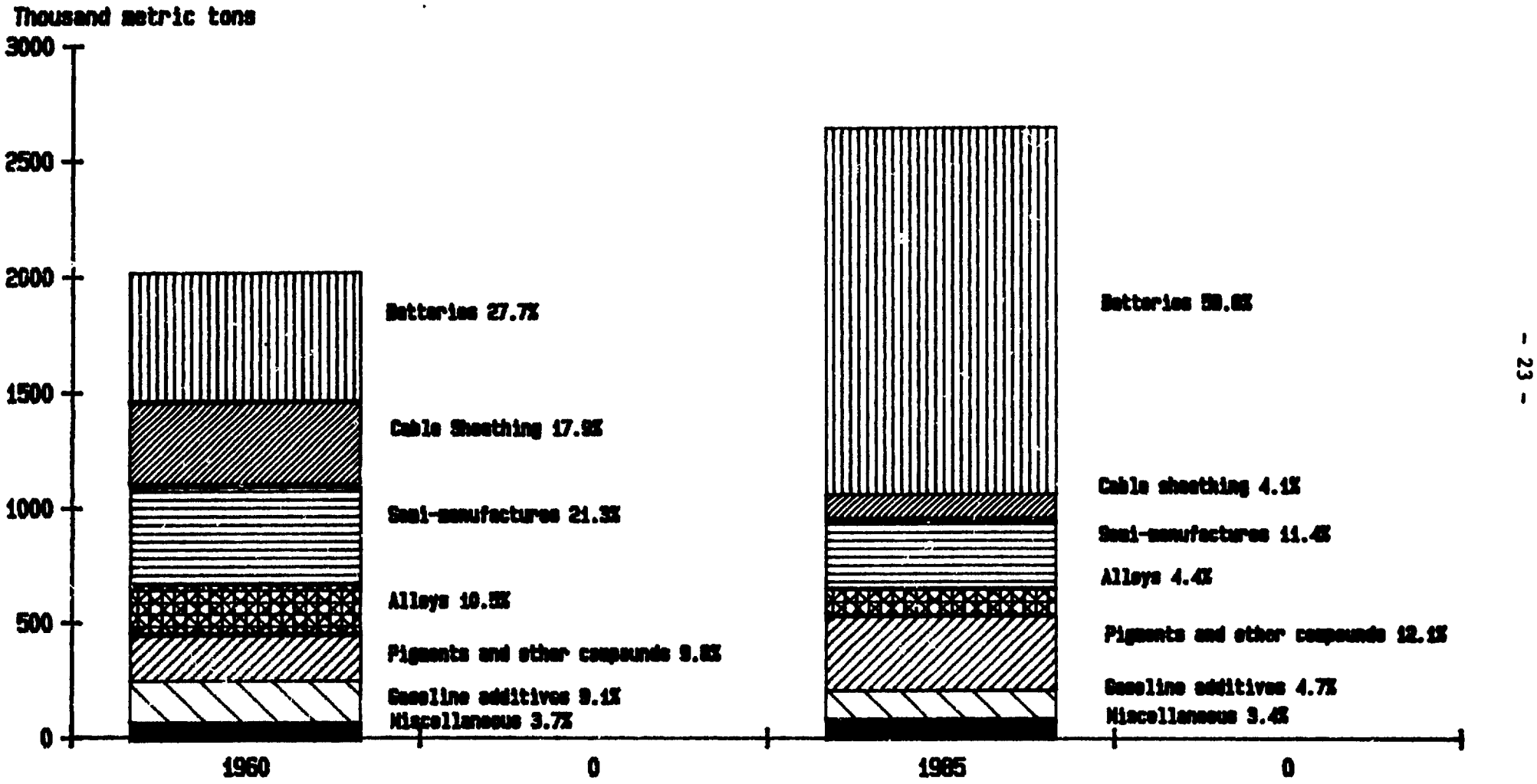
(Thousand metric tons)

	1960	1965	1970	1973	1975	1979	1980	1982	1984	1985
Total world consumption	3,080	3,671	4,502	5,218	4,757	5,624	5,404	5,250	5,449	5,479
Total[1]	2,056	2,406	2,622	2,953	2,470	2,917	2,617	2,493	2,703	2,666
% of world consumption	66.7	65.5	58.2	56.6	51.9	51.9	48.4	47.5	49.6	48.7
Batteries	570	741	1,001	1,259	1,093	1,482	1,308	1,347	1,581	1,594
Cable sheathing	368	399	276	255	206	173	163	140	109	111
Semi-manufactures	437	449	405	424	363	317	312	287	304	303
Alloys	215	242	222	232	179	195	165	134	122	118
Pigments and other compounds	202	235	309	352	269	357	337	289	314	323
Gasoline additives	187	262	322	338	282	285	233	204	159	126
Miscellaneous	77	78	87	93	78	108	99	92	114	91

[1] Figures based on consumption in the following countries: France, Germany, F.R., Italy, Japan, the United Kingdom and the United States.

Source: International Lead and Zinc Study Group

CHART IV - CONSUMPTION OF REFINED LEAD BY USE (1)



1 Based on consumption in the following countries: France, Germany, F.R., Italy, Japan, the United Kingdom and the United States.
Source: GATT based on statistics compiled by the International Lead and Zinc Study Group.

from the LME price, reflecting differences in the strength of demand in the United States compared with other major consuming areas such as Europe and Japan and also fluctuations in the value of the United States dollar against sterling and other leading currencies. Such fluctuations in exchange rates can at times affect both the competitive position of lead from country to country when expressed in national currencies and the regular pattern of international trade flows.

28. Table 7 and Chart V indicate average annual prices for lead on the basis of the quotations at the LME and the United States producer price during the period 1950-1985 in terms of both current and constant[10] United States dollars. Both current and constant prices trended downward sharply after the Korean war but partly recovered to higher levels in real terms during the 1960s and the early 1970s. Then, the increase in consumption between 1976 to 1979 led to higher prices. The peak in prices in 1979 was the result of large purchases by the Soviet Union and strikes in the United States. After the boom in 1979, the price of lead plummetted due to the continuing recessions, slower world economic growth and sluggish demand and in 1985 prices in constant terms fell to their historically lowest level.

29. Table 8 illustrates principal movements in commercial stocks of lead metal and stocks held in the United States Government Stockpile since 1960. Stocks held by producers, traders and in LME approved warehouses tend to reflect most directly changes in the balances of world supply and demand. Stocks held by consumers represent mainly metal required to maintain normal processing operations and remain generally more stable. As a result of the steep fall in lead consumption during 1975 in the wake of the first world energy crisis, commercial stocks rose substantially to 577,000 tons, although by the end of 1978 they had fallen back to below 400,000 tons as consumption recovered. More recently, stocks held in LME warehouses rose rapidly during 1982 and much of 1983 to a record level of 218,000 tons in September 1983. Subsequently, LME stocks had been drawn down equally rapidly as consumption recovered from the world economic recession to about 60,000 tons at the end of 1985 and 38,000 tons at the end of 1986. The United States lead stockpile was largely accumulated during and immediately following the Korean War and has been reduced from its peak of nearly 1.2 million tons in the early 1960s to its present level of 545,000 tons. Substantial releases of metal from the stockpile were made in 1972-74 to dispose of stockpile inventories rendered surplus as a result of reductions in the stockpile goals for lead and other materials. In the late 1970s the stockpile goal for lead was raised to 998,000 tons as a result of revised assumptions in the scenario for a possible emergency. No acquisitions were made, however, and the inventory has remained unchanged. There are no plans for increasing the quantities held. On 8 July 1985, the US President proposed a major restructuring of the stockpile. The goal for lead would drop to zero,

TABLE 7

LEAD PRICES 1950-1985
(in US$/ton)

Year	London Metal Exchange[1]		New York Market[2]	
	Current $	1980 Constant $	Current $	1980 Constant $
1950	293	1,297	293	1,297
1951	446	1,709	386	1,479
1952	372	1,363	363	1,330
1953	252	947	297	1,117
1954	265	1,019	310	1,192
1955	292	1,102	334	1,260
1956	321	1,172	353	1,288
1957	266	950	323	1,154
1958	201	705	267	937
1959	195	694	269	957
1960	198	690	263	916
1961	176	603	240	822
1962	154	519	212	714
1963	174	596	246	843
1964	278	933	300	1,007
1965	317	1,057	353	1,177
1966	262	842	333	1,071
1967	229	729	309	984
1968	240	769	291	933
1969	289	881	329	1,003
1970	304	871	344	986
1971	254	690	304	826
1972	302	755	331	828
1973	430	927	359	774
1974	593	1,050	497	880
1975	417	664	475	756
1976	445	699	509	799
1977	618	883	677	967
1978	662	822	742	922
1979	1,208	1,325	1,161	1,273
1980	906	906	935	935
1981	727	723	806	802
1982	546	551	562	567
1983	425	440	478	495
1984	444	468	563	593
1985	391	408	420	438

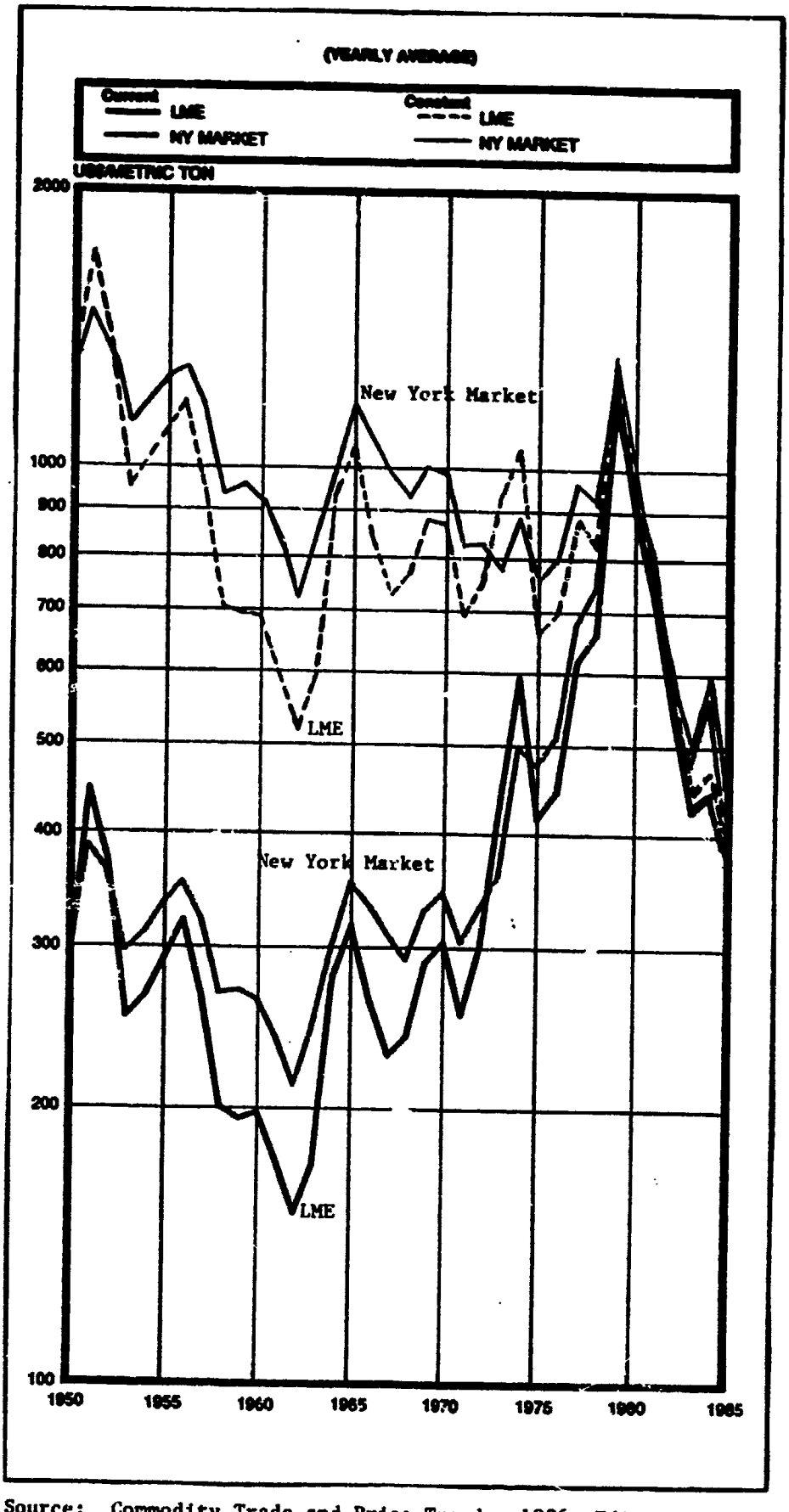
[1] Soft pigs, 99.97 per cent purity, settlement price

[2] Pig, desilverized, domestic producer price

Source: World Bank, Commodity Trade and Price Trends, 1986

CHART V

LEAD PRICES, 1950-1986



Source: Commodity Trade and Price Trends, 1986 Edition World Bank

TABLE 8

STOCKS OF LEAD METAL, 1960-1986
(end of year)

(Thousand Metric Tons)

	1960	1965	1970	1973	1975	1979	1980	1982	1983	1984	1985	1986
Commercial Stocks:												
Producers	277	178	277	152	276	182	221	242	186	208	241	179
Consumers	168	178	190	192	211	251	224	186	179	176	176	183
Merchants	5	6	8	9	5	8	7	5	3	4	2	3
LME	7	3	25	22	85	17	73	126	172	41	61	38
TOTAL	457	365	500	375	577	458	525	560	540	429	480	403
Non-Commercial Stocks:												
US Stockpile	1161	1165	1035	793	546	545	545	545	545	545	545	545

Source: International Lead and Zinc Study Group

with 272,000 tons of the current inventory to be retained in a supplemental reserve. Excess lead could be available for disposal. Provision is made in the plan for consultations on any disposals with interested governments. Before the proposal can go into effect it must be approved by Congress, which has opposed changing stockpile goals.

Price elasticities

30. The supply and demand for lead, as for most metals, are not very sensitive in the short run to price changes, and therefore relatively large price variations are required to clear the market. It is estimated that price elasticities of supply and demand for the short term are negligible. In addition, as mentioned before, production of primary lead is influenced by market trends in silver and zinc as well as by demand for refined lead. It seems that in the absence of government regulations secondary production is more responsive to demand for refined lead, than primary production. In some countries domestic regulations are considered to be an important influence on level of secondary production. Chart VI shows the relation between world production and consumption of refined lead from 1960 to 1985.

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[1] Statistical data on production and consumption of centrally-planned economies are estimates.

[2] International Lead and Zinc Study Group: "The Market Situation for Lead," September 1985.

[3] Two-thirds of market-economy country lead mine production are derived from mixed ores. About 60 per cent of silver and 8 per cent of copper are produced jointly with lead and zinc. International Lead and Zinc Study Group: "Joint Production of Lead and Zinc."

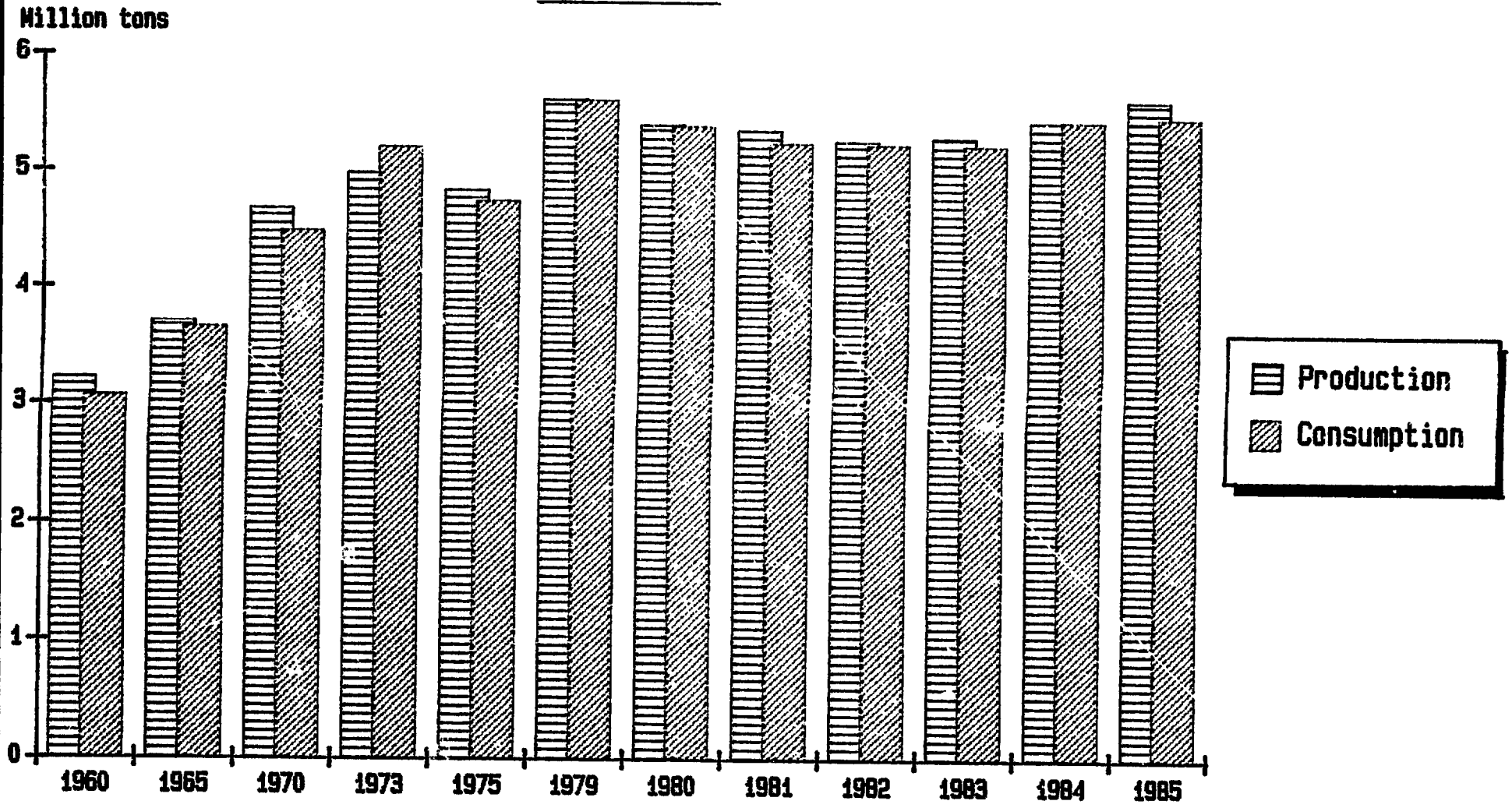
[4] International Lead and Zinc Study Group: The Market Situation for Lead; January 1986.

[5] Data on secondary refined lead production in centrally-planned economies are not available.

[6] The figure is substantially higher in the United States as a result of the importance of the large vehicle population and the consequent availability of scrapped vehicle batteries.

[7] Copper, zinc and tin experienced the same downward trend and in 1985 their shares in metal consumption were as follows: copper - 24.8 per cent (1960 = 31.5 per cent), zinc - 16.7 per cent (1960 = 20.4 per cent), tin - 0.6 per cent (1960 = 1.3 per cent) in contrast to aluminium the share of which rose to 42 per cent (1960 = 27.6 per cent). The share of nickel remained unchanged at 2 per cent.

CHART VI - WORLD PRODUCTION AND CONSUMPTION OF REFINED LEAD



Source: GATT based on statistics compiled by the International Lead and Zinc Study Group.

[8]Table 6 is based on consumption by use in the Federal Republic of Germany, Italy, Japan, the United Kingdom and the United States, as figures for other countries for years 1960 and 1965 are not available. It should be noted that although trends in use of lead have been similar in most consuming countries, the importance of each use may vary from country to country. Thus, the battery sector which has increased its dominant position in total lead consumption takes a more important share in the United States (73 per cent of all lead consumption in 1985) while its share in Japan and the EEC is lower (64 per cent and 36 per cent in the same year, respectively). In developing countries, consumption is also dominated by batteries which, for example, accounted for 66 per cent of lead usage in Brazil in 1985.

[9]SLI - starting, lighting, ignition.

[10]In 1980 constant or real dollars, deflated by the c.i.f. Manufacturing Unit Value Index (MUV - Industrial market economies' indices of US dollar unit values of manufactured exports to developing countries. The c.i.f. index combines a 90 per cent weight of f.o.b. export prices with a 10 per cent weight of transport costs).

SECTION III

INTERNATIONAL TRADE[1]

31. This section discusses briefly export and import flows in lead concentrates, lead bullion and refined lead from 1975 to 1985. It also describes the direction of trade in these products by main exporters and importers in 1985. More detailed information on trade flows in lead and lead products, semi-manufactures and manufactures included, is provided in Section IV which examines the world trade in lead on a tariff line basis together with individual tariff treatment in developed country markets and some developing countries.

32. According to the statistics of the International Lead and Zinc Study Group, in 1985 the volume of trade[1] in lead concentrates represented 16.5 per cent of world mine production and 5.7 per cent and 14 per cent of world smelting and refining, respectively. Data shown below indicate total world trade in the above mentioned products in the period from 1975 to 1985.

Thousand tons	1975	1979	1980	1981	1982	1983	1984	1985
Ores/concentrates (lead content)								
Exports	640.4 (571.2)	649.7 (544.2)	667.9 (583.4)	718.9 (645.6)	642.1 (596.4)	646.4 (593.2)	660.2 (600.1)	635.0 (575.3)
Imports	620.9 (557.9)	711.5 (620.7)	723.4 (638.9)	724.9 (649.8)	638.5 (584.3)	655.7 (594.2)	700.9 (651.7)	676.8 (612.5)
Lead bullion								
Exports	230.5 (199.5)	292.9 (231.4)	248.6 (214.9)	203.2 (176.4)	260.5 (222.6)	249.7 (201.0)	293.5 (239.0)	242.3 (198.1)
Imports	247.3 (210.8)	296.8 (246.0)	277.3 (237.7)	192.4 (165.9)	253.0 (204.9)	202.3 (144.8)	242.6 (206.9)	247.1 (225.5)
Refined lead								
Exports	868.2 (715.2)	1,006.2 (804.7)	1,108.4 (889.7)	910.0 (694.5)	1,024.0 (831.1)	1,019.1 (810.8)	971.9 (741.4)	1,010.9 (788.0)
Imports	811.0 (672.7)	1,112.7 (894.0)	1,015.7 (807.6)	943.5 (725.5)	964.9 (756.1)	991.4 (783.3)	1,023.4 (773.3)	986.7 (749.7)

Note: The totals shown above include published data on exports and imports reported by market economy countries together with estimates of trade between centrally-planned economies and other countries not covered by official trade statistics. Trade among centrally-planned economies is excluded, intra-EEC trade is included. The figures in brackets indicate the world total excluding intra-EEC trade.

Exports

33. In volume terms, world exports of lead ores and concentrates accounted for 575,000 tons in 1985, about the same level as in 1975 but below lead concentrates exports in the previous four years. The major change in the pattern of exports has been the emergence of South Africa as a substantial exporter since 1980, after the opening of the Black Mountain mine. South Africa became the second largest exporter after Peru, preceding Australia and Canada. Canada was the top exporter until 1981; its exports thereafter declined both in volume and in share of the total world exports to subsequently displace it from its leading position. In 1985, other principal exporting countries in decreasing order of importance were Morocco, Thailand, Sweden, Iran, Honduras and the EEC (Ireland and Italy). The figures on world exports of lead ores and concentrates from 1975 to 1985 are given in Table 9. Exports of lead bullion are mainly undertaken by developed countries which accounted for about 89 per cent of total world exports of this product in 1985. (See Table 10) They are dominated by Australia, which in the same year was responsible for 82 per cent of world exports, amounting to about 200,000 tons.

34. Developed countries are also the major exporters of refined lead. Their share in world refined lead exports of about 800,000 tons in 1985 was 65.5 per cent. Of this amount, Australia and Canada accounted for one-half, 29 per cent and 21 per cent, respectively. Other major developed country exporters are the EEC (mainly Spain and the Federal Republic of Germany) and Sweden. Refined lead exports of developing countries amounted to about 240,000 tons in 1985 and represented about 33 per cent of total world exports. The six developing country exporters were, in decreasing order of importance, the following: Mexico (12.6 per cent of world trade), Peru (8.1 per cent), Morocco (6.9 per cent), Taiwan (2.6 per cent), Yugoslavia (1.9 per cent) and Zambia (0.6 per cent). (See Table 11) As can be seen from the Tables on exports, centrally-planned economies practically do not export any of the above-mentioned products. The exception is exports of bullion by the People's Democratic Republic of Korea.

Imports

35. Developed countries accounted for over 86 per cent of world imports of lead ores and concentrates totalling 613,000 tons in 1985. Compared with 1975, their imports increased in both volume and percentage share, mainly due to increased imports by Japan. In contrast, imports of developing countries declined both in volume and as a proportion of total trade as Mexico expanded its lead mine production to meet its domestic requirements. Table 12 indicates that in 1985 the EEC was the largest importer of lead ores and concentrates (53.1 per cent), followed by Japan (25.7 per cent), the USSR (8.2 per cent) and the United States

TABLE 9

WORLD EXPORTS OF LEAD ORES AND LEAD CONCENTRATES, 1975-1985
(Thousands of Metric Tons)

	1975	1978	1979	1980	1981	1982	1983	1984	1985
Total Trade	640.4	710.8	649.7	667.9	718.9	642.1	646.4	660.2	635.0
Total trade excluding intra-EEC trade	(571.1)	(616.4)	(544.2)	(579.5)	(645.6)	(596.4)	(593.2)	(600.1)	(575.3)
Developing countries, of which	210.1	286.7	244.3	223.3	245.8	230.4	267.6	264.3	237.6
Algeria	2.8	0.6	2.2	2.0*	2.0*	2.0*	2.0*	2.0*	2.0*
Argentina	-	-	1.6	-	10.6	10.5	12.8	5.8	8.7
Bolivia	17.7	16.5	12.8	15.9	15.6	12.0	9.3	2.4	1.6
Congo	2.0*	2.5*	5.0*	6.0*	6.0*	6.0*	6.0*	6.0*	4.0
Honduras	18.2	21.8	16.4	9.9	11.6	8.7	15.4	20.8	19.6
Iran	34.5	29.6	15.1	10.0*	20.0*	15.0*	20.0*	20.0*	20.0*
Korea, Rep.of	4.4	7.4	4.3	2.6	5.0	0.5	-	0.6	0.9
Mexico	-	4.1	-	-	-	-	-	4.4	9.3
Morocco	62.9	81.0	79.6	69.7	60.3	41.4	45.5	56.3	37.8
Peru	64.5	97.4	90.2	86.3	83.4	106.7	128.4	117.8	105.0
Philippines	2.2	1.4	3.3	1.9	1.1	-	-	-	-
Thailand	0.9	0.5	5.7	13.0	22.5	22.6	25.6	25.0	26.0
Yugoslavia	-	23.9	8.1	6.0	7.7	5.0	2.6	3.2	2.9
Developed countries,	418.3	420.1	393.4	433.6	468.1	407.8	370.8	390.9	393.2
of which:	(349.0)	(325.7)	(287.9)	(345.2)	(383.5)	(362.1)	(317.6)	(330.8)	(333.5)
Australia	39.8	72.0	25.1	15.6	22.2	36.4	45.3	65.7	80.8
Canada	211.9	142.7	151.5	147.2	146.1	106.7	85.5	72.9	62.6
EEC	88.7	113.2	144.9	135.4	105.4	102.0	102.4	120.1	106.9
	(19.4)	(18.8)	(39.4)	(47.0)	(32.1)	(56.4)	(49.2)	(60.0)	(47.2)
Belgium	0.0	0.0	0.6	3.9	-	0.0	0.0	-	-
	(-)	(-)	(0.6)	(2.3)	(-)	(-)	(-)	(-)	(-)
Denmark	25.6	31.4	29.7	28.9	28.9	21.5	24.9	18.9	16.9
	(6.0)	(2.0)	(9.9)	(11.2)	(0.5)	(7.9)	(3.5)	(-)	(3.1)
France	5.2	0.0	0.0	0.0	0.1	0.0	2.0	0.1	-
	(0.1)	(0.0)	(0.0)	(0.0)	(0.1)	(0.0)	(0.0)	(0.1)	(-)
Germany, F.R.	2.0	-	1.5	1.2	0.2	0.0	0.4	0.0	6.7
	(0.8)	(-)	(1.5)	(1.2)	(0.2)	(-)	(-)	(-)	(0.6)
Greece	6.5	26.0	30.1	19.5	12.5	29.0	22.1	20.2	10.9
	(4.2)	(4.7)	(16.6)	(4.5)	(7.4)	(23.0)	(13.1)	(14.7)	(7.0)
Ireland	36.3	43.3	68.0	60.3	28.9	33.4	35.3	36.4	35.4
	(-)	(7.0)	(5.6)	(17.3)	(7.0)	(9.5)	(16.2)	(16.2)	(15.5)
Italy	13.1	12.5	12.6	13.9	11.3	14.0	13.7	20.1	13.7
	(8.3)	(5.1)	(5.2)	(6.7)	(5.6)	(14.0)	(13.7)	(19.5)	(13.0)
Spain	-	0.0	0.0	5.6	19.3	0.1	-	20.4	20.3
	(-)	(-)	(0.0)	(1.7)	(11.3)	(-)	(-)	(7.1)	(7.0)
United Kingdom	-	-	2.4	2.1	4.2	4.0	4.0	4.0	3.0
	(-)	(-)	(-)	(2.1)	(-)	(2.0)	(2.7)	(2.4)	(1.0)
Finland	-	2.0	1.5	0.7	1.9	-	-	3.8	3.1
Norway	2.0	3.2	3.7	2.4	3.4	3.6	4.1	3.7	3.7
South Africa	1.9	-	0.1	72.3	101.5	101.8	84.2	85.5	101.7
Sweden	28.2	32.8	33.7	32.4	52.0	28.1	29.2	27.3	24.5
Switzerland	0.0	-	-	-	2.5	0.0	-	-	-
United States	45.8	54.2	32.9	27.6	33.0	29.1	20.1	11.9	9.9
Centrally-planned economies,	12.0	4.0	12.0	11.0	5.0	4.0	8.0	5.0	4.0
of which:									
Bulgaria	-	-	6.0	6.0	-	-	-	-	-
Czechoslovakia	4.0	4.0	5.0	4.0	4.0	3.0	4.0	4.0	4.0
Other	8.0	-	1.0	1.0	1.0	1.0	4.0	1.0	-

*Estimated

Source: International Lead and Zinc Study Group

TABLE 10

WORLD EXPORTS OF LEAD BULLION, 1975-1985
(Thousands of Metric Tons)

	1975	1978	1979	1980	1981	1982	1983	1984	1985
Total trade	230.5	257.2	292.9	248.6	203.2	260.5	249.7	293.5	242.3
Total trade excluding intra-EEC trade	(199.5)	(211.7)	(231.4)	(212.7)	(176.4)	(222.6)	(201.0)	(239.0)	(198.1)
Developing countries, of which:	5.2	4.6	9.3	5.4	6.9	11.4	5.0	2.5	8.0
Korea, Rep. of	-	1.3	1.9	2.6	0.1	-	-	0.0	0.9
Mexico	5.0	3.2	6.4	6.7	4.7	11.4	5.0	2.5	7.1
Yugoslavia	0.2	0.1	0.3	0.1	2.1	-	-	-	-
Developed countries,	190.3	222.6	259.6	214.2	184.3	229.1	234.7	273.0	220.3
	(159.3)	(177.1)	(198.1)	(178.3)	(157.5)	(191.2)	(186.0)	(218.5)	(176.1)
of which:									
Australia	142.4	147.1	161.7	153.9	136.6	165.4	161.4	201.2	162.9
EEC	32.7	49.1	57.5	42.2	27.8	39.7	51.5	54.7	45.1
	(1.7)	(3.6)	(2.7)	(6.3)	(1.0)	(1.2)	(2.8)	(3.9)	(4.1)
Belgium	4.2	1.4	1.2	1.2	1.5	0.2	0.5	0.8	2.5
	(n.a.)	(n.a.)	(0.4)	(0.9)	(0.5)	(0.1)	(0.5)	(0.7)	(2.0)
Denmark	-	0.4	-	0.3	0.1	-	0.1	0.2	0.3
	(-)	(n.a.)	(-)	(0.2)	(0.0)	(-)	(-)	(0.2)	(0.1)
France	2.2	10.2	6.1	9.2	0.8	1.3	2.9	3.8	2.5
	(0.8)	(3.3)	(0.0)	(4.4)	(0.0)	(0.0)	(1.2)	(0.5)	(0.0)
Germany, F.R.	1.7	1.1	2.5	0.5	1.3	2.2	2.9	0.8	-
	(0.9)	(0.1)	(0.5)	(-)	(0.2)	(0.8)	(0.1)	(0.0)	(-)
Italy	-	3.0	15.3	0.6	0.0	0.0	0.0	-	0.6
	(-)	(-)	(1.8)	(0.4)	(-)	(0.0)	(-)	(-)	(-)
Netherlands	-	0.2	0.3	-	0.4	-	0.5	-	0.3
	(-)	(n.a.)	(n.a.)	(-)	(0.3)	(-)	(-)	(-)	(-)
Spain	-	5.2	17.0	2.2	11.2	0.0	0.0	3.7	3.2
	(-)	(-)	(10.3)	(-)	(11.2)	(0.0)	(0.0)	(-)	(-)
United Kingdom	24.6	27.6	32.1	28.2	23.7	35.4	44.6	49.1	38.9
	(-)	(0.2)	(0.0)	(0.4)	(0.1)	(0.3)	(1.0)	(2.4)	(2.0)
Norway	-	-	0.0	-	0.0	0.0	0.1	0.0	0.0
Sweden	15.2	26.4	23.4	18.1	8.7	24.6	21.7	13.4	9.1
Centrally-planned economies, of which:	35.0	30.0	24.0	25.0	12.0	20.0	10.0	18.0	14.0
Korea, P.D.R.	35.0	30.0	24.0	25.0	12.0	20.0	10.0	18.0	14.0

Source: International Lead and Zinc Study Group

TABLE 11

WORLD EXPORTS OF REFINED LEAD, 1975-1985
(Thousands of Metric Tons)

	1975	1978	1979	1980	1981	1982	1983	1984	1985
Total trade	868.2	978.9	1,006.2	1,101.4	910.0	1,024.0	1,019.1	971.9	1,010.9
Total trade excluding intra-EEC trade	(713.9	(775.1)	(804.7)	(879.2)	(694.5)	(831.1)	(810.8)	(741.4)	(788.0)
Developing countries, of which:	278.6	283.9	278.8	242.5	222.?	235.5	252.9	222.9	258.8
Argentina	-	1.1	0.6	4.6	0.3	0.1	-	-	-
Mexico	109.9	111.9	111.0	88.9	66.3	58.7	89.8	82.2	98.9
Morocco	4.4	28.1	32.2	32.8	43.9	51.9	59.7	46.1	54.7
Peru	62.7	74.2	69.7	59.3	80.3	66.1	55.4	58.6	64.1
Tunisia	20.6	12.2	11.1	11.9	6.5	14.8	1.3	0.1	0.5*
Yugoslavia	62.4	41.9	35.3	24.7	14.0	17.8	18.0	14.0	15.0
Zambia	17.9	10.0	8.5	8.9	8.3	11.3	12.7	6.0	5.0
Other	0.7	4.5	10.4	11.4	3.1	14.8	16.0	15.9	20.6
Developed countries	545.6	670.0	692.8	831.9	670.3	764.5	750.2	732.0	739.1
	(391.3)	(466.2)	(491.3)	(609.7)	(454.8)	(571.6)	(541.9)	(501.5)	(516.2)
of which:									
Australia	117.1	148.7	172.2	165.2	170.5	194.8	180.6	147.3	153.9
Austria	3.4	0.7	0.4	0.4	0.3	0.8	0.8	0.5	1.0
Canada	110.9	132.0	118.0	126.5	119.8	146.1	147.3	120.7	113.9
EEC	221.0	320.0	332.0	330.0	323.9	320.9	326.2	382.5	354.6
	(66.7)	(116.2)	(130.5)	(107.8)	(108.4)	(128.0)	(117.9)	(152.0)	(131.7)
Belgium	55.0	74.8	65.0	70.8	62.2	56.8	69.8	77.8	59.4
	(8.3)	(23.0)	(21.8)	(15.5)	(12.4)	(22.9)	(14.0)	(20.3)	(18.9)
Denmark	1.2	10.0	5.8	3.9	5.9	2.6	0.3	9.7	3.5
	(1.1)	(2.6)	(5.1)	(3.8)	(5.8)	(2.6)	(0.3)	(9.1)	(3.2)
France	5.6	24.7	47.9	33.5	58.6	52.2	45.3	46.3	55.9
	(3.3)	(10.2)	(23.7)	(7.3)	(16.9)	(10.0)	(8.7)	(11.4)	(10.0)
Germany, F.R.	73.6	98.9	97.5	97.7	86.7	80.3	110.4	99.3	99.3
	(20.7)	(34.2)	(27.9)	(29.9)	(27.8)	(36.1)	(44.1)	(40.4)	(38.0)
Greece	1.0	1.1	0.1	0.6	1.5	-	-	2.0	-
	(0.9)	(0.6)	(0.1)	(0.1)	(0.8)	(-)	(-)	(2.0)	(-)
Ireland	2.0	3.1	-	-	0.9	0.1	-	0.2	0.1
	(-)	(-)	(-)	(-)	(0.3)	(0.1)	(-)	(0.2)	(-)
Italy	3.2	4.2	4.6	1.8	4.1	3.9	5.3	8.0	10.2
	(3.0)	(4.1)	(4.2)	(1.7)	(2.6)	(3.8)	(5.2)	(7.9)	(9.9)
Netherlands	22.8	20.3	16.2	16.4	11.0	12.3	11.7	13.6	19.0
	(10.2)	(4.6)	(1.4)	(2.2)	(3.0)	(2.1)	(0.6)	(1.2)	(2.5)
Spain	1.6	5.3	1.9	5.5	12.2	33.3	39.7	57.6	52.6
	(0.3)	(1.6)	(-)	(2.0)	(5.5)	(28.5)	(30.2)	(46.2)	(42.0)
United Kingdom	55.0	77.6	93.0	99.8	80.8	59.4	43.7	68.0	54.6
	(18.9)	(35.3)	(46.3)	(45.3)	(33.3)	(21.9)	(14.8)	(13.3)	(7.2)
Finland	0.1	0.8	1.0	0.9	0.5	-	1.2	0.0	-
Japan	39.5	7.8	9.2	6.3	2.9	7.5	14.4	16.5	24.4
Norway	0.2	0.0	0.1	-	0.0	-	0.0	-	-
South Africa	26.5	27.6	25.0	27.3	18.2	18.6	23.8	9.1	14.3
Sweden	11.4	26.4	2 .6	21.2	15.7	26.5	30.7	43.9	41.5
Switzerland	1.8	2.8	4.9	4.1	4.8	5.1	7.7	6.8	10.7
United States	16.7	3.2	7.4	150.0	13.7	44.2	17.5	4.7	24.8
Centrally-planned economies, of which:	44.0	25.0	34.6	27.0	17.0	24.0	16.0	17.0	13.0
Bulgaria	15.0	10.0	12.0	5.0	4.0	5.0	-	1.0	1.0
Korea, P.D.R.	15.0	6.0	6.0	13.0	4.0	5.0	6.0	1.0	-
Poland	0.0	-	4.6	-	-	-	-	-	-
USSR	11.0	8.0	10.0	7.0	7.0	10.0	8.0	10.0	10.0
Other	3.0	1.0	2.0	2.0	2.0	4.0	2.0	5.0	2.0

* Estimated

Source: International Lead and Zinc Study Group

TABLE 12

WORLD IMPORTS OF LEAD ORES AND LEAD CONCENTRATES, 1975-1985
(Lead content; thousands of metric tons)

	1975	1978	1979	1980	1981	1982	1983	1984	1985
Total trade	620.9	667.5	711.5	723.4	724.9	638.5	655.7	700.9	676.8
Total trade excluding intra-EEC trade	(556.8)	(589.9)	(620.7)	(630.5)	(649.8)	(584.3)	(594.2)	(651.7)	(612.5)
Developing countries, of which:	52.9	103.8	107.8	88.8	68.9	44.7	32.9	24.5	23.7
Brazil	14.9	26.9	25.2	20.9	9.2	-	4.0	6.4	16.5
India	-	-	-	0.9	3.6	7.1	5.0	-	-
Mexico	13.3	60.8	58.4	34.4	23.1	9.0	10.0	4.2	-
Romania	2.0	4.0	18.0	25.0	20.0	15.0	10.0	5.0	7.0
Tunisia	12.7	8.7	5.0	6.0	12.4	13.6	-	8.6	-
Yugoslavia	10.0	3.4	1.2	1.6	0.6	-	3.9	0.3	0.2
Developed countries,	523.0	483.7	505.7	566.6	566.0	535.8	551.8	618.4	592.1
	(456.9)	(406.1)	(414.9)	(473.7)	(501.2)	(481.6)	(490.3)	(569.2)	(527.8)
of which:									
Austria	7.4	2.6	3.7	2.5	1.0	4.2	2.8	4.2	2.2
Canada	2.5	4.8	1.6	50.9	48.4	34.4	18.5	21.6	0.3
EEC	310.4	294.1	326.4	328.9	323.6	324.9	325.1	344.4	389.7
	(246.3)	(216.4)	(235.6)	(236.0)	(248.5)	(270.7)	(263.6)	(295.2)	(325.4)
Belgium	43.8	36.2	39.9	36.7	37.4	47.7	38.5	30.4	51.7
	(34.8)	(25.4)	(25.0)	(26.0)	(35.7)	(43.3)	(31.5)	(24.8)	(45.8)
France	90.9	87.7	87.6	90.7	92.8	109.4	94.0	103.2	123.8
	(60.8)	(56.0)	(52.7)	(55.5)	(65.2)	(85.4)	(78.5)	(88.3)	(97.1)
Germany, F.R.	118.8	96.4	108.4	102.9	121.7	108.9	123.4	117.1	146.6
	(103.5)	(87.8)	(95.2)	(88.8)	(102.7)	(95.7)	(109.1)	(111.0)	(132.5)
Greece	3.8	16.8	15.8	18.3	10.2	8.7	0.5	3.2	-
	(n.a.)	(-)	(1.4)	(5.1)	(2.1)	(8.7)	(0.5)	(1.3)	(-)
Italy	8.9	12.1	29.1	28.8	15.8	0.2	3.6	7.4	6.6
	(6.4)	(6.4)	(22.3)	(21.3)	(12.1)	(0.2)	(3.6)	(7.4)	(6.6)
Spain	14.6	20.0	9.1	16.8	16.9	21.0	39.7	48.4	32.7
	(13.6)	(14.0)	(8.2)	(8.4)	(6.6)	(10.5)	(18.3)	(29.0)	(16.7)
United Kingdom	29.6	30.9	36.5	34.7	28.8	29.0	25.4	34.7	28.3
	(27.2)	(26.9)	(30.8)	(30.9)	(24.1)	(26.9)	(22.1)	(33.4)	(26.7)
Japan	118.5	129.2	131.0	137.1	134.2	136.5	145.4	169.4	157.1
United States	79.4	53.0	40.0	44.1	58.5	35.8	47.5	78.8	42.8
Other	4.8	-	3.0	3.1	0.3	-	12.5	-	-
Centrally-planned economies, of which:	45.0	80.0	98.0	68.0	90.0	58.0	71.0	58.0	61.0
Bulgaria	1.0	15.0	25.0	15.0	28.0	10.0	10.0	8.0	4.0
Germany, D.R.	5.0	5.0	3.0	3.0	2.0	-	-	-	-
USSR	30.0	40.0	70.0	50.0	60.0	45.0	55.0	45.0	50.0
Other	9.0	20.0	-	-	-	3.0	6.0	5.0	7.0

Source: International Lead and Zinc Study Group

(7 per cent). In the same year, almost 84 per cent of world imports of lead bullion were destined to the member States of the European Economic Community, of which about 65 per cent were imported by the United Kingdom, and 9 per cent by the Federal Republic of Germany. Japanese imports of lead bullion increased in 1985 and accounted for the remaining 16 per cent (Table 13).

36. The major change in the pattern of imports of refined lead has been the increase of imports by several developing countries. Compared to 1975, their imports rose by about 80 per cent, to 240,000 tons in 1985 and their share from about 20 per cent in 1975 to 32 per cent in 1985. Table 14 indicates that among others, developing countries importing refined lead were the following: The Republic of Korea, India, Iran, Malaysia, Indonesia and the Philippines. In contrast, the share of world imports by developed countries and centrally-planned economies in 1985 were 4 percentage points and about 7 percentage points lower than their share of imports in 1975, respectively. This was mainly due to reduced imports by the United States and the People's Republic of China.

Direction of Trade

37. Table 15 shows destinations of exports of lead ores and concentrates, lead bullion and refined lead by main suppliers in 1985. Peru is the largest exporter of lead ores and concentrates. Its exports of these products in 1985 were almost twice as high as its exports in 1975. Though the United States and Japan have remained its major customers, the EEC, namely Belgium-Luxembourg, has increased its purchases of Peruvian lead concentrates since the early 1980s. The shares of these countries in Peru's exports of lead concentrates in 1985 were as follows: the EEC 36 per cent, Japan, 26 per cent and the United States, 24 per cent. Lead ores and concentrates exports of South Africa, the second largest exporter of these items since 1980, are mainly oriented towards the EEC. Australian lead ores and concentrates exports showed large fluctuations over the last few years. In 1985, most of its exports were destined to Japan, the EEC and the United States (33.9 per cent, 33.7 per cent and 18 per cent, respectively). In contrast to the above-mentioned countries, exports of lead ores and concentrates by Canada substantially decreased in the last decade and in 1985 they were 70 per cent below the level in 1975. Japan which was previously the principal buyer of Canadian lead ores, did not import any ores and concentrates in 1983 and 1984 and its imports in 1985 were about one-tenth of its imports in 1975. In the same period, imports of its other two largest customers, the United States and the EEC also declined. As mentioned before, lead bullion is principally exported by Australia. Its exports have been mainly destined to the EEC and since 1984-85 to Japan (63 per cent and 37 per cent of total exports in 1985, respectively).

TABLE 13

WORLD IMPORTS OF LEAD BULLION, 1975-1985
(Thousands of Metric Tons)

	1975	1978	1979	1980	1981	1982	1983	1984	1985
Total trade	247.3	253.8	296.8	277.3	192.4	253.0	202.3	242.6	247.1
Total trade excluding intra-EEC trade	(210.8)	(212.8)	(246.0)	(237.2)	(165.9)	(204.9)	(144.8)	(206.9)	(225.5)
Developing countries, of which:	5.4	1.5	1.1	1.6	1.3	0.7	1.4	1.3	0.8
Korea, Rep. of	-	0.7	0.4	1.5	1.2	0.5	1.0	1.1	0.6*
Philippines	-	0.2	0.4	0.1	0.1	0.2	0.4	0.2	0.2*
Yugoslavia	5.4	0.6	0.3	-	-	-	-	-	-
Developed countries,	241.9	249.3	285.3	267.3	191.1	252.3	200.9	241.3	246.3
	(205.4)	(208.3)	(234.5)	(227.2)	(164.6)	(204.2)	(143.4)	(205.6)	(224.7)
of which:									
EEC	241.5	242.2	277.7	257.2	182.1	245.3	196.3	220.4	210.4
	(205.0)	(201.3)	(226.9)	(217.1)	(155.6)	(197.2)	(138.8)	(184.7)	(188.8)
Belgium	8.9	37.0	37.3	25.7	15.2	15.8	43.5	22.9	21.6
	(6.4)	(25.2)	(20.6)	(14.7)	(8.5)	(9.4)	(21.6)	(22.4)	(21.6)
France	8.0	1.5	14.3	12.0	1.7	4.0	1.3	1.2	0.4
	(5.0)	(-)	(9.6)	(11.3)	(1.1)	(2.7)	(0.4)	(0.5)	(0.1)
Germany, F.R.	84.8	62.7	61.3	69.9	46.2	74.7	51.2	43.0	38.3
	(53.8)	(41.2)	(33.0)	(42.3)	(33.3)	(54.2)	(39.0)	(26.7)	(19.9)
Italy	9.8	5.9	2.0	4.5	9.0	17.9	16.2	15.2	4.2
	(9.8)	(0.1)	(0.9)	(4.2)	(2.9)	(10.0)	(3.2)	(1.0)	(1.7)
Netherlands	13.1	11.7	10.3	8.2	0.1	9.0	2.0	-	-
	(13.1)	(11.6)	(10.3)	(8.2)	(-)	(8.9)	(2.0)	(-)	(-)
Spain	-	0.2	0.1	(-)	(0.0)	(-)	(-)	(-)	(-)
	(-)	(-)	(0.1)	(0.5)	(0.0)	(-)	(-)	(-)	(-)
United Kingdom	116.9	123.2	152.5	136.4	109.9	123.9	82.1	138.1	145.9
	(116.9)	(123.2)	(152.5)	(136.4)	(109.8)	(112.0)	(72.6)	(134.1)	(145.5)
Japan	-	2.5	5.1	8.9	8.3	6.9	3.8	19.8	34.0
Norway	-	-	0.5	0.7	0.0	0.0	0.6	0.9	0.9
Sweden	-	0.2	0.2	0.2	0.3	0.1	0.1	0.2	0.3
United States	0.4	4.4	1.7	0.3	0.4	0.0	0.1	0.0	0.7
Centrally-planned economies, of which:	-	3.0	10.4	8.4	-	-	-	-	-
Bulgaria	-	-	-	3.5	-	-	-	-	-
Czechoslovakia	-	-	-	0.9*	-	-	-	-	-
USSR	-	3.0	10.4	4.0*	-	-	-	-	-

* Estimated

Source: International Lead and Zinc Study Group

TABLE 14

WORLD IMPORTS OF REFINED LEAD, 1975-1985
(Thousands of Metric Tons)

	1975	1978	1979	1980	1981	1982	1983	1984	1985
Total trade	811.0	1,037.6	1,112.7	1,015.7	943.5	964.9	991.4	1,023.4	986.7
Total trade excluding intra-EEC trade	(658.2)	(819.2)	(894.0)	(787.2)	(725.5)	(756.1)	(783.3)	(773.2)	(749.7)
Developing countries, of which:	131.7	164.3	177.6	164.0	181.0	226.7	248.6	203.6	240.3
Algeria	7.8	7.9	4.2	6.4	3.6	0.6	0.3	2.7	6.8
Brazil	12.5	0.8	0.6*	-	0.2*	0.6*	0.6*	0.7	2.1
Egypt	15.2	16.0	15.0*	14.0*	15.0*	16.0*	28.0*	10.1	11.0
India	14.4	29.3	39.6	31.0	31.7	66.0	61.3	38.9	39.7
Indonesia	2.6	6.5	5.7	7.4*	8.7	11.4	11.8	12.3	11.3
Iran	14.0	10.6	3.6	2.0*	11.4	16.8	25.1	16.2	22.4
Israel	0.8	2.1	2.9	1.1	1.9	1.8	1.2	0.8	1.0
Korea, Rep. of	4.5	20.5	19.1	18.2	16.7	16.5	22.2	26.2	42.3
Malaysia	1.0	5.2	4.7	5.8	7.9	7.9	7.6	8.1	11.7
Philippines	6.4	7.5	7.0	4.6	6.0	5.7	9.0	5.7	9.2
Romania	5.0	4.0	11.0	10.0	10.0	10.0	5.0	5.0	5.0
Thailand	6.0	8.6	10.8	11.2	8.9	9.7	13.2	10.0	8.1
Turkey	4.7	3.3	2.9	5.5	2.7	6.3	8.0	6.8	8.4
Yugoslavia	15.6	8.8	9.6	10.1	12.1	15.6	7.1	9.9	8.0
Other	21.2	33.2	34.9	36.7	44.2	41.8	48.5	51.2	53.3
Developed countries,	539.6	732.2	696.7	711.8	624.4	607.8	635.9	719.8	643.4
	(386.8)	(513.8)	(478.0)	(483.3)	(406.4)	(399.0)	(427.8)	(469.6)	(406.4)
of which:									
Austria	15.9	24.5	29.5	32.4	35.7	32.5	31.4	38.3	37.4
Canada	2.0	1.7	2.3	2.6	9.2	5.7	2.6	6.3	5.5
EEC	364.8	387.3	378.0	463.2	369.7	376.8	375.7	398.1	375.1
	(212.0)	(168.9)	(159.3)	(234.7)	(151.7)	(168.0)	(167.6)	(147.9)	(138.1)
Belgium	9.3	12.7	18.3	21.8	24.8	27.1	18.6	33.9	24.6
	(0.4)	(0.1)	(1.2)	(9.9)	(5.2)	(4.7)	(0.3)	(10.1)	(4.9)
Denmark	6.4	6.7	6.4	3.2	2.2	4.2	9.6	14.1	16.9
	(5.2)	(5.5)	(1.2)	(1.7)	(0.7)	(2.6)	(1.6)	(6.5)	(7.0)
France	42.8	32.6	35.5	35.4	36.5	37.1	44.3	51.2	39.2
	(2.0)	(1.6)	(1.8)	(6.6)	(5.5)	(8.8)	(3.7)	(7.4)	(5.9)
Germany, F.R.	32.8	63.4	62.6	90.7	67.5	76.9	64.1	99.0	92.4
	(10.6)	(5.5)	(6.9)	(23.7)	(8.0)	(9.8)	(5.4)	(4.8)	(8.2)
Greece	7.9	6.4	5.0	7.8	5.8	18.7	24.4	12.2	9.8
	(n.a.)	(n.a.)	(n.a.)	(7.6)	(4.7)	(14.3)	(22.0)	(8.9)	(8.0)
Ireland	1.7	4.2	4.0	3.2	2.2	1.5	0.9	0.3	0.1
	(n.a.)	(0.4)	(0.2)	(-)	(-)	(0.1)	(-)	(0.3)	(-)
Italy	125.4	136.7	147.9	171.6	122.4	108.2	115.2	107.6	108.0
	(94.0)	(92.5)	(99.1)	(115.2)	(73.6)	(70.7)	(75.4)	(66.3)	(61.1)
Netherlands	41.5	38.6	37.1	46.0	34.2	32.8	30.1	26.8	24.9
	(17.4)	(1.2)	(1.9)	(8.3)	(2.9)	(2.5)	(6.0)	(0.3)	(0.0)
Portugal	8.2	14.3	13.1	16.5	17.8	18.6	16.3	13.9	20.5
	(n.a.)	(n.a.)	(-)	(n.a.)	(2.0)	(8.9)	(8.2)	(8.9)	(10.1)
Spain	6.8	3.5	1.0	3.9	6.8	6.0	6.7	4.1	2.2
	(0.5)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)
United Kingdom	82.3	68.2	47.1	63.1	49.5	45.7	45.3	35.0	36.5
	(81.9)	(62.3)	(47.0)	(61.7)	(49.1)	(45.6)	(45.0)	(34.4)	(22.9)
Finland	13.0	12.0	15.5	20.5	20.9	19.2	12.1	14.5	18.6
Japan	15.8	48.4	50.2	69.1	48.7	45.5	49.0	63.6	39.6
New Zealand	7.8	8.6	6.6	6.8	5.2	6.0	5.1	4.9	4.5
Norway	8.2	7.4	6.5	7.7	6.5	12.3	11.6	13.3	12.8
South Africa	3.3	5.7	3.4	9.2	9.3	4.0	5.4	9.9	3.9
Sweden	3.2	0.3	1.5	0.6	7.1	1.7	1.9	0.5	1.7
Switzerland	14.4	15.0	11.6	18.0	10.2	12.9	10.4	7.1	10.7
United States	91.2	221.3	191.6	81.7	101.9	91.2	130.7	163.3	133.6
Centrally-planned economies, of which:	139.7	141.1	238.4	139.9	138.1	130.4	106.6	100.0	103.0
China, P.R.	55.0	40.0	50.0	35.0	30.0	15.0	10.0	5.0	5.0
Czechoslovakia	16.0	14.0	15.0	15.0	15.0	15.0	15.0	18.0	18.0
Germany, D.R.	3.0	2.0	7.0	5.0	8.0	8.0	4.0	4.0	4.0
Hungary	1.0	4.0	2.0	2.0	2.0	4.0	2.0	2.0	2.0
Poland	14.7	5.1	5.4	1.9	3.1	6.4	1.6	6.0	6.0
USSR	48.0	70.0	150.0	80.0	80.0	80.0	70.0	60.0	65.0
Other	2.0	6.0	9.0	1.0	-	2.0	4.0	5.0	3.0

*Estimated

Source: International Lead and Zinc Study Group

TABLE 15

DIRECTION OF TRADE BY MAIN EXPORTING COUNTRIES, 1985
(as percentage share of total exports)

Lead ores and concentrates		Lead bullion		Refined lead	
Country	%	Country	%	Country	%
Peru*	105.0	Australia	162.9	Australia	153.9
to: EEC	35.9	to: EEC	62.9	to: India	29.2
Japan	26.0	Japan	36.9	Japan	13.6
United States	24.1	Other	0.2	Iran	13.0
Brazil	3.7			EEC	9.8
Korea, P.D.R.	3.2			Indonesia	7.1
Yugoslavia	2.4			Korea, Rep. of	5.2
USSR	2.3			Thailand	3.3
Other	2.4			Other	19.8
South Africa	101.7			EEC*	131.7
to: EEC	n.a.			to: USSR	31.2
Japan	n.a.			Austria	21.2
				Egypt	7.6
Australia	80.8			Turkey	5.1
to: Japan	33.9			Switzerland	3.4
EEC	33.7			Czechoslovakia	3.0
United States	18.1			Other	29.5
South Africa	8.3				
Other	6.0			Canada	113.9
				to: United States	64.9
Canada	62.6			EEC	30.7
to: EEC	54.3			Other	4.4
Japan	22.4				
United States	16.0			Mexico	98.9
Other	7.3			to: EEC	53.6
				United States	29.8
				Japan	4.6
				Cuba	4.2
				Other	7.8
				Peru	64.1
				to: EEC	43.5
				Korea, Rep. of	27.2
				Venezuela	11.7
				Japan	8.5
				United States	6.8
				Other	2.3
				Morocco*	54.7
				to: EEC	67.6
				Other	32.4
				Sweden	41.5
				to: USSR	40.0
				EEC	33.8
				Norway	12.2
				Finland	11.6
				Other	2.4

*Estimates

Source: International Lead and Zinc Study Group
Metallgesellschaft: Metallstatistik, 1975-1985
Estadistica del Comercio Exterior de Espana

38. India has replaced the United Kingdom as the principal buyer of Australian refined lead. Its share in Australia's exports in 1985 was almost 30 per cent and Japan and Iran shared equally 27 per cent. Most of the remaining Australian lead metal exports were destined to other countries in South East Asia. The United States has increased considerably its imports of refined lead from Canada in the last few years and become its principal customer. In 1985, the United States bought about two-thirds of refined lead exported by Canada. In contrast the volume and share of Canada's exports into the EEC decreased in the last two years, and accounted for 31 per cent of total Canadian lead metal exports in 1985. Most refined lead exported by the EEC is consumed in other European countries, including the USSR. The latter country has been the principal importer of refined lead exported by Spain since 1982 although this ceased in 1986. The USSR has also been the major customer of Sweden, together with the EEC and other Nordic countries. The EEC is the major customer of refined lead exported by Mexico, Peru and Morocco.

39. Table 16 indicates that in 1985 Peru, followed by South Africa, Australia, Morocco, Canada and Sweden were the major suppliers of lead ores and concentrates to the EEC. In the same year, Peru became the principal supplier of lead ores and concentrates to Japan (29 per cent), followed by Australia, Canada and South Africa (25 per cent, 22.5 per cent and 13 per cent, respectively). The USSR makes most of its lead ores and concentrates purchases in Spain and Sweden, while the United States imports mainly from Peru, Australia and to a lesser extent from Canada and Honduras. Most lead bullion imported by the EEC and Japan originates from Australia. The United States has remained the largest importing country of lead metal though the volume of its imports showed large fluctuations over the last ten years. Its principal suppliers have been Canada and Mexico which supplied 67 per cent and 25 per cent of its total lead metal imports in 1985. The EEC's import requirements of refined lead are mainly covered by imports from Morocco, Canada, Mexico, Peru and Australia. Similar to lead ores and concentrates, Spain and Sweden have been the major exporters of lead metal to the USSR. The Republic of Korea purchased most of its refined metal from the countries in the same geographic region, namely Australia, Japan, the People's Republic of China, and Peru. Most lead metal imports to Japan originate from Australia and to a lesser extent from Mexico, Peru and South Africa. India buys all its lead metal from Australia.

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[1] If not otherwise mentioned all figures exclude the EEC intra-trade and trade among centrally-planned economies.

TABLE 16

DIRECTION OF TRADE BY MAIN IMPORTING, 1985
(as percentage share of total exports)

Lead ores and concentrates			Lead bullion			Refined lead		
Country		%	Country		%	Country		%
EEC		325.4	EEC		188.8	EEC		138.1
from:	Peru	35.0	from:	Australia	84.3	from:	Morocco	29.2
	South Africa	10.6		Korea, P.D.R.	2.2		Canada	22.8
	Australia	9.2		Other	13.5		Mexico	14.2
	Morocco	8.4					Peru	10.4
	Canada	6.5	Japan		34.0		Australia	10.0
	Sweden	6.0	from:	Australia	67.7		Sweden	5.7
	Honduras	4.0		Korea, P.D.R.	10.6		Other	7.7
	Iran	3.7		Other	22.7			
	Thailand	1.6				United States		133.6
	Other	15.0				from:	Canada	67.2
							Mexico	25.4
Japan		157.1					Peru	3.7
from:	Peru	29.1					Australia	3.0
	Australia	25.0					Other	0.7
	Canada	22.5						
	South Africa	13.2				USSR*		65.0
	Thailand	6.5				from:	EEC (Spain)	n.a.
	Other	3.7					Sweden	n.a.
USSR*		50.0						
from:	EEC (Spain)	n.a.				Korea, Rep. of		42.3
	Sweden	n.a.				from:	Peru	39.5
							Australia	19.6
United States		42.8					Japan	n.a.
from:	Peru	34.9					China, P.R.	n.a.
	Australia	27.9					Other	n.a.
	Canada	11.6						
	Honduras	4.7						
	Other	20.9				India		39.7
						from:	Australia*	100.0
						Japan		39.6
						from:	Australia	59.0
							Mexico	12.8
							Peru	12.8
							South Africa	5.3
							Other	10.1

* Estimates

Source: International Lead and Zinc Study Group
Metallgesellschaft: Metallstatistik, 1975-1985
Estadistica del Comercio Exterior de Espana

SECTION IV

COMMERCIAL POLICY SITUATION[1]

40. This section discusses commercial policy measures affecting trade in lead and lead products. First, it describes tariff concessions made by developed countries on lead in the Tokyo Round negotiations and refers to pre- and post-Tokyo Round rates. This part is followed by an analysis of trade flows in lead, under different tariff atment for countries participating in the Tariff Study. Information on tariff treatment and trade flows for certain developing countries is also presented. Some reference is made to the problems of tariff escalation and effective tariff protection in the lead industry. This section is concluded with a description of non-tariff measures applied to trade in lead and its products which have been notified to GATT. As explained in paragraph 6, several other metals are commonly produced in association with lead; this study does not attempt to describe the impact that trade barriers applicable to co-product and by-product metals might have on lead trade.

Tokyo Round negotiations: tariff assessment

41. Tariff concessions and the binding of m.f.n. rates of duty in lead and lead products were subjects of several trade negotiations undertaken in the GATT. In this section, the main focus is the Tokyo Round negotiations and their results in further liberalizing lead trade. It should, however, be borne in mind that any attempt to measure the importance of tariff reductions encounters a number of technical difficulties. "The main problem stems from the impossibility to correctly assess the volume of trade which will be generated by the agreed duty reductions. Instead of the future trade increment the past volume of trade is usually taken into consideration when the depth of the duty cut on individual customs tariff lines is combined in the overall assessment".[2] The methodology worked out by the Working Party on the tariff study was based on the comparison of the level of tariffs before the negotiations with the agreed level of concessional rates agreed. Two tariff averages were used: the first tariff average was a simple arithmetic average of duty rates; the second was a weighted average giving to each duty the weight of imports on which such duty was collected.[3]

42. Table 17 presents a comparison of pre- and post-Tokyo Round simple and weighted average tariffs on all industrial products (excluding petroleum) with tariff averages on unwrought lead, lead semi-manufactures and metal manufactures (other non-ferrous metals included) for nine developed country markets.[4] Weighted tariff averages of all duty rates are calculated using the m.f.n. imports at the national tariff level in 1977 (in some cases 1976) of the country concerned. Simple and weighted

TABLE 17

PRE-TOKYO ROUND AND POST-TOKYO ROUND TARIFFS IN NINE DEVELOPED MARKETS

(Percentages).

		All industrial products excluding petroleum		Unwrought lead		Lead semi-manufactures		Metal[1] manufactures	
		Pre	Post	Pre	Post	Pre	Post	Pre	Post
Nine tariffs combined	S	10.4	6.4	4.1	3.0	8.4	5.8	9.8	5.9
	W	7.0	4.6	2.6	2.3	6.8	4.8	9.3	5.7
United States	S	11.2	6.3	4.0	3.1	5.0	3.9	9.9	7.9
	W	6.3	4.3	3.6	3.4	3.2	2.4	5.5	4.5
Canada	S	12.6	7.3	9.2	5.7	11.2	7.8	14.6	8.5
	W	12.7	7.8	0.0	0.0	6.8	4.8	16.1	9.4
Japan	S	10.2	5.0	6.6	5.0	15.6	7.2	10.4	5.4
	W	5.4	2.7	5.5	4.4	11.7	6.3	9.3	5.2
Austria	S	11.7	8.1	3.3	2.7	13.0	7.0	15.9	9.6
	W	8.9	7.7	4.9	3.9	0.0	0.0	19.8	13.4
Finland	S	13.2	11.4	0.0	0.0	1.1	0.0	8.8	6.8
	W	6.9	5.5	0.0	0.0	1.1	0.0	7.7	6.2
Norway	S	8.5	6.7	0.0	0.0	1.0	0.8	7.8	5.3
	W	4.2	3.1	0.0	0.0	4.2	3.2	6.9	4.5
Sweden	S	6.0	4.8	0.0	0.0	0.0	0.0	5.1	3.8
	W	5.6	4.0	0.0	0.0	0.0	0.0	5.3	3.9
Switzerland	S	3.7	2.9	0.1	0.1	1.7	1.4	3.2	2.4
	W	2.9	2.2	0.1	0.1	2.8	2.3	3.8	2.7
EEC	S	9.1	6.4	1.2	1.2	8.9	7.2	7.8	5.6
	W	6.5	4.6	1.3	1.3	9.7	7.8	5.8	5.8

[1] Metal manufactures include all non-ferrous metals.

S: Simple average
W: Weighted average

tariff averages are broken down into three groups of products divided according to the stage of processing. Table 17 shows that tariff averages, both simple and weighted, on unwrought lead and lead semi-manufactures are, in most countries, lower than those on all industrial products taken together. The exceptions to this observation are the weighted tariff average on unwrought lead in Japan, the simple tariff average and the weighted tariff average on lead semi-manufactures in Canada and Norway, respectively, and both simple and weighted tariff averages on lead semi-manufactures in Japan and the EEC. With respect to metal manufactures (other non-ferrous metals included), eight out of nine developed country markets listed in Table 17 have higher than average tariffs on either the weighted basis, or on both the simple and weighted basis. The only exception is Sweden. However, in examining simple tariff averages for lead manufactures given in Tables 20 to 34 it can be noted that simple tariff averages on lead manufactures are lower than those of metal manufactures in all countries with the exception of Canada, Japan and the EEC. Weighted tariff averages indicated in these Tables cannot be compared as they relate to different trade years.

43. Tariff concessions granted on lead and lead products in the Tokyo Round, vary according to different products and countries. On the basis of the information on pre- and post-Tokyo tariff treatment on lead and lead products in the countries participating in the MTNs presented in Annex I, the following observations can be made:

(i) except for Australia and New Zealand, m.f.n. duties on lead and lead products are bound by all developed countries. Australian m.f.n. tariffs are unbound and m.f.n. rates shown in Annex I, under post-MTN, represent m.f.n. rates applied as from 1 January 1985. New Zealand's m.f.n. rates are bound on lead ores and concentrates and most lead chemicals. The m.f.n. duties on unwrought lead, lead semi-manufactures and lead oxides are only partially bound. CCCN 78.06 (other articles of lead) is subject to a ceiling binding. CCCN ex 28.42 in Norway and TSUS 473.52 and .56 in the United States are also bound at a ceiling rate;

(ii) most of m.f.n. duties are ad valorem. Only Switzerland applies low specific duties on all lead semi-manufactures and manufactures. Specific rates also apply on unwrought lead (CCCN 78.01) in Austria and Japan and on lead ores and concentrates and ashes and residues in the United States (for the sake of comparison ad valorem incidence is indicated in brackets);

(iii) the majority of the positive m.f.n. rates on lead were reduced. Tariff cuts varied according to the products and countries and

ranged between 10 per cent and 55 per cent. In general, tariff cuts were deeper on products which were facing higher nominal duties. However, certain m.f.n. rates were bound at the same level. Moreover, while most developed countries grant the m.f.n. duty-free treatment on lead ores and concentrates, m.f.n. nominal duties increase with higher stages of lead processing.

Trade in lead and lead products under different tariff treatment according to stages of processing

44. The purpose of this discussion is to give an indication of the magnitude of trade flows in lead and lead products under different tariff treatment according to stages of processing for the countries for which more detailed statistical information is available. Three sets of Tables, with varying degrees of detail, have been established for this purpose. First, Table 18 provides a summary of trade in lead and lead products under different tariff treatment in sixteen developed-country markets and seventeen developing countries. Second, Tables 19 to 34 give information on trade flows for the same sixteen developed countries at tariff line level broken down by stages of processing as well as by different tariff treatment. Third, trade flows in lead and lead products of other countries included in Table 18 are shown in Tables 35 to 51, based on information gathered from national trade statistics. In addition to the individual country tables, Table 52 indicates m.f.n. rates on lead and lead products applied by some other countries.

(i) Developed countries

45. Tables 19 to 34 were established on the basis of the tariff assessment listing for the countries participating in the Tariff Study and from national statistics and tariff schedules for other countries. The trade flows in value terms (US$'000) refer to 1984 data (1984-85 for Australia, 1983-84 for New Zealand and 1985 for Canada). The Tables indicate imports on a tariff line basis from m.f.n. sources, imports from GSP beneficiaries and imports under other preferential treatment. They also show shares of imports under different tariff treatment in different stages of processing as well as in total imports of lead and lead products. Additional columns give the principal exporters under each treatment.

46. Each tariff line shows tariffs granted to the item under different tariff treatment. The m.f.n. treatment relates to m.f.n. final rates (1984-85 for Australia). In certain cases footnotes indicate lower rates actually applied (New Zealand) or imports under by-law provisions (Australia). For the purpose of comparability, specific rates were converted to ad valorem equivalents on the basis of 1984 trade figures

TABLE 18

SUMMARY OF TRADE IN LEAD AND LEAD PRODUCTS UNDER DIFFERENT TARIFF TREATMENT IN THIRTY TWO COUNTRIES

(Value in US$'000)

Country	Trade Year	MFN										GSP			Other preferential treatment			
		Total trade		Duty-free				Dutiable										
				Unbound		Bound		Tariff range		Value	%	Tariff range	Value	%	Tariff range	Value	%	Countries to which preferential treatment is granted
		Value	%	Value	%	Value	%	Unbound	Bound									
Developed countries																		
Australia	1984/85	14,632	100.0	10,531	72.0			10.0-20.0		55	0.4	Free-10.0	3,810	26.1	Free	223	1.5	CAN,PNG,NZL
Austria	1984	17,015	100.0			2,091	12.3		4.0-15.0	12	0.1	2.0-7.5	672	3.9	free	14,240	83.7	EEC,EFTA,ESP[1]
Canada	1985	84,589	100.0			2,580	3.0		3.8-13.0	82,009	97.0	Free-6.0	-		Free-12.0	-		Commonwealth countries, except UK
EEC	1984	447,519	100.0			410,910	89.8		2.2-10.5	19,167	4.2	Free	535	0.1	Free	26,906	5.9	ACP,EFTA,ESP[1],TUR, Mediterranean overseas countries
Finland	1984	8,581	100.0			8,057	93.9		3.8-5.1	6	0.1	Free	-		Free	518	6.0	EFTA,EEC,CPE,ESP[1]
Hungary	1984	5,979	100.0			2,344	39.2		2.5-9.8	1,770	29.6	Free-5.0	-		Free	102	1.7	Eastern trading area[2],FIN
Iceland	1985	124	100.0			-			2.0-35.0	2	1.6				Free	122	98.4	EFTA,EEC
Japan	1984	170,663	100.0			78,641	46.1		3.2-8.2	142,678	25.0	Free	20,225	11.8				
New Zealand	1983/84	3,337	100.0			3,065	91.8	5.0 -	50.0	130	3.9	Free-25.0	10	0.3	Free	132	4.0	SPARTECA (including NYS, AUS,CAN
Norway	1984	8,686	100.0			8,475	97.6		3.2-3.8	12	0.1	free	-		Free	199	2.3	EEC,EFTA,ESP[1]
Portugal	1984	10,836	100.0	-				1.0-30.0		7,416	68.4				n.a.	3,420	31.6	EFTA,EEC
South Africa	1984	6,833	100.0	6,694	98.0			0.4-20.0		139	2.0							
Spain	1984	15,582	100.0	-				0.9 -	26.0	9,073	58.2				n.a.	6,509	41.8	EEC,EFTA
Sweden	1984	16,601	100.0			15,656	94.3		2.9-3.8	217	1.3	Free	1	0.0	Free	727	4.4	EEC,EFTA,ESP[1]
Switzerland	1984	6,683	100.0			...			0.1-1.4	1,031	15.4	Free	-		Free	5,652	84.6	EEC,EFTA,ESP[1]
United States	1984	117,190	100.0						0.5-15.0	102,449	87.4	Free	12,522	10.7	free	2,219	1.9	CBERA countries,CAN,ISR
Developing countries																		
Argentina	1982	1,041	100.0					10.0-38.0		129	12.4				n.a.	912	87.6	ALADI
Brazil	1983	4,901	100.0	1,826	37.2			30.0-70.0		1,658	33.8				n.a.	1,417	28.9	ALADI
Colombia	1983	1,999	100.0					7.0-46.0		1,008	50.4				n.a.	991	49.6	ALADI
Hong Kong	1985	1,416	100.0	1,416	100.0													
India	1981/82	24,719	100.0					40.0-60.0		24,719	100.0							
Indonesia	1984	10,407	100.0					5.0-50.0		10,393	99.9				4.5	14	0.1	ASEAN countries
Israel	1983	1,386	100.0	1,342	96.8			2.0-10.0		-					1.0-7.9	-		EEC,USA
Korea, Rep.of	1985	29,661	100.0					5.0-25.0		29,661	100.0							
Malaysia	1984	12,670	100.0					Free		12,670	100.0							ASEAN
Mexico	1985	340	100.0					5.0-40.0		340	100.0							
Peru	1982	491	100.0					10.0-45.0		162	33.0				n.a.	329	67.0	ALADI
Philippines	1981	7,563	100.0					10.0-50.0		7,563	100.0							ASEAN countries
Singapore	1985	1,720	100.0					Free		1,720	100.0							
Thailand	1983	13,047	100.0					1.0-30.0		12,887	98.8				n.a.	160	1.2	ASEAN
Yugoslavia	1984	9,477	100.0					5.0-15.0		7,735	81.6				Free	1,742		Protocol Among Developing Countries

[1]Before the entry of Spain to the EEC.

[2]Other treatment, see para 57.

and reference is made to Annex I where specific rates are indicated. The m.f.n. rates are broken down into duty-free and dutiable rates, bound and unbound. The GSP rates for Austria and Canada refer to the final GSP rates which were gradually reduced in step with staged m.f.n. reductions. GSP rates for other countries refer to 1985 schemes. (1984-85 for Australia.) Other preferential treatment refers to preferential rates of duty granted to certain countries or regional groupings.

47. Sub-totals on trade flows in each stage of processing are given together with tariff ranges and m.f.n weighted and simple tariff averages. Figures for total lead trade are also provided. However, it should be noted that trade flows under ex tariff lines comprise imports of all products included under the respective tariff lines and not only lead products. In order to avoid the largest distortions, trade indicated in brackets under CCCN ex 26.03 was not taken into account in the calculation of the total lead trade. Most tariff lines on lead chemical compounds are ex items and also include chemicals of other non-ferrous metals. As no percentage allocations for different metals are available, trade figures given for these products relate to the total trade under the same tariff line and should be considered as a rough order of magnitude. Therefore, they were not included in the sub-total trade of chemicals and in the total trade. Also, no weighted tariff averages were calculated for these products. In addition, as mentioned in the footnotes to the Tables, for certain countries, separate values for imports under CCCN 78.04 (powders and flakes and lead foil) are not available. In such cases, trade values were considered for only within one tariff line; however, they were considered in calculating the weighted tariff averages. It should also be noted that a weighted tariff average of zero per cent does not necessarily indicate duty-free treatment but may indicate that there is no trade under m.f.n. dutiable items. Certain difficulties in the calculations relating to the actual incidence of tariffs mentioned above, make it necessary to regard these figures as approximations at best. Moreover, neither the simple nor the weighted tariff averages provide a fully satisfactory indication of how tariffs have affected trade flows over time.

Individual developed-country profiles

48. Despite difficult market conditions and severe cost cutbacks, Australian production of base metals has continued to progress. Most base metal ore bodies are polymetallic, with joint production of metals where the buoyancy of one metal is supporting the weakness of another. For instance, zinc supports lead production at Broken Hill and lead and zinc support copper at Mount Isa. At present, Australia is the second largest world lead mine producer and the third largest exporter of lead ores and concentrates. Australia's main lead mine producer is Mount Isa which produces about 33 per cent of the country's lead. About half of the

TABLE 19

TRADE IN LEAD AND LEAD PRODUCTS UNDER DIFFERENT TARIFF TREATMENT ACCORDING TO STAGES OF PROCESSING

Country: AUSTRALIA

Year: 1984/1985

(Value in US$'000)

	Tariff No.	Total trade		MFN		MFN											GSP and LDC SCHEMES				Other preferential treatment (CER,PNG,NZL)			
						Duty free					Dutiable													
				Tariff average		Unbound		Bound		Origin	Rate		Value	%	Origin	Rate	Value	%	Origin	Rate	Value	%	Origin
		Value[4]	%	Weighted	Simple	Value	%	Value	%		Unbound	Bound											
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
Ores and concentrates	26.01.000/100	2,927[1]														Free	2,927		TDH,PER				
	26.01.000/105	5,192[1]				5,192[1]				IPN,HKR						Free	-						
Ash and residues	ex26.03.000	(1,330)				(877)[2]				IPN,USA						Free	(340)		PER	Free	(113)		NZL
	Sub-total	8,119	100.0	0.0	0.0	5,192	63.9									Free	2,927	36.1		Free	...		
Unwrought Powders and flakes	78.01.000	354				294[2]				PRC,USA						Free	42		KOR,P.N	Free	18		PNG,NZL
	78.04.000	40				40[2]				USA,PRC													
	Sub-total	394	100.0	0.0	0.0	334	84.8									Free	42	10.7		Free	18	4.5	
Wrought	78.02.000	50[1]				33				PRC						Free	15		FIN	Free	8		NZL
	78.02.000	1[1]				1[2]				IPN													
	78.03.000	96[1]				43[2]				PRC,SAF										Free	53		NZL
	78.03.000[3]	15[1]				15				USA													
	78.04.000																						
	78.05.000	26				22[2]				PRC										Free	3		NZL
	Sub-total	196	100.0	0.0	0.0	114	58.2									Free	15	7.6		Free	64	32.6	
Chemicals	28.27.000	181				107[2]				PRC,ZAF						Free	14		MEX,HKR	Free	-		
	ex28.30.900/140	1,714[1]				1,473[2]				PRC,USA						Free	240		IND,CHN				
	ex28.30.900/142	2[1]				2[2]				USA,PRC													
	ex28.35.000/ZR	587[1]				550[2]				USA,PRC						Free	37		CHN				
	ex28.35.000/ZR	1[1]				1[2]				USA													
	ex28.38.900/141	1,533[1]				1,266[2]				PRC,IPN						Free	174		CHN,PTV	Free	93		NZL
	ex28.38.900/143	19[1]				19[2]				USA													
	ex28.39.000/36	504[1]				439[2]				PRC,USA,ZAF						Free	65		CHN,CHL				
	ex28.39.000/36	5[1]				5				PRC,USA													
	ex28.42.900/152	1,202				978				PRC,IPN,USA						Free	224		CHN,PTV	Free	1		NZL
	ex28.42.900/151	9				8				PRC,USA													
	ex28.48.200/49	12									10.0		12		PRC,IPN								
	Sub-total	5,768	100.0	0.0	0.8	4,868	84.0				10.0		12	0.2		Free	814	14.1		Free	96	1.6	
Finished manufactures	78.06.000	112[1]									20.0		43		USA,PRC	10.0	22		PNT,TAI	Free	47		NZL
	78.06.000	43[1]				43				USA,CHN													
	Sub-total	155	100.1	10.0	10.0	43	27.7				20.0		43	27.7		10.0	22	14.2		Free	47	30.3	
	TOTAL	14,632	100.0			10,531	72.0				10.0[5] 20.0[5]		55	0.4		Free[5] 10.0[5]	3,800	26.1		Free	223	1.5	

[1] Free under by-law, may be subject to 2 per cent of revenue duty.

[2] M.f.n. duty-free subject to a 2 per cent revenue duty.

[3] Trade figures included with powders and flakes above.

[4] The exchange rate used these figures, US$0.7754 per Australian dollar, is an average of various averages from July 1984 - June 1985 (IMF Statistics).

[5] Tariff range.

Note: Where the lead products are not specified separately (indicated by "ex") the trade flow figures, shown within brackets, may include imports of products other than those of lead, and for the same reason are not included in the sub-total.

output comes from mines in the mining area of Broken Hill belonging to CRA and North Broken Hill Holdings Ltd. (NBHH). About 75 per cent of lead concentrates are processed locally and exported either as lead bullion or refined lead. Australia is also the main world exporter of these two products. The Broken Hill Associated Smelters Pty. Ltd. at Port Pirie is the major producer of refined lead. Another smelter owned by CRA (about 70 per cent) and NBHH (30 per cent) has recently been modified. In addition to these items, Australia also exports some lead oxides and lead scrap.

49. Table 19 indicating Australian lead imports in 1984-85 fiscal year shows that in that year its imports consisted mainly of lead ores and concentrates and lead chemicals. As already mentioned, Australian m.f.n. duties on lead are not bound. With the exception of arsenate of lead and lead manufactures, all m.f.n. rates of duty applied to lead are zero. However, unless they are imported under by-law provisions, all lead products are subject to a revenue duty of 2 per cent introduced in 1979. Positive m.f.n. rates of duty of 10 per cent are applied on arsenate of lead and 20 per cent on lead manufactures. Australia grants tariff preferences under its GSP scheme to lead imports from developing countries. It also grants duty-free access to imports of lead products from New Zealand under the Australia-New Zealand Economic Relations Trade Agreement[6] and to Papua New Guinea under the Agreement on Trade and Commercial Relations (PACTRA)[7]. In addition, the South Pacific Regional Trade and Economic Cooperation Agreement (SPARTECA)[8] provides for duty-free and unrestricted access to imports from the Forum Island countries. In 1984-85 about 26 per cent of total lead imports originated from GSP sources and 1.5 per cent from New Zealand.

50. The lead and zinc industry belongs to important processing industries of Austria's economy. Bleiberger Bergwerks-Union AG, a part of the state-owned holding company, Oesterreichische Industrieverwaltungs AG (OIAG), is the major country's lead producer. Most of lead metal is produced from secondary sources (about two-thirds of total metal production), while primary production processes small amounts of concentrates mined in the country or imported. Since primary and secondary lead metal production covers only partially its domestic consumption (66 per cent in 1985), Austria depends to a large extent on imports of unwrought lead. This item represented 75 per cent in Austria's total lead imports in 1984. Lead metal was imported duty-free under the Agreement between EFTA countries and the EEC, while about 5 per cent was supplied under the GSP preferential treatment of 2 per cent (ad valorem incidence of a specific rate) by Yugoslavia. Imports of lead scrap from Hungary, Switzerland and the EEC represented 4.4 per cent of total imports in 1984. Austria also imports wrought lead products, lead oxides and some lead manufactures. These products represented 6.8 per cent, 3.5 per cent and 2.8 per cent in total lead imports in 1984, respectively, and were

[illegible]

[illegible]

Country: [illegible]
Year: 1984

	Tariff No.	Total trade		EFTA Tariff average		EFTA										CXP and IEC[1]				Other preferential treatment (EEC,EFTA,Spain)[2]			
						Duty free					Dutiable												
		Value	%			Enhanced		Bound		Origin	Rate		Value	%	Origin	Rate	Value	%	Origin	Rate	Value	%	Origin
				Weighted	Simple	Value	%	Value	%		Enhanced	Bound											
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
Iron and concentrates	26.01	1,342						1,342		EEC,CHE													
	ex 26.03	(8,660)						(8,660)		EEC,ESP,ROM													
	Sub-total	1,342	100.0					1,342	100.0														
Wrought	73.01 A1	436										4.0				2.0	-			Free	436		EEC,SWE,CHE
	73.01 A2	12,225										4.0[3]	1		CAN	2.0[3]	669		TUR	Free	11,555		EEC,SWE,CHE
Waste and scrap	73.01 B	749						749		SWE,CHE,EEC													
	Sub-total	13,410	100.0	0.5	2.7			749	5.6			4.0	1	-		2.0	669	5.0		Free	11,991	89.4	
Wrought	78.02	457										6.0	-			3.0	-			Free	457		EEC
	78.03	487										7.0	1		USA	3.5	-			Free	486		EEC
	78.04[4]	223										8.0	1		USA	4.0	-			Free	222		EEC
	78.05	66										7.0	-			3.5	-			Free	66		EEC
	Sub-total	1,153	100.0	7.5	7.0							6.0-8.0[5]	2	0.2		3.0-4.0[5]	-			Free	1,131	99.8	
Chemicals	28.27	593										15.0	-			7.5	1			Free	592		EEC,CHE
	ex 28.30 B07	(2,670)						(2,670)		EEC,CHE,POL													
	ex 28.35 B	(141)						(141)		EEC,ROM,SWE													
	ex 28.38 A3	(1,406)										8.0	(295)		ROM,CSK,POL	4.0	(8)		TUR	Free	(1,103)		EEC,CHE,MOR
	ex 28.39 A3	(10)						(10)		EEC													
	ex 28.39 B1	(16)										8.0	(16)		ROM,POL	4.0	-			Free	(20)		EEC
	28.42 A3	48										9.0	-			4.5	-			Free	46		EEC
	ex 28.48	(265)						(265)		EEC,CHE,ESP													
	Sub-total	633	100.0	0.0	5.0			...	0.0			8.0-15.0[5]	...	0.0		4.0-7.5[5]	1	0.2		Free	632	99.8	
Finished manufactures	78.04 A	4										8.0	-			4.0	-			Free	4		EEC
	78.04 B	483										8.0	9		USA,JPN	4.0	2		CAN	Free	472		EEC,CHE,SWE
	Sub-total	487	100.0	0.9	0.8							8.0	9	1.8		4.0	2	0.4		Free	476	97.7	
	TOTAL	17,015	100.0					2,091	12.3			4.0-15.0[5]	13	0.1		2.0-7.5[5]	672	3.9		Free	14,240	83.7	

[1] CXP rates indicate rates as calculated by the secretariat in accordance with the Austrian formula: 50 per cent of final post-KR rates, applied on a by-country of origin and by-product basis. Also, preferential duty-free treatment is granted to LDCs.

[2] Under the Agreement between the EFTA countries and Spain, signed on 26 June 1979, Spain benefited from 60 per cent reduction of applied m.f.n. rates in 1984.

[3] Ad valorem incidence of specific rates based on 1984 trade figures. Specific rate indicated in Annex I.

[4] Includes powders and flakes.

[5] Tariff range.

Note: Where the lead products are not specified separately (indicated by "ex") the trade flow figures, shown within brackets, may include imports of products other than those of lead, and for the same reason are not included in the sub-total.

also imported mainly from the EEC. As can be seen from Table 20, Austria's duty-free lead imports from the EEC and other EFTA countries accounted for 84 per cent of total lead imports valued at US$17 million in 1984. In contrast, imports from m.f.n. sources subject to m.f.n. positive rates of duty ranging from 4 per cent to 15 per cent were practically nil.

51. Canada is one of the world's major lead producers. However, production of concentrates has fluctuated quite widely due to market conditions including temporary mine closures, interruptions due to labour disputes, and the permanent closure of some mines due to ore depletion. Mine production peaked at over 400,000 tons in 1971, trended downwards until 1980 and then levelled out at about 270,000 tons. The closure of the Faro Mine in the Yukon by Cyprus Anvil Mining Corporation in 1982 was partly offset by the Polaris Mine in the High Arctic, opened by Cominco Limited the same year. Consequently, Canada's exports of lead concentrates decreased to less than 30 per cent of total lead exports in 1985, compared with 60-70 per cent in the early 1980s. The Faro Mine was re-opened in 1986 under the new ownership of Curragh Resources Corporation, whereas Pine Point Mines Limited, controlled by Cominco Limited, announced plans to close its Northwest Territories Mine in 1987. There are no significant new lead mines under development. Metal production has also fluctuated but to a lesser extent than mining. Both of Canada's primary lead smelters are relatively old and Cominco Limited recently announced that it is replacing its smelter at Trail, British Comombia, with some financial investment by the Federal and Provincial Governments. It will be completed in 1989 and have an annual smelting capacity of 160,000 tons. In addition to lead ores and concentrates and unwrought lead, Canada exports lead semi-manufactures and lead scrap.

52. For the purpose of inter-country comparability, Canadian statistics on lead imports were elaborated on the basis of CCCN concordances supplied by the Canadian authorities. However, since the Canadian tariff is end use oriented, it is difficult to assess the average level of m.f.n. tariffs by stages of processing. Trade flows indicated under ex tariff lines overstate the magnitude of trade in lead since they pertain to trade of other products included in the same tariff lines. Table 21 indicates that in 1985 Canadian imports of lead amounted to US$85 million. Of this amount imports of collapsible tubes of lead from the United States accounted for 95 per cent of total imports. The remaining 5 per cent consisted of imports of unwrought lead and lead oxides supplied by the United States, Mexico and the EEC. Most m.f.n. duties on semi-manufactures and manufactures are positive, ranging from 3.8 per cent to 15.0 per cent. Canada grants preferential treatment to imports of m.f.n. dutiable lead products from developing countries under its GSP scheme. It also applies preferential rates to imports from New Zealand and the British Commonwealth countries other than the United Kingdom. In 1985, there were no imports from these sources.

[illegible]

[illegible]

Country: [illegible]

Year: 1988

(Value in [illegible])

	Tariff No.	Trade		MFN		MFN										GSP and EEC				Other preferential treatment (Communist countries, except EEC)			
				Tariff average		Duty free					Dutiable												
		Value	%			Enhanced		Bound		Origin	Rate		Value	%	Origin	Rate	Value	%	Origin	Rate	Value	%	Origin
				Weighted	Simple	Value	%	Value	%		Enhanced	Bound											
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
[illegible]	ex32.908.01	66						66				4.8[1]	-			Free	-			Free	-		
[illegible]	ex68.105.01	-						Free															
	Sub-total	66	100.0	0.0	2.4			66				4.8[1]	-			Free	-			Free	-		
[illegible]	33.708.01	2,514						2,514		[illegible]													
	33.909.01	51										12.0	51		USA	Free	-			12.0			
	ex36.109.01	59										7.6	59		EEC	Free	-			Free	-		
	Sub-total	2,624	100.0	0.4	6.5			2,514	95.8			7.6-12.0[2]	110	4.2		Free	-			Free-12.0[2]	-		
[illegible]	33.602.01	-						Free															
	33.903.01	77										4.3	77		EEC,USA	2.5[3]				4.3	-		
	36.405.01	-						Free															
	ex35.110.01	466										4.3	466		EEC,USA	Free	-			Free	-		
	ex40.121.02	-										9.1	-			6.0	-			7.5	-		
	Sub-total	543	100.0	4.3	3.5			Free	0.0			4.3-9.1[2]	543	100.0		Free-6.0[2]	-			Free-7.5[2]	-		
[illegible]	92.927.01	1,406										13.1	1,406		EEC,USA,NZL	Free	-			Free	-		
	92.927.02											11.0				Free				Free	-		
	ex92.93.001	-										15.0				Free							
	ex92.935.01	-										3.8				2.5				3.8	-		
	Sub-total	1,406	100.0	13.1	7.0							3.8-13.1[2]	1,406	100.0		Free-2.5[2]				Free-3.8[2]			
[illegible]	33.910.01	79,950[4]										11.1	79,950		USA	Free	-			10.0	-		
	Sub-total	79,950	100.0	11.1	11.1							11.1	79,950	100.0		Free	-			10.0	-		
	TOTAL	84,589	100.0					2,580	3.0			3.8-15.0[2]	82,000	97.0		Free-6.0[2]				Free-12.0[2]	-		

[1] Applied rate: Free.

[2] Tariff range.

[3] Free for EEC's.

[4] Item includes collapsible tubes of lead or tin or lead coated with tin. It is estimated the sub-position attributable to lead alone equals US$79,950.

Note: Where the lead products are not specified separately (indicated by "ex") the trade flow figures, shown within brackets, may include imports of products other than those of lead, and for the same reason are not included in the sub-total.

53. Lead mine production in Czechoslovakia is estimated at about 3,000 tons annually. Most of lead concentrates are exported, mainly to the Federal Republic of Germany. Czechoslovakia also has secondary lead plants, the output of which is estimated at about 21,000 tons annually. Its imports of lead products are generally low. In 1982, Czechoslovakia imported a large quantity of lead oxides from Yugoslavia. In the Tokyo Round, Czechoslovakia reduced most m.f.n. rates applied to lead imports. The m.f.n. tariff treatment is indicated in Table 53.

54. The EEC has an important smelting and refining production of lead which in 1985 amounted to almost 1.4 million tons of lead metal, representing approximately 25 per cent of world production.[9] In 1984-85, its metal consumption was about the same level as its production, in contrast to previous years when the former was on average about 200,000 tons lower than the domestic output. As its lead mine production is only between 200,000 to 300,000 tons per year, most EEC smelters and refineries depend to a large extent on imports of lead concentrates or lead bullion, and supplies of scrap. Consequently, the EEC is a net importer of these products. Most lead metal is processed into semi-manufactures, including chemicals, and manufactures for the EEC market and abroad. As can be seen from tables on imports of other countries, the EEC countries are major suppliers of these products to most of them.

55. The EEC constitutes the largest market for lead and lead products. Table 22 indicates that in 1984, its lead imports were valued at US$458 million. The bulk of them are lead concentrates and unwrought lead mainly destined for further processing. In 1984, these items represented 50 per cent and 47 per cent of the EEC imports, respectively, and with the exception of alloyed lead, were imported m.f.n. duty free. Most lead ores and concentrates were supplied by Peru, South Africa and Sweden while unwrought lead originated mainly in Australia, Sweden and Mexico. As Table 22 shows, lead alloys are subject to the m.f.n. duty of 3.5 per cent and there is no GSP preference on this item under the EEC's GSP scheme. Nominal m.f.n. rates of duty increase on lead products of higher stages of processing. Thus, m.f.n. simple tariff averages are 7.8 per cent on lead wrought products, 10.5 per cent on lead chemicals and 7.6 per cent on lead manufactures compared to 0.3 per cent on unwrought lead and zero duty on lead concentrates. In 1984, imports from m.f.n. sources shared 41 per cent of total dutiable imports. The EEC grants duty-free and unlimited access to most lead products subject to positive m.f.n. rates of duty when imported from developing countries as well as to least-developed countries under the GSP scheme. However, as mentioned above, lead alloys are excluded from the GSP preferential treatment. In 1984, GSP imports amounted to over US$0.5 million and represented 1.1 per cent of m.f.n. dutiable imports. The EEC also grants the duty-free preferential treatment to the ACP countries, members of the Lomé Convention, as well as

TABLE 22

TRADE IN LEAD AND LEAD PRODUCTS UNDER DIFFERENT TARIFF TREATMENT ACCORDING TO STAGES OF PROCESSING

Country: EEC

Year: 1984

(Value in US$'000)

	Tariff No.	Total trade		MFN		MFN											CSP and LDC				Other preferential treatment						
				Tariff average		Duty free					Dutiable										ACP, Mediterranean, overseas countries, ESP[1], TUG[2]				EFTA countries		
						Unbound		Bound		Origin	Rate		Value	Z	Origin												
		Value	Z	Weighted	Simple	Value	Z	Value	Z		Unbound	Bound				Rate	Value	Z	Origin	Rate	Value	Z	Origin	Value	Z	Origin
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)
Ores and concentrates	26.01.50	186,499						186,499		FER,ZAF,SAF																
Ash and residues	26.03.30	44,083						44,083		USA,ESP,ZAF																
	Sub-total	230,582	100.0					230,582	100.0																	
Unwrought	78.01.0100	172,917						172,917		AUS,SAF,MEX																
	78.01.0900	42,297										3.5	17,357		MEX,PER,CAN					Free	16,942		MAR,ESP,YUG	7,958		SAF,CHE,AUT
Waste and scrap	78.01.3000	7,411						7,411		CHE,NOR,MEX																
Powders and flakes	78.04.2000	213										2.2	24		USA,JPN	Free	83		MEX	Free	99		ESP	7		AUT
	Sub-total	222,798	100.0	0.3	1.4			180,328	80.9			2.2-3.5[3]	17,381	7.8		Free	83	0.0		Free	17,041	7.6		7,965	3.6	
Wrought	76.02.0000	432										8.0	184		USA,JPN,CAN	Free	150		MEX	Free	65		MAR,YUG,ROM	33		AUT,SAF,NOR
	78.03.0000	1,017										8.0	118		USA,CAN	Free	4		MEX	Free	607		YUG,ISR,ESP	288		SAF,CHE,AUT
	78.04.1100	63										8.0	45		USA,JPN	Free	-			Free	15		ESP	3		SAF,CHE
	78 04.1900	92										8.0	81		USA,NOR	Free	6		SGP	Free	1		ESP	3		ISR,SAF
	78 05.0000	462										9.0	90		USA,JPN					Free	321		YUG	31		AUT,SAF,CHE
	Sub-total	2,259	100.0	7.8	8.2							8.0-9.0[3]	542	24.0		Free	243	10.8		Free	1,108	49.0		365	16.2	
Chemicals	28.27.0000	439										10.5	325		USA,DDR,ZAF	Free	48		MEX	Free	4		CYP,ESP	42		AUT,SAF,CHE
	ex 28.30.8000	(1,294)										2.2	(534)		ZAF,ROM,SAM	Free	(177)		ROM	Free	(539)		ESP,MLT	(44)		AUT
	ex 28.35.4000	(1,903)										6.5	(8.8)		JPN,USA,POL	Free	(573)		MEX	Free	(91)		ESP	(391)		AUT,SAF,CHE
	ex 28.38.7100	(243)										4.6	(5)		DDR	Free	-			Free	(183)		ESP	(55)		AUT,CHE
	28.39.7000	13										6.5	-			Free	-			Free	-			13		SAF
	ex 28.42.7000	(6,169)										8.0	(702)		USA,DDR;CSR	Free	1,897		CAN,ROM,IND	Free	(2,661)		ESP,ISR,YUG	(889)		FIN,CHE,AUT
	ex 28.48.2000	(28)										9.0	(28)		USA	Free	(-)			Free	-			-		
	Sub-total	452	100.0	10.5	6.6							3.2-10.5[3]	325	71.9		Free	48	10.6		Free	4	0.9		75	16.6	
Finished manufactures	78.06.1000	515										6.0	167		USA,JPN,AUS	Free	202		IRN,PAK,ARE	Free	76		ESP,USA,ROM	70		SAF,NOR,CHE
	78.06.9000	1,126										8.0	776		JPN,USA,CAN	Free	42		HKG,KOR,IND	Free	43		MAR;YUG,ESP	265		SAF,CHE,AUT
	Sub-total	1,641	100.0	7.6	7.0							6.0-8.0[3]	943	57.5		Free	244	14.9		Free	119	7.2		335	20.4	
	TOTAL	457,519	100.0					410,910	89.8			2.2-10.5[3]	19,167	4.2		Free	531	0.1		Free	18,173	4.0		8,733	1.9	

[1]Preferential rates for Spain were 40 per cent below the applied m.f.n. rates in 1984.

[2]Preferential rate for Yugoslavia is duty-free (Agreement for Cooperation between the EEC and Yugoslavia, April 1980).

[3]Tariff range

Note: Where the lead products are not specified separately (indicated by "ex") the trade flow figures, shown within brackets, may include imports of products other than those of lead, and for the same reason are not included in the sub-total.

to Mediterranean countries and Yugoslavia, while the preferential rates for Spain before its accession to the EEC were 40 per cent below the applied m.f.n. rates. In 1984, these countries supplied 39 per cent of lead products subject to m.f.n. rates of duty valued at US$18 million. Most of these imports were lead based alloys supplied by Morocco, Spain and Yugoslavia. Imports of m.f.n. dutiable lead products are also free of duty when imported from EFTA countries under Free Trade Agreements. In 1984, EFTA countries shared 19 per cent of these imports.

56. Finland has small lead mine production (about 2,000 tons a year) and one secondary smelter with an annual capacity of 7,000 tons. Most of its domestic requirements for refined lead are covered by imports. Table 23 shows that in 1984 this item represented about 84 per cent of its total lead imports and was supplied mainly by the Soviet Union, Sweden and the EEC. The remaining 16 per cent of total imports amounting to US$8.6 million were wrought lead products, lead oxides and lead containers imported from the EEC and Sweden. With the exception of lead oxides and some lead manufactures, imports of all lead products into Finland are m.f.n. duty free. These two products enter duty free when imported from developing or least-developed countries included in the list of GSP beneficiaries or from other EFTA and EEC countries. In 1984, most of these products were supplied by the latter countries. There is also no duty on imports from Bulgaria, Czechoslovakia, the German Democratic Republic, Hungary, Poland and the USSR under the agreement for the reciprocal removal of obstacles to trade and from Romania and the People's Republic of China under the long-term trade agreements.

57. Hungary also produces small quantities of lead and meets its needs largely through imports. In 1984, the value of its lead imports was US$6 million of which almost 67 per cent was unwrought lead and 29 per cent lead oxides. The major suppliers of unwrought lead were the USSR, Bulgaria and Switzerland while Austria and the EEC covered most of lead oxides imports. Ash residues and unwrought lead excepted, all lead products are subject to positive m.f.n. rates of duty which are 3.8 per cent on lead ores and concentrates, 7.7 per cent on wrought lead and lead manufactures and from 2.5 per cent (lead oxides) to 8.9 per cent on lead chemicals. In the Tokyo Round, Hungary reduced and bound all m.f.n. rates of duty on lead. Hungary grants preferential treatment to imports of certain lead products under its GSP scheme. Table 24 shows that GSP preferential rates range from duty free (lead ores and concentrates, lead tubes and pipes and lead oxides) to 5 per cent (other chemicals). In 1984, Hungary's imports under the GSP were nil. M.f.n. dutiable lead products enter duty free when imported from CMEA countries within the framework of bilateral agreements and from Finland. In 1984, about 6 per cent of lead oxides were imported from Bulgaria.

TABLE 3

TRADE IN LEAD AND LEAD PRODUCTS UNDER DIFFERENT TARIFF TREATMENT ACCORDING TO STAGES OF PROCESSING

Country: FINLAND
Year: 1984

	Tariff No.	Total trade		MFN		MFN										CSP and LDC[1]				Other preferential treatment (EFTA, EEC, CPE[1], Spain[2])			
				Tariff average		Duty free					Dutiable												
		Value	%			Unbound		Bound		Origin	Rate		Value	%	Origin	Rate	Value	%	Origin	Rate	Value	%	Origin
				Weighted	Simple	Value	%	Value	%		Unbound	Bound											
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
Ores and concentrates	26.01.400	-						Free															
Ash and residues	ex 26.03.900	(2,144)						(2,144)		FRE,USA,CAN													
	Sub-total	...						...															
Waste and scrap	78.01.110	10						10		SAE													
Unalloyed	78.01.190	5,478						5,478		SDN,SAE,EEC													
Alloyed	78.01.200	1,696						1,696		SAE,EEC,USA													
Waste and scrap	78.01.300	-						-															
Powders and flakes	78.04.200	14						14		SAE,EEC													
	Sub-total	7,198	100.0					7,198	100.0														
Refined	78.02.000	428						428		EEC,SAE													
	78.03.000	410						410		EEC,USA,SAE													
	78.04.100	18						18		LEN,EEC,SAE													
	78.05.000	40						-								Free	-			Free[3]	40		EEC
	Sub-total	896	100.0					856	95.5							Free	-			Free	40	4.5	
Chemicals	28.27.100	46										3.8	-			Free	-			Free	46		EEC,SAE
	28.27.900	96										3.6	-			Free	-			Free	96		EEC
	ex 28.30.900	(2,280)						(2,280)		EEC,HUN,USA													
	ex 28.35.[illegible]	(63)						(63)		EEC,SAE,AUT													
	ex 28.38.900	(3,650)						(3,650)		EEC,HUN,SAE													
	ex 28.39.900	(189)						(189)		USA,EEC,SAE													
	28.42.000	1						1		EEC													
	ex 28.49.000	(355)						(355)		EEC,FIN,SAE													
	Sub-total	143	100.0	0.0	1.0			1	0.7			3.8	-			Free	-			Free	142	99.3	
Finished manufactures	78.06.010	2						2		EEC													
	78.06.090	342										5.1	6		USA,FIN	Free	-			Free	336		EEC,HUN,AUT
	Sub-total	344	100.0	3.8	2.6			2	0.6			5.1	6	1.7		Free	-			Free	336	97.7	
	TOTAL	8,581	100.0					8,057	93.9			3.8-5.1[4]	6	0.1		Free	-			Free	518	6.0	

[1] Centrally-planned economies

[2] Under the agreement between the EFTA countries and Spain, signed on 26 June 1979, Spain benefited from 60 per cent reduction of applied m.f.n. rates in 1984

[3] M.f.n. rate in 1984 was 0.7 per cent

[4] Tariff range

Note: Where the lead products are not specified separately (indicated by "ex") the trade flow figures, given within brackets, may include imports of products other than those of lead, and for the same reason are not included in the sub-total.

TABLE 26

TRADE IN LEAD AND LEAD PRODUCTS UNDER DIFFERENT TARIFF TREATMENT ACCORDING TO STAGES OF PROCESSING

Country: HUNGARY
Year: 1986

	Tariff No.	Total trade		MFN		MFN										GSP and LDC[1]				Other Treatment (Eastern Trading Area, Finland[2])			
				Tariff average		Duty free					Dutiable												
						Unbound		Bound		Origin	Rate												
		Value	%	Weighted	Simple	Value	%	Value	%		Unbound	Bound	Value	%	Origin	Rate	Value	%	Origin	Rate	Value	%	Origin
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
Ores and concentrates	ex 26.01.99	(21)										3.8	-			Free	-			Free	(71)		FIN
Ash and residues	26.03.02	-						-															
	Sub-total	...	100.0	3.8	1.9			-				3.8	-			Free	-			Free	...		
Unwrought	78.01.01	3,995[3]						2,332		SUN,BGR,CHE													
Waste and scrap	78.01.02	12						12															
	Sub-total	4,007[3]	100.0	0.9	0.0			2,344	58.5														
Wrought	78.02.00	14										7.7	14		EEC,AUT					Free	-		
	78.03.00	2										7.7	2		EEC					Free	-		
	78.04.00[4]	-										7.7	-							Free	-		
	78.05.00	-										7.7	-			Free	-			Free	-		
	Sub-total	16	100.0	7.7	7.7							7.7	16	100.0		Free	-			Free	-		
Chemicals	28.27.00	1,738										2.5	1,656		AUT,EEC	Free	-			Free	102		BGR
	ex 28.30.02	(3)										6.2	(3)		EEC	2.0	-			Free	-		
	ex 28.35.01	(497)										9.8	(81)		EEC,AUT	5.0				Free	(416)		SUN,CSK
	ex 28.38.02	(922)										8.9	(286)		EEC,YUG,CHE	5.0	-			Free	(636)		ROR,CSK,ROM
	ex 28.39.02	(226)										8.9	(158)		EEC	5.0	-			Free	(68)		POL,ROR
	ex 28.42.99	(1,660)										3.8	(1,256)		AUT,EEC,CHE	Free	(-)			Free	(404)		ROM,CSK,CSK
	ex 28.48.02	-										8.9	(-)							Free	-		
	Sub-total	1,738	100.0	2.5	8.2							2.5-9.8[5]	1,656	94.2		Free	-			Free	102	5.8	
Finished manufactures	78.06.00	198	100.0	7.7	7.7							7.7	198	100.0	EEC,AUT,CHE					Free	-		
	TOTAL	5,979[3]	100.0					2,344	39.2			2.5-9.8[5]	1,770	29.6		Free-5.0[5]	-			Free	102	1.7	

1 Hungary grants duty-free treatment to imports from LDC countries.

2 Duty-free rates applied to Finland under the bilateral agreement on the reciprocal removal of obstacles to trade.

3 Difference between total and sub-total represents trade of unspecified origin on line 78.01.01

4 Includes powders and flakes

5 Tariff range

Note: Where the lead products are not specified separately (indicated by "ex") the trade flow figures, shown within brackets, may include imports of products other than those of lead, and for the same reason are not included in the sub-total.

58. Iceland imports all its requirements of lead and lead products. Table 25 indicates that in 1985, its total lead imports were valued at US$124,000 and were composed mainly of refined lead (60 per cent of total imports), unwrought lead products (24 per cent) and lead oxides (15 per cent). Most of these products were supplied m.f.n. free of duty by the EEC countries. Iceland reduced and bound its m.f.n. tariffs on lead in the Tokyo Round. M.f.n. positive rates are applied only on ash and residues and lead manufactures.

59. As mentioned before, Japan has substantially increased its lead metal consumption. Although its production of refined lead has also risen it has still to import in order to satisfy its domestic consumption. Japan has one fully integrated company (Kamioka Mining and Smelting Co. Ltd.), and eight custom smelting and refining companies, (Dowa Mining Co. Ltd., Hosokura Mining Co., Mitsui Mining and Smelting Ltd., Mitsubishi Cominco Smelting Co. Ltd., Sumitomo Metal Mining Co. Ltd., Nippon Mining Co. Ltd., Toho Zinc Co. Ltd. and Hachinohe Smelting Co. Ltd). Its domestic lead mine production is not sufficient and about 80 per cent of lead ores and concentrates requirements are imported (average for 1980-85). Table 26 shows that this product represented in value terms more than one-half of total Japanese imports in 1984, and was imported mainly from Peru, Australia and Canada, m.f.n. duty free. However, the dependence on foreign sources might diminish in the future as Dowa Mining Co. Ltd. reportedly discovered a rich mixed sulphide ore deposit with, among other metals, lead grading 10.3 per cent. In contrast to lead ores and concentrates, all other lead products are m.f.n. dutiable and, except for lead manufactures, m.f.n. rates increase with higher stages of processing. M.f.n. rates of duty range from 3.2 per cent to 6.5 per cent on unwrought lead[11], 5.8 per cent to 8.2 per cent on wrought lead, 3.7 per cent to 7 per cent (lead oxides) on lead chemicals and 5.8 per cent on lead manufactures. In 1984, refined lead imports valued at US$76 million represented about 44 per cent of total imports and that of lead oxides valued at about US$4 million were over 2 per cent. Imports of wrought lead products and lead manufactures were negligible, about 0.3 per cent of total lead imports in 1984. Except for lead oxides, most m.f.n. dutiable lead products imports originated from m.f.n. sources, namely from Australia, the United States and Canada (lead metal) and the EEC. Imports of lead concentrates and lead metal from South Africa and the People's Democratic Republic of Korea are subject to general rates.

60. All m.f.n. dutiable lead products benefit from preferential duty-free treatment when imported from developing countries under the Japanese GSP scheme. However, in principle all industrial products covered by the GSP are subject to quantitative limitations. In the case of lead, ceiling quotas are applied to goods in Chapter 28 (lead oxides and other lead chemicals) and to unwrought lead (CCCN 78.01.01 - other). In the fiscal year 1984, the ceiling quota on unwrought lead was 783 tons and was

TABLE 25

TRADE IN LEAD AND LEAD PRODUCTS UNDER DIFFERENT TARIFF TREATMENT ACCORDING TO STAGES OF PROCESSING

Country: ICELAND
Year: 1985 (trade), 1986 (tariff treatment)

(US$'000)

Product Description	Tariff No.	Total Imports	MFN					Other Preferential Treatment[2]		
			Tariff average		Rate %	Value	Origin[1]	Rate[2] %	Value	Origin[1]
			Weighted %	Simple %						
Ores and concentrates	26.01.45				Free(B)	-		)	-	
Ash and residues	ex 26.03.00				8(B)[3]	-		)	-	
	Sub-total	-		2	Free-4[4]	-		)	-	
								)		
Unwrought								)		
Unalloyed	78.01.20				)	-		)	-	
	78.01.30				)	-		)	70	EEC
Alloyed	78.01.40				)	-		)	4	EEC
Waste and scrap	78.01.10				) Free(B)	-		)	-	
Powders and flakes	78.04.01				)	-		)	-	EEC
	ex 78.04.09				)	-		)	(8)	EEC
	Sub-total	74				-		) Free	74	
Wrought	78.02.01				)	-		)	11	EEC
	78.02.02				)	-		)	-	EEC
	78.03.00				) Free(B)	-		)	10	EEC
	ex 78.04.09				)	-		)	8	EEC
	78.05.00				Free	-		)	1	EEC
	Sub-total	30				-		)	30	
Chemicals	28.27.00				)	-		)	18	EEC
	ex 28.30.09				)	(-)		)	(18)	EEC
	ex 28.35.00				)	(-)		)	(7)	EEC
	ex 28.36.20				) Free(B)	(8)	USA	)	(58)	EEC,NOR,SAE
	ex 28.39.09				)	(-)		)	(13)	SAE,EEC
	ex 28.42.10				)	(219)	POL,DDR	)	(99)	EEC
	ex 28.48.00				)	(1)		)	(-)	
	Sub-total	18				-		)	18	
Finished manufactures	78.06.01				2 (B)	-		)	-	
	78.06.02				25 (B)	-		)	-	
	78.06.09				35 (B)	2		)	-	
	Sub-total	2	35%	20.7%	2-35[4]	2		)	-	
	TOTAL	124			Free-35[4]	2			122	

[1] Not available when imports (c.i.f. value) are smaller than US$1,205 by supplier.

[2] Duty-free treatment is granted to imports from the EEC and other EFTA countries.

[3] Applied rate as from 1979 is 4 per cent. This rate has been used for the calculation of tariff averages.

[4] Tariff range.

Note: Where the lead products are not specified separately (indicated by "ex") the trade flow figures, shown within brackets, may include imports of products other than those of lead, and for the same reason are not included in the sub-total.
Exchange rate 1985: Kronur 41.508 per US$, International Financial Statistics, IMF, February 1987.
(B) Bound rate (Schedule LXII)

Source: Statistics of Iceland II, 84, External Trade 1985, Statistical Bureau of Iceland, 1986
International Customs Journal, 1979-80, Brussels, 1979

TABLE 26

TRADE IN LEAD AND LEAD PRODUCTS UNDER DIFFERENT TARIFF TREATMENT ACCORDING TO STAGES OF PROCESSING

Country: JAPAN
Year: 1986

	Tariff No.	Total trade		MFN		MFN											GSP and LDC				Other preferential treatment			
						Duty free					Dutiable													
		Value	%	Tariff average		Unbound		Bound		Origin	Rate		Value	%	Origin	Rate	Value	%	Origin	Rate	Value	%	Origin
				Wtd.	Simple	Value	%	Value	%		Unbound	Bound												
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
Ores and concentrates	26.01.813	89,697[1]						78,641		PER,AUS,CAN													
Ash and residues	ex 26.03.200	(46,564)						(46,484)		AUS,DAN,IND													
	Sub-total	89,697	100.0					78,641	87.7														
Unwrought	78.01.111	18,176[2]										6.0[3]	17,802		AUS								
	78.01.119	51,650[2]										5.1[3]	21,899		AUS,USA,CAN	Free	12,162		MEX,PER,CAN				
	78.01.121	6,082										6.5[3]	2,049		EEC,AUS,CAN	Free	4,033		MEX,CAN				
	78.01.129	59										4.7[3]	17		EEC,USA	Free	42		CAN,SGP				
Waste and scrap	78.01.200	123										3.2	95		USA,NCL	Free	28		PNG,ARE				
Powders and flakes	78.04.200	36										6.5	36		USA	Free	-						
	Sub-total	76,326	100.0	5.5	5.3							3.2-6.5[4]	41,898	54.9		Free	16,265	21.3					
Wrought	78.02.000	63										5.8	36		USA,EEC	Free	27		SGP,KOR				
	78.03.100	-										8.2	-			Free	-						
	78.03.200	-										8.2	-			Free	-						
	78.04.100	88										6.5	88		USA,EEC	Free	-						
	78.05.100	1										8.2	1		USA	Free	-						
	78.05.200	5										7.2	5		USA	Free	-						
	Sub-total	157	100.0	6.3	7.3							5.8-8.2[4]	130	82.8		Free	27	17.2					
Chemicals	28.27.100	3,894										7.0	116		EEC,AUS,USA	Free	3,778		MEX,SGP,CHN				
	28.27.200	22										3.7	22		EEC,USA	Free	-						
	ex 28.30.140	(3,000)										4.9	(822)		EEC,USA	Free	(2,178)		CHN,ISR,KOR				
	ex 28.35.290	(423)										3.7	(338)		EEC,USA,SAE	Free	(84)		CHN,KOR				
	ex 28.38.590	(1,793)										4.9	(751)		EEC,USA,POL	Free	(1,042)		ESP,CHN,CAN				
	ex 28.39.300	(1,030)										4.9	(935)		EEC,USA,POL	Free	(96)		BGR,CHN				
	28.42.500	49										7.0	-			Free	49		IND				
	ex 28.48.100	(11)										5.8	(11)		USA,EEC	Free	-						
	Sub-total	3,965	100.0	6.5	5.2							3.7-7.0[4]	138	3.5		Free	3,827	96.5					
Finished manufactures	78.06.000	518										5.8	512		USA,EEC	Free	6		CAN,KOR				
	Sub-total	518	100.0	5.8	5.8							5.8	512	98.8		Free	6	1.2					
	TOTAL	170,663[1,2]	100.0					78,641	46.1			3.2-8.2[4]	42,678	25.0		Free	20,125	11.8					

[1] Difference between total and sub-total represents trade with South Africa, which is subject to general rates

[2] Difference between total and sub-total represents trade with the Democratic Republic of Korea, which is subject to general rates

[3] Ad valorem incidence of specific rate based on 1986 trade figures. Specific rate indicated in Annex I

[4] Tariff range

Note: Where the lead products are not specified separately (indicated by "ex") the trade flow figures, shown within brackets, may include, imports of products other than those of lead, and for the same reason are not included in the sub-total.

increased by 50 per cent in the scheme for 1986-87. Ceiling quotas on chemicals included in Chapter 28 were also increased by 50 per cent. In 1984, developing countries, namely Mexico and Peru, supplied about US$16 million or over 21 per cent of lead metal. In the same year, Mexico, Singapore and the People's Republic of China supplied almost the total of lead oxides imports by Japan.

61. New Zealand is partially dependent on imports of lead metal as its secondary metal production satisfies on average only about one-half of its domestic requirements. Table 27 indicates that in 1983-84 imports of unwrought lead amounted to US$3 million representing 90 per cent of total lead imports. Most of this product was imported m.f.n. duty free from Australia and the EEC. The m.f.n. duty-free treatment applies also to lead ores and concentrates and lead chemicals. Other lead products are subject to m.f.n. positive rates of duty. In 1983-84, imports of products from m.f.n. sources subject to positive m.f.n. rates were about 26 per cent (wrought products) and 69 per cent (lead manufactures) and were supplied mainly by the EEC and Japan. A large part of dutiable lead products were imported from Australia which enjoys duty-free access to New Zealand's market under the Australia-New Zealand Closer Economic Relations Agreement. New Zealand's GSP scheme grants tariff preferences to imports of wrought lead products and lead manufactures when imported from developing countries. Canada also benefits from preferential rates on certain items. The Forum Islands have duty free and unrestricted access to New Zealand under the South Pacific Regional Trade and Economic Cooperation Agreement (SPARTECA). In 1983-84, imports of lead products from these sources were practically nil.

62. Norway has no lead metal production and all lead ores mined in the country (around 4,000 tons annually) are exported. Norway also sells lead scrap (7,000 tons per year) mainly to its neighbours, Denmark and Sweden. Consequently, all its domestic requirements for lead products are covered from abroad. In 1984, Norway imported about US$8.7 million of lead products of which lead metal accounted for 78 per cent, wrought lead for 15 per cent and lead oxides for 4 per cent. Most lead imports were supplied by the EEC and Sweden. Table 28 indicates that with the exception of lead foil (CCCN 78.04.1000) and lead nails, rivet (CCCN 78.06.0090), all other lead products enter Norway m.f.n. duty free. Norway accords duty-free treatment on the two above-mentioned items when imported from developing and least-developed countries included in the list of the GSP beneficiaries. Norway also grants duty-free access to imports of these products when imported from other EFTA countries or the EEC. In 1984, most of the dutiable products were imported from these countries.

63. Poland is an important European producer of lead. In 1985, its mine production was at 51,000 tons and refined lead production was 87,000 tons. However, with the decreasing metal content of lead ores, the production

TABLE 27

TRADE IN LEAD AND LEAD PRODUCTS UNDER DIFFERENT TARIFF TREATMENT ACCORDING TO STAGES OF PROCESSING

Country: NEW ZEALAND

Year: 1983-1984

(Value in US$'000)

	Tariff No.	Total trade		MFN		MFN										GSP				Other preferential treatment (SPARTECA inc. Malaysia, Australia and Canada)			
				Tariff average		Duty free					Dutiable												
						Unbound		Bound		Origin	Rate				Origin								
		Value	%	Weighted	Simple	Value	%	Value	%		Unbound	Bound	Value	%		Rate	Value	%	Origin	Rate	Value	%	Origin
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
Ores and concentrates	ex26.01.019	(867)						(867)		JPN,AUS,CHN													
Ash and residues	ex26.03.000	(3)						(3)		AUS													
	Sub-total	...	100.0					...	100.0														
Unwrought	78.01.001	40									5.0		40		EEC,JPN								
	78.01.009	2,942						2,942		AUS,EEC													
Powders and flakes	78.04.009	9						9		EEC,AUS													
	Sub-total	2,991	100.0	0.2	5.0			2,951	98.7		5.0		40	1.3									
Wrought	78.02.001	23									15.0					10.0	10		OAN	Free	13		AUS
	78.02.009	40										5.0	31		EEC,JPN	Free	-			Free[1]	9		AUS
	78.03.000	96										25.0	8		EEC	15.0	-			Free[1]	86		AUS
	78.04.001	-										5.0	-			Free	-			Free	-		
	78.05.000	2										5.0	2		EEC	Free	-			Free	-		
	Sub-total	161	100.0	8.9	11.0						5.0 - 25.0[2]		41	25.5		Free; 15.0[2]	10	6.2		Free	110	68.3	
Chemicals	28.27.001	60						60		EEC,AUS													
	28.27.009	54						54		AUS,USA,EEC													
	ex28.30.000	(1,607)						(1,606)		JPN,EEC,AUS													
	ex28.35.000	(2,334)						(2,334)		EEC,CHN,USA													
	ex28.38.009	(1,590)						(1,590)		EEC,JPN,CAN													
	ex28.39.000	(828)						(828)		EEC,ISR,CHN													
	ex28.42.000	(3,840)						(3,840)		USA,EEC,AUS													
	ex28.48.000	(550)						(550)		EEC,SWE,USA													
	Sub-total	114	100.0	0.0	0.0			114	100.0														
Finished manufactures	78.06.000	71										50.0[3]	49		JPN,EEC,USA	25.0	-			Free	22		FJI,AUS
	Sub-total	71	100.0	50.0	50.0							50.0	49	69.0		25.0	-			Free[4]	22	31.0	
	TOTAL	3,337	100.0					3,065	91.8		5.0 - 50.0[2]		130	3.9		Free-25.0	10	0.3		Free	132	4.0	

[1] Canada.

[2] Tariff range.

[3] Ceiling binding.

[4] Canada: 25.0 per cent.

Note: Where the lead products are not specified separately (indicated by "ex") the trade flow figures, shown within brackets, may include imports of products other than those of lead, and for the same reason are not included in the sub-total.

TABLE 28

TRADE IN LEAD AND LEAD PRODUCTS UNDER DIFFERENT TARIFF TREATMENT ACCORDING TO STAGES OF PROCESSING

Country: NORWAY
Year: 1984

	Tariff No.	Total trade		MFN		MFN										GSP and LDC				Other preferential treatment (EEC, EFTA, Spain)[1]			
				Tariff average		Duty free					Dutiable												
						Unbound		Bound		Origin	Rate				Origin								
		Value	%	Weighted	Simple	Value	%	Value	%		Unbound	Bound	Value	%		Rate	Value	%	Origin	Rate	Value	%	Origin
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
Ores and concentrates	26.01.6000	-						-															
Ash and residues	ex 26.03.9000	(4,421)						(4,421)		EEC,SWE,FIN													
	Sub-total	...	100.0					...	100.0														
Unwrought	78.01.1100	447						447		EEC,SWE													
	78.01.1900	3,348						3,348		SWE,EEC,USA													
	78.01.2000	2,966						2,966		EEC,SWE													
Waste and scrap	78.01.3000	37						37		EEC													
Powders and flakes	78.04.2000	9						9		EEC													
	Sub total	6,807	100.0					6,807	100.0														
Wrought	78.02.0000	269						269		EEC,SWE													
	78.03.0000	996						996		EEC,SWE													
	78.04.1000	9										3.8	3		USA	Free	-			Free	6		EEC
	78.05.0000	17						17		EEC,SWE													
	Sub-total	1,291	100.0	0.0	1.0			1,282	99.3			3.8	3	0.2		Free	-			Free	6	0.5	EEC
Chemicals	28.27.1000	354						354		EEC,SWE,USA													
	28.27.9000	26						26		USA,EEC													
	ex 28.30.9090	(3,474)						(3,474)		EEC,JPN,USA													
	ex 28.35.9000	(12)						(12)		EEC													
	ex 28.38.9000	(411)						(411)		EEC,CHN,DDR													
	ex 28.39.9000	(108)						(108)		EEC,SWE,USA													
	28.42.8000	6						6		EEC													
	ex 28.48.0000	(153)						(153)		FIN,EEC,SWE													
	Sub-total	386	100.0					386	100.0														
Finished manufactures	78.06.0010	-						-															
	78.06.0090	202										3.2	9		USA	Free	-			Free	193		EEC,AUT,SWE
	Sub-total	202	100.0	3.2	1.6			-				3.2	9	4.5		Free	-			Free	193	95.5	
	TOTAL	8,686	100.0					8,475	97.6			3.2-3.8[2]	12	0.1		Free	-			Free	199	2.3	

[1] Under the Agreement between the EFTA countries and Spain, signed on 26 June 1979, Spain benefited from 60 per cent reduction on applied m.f.n. rates in 1984.

[2] Tariff range.

Note: Where the lead products are not specified separately (indicated by "ex") the trade flow figures, shown within brackets, may include imports of products other than those of lead, and for the same reason are not included in the sub-total.

costs have increased and presently lead-zinc operations require State subsidies. As production does not meet domestic needs, some lead concentrates, lead metal and lead oxides are imported, mainly from the Federal Republic of Germany and the People's Democratic Republic of Korea (refined lead). Table 52 shows the m.f.n. tariff treatment applied to imports of lead.

64. Portugal's consumption of refined lead which has been increasing in recent years is only partially covered by domestic secondary production (around 6,000 tons annually). About 80 per cent of domestic requirements of refined lead are imported. As can be seen from Table 29, in 1984 this product represented more than 95 per cent of Portugal's lead imports. Over two-thirds were supplied by Peru, Morocco, Australia and Canada and were subject to an m.f.n. duty of 2 per cent. The other third of metal imports originated in the EEC which together with EFTA countries enjoys duty-free preferential treatment. The EEC countries also supplied lead oxides and other lead chemicals. M.f.n. rates of duty range from free to 30 per cent. Zero duty applies to lead ores, lead scrap and some lead chemicals (the m.f.n. rate of duty on lead oxides is 12.2 per cent). The m.f.n. tariffs on lead are being adjusted in the process of the harmonization of its tariff with the EEC Common Tariff after Portugal's accession to the European Community.

65. South Africa has been the second largest exporter of lead concentrates after Peru since 1980. As it has no primary smelting, all lead concentrates produced by the Black Mountain Mineral Development Co. (Pty) Ltd. are exported. A new open pit zinc lead mine with an annual output of 5,000 tons of lead concentrates by 1987 has been developed by Shell South Africa (Pty) Ltd. Though the secondary lead production has increased in recent years it does not fully cover domestic consumption and some refined lead is imported. In 1984, this item represented almost the total of South Africa's lead imports valued at US$4.9 million. It was imported m.f.n. duty free mainly from the EEC, Mexico and Sweden. Table 30 shows that the m.f.n. treatment on lead products ranges from zero to 20 per cent. M.f.n. duty-free access is granted to most lead products, 10 per cent duty applies to some chemicals and lead bars and 20 per cent to lead containers.

66. Spain is the largest European lead mine producer after Yugoslavia. It also has an important primary and secondary metal production. Its principal lead producer, Sociedad Minera y Metallurgica de Penarroya de Espana, owns mines in Union and a smelter at Santa Lucia. Andalusa de Pintas SA and Exploracion Minera International Espana SA are non-integrated mining and milling companies. A customs smelter owned by Compania La Cruz SA was closed indefinitely in July 1986. The Government of Spain has undertaken administrative decentralization of the mineral industry in order to speed its development. Several explorations and studies have been done on the possibilities of opening new mines by

TABLE 29

TRADE IN LEAD AND LEAD PRODUCTS UNDER DIFFERENT TARIFF TREATMENT ACCORDING TO STAGES OF PROCESSING

Country: PORTUGAL
Year: 1984 (trade), 1986 (tariff treatment)

(US$'000)

Product Description	Tariff No.	Total Imports	MFN					Other Preferential Treatment[1]		
			Tariff average		Rate %	Value	Origin[2]	Rate %	Value	Origin[2]
			Weighted %	Simple %						
Ores and concentrates	26.01.500				Free	-			-	EEC
Ash and residues	26.03.300				1	-			-	
	Sub-total	-		0.5	Free-1[3]	-			-	
Unwrought										
Unalloyed	78.01.120				)	157	CAN		-	
	78.01.130				)	7,246	PER,MAR,AUS,CAN		1,682	)
Alloyed	78.01.150				) 2	-			1,055	)
	78.01.190				)	-			199	)EEC
Waste and scrap	78.01.300				Free	-			-	)
Powders and flakes	78.04.200				1	1			1	)
	Sub-total	10,341	2	2.7	Free-8[3]	7,404			2,937	
Wrought	78.02.000				10	-			1	)
	78.03.000				20	8	USA		39	)EEC
	78.06.110				) 15	3			-	)
	78.06.190				)	-			1	EEC,EFTA
	78.05.00				11	1				
	Sub-total	53	18	14.2	10-20[3]	12			41	
Chemicals	28.27.200				)	-			355	)
	28.27.800				) 12.2	-			8	)EEC
	ex 28.30.790				)	(125)	JPN		(14)	EEC,EFTA
	ex 28.30.800				)	(243)	ZAF		(353)	)
	ex 28.30.950				)	(-)			(6)	)
	ex 28.30.980				)	(3)			(17)	)EEC
	ex 28.35.479				)	(-)			(61)	)
	ex 28.35.599				) Free	(-)			(13)	)
	ex 28.38.710				)	(-)			(189)	EEC,AUT
	ex 28.38.909				)	(-)			(-)	)
	ex 28.39.100				)	(-)			(34)	)
	28.39.700				)	-		1	)EEC	
	28.42.740				)	-		36	)	
	ex 28.48.200				) 12	(-)			(-)	)
	ex 28.48.999				)	(-)			(49)	EEC,EFTA
	Sub-total	402		4	Free-12.2[3]	...			402	
Finished manufactures	78.06.100				20	-			-	
	78.06.900				20,30	-			40	EEC
	Sub-total	40		23.3	20-30[3]	-			40	
	TOTAL	10,836			Free-30[3]	7,416			3,420	

[1] The Act of accession to the European Communities (Articles 190 and 197, Section I, Chapter I, Title III, Part Four) provides for progressive introduction of the Common Customs Tariff and duty-free entry for EEC originating goods, from 1 January 1993. Imports from EFTA countries are indicated together with those from the EEC. No information is available with respect to the tariff treatment actually applied.

[2] Origin not available when imports are smaller than US$6,831. For this reason, EFTA origins are not shown separately.

[3] Tariff range.

Note: Where the lead products are not specified separately (indicated by "ex") the trade flow figures, shown within brackets, may include imports of products other than those of lead, and for the same reason are not included in the sub-total.
Exchange rate 1984: Escudos 146.39 per US$, IMF International Financial Statistics, September 1986.

Source: Estatísticas do Comercio Externo 1984, Instituto Nacional de Estatística, Lisboa, November 1985
International Customs Journal, 1983-84, Brussels, July 1983
Official Journal of the European Communities, L/302, Vol. 28, 15 November 1985

[illegible] (tariff comment)

($'000)

Product Description	Tariff No.	Total Imports	SADC Tariff rates: Weighted %	SADC Tariff rates: Simple %	SADC Rate %	SADC Value[1]	SADC Origin	Other Preferential Treatment: Rate %	Other Preferential Treatment: Value	Other Preferential Treatment: Origin
[illegible]	26.01.A+				[illegible]	2,133	[illegible]			
[illegible]	ex 26.03				Free	(1,289)	[illegible]			
	Sub-total	2,133				2,133				
Wrought										
Stainless	78.01.10.10				)	4,230	[illegible]			
Alloyed	78.01.10.90				)	19	[illegible]			
Waste	78.01.20				)	-				
Scrap	78.01.40				) Free	139	[illegible]			
Powders	78.04.30				)	7	n.a.			
Flakes	78.04.40				)	-				
	Sub-total	4,404				4,404				
Unwrought	78.02.10				Free	61	[illegible]			
	78.02.20				10	8	n.a.			
	78.02.30				3	12	[illegible]			
	78.03				0.4[2]	3	n.a.			
	78.04.10				Free	56	[illegible]			
	78.05.10				)	3	n.a.			
	78.05.20				) 5	-				
	78.05.90				)	-				
	Sub-total	143	0.9	3.5	Free-10[3]	143				
Chemicals	28.27.10				Free	34	[illegible]			
	28.27.15				15	13	[illegible]			
	28.27.90				)	29	[illegible]			
	ex 28.30.30.90				)	(760)	[illegible]			
	ex 28.30.60.90				) 10	(45)	[illegible]			
	ex 28.30.70.90				)	(20)	[illegible]			
	ex 28.30.80.90				)	(15)	[illegible]			
	ex 28.35.90				)	(917)	[illegible]			
	ex 28.38.90				)	(854)	[illegible]			
	ex 28.39.90				)	(727)	[illegible]			
	28.42.20				) Free	6	n.a.			
	ex 28.48.20				10	-				
	Sub-total	82	5.9	7.9	Free-15[3]	82				
Finished manufactures	78.06.10				3	-				
	78.06.90				20	71	[illegible]			
	Sub-total	71	20	11.5	3-20[3]	71				
	TOTAL	6,833			Free-20[3]	6,833				

[1] F.o.b. value is indicated.

[2] Ad valorem incidence of a specific rate of $40 per 1,000 kgs.

[3] Tariff range.

Note: Where the lead products are not specified separately (indicated by "ex") the trade flow figures, shown within brackets, may include imports of products other than those of lead, and for the same reason are not included in the sub total.
Exchange rate 1984: R80.6854 per Rand, International Financial Statistics, IMF, September 1986.

Source: Foreign Trade Statistics, Calendar Year 1984, Commissioner for Customs and Excise of the Republic of South Africa
Customs Tariff, Customs and Excise, Department of Finance, Pretoria, 1986

TABLE 31

TRADE IN LEAD AND LEAD PRODUCTS UNDER DIFFERENT TARIFF TREATMENT ACCORDING TO ORIGIN OF PRODUCTS

Country: SPAIN
Year: 1985 (trade), 1986 (tariff treatment)

('000 US$)

Product Description	Tariff No.	Total Imports	MFN[1]					Other Preferential Treatment		
			Tariff average		Rate[2]	Value	Origin	Rate	Value	Origin
			Weighted %	Simple %	%			%		
Ores and concentrates	26.01.50.1				)	8,977	NOR,CAN,CHL,BOL,MEX,PER		3,442	EEC,SWE
	26.01.50.9				) 0.9	-			-	
Ash and residues	26.03.30				Free	-			112	EEC
	Sub-total	12,531	0.9	6.4	Free-1.9[3]	8,977			3,554	
Unwrought										
Unalloyed	78.01.01				)	-			-	
	78.01.12				)	-			9	EEC
	78.01.13				)	1	ZAF		-	
Alloyed	78.01.15				) 2.7	-	USA		1,955	)
	78.01.19				)	30	CAN		573	) EEC
Waste and scrap	78.01.30				)	31	CAN,USA		8	EEC,AND
Powders and flakes	78.04.20				5.5	-			40	EEC
	Sub-total	2,647	2.7	3.1	2.7-5.5[3]	62			2,585	
Wrought	78.02.00				2.7	-			94	)
	78.03.00				)	5	)		-	) EEC
	78.04.11				)	23	)USA		12	)
	78.04.19				) 5.5	1	)		7	)
	78.05.00				)	-			-	
	Sub-total	145	5.5	4.9	2.7-5.5[3]	29			116	
Chemicals	28.27.20				)	-			-	
	28.27.80				) 26(8)	4	USA		5	EEC
	ex 28.30.79				9.5	(254)	JPN,USA		(2,016)	EEC
	28.30.80.9				11.1	-			-	
	ex 28.30.95				17.3	(32)	ISR,USA,DDR		(130)	EEC
	ex 28.30.98.9				(23.1)24.4(8)	(51)	USA		(30)	EEC
	ex 28.35.47				)	(2)	USA		(181)	EEC,AUT
	ex 28.35.59				) 14.8	(-)	JPN		(19)	AUT,EEC
	28.38.71.1				14	-			53	EEC
	ex 28.38.90				(19.8)20.8(8)	(78)	USA		(745)	EEC
	28.39.10				0.9	(103)	HGR,DDR		(814)	EEC
	28.39.70				16.5	-			2	EEC
	28.42.74				25(8)	-			25	EEC
	ex28.48.99				13.2	(6)	USA,JPN		(552)	EEC
	Sub-total	89	26	16.6	0.9-26[3]	4			85	
Finished manufactures	78.06.10				6.4	-	USA		45	EEC,CHE
	78.06.90				10.7	1	JPN		124	EEC
	Sub-total	170	10.7	8.5	6.4-10.7[3]	1			169	
	TOTAL	15,582			Free-26[3]	9,073			6,509	

[1] The Act of Accession to the European Communities (Articles 31 and 37, Section I, Chapter I, Title II, Part Four) provides for full introduction of the Common Customs Tariff and duty-free entry for EEC originating goods, from 1 January 1993. Imports from EFTA countries are indicated together with those from the EEC. No information is available with respect to the tariff treatment actually applied.

[2] Figures in parenthesis represent applied rates. These rates have been used for the calculation of the tariff averages. M.f.n. rates take account of the successive reduction towards the alignment with the CCT.

[3] Tariff range.

Note: Where the lead products are not specified separately (indicated by "ex") the trade flow figures, shown within brackets, may include imports of products other than those of lead, and for the same reason are not included in the sub-total.
(8) - Bound rates (Schedule XLV).
Exchange rate 1986: Pesetas 160.76 per US$, IMF International Financial Statistics, September 1986.

Source: Estadistica del Comercio Exterior de Espana, Enero-Diciembre 1986, Direccion General de Aduanas, Madrid
Boletin Oficial del Estado, Suplemento al. num. 296, Madrid, 11 December 1985, TAR/49
Official Journal of the European Communities, L/302, Vol. 28, 15 November 1985

private companies in recent years. All lead mine output is processed further in the country, and about 30 per cent of lead metal is exported. As Table 31 shows, Spain has to import some lead concentrates as its domestic lead mine production is not sufficient. In 1984, this product represented over 80 per cent of total lead imports. About two-thirds of lead concentrates were imported from m.f.n. sources, namely, Morocco, Canada, South Africa, Honduras and Peru, and were subject to a duty of 0.9 per cent. The remaining one-third was supplied by the EEC and Sweden under the duty-free preferential treatment. These countries also supplied most of lead metal and other lead products. Like Portugal, Spain too harmonizes its tariff schedule in several stages with the EEC Common Tariff, since its accession to the EEC.

67. Sweden's fully-integrated Boliden Mineral AB operates eighteen local mines of sulphide ores with total annual ore production of about 16 million tons. The copper and lead concentrates are partly delivered to smelters within the Boliden Group and partly exported (mainly to the EEC). Boliden also owns a secondary smelter with an annual capacity of 25,000 tons. Sweden consumes less than one-half of its refined lead metal output and exports the other half (mainly to the Federal Republic of Germany and the USSR). Table 32 illustrates Sweden's lead imports which in 1984 amounted to US$16.6 million. It consisted of 38 per cent lead concentrates, 26 per cent lead metal, 12 per cent lead scrap, 6 per cent wrought lead, 12 per cent lead oxides and 6 per cent lead manufactures. Except for certain lead manufactures (lead containers and other) all lead products are imported m.f.n. duty free. These two items receive the duty-free treatment when imported from developing and least-developed countries included in the list of GSP beneficiaries or from other members of EFTA and the EEC. As can be seen from Table 30, lead manufactures, as well as most of the m.f.n. duty-free lead products, were imported from the latter countries. Canada and Australia were major suppliers of lead concentrates.

68. Switzerland is a net importer of refined lead as its requirements are only partially covered by the domestically-recycled metal. Some old lead scrap which is not locally processed is exported, mainly to the EEC. Switzerland also exports some lead unwrought products. In 1984, lead products imports amounted to US$6.7 million. Of this amount, refined lead accounted for 62 per cent, wrought lead 18 per cent, lead manufactures 16 per cent and lead oxides and other chemicals were the remaining 4 per cent. Table 33 indicates ad valorem incidence based on 1984 trade figures[12] of specific m.f.n. rates which are applied to all lead products with the exception of lead ores and concentrates. They range from 0.1 per cent to 3 per cent (CCCN 78.05.1000 - lead foil). In 1984, imports from m.f.n. sources represented about 15 per cent of total lead imports and consisted mainly of refined lead supplied by Canada. Switzerland grants duty-free access to imports of lead products originating from developing

TABLE V

TRADE IN LEAD AND LEAD PRODUCTS UNDER DIFFERENT TARIFF TREATMENTS ACCORDING TO STAGES OF PROCESSING

Country: [illegible]
Year: 1984

	Tariff No.	Total trade		MFN		MFN										CEP and LDC				Other preferential treatment (EEC,EFTA,Spain)[1]			
				Tariff average		Duty free					Dutiable												
		Value	%			Unbound		Bound		Origin	Rate		Value	%	Origin	Rate	Value	%	Origin	Rate	Value	%	Origin
				Weighted	Simple	Value	%	Value	%		Unbound	Bound											
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
Ores and concentrates	26.01.4000	6,378						6,378		BUS,CAN,ARG													
Ash and residues	ex 26.03.9090	(4,182)						(4,182)		MOR,PRT,PHS													
	Sub-total	6,378	100.0					6,378	100.0														
Unwrought	78.01.1100	84						84		EEC,FIN,NOR													
	78.01.1900	107						107		EEC,MEX													
	78.01.2010	2,493						2,493		EEC,NOR													
	78.01.2020	347						347		EEC,NOR													
	78.01.2090	1,230						1,230		EEC,NOR													
Waste and scrap	78.01.3000	2,013						2,013		EEC,NOR,MEX													
Powders and flakes	78.04.2000	7						7		EEC													
	Sub-total	5,281	100.0					5,281	100.0														
Wrought	78.02.0000	207						207		EEC,NOR													
	78.03.0000	579						579		EEC													
	78.04.1000	275						275		EEC,USA													
	78.05.0000	40						40		EEC													
	Sub-total	1,101	100.0					1,101	100.0														
Chemicals	28.27.1000	1,511						1,511		EEC,NOR													
	28.27.9010	297						297		EEC,NOR													
	28.27.9090	38						38		USA,EEC													
	ex 28.30.9090	(786)						(786)		EEC,USA,ESP													
	ex 28.35.9090	(291)						(291)		EEC,ESP													
	ex 28.38.9090	(892)						(892)		EEC,USA,AUT													
	ex 28.39.9090	(223)										2.9[2]	(223)		EEC,USA,NOR								
	28.42.8000	42						42		EEC													
	ex 28.48.0000	(204)						(204)		EEC,FIN,CAN													
	Sub-total	1,888	100.0	0.0	0.3			1,888	100.0			2.9	(223)										
Finished manufactures	78.06.0010	-										3.8	-			Free	-			Free	-		
	78.06.0020	8						8		EEC,NOR													
	78.06.0090	945										3.2	217		USA,FIN,CAN	Free	1		EEC	Free	727		EEC,FIN,NOR
	Sub-total	953	100.0	3.1	2.3			8				3.2-3.8[3]	217			Free	1			Free	727		
	TOTAL	16,601	100.0					15,656	94.3			2.9-3.8[3]	217	1.3		Free	1	0.0		Free	727	4.4	

[1] Under the agreement between the EFTA countries and Spain, signed on 26 June 1979, Spain benefitted from 60 per cent reduction on m.f.n. rates in 1984.

[2] Partially bound

[3] Tariff range

Note: Where the lead products are not specified separately (indicated by "ex") the trade flow figures, shown within brackets, may include imports of products other than those of lead, and for the same reason are not included in the sub-total.

TABLE II

TRADE IN LEAD AND LEAD PRODUCTS UNDER DIFFERENT TARIFF TREATMENT ACCORDING TO STAGES OF PROCESSING

Country: SWITZERLAND
Year: 1984

	Tariff No.	Total trade		MFN		MFN 2/										CEP and LA.				Other preferential treatment (EEC, EFTA, Spain) 1/			
						Duty free					Dutiable												
		Value	%	Tariff average		Unbound		Bound		Origin	Rate		Value	%	Origin	Rate	Value	%	Origin	Rate	Value	%	Origin
				Weighted	Simple	Value	%	Value	%		Unbound	Bound											
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
Ores and concentrates	26.01.4000	-						-															
Ash and residues	ex 26.03.0100	(512)						(512)		EEC,HUN,AUT													
	Sub-total	...	100.0					...	100.0														
Unwrought	78.01.1000	4,154										0.2	1,012		CAN	Free	-			Free	3,142		EEC
Waste and scrap	78.01.2000	-										0.2	-			Free	-			Free	-		
Powders and flakes	78.04.2000	2										0.2	-			Free	-			Free	2		AUT,EEC
	Sub-total	4,156	100.0									0.2	1,012	26.4		Free	-			Free	3,144	75.6	
Wrought	78.02.0100	162										0.8	-			Free	-			Free	162		EEC
	78.03.0100	777										0.2	-			Free	-			Free	777		EEC
	78.04.1000	163										1.9	12		USA,NZL	Free	-			Free	151		EEC
	78.05.1000	121										3.0	-			Free	-			Free	121		EEC
	78.05.2900	9										0.3	-			Free	-			Free	9		EEC
	Sub-total	1,232	100.0									0.2-3.0 3/	12	1.0		Free	-			Free	1,720	99.0	
Chemicals	28.27.1000	117										0.6	-			Free	-			Free	117		EEC
	28.27.2000	35										0.6	-			Free	-			Free	35		EEC
	ex 28.30.4000	(1,060)										0.1	(137)		USA,POL	Free	-			Free	(933)		EEC
	ex 28.30.8000	(590)										0.2	(11)		USA,HUN,POL	Free	(126)			Free	(453)		EEC,AUT
	ex 28.35.2000	(628)										0.1	(16)		USA	Free	-			Free	(612)		EEC,AUT,SWE
	28.38.5000	1										0.2	-			Free	-			Free	1		EEC
	29.39.4000	-										1.7	-			Free	-			Free	-		
	28.42.5000	87										0.3	-			Free	-			Free	87		EEC
	ex 28.48.1000	(21)										0.1	-			Free	-			Free	(21)		EEC,AUT
	Sub-total	240	100.0									0.1-1.7 3/	(166)			Free	(126)			Free	240	100.0	
Finished manufactures	78.06.1000	22										0.1	-			Free	-			Free	22		EEC
	78.06.1900	-										0.6	-			Free	-			Free	-		
	78.06.2000	179										1.6	-			Free	-			Free	179		EEC
	78.06.2200	714										1.2	5		JPN,USA	Free	-			Free	709		EEC,AUT,SWE
	78.06.3100	140										0.9	2		JPN	Free	-			Free	138		EEC
	Sub-total	1,055	100.0									0.1-1.6 3/	7	0.7		Free	-	0.0		Free	1,048	99.3	
	TOTAL	6,683	100.0					...				0.1-3.0 3/	1,031	15.4		Free	-	0.0		Free	5,652	84.6	-

1/ Under the agreement between the EFTA countries and Spain, signed on 26 June 1979, Spain benefited from 60% reduction of applied m.f.n. rates in 1984.

2/ M.f.n. duties indicate ad valorem incidence of specific rates based on 1984 trade figures. Specific rates are indicated in Annex I.

3/ Tariff range

Note: Where the lead products are not specified separately (indicated by "ex") the trade flow figures, shown within brackets, may include imports of products other than those of lead, and for the same reason are not included in the sub-total.

countries and least-developed countries under the GSP. In 1984, imports from these countries were nil. In contrast, most lead products are supplied duty free by the EEC or other EFTA countries. In 1984, almost 85 per cent of lead products imports originated in these countries.

69. The United States lead production has been stagnating since the early 1970s as a result of production cutbacks by most lead producers due to declining domestic consumption. Nevertheless, the United States remains the world's leading producer and consumer of lead. In 1985, the United States produced about 12 per cent of world lead concentrates and over 18 per cent of lead metal and consumed over 1.1 million tons of refined lead which represented about 20 per cent of world consumption. About 90 per cent of domestic lead mine production is located in Missouri. The Buick Mine, the country's largest single producer and the second largest Viburnum Division now owned by Doe Run Company produce more than one half of the country's lead concentrates. The principal United States lead producer has been St. Joe Minerals Corp. and is now Doe Run Company, which in 1986 was the result of a merger of the lead assets of St. Joe Minerals and Homestake Mining Co. In 1987, its mine capacity was estimated to be 58 per cent of the total United States capacity. The Doe Run also owns the country's largest smelter at Herculaneum. Other major smelters and refiners are owned by AMAX-Homestake and ASARCO. In 1985, secondary production was responsible for 55 per cent of total metal production. However, the number of secondary refineries and the production capacity have decreased in recent years partly due to low lead prices but also because of the effect of strict anti- pollution measures, e.g. on scrap collection, and new investment needed for modernization. The United States exports some lead concentrates, mainly to Canada, and refined lead. It also exports wrought lead products and lead pigments, mainly litharge. Taiwan and Brazil are its major markets for lead scrap.

70. The United States is a net importer of several lead products. Table 34 prepared on the basis of concordances established between the Tariff Schedule of the United States Annotated (TSUSA) and the Customs Cooperation Council nomenclature, indicates that in 1984 the United States imported about US$117 million of lead products, out of this amount unwrought lead accounted for three quarters. It was mainly supplied by Canada and Mexico and to a lesser extent by the EEC. The m.f.n. duty on this product is bound at a ceiling rate of 4 per cent but the m.f.n. applied rate is lower. The remaining imports consisted of lead concentrates (10.5 per cent of total imports), lead chemicals (8 per cent), lead manufactures (3.3 per cent) and wrought lead products (2.9 per cent). As can be seen from Table 34, most of these products were supplied from m.f.n. sources, principally Canada and the EEC, and were subject to positive m.f.n. rates of duty ranging from 0.1 per cent (lead residues) to 15 per cent (lead sub-oxide), with the majority of rates being between 2 per cent and 4 per cent. M.f.n. specific duties are applied on lead ores

TABLE IV

[illegible] IMPORTS FROM [illegible] ACCORDING TO SOURCE OF PURCHASE

Country: UNITED STATES

Year: 1984

(Value in US$'000)

	Tariff No.	Total trade		MFN		MFN										CBI				Other preferential treatment[1]			
						Duty free					Dutiable												
		Value	%	Tariff average		Unbound		Bound		Origin	Rate		Value	%	Origin	Rate	Value	%	Origin	Rate	Value	%	Origin
				Weighted	Simple	Value	%	Value	%		Unbound	Bound											
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
Ores and concentrates	602.10	11,914										5.9[2]	964		CAN,EEC,	Free	3,709		PER,MEX	Free	2,201		BRB
fish and residues	603.25	364										4.9[2]	364		CAN,EEC	Free	-			Free	-		
	ex603.49	-										0.3[2]	-			Free	-			Free	-		
	ex603.50	(3,188)										0.4[2]	(2,817)		CAN,EEC,CHL	Free	(364)		MEX,PER	Free	-		
	ex603.55	-										0.1[2]	-			Free	-			Free	-		
	ex603.65	(9,017)						(9,017)		TUR,JPN,CAN													
	Sub-total	17,278	100.0	2.2	1.9							0.1-5.9[3]	1,308	30.6		Free	3,759	71.4		Free	2,201	17.9	
Shrimp, fr	626.01	57										4.0[4]	20		EEC,CAN	Free	37		MEX	Free	-		
	626.03	86,190										6.0[4]	86,190		CAN,MEX,EEC					Free	-		
	626.04	1,494										2.3	788		CAN,EEC,ATG	Free	706		MEX,CAN	Free	-		
Prawns and flakes	626.40	4										11.9	4		EEC,CAN	Free	-			Free	-		
	626.42	319										11.2	319		EEC,CAN,JPN	Free	-			Free	-		
	Sub-total	88,064	100.0	4.0	6.7							2.3-11.9[3]	87,321	99.2		Free	743	0.8		Free	-	0.0	
Wrought	626.10	237										2.7	237		CAN,EEC	Free	-			Free	-		
	626.12	-										3.0	-			Free	-			Free	-		
	626.14	136										3.9	136		CAN,EEC	Free	-			Free	-		
	626.16	-										6.5	-			Free	-			Free	-		
	626.18	-										4.2	-			Free	-			Free	-		
	626.20	37										3.9	37		EEC,CAN	Free	-			Free	-		
	626.22	-										2.5	-			Free	-			Free	-		
	626.24	39										3.9	37		CAN,EEC	Free	2		MEX,CAN	Free	-		
	626.30	1,538										1.2	1,431		EEC,CAN,JPN	Free	91		ECU,BRA	Free	16		PHI
	626.32	-										6.3	-			Free	-			Free	-		
	626.34	1,088										6.2	194		CAN,JPN,EEC	Free	892		MEX,CAN	Free	2		BRB
	626.50	38										2.0	35		CAN,EEC	Free	3		CAN	Free	-		
	626.52	-										4.2	-			Free	-			Free	-		
	626.54	65										3.9	57		CAN,EEC	Free	9		CAN	Free	-		
	644.17	-										4.7	-			Free	-			Free	-		
	644.18	213										3.9	213		JPN,EEC	Free	-			Free	-		
	644.28	2										2.2	2		EEC								
	Sub-total	3,394	100.0	2.3	3.8							1.2-6.5[3]	2,379	70.1		Free	997	29.4		Free	18	0.5	
Chemicals	419.00	145										3.7	40		EEC,CAN	Free	105		PER	Free	-		
	419.02	288										1.9	282		CAN,ZAF,EEC	Free	6		MEX	Free	-		
	419.04	1,579										4.8	1,561		EEC,CAN,JPN	Free	18		MEX	Free	-		
	426.36	112										1.1	112		EEC,JPN,AUT	Free	-			Free	-		
	426.42	-										2.5	-			Free	-			Free	-		
	426.44	97										4.9	97		EEC,CAN,JPN	Free	-			Free	-		
	473.44	-										5.8	-			Free	-			Free	-		
	473.46	19										1.2	19		EEC	Free	-			Free	-		
	473.48	9										4.3	9		AUT	Free	-			Free	-		
	473.50	4										5.8	4		CAN	Free	-			Free	-		
	473.52	6,313										6.0[4]	6,313		MEX,CAN,EEC	Free	-			Free	-		
	473.54	-										2.3[4]	-			Free	-			Free	-		
	473.56	556										8.6	556		MEX,EEC,JPN	Free	-			Free	-		
	473.58	2										15.0	2		JPN	Free	-			Free	-		
	473.60	373										0.5	373		EEC,CAN	Free	-			Free	-		
	473.62	149										10.0	149		EEC	Free	-			Free	-		
	Sub-total	9,644	100.0	5.6	4.9							0.5-15.0[3]	9,515	98.7		Free	129	1.3		Free	-	0.0	
Finished manufactures	657.70	20										0.6	4		EEC	Free	16		CAN,EEC,MEX	Free	-		
	657.75	3,790										3.9	1,922		EEC,JPN,CAN	Free	1,868		CAN,EEC,MEX	Free	-		
	Sub-total	3,810	100.0	3.9	2.2							0.6-3.9[3]	1,926	50.6		Free	1,884	49.4		Free	(2,663)	0.0	
	TOTAL	117,180	100.0									0.5-15.0[3]	102,449	87.4		Free	12,522	10.7		Free	2,219	1.9	

[1] A preferential treatment is given to beneficiary countries of the Caribbean Basin Economic Recovery Act (CBERA). Imports of local products are duty-free when imported from Israel under the Agreement on the Establishment of a Free Trade Area between the Government of the United States and the Government of Israel (which entered into force on 19 August 1985 (I/5867).

[2] MFN duties indicate ad valorem incidence of specific rates based on 1984 trade figures. Specific rates on tariff line basis are given in Annex I.

[3] Tariff range.

[4] Ceiling binding.

[5] Duties excluded from CBI treatment in 1984 CBI scheme.

Note: Where the local products are not specified separately (indicated by "ex") the trade flow figures, shown within brackets, may include imports of products other than those of local, and for the same reason are not included in the sub-total.

and concentrates and lead ash and residues. The United States grants preferential duty-free treatment to imports of lead products when imported from developing countries included in its GSP scheme. The United States GSP scheme has a built-in feguard mechanism whereby GSP beneficiaries may be excluded from GSP treatment on a product-by-product basis. In 1984, litharge and red lead imported from Mexico were affected by these provisions. In the same year, imports from GSP sources represented about 11 per cent of total lead imports. However, most of lead ores and concentrates (about 70 per cent of total lead concentrates imports) entered duty free from Peru and Mexico under the GSP. About 17 per cent of lead concentrates originating in Honduras were also imported duty free. This country benefits duty-free access granted by the United States to all lead products imports from the countries in the Caribbean under the Caribbean Basin Economic Recovery Act (CBERA).

(ii) Developing countries

71. The following sub-section gives a brief description of production, consumption and trade of lead in some developing countries. Tables 35 to 51 provide detailed information on imports of lead and lead products on tariff line basis divided according to stages of processing for the following developing countries: Argentina, Brazil, Colombia, Hong Kong, India, Indonesia, Israel, the Republic of Korea, Malaysia, Mexico, Morocco, Peru, the Philippines, Singapore, Thailand, Turkey and Yugoslavia. Trade figures are based on the most recent national statistics. Imports under CCCN ex 26.03 and lead chemicals under ex tariff lines are not included in total lead trade. Tables indicate the m.f.n. tariff treatment applied in 1986 and where available, preferential treatment granted to other countries or regional groupings together with the value of preferential imports. Tariff averages, both simple and weighted, are given for lead products at each stage of processing. In addition to the individual country Tables which link tariff treatment to trade flows, Table 52 indicates m.f.n. tariff treatment applied to lead and lead products by the following developing countries: Chile, Egypt, Ghana, Jamaica, Nigeria, Pakistan, Romania, Tunisia, Uruguay and Zaire. Trade statistics based on the tariff line level for these countries are not available.

Individual developing-country profiles

72. The Minera Aquilar, Argentina's only lead-zinc mine situated in the province of Jujuy, produces on average around 30,000 tons of lead in concentrates annually. The concentrates are normally processed into refined lead by the National Lead Company in Chaco. For the last four years a part of the concentrates output has been exported. Argentina also has some secondary lead production (17,000 tons in 1985). Under the "Mining Expansion Plan", Argentina's Government has undertaken feasibility

TRADE IN LEAD AND LEAD PRODUCTS UNDER DIFFERENT TARIFF TREATMENT ACCORDING TO STAGES OF PROCESSING

Country: ARGENTINA
Year: 1982 (trade), 1986 (tariff treatment)

(US$'000)

Product Description	Tariff No.	Total Imports	MFN					Other Preferential Treatment[1]		
			Tariff Average		Rate %	Value	Origin	Rate %	Value	Origin
			Weighted %	Simple %						
Ores and concentrates	26.01.07.00				26	-	USA		-	
Ash and residues	ex26.03.00.00				30	(127)			(30)	URY
	Sub-total	...		28	26-30[2]	...			...	
Unwrought										
Unalloyed	78.01.02.00				)	44	EEC		-	
	78.01.03.00				) 37	-			849	MEX, PER
Alloyed	78.01.04.00				)	2	EEC		-	
Waste and scrap	78.01.01.00				)	-			-	
Powders and flakes	ex78.04.00.00				38	-	EEC,USA		-	BRA
	Sub-total	895	37	37.2	37-38[2]	46			849	
Wrought	78.02.00.00				)	22	JPN,EEC		-	
	78.03.00.00				)	-			-	
	ex78.04.00.00				) 38	-	EEC,USA		-	BRA
	78.05.00.01				)	-			-	
	78.05.00.99				)	3	USA		3	BRA
	Sub-total	28	38	38	38	25			3	
Chemicals	28.27.00.01				)	2	USA		16	MEX
	28.27.00.02				)	-			39	
	28.27.00.99				) 35	2	USA		-	
	ex28.30.00.01.99				)	(145)	EEC,USA,CHE		-	
	ex28.30.00.02.99				)	(6)	USA,EEC		-	
	ex28.30.00.03.99				)	-			-	
	ex28.30.00.04.99				) 10	-			-	
	ex28.35.00.99				25	(574)	FEC,USA,AUT,CSK		(10)	BRA
	ex28.38.02.01.99				35	(297)	AUT,EEC,USA,JPN,CHE		(21)	BRA,PER
	ex28.39.00.01.99				25	-			-	
	28.39.00.02.10				10	35	USA,ZAF		5	MEX
	28.42.02.14				35	-	EEC		-	
	ex28.48.00.02.99				10	(8)	USA,EEC,CHE		-	
	Sub-total	99	12.6	25.8	10-35[2]	39			60	
Finished manufactures	78.06.00.00.01				) 38	-			-	
	78.06.00.00.99				)	19	USA,EEC,JPN,CHE		-	BRA
	Sub-total	19	38	38	38	19			-	
	TOTAL	1,041			10-38[2]	129			912	

[1] Imports from ALADI countries; no information is available in relation to the nature or extent of preference applied. The weighted tariff averages are calculated excluding this trade.

[2] Tariff range.

Note: Where the lead products are not specified separately (indicated by "ex") the trade flow figures, shown within brackets, may include imports of products other than those of lead, and for the same reason are not included in the such total.

Source: - Comercio Exterior 1982, Tomo III, Instituto Nacional de Estadistica y Censos.
- International Customs Journal, 1985-86, Brussels 1986.

studies for possible exploitation of its metallic reserves. It also encourages the domestic and foreign investment in the development of its metal sector. Most of Argentina's imports of lead are in the form of unwrought unalloyed lead. As Table 35 indicates, this product represented almost 90 per cent of Argentina's imports in 1982. It was supplied mainly by Mexico and Peru under the ALADI preferential regional agreement. M.f.n. rates of duty applied to lead and lead products range from 10 per cent to 38 per cent, 37 per cent and 38 per cent being applied to unwrought and wrought lead and lead finished manufactures.

73. Brazilian primary and secondary lead industry at present fully satisfies domestic refined lead requirements. After several years of depressed demand, Brazilian consumption of refined lead recovered and in 1985 it was almost 83,000 tons. Since Brazilian lead mine production is not sufficient, part of local demand of lead concentrates, is imported, mainly from Ireland and Peru. However, it is expected that the import requirements of the primary industry will decrease in the near future upon the opening of a new zinc/lead mine Morro Agudo in Minas Gerais with an annual capacity of 12,500 tons in 1987. Brazil also imports lead scrap for its secondary smelting. Its principal suppliers of this item are the United States and the EEC. As can be seen from Table 36, both lead concentrates and lead scrap enter m.f.n. duty-free[13] and in 1983, they represented more than one-half of total lead imports valued at US$5 million. Other major lead imports are lead manufactures (CCCN 78.06.09) which in the same year accounted for about 30 per cent of total lead imports and were shipped by Japan, the EEC, the United States and Switzerland. The remaining lead imports are composed of refined lead and lead oxides supplied by Mexico and Peru under ALADI preferential agreements. With the exception of lead ash and residues and lead scrap, Brazilian m.f.n. tariff treatment on lead products is positive ranging from 20 per cent to 70 per cent. M.f.n. tariff rates increase with the higher degree of processing.

74. Chile has a small mine production of lead but no smelting or refining capacity. Lead and lead products for its domestic consumption, which is very low, are imported. As trade figures on its imports are not available, Table 52 only gives Chile's tariff treatment applied to imported lead products.

75. Colombia's small production of lead ores and concentrates is principally exported. Its secondary lead output is estimated at about 3,000 tons annually. Consequently, most of its requirements of lead products are covered by imports. Table 37 indicates that in 1983, Colombia's lead imports valued at about US$2 million were made up mainly of unwrought lead and lead oxides and lead sulphates. About 50 per cent of them came from m.f.n. sources under the m.f.n. rates of duty of 13 per cent (unwrought lead) and 26 per cent (chemical compounds). The other half was supplied by Peru and Mexico under the ALADI preferential agreements.

TABLE 36

TRADE IN LEAD AND LEAD PRODUCTS UNDER DIFFERENT TARIFF TREATMENT ACCORDING TO STAGES OF PROCESSING

Country: BRAZIL
Year: 1983 (trade), 1986 (tariff treatment)

(US$'000)

Product Description	Tariff No.	Total Imports	MFN					Other Preferential Treatment[1]		
			Tariff Average Weighted %	Tariff Average Simple %	Rate %	Value	Origin	Rate %	Value	Origin
Ores and concentrates	26.01.06.99				20[2]	848	EEC,USA		747	PER
Ash and residues	ex26.03.01.00				Free	(1,083)	USA		-	
	Sub-total	1,595			Free	848			747	
Unwrought										
Unalloyed	78.01.01.01								-	-
	78.01.01.99					-			-	
	78.01.02.01				30	-			60	MEX
	78.01.02.99					-	CHE		299	MEX
Alloyed	78.01.03.00					-			-	
Waste and scrap	78.01.04.00				Free	978	USA,EEC		-	
Powders and flakes	78.04.01.00				45	-	EEC		-	
	Sub-total	1,337		27.9	Free-45[3]	978			359	
Wrought	78.02.01.00				37	-	CHE		-	
	78.02.02.01					1	JPN,PTW		-	
	78.02.02.99					-	JPN,USA		-	
	78.03.00.00					1	EEC,JPN		-	
	78.04.99.00					-	USA		-	
	78.05.01.00				55	-			-	
	78.05.02.00					-			-	
	78.05.03.00					-			-	
	78.05.04.00					-			-	
	Sub-total	2	55	53	37-55[3]	2			-	
Chemicals	28.27.01.00				45	9	USA,EEC		185	
	28.27.02.00					-	EEC		7	MEX
	28.27.03.00					9	USA,EEC		119	PER
	28.30.09.00					-	EEC,CHE		-	
	28.30.26.00					-			-	
	28.30.33.00					-			-	
	28.30.5 .00					-			-	
	ex28.30.67.00					-			-	
	28.35.06.00					-	EEC		-	
	ex28.35.22.00					-			-	
	28.38.06.01					-			-	
	28.38.06.02				30	84	USA		-	
	ex28.38.28.0					-			-	
	ex28.39.06.30					-	EEC		-	
	28.39.13.00					2	USA,EEC		-	
	28.42.05.01					-			-	
	28.42.05.02					102	EEC,CHE		-	
	ex28.42.21.00					-			-	
	28.48.01.03					-			-	
	28.48.02.03					-			-	
	Sub-total	517	30.7	31.5	30-45[3]	206			311	
Finished manufactures	78.06.01.00					-			-	
	78.06.02.00				70	-	USA		-	
	78.06.99.00					1,450	JPN,EEC,USA,CHE		-	
	Sub-total	1,450	70	70	70	1,450			-	
	TOTAL	4,901			Free-70[3]	3,484			1,417	

[1] Imports from ALADI countries; no information is available in relation to the nature or extent of preference applied. The weighted tariff averages are calculated excluding this trade.

[2] Applied rate free [3] Tariff range

Note: Where the lead products are not specified separately (indicated by "ex") the trade flow figures, shown within brackets, may include imports of products other than those of lead, and for the same reason are not included in the each total.

Source: - Comercio Exterior do Brasil, Importaçao 1983, Tomo I and II, Ministerio da Fazenda, Brasilia.
- Tarifa Aduaneira do Brasil, 1985.

TABLE 37

TRADE IN LEAD AND LEAD PRODUCTS UNDER DIFFERENT TARIFF TREATMENT ACCORDING TO STAGES OF PROCESSING

Country: COLOMBIA
Year: 1983 (trade), 1986 (tariff treatment)

(US$'000)

Product Description	Tariff No.	Total Imports	MFN					Other Preferential Treatment[1]		
			Tariff Average Weighted %	Tariff Average Simple %	Rate %	Value	Origin[2]	Rate %	Value	Origin
Ores and concentrates	26.01.05.00				7	-			-	
Asi. and residues	ex26.03.00.00				13	-			-	
	Sub-total	-		10	7-13[3]	-			-	
Unwrought										
Unalloyed	78.01.01.01					57				
	78.01.01.02					300				
Alloyed	78.01.02.01				13	-			-	
	78.01.02.99					120	EEC,JPN		512	PER,CHL
Waste and scrap	78.01.03.00					-			-	
Powders and flakes	78.04.02.00				26	-				
	Sub-total	989	13	15.2	13-26[3]	477			512	
Wrought	78.02.01.00					10				
	78.02.02.00					31				
	78.03.00.00				26	24				
	78.04.01.00					30				
	78.05.01.00					-				
	78.05.02.01					-			-	
	78.05.02.99				40	6				
	Sub-total	101	26.8	32	26-40[3]	101			-	
Chemicals	28.27.00.01					-			479	MEX,PER
	28.27.00.02					96				
	28.27.00.03					-				
	ex28.30.01.99					(92)				
	28.30.02.03					-			-	
	ex28.30.03.99					(59)				
	ex28.30.04.99				26	(2)				
	ex28.35.01.99					(33)				
	ex28.35.02.99					(25)				
	28.38.01.12					331				
	ex28.38.03.99					-			-	
	ex28.39.01.99					(1)				
	ex28.39.02.99					(86)				
	28.42.02.51					-				
	ex28.48.01.99				33	(8)				
	28.48.05.01				20	-			-	
	ex28.48.89.00				33	(25)				
	Sub-total	906	26	26.5	20-33[2]	427			479	
Finished manufactures	78.06.01.00				46	-			-	
	78.06.00.99					3				
	Sub-total	3	46	46	46	3			-	
	TOTAL	1,999			7-46[3]	1,008			991	

[1] Imports from ALADI countries; no information is available in relation to the nature or extent of preference applied. The weighted tariff averages are calculated excluding this trade.

[2] Origin not available for imports below US$400,000

[3] Tariff range.

Note: Where the lead products are not specified separately (indicated by "ex") the trade flow figures, shown within brackets, may include imports of products other than those of lead, and for the same reason are not included in the such total.

Source: - Anuario de Comercio Exterior 1983, Departamento Administrativo Nacional de Estadistica.
- Zoll-und-Handels Information, January 1984.

76. In the last five years, consumption of refined lead in Egypt has doubled reaching 30,000 tons in 1985. All requirements for lead are satisfied from external sources. As detailed figures on Egypt's lead trade are not available, Table 52 gives only the tariff treatment applied to lead imports.

77. Refined lead consumption of both Ghana and Jamaica is insignificant. The m.f.n. tariff treatment on lead is also indicated in Table 52.

78. In 1985 Hong Kong imported about US$1.4 million of lead products (see Table 38). About two-thirds of these imports were unwrought lead shipped mainly from countries in the same geographic region. The other third was shared among wrought lead, lead oxides and lead manufactures. Imports of lead and lead products to Hong Kong are m.f.n. duty free.

79. The consumption of refined lead in India, which has been rising 5.5 per cent per year, by far exceeds domestic production. In the fiscal year 1985-1986, Indian lead metal consumption has been estimated at around 75,000 tons against 17,200 tons of primary lead and 9,200 tons of secondary lead production. Hindustan Zinc Ltd. (HZL), a State company, is the only primary producer. Seconda lead is produced from indigenous or imported scrap by a private company Indian Lead Pvt. In its long-term plan to increase domestic production, the Indian Government has decided to develop a lead-zinc mine and smelter complex based on the Rampura-Agucha deposits in Rajasthan. The new project, with a refined lead capacity of 35,000 tons per year, is expected to be completed by the early 1990s. With the commissioning of the new smelter, India will satisfy 65 per cent of domestic lead consumption from its sources since the mid 1990s. At present, about two-thirds of Indian lead metal consumption is imported. As Table 39 indicates, in the fiscal year 1981-1982, this item represented 87 per cent of total imports of lead valued at US$25 million. Lead metal is principally purchased in Australia and the EEC (mainly the Federal Republic of Germany). Australia, together with the United States and United Arab Emirates, was the major supplier of lead scrap which in the same year accounted for over 10 per cent of total lead imports. With the exception of lead ashes and residues and unalloyed lead metal which are subject to the m.f.n. duty of 40 per cent, m.f.n. duties on all other lead products are 60 per cent.

80. Indonesia has a small secondary production of lead (about 6,000 tons per year) and meets most of its requirements of lead from foreign sources. In 1984 lead metal accounted for 90 per cent of total lead imports of US$10.4 million and originated mainly from Australia. Australia and Mexico supplied most of lead oxides. Table 40 shows the m.f.n. tariff treatment on lead and lead products as well as m.f.n. applied rates (in parenthesis). The majority of lead imports enter under the m.f.n. rate of duty of 5 per cent.

TABLE 39

TRADE IN LEAD AND LEAD PRODUCTS UNDER DIFFERENT TARIFF TREATMENT ACCORDING TO STAGES OF PROCESSING

Country: HONG KONG
Year: 1985 (trade), 1986 (tariff treatment)

(US$'000)

Product Description	Tariff No.	Total imports	MFN					Other Preferential Treatment		
			Tariff Average Weighted %	Tariff Average Simple %	Rate %	Value	Origin	Rate %	Value	Origin
Ores and concentrates Ash and residues	26.01 ex26.03				Free	- (196)	CHN,MAC,SGP			
	Sub-total	...			Free	...				
Unwrought Unalloyed Alloyed Waste and scrap Powders and flakes	78.01 78.01 78.01 ex78.04				Free	583 341 65 (2)	PTW,CHN,JPN,AUS,CAN,KOR CHN,EEC,AUS PTW,CHN,USA,SGP,MAC EEC			
	Sub-total	989			Free	989				
Wrought	78.02 78.02 78.03 ex78.04 78.05				Free	58 29 75 2 93	SGP,AUS,PTW,CHN,JPN PTW,SGP,JPN EEC,ZAF,USA,AUS EEC JPN,EEC,ZAF			
	Sub-total	257			Free	257				
Chemicals	28.27 26.27 ex28.30 ex28.30 ex28.35 ex28.38 ex28.39 ex28.41 ex28.42 ex28.48				Free	93 7 (698) (28) (3,028) (3,947) (209) (26) (1,044) (25)	CHN,EEC,USA,AUS EEC,AUS,JPN CHN,PTW,SGP,EEC,JPN,SWE EEC,USA CHN,EEC,PTW CHN,EEC,JPN,PTW,USA,SGP CHN,JPN,EEC EEC,USA,JPN,SGP CHN,JPN,SUN,USA,EEC EEC,USA,JPN,SGP			
	Sub-total	100			Free	100				
Finished manufactures	78.06				Free	70	EEC,CHN,SGP,JPN			
	Sub-total	70			Free	70				
	TOTAL	1,416			Free	1,416				

Note: Where the lead products are not specified separately (indicated by "ex") the trade flow figures, shown within brackets, may include imports of products other than those of lead, and for the same reason are not included in the such total.
Exchange rate 1985: 7.791 Hong Kong dollars per US$, Hong Kong monthly digest of statistics, March 1986.

Source: - Hong Kong Trade Statistics, December 1985, Census and Statistics Department, Hong Kong
- Zoll-und-Handels Information, January 1985.

TABLE 20

TRADE IN LEAD AND LEAD PRODUCTS UNDER DIFFERENT TARIFF TREATMENT ACCORDING TO STAGES OF PROCESSING

Country: INDIA
Year: 1981-82 (trade), 1986 (tariff treatment)

(US$'000)

Product Description	Tariff No.	Total Imports	MFN					Other Preferential Treatment		
			Tariff Average Weighted %	Tariff Average Simple %	Rate %	Value	Origin	Rate %	Value	Origin
Ores and concentrates Ash and residues	26.01 26.03 26.03				60 40	48 13 708	MAR,EEC KEN AUS,EEC,USA,CYP,KEN			
	Sub-total	769	41.2	46.7	40-60[1]	769				
Unwrought Unalloyed	78.01 78.01 78.01 78.01				40	13,270 2,626 3,014 150	AUS,EEC,AUT,USA,SGP AUS AUS,AUT,SGP EEC,ARE,MYS,HKG,SGP			
Alloyed Waste and scrap Powders and flakes	78.01 78.01 78.04				60	2,013 2,578 -	AUS,SUN,EEC,USA AUS,USA,ARE,EEC,SGP			
	Sub-total	23,651	43.9	48.6	40-60[1]	23,651				
Wrought	78.02 78.03 78.04 78.05				60	61 2 9 10	AUS,JPN,EEC,USA USA,EEC EEC SWE,JPN,EKG			
	Sub-total	82	60	60	60	82				
Chemicals	28.27 28.27 ex28.30 ex28.35 ex28.38 ex28.38 ex28.39 ex28.42 ex28.48				60	- 191 (581) (71) (278) (18) (160) (26) (14)	USA EEC,USA EEC,JPN,USA EEC,AUT,USA,JPN EEC,USA.JPN JPN,EEC USA,CAN,EEC,JPN,NOR EEC,USA,JPN EEC,JPN			
	Sub-total	191	60	60	60	191				
Finished manufactures	78.06 78.06				60	4 22	HKG USA,JPN,HKG,EEC,SUN			
	Sub-total	26	60	60	60	26				
	TOTAL	24,719			40-60[1]	24,719				

[1] Tariff range.

Note: Where the lead products are not specified separately (indicated by "ex") the trade flow figures, shown within brackets, may include imports of products other than those of lead, and for the same reason are not included in the such total.
Exchange rate April 1981/March 1982: Rupees 8.92925 per US$, IMF International Financial Statistics, April 1985.

Source: - Monthly Statistics of the Foreign Trade of India, Volume II - Imports, March 1982, Directorate General of Commercial Intelligence and Statistics, Calcutta.
- International Customs Journal, 1983-84, Brussels 1983.

TRADE IN LEAD AND LEAD PRODUCTS UNDER DIFFERENT TARIFF TREATMENT ACCORDING TO STAGES OF PROCESSING

Country: INDONESIA
Year: 1984 (trade), 1986 (tariff treatment)

(US$'000)

Product Description	Tariff No.	Total Imports	MFN[1]					Other Preferential Treatment		
			Tariff Average Weighted %	Tariff Average Simple %	Rate %	Value	Origin	Rate %	Value	Origin
Ores and concentrates Ash and residues	26.01.400 ex26.03.900				5	- -	USA		-	
	Sub-total	-	5	5	5	-			-	
Unwrought Unalloyed Alloyed Waste and scrap Powders and flakes	78.01.200 78.01.300 78.01.400 78.01.100 78.04.200				5[2]	5,296 587 3,370 35 -	AUS,JPN,PTW,USA,CHN AUS,JPN,PTW AUS,MYS,PTW,BUR,CAN PRK MYS	4.5[3]	14	MYS,SGP
	Sub-total	9,302	5	5	5	9,288			14	MYS,SGP
Wrought	78.02.100 78.02.910 78.02.920 78.02.990 78.03.110 78.03.190 78.03.210 78.03.290 78.04.110 78.04.120 78.05.000				20(10) 30(10) 20(10) 30(20) 20(10)	96 - 1 1 3 22 - - 2 - 7	EEC,JPN,PTW,CAN USA,SGP USA SGP PTW,JPN,USA SGP CHN EEC,SGP PTW,SGP,USA			
	Sub-total	132	10	10.9	20-30[4] (10-20)	132				
Chemicals	28.27.100 28.27.200 ex28.30.900 ex28.35.190 ex28.35.200 ex28.38.990 ex28.39.190 ex28.39.290 28.42.220 ex28.48.000				15(5)	359 370 (2,341) (221) (22) (370) (209) (2,614) 3 (568)	USA,MEX,AUS,EEC,JPN AUS,EEC,CHN,JPN JPN,PTW,EEC,CHN,USA CHN,EEC,HKG,PTW,USA KOR PTW,EEC,JPN,USA,CHN,KOR JPN,EEC,USA,NOR,POL,SGP JPN,PHL,CHN,AUS,KOR,USA EEC EEC,JPN,USA,SGP,MYS			
	Sub-total	732	5	5	15(5)	732				
Finished manufactures	78.06.100 78.06.200 78.06.300 78.06.400 78.06.900				20(10) 10(5) 30(20) 50(40)	- - 203 - 38	 USA CHN,PTW,SWE,USA,EEC JPN,SGP,USA,EEC,CAN			
	Sub-total	241	16.3	15	10-50[4]	241				
	TOTAL	10,407			5-50[4] (5-40)	10,393			14	

[1] Figures in parenthesis indicate applied rates. These rates have been used for the calculation of tariff averages.

[2] Rate bound (Schedule XXI) at 30 per cent.

[3] Preferential rate applied to imports of unrefined lead (CCCN 78.01.200) from ASEAN countries.

[4] Tariff range.

Note: Where the lead products are not specified separately (indicated by "ex") the trade flow figures, shown within brackets, may include imports of products other than those of lead, and for the same reason are not included in the sub total.

Source: - Indonesia Foreign Trade Statistics, Imports 1984, Vol. I, Central Bureau of Statistics, Jakarta.
- Zoll-und-Handels Information, August 1985.

81. Israel has no domestic lead production and imports all lead metal. In 1983, Israel's imports of unalloyed lead valued at US$1.1 million and were supplied by the EEC and the United States (see Table 41). Israel imports some wrought lead products and lead oxides. The m.f.n. treatment of Israel applied to lead ranges from zero duty to 10 per cent. Israel grants preferential treatment to the EEC on most m.f.n. positive rates of duty. M.f.n. dutiable imports enter duty free when supplied by the United States under the Agreement of a Free Trade Area.

82. The Republic of Korea has small lead mine production and thus a large part of lead concentrates for its custom smelter and refiner "Korea Mining and Smelting Co." is imported. A new 35,000 ton refinery was opened in 1986. However, its lead metal production is insufficient to cover domestic consumption which has been substantially increasing in recent years. In 1985, about 72 per cent of Korea's total lead imports or two-thirds of i s consumption was unwrought lead, which entered under the m.f.n. rate of duty of 20 per cent. The principal suppliers of this product were Peru, Australia, Japan and the People's Republic of China. In the same year, imports of lead concentrates and lead scrap accounted for about 13 per cent each. The m.f.n. applied rate of duty on lead concentrates was reduced from 5 per cent to 1 per cent while the m.f.n. rate on scrap is at 10 per cent (see Table 42). Korea also imports wrought lead products (4 per cent of total lead imports in 1984).

83. Malaysia has a secondary production of about 12,000 tons. All lead imports requirements for domestic consumption enter m.f.n. duty free. Table 43 gives the composition of Malaysia's imports in 1984. In that year, lead metal accounted for 58 per cent of total imports valued at almost US$13 million. It was supplied mainly by Australia and Burma. Lead bars and other wrought lead products representing 32 per cent of total imports originated principally from Singapore, Japan and Australia. Japan and the EEC were the major suppliers of lead manufactures and lead oxides which accounted for 8 per cent and 2 per cent of total imports, respectively.

84. Mexico is, with Peru, the largest lead mine and lead metal producer among developing countries. As lead and zinc are often found together with silver in complex ores, generally, their output reflects changes in silver output. Following the increase in silver production in the last three years, mine production of lead rose to over 200,000 tons in 1985, the highest level since 1974. Lead concentrates supplied by 130 concentration plants throughout Mexico are processed by Penoles and MEDIMSA at their metallurgical plants. Mexico also produces some refined lead from secondary materials. Mexico's consumption of refined lead has increased in recent years and in 1985 it accounted for about 50 per cent of its total refined output. The other half of lead metal is exported mainly to the EEC (Italy) and Japan. Since Mexico is self-sufficient in

TABLE 41

TRADE IN LEAD AND LEAD PRODUCTS UNDER DIFFERENT TARIFF TREATMENT ACCORDING TO STAGES OF PROCESSING

Country: ISRAEL
Year: 1983 (trade), 1986 (tariff treatment)

(US$'000)

Product Description	Tariff No.	Total Imports	MFN					Other Preferential Treatment[1]		
			Tariff Average Weighted %	Tariff Average Simple %	Rate %	Value	Origin[2]	Rate %	Value	Origin
Ores and concentrates Ash and residues	ex26.01.9900 ex26.03				Free	(664) -	ZAF,EEC,AUS			
	Sub-total	...			Free	...				
Unwrought										
Unalloyed	78.01.1091				8	-				
	78.01.1099				Free	1,118	EEC,USA			
Alloyed	78.01.1010				8	-		4.9	-	
Waste and scrap	78.01.2000					-				
Powders and flakes	78.04				Free	(41)	n.a.			
	Sub-total	1,123[2]		3.2	Free-8[3]	1,118			-	
Wrought	78.02.1000				8	-				
	78.02.9900					22	EEC			
	78.03.0000				Free	62	n.a.			
	78.04					41	n.a.			
	78.05.0000				10	-				
	Sub-total	133[2]		3.6	Free-10[3]	125				
Chemicals	28.27.0000					99	n.a.			
	ex28.30.9900					(594)	EEC,USA			
	ex28.35.9900					(47)	n.a.			
	ex28.36.9900				Free	(1,683)	EEC,SWE,AUT,USA,ROM			
	ex28.39.0000					(649)	EEC,AUT			
	ex28.42.9900					(341)	EEC			
	ex28.48.0000					(148)	EEC			
	Sub-total	99			Free	99				
Finished manufactures	78.06.1000				2	-		1	-	
	78.06.3000				10	-		7.9	-	
	78.06.9920				8	-		4.9	-	
	78.06.9930				Free	-				
	78.06.9990				10	-				
	Sub-total	-		6	Free-10[3]	-		1-7.9	-	
	TOTAL	1,366[2]			Free-10[3]	1,342		1-7.9	-	

[1] Preferential treatment granted to the EEC countries on most m.f.n positive rates of duty. On the basis of the Agreement of a Free Trade Area between the government of the United States and the government of Israel which entered into force on 19 August 1985, trade between these countries are subject to no duties (L/5862).

[2] Imports below US$50,000 are not indicated at a tariff line basis and their origin and tariff treatment are not specified. Their values included in sub-totals and total imports are as follows: Unwrought (ex78.01): US$5,000; Wrought (ex78.02): US$8,000; other items under chapter 78: US$31,000; total: US$44,000.

[3] Tariff range.

Note: Where the lead products are not specified separately (indicated by "ex") the trade flow figures, shown within brackets, may include imports of products other than those of lead, and for the same reason are not included in the such total.

Source: - Foreign Trade Statistics 1983 Vol.IV, Central Bureau of Statistics.
- International Customs Journal, 1982-83, Brussels 1982.

[illegible]

Country: KOREA, REP. OF
Year: 1985 (trade), 1986 (tariff treatment)

(US$'000)

Product Description	Tariff No.	Total Imports	MFN					Other Preferential Treatment		
			Tariff Average Weighted %	Tariff Average Simple %	Rate %	Value	Origin	Rate %	Value	Origin
Ores and concentrates Ash and residues	26.01.07.00 ex26.03.02.99				5(1[1]) 20	3,845 (110)	JPN,CAN JPN			
	Sub-total	3,845	1	10.5	5(1)-20[2]	3,845				
Unwrought Unalloyed	78.01.02.00				)	12	USA,JPN			
	78.01.03.00				)	16,260	PER,AUS,JPN,MEX,NAM,CHN			
Alloyed	78.01.04.01				) 20	92	MEC,USA,JPN,NTS			
	78.01.04.02				)	2,891	CHN,USA,AUS			
	78.01.04.99				)	1,117	CHN,USA,JPN,MEX,EEC			
Waste and scrap	78.01.01.00				10	3,684	AUS,USA,ARE,JPN,SAU,KWT			
Powders and flakes	ex78.04.02.00				20	4	EEC,JPN			
	Sub-total	24,060	18.5	18.6	10-20[2]	24,060				
Wrought	78.02.01.00				)	356	MEC,JPN,SGP,USA,EEC			
	78.02.02.00				) 20	618	JPN,USA			
	78.03.00.00				)	16	USA,JPN			
	78.04.01.00					135	JPN,USA			
	78.05.01.00				)	-				
	78.05.02.00				) 25	-				
	Sub-total	1,125	20	22.5	20-25[2]	1,125				
Chemicals	28.27.01.00				)	33	JPN			
	28.27.02.00				)	8	EEC,USA			
	28.27.03.00				)	-				
	ex28.30.01.99				)	(802)	JPN,EEC,USA			
	ex28.30.02.00				)	(33)	JPN,EEC,USA			
	ex28.30.03.00				)	-				
	ex28.30.04.99				)	(275)	JPN,USA,EEC			
	ex28.30.05.00				)	-				
	ex28.30.06.99				)	(118)	JPN,EEC			
	ex28.35.02.00				) 20	(32)	JPN			
	ex28.35.03.99				)	-				
	ex28.38.02.99				)	(1,856)	JPN,EEC,USA,AUS			
	ex28.38.04.99				)	(313)	JPN,EEC,USA			
	ex28.39.01.99				)	(17)	USA,JPN			
	ex28.39.02.99				)	(333)	JPN,USA,EEC,CHE			
	ex26.42.01.99				)	(1,816)	EEC,JPN,USA			
	ex28.42.02.00				)	-				
	ex28.48.13.00				)	-				
	ex28.48.14.00				)	-				
	Sub-total	41	20	20	20	41				
Finished manufactures	78.06.01.00					29	USA,JPN,CHN,EEC			
	78.06.02.00				25	366	CHN,SGP,JPN			
	78.06.03.00					195	JPN,EEC,USA,CAN			
	Sub-total	590	25	25	25	590				
	TOTAL	29,661			5(1)-25[2]	29,661				

[1] Applied rate. This rate was used for the calculation of the tariff average.

[2] Tariff range.

Note: Where the lead products are not specified separately (indicated by "ex") the trade flow figures, shown within brackets, may include imports of products other than those of lead, and for the same reason are not included in the such total.

Source: - Statistical Yearbook of Foreign Trade, 12/1985, Office of Customs Administration.
- Tariff Schedules of Korea 1984, Customs Bureau, Ministry of Finance.

TABLE 43

TRADE OF LEAD AND LEAD PRODUCTS UNDER DIFFERENT TARIFF TREATMENT ACCORDING TO STAGES OF PROCESSING

Country: MALAYSIA
Year: 1984 (trade), 1986 (tariff treatment)

(US$'000)

Product Description	Tariff No.	Total Imports	MFN					Other Preferential Treatment		
			Tariff Average Weighted %	Tariff Average Simple %	Rate %	Value	Origin	Rate %	Value	Origin
Ores and concentrates Ash and residues	26.01.210 ex26.03.900				Free	1 (209)	AUS,JPN,USA JPN,SGP,FIN,EEC,AUS			
	Sub-total	1			Free	1				
Unwrought Unalloyed Alloyed Waste and scrap Powders and flakes	78.01.200 78.01.300 78.01.400 78.01.100 78.04.000				Free	374 3,953 2,725 235 (30)	AUS,BUR,PTW,SGP,JPN,EEC BUR,AUS,JPN,PTW,SGP,PTW AUS,EEC,USA,PTW,SGP,JPN SGP,AUS,MYS,EEC JPN,PTW,EEC,SGP,CHE			
	Sub-total	7,287			Free	7,287				
Wrought	78.02.000 78.03.000 78.04.000 78.05.000				Free	3,610 278 30 197	SGP,JPN,AUS,PTW,EEC,USA AUS,EEC,USA,JPN,USA,SGP JPN,PTW,EEC,SGP,CHE JPN,AUS,EEC,SGP,KOR,USA			
	Sub-total	4,115			Free	4,115				
Chemicals	28.27.000 ex28.30.900 ex28.35.000 ex28.38.290 ex28.39.000 ex28.42.200 ex28.48.900				Free	279 (2,832) (106) (973) (867) (2,526) (152)	EEC,JPN,CHN,USA,PTW,SGP JPN,EEC,SGP,CHN,HKG,IND,USA EEC,AUS,PTW,JPN,USA,CHN EEC,JPN,PTW,CHN,SGP,USA EEC,NOR,USA,CHN,SGP,JPN USA,JPN,EEC,CHN,PTW,SGP JPN,EEC,SGP,CHN,PTW,HKG			
	Sub-total	279			Free	279				
Finished manufactures	78.06.000				Free	988	JPN,EEC,SGP,HKG,PTW			
	Sub-total	988			Free	988				
	TOTAL	12,670			Free	12,670				

Note: - Where the lead products are not specified separately (indicated by "ex") the trade flow figures, shown within brackets, may include imports of products other than those of lead, and for the same reason are not included in the such total.
- Exchange rate 1984: Ringitt 2.3436 per US$, IMF International Financial Statistics, July 1986.

Source: - Malaysia Annual Statistics of External Trade 1984, Volume II Part I and II, Department of Statistics, Kuala Lumpur
- International Customs Journal, 1981-82, Brussels 1981.

TABLE 44

TRADE IN LEAD AND LEAD PRODUCTS UNDER DIFFERENT TARIFF TREATMENT ACCORDING TO STAGES OF PROCESSING

Country: MEXICO
Year: 1985 (trade), 1986 (tariff treatment)

(US$'000)

Product Description	Tariff No.	Total Imports	MFN					Other Preferential Treatment[1]		
			Tariff Average		Rate %	Value	Origin	Rate %	Value	Origin
			Weighted %	Simple %						
Ores and concentrates	26.01.999				5	(77)	GTM,USA,CHE,SWE,EEC		(1)	BRA
Ash and residues	ex26.03.003					-			-	
	Sub-total	...	5	5	5	...			...	
Unwrought										
	78.01.001				10	11	USA,EEC			
Waste and scrap	78.01.002					14	USA			
Powders and flakes	78.04.002					3				
	Sub-total	28	10	10	10	28				
Wrought	78.02.001				20	2	CHE,USA			
	78.02.999					15				
	78.03.001				10	19	USA			
	78.04.001					8				
	78.05.001				25	2				
	Sub-total	46	14.3	17	10-25	46				
Chemicals	28.27.001				40	10	USA			
	28.27.999					37				
	ex28.30.999				20	(251)	USA,EEC,PRI,CHE			
	ex28.35.999				25	(45)	EEC,USA			
	ex28.38.999				5	(85)	USA,EEC,JPN			
	ex28.39.999				40	(25)	USA,EEC,AUT			
	ex28.42.999					(71)	USA,NOR,SWE,EEC,CHE			
	ex28.48.999				20	(452)	USA,EEC,CHE			
	Sub-total	47	40	28.7	5-40[2]	47				
Finished manufactures	78.06.001				25	13	USA,EEC			
	78.06.002					-				
	78.06.999					206	USA,EEC			
	Sub-total	219	25	25	25	219				
	TOTAL	340			5-40[2]	340			...	

[1] Imports from ALADI countries; no information is available in relation to the nature or extent of preference applied.

[2] Tariff range.

Note: Where the lead products are not specified separately (indicated by "ex") the trade flow figures, shown within brackets, may include imports of products other than those of lead, and for the same reason are not included in the such total.

Source: Mexico Information File, GATT

lead and lead products, its imports are practically nil. Table 44 indicates the m.f.n. tariff treatment on lead and lead products which ranges from 5 per cent (ores and concentrates) to 40 per cent (lead oxides and sulphates).

85. Morocco too belongs to the major world lead mine producers. However, its production has decreased since 1981 as a result of closures of some mines (Aouli-Mibladen in 1983 and the mine in Zaida in 1985). In 1986, it was 70,000 tons, about 37,000 tons below the level in 1985. Some decrease in the capacity will be partially offset by the opening of new mines. At present more than one-half of mining output is processed into lead metal locally by Oued El Heimer smelter and the other half of concentrates is exported mainly to the EEC, Switzerland, the USSR and Sweden. As domestic consumption of refined lead is only about 5 per cent of its production, most metal is also exported, principally to the EEC, Switzerland, the USSR and Sweden. Consequently, as can be seen from Table 45, Morocco's imports of lead and lead products are low and consist mainly of lead oxides and unwrought and wrought lead products. The m.f.n. rates of duty on lead range from 10 per cent to 40 per cent. However, the applied tariff treatment is lower, between zero and 25 per cent.

86. Nigeria has a secondary smelter which produces about 2,000 tons of lead metal annually. Its consumption of lead and lead products is low and imports are limited to a few lead products. Table 52 indicates the m.f.n. tariff treatment which is applied to imports of lead and lead products.

87. Pakistan has one secondary plant producing about 2,000 tons of lead metal per year. Its imports of lead products consist mainly of unwrought lead and lead oxides. Table 52 indicates the m.f.n. treatment applied to imports of lead and lead products.

88. Peru, with 200,000 tons of lead in concentrates produced in 1985, is the largest lead mine developing country producer. However, Peru's lead production has suffered from low prices and has been mainly maintained as a by-product to silver and zinc. Also, the future plans for expansion or development of new mines are primarily designed to increase silver and zinc output. In recent years, the Peruvian Government has taken several legislative actions, such as tax incentives to the small mining sector, the establishment of certain guarantees in new mining contracts, etc. for promoting the development of and investment in the mining industry. The State company Centromin Peru, the leading producer of lead concentrates, also owns the lead agglomeration plant installed in 1983 in La Oroya, in the site of the old lead smelter and refinery. Peru also has several smaller private mines with the participation of foreign, mainly Japanese, capital. A new lead smelter and refinery owned by FUNDECONSA was put on stream in 1986. Presently, Peru processes less than one-half of its mine production. Only a small part of refined lead output remains in the country for domestic consumption. Consequently, Peru is a

TABLE 45

TRADE IN LEAD AND LEAD PRODUCTS UNDER DIFFERENT TARIFF TREATMENT ACCORDING TO STAGES OF PROCESSING

Country: MOROCCO
Year: 1984 (trade), 1987 (tariff treatment)

(US$'000)

Product Description	Tariff No.	Total Imports	MFN					Other Preferential Treatment		
			Tariff Average		Rate[1]					
			Weighted %	Simple %	%	Value	Origin	Rate %	Value	Origin
Ores and concentrates Ash and residues	ex26.01.90 ex26.03				10(Free) 10	(14) -	AUS			
	Sub-total	...		5	[2] (Free-10)	...				
Unwrought Unalloyed Alloyed Waste and scrap Powders and flakes	78.01.11 78.01.19 78.01 78.04.20				)) 25(5)) 30(25)	- 371 - -	 EEC EEC,CHE			
	Sub-total	371	5	10	25-30[2] (5-25)	371				
Wrought	78.02.00 78.03.00 78.04.20 78.05.10 78.05.29				25(10) 30(25) 35(25)	295 - - - 6	EEC EEC,CHE EEC USA,EEC			
	Sub-total	301	10.3	22	25-35[2] (10-25)	301				
Chemicals	28.27.10 28.27.91 28.27.99 ex28.30.79 ex28.30.90 ex28.35.49 ex28.38.71 ex28.38.99 ex28.39.10 28.39.70 28.42.74 ex28.48.99				30(10) 30(20) 30(10) 40(20) 30(20) 30(10) 30(20)	144 169 3 (15) (1) (2) (34) (1) (22) 6 3 (18)	EEC,CHE EEC EEC,CHE EEC EEC,CHE EEC EEC,CHE			
	Sub-total	327	10.1	15.8	30-40[2] (10-20)	327				
Finished manufactures	78.06.10 78.06.91 78.01.98				35(25) 35(15) 35(25)	3 5 6	EEC AUT EEC,USA			
	Sub-total	14	21.5	21.7	35[2] (15-25)	14				
	TOTAL	1,013			10-40[2] (Free-25)	1,013				

[1] Figures in parenthesis indicate applied rates. These rates have been used for the calculation of tariff averages.

[2] Tariff range.

Note: Where the lead products are not specified separately (indicated by "ex") the trade flow figures, shown within brackets, may include imports o and for the same reason are not included in the such total.

Exchange rate 1984: Dirhams 8.811 per US$, IMF International Financial Statistics, October 1986.

Source: Statistiques du Commerce Extérieur, Ministère des Finances, Office des Changes, 1984
International Customs Journal, 1986-87, Brussels 1986

TABLE 46

TRADE IN LEAD AND LEAD PRODUCTS UNDER DIFFERENT TARIFF TREATMENT ACCORDING TO STAGES OF PROCESSING

Country: PERU
Year: 1982 (trade), 1986 (tariff treatment)

(US$'000)

Product Description	Tariff No.	Total Imports	MFN					Other Preferential Treatment[1]		
			Tariff Average		Rate	Value	Origin	Rate	Value	Origin
			Weighted %	Simple %	%			%		
Ores and concentrates Ash and residues	26.01.05.00 ex26.03.00.00				10	- -			- -	
	Sub-total	-		10		-			-	
Unwrought Unalloyed	78.01.01.01 78.01.01.02				15	1	USA			
Alloyed	78.01.02.01 78.01.02.99				20	51	USA		9	BOL
Waste and scrap	78.01.03.00				15	-				
Powders and flakes	78.04.02.00				25	(36)	USA,EEC			
	Sub-total	61	19.9	18.3	15-25[2]	52			9	
Wrought	78.02.01.00 78.02.02.00 78.03.00.00 78.04.01.00 78.05.01.00 78.05.02.01 78.05.02.99				25 30	38 1 36 13	USA,JPN USA USA,EEC USA,JPN			
	Sub-total	88	25.7	27.1	25-30[2]	88				
Chemicals	28.27.00.01 28.27.00.02 28.27.00.03 ex28.30.01.99 28.30.02.03 ex28.30.03.99 ex28.30.04.99 ex28.35.01.99 ex28.35.02.99 28.38.01.12 ex28.38.03.99 ex28.39.01.99 ex28.39.02.99 28.42.02.51 ex28.42.03.00 ex28.48.04.00 28.48.05.01				45 20 35 25 30 25 20 30 35	3 (668) (1,591) (746) (267) (240) (60)	EEC JPN,EEC,USA,CHE USA,EEC,CSK EEC,USA,JPN,POL,CSK EEC,USA,ISR,CHE EEC,USA,POL EEC,USA,CHE		(3) (6) (502) (13) (5)	ARG ARG CHL,URY,MEX MEX,CHL CHL,MEX
	Sub-total	3	45	27.9	20-45[2]	3			...	
Finished manufactures	78.06.00.01 78.06.00.99				35 40	19	USA,EEC		320	ARG,BRA
	Sub-total	339		37.5	35-40[2]	19			320	
	TOTAL	491			10-45[2]	162			329	

[1] Imports from ALADI countries; no information is available in relation to the nature or extent of preference applied. The weighted tariff averages are calculated excluding this trade.

[2] Tariff range.

Note: Where the lead products are not specified separately (indicated by "ex") the trade flow figures shown within brackets may include imports of products other than those of lead and for the same reason are not included in the sub totals

Source: - Commodity Trade Statistics, United Nations Statistical Office, January-December 1982
- Zoll-und-Handels Information, September 1983.

net exporter of both lead concentrates and lead metal, and its imports are limited to some lead semi-manufactures and manufactures. Table 46 gives the m.f.n. tariff treatment applied to lead imports.

89. The secondary lead production of 7,000 tons per year meets more than one-half of the domestic requirements of the Philippines. In 1981, its lead imports were valued at US$7.6 million. They consisted of unwrought lead purchased principally in Australia, the United States and Peru (87 per cent of total lead imports), wrought lead products (8 per cent of total) and lead oxides (3 per cent of total). Lead and lead product imports are subject to m.f.n. rates of duty ranging from 10 per cent to 50 per cent and increase with higher stages of processing (see Table 47).

90. Romania possesses some low-grade lead and zinc deposits. It also has some primary and secondary metal production. The balance between domestic lead concentrates and metal production and consumption is imported. Romania also imports some lead oxides. Table 52 gives the m.f.n. tariff treatment applied on imports of lead and lead products.

91. Singapore also satisfies its domestic consumption of lead and lead products by imports. Table 48 indicates that in 1985, Singapore's imports valued at US$1.7 million and originated mainly from countries in the same geographic region. Singapore grants the m.f.n. duty-free treatment to imports of all lead products.

92. Thailand's Sixth Five-Year National Economic and Social Development Plan emphasizes the development and use of indigenous minerals. As a result of the geographical survey undertaken in the past two years, large areas containing, among others, lead should be exploited in the future. At present, all of Thailand's lead mine production is exported in the form of lead concentrates, mainly to Japan and the EEC. In 1985, its secondary metal production covered only about one-third of its domestic requirements, and the other two-thirds were imported, principally from Australia, Japan and the People's Republic of China. Table 49 shows imports of lead and lead products into Thailand in 1983. In that year unwrought lead metal subject to the m.f.n. rate of duty of 1 per cent represented 74 per cent of total lead imports. M.f.n. rates of duty increase with higher stages of processing and are 15 per cent and 20 per cent on wrought lead products, 10 per cent on lead oxides and 15 per cent and 50 per cent on lead manufactures. In 1983, these products accounted for 12 per cent, 2.5 per cent and 11.5 per cent of total lead imports, respectively.

93. The exhaustion of lead and zinc mine deposits contributed to the decline in lead mine and metal production in Tunisia. In order to decrease its dependency on imports of lead concentrates, Tunisia plans to

TABLE 47

TRADE IN LEAD AND LEAD PRODUCTS UNDER DIFFERENT TARIFF TREATMENT ACCORDING TO STAGES OF PROCESSING

Country: PHILIPPINES
Year: 1981 (trade), 1986 (tariff treatment)

(US$'000)

Product Description	Tariff No.	Total Imports %	MFN					Other Preferential Treatment		
			Tariff Average		Rate %	Value	Origin	Rate %	Value	Origin
			Weighted %	Simple %						
Ores and concentrates Ash and residues	26.01.700 ex26.03.000				10	- (333)	JPN			
	Sub-total	...		10	10	...				
Unwrought Unalloyed Alloyed Waste and scrap Powders and flakes	 78.01.200 78.01.300 78.01.400 78.01.100 78.04.000				 10 20	 142 5,332 1,138 - 1	 AUS, USA AUS,USA,PER,CHN,SGP,JPN AUS,USA,CHN,EEC,JPN CHN EEC			
	Sub-total	6,613	10	12	10-20[1]	6,613				
Wrought	78.02.000 78.03.000 78.04.000 78.05.000				20	374 144 43 70	JPN,EEC,USA,AUS,CHN,MYS EEC,AUS,JPN,USA JPN,HKG,AUS,USA HKG,CHN,USA			
	Sub-total	631	20	20	20	631				
Chemicals	28.27.000 ex28.30.900 ex28.35.000 ex28.38.990 ex28.39.000 ex28.42.200 ex28.48.000				30 10	206 (4,938) (319) (187) (1,654) 48[2] (86)	JPN,AUS,USA JPN,USA,AUS,CHN,EEC JPN,USA,EEC,CHN,SGP EEC,CHN,USA EEC,ISR,JPN,HKG,USA,CHN EEC EEC,USA,KOR,SGP,CHE,JPN			
	Sub-total	254	26.2	12.9	10-30[1]	254				
Finished manufactures	78.06.000				50	65	CHN,USA,JPN,HKG,EEC			
	Sub-total	65	50	50	50	65				
	TOTAL	7,563			10-50[1]	7,563				

[1] Tariff range.

[2] Imports of lead carbonate, neutral or basic ("white lead") (SITC tariff no. 523.24-06).

Note: Where the lead products are not specified separately (indicated by "ex") the trade flow figures, shown within brackets, may include imports of products other than those of lead, and for the same reason are not included in the such total.

Source: - Foreign Trade Statistics of the Philippines 1981, National Census and Statistics Office.
- International Customs Journal, 1982-83, Brussels 1987.

TABLE 48

TRADE IN LEAD AND LEAD PRODUCTS UNDER DIFFERENT TARIFF TREATMENT ACCORDING TO STAGES OF PROCESSING

Country: SINGAPORE
Year: 1985 (trade), 1986 (tariff treatment)

(US$'000)

Product Description	Tariff No.	Total Imports	MFN					Other Preferential Treatment		
			Tariff Average		Rate %	Value	Origin	Rate %	Value	Origin
			Weighted %	Simple %						
Ores and concentrates Ash and residues	26.01.260 ex26.03.900				Free	29 (2,011)	MAR JPN,PHL,MYS			
	Sub-total	29			Free	29				
Unwrought Unalloyed Alloyed Waste and scrap Powders and flakes	78.01.200 78.01.300 78.01.400 78.01.100 78.04.000				Free	124 244 213 25 (1)	MYS,IND MYS HKG,MYS,IND n.a. n.a.			
	Sub-total	606			Free	606				
Wrought	78.02.000 78.03.000 78.04.000 78.05.000				Free	344 84 1 36	MYS,HKG,IND,THA,PTW MYS n.a. MYS			
	Sub-total	465			Free	465				
Chemicals	28.27.000 ex28.30.100 ex28.30.200 ex28.30.300 ex28.35.000 ex28.38.900 ex28.39.000 ex28.42.900 ex28.48.000				Free	209 (4,913) (524) (58) (100) (1,508) (1,076) (3,047) (265)	AUS,EEC,USA,CHN EEC,JPN,USA,CHN,THA,IND EEC,HKG,ISR,USA EEC JPN,EEC EEC,JPN,PTW,ISR,CHN,NOR ISR,EEC,USA,CHN,DDR,KOR JPN,EEC,ROM,PTW,DDR,USA EEC,JPN,AUS			
	Sub-total	209			Free	209				
Finished manufactures	78.06.000				Free	411	JPN,EEC,AUS,USA,PTW,HKG			
	Sub-total	411			Free	411				
	TOTAL	1,720			Free	1,720				

Note: - Where the lead products are not specified separately (indicated by "ex") the trade flow figures, shown within brackets, may include imports of products other than those of lead, and for the same reason are not included in the such total.
- Exchange rate 1985: Singapore dollars 2.2002 per US$, IMF International Financial Statistics, July 1986.

Source: - Singapore Trade Statistics, Vol. VI no 12, Department of Statistics, December 1985, Singapore.
- International Customs Journal, 1986-87, Brussels 1986.

TABLE 40

TRADE IN LEAD AND LEAD PRODUCTS UNDER DIFFERENT TARIFF TREATMENT ACCORDING TO SOURCE OF PREFERENCE

Country: THAILAND
Year: 1983 (trade), 1986 (tariff treatment)

('000 US$)

Product Description	Tariff No.	Total Imports	MFN					Other Preferential Treatment[1]		
			Tariff average		Rate %	Value	Origin	Rate %	Value	Origin
			Weighted %	Simple %						
Ores and concentrates	ex 26.01.39				) 3	(473)	CHN,PHL,ROK	2.4	(153)	PHL
Ash and residues	ex 26.03.00				)	-				
	Sub-total	...		3	3	...		2.4	...	
Unwrought:										
Unalloyed	78.01.02				)	741	AUS,JPN,FIN,ROK,SAE	0.75	112	SGP
	78.01.05				)	102	AUS	0.8	-	
	78.01.06				)	7,727	AUS,ROK,FIN,CHN,SAE	)	45	SGP
Alloyed	78.01.03				) 1	572	AUS,FIN,FRG,ROK	) 0.7	-	
	78.01.04				)	50	CHN	)	-	
Waste and scrap	78.01.01				)	273	USA,NZA,FRG	)	-	
Powders and flakes	78.04.12				20	3	JPN,FRG	16	-	
	Sub-total	9,625	1	3.7	1-20[2]	9,468		0.75-16[2]	157	
Wrought	78.02.01				)	4	ROK,USA,FRG,JPN,SAE	)	3	SGP
	78.02.02				) 15	1,412	FRG,JPN,SAE,FIN	)12	-	
	78.02.09				)	13	FRG,ROK,JPN,ROK	)	-	
	78.03.00				)	73	FRG,AUS,USA,JPN	10.5	-	
	78.04.11				20	3	HKG,FRG	16	-	
	78.04.20				)	28	JPN	12	-	
	78.05.01				)15	54	FRG,JPN,FIN,USA	10.5		
	78.05.03				)	2	JPN	12		
	Sub-total	1,592	15	15.6	15-20[2]	1,589		10-5-16[2]	3	
Chemicals	28.27.01				)	13	FRG,FIN,CHN	)	-	
	28.27.02				)	170	AUS,FRG	) 7	-	
	28.27.09				)	147	AUS,FRG,CHN	)	-	
	ex 28.30.29				)	(939)	FRG,AUS,JPN,CHN,SGP,FIN			
	ex 28.35.09				)10	(41)	FRG,FIN,USA,CHN,FIN			
	ex 28.38.29				)	(1,439)	FRG,JPN,FIN,CHN,USA,ROK			
	ex 28.39.25				)	(2,079)	ISR,FRG,JPN,GBR,CHE			
	ex 28.39.29				)	(109)	ISR,CHE,FRG,JPN,CHN			
	ex 28.42.09				)	(1,066)	KEN,JPN,CHN,FRG,USA			
	ex 28.48.00				)	(101)	FRG,JPN,ROK,USA,CHE	8	-	
	Sub-total	330	10	10	10	330		7-8[2]	-	
Finished manufactures	78.06.01				) 15	-	ROK			
	78.06.10				)	-	FRG			
	78.06.20				30	1,500	JPN,FRG,USA,FRG,DNK,FIN			
	Sub-total	1,500	30	20	15-30[2]	1,500				
	TOTAL	13,047			1-30[2]	12,887		0.75-16	160	

[1] Preferential rates as in force on 15 September 1981, applied to goods originating in ASEAN countries.

[2] Tariff range.

Note: Where the lead products are not specified separately (indicated by "ex") the trade flow figures, shown within brackets, may include imports of products other than those of lead, and for the same reason are not included in the sub-total.
Exchange rate 1983: Baht 23.0 per US$, IMF International Financial Statistics, September 1986.

Source: Foreign Trade Statistics, of Thailand, December 1983, Department of Customs, Bangkok
Hall-and-Hundale Information, July 1984, Ifda
Customs Tariff of Thailand, unofficial up to 1981

enlarge or develop new lead and zinc mines. Tunisia consumes only a small part of its output of refined lead which has substantially decreased in recent years. Imports of lead products are negligible. Table 52 indicates the m.f.n. treatment on lead and lead products.

94. Turkey revised its mining legislation in June 1985 in order to boost development of/and investments into its mineral sector. The number of large economic enterprises decreased and the new law encourages co-operative joint venture projects with the private sector. New trade and investment incentives include guarantees to allow capital and profit repatriation. Turkey has small production of lead concentrates of which only some are further processed in the country. Since its consumption of refined lead has substantially increased in recent years, most of it is imported. As can be seen from Table 50, in 1981, unwrought lead represented the major part of Turkey's lead imports. About 43 per cent of lead metal was imported duty free under the Additional Protocol of the Association Agreement between Turkey and the EEC. The remaining lead imports originating in Bulgaria, Sweden and the United States were subject to the m.f.n. rate of duty of 35 per cent. As in most other countries, the m.f.n. treatment on lead increases with higher stages of processing.

95. Uruguay has no lead production and imports all lead for its consumption. Table 52 indicates the m.f.n. treatment on lead and lead products.

96. The mineral industry of Yugoslavia has faced difficult conditions for several years as lack of foreign currencies and higher production costs adversely affected the mineral output. In order to attract investments into new primary facilities, the Government has changed the basic law for investment of foreign capital in the country's economy. Though Yugoslavia remains among the largest developing country producers of lead, its mine and refined lead production has stagnated and its exports of these products have fallen in recent years. Yugoslavia imports mainly unwrought lead metal and lead oxides. As Table 51 shows, these items represented 62 per cent and 32 per cent in total lead trade of US$9.5 million in 1984, respectively, and were principally purchased in the EEC and Austria. The m.f.n. tariff treatment on lead and lead products range from 5 per cent to 15 per cent. Yugoslavia grants a preferential duty-free treatment on imports of unalloyed lead under the Protocol Relating to Trade Negotiations Among Developing Countries. In 1984, almost one-third of total unwrought lead imports were supplied duty-free under this Protocol by Peru.

97. In Zaire domestic consumption of lead products is very low. Lead metal including alloys and lead oxides are imported, principally from the EEC. Table 52 indicates m.f.n. rates of duty applied on lead and lead products.

ANNEX 9

TRADE IN LEAD AND LEAD PRODUCTS WITH DIFFERENT TARIFF TREATMENT ACCORDING TO STAGES OF PROCESSING

Country: TURKEY
Year: 1984 (trade), 1986-87 (tariff treatment)

(US$'000)

Product Description	Tariff No.[1]	Total Imports	MFN					Other Preferential Treatment[2]		
			Tariff average		Rate %	Value	Origin	Rate %	Value	Origin
			Weighted %	Simple %						
Ores and concentrates Ash and residues	ex 26.01 ex 26.03 Sub-total	-		7.5	5 10 5-10[3]	- - -			- - -	
Unwrought Unalloyed Alloyed Waste and scrap Powders and flakes	78.01.10 78.01 78.01 78.04[4]				)) 35) 40	3,498 - - (3)	NAM,MEX,USA,NOR NOR		1,498 - - (2)	EEC EEC
	Sub-total	4,996	35	48.3	35-40[3]	3,498			1,498	
Wrought	78.02.00 78.03.00 78.04[4] 78.05				))) 40)	- - 3 -	 NOR 		5 102 2 5	)) EEC))
	Sub-total	117	40	40.0		3			114	
Chemicals	28.27.30 28.27.90				) 50)	- -			138	)
	ex 28.30.29 ex 28.30 ex 28.30 ex 28.30 ex 28.30				) 40) 50 15(N) 40	(128))) (276))	ZAF JPN,USA,CHE 		(486) (69) 	)
	ex 28.35 ex 28.35				)) 50	)) (8)	CHE		(49)	) EEC
	28.38.33 ex 28.38.79 28.39.24 28.42.16 ex 28.42.49 ex 28.48.90				)) 15(N) 25)) 15 15(N)	- (2) 21 - (809)	 CHE,JPN CHE,USA CHE JPN,AUT,USA,CHE		16 (297) - - (15) (646)	)
	Sub-total	175		32.3	15-50[3]	21			154	
Finished manufactures	78.06.00 Sub-total	2	40	40	40	- -			2 2	EEC
	TOTAL	5,290			5-50	3,522			1,768	

[1] Tariff lines extracted from both the Statistical and the Customs Schemes.

[2] Duty-free tariff treatment to the EEC countries according to Article 10 and 11 (CCCN 28.27) of the additional Protocol of the Association Agreement between Turkey and the EEC signed 23 November 1970.

[3] Tariff range.

[4] Imports of this item are not specified separately. Trade figures are considered only under the wrought products together with lead foil.

Note: Where the lead products are not specified separately (indicated by "ex") the trade flow figures, shown within brackets, may include imports of products other than those of lead, and for the same reason are not included in the sub-total.

(N) - Bound rate (Schedule XXXVII).

Source: Foreign Trade Statistics, 1984, Prime Ministry State Institute of Statistics, Ankara, April 1986
International Customs Journal, Brussels, July 1986

TABLE 51

TRADE IN LEAD AND LEAD PRODUCTS UNDER DIFFERENT TARIFF TREATMENT ACCORDING TO STAGES OF PROCESSING

Country: YUGOSLAVIA
Year: 1984 (trade), 1986 (tariff treatment)

(US$'000)

Product Description	Tariff No.	Total Imports	MFN					Other Preferential Treatment		
			Tariff Average		Rate	Value	Origin	Rate	Value	Origin
			Weighted %	Simple %	%			%		
Ores and concentrates	26.01				7[1]	154	SWE,EEC			
Ash and residues	ex26.02				5[1]	(1)	CHE			
	Sub-total	154	7	6	5-7[2]	154				
Unwrought										
Unalloyed	78.01				5	-		Free[3]	-	
	78.01				10	2,620	EEC,MAR		1,742	PER
Alloyed	78.01				8	1,491	EEC			
Waste and scrap	78.01				5	-				
Powders and flakes	78.04				10	13	EEC			
	Sub-total	5,866	9.3	7.6	5-10[2]	4,124			1,742	
Wrought	78.02					302	EEC,SUN,AUT			
	78.03				10	7	EEC,AUT			
	78.04					70	EEC,USA			
	78.05				15	-				
	Sub-total	379	10	11.2	10-15[2]	379				
Chemicals	28.27				10[1]	2,198	AUT,BGR,EEC			
	28.27				10	849	AUT,EEC,DDR,USA,JPN			
	ex28.30				8	(5,049)	CSK,DDR,EEC,SUN,JPN			
	ex28.30					(793)	SUN,EEC			
	ex28.30					(766)	ISR,EEC,SUN,CHE,AUT			
	ex28.30					(347)	EEC,AUT,SUN,CHE,JPN			
	ex28.35				10	(3,601)	SUN,EEC,CSK,POL,DDR			
	ex28.35					(165)	EEC,AUT			
	ex28.38					(11,001)	DDR,EEC,CSK,SUN,POL			
	ex28.39					(311)	EEC,POL,DDR,AUT,CSK			
	ex28.39					(1,169)	DDR,EEC,AUT,POL,CHE			
	ex28.42					(3,017)	EEC,DDR,AUT,CSK,SUN			
	ex28.48					(466)	EEC,USA,CHE,DDR			
	Sub-total	3,047	10	9.8	8-10[2]	3,047				
Finished manufactures	78.06				8	-				
	78.06				10	20	EEC,USA			
	78.06					11	EEC			
	Sub-total	31	10	12.7	8-10[2]	31				
	TOTAL	9,477			5-15[2]	7,735			1,742	

[1] Customs quotas may apply under Article 49 of the Customs Act.

[2] Tariff range.

[3] Preferential treatment granted under the Protocol Relating to Trade Negotiations Among Developing Countries. It does not apply to Israel and the Republic of Korea.

Note: - Where the lead products are not specified separately (indicated by "ex") the trade flow figures, shown within brackets, may include imports of products other than those of lead, and for the same reason are not included in the such total.
- Exchange rate 1983/84: Dinars 124.8 per US$, according to the Decision of the Federal Executive Council on dinar parity, 9/12/83.

Source: - Statistics of Foreign Trade of the SFR Yugoslavia 1984, Federal Statistical Office, Beograd 1986.
- International Customs Journal, 1980-81, Brussels 1980.

TABLE 52

LEAD AND LEAD PRODUCTS TARIFF RATES[1] ACCORDING TO DIFFERENT STAGES OF PROCESSING

Product description	Tariff No.	Chile (1986)	Czechoslovakia (1986)	Egypt (1986)	Ghana (1982)	Nigeria (1984)	Poland (1986-87)	Romania (1977)	Uruguay (1986)	Zaire (1981-82)
Ores and concentrates	26.01	35%	Free(B)	2%	35%	Free	5%	Free	10%	Free
Ash and residues	26.03		4.5%(B)			33.3%	Free	5%	20%	
Unwrought										
Unalloyed	78.01		0.5%(B)							
Alloyed	78.01	35%	Free(B),0.5%(B)	2%(B)	35%	5%	Free	Free	10%	Free
Waste and scrap	78.01		1.25%(B)							
Powders and flakes	78.04		6.5%(B), 6.75%(B)	30%		66.7%	10%	2%		5%
Wrought	78.02		2.25%(B),5%(B)			15%,33.3%,66.7%	5%		20%	
	78.03	35%	2.75%(B)	30%	35%	10%,66.7%		2%		5%
	78.04		4.25%(B),6 75%(B)			66.7%	10%		55%	
	78.05		10%(B)	40%		5%,10%,33.3%,50%		3%,10%		
Chemicals	28.27		3.25%(B)	15%			8%		10%	
	28.30		4.75%(B),5%(B), 7.25%(B)			5%	5%,8%,10%		10%,20%	
	28.35		4.75%(B)				10%			
	28.38	35%	3%(B),5%(B)	5%(B)	35%		8%,10%	10%		5%
	28.39		4.75%(B),8%(B)				12%,15%		10%	
	28.42		5%(B)			10%	5%			
	28.48						8%,10%			
Finished manufactures	78.06	35%	2%(B),8.25%(B) 9%(B)	50%	35%	66.7%	10%	3%	20%,55%	10%
Tariff range		35%	Free-10%	2%-50%	35%	Free-66.7%	Free-15%	Free-10%	10%-55%	Free-10%

[1] Tariff data extracted from the latest available sources. Year indicated refers to the year of the edition of those publications.

Note: (B) Bound rate (Schedules, X-Czechoslovakia, LXII-Egypt)

Source: Arancel Aduanero, Direccion Nacional de Aduanas, Santiago, 1986
Manual Practico del Importador, Tomo I, Codigo General de Mercaderias, Centro de Estadisticas Nacionales y Comercio Internacional del Uruguay, Montevideo, 1986
International Customs Journal: Czechoslovakia, Poland, Romania, Zaire; Brussels
Zoll-und-Handels Archiv: Egypt, Ghana, Nigeria, Zambia, Köln

Tariff escalation and effective tariff protection

98. As pointed out in document TAR/W/29, COM.TD/W/369 of 8 June 1982, a number of serious difficulties arise in any attempt to precisely measure the effective tariff rates.[14] These involve lack of accurate information on input/output values in specific industries, as well as other factors such as the estimation of the relative importance of trade flows under m.f.n. and GSP rates or other preferential rates, the calculation of ad valorem tariff equivalents of non-tariff measures, the establishment of appropriate weighting patterns, and accounting for technological change in industries. Nevertheless, as noted in TAR/W/18 of 5 March 1981, the effective rate of protection of value added can be assessed with "reasonable" precision in the early stages of processing. Beyond the unwrought stage, measurement of effective rates of protection becomes increasingly difficult. As indicated in TAR/W/29 of 8 June 1982, where tariffs show escalation at successive processing stages, simple calculations of effective rates of protection yield estimates that are higher than nominal tariff rates themselves.

99. Due to the methodological problems described above, the present study does not attempt to analyze effective tariff protection in the lead industry and refers to nominal tariff protection. However, by examining nominal tariff rates it may be noted that the nominal tariffs tend to increase with a higher stage of processing in a number of countries. Although most of the countries examined import lead ores and concentrates duty free, they apply positive m.f.n. rates of duty on unwrought and wrought lead products and lead finished manufactures. Moreover, with respect to the latter two groups of products, it is often the case that m.f.n. rates of duty are significantly higher on lead manufactures than on wrought lead.

Non-tariff measures

100. Table 53 shows non-tariff measures applicable to exports and imports of lead, as notified to the secretariat in the context of the updating of the inventories of Non-Tariff Measures. Measures taken for balance-of-payments purposes were also taken into account. Other non-tariff measures relevant to the present study may be identified as the process of updating and notification continues. As indicated in this Table, non-tariff measures affecting trade in lead involve the following areas:

(i) government participation in trade and restrictive practices tolerated by governments. These are in the form of government aids, countervailing duties, government procurement and State trading;

(ii) Customs and administrative entry procedures, such as anti-dumping duties, customs classification, consular formalities and documentation, rules of origin and other customs formalities;

TABLE 53

NON-TARIFF MEASURES AFFECTING TRADE IN LEAD AND ARTICLES THEREOF

Non-Tariff Measures	Product	Country Maintaining the Measure
I. On exports		
Export embargo	Ash and residues containing metals (CCCN 26.03) Lead and articles thereof (CCCN ex 78) Lead waste and scrap (CCCN ex 7801) Lead waste and scrap (CCCN ex 7801)	Austria Pakistan Brazil Colombia
Export restrictions	Metallic ores, slag and ash (CCCN ex 26) Metallic ores and concentrates (CCCN ex 26.01)	Canada[1] Canada
Export quotas	Certain minerals and metals (CCCN ex 26) Lead waste and scrap (CCCN ex 78.01)	India EEC
Export licensing or administrative documentation requirement	Metallic ores and concentrates (CCCN ex 26.01) Metallic ores and concentrates (CCCN ex 26.01) Ash and residues containing metals (CCCN 26.03) Ash and residues containing metals (CCCN 26.03) Ash and residues containing metals (CCCN ex 26.03) Lead and articles thereof (CCCN ex 78) Lead, unwrougth and waste (CCCN ex 78.01) Unwrought lead (CCCN ex 78.01) Lead waste and scrap (CCCN ex 78.01) Lead waste and scrap (CCCN ex 78.01) Lead scrap (CCCN ex 78.01) Metal and metal scrap Lead articles (CCCN 78.02, 78.03, 78.04, 78.05)	Brazil New Zealand Finland Tunisia Brazil Malaysia Malaysia Korea, Republic of Austria Dominical Republic New Zealand Sri Lanka Tunisia
Export taxes	Metallic ores, slag and ash (CCCN ex 26) Lead ashes and residues (CCCN ex 26.03) Lead and articles thereof (CCCN ex 78) Lead waste and scrap (CCCN ex 78.01)	Canada Switzerland Canada Switzerland
II. On imports		
Prohibition or embargo	Metallic ores and concentrates (CCCN 26.01) Ash and residues containing metals (CCCN 26.03) Lead and articles thereof (CCCN 78) Lead waste (CCCN ex 78.01) Tubes and pipes of lead (CCCN 78.05) Tubes and pipes of lead (CCCN ex 78.05)	Tunisia Tunisia Tunisia Bangladesh Egypt Senegal
Quota unspecified	Lead ores (CCCN 2601.7a) Metallic articles (CCCN ex 78) Unwrought lead (CCCN 78.01.1)	Yugoslavia Senegal Yugoslavia
Quantitative restrictions	Lead oxides (CCCN 28.27) Sulphates and persulphates (CCCN ex 28.38) Lead articles (CCCN 78.02, 78.03, 78.04, 78.05, 78.06)	EEC (Italy) EEC (Germany,F.R., Italy) EEC (Italy)
Licensing	Metallic ores, slag and ash (CCCN ex 26) Metallic ores, slag and ash (CCCN ex 26) Metallic ores and concentrates (CCCN 26.01) Lead concentrates (CCCN 26.01.7b)[1] Lead waste and scrap (CCCN ex 78.01)[2]	India Switzerland Japan Yugoslavia Yugoslavia
Licensing (method unspecified)	Wheel balancing weights (CCCN 78.06.900)	Jamaica
Liberal licensing	Lead ore and concentrates (26.01.700)	Korea, Republic of
Automatic licensing	Ash and residues containing metals (CCCN 26.03) Other chlorides (28.30.5090)	South Africa South Africa

Non-Tariff Measures	Product	Country Maintaining the Measure
Non-automatic licensing	Metallic ores, slag and ash (CCCN 26) Metallic ores and concentrates (CCCN 26.01) Lead ores and concentrates (CCCN 26.01.07000) Ash and residues containing metals (CCCN 26.03) Ash and residues containing metals (CCCN 26.03) Ash and residues containing metals (CCCN 26.03) Ash and residues containing metals (CCCN 26.03) Litharge, red lead, white lead (CCCN 28.27) Lead protoxide (CCCN 28.27.0001) and saline lead oxide (CCCN 28.27.0002) Other chlorides, oxychlorides and hydroxchlorides (CCCN ex 28.30.000199, 28.30.000299) Other chlorides (CCCN 28.30.199) Sulphides and polysulphides (CCCN 28.35) Sulphides other than those of strontium, zinc, mercury and molybdenum, polysulphides (CCCN 28.35.0099) Other sulphides than sodium (CCCN 28.35.0199) Other sulphates (CCCN 28.38.020199) Nitrites and nitrates (CCCN 28.39) Lead arsenates (CCCN ex 28.48) Lead and articles thereof (CCCN 78) Lead, other than waste and scrap, and lead articles (CCCN ex 78) Lead, unwrought and waste (CCCN 78.01) Lead, unwrought and waste (CCCN 78.01) Tubes and pipes of lead (CCCN 78.05.0100) Other articles of lead (CCCN 78.06)	Zambia Sri Lanka Argentina Argentina Colombia Sri Lanka Turkey India Argentina Argentina Colombia Sri Lanka Argentina Colombia Argentina Israel India Peru Ghana Argentina Colombia Colombia Turkey
License temporarily suspended	Other articles of lead (CCCN 78.06)	Brazil
Prior Import deposit	Lead and some articles thereof (CCCN 78.01, 78.05, 78.06)	EEC (Greece)
Restriction unspecified	Metallic ores and concentrates (CCCN ex 26.01)	Thailand
State trading	Metallic ores, slag and ash (CCCN ex 26) Lead ore (CCCN ex 26.01) Lead and articles thereof other than manufactures under CCCN 78.06 (CCCN ex 78) Lead or lead allow and articles thereof (CCCN ex 78)	India Tunisia India Tunisia
Turnover tax	Metallic ores and concentrates (CCCN 26.01)	EEC (Italy)
Domestic price measures	Metallic ores and concentrates (CCCN ex 26.01)	Brazil
Technical standards and regulations	Lead and plumiferus materials (CCCN ex 26.03, ex 28.27, ex 28.30, ex 28.38, ex 28.39, ex 28.40, ex 28.48) Chemical products (CCCN 29) Chemicals	Sweden Switzerland United States

[1] The relevant sections of provincial legislation have never been used.

[2] Conditionally liberalized imports (LBO) carried out within an established right to payment.

Source: NTM/W/17/Add.2; NTM/W/17/Add.2/Corr.1
NTM/W/6/Rev.3; NTM/W/6/Rev.3/Add.1-4
NTM/INV/I-V; NTM/INV/I-V/Add.1-13
TBT/W/68/Rev.1
L/5945/Rev.1; L/6126

(iii) technical barriers to trade including technical regulations and standards;

(iv) specific limitations, such as quantitative restrictions, exchange control, licensing and embargoes and other restrictions of similar effect;

(v) charges, in the form of prior import deposits, surcharges, port taxes, statistical taxes.

In addition to the measures listed in Table 53, there exist other measures of a general nature that are not only specific to lead but which apply to a wide range of products including lead. These measures include governmental and inter-governmental grants and loans, fiscal measures (e.g. tax incentives for resource products processing industries), research assistance, etc., which might have a protective effect.

101. When the purchases of "non-ferrous metals and articles thereof", are made by the entities listed in Annex I to the Agreement on Government Procurement, they are covered by this Agreement.[15] Statistical information exchanged among the parties to the Agreement indicates that in 1985, purchases of such products by government entities covered by the Agreement amounted to SDR 45.8 million (US$46.5[16]) for all members except the EEC. The purchases of the EEC were valued at SDR 20.5 million (US$20.8 million[16]).[17] It should be noted that Article VIII of the Agreement contains general exceptions relating to procurement of items indispensable for national security or national defence purposes. In addition, defence agencies in countries which are party to the Agreement are not covered by the Agreement in respect of purchases of certain specific products.

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[1]This section refers only to the countries members of the GATT.

[2]The Tokyo Round of MTNs, Report of the Director-General of GATT.

[3]"The two methods can lead to very different results and such difference is easy to explain. In the weighted average the more trade is following under the duty, the more importance the duty is given in the calculation. At the same time, logically, the lower the duty the larger tends to be the volume of trade which flows under such duty. Thus the weighted average will tend to give more importance to low duties and, at the other extreme, will ignore duties which are so high as to be prohibitive. For these reasons, the weighted average has a downward bias. On the contrary the simple average gives the same importance to each duty whatever its level. It could thus assign excessive importance to residual tariff items or to duties facing products of little importance in world trade. Therefore the simple average should in principle give an upward

correction of the weighted average bias." The Report of the Director-General on the Tokyo Round of Multilateral Trade Negotiations.

[4]Table 17 is based on the Tariff Study information prepared by the secretariat for the report by the Director-General on the results of the Tokyo Round in 1980. For technical reasons, this information did not include Australia and New Zealand. At present, it is not possible to compile similar information on more recent statistics since the Tariff Study files for the United States and Canada are recorded on the basis of the national nomenclature.

[5]Tables for Portugal and Spain refer to 1984, before their entry to the EEC.

[6]See GATT document L/5475/Add.1

[7]See GATT document L/4451/Add.1

[8]See GATT document L/5488

[9]In addition to Spain, which is referred to in paragraph 66, only Ireland, where lead is mined as a by-product at the Tara Mine, has some significant production of lead concentrates. Lead deposits in other EEC countries are relatively small and on average about 50 per cent of lead concentrates requirements are imported. Thus, Belgium's Metallurgie Hoboken Overpelt SA (MHO) produces lead metal mainly from lead ores and concentrates imported from Peru, Canada and Greece and scrap supplied by the EEC countries. Its sales of lead oxides and unwrought metal are directed to the EEC countries. Also a French smelter belonging to the Societé Minière et Metallurgique de Penarroya SA uses lead concentrates imported from South Africa, Sweden and Greenland. France's trade in lead semi-manufactures is principally within the EEC. The grade and metal content of lead ores mined in the Federal Republic of Germany have been decreasing. German smelters belonging to Metallgesellschaft AG, Preussag AG Metall purchase their lead concentrates in Canada, South Africa and Sweden and the Norddeutche Affinerie uses lead bullion supplied mainly be the U.K. These companies also have an important secondary production from domestic scrap and scrap supplied by other EEC countries. The Netherlands Hollandse Metallurgische Industrie BV (HMI) owned by Billiton, is one of the most important secondary lead producer in Europe. Its lead refinery at Arnhem has been recently rebuilt. The Netherland's trade in lead, similarly to most EEC countries, is principally within the EEC. Italian lead and zinc mines operated by Societa per Azioni Minero- Metallurgische (SAMIM), Fertusola and Mineraria Silius S.p.A. supply about 57 per cent of the primary lead produced by a SAMIM smelter at Porte Vesme. Although Italy also has a substantial secondary lead production it is still a net importer of lead metal. A partly State-owned smelter - the Hellenic Mining and Metallurgical Co. of Laurium SA (EMMEL) - restarted smelting operations after the completion of its modernization and expansion in 1984. About 50 per cent of feedstock is supplied from Kassandra Mines and

the other half is imported. The exploitation of new mixed sulphide deposits at Peloponnesos and Kassandra mines have been under consideration. The United Kingdom major primary producers - Britannia Refined Metals Ltd. and Commonwealth Smelting Ltd. - are subsidiaries of Australian MIM Holdings Ltd. Britannia is a refiner using imported bullion from Australia and some scrap. Commonwealth Smelting Ltd., produces bullion only and exports it, mainly to the Federal Republic of Germany. The U.K. secondary lead refining industry is the largest in Europe and the second largest, after the US, in market-economy countries.

[10]About one-half of lead metal imports is of unspecified origin.

[11]Specific duties are applied to lead alloys.

[12]As lead prices have fluctuated in recent years, the ad valorem incidence might be affected by the choice of the reference year.

[13]The m.f.n. rate on lead ores and concentrates is 20 per cent; however, the applied rate is duty-free.

[14]"Nominal tariffs may not accurately reflect the relative protection afforded industries by a structure of tariffs. Cordon's (1966) Effective Rate of Protection (ERP) was designed to capture effects of differential tariffs on prices of final products and imported inputs. Despite considerable criticism and refinement, the ERP is still widely accepted as the practical alternative to nominal tariffs in measuring the structure of protection." Deardorff and Stern, The Structure of Tariff Protection: Effects of foreign tariffs and existing NTBs; The Review of Economics and Statistics, November 1985, p.539.

[15]Members to this Agreement are: Austria, Canada, the EEC (Greece, Portugal and Spain excepted), Finland, Hong Kong, Israel, Japan, Norway, Singapore, Sweden, Switzerland and the United States.

[16]Using the average SDR/US$ converstion rate for 1985 of SDR 0.98489 per US$.

[17]The EEC nomenclature is different from that of other signatories and the figures therefore may not be strictly comparable.

SECTION V

ACTIVITIES IN OTHER INTERNATIONAL ORGANIZATIONS

102. The International Lead and Zinc Study Group is an intergovernmental consultative organization established in 1959 under the auspices of the Economic and Social Council of the United Nations. The current membership includes thirty-four countries[1] who are responsible for 90 per cent of world production and over 80 per cent of world consumption of both lead and zinc. The Group's main functions are to provide opportunities for intergovernmental consultations on international trade in lead and zinc and, to facilitate such consultations, to establish market transparency in worldwide supply and demand for both metals. For this purpose, the Study Group meets regularly to review the current levels of world production and consumption and international trade in lead and zinc and to assess expected short-term trends. It publishes a monthly statistical bulletin containing latest available data on production, consumption, stocks, prices and trade. It also publishes special reports dealing with economic and technical aspects of the lead and zinc industries of concern to its members. During the twenty-eight years in which the Study Group has been in operation, it has proved a valuable forum for consultation between member governments on problems in lead and zinc, particularly in relation to the balance between supply and demand.

103. Principal industry based international organizations operating in the lead and zinc industries are:

(i) the International Lead Zinc Research Organization, whose main function is to promote, sponsor and organize research into the production and uses of lead and zinc;

(ii) the Lead Development Association and the Lead Industries Association, which are concerned with the promotion of the uses of lead and lead products.

104. In addition, national Lead Development Associations or Information Centres are in operation in many developed countries and in some developing countries, carrying out promotional work for lead.

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[1] Member countries of the International Lead and Zinc Study Group are as follows: Algeria, Australia, Austria, Belgium, Bulgaria, Canada, the People's Republic of China, Czechoslovakia, Denmark, Finland, France, the Federal Republic of Germany, Hungary, India, Iran, Ireland, Italy, Japan, Republic of Korea, Mexico, Morocco, the Netherlands, Norway, Peru, Poland, the Republic of South Africa, Spain, Sweden, Tunisia, the Union of Soviet Socialist Republics, the United Kingdom, the United States of America, Yugoslavia and Zambia.

OBSERVATIONS

105. From the examination of world trade flows in lead and lead products and the tariff and non-tariff treatment under which this trade takes place, the following observations can be made:

(a) trade in lead takes place in five product groups: lead ores and concentrates; unwrought lead; wrought lead; lead chemicals; and finished manufactures of lead.

Imports of lead into fifteen developed-country markets were as follows: (1984 for Austria, the EEC, Finland, Hungary, Japan, Norway, Portugal, Spain, Sweden, Switzerland and the United States, 1984/85 for Australia, 1983/84 for New Zealand, 1985 for Canada and Iceland):

(In US$'000)

363,125 (38.6 per cent) as ores and concentrates;
452,512 (48.0 per cent) as unwrought metal;
12,770 (1.4 per cent) as wrought metal products;
23,988 (2.6 per cent) as lead chemicals;
89,667 (9.5 per cent) as finished manufactures.

Imports into developing-country markets were as follows: (1981 for the Philippines and Turkey, 1982 for Argentina and Peru, 1983 for Brazil, Colombia, Israel, Thailand, 1984 for India, Morocco, Malaysia and Yugoslavia, 1985 for Hong Kong, Korea, Republic of, Mexico and Singapore, 1981/82 for India):

(In US$'000)

6,393 (5.2 per cent) as ores and concentrates;
92,803 (76.2 per cent) as unwrought metal;
7,181 (5.9 per cnet) as wrought metal products;
9,477 (7.8 per cent) as lead chemicals; and
5,966 (4.9 per cent) as finished manufactures;

(b) in developed countries most of the m.f.n. rates on lead and lead products are bound. The exception to this is Australia (only ex 28.30.900 has a ceiling binding) and CCCN 78.01.001 and 78.02.001 in the tariff of New Zealand. Ceiling bindings apply to the tariff lines 32.900.01, 33.600.01 and 34.405.01 in Canada, to CCCN 78.06.000 in New Zealand and TSUS 624.02, 624.03, 473.52 and 473.56 in the United States. Tariff lines CCCN 78.03.000, 78.04.001 and 78.05.000 are only partially bound

in New Zealand. The majority of the positive rates were reduced in the Tokyo Round. The tariff cuts varied according to products and countries and were between 10 per cent and 55 per cent. In general, tariff cuts were deeper on products which were facing higher nominal rates of duty. However, some importing countries made no or modest reductions on unwrought lead (notably refined lead and lead alloys, lead powders and

flakes), which along with ores and concentrates, account for the bulk of world trade in lead;

(c) for most lead products entering developed-country markets, the post-Tokyo Round m.f.n. tariffs range from zero to 15 per cent. Most positive m.f.n. rates are ad valorem and only Switzerland applies specific rates to all lead products. Specific rates are also applied by the United States to lead ores and concentrates and ash and residues (except TSUS 603.70) and to TSUS 612.12, while mixed rates are applied by Japan on unwrought lead;

(d) all developing countries examined apply m.f.n. ad valorem rates of duty to lead and lead products. Their m.f.n. tariffs are unbound and range from duty free to 70 per cent, with the majority being between 5 per cent and 30 per cent. Hong Kong and Singapore grant m.f.n duty-free treatment to all lead products;

(e) most developed countries and some developing countries accord m.f.n. duty-free treatment or low m.f.n. positive tariffs on lead ores and concentrates. M.f.n. nominal duties increase with higher stages of processing. In certain countries tariff protection starts already beyond the mining stage, while in other countries, m.f.n. rates are higher on lead semi-manufactures mainly lead chemicals, or manufactures. However, it can be assumed that most countries accord the most important tariff protection on imports of unwrought lead. As indicated in TAR/W/29 of June 1982 where nominal tariffs show escalation at successive processing stages, simple calculations of effective rates of protection yield estimates that are higher than nominal tariffs themselves;

(f) all developed countries grant duty free or preferential rates under their GSP schems to most lead products subject to m.f.n. dutiable rates. The exception to this are imports of unwrought lead in the EEC where duty-free treatment is applied only to imports from least-developed countries, ACP countries and Yugoslavia; imports of unwrought alloyed lead in Japan, and imports of lead manufactures in Australia. The United States

does not grant GSP treatment on unwrought alloyed lead and in certain cases applies competitive needs provisions. (In 1984, Mexico was excluded from duty-free treatment on TSUS 473.52 and TSUS 473.56);

(g) most developed countries also grant duty free or preferential rates on most dutiable m.f.n. rates under other regional agreements (Japan excepted). Preferential treatment is also

granted by some developing countries under bilateral or regional agreements;

(h) in addition to tariff protection, some countries, both developed and developing, apply non-tariff measures such as prohibitions, licensing, quotas, quantitative restrictions taxes to imports and exports of certain lead products. There also exist other measures of a general nature in the form of government procurement, governmental and intergovernmental grants and loans, fiscal measures, research assistance, etc.;

(i) at present, most of the international trade in lead takes place in the form of lead ores and concentrates and unwrought lead. Lead ores and concentrates are mainly imported by countries which have an important smelting capacity and insufficient domestic mine production. Often, these countries are exporters of lead products of higher stages of processing while primary producers, generally, do not appear among suppliers. Trade in lead semi- manufactures (lead oxides excepted) and manufactures is less important and takes place mostly within the same geographic region and under preferential arrangements. Major suppliers of lead semi-manufactures and manufactures are developed countries. Imports of semi-finished and finished products from developing countries under GSP are nil or very low.

106. A number of other metals, notably zinc, copper, cadmium, indium, germanium, gallium and silver are commonly produced in association with lead and their recovery and sale have a bearing on the commercial viability of some lead operations. This study has not considered the impact that trade barriers applicable to these by-product and co-product metals might have on the structure and pattern of trade in lead and lead products.

ANNEX I

[illegible]

CCCN	Product description	AUSTRALIA		AUSTRIA		CANADA*	
		Pre-UER	Post-UER	Pre-UER	Post-UER	Pre-UER	Post-UER
ex 2801	Lead ore and concentrates	Free	Free[1] GSP: Free	Free	Free (B)	Free (not bound) GSP: Free	4.0%(B)(applied rate: Free GSP: Free (ex 32900-1)
ex 2803	Ash and residues of lead	Free	Free[2] GSP: Free	Free	Free (B)	Free GSP: Free (ex 60105-1)	Free(B) GSP: Free (ex 60105-1)
2827	Lead oxides: red lead and orange lead	7.5%	Free[2] GSP: Free	16.0% GSP: 7.0%	15% (B) GSP: 7.5%	15% GSP: Free (92827-1) 12.5% GSP: Free (92827-2)	13.1% (B) GSP: Free 11.0% (B) GSP: Free
ex 2830	Oxychlorides and hydrochlorides of lead	7.5% GSP: Free	Free[2] GSP: Free	Free	Free (B)	15% GSP: 10% (ex 92830-1)	12.5% (B) GSP: Free
ex 2835	Sulphides of lead	7.5%	Free[2] GSP: Free	Free	Free (B)	15% GSP: 10% (ex 92835-1)	3.8% (B) GSP: Free
ex 2836	Sulphates of lead	15%	Free[1,2] GSP: Free	16% GSP: 5.5%	8% (B) GSP: 4%	15% GSP: Free (ex 92836-1)	9.2% (B) GSP: Free
ex 28.39	Nitrates of lead	6%	Free[1,2]	Free GSP: Free	Free (B)	15% GSP: Free (ex 92839-1)	12.5% (B) GSP: Free
ex 28.42	Carbonate of lead	19%	Free	19.0% GSP: 6.5%	9% (B) GSP: 4.5%	15% GSP: Free (ex 92842-1)	Free (B)
ex 28.48	Chromate of lead	19%	10% GSP: Free	Free	Free (B)	15% GSP: Free (ex 92841-1)	Free (B)
ex 7801	Unwrought lead	Free (.100 Un-alloyed lead 35% and $0.044 per kg. (.900 Other)	Free[2] GSP: Free	5% GSP: 2.2% (Lead-tin alloys) 5% min. $40/100kgs. GSP: 2.2%	4% (B) GSP: 2% 4% min. $28/100kgs.[3](B) GSP: 2% min.$14/100kgs. (Other)	10% GSP: Free (ex 34100-1 - Antimonial lead lead in blocks) 17.5% GSP: 11.5% (ex 33900-1 - Others - alloyed) Free (ex 33700-1 - Unwrought unalloyed lead)	7.6% (B) GSP: Free 12.0% (B) GSP: Free Free (B)
ex 7801	Waste and scrap of lead	Free	Free[2] GSP: Free	Free	Free (B)	Free (33700-1)	Free (B)
7802	Wrought bars, rods, angles, shapes and sections of lead	35% $0.044/kg.	Free[1] GSP: Free	10% GSP: 3.7%	6% (B) GSP: 3%	5% GSP: 3% (ex 33800-1 - Unalloyed)	4.3% (B) GSP: 2.5%[4]
7803	Wrought plates, sheets, strips, of lead	55%	Free[1,2] GSP: Free	12% GSP: 4.4%	7% (B) GSP: 3.5%	See above: (ex33800-1 - Sheets, strips ...)	
7804	Lead foil, of a weight per m^2 not exceeding Lead powder and flakes	17.5%	Free[2] GSP: Free	18% GSP: 5.8%	8% (B) GSP: 4%	Free GSP: Free (ex 33600-1 - Tea lead) 17.5% GSP: Free (34405-1 - Composition foil) 5% GSP: Free (ex 35101-1 - Unalloyed) 17.5% GSP: 11.5% (ex 33900-1 - Alloyed)	Free (B) Free (B) 4.3% (B) GSP: Free 10.2% GSP: Free
7805	Tubes and pipes and blanks therefor, of lead: Hollow bars, and tube and pipe fittings of lead	55%	Free[1,2] GSP: Free	12% GSP: 4.4%	7% (B) GSP: 3.5	12.5% GSP: 7.5% (ex 40121-2)	9.1% (B) GSP: 6%
7806	Other articles of lead	55%	20%[1]	15% GSP: 5.3% (Lead wool) 17% GSP: 5.7% (Other)	8% (B) GSP: 4% 8% (B) GSP: 4%	17.5% GSP: 10% (ex 33910-1)	11.0% (B) GSP: Free

[1] Free under by-law, may be subject to 2 per cent revenue duty.

[2] Revenue duty.

[3] Mixed rates

[4] Free for LDC

* The figures in parenthesis represent Canadian nomenclature tariff lines, based on the concordance with the CCCN indicated by the Canadian authorities.

CCCN	Product description	EEC		FINLAND		JAPAN	
		Pre-GSTP	Post-GSTP	Pre-GSTP	Post-GSTP	Pre-GSTP	Post-GSTP
ex 2601	Lead ore and concentrates	Free	Free (B)	Free	Free (B)	Free	Free (B)
ex 2603	Ash and residues of lead	Free	Free (B)	Free	Free (B)	Free	Free (B)
2827	Lead oxides:	)12.2%)GSP: Free	)10.5% (B))GSP: Free	)5%)GSP: Free	)3.8% (B))GSP: Free	5% GSP: Free	3.7% (B) GSP: Free
	red lead and orange lead	)	)	)	)	14% GSP: Free	7% GSP: Free
ex 2830	Oxychlorides and hydroxychlorides of lead	4.0% GSP: Free	3.2% (B) GSP: Free	Free	Free (B)	7.5% GSP: Free	4.9% (B) GSP: Free
ex 2833	Sulphides of lead	12% GSP: Free	6.9% (B) GSP: Free	Free	Free (B)	5% GSP: Free	3.7% (B) GSP: Free
ex 2834	Sulphates of lead	6.4% GSP: Free	4.6% (B) GSP: Free	Free	Free (B)	7.5% GSP: Free	4.9% (B) GSP: Free
ex 2839	Nitrates of lead	12% GSP: Free	6.9% (B) GSP: Free	Free	Free (B)	7.5% GSP: Free	4.9% (B) GSP: Free
ex 2842	Carbonate of lead	8.8% GSP: Free	8.0% (B) GSP: Free	7.5%	1%[1] (C)	14% GSP: Free	7% (B) GSP: Free
ex 2848	Arsenate of lead	9.6% GSP: Free	6% (B) GSP: Free	Free	Free (B)	10% GSP: Free	5.8% (B) GSP: Free
7801	Unwrought lead	Free (For refining, containing 0.02% or more by weight of silver (bullion lead)) 3.5% (Other)	Free (B) 3.5% (B)	Free	Free (B)	7.5% (Unalloyed: used for electrolytic refining) Y 8/kg. +(Y 58 minus the value for custom duty) x 1/2 valued under Y 58/kg. Y 8/kg. valued over Y 58/kg. (Unalloyed: others) 12% or Y 8/kg. WIG 2A Alloyed - cont. antimony 7% or Y 8/kg. WIG 2B Alloyed - other GSP: Free(all)	6% (B) 6.5% or Y 5.30/kg. WIG 4.7% or Y 8/kg. WIG(B) GSP: Free(all)[2]
7801	Waste and scrap of lead	Free	Free (B)	Free	Free (B)	5% GSP: Free	3.2% (B) GSP: Free
7802	Wrought bars, rods, angles, shapes and sections of lead:	)10%)GSP: Free)	)8% (B))GSP: Free)	)1%)	)Free (B))	)10%)GSP: Free)	)5.8% (B))GSP: Free)
	lead wire	)	)	)	)	)	)
7803	Wrought plates, sheets, strips, of lead	10% GSP: Free	8% (B) GSP: Free	0.8% 1%	)Free (B))	20% GSP: Free	8.2% (B= GSP: Free
7804	Lead foil, of a weight per m^2 not exceeding 1700g:	10% GSP: Free	8% (B) GSP: Free	2.5%	Free (B)	)12%)GSP: Free)	)5.5% (B))GSP: Free)
	lead powder and flakes	2.5% GSP: Free	2.2% (B) GSP: Free	Free GSP: Free	Free (B)	)	)
7805	Tubes and pipes and blanks therefor, of lead:	)11%)GSP: Free)	)9% (B))GSP: Free)	)1%)GSP: Free)	)Free (B)))	20% GSP: Free	8.2% (B) GSP: Free
	hollow bars, and tube and pipe fittings of lead	)	)	)	)	15% GSP: Free	7.2% (B) GSP: Free
7806	Other articles of lead	6% GSP: Free (Containers with anti-radiation covering) 8.5% GSP: Free	6% (B) GSP: Free 8% (B) GSP: Free	0.5% GSP: Free (.010 Lead rope and wool) 7.5% GSP: Free (.090 Other -)	Free (B) 5.1% (B) GSP: Free	10% GSP: Free	5.8% (B) GSP: Free

[1] Rate applied in 1984: Free.

[2] Goods in Chapter 28 and unwrought lead (CCCN 78.01.01) are subject to ceiling quotas under the GSP.

CCCN	Product description	NEW ZEALAND		NORWAY		SWEDEN	
		Pre-GSTP	Post-GSTP	Pre-GSTP	Post-GSTP	Pre-GSTP	Post-GSTP
ex 2601	Lead ore and concentrates	Free	Free (B)	Free	Free (B)	Free	Free (B)
ex 2603	Ash and residues of lead	Free	Free (B)	Free	Free (B)	Free	Free (B)
2827	Lead oxides:	Free	Free (B - except red red)	Free	Free (B)	Free	Free (B)
ex 2830	Oxychlorides and hydro-chlorides of lead	Free	Free (B)	Free	Free (B)	Free	Free (B)
ex 2835	Sulphides of lead	Free	Free (B)	Free	Free (B)	Free	Free (B)
ex 2838	Sulphates of lead	Free	Free (B)	Free	Free (B)	Free	Free (B)
ex 2839	Nitrates of lead	Free	Free (B)	Free	Free (B)	free	Free (B)
ex 2842	Carbonate of lead	Free	free (B)	free	Free (B)	free	Free (B)
ex 2848	Arsenate of lead	Free	Free (B)	free	Free (B)	9.0%	Free (B)
ex 7801	Unwrought lead	15%	5% (001-Solder) 009 - Unrefined, refined, excl. lead alloys	Free GSP: 10%	Free (B)	Free	Free (B)
ex 7801	Waste and scrap of lead	Free	Free (B)	Free	Free (B)	Free	Free (B)
7802	Wrought bars, rods, angles, shapes and sections of lead; solder	15%	15% GSP: 10%	Free	Free (B)	Free	Free (B)
	lead wire	32.5%, 15%	5% (B-except solder) GSP: Free				
7803	Wrought plates, sheets,	50% 5% (001 worked) 5% (009 other than worked)	25% (B) GSP: 15% 25% GSP: 15%	Free	Free (B)	Free	Free (B)
7804	Lead foil, of a weight per m² not exceeding 1700g:	30%, 5%, Free	5% (B-except solder) GSP:Free	5%	3.8% (B)	Free	Free (B)
	lead powder and flakes	Free	Free (B)	Free	Free (B)		
7805	Tubes and pipes and blanks therefor, of lead:	32.5% $2.38/100 kgs. (0.7%)	5% (partially bound-bends) GSP: Free	Free	Free (B)	Free	Free (B)
	hollow bars, and tube and fittings of lead						
7806	Other articles of lead	50%	50% (C) (applied rate in 1984: 35%) GSP: 25%	Free (0010 nails, rivet burrs) 4% GSP: Free (009 Other)	Free (B) 2% (B) GSP: Free	5% GSP: Free (001 - Containers) Free (002 Lead wool, ropes) 4% GSP: Free (009 Other)	3.8% (B) GSP: Free Free (B) 3.2% (B) GSP: Free

CCCN	Product description	SWITZERLAND	
		Pre-NTN	Post-NTN
2601.4000	Lead ore and concentrates	Free	Free (B)
ex 2603.0100	Ash and residues of lead	Free	Free (B)
2827.1000 .2000	Lead oxides:	SwF 2.40/100 kgs. (0.6%)	SwF 2.30/100 kgs. (0.6%) (B)
	red lead and orange lead	SwF 9/100 kgs. (0.7%) GSP: Free	SwF 8/100 kgs. (0.6%) (B) GSP: Free
ex 2839.4000 .8000	Oxychlorides and hydrochlorides of lead	SwF 2.20/100 kgs. (0.1%) GSP: Free	SwF 2.20/100 kgs. (0.1%) (B) GSP: Free
ex 2835.2000	Sulphides of lead	SwF 0.50/100 kgs. (0.1%) GSP: Free	SwF 0.50/100 kgs. (0.1%) (B) GSP: Free
2838.5000	Sulphates of lead	SwF 0.40/100 kgs. (0.1%) GSP: Free	SwF 0.40/100 kgs. (0.2%) (B) GSP: Free
2839.4000	Nitrates of lead	SwF 6.00/100 kgs. (1.7%) GSP: Free	SwF 6.00/100 kgs. (1.7%) (B) GSP: Free
2842.5000	Carbonate of lead	SwF 10.00/100 kgs. (0.3%) GSP: Free	SwF 9.00/100 kgs. (0.3%) (B) GSP: Free
ex 2848.1000	Arsenate of lead	SwF 1.50/100 kgs. (0.1%) GSP: Free	SwF 1.50/100 kgs. /0.1%) (B) GSP: Free
ex 7801	Unwrought lead	SwF 0.20/100 kgs. (0.2%) GSP: Free	SwF 0.20/100 kgs. (0.2%) (B) GSP: Free
ex 7801	Waste and scrap of lead	SwF 0.20/100 kgs. (0.2%) GSP: Free	SwF 0.20/100 kgs. (0.2%) (B) GSP: Free
7802	Wrought bars, rods, angles, shapes and sections of lead; lead wire	SwF 9/100 kgs. (1.0%) GSP: Free	SwF 8/100 kgs. (0.8%) (B) GSP: Free
7803	Wrought plates, sheets	SwF 6/100 kgs. (0.2%) GSP: Free	SwF 5/100 kgs. (0.2%) (B) GSP: Free
7804	Lead foil, of a weight per m^2 not exceeding 1700g:	SwF 25/100 kgs. (2.3%) GSP: Free	SwF 21/100 kgs. (1.9%) (B) GSP: Free
	lead powder and flakes	SwF 2/100 kgs. /0.2%) GSP: Free	SwF 2/100 kgs. (0.2%) (B) GSP: Free
7805	Tubes and pipes and blanks therefor, of lead:	SwF 8/100 kgs. (4.0%) GSP: Free	SwF 6/100 kgs. (3.0%) (B) GSP: Free
	hollow bars, and tube and pipe fittings of lead	SwF 14/100 kgs. (0.3%) GSP: Free	SwF 12/100 kgs. (0.3%) (B) GSP: Free
7806	Other articles of lead	SwF 12/100 kgs. (0.1%) GSP: Free (Containers for industrial purpose)	SwF 11/100 kgs. (0.1%) (B) GSP: Free
		SwF 24/100 kgs. (0.4%) GSP: Free (Tubes for packing)	SwF 23/100 kgs. (0.4%) (B) GSP: Free
		SwF 11/100 kgs. (1.5%) GSP: Free (Other articles unworked)	SwF 10/100 kgs. (1.4%) (B) GSP: Free
		SwF 12/100 kgs. (1.5%) GSP: Free (Other articles machined)	SwF 10/100 kgs. (1.2%) (B) GSP: Free
		SwF 24/100 kgs. (1.0%) GSP: Free (Other articles surface treated)	SwF 20/100 kgs. (0.9) (B) GSP: Free

The figures in parenthesis represent ad valorem incidence based on 1984 import prices.

CCCN	Product description	UNITED STATES	
		Pre-MTN	Post-MTN
ex 2601	Lead ore and concentrates	0.75c/lb on lead content (5.9%) (B) GSP: Free (602.10 All lead-bearing ores)	0.75c/lb on lead content (5.9%) (B) GSP: Free
ex 2603	Ash and residues of lead	1.065c/lb on lead content (5.7%) (B) (603.25 Lead dross)	0.9c/lb on lead content (4.9%) (B)
		Free (603.65 Other metal-bearing materials)	Free (B)
		1c/lb on copper content + 0.75c/lb on lead content + 0.67c/lb on zinc content (0.4%) (B) (603.49 Other metal-bearing materials)	0.7c/lb on copper content 0.5c/lb on lead content + 0.5c/lb on zinc content (0.3%) (B)
		1.8c/lb on copper content + 0.75c/lb on lead content + 0.67c/lb on zinc content (1.0%) (B) (603.50 - Other)	0.32c/lb on copper content + 0.3c/lb on lead content + 0.3c/lb on zinc content (0.4%) (B)
		1c/lb on copper content + 0.75c/lb on lead content + 9.67c/lb on zinc content (0.1%) (B) (603.54 - Other)	0.6c/lb on copper content + 9.4c/lb on lead content + 0.4c/lb on zinc content (0.1%) (B)
		9.5% (603.70 - Other)	5% (B)
2827	Lead oxides	1.2% (B) GSP: Free (473.46 - Leaded zinc oxide not over 25% lead by weight, dry)	1.2% (B) GSP: Free
		4.3% (B) GSP: Free (473.48 - Leaded zinc oxide not over 25% lead by weight, not dry)	4.3% (B) GSP: Free
		10% (B) GSP: Free (473.50 - Leaded zinc oxides over 25% lead by weight)	5.8% (B) GSP: Free
		15% (B) (473.58 - Sub-oxide)	15% (B)
		1.875c/lb /8.6%) (B) (473.56 - Red lead)	8.6% (B)
		1c/lb (2.8%) (B) (473.54 - Orange lead)	2.3% (B)
		7.5% (B) (419.04 - Lead compounds except lead arsenate and nitrate) GSP: Free (all)	4.8% (B) GSP: Free (all)
ex 2830	Oxychlorides and hydro-chlorides of lead	1.25c/lb (6%) (B) (473.52 - Litharge) GSP: Free	6% (C) GSP: Free
ex 2838	Sulphates of lead	10% (B) GSP: Free (473.62 - White lead)	10% (B) GSP: Free
ex 2839	Nitrates of lead	7.5% (B) GSP: Free	1.9% (B) GSP: Free
ex 2842	Carbonate of lead	1.4% (B) GSP: Free (473.60 - White lead basic carbonate)	0.5% (B) GSP: Free
ex 2848	Arsenate of lead	5% (B) GSP: Free (419.00 - Arsenates)	3.7% (B) GSP: Free
ex 2914	Lead acetate	1.3% (B) GSP: Free (426.36 - Lead acetate)	1.1% (B) GSP: Free
ex 2915	Organic salts	7.5% (B) GSP: Free (426.44 - Organic lead salts other than resinate and acetate)	4.9% (B) GSP: Free
ex 3207	Pigments	10% (B) GSP: Free (473.44 - Blue lead sublimed)	5.8% (B) GSP: Free
ex 3808	Resinates	3% (B) GSP: Free (426.42 - Lead resinate)	2.5% (B) GSP: Free

CCCN	Product description	UNITED STATES (cont'd.)	
		Pre-MTN	Post-MTN
ex 7801	Unwrought lead	1.0625c/lb (5.2%) (624.00 - Lead bullion) GSP: Free 1.0625c/lb (5.2%) (624.03 - Other)	4% (B) GSP: Free 4% (C)
ex 7801	Waste and scrap of lead	1.0625c/lb on 99.6% of lead content (5.8%) (B) (624.04) GSP: Free	2.3% (B) GSP: Free
7802	Wrought bars, rods, angles, shapes and sections of lead; lead wire	1.3125c/lb (1.3%) (B) (624.30 - Wire) 1.5c/lb (11.4%) (B) (624.32 - Bars etc. valued not over 13.1/3c/lb) 11.25% (B) (624.34 - Bars etc. valued over 13.1/3c/lb) GSP: Free (all)	1.2% (B) 6.3% (B) 6.2% (B) GSP: Free (all)
7803	Wrought plates, sheets,	1.3125c/lb (3.3%) (B) (624.10 - Plates, sheets not clad, unalloyed) 0.75c/lb (3%) (B) (624.12 - Plates, sheets, not clad, alloyed) 5.5% (B) (624.14 - Plates, sheets not clad, alloyed, valued over 13.1/3c/lb) 12% (B) (624.16 - Plates, sheets, clad) 0.7c/lb (6%) (B) (624.18 - Strips, valued not over 13.1/3c/lb, not cut) 5.5% (B) (624.20 - Strips, valued over 13.1/3c/lb, not cut) 0.75c/lb (3%) (B) (624.22 - Strips, cut, valued over 13.1/3c/lb) GSP: Free (all)	2.7% (B) 3% (B) 3.9% (B) 6.5% (B) 4.2% (B) 3.9% (B) 2.5% (B) GSP: Free (all)
7804	Lead foil, of a weight per m^2 not exceeding 1700g:	0.75c/lb (7%) (B) (644.17 - Foil not cut to shape valued not over 13.1/3c/lb) 5.5% (B) (644.18 - Foil, not cut to shape, valued over 13.1/3c/lb) 5.5% (B) (644.28 - Foil cut to shape)	4.7% (B) 3.9% (B) 2.2% (B)
	lead powder and flakes	1.5c/lb (11.9%) (624.40 - Lead powder, flakes, value not over 13.1/4c/lb) 11.15% (11.15%) (B) (624.42 - Lead powder, flakes, valued over 13.1/3c/lb) GSP: Free (all)	11.9% (B) 11.1% (B) GSP: Free (all)
7805	Tubes and pipes and blanks therefor, of lead:	1.3125c/lb (2.6%) (B) (624.50 - Pipes, unalloyed)	2% (B)
	hollow bars, and tube and	0.75c/lb (6%) (B) (624.52 - Pipes, alloyed, valued not over 13.1/3c/lb) 5.5% (B) (624.54 - Pipes, alloyed, over 13.1/3c/lb) GSP: Free (all)	4.2% (B) 3.9% (B) GSP: Free (all)
7806	Other articles of lead	8.5% (B) (654.20 - Household ware) 5% (B) (ex 640.30 - Containers) 6% (B) (ex 640.40 - Collapsible tubes) 0.75c/lb (0.6%) (B) (657.70 - Articles of lead, value not over 13.1/3c/lb) 5.5% (B) (657.75 - Articles of lead, value over 13.1/3c/lb) GSP: Free (all)	3.4% (B) Free (B) 2.4% (B) 0.6% (B) 3.9% (B) GSP: Free (all)

[1] Mexico is excluded from the GSP duty-free treatment on the TSUS 473.52 and 473.56 in 1986/87.

The figures in parenthesis represent ad valorem incidence based on 1984 import prices.

The figures in parenthesis below tariff rates indicate TSUS concordance with the CCCN.

(B) - Bound rates, Geneva (1979) Protocol to the GATT.

(C) - Ceiling binding.

ANNEX II

THE HARMONIZED SYSTEM OF COMMODITY DESCRIPTION AND CLASSIFICATION

CHAPTER 26 - ORES, SLAG AND ASH

1. For the purposes of headings Nos. 26.01 to 26.17, the term "ores" means minerals of mineralogical species actually used in the metallurgical industry for the extraction of mercury, of the metals of heading No. 28.44 or of the metals of Section XIV or XV, even if they are intended for non-metallurgical purposes. Headings Nos. 26.01 to 26.17 do not, however, include minerals which have been submitted to processes not normal to the metallurgical industry.

2. Heading No. 26.20 applies only to ash and residues of a kind used in industry either for the extraction of metals or as a basis for the manufacture of chemical compounds of metals.

Heading Number	H.S.[1] Code	
26.07	2607.00	Lead ores and concentrates
26.20		Ash and residues (other than from the manufacture of iron or steel), containing metals or metallic compounds.

CHAPTER 28

INORGANIC CHEMICALS; ORGANIC OR INORGANIC COMPOUNDS OF PRECIOUS METALS, OF RARE-EARTH METALS, OF RADIOACTIVE ELEMENTS OR OF ISOTOPES

Heading Number	H.S. Code	
		I. - Chemical elements
28.24		Lead oxides; red lead and orange lead
	2824.10	- Lead monoxide (litharge, massicot)
	2824.20	- Red lead and orange lead
	2824.90	- Other
28.27		Chlorides, chloride oxides and chloride hydroxides; bromides and bromide oxides; iodides and iodide oxides
	2827.39	- other
28.30		Sulphides; polysulphides
	2830.90	- other
28.33		Sulphates; alums; peroxosulphates (persulphates)
	2833.29	- other

Heading Number	H.S. Code	
28.34		Nitrates; nitrates
28.36		Carbonates; peroxocarbonates (percarbonates); commercial ammonium carbonate containing ammonium carbamate.
	2836.70	- lead carbonate
28.41		Salts of oxometallic or peroxometallic acids
	2841.20	- chromates of zinc or of lead

CHAPTER 78

LEAD AND ARTICLES THEREOF

1. In this Chapter the following expressions have the meanings hereby assigned to them:

(a) Bars and rods

Rolled, extruded, drawn or forged products, not in coils, which have a uniform solid cross-section along their whole length in the shape of circles, ovals, rectangles (including squares), equilateral triangles or regular convex polygons (including "flattened circles" and "modified rectangles", of which two

opposite sides are convex arcs, the other two sides being straight, of equal length and parallel). Products with a rectangular (including square), triangular or polygonal cross-section may have corners rounded along their whole length. The thickness of such products which have a rectangular (including "modified rectangular") cross-section exceeds one-tenth of the width. The expression also covers cast or sintered products, of the same forms and dimensions, which have been subsequently worked after production (otherwise than by simple trimming or de-scaling), provided that they have not thereby assumed the character of articles or products of other headings.

(b) Profiles

Rolled, extruded, drawn, forged or formed products, coiled or not, of a uniform cross-section along their whole length, which do not conform to any of the definitions of bars, rods, wire, plates, sheets, strip, foil, tubes or pipes. The expression also covers cast or sintered products, of the same forms, which have been subsequently worked after production (otherwise than by simple trimming or de-scaling), provided that they have not thereby assumed the character of articles or products of other headings.

(c) Wire

Rolled, extruded or drawn products, in coils, which have a uniform solid cross-section along their whole length in the shape of circles, ovals, rectangles (including squares), equilateral triangles or regular convex polygons (including "flattened circles" and "modified rectangles", of which two opposite sides are convex arcs, the other two sides being straight, of equal length and parallel). Products with a rectangular (including square), triangular or polygonal cross-section may have corners rounded along their whole length. The thickness of such products which have a rectangular (including "modified rectangular") cross-section exceeds one-tenth of the width.

(d) Plates, sheets, strip and foil

Flat-surfaced products (other than the unwrought products of heading No. 78.01), coiled or not, of solid rectangular (other than square) cross-section with or without rounded corners (including "modified rectangles" of which two opposite sides are convex arcs, the other two sides being straight, of equal length and parallel) of a uniform thickness, which are:

- of rectangular (including square) shape with a thickness not exceeding one-tenth of the width;

- of a shape other than rectangular or square, of any size provided that they do not assume the character of articles or products of other headings.

Heading No. 78.04 applies, inter alia, to plates, sheets, strip and foil with patterns (for example, grooves, ribs, chequers, tears, buttons, lozenges) and to such products which have been perforated, corrugated, polished or coated, provided that they do not thereby assume the character of articles or products of other headings.

(e) Tubes and pipes

Hollow products, coiled or not, which have a uniform cross-section with only one enclosed void along their whole length in the shape of circles, ovals, rectangles (including squares), equilateral triangles or regular convex polygons, and which have a uniform wall thickness. Products with a rectangular (including square), equilateral triangular or regular convex polygonal cross-section, which may have corners rounded along their whole length, are also to be considered as tubes and pipes provided the inner and outer cross-sections are concentric and have the same form and orientation. Tubes and pipes of the foregoing cross-sections may be polished, coated, bent, threaded, drilled, waisted, expanded, cone-shaped or fitted with flanges, collars or rings.

Sub-heading note

1. In this chapter the expression "refined lead" means:

Metal containing by weight at least 99.9 per cent of lead, provided that the content by weight of any other element does not exceed the limit specified in the following table:

Other Elements

Element		Limiting content per cent by weight
Ag	Silver	0.02
As	Arsenic	0.005
Bi	Bismuth	0.05
Ca	Calcium	0.002
Cd	Cadmium	0.002
Cu	Copper	0.08
Fe	Iron	0.002
S	Sulphur	0.002
Sb	Antimony	0.005
Sn	Tin	0.005
Zn	Zinc	0.002
Other (for example Te), each		0.001

Heading Number	H.S. Code	
78.01		Unwrought lead
	7801.10	- Refined lead
		- Other:
	7801.91	- Containing by weight antimony as the principal other element
	7801.99	- Other
78.02	7802.00	Lead waste and scrap
78.03	7803.00	Lead bars, rods, profiles and wire
78.04		Lead plates, sheets, strip and foil; lead powders and flakes
		- Plates, sheets, strip and foil:
	7804.11	- Sheets, strip and foil of a thickness (excluding any backing) not exceeding 0.2 mm
	7804.19	- Other
	7804.20	- Powders and flakes
78.05	7805.00	Lead tubes, pipes and tube or pipe fittings (for example, couplings, elbows, sleeves)
78.06	7806.00	Other articles of lead

[1] Harmonized System.