

ASIA AND THE PACIFIC

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After more than two decades of growth, the economies of many Asian countries faced a sharp downturn in 1997. In the beginning of July, a financial crisis in Thailand spread to other countries in southeast Asia. With the liberation of their financial institutions in the early 1990's, Asian stock markets had soared as European and U.S. fund managers invested substantially in them. Investors in the United States, with its booming economy combined with low interest rates, began looking for high profit margins in southeast Asia. According to International Monetary Fund estimates, by the end of 1996 banks in Europe had lent \$318 billion, and those in Japan and the United States had contributed \$216 billion and \$46 billion, respectively, to southeast Asian countries. Deteriorating infrastructure, poor administration, and opaque regulations had left the nations unprepared to handle the inundation of foreign funds. Additionally, comfortable relations between Government and business conglomerates led to corruption in some countries, sapping entrepreneurial creativity and growth in a short period.

In 1997, the pace of economic growth in the region slowed compared with that of 1996. Although the slower economic growth in the United States and the European Union affected trade in the region, the financial crisis in Asia and the Pacific region had more of an effect. A decline in the production of electronics, particularly semiconductors, had a disproportionate effect on the exports of several countries—Malaysia, Singapore, and Thailand. The Asian tigers—Hong Kong, the Republic of Korea, Singapore, and Taiwan—no longer can rely simply on producing more and cheaper products. Consequently, they have transformed themselves into high-tech, high-quality, and high-efficiency producers. China, Indonesia, Thailand, Vietnam, and the countries of the Indian subcontinent, however, have replaced them by becoming labor-intensive producers.

Investment in the gold industry was weakened by the sharp decline in gold prices when the Reserve Bank of Australia announced that it would sell two-thirds of its reserves. Poor prices caused Western Mining Corp. to delay its A\$157 million St. Ives Gold expansion project in Western Australia. Weak prices and a new government regulation making it easier to import gold legally, however, helped to increase the demand for gold in India. Government mining regulations are a key issue in Asia. Restrictive regulations in many Asian countries put the region at a competitive disadvantage with other regions, especially Latin America, for international exploration and mining investments. China, however, enacted amendments to its Mineral Resources Law on January 1, 1997, that may give foreigners more confidence in investing in exploration and mining by strengthening state control and allowing the state to transfer exploration rights to foreign or joint-venture investors. Indonesia was singled out by the World Bank as the only Asian country with attractive policies for foreign investment in mining; state control of mines in China, India, and Vietnam inhibits foreign investment.

Hamersley Iron Pty. Ltd. announced that it would develop its Yandicoogina iron ore project in Western Australia's Pilbara region, with the first shipments of product scheduled for mid-1999. Initial output was expected to be 5 million metric tons per year (Mt/yr) of high-grade pisolitic fines, increasing to about 15 Mt/yr as market demand increases. The new mine will be the sixth iron ore mine developed in the Pilbara region by the company.

In September 1997, Pasmaico Ltd. resolved the last obstacle in its acquisition of a lead-zinc-silver mine in Queensland following the announcement by the Queensland Government of the Century Zinc Project Bill that formally permitted issuance of a mining lease, pipeline license, and a port lease for the project. Pasmaico cleared the major hurdle for development of the project when an agreement was signed between Rio Tinto Ltd.'s wholly owned Century Zinc Ltd. and 12 local aboriginal groups. Rio Tinto sold the Century Mine to Pasmaico for \$345 million early in the year, subject to the issuance of the relevant leases and license by the state authorities. The mine is expected to produce 780,000 metric tons per year (t/yr) of low-iron concentrates for use in the company's 205,000-t/yr Budel Zink smelter in the Netherlands. Production was to be transported in slurry form through a pipeline to storage and loading facilities at Karumba on the Gulf of Carpentaria, 300 kilometers away; from there, it would be barged to vessels anchored offshore for shipment overseas.

During the 15th National Congress of the Communist Party of China in September 1997, the Party planned to accelerate the reform of state-owned enterprises that was implemented in the early 1990's. The Government will convert large- and medium-sized state-owned enterprises into corporations. It will share the owner's equity according to the amount of capital that it invests into the enterprises, but will bear limited responsibility for their debts. The enterprises will operate independently according to law and be responsible for their own profits and losses; the Government will not intervene directly in the operation of any of the enterprises. It will create an environment for developing a diversity of investors to push the separation of administrative functions from the enterprises' management. The Government will establish highly competitive, multiple, large enterprise groups in different sectors. China also will accelerate the pace in relaxing control over small state-owned enterprises and try to invigorate them by way of reorganization, merging, leasing, contract operation, joint-stock partnership, and/or sell-off. The Government will encourage enterprises to merge, to declare bankruptcy if necessary, and to increase efficiency by downsizing staff. Although this will bring temporary difficulties to some employees, it is considered to be fundamentally essential to change the parochial attitude of local governments of breaking down internal protectionism in trade and moving labor and capital for the establishment of national markets.

In the wake of the Busang gold scam, the Government of Indonesia

unveiled proposed revisions that will give the Government a free, open-ended 10% stake in new mining contracts, plus a 10% share of the capital gains earned on overseas stock markets. The revisions also impose controls on releasing information and require full Indonesian management within 6 years of operation. One new rule requires that the calculation of a company's reserves be done by a Government-approved, independent consultant. These revisions seemed to be radical, impractical, far-reaching, and a major deterrent to future mining investment in the country. Later, the Government canceled plans to revise the mining regulations.

Atlantic Richfield Co. (Arco) discovered a massive natural gas reserve on the onshore Wiriagar and the offshore Berau blocks in Irian Jaya. The gas find was estimated to have 178 billion cubic meters (Gm^3) of proven reserves, 195 Gm^3 probable reserves, and 198 Gm^3 of possible reserves. The Natuna gas project in the South China Sea is one of the world's largest gasfields, with reserves of 6.28 trillion cubic meters (Tm^3); the recoverable reserves were estimated to be 1.30 Tm^3 . The company planned to invest up to \$3 billion to develop and operate the project, and Pertamina, the Indonesian state oil company, would build and operate the natural gas liquefaction facilities. Arco expected to deliver liquefied natural gas to Asian markets, especially Japan and the Republic of Korea, by 2003.

For Japan to meet the growing demand for copper, nickel, and zinc in the domestic and Asian markets, several smelting and refining expansion programs would have to be undertaken within the next 2 years. Expansion projects for copper included the Toyo copper smelter and the Niihama copper refinery in Ehime Prefecture, the Saganoseki copper smelter and refinery in Oita Prefecture, and the Hitachi copper refinery in Ibaraki Prefecture. Sumitomo Metal Mining Co. invested \$12 million to expand nickel production at the Niihama nickel refinery. Akita Smelting Co. invested \$17 million to expand its Iijima zinc refinery in Akita Prefecture. By 1999, Japan's copper refining capacity will be raised by 81,000 t/yr, to 1.34 Mt/yr; nickel refining capacity, by 6,000 t/yr, to 36,000 t/yr; and zinc refining, by 20,000 t/yr, to 669,200 t/yr. A Japanese consortium started renovations of a newly acquired 120,000-t/yr copper smelter and refinery complex at Port Kembla, in Wollongong, New South Wales, Australia. This plant is the second Japanese majority-owned copper smelter overseas.

To attract foreign investors to participate in the exploration and development of the country's mineral resources, the Mongolian Government revised the 1994 Mineral Resources Law and the related Foreign Investment and Tax Laws in June 1997. The major provisions under the revised laws are as follows: expansion of exploration areas granted to companies to 40% from 12.7% of the total landmass; establishment of a cadastral office under the Mineral Authority to issue exploration licences and mining permits on a first-come, first-served basis; granting of a 3-year exploration licence with the right to two 2-year renewals; extension of a 60-year mining license for an additional 40 years; making licenses transferable; reduction of the royalty rate for all minerals to 2.5% from 12.5%; reduction of the corporate income tax to 30% from 40%; tax allowances for capital expenditure on infrastructure and accelerated depreciation of fixed assets; exemption of import duties on plant and equipment; and simplification and shortening of foreign investment procedure and process. The revised provisions became effective on July 1, 1997.

A report by an independent engineering consultancy concluded in

September 1997 that it would be viable to establish a second nickel smelter in the north of the island of La Grand Terre, the main island of New Caledonia, France's small territory in the Pacific about 1,800 kilometers east of Australia. The smelter would be a joint-venture project between Société Minière du Sud Pacifique (SMSP), owned by the Kanaks, or indigenous people, and Canada's Falconbridge Ltd. New Caledonia's Société le Nickel (SLN), a 90%-owned subsidiary of Metropolitan France's Eramet S.A., presently operates the 55,000-t/yr Doniambo ferronickel-nickel matte smelter at Nouméa, the territory's capital. The new smelter would be supplied by the Koniombo nickel deposit, owned by SLN, in a fair-basis exchange for SMSP's Poum nickel deposit.

A large-sized gold mine on Lihir Island in New Ireland Province came on-stream 3 months ahead of schedule and under budget, pouring its first gold from the treatment of oxide ore on May 25, 1997, about 19 months after full-scale construction activity began. The first gold from the higher grade sulfide ore was poured in September 1997. Estimated gold production for 1997 was revised upward to more than 6,800 kilograms (kg); the earlier forecast had been 5,400 kg. The Lihir Mine is expected to produce almost 18,700 kilograms per year of gold for about 30 years after it begins operating at full capacity.

In June, Ok Tedi Mining Ltd., operator of the Ok Tedi copper mine in the Star Mountains of Papua New Guinea's Western Province, signed two agreements dealing with the compensation of communities and landowners affected by severe environmental changes caused by the mine's operations. The agreements completed the 1996 out-of-court settlement by the mine's joint-venture partners led by BHP Minerals Holding Pty. Ltd. Under the Ok Tedi agreement, about \$28.6 million will be paid to the people living in the affected river communities along the lower reaches of the Ok Tedi River basin during the remaining life of the mine. The Lease Compensation agreement will compensate local landholders of a Lease for Mining Purposes (LMP) that was granted to the partners in April 1997. The LMP land will be used to dispose of sediment dredged from the Ok Tedi River as part of the mine's waste rock and tailings management programs.

In September, Australia's Pacific Nickel Holdings Ltd., formerly Arboyne NL, announced its plans to reopen the Nonoc nickel mine-smelter-refinery complex on Nonoc Island off the coast of Mindanao in Surigao del Norte Province, the Philippines; the Government had foreclosed the complex in 1986. Refurbishment of the site and facilities will be undertaken by a Norwegian-based conglomerate that has a 10% equity participation in Pacific Nickel Holdings. The work began in late 1997, and will take 18 months to complete at a cost of about \$550 million. The original design capacity of the nickel smelter-refinery complex had a production rate of about 30,000 t/yr of nickel and 1,600 t/yr of cobalt contained in sulfides, although the capacity after refurbishment is expected to be about 35,000 t/yr of nickel and about 1,800 t/yr of cobalt.

In March, Australia's Ross Mining NL received all Government approvals to proceed with the development of a 3,100-kilogram-per-year open-cut gold mine at Gold Ridge on Guadalcanal Island of the Solomon Islands. The mine will be the first-ever large-scale mining project in the Solomons. The mine is expected to be on-stream by April 1998.

The Thai National Economic and Social Development Board plans to issue new guidelines to tighten up new projects proposed by state-owned enterprises. Under the new guidelines, a feasibility study

must include the currency exchange rate risk when working out the expected investment return. Because the Thai baht had been quite stable against the U.S. dollar, there were no problems until mid-1997 when the value of the baht decreased more than 40% against the U.S. dollar. The Board will now look into the import content and the raw materials of the projects before granting approval. Because the devaluation of the baht against foreign currencies had caused costs for offshore borrowing and equipment purchases to increase to such a high level, many private power producers requested that the state-owned Electricity Generating Authority of Thailand negotiate the contracts. The baht's devaluation also led to a huge negative impact on companies' investment returns and their ability to repay loans.

Significant resources in other countries of the Asia and Pacific region include tin and associated titanium in Malaysia; copper, fluorspar, gold, and molybdenum in Mongolia; gold and iron sands in New Zealand; magnesite in North Korea; chromite in the Philippines; and gemstones in Sri Lanka. Burma (Myanmar), Cambodia, Laos, and Thailand have significant areas with mineral potential that has not been evaluated fully. Overall, the region lacks large resources of petroleum; nevertheless, oil and gas occurs throughout the region, and commercial quantities are being recovered in Australia, Brunei, Burma, China, India, Indonesia, and Malaysia. Large coal deposits are in Australia, China, India, and Mongolia. Coal also is found in Indonesia, which is becoming a major world exporter; New Zealand; North Korea; and Vietnam.

The Asia and Pacific region is a significant producer of mined commodities and value-added mineral products. It produces more than 60% of the world's output of barite, ilmenite, iodine, refined tin, tungsten, and refined zinc. About 40% to 60% of the world's output of alumina, bauxite, cement, fluorspar, graphite, iron ore and pig iron, and refined nickel is from the region. In addition, the region accounts for 15% to 40% of the world's production of alumina and aluminum metal, mined and refined copper, gold, mined and refined lead, magnesite, mined manganese, mined nickel, salt, steel, and mined zinc.

Australia, China, Japan, and the newly industrialized economies of the Asia and Pacific region continue to have important roles in the consumption of minerals and materials. Japan is by far the largest single consumer of fuels, minerals, and metals in the region. Most of Japan's consumption of raw materials is for the manufacture of finished goods for consumption and export. China also is a large consumer of fuels, minerals, and metals, largely producing end-products for internal use. Per capita consumption of minerals continues to be very low in China.

From 1993 to 1997, consumption of aluminum, cadmium, copper, lead, nickel, and zinc in the Asia and Pacific region grew considerably owing to continuous economic growth in China and the Association of Southeast Asian Nations (ASEAN)—Brunei, Indonesia, Malaysia, the Philippines, Singapore, and Thailand. In terms of quantity consumed, Japan ranked the highest, followed, in order, by China, the Republic of Korea, Taiwan, and India. In terms of demand growth rate, however, the ASEAN countries ranked the highest in the region. The high growth in demand for base metals by Indonesia, Malaysia, Singapore, and Thailand was attributable to the continuing growth of their economies and the investment in manufacturing plants in the ASEAN countries by Japan, the Republic of Korea, and Taiwan. The regional consumption of aluminum, cadmium, copper, lead, and zinc as a percentage of the world total consumption of these metals also registered considerable increases

from 1993 through 1997.

Major Sources of Information

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TABLE 1
ASIA AND THE PACIFIC: PRODUCTION OF SELECTED MINERAL COMMODITIES, 1997

(Thousand metric tons unless otherwise specified)

Country	Aluminum			Barite	Cement	Coal		Copper		Fluorspar	Gold	
	Bauxite	Alumina	Metal			Anthracite	Bituminous	Mine, Cu content	Refined, primary		mine, Au content 1/	Graphite
Afghanistan	--	--	--	2	116	--	185	5	--	--	--	--
Australia	44,465	13,385	1,495	15	6,500	--	276,590	560	271	--	312	--
Bangladesh	--	--	--	--	285	--	--	--	--	--	--	--
Bhutan	--	--	--	--	160	--	--	--	--	--	--	--
Brunei	--	--	--	--	--	--	--	--	--	--	--	--
Burma	--	--	--	22	530	--	45	6	--	--	(2/)	--
Cambodia	--	--	--	--	--	--	--	--	--	--	--	--
China	8,000	3,000	2,050	3,500	492,600	270,000	1,000,000	414	800	2,400	175	190
Fiji	--	--	--	--	84	--	--	--	--	--	5	--
Hong Kong	--	--	--	--	1,925	--	--	--	--	--	--	--
India	5,800	1,700	484	400	80,000	--	290,000	40	36	19	2	120
Indonesia	1,100	--	216	--	26,000	--	56,000	529	--	--	68	--
Japan	--	340	17	--	91,938	2	4,272	1	1,279	--	8	--
Korea, North	--	--	--	120	17,000	70,000	--	15	23	39	5	40
Korea, Republic of	--	--	--	(2/)	59,796	4,514	--	--	265	1	15	1
Laos	--	--	--	--	8	--	--	--	--	--	--	--
Malaysia	279	--	--	3	12,700	--	105	19	--	--	4	--
Mongolia	--	--	--	--	112	--	4,922	125	--	250	8	--
Nepal	--	--	--	--	360	--	--	--	--	--	--	--
New Caledonia	--	--	--	--	100	--	--	--	--	--	--	--
New Zealand	--	--	305	--	976	--	3,000	--	--	--	12	--
Pakistan	5	--	--	19	9,000	--	3,000	--	--	(2/)	--	--
Papua New Guinea	--	--	--	--	--	--	--	111	--	--	50	--
Philippines	--	--	--	--	15,000	--	1,800	47	147	--	34	--
Singapore	--	--	--	--	1,900	--	--	--	--	--	--	--
Sri Lanka	--	--	--	--	910	--	--	--	--	--	--	5
Taiwan	--	--	--	--	21,522	--	98	--	--	--	(2/)	--
Thailand	--	--	--	59	35,000	--	--	--	--	8	--	--
Vietnam	--	--	--	--	6,000	7,600	--	--	--	--	--	--
Total	59,649	18,425	4,567	4,140	880,522	352,116	1,640,017	1,872	2,821	2,717	698	356
Share of world total, percent	49 3/	43	21	60	58	86	42	16	21	59	29	62
United States	NA	6,223	3,603	692	84,255	4,244 e/	879,000 e/	1,940	2,448	--	357	--

See footnotes at end of table.

TABLE 1--Continued
ASIA AND THE PACIFIC: PRODUCTION OF SELECTED MINERAL COMMODITIES, 1997

(Thousand metric tons unless otherwise specified)

Country	Iodine	Iron		Steel, crude	Lead		Magnesite	Manganese mine, Mn content	Mercury mine, Hg content 1/	Mica	Nickel	
		Ore, gross weight	Pig		Mine, Pb content	Refined, primary					Mine, Ni content	Refined 4/
Afghanistan	--	--	--	--	--	--	--	--	--	--	--	--
Australia	--	157,766	7,884	8,769	531	204	245	1,024	--	--	124	74
Bangladesh	--	--	--	36	--	--	--	--	--	--	--	--
Bhutan	--	--	--	--	--	--	--	--	--	--	--	--
Brunei	--	--	--	--	--	--	--	--	--	--	--	--
Burma	--	--	--	--	3	2	--	(2/)	--	--	(2/)	--
Cambodia	--	--	--	--	--	--	--	--	--	--	--	--
China	5	245,000	115,440	107,600	650	370	2,000	7,000	500	120	44	40
Fiji	--	--	--	--	--	--	--	--	--	--	--	--
Hong Kong	--	--	--	450	--	--	--	--	--	--	--	--
India	--	67,000	20,000	23,748	32	69	375	680	--	--	--	--
Indonesia	(2/)	345	--	3,450	--	--	--	--	--	--	72	32
Japan	6	4	78,519	104,545	5	142	--	(2/)	--	--	--	56
Korea, North	--	10,000	6,600	8,100	75	75	1,600	--	--	--	--	--
Korea, Republic of	--	296	22,712	42,554	4	121	--	--	--	34	--	--
Laos	--	--	--	--	--	--	--	--	--	--	--	--
Malaysia	--	269	--	3,200	--	--	--	--	--	6	--	--
Mongolia	--	--	--	--	--	--	--	--	--	--	--	--
Nepal	--	--	--	--	--	--	--	--	--	--	--	--
New Caledonia	--	--	--	--	--	--	--	--	--	--	110	10
New Zealand	--	2,300	--	758	--	--	--	--	--	--	--	--
Pakistan	--	--	1,400	450	--	--	4	--	--	--	--	--
Papua New Guinea	--	--	--	--	--	--	--	--	--	--	--	--
Philippines	--	--	--	950	--	--	1	--	--	--	15	--
Singapore	--	--	--	--	--	--	--	--	--	--	--	--
Sri Lanka	--	--	--	--	--	--	--	--	--	4	--	--
Taiwan	--	--	8,870	15,478	--	--	--	--	--	8	--	10
Thailand	--	44	--	2,430	5	--	--	(2/)	--	--	--	--
Vietnam	--	--	--	330	--	--	--	--	--	--	--	--
Total	11	483,024	261,425	322,848	1,305	983	4,225	4,225	500	172	365	222
Share of world total, percent	73	47	48	40	43	17	9 3/	55	18 3/	55	33	22
United States	1	62,971	49,594	98,465	459	1,449	W	--	W	114	--	--

See footnotes at end of table.

TABLE 1--Continued
ASIA AND THE PACIFIC: PRODUCTION OF SELECTED MINERAL COMMODITIES, 1997

(Thousand metric tons unless otherwise specified)

Country	Petroleum crude 5/	Natural gas 6/	Salt	Tin 1/		Titanium		Tungsten mine, W content 1/	Zinc	
				Mine, Sn content	Refined, primary	Ilmenite	Rutile		Mine, Zn content	Refined, primary
Afghanistan	--	2,700	13	--	--	--	--	--	--	--
Australia	210	29,950	8,749	10,168	605	2,233	235	--	1,035	307
Bangladesh	1	6,200	350	--	--	--	--	--	--	--
Bhutan	--	--	--	--	--	--	--	--	--	--
Brunei	59	10,990	--	--	--	--	--	--	--	--
Burma	5	1,700	35	40	--	--	--	280	400	--
Cambodia	--	--	40	--	--	--	--	--	--	--
China	1,180	24,000	29,280	65,000	61,300	160	--	25,500	1,200	1,400
Fiji	--	--	--	--	--	--	--	--	--	--
Hong Kong	--	--	--	--	--	--	--	--	--	--
India	277	18,500	9,502	--	--	300	16	3	142	159
Indonesia	585	84,900	680	47,000	42,000	--	--	--	--	--
Japan	5	2,279	1,400	--	507	--	--	--	72	501
Korea, North	--	--	590	--	--	--	--	900	210	200
Korea, Republic of	--	--	770	--	--	--	--	--	9	335
Laos	--	--	18	1	--	--	--	--	--	--
Malaysia	261	48,672	--	5,065	33,289	168	--	--	--	--
Mongolia	--	--	(2/)	50	--	--	--	100	--	--
Nepal	--	--	7	--	--	--	--	--	--	--
New Caledonia	--	--	--	--	--	--	--	--	--	--
New Zealand	26	4	67	--	--	--	--	--	--	--
Pakistan	24	16,980	952	--	--	--	--	--	--	--
Papua New Guinea	--	--	--	--	--	--	--	--	--	--
Philippines	(2/)	--	550	--	--	--	--	--	--	--
Singapore	--	--	--	--	--	--	--	--	--	--
Sri Lanka	--	--	65	--	--	19	3	--	--	--
Taiwan	(2/)	849	62	--	--	--	--	--	--	--
Thailand	10	16,159	555	756	12,028	--	--	25	9	72
Vietnam	--	--	390	4,700	2,900	--	--	--	15	10
Total	2,643	263,883	54,075	132,780	152,629	2,880	254	26,808	3,092	2,984
Share of world total, percent	11	11	28	63	72	72 3/	61 3/	80 3/	41	39
United States	2,304	536,098	36,512	--	12,344	W	W	W	632	367

e/ Estimated. NA Not available. W Withheld to avoid disclosing company proprietary data.

1/ Metric tons.

2/ Less than 1/2 unit.

3/ Excludes U.S. production.

4/ Includes Ni content of intermediate products but excludes ferroalloy.

5/ Million 42-gallon barrels.

6/ Million cubic meters.

TABLE 2
ASIA AND THE PACIFIC: CONSUMPTION OF SELECTED METALS

(Thousand metric tons unless otherwise specified)

Country	Aluminum, primary		Cadmium 1/		Copper, refined		Lead, refined		Nickel		Tin, refined 1/		Zinc, slab	
	1993	1997	1993	1997	1993	1997	1993	1997	1993	1997	1993	1997	1993	1997
Australia	338	362	25	24	146	156	62	63	2	2	400	4,800	146	184
China	1,318	1,484	550	600	985	1,025	314	429	39	37	21,100	31,800	667	797
Hong Kong	45	227	(2/)	(2/)	14	85	1	1	(2/)	(2/)	2,000	1,200	1	6
India	475	600	649	446	111	140	80	104	13	18	1,400	1,500	150	216
Indonesia	139	180	(2/)	(2/)	48	94	75	88	(2/)	(2/)	1,500	2,400	48	84
Japan	2,138	2,434	5,938	7,247	1,384	1,441	370	330	157	177	28,600	28,200	719	742
Korea, Republic of	525	666	380	380	400	618	178	244	33	67	9,100	11,800	311	312
Malaysia	82	102	(2/)	(2/)	91	160	51	74	(2/)	(2/)	5,200	6,600	24	56
New Zealand	27	37	(2/)	(2/)	4	6	4	4	(2/)	(2/)	--	--	17	24
Philippines	23	34	(2/)	(2/)	49	72	32	24	(2/)	(2/)	200	100	39	46
Singapore	22	40	(2/)	(2/)	19	8	8	16	(2/)	(2/)	--	--	30	15
Taiwan	299	374	20	20	477	588	100	142	19	75	8,100	9,700	170	229
Thailand	180	233	(2/)	(2/)	119	152	59	57	(2/)	(2/)	5,000	4,600	90	76
Asia and the Pacific, unspecified	79	116	118	119	30	20	24	44	7	11	300	1,000	97	100
Total, Asia and the Pacific	5,690	6,889	7,680	8,836	3,877	4,565	1,358	1,620	270	387	82,900	103,700	2,509	2,887
Asia and the Pacific as a percent of World total	31	32	40	54	35	36	27	28	34	40	39	45	36	38
United States	4,877	5,317	2,699	1,356	2,359	2,770	1,357	1,731	122	134	34,800	37,400	1,148	1,277

1/ Metric tons.

2/ Included in Asia and the Pacific, unspecified.

Source: World Bureau of Metal Statistics. World Metal Statistics, July 1998.