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The International Copper Market in 1953 and 1954
Richard M. Kirby 17 pages

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Introduction

The position of the United States with respect to world trade in copper has changed markedly since 1940. Prior to that time, the United States was a net exporter of copper, but since then it has been a net importer of this metal. This change in the net flow of copper was an outgrowth not only of war and post-war industrial demands, but also of the United States Government's policy of stockpiling strategic materials which has removed substantial quantities of copper from world markets.

At the present time, the United States relies heavily on foreign sources of this metal, mainly Chile, which usually furnishes over half of the copper imported by this country. Consequently, it is of interest to examine the international as well as the domestic supply and demand factors which affect the market for this major non-ferrous metal.

Since April 1953, copper prices in the United States have been fairly stable between 29 and 30 cents a pound for electrolytic copper delivered in the Connecticut Valley. In 1951 and 1952, the price of copper in the United States, under the ceiling price program, had been 24 1/2 cents. In February 1953, copper prices in the United States were decontrolled, and after two months of instability, custom smelters' prices rose to about 29 cents and integrated producers' prices settled at 30 cents, about 5 cents a pound above the old ceiling price, and this price has been maintained. Since April 1953, the custom smelters' price has been raised three times: to 29 1/2 cents in October 1953, to 29 3/4 cents in March 1954 and to 30 cents in April 1954.

Prices in the United Kingdom fell from an average of 32.7 cents in 1952 to 29.6 cents a pound at the end of 1953. After a further drop in January to 28.1, the United Kingdom price has risen in recent months, and stood at 30 cents at the end of May 1954. The London price was indicative of prices in the rest of the world, except in Chile, after the United States decontrolled copper.

In Chile, the government agencies in control of copper insisted in 1953 upon a price of 35 1/2 cents f.a.s. Chilean ports, which was about 6 cents above the world market. In consequence, substantial stocks of unsold Chilean copper accumulated after the late spring of 1953, and in August, the Chilean Government requested the United States to purchase these stocks for its strategic stockpile with the understanding that they be withheld from the market. After extended negotiations complicated by "quid pro quo" arrangements involving United States-owned mines in Chile, the United States agreed in March 1954 to purchase 100,000 short tons of Chilean copper. By this time, Chilean stocks had increased to over 180,000 short tons.

Importance of Chile in copper market

Chile is the world's largest copper exporter and second largest producer, following the United States, so that its action in maintaining a price above the market was a very important factor in 1953 in preventing a sharp fall in copper prices such as had occurred in the cases of lead and zinc. Table 1 shows Chile's share in world output in recent years. In 1953, although final world figures are not yet available, Chile's share of world output declined because of the price policy noted above, and also because of strikes in October and November. Table 4 shows Chile's monthly production for 1953 and 1954. In recent months, production at major mines (with 90 to 95 per cent of the total output) has averaged only about 22,000 short tons a month as compared with 37,000 short tons a month in the first half of 1953.

Table 1

Chile's Share in World Copper Mining Output 1950-1952

(Thousands of short tons)

Year	Chile	World	% of World
1950	399	2,761	14.4
1951	418	2,893	14.5
1952	446	3,008	14.8

Source: U.S. Bureau of Mines Minerals Yearbook, 1952, (preprint), page 36.

As the world's largest copper exporter, Chile supplied 37 per cent of the world's primary copper exports in 1952. 1/ Three-fourths of these exports went to the United States. Chile supplied 60 per cent of United States copper imports in 1952, but only 42 per cent in 1953 because of reasons stated above. Table 4 shows monthly exports of copper from Chile to the United States. Normally, most of Chile's copper comes to the United States in refined form, but in December 1952, blister copper produced at the new sulfide plant at the Chuquicamata mine began to arrive in the United States, because refining facilities for this blister are lacking in Chile. 2/ Of the total tonnage of Chilean copper coming to the United

1/ Other important exporters were Northern Rhodesia, Belgian Congo, Canada and Mexico which supplied 26, 16, 11 and 4 per cent, respectively, of world copper exports in 1952.

2/ Mineral Industrial Surveys, United States Department of the Interior, Bureau of Mines, December 1952.

States in 1953 the proportion of blister increased to a level of 57 per cent of the total tonnage during the latter half of the year compared to only 16 per cent in 1952.

Copper in the United States

Before analyzing international developments in demand and supply conditions for copper, it will be useful to examine the industry in the United States, because of the importance of this country as the world's major copper producer and consumer.

The main consumers of copper in the United States are the electircal equipment industry which consumes about 20 per cent, the building industry and automobile industry which consume about 10 per cent each, other rod and wire producers about 9 per cent, light and power about 7 per cent, telephone and telegraph about 6 per cent, cartridge cases and rotating bands about 5 per cent, and the radio and television industry about 4 per cent. Other uses of copper are in air conditioning, refrigerators, railroads and ship building, none of which take more than 2 per cent of the total. 1/

In the period 1925-1929, approximately 60 per cent of the supply of refined copper coming on the market in the United States was produced from domestic ores, 21 per cent from foreign ores, 15 per cent from secondary sources and 4 per cent from refined imports. Since 1929, there has been a proportionate increase in the supply furnished by refined imports and a decline in the supply from domestic ores. As a result in 1950, the supply furnished by domestic ores was approximately 51 per cent while refined imports accounted for approximately 17 per cent, foreign ores approximately 18 per cent, and secondary sources about 14 per cent. 2/ In 1953, domestic ores accounted for about 53 per cent, refined imports about 16 per cent, foreign ores about 21 per cent, and secondary sources about 10 per cent. 3/ Of the copper imported into this country in 1953, about 16 per cent was ores and concentrates, about 42 per cent was unrefined and regulus, about 40 per cent was refined copper, and the balance was old scrap, amounting to about 2 per cent of the total. 4/

The distribution pattern has changed greatly since World War I. In the 1920's domestic consumption took approximately 70 per cent of refined production plus refined imports and exports 30 per cent. Since then domestic consumption has expanded to approximately 90 to 95 per cent, leaving

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1/ Resources for Freedom, Volume II of the President's Materials Policy Commission, June 1952, page 33.
2/ Materials Survey on Copper, U.S. Bureau of Mines, Volume II, page IV-2.
3/ Copper in 1953, Mineral Industry Surveys, U.S. Bureau of Mines, page 9.
4/ Ibid, page 7.

5 to 10 per cent for exports. In 1953, exports took 6 per cent leaving 94 per cent for domestic consumption. 1/

The principal stages in the production of copper in the United States are mining, smelting, refining, and fabricating. These segments of the industry are dominated in the United States in varying degrees by large vertically integrated companies. Copper mining is dominated by three concerns, Kennecott Copper Corporation, Phelps Dodge Corporation and Anaconda Copper Mining Company, which produce over 75 per cent of the annual domestic mine production of copper. In 1950 these concerns produced over 680 thousand of the total U.S. mine production of 909 thousand. Two of these concerns, Anaconda and Kennecott, together, control 35 per cent of the world's known copper reserves including 95 per cent of Chile's capacity.

Four companies control about 93 per cent of the smelting capacity in the United States. These include the same three companies which control mining and the American Smelting and Refining Company. Both mining and smelting are centralized in the Western States.

Refining of copper takes place mainly in the metropolitan New York area or in Baltimore. This concentration is the result of cheap power, nearness to the market, and transportation advantages. Five concerns dominate this sector of the industry. They include the four concerns mentioned above as dominant in smelting copper, and a fifth concern, the American Metal Company. Together these five concerns control 92 per cent of the refining capacity of the United States.

Fabricating is that phase of the industry which transforms the copper into wires, rods, extruded and rolled shapes and other semi-finished forms which are the raw materials for other industries. Over 50 per cent of this business is in the hands of the same firms which control the earlier stages of production, Konnecott, Anaconda, Phelps Dodge, and American Smelting and Refining Company, which gives these concerns a completely integrated operation in the industry.

The market for refined copper in the U.S. is confined to about 60 buyers. These 60 include those integrated with the primary copper producers, the independent fabricators, and the large electrical manufacturers. The large producing companies channel most of their output of refined copper to their own fabricating plants and eventually sell it as finished copper manufactures.

Copper producers handle their transactions with the consumers through their sales agents, which, in the case of the large producers, are generally affiliated companies. Custom smelters and refiners, apart from the American Smelting and Refining Company, are independent of the big integrated concerns.

1/ Ibid, page 9.

The large integrated producers maintain price leadership in the industry. Their major consideration is a satisfactory operating profit over a period of years and not necessarily a definite margin for each sale. Unlike the custom smelters, the integrated producers may refrain from selling in a falling market rather than reduce prices; this was their policy in 1953 and so far in 1954 which was an important factor in preventing the price of copper from falling below 29 cents a pound. Prices are generally quoted in terms of electrolytic copper, f.o.b. refinery, with quotations for the other types fluctuating around the electrolytic price.

Demand, supply and price developments in the copper industry up to March 1954

Although copper prices have been fairly stable in the United States since April 1953, there have been considerable changes in demand and supply factors in the copper industry in the United States and elsewhere which have influenced the industry in this country. Table 2 shows monthly statistics of production, exports, imports and distribution of copper in the United States since October 1952. The Table contains two lines (3 and 12) which are calculated as residuals. Line 3, when positive, represents the net decrease in stocks of unrefined copper other than scrap plus the scrap consumed in refinery production in excess of imports of scrap, and the reverse if it is a negative figure. The latter is generally the result of heavy unrefined and scrap imports. Line 12 is the discrepancy between supply and distribution of refined copper, lines 7 and 11. The most important causes of discrepancy are statistical errors and government stockpile changes. Data on the stockpile are secret, and are not published. The calculated residual suggests, however, that deliveries to the stockpile continued fairly steadily in 1953 and the early months of 1954, at a rate amounting possibly to 5-10 per cent of the published domestic deliveries.

The first important indication of imbalance in the copper industry in 1953 came in July, when demand suddenly declined as evidenced by a drop in domestic deliveries from an average of 132 thousand tons a month in January-June 1953, to 105 in July representing a fall of more than 20 per cent (Table 2). Producers' stocks which had been fairly stable at 60 thousand tons or less during the first half of 1953, rose to 77 thousand at the end of July. During the remainder of 1953, domestic deliveries were fairly stable at a reduced level averaging 107 thousand tons a month, and producers' stocks increased to 89 thousand tons at the end of the year.

The increase in stocks in the second half of 1953 would have been even heavier had there not been several factors which tended to counteract the decline in domestic demand and which helped, therefore, to maintain copper prices between 29 and 30 cents a pound. This was despite the maintenance of refined production at an average of 119 thousand tons in the second half of 1953 compared with 113 thousand tons in the first half of 1953. The most important factor was the decrease in refined imports from an average of 33 thousand tons a month in the first half of the year to 18 thousand in July, and an average of 12 thousand for the balance of the year. Another important

factor was the increase in refined exports from an average of 6 thousand in the first half of 1953 to 10 thousand in July and an average for the balance of the year of almost 11 thousand tons. Moreover, some upward pressure on copper prices came from exports of scrap which rose from a monthly average of 600 tons in the first half of the year to 5,000 tons monthly for the latter half of 1953. And the maintenance of refined production at a high level in the last quarter of 1953 depended in part, as shown by line 3 of Table 2, on relatively high utilization either of scrap or of producers' stocks of unrefined copper.

The decline in refined imports was enough to offset half of the decline in domestic deliveries. As shown in Table 4, refined imports from Chile dropped from an average of 19.8 thousand tons in January-June to 6.7 thousand in July, and an average of only 4.3 thousand for the balance of the year. This drop in refined imports from Chile was the main cause of lower refined copper imports into the United States although, as indicated in Table 6, there was also a reduction of refined imports from Canada and Mexico which helped to counteract the reduced demand for copper in the United States. In the latter half of 1953 exports to Europe from Canada and Mexico increased.

The sudden increase in refined exports in July represented a partial recovery toward the 14 thousand ton monthly level of the last quarter of 1952, as shown in line 10. Bureau of Mines reports indicate that the United Kingdom, France and other European buyers had cut their imports from the United States expecting prices to fall in the first half of 1953. As prices did not fall but remained at near the 30-cent level, private European buyers began to enter the market again in July in order to replenish their inventories. As shown in Table 5, West European countries accounted for most of the increase in refined exports from the United States in the second half of 1953. Copper consumption in these countries showed a decided increase in the second half of 1953 compared to the first six months. From a monthly average of 63.5 thousand short tons in the first quarter of 1953, and 58.2 thousand in the second quarter, consumption rose to 67.7 thousand in the third quarter and 88.3 thousand in the last quarter. The gain in the second half represented a 28 per cent increase over consumption during the first six months of 1953. 1/ It seems likely that these figures reflect a cessation of inventory liquidation and possibly some rebuilding of inventories by fabricators, as well as a rise in actual use of copper. The OEEC production index for "metal products" began to rise in the second half of 1953 and advanced further in the first half of 1954.

In August 1953, the London Metal Exchange resumed free trade after 14 years of control. It was expected that London prices would drop sharply, but only a slight reaction resulted from resumption of free market operations, with even less repercussion on prices in New York. The stabilizing pressure of the United States' big integrated producers may be seen during the entire period under survey. Approximately 92 per cent of the United States output,

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1/ OEEC Statistical Bulletins, General Statistics, May 1954, page 25.

the production of the five biggest integrated producers, was held at a 30-cent per pound price from April 1953 on.

In October 1953, there was a shortage of copper in the United Kingdom causing the British Ministry of Materials to sell copper in the London Metal Exchange in order to insure regular supplies for British consumers. This shortage in London was reflected in an increase of a fraction of a cent to 29 1/2 cents in the New York selling price of custom smelters.

The price of copper in the United Kingdom fell to 28.1 cents in January 1954, reflecting the uneasy state of the world market. With the support of the 30-cent price maintained by the big integrated producers in the United States, prices in this country did not fall although domestic deliveries dropped to a low of 77.1 thousand tons in January. Other factors which helped stabilize prices included a decrease in refined production, and an increase in refined and scrap exports in early 1954 (see Table 2). However, with producers' stocks rising to 118.4 thousand at the end of February, approximately double the stocks held in June 1953, there were almost universal predictions of a drop in copper prices. Instead of the expected fall, copper prices quoted in March by custom smelters rose from 29 1/2 to 29 3/4 cents. A review of the main factors which probably contributed toward the price rise is as follows:

1. United States Government purchases - A basic factor was the increasing certainty that most of Chile's 180,000 ton stockpile would be purchased by the United States Government for its strategic stockpile, and would not come on the world market to depress prices.

2. Price and production policy of big integrated producers - The 30-cent price maintained by the big integrated producers of the United States who control 92 per cent of the refining capacity of this country and most of the world's total capacity was an important factor. In the early months of 1953 they were instrumental in causing a contraction in mine and refined production in the United States, which made output in the second quarter 7 per cent below production in the second half of 1953. This tended to reduce the quantity of refined copper offered on the market and thus helped stiffen prices.

3. Domestic demand - Domestic deliveries, which had reached a low of 77.1 thousand in January, rose to 89.0 in February and by March were up to 95.8 thousand tons (Table 2, line 9).

4. Policy of British Ministry of Materials and other west European factors - The British Ministry of Materials announced in March that it would no longer intervene in the copper

market in case of inadequate supplies. This announcement caught United Kingdom buyers with low inventories causing immediate increases in purchases which stiffened the market in London to 29.6 cents and helped stiffen the market in New York as well. Also reinforcing the price increase was the steady demand for copper in West Europe which had risen in the latter half of 1953 and seems to have remained fairly steady thereafter.

5. Scrap prices - The price of Number One copper scrap rose from 22.5 cents per pound in February to about 25 cents in March, a price which corresponds to expectations of refined copper prices of about 30 cents per pound 60 to 90 days later. This stiffening of scrap prices was mainly because of increased demand for scrap in Japan which imported 20.9 thousand tons in the first quarter of 1954. Scrap exports (see Table 3) for the first quarter of 1954 averaged 8.8 thousand tons a month compared to .6 thousand in the first half of 1953 and 5.2 thousand in the second half of the year. 1/

Demand, supply and price developments in the copper industry since March 1954

With a further quarter-cent rise in April, the United States custom smelters' price is now at par with the integrated producers' price of 30 cents a pound. Domestic deliveries reached a peak of 111 thousand in May and fell to 106.3 in June roughly equal to the monthly average for the second half of 1953. The lessening of demand in June may reflect the ceasing of hostilities in the Far East, as well as vacation shutdowns at brass and wire mill plants. Refined imports increased from 14.2 thousand in April to 19.6 thousand in May mainly due to increased imports from Chile. Despite increased refined imports and decreased deliveries, refined stocks fell sharply from 124.5 thousand in April to 82.1 thousand in May. The main explanation is probably the purchases for the Government stockpile of Chilean copper already in this country. These purchases also probably help to explain the further drop of refined stocks to 69.2 thousand in June. Without this withdrawal of Chilean copper from the market for the U.S. Government stockpile, it is commonly agreed that the market would have weakened.

1/ There are certain so-called normal flow patterns connecting world markets. Refined copper or blister moves from Latin America to the United States, mainly, although there is some flow to Western Europe. The main flow to the latter market is from Africa although 5 to 10 thousand tons of toll copper flow monthly from Africa via the U.S. to Europe. The supplier-customer bonds are not usually broken except in the case of scrap where the flow is free with few customer-supplier bonds in existence.

In the United Kingdom, copper prices fell in late July to the equivalent of approximately 29.5 cents per pound. Besides the truce in Indo-China, the apparent reason for the decline was hedging sales by metal dealers against arrivals in England of Chilean copper, purchases of which were apparently increased in the spring when the Chilean Government pushed sales to European buyers by shading prices and by permitting production from Chilean mines to be sold for sterling and other soft currencies. Late in June, after substantially all its huge stocks had been sold and it became apparent that selling for soft currencies did not help solve its dollar problem, Chile reversed this selling policy and allowed copper to be sold for hard currencies only. Late in July, Chile raised its dollar price to 29 1/4 cents f.a.s. Antofagasta, Chile, for copper to Europe.

The latest reports on Number Two copper wire scrap in the United States for the middle of July are that the price has settled at 25 1/2 cents after fluctuating between 25 1/2 and 25 3/4 cents per pound. This weakening is reported to be the result of decreased demand from Japan and Europe for copper scrap.

Outlook

With Chile's backlog disposed of and world producers' stocks, as a result, nearing a more normal level, Chile's attempt to raise its price to European buyers to 29 1/4 cents f.a.s. Antofagasta, which is equivalent to 30 1/4 cents London, raises the question of the possibility of a rise in U.S. copper prices. There are a number of factors, however, that suggest weakness in the market. These adverse factors today include the recent fall in the price of scrap, the weakening of the London market, and a slackening in demand because of vacation shutdowns as indicated by reports that U.S. domestic deliveries may fall below 95 thousand tons in July and August. Moreover, fear of substitution of other metals, as well as the demand on the part of labor for higher wages if prices go up, seems likely to cause the large integrated producers to maintain the present price and to expand output if demand should strengthen.

While a rise in the U.S. price seems unlikely, a decline does not appear imminent. World stocks of copper, and particularly Chile's stocks, are now at a seemingly normal level. The United States' big integrated producers will attempt to preserve an equilibrium of supply and demand by increasing or decreasing production as the market dictates, in order to maintain present prices. Thus it would probably take a serious decline in domestic or European demand to cause a drop in the present price level, at least in the near future.

Table 2

United States Copper Production and Distribution 1952 - 1954

(In thousands of short tons)

	1952			1953						Average 1st half 1953
	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	
Production and supply:										
1. Mine production (copper content)	79.4	75.5	75.8	77.6	72.4	80.8	79.6	80.8	73.6	77.5
2. + Imports, unrefined and scrap	21.0	23.9	24.4	23.5	33.2	20.5	39.6	32.1	40.2	31.5
3. + Differences (*)	5.4	.7	13.8	6.9	-4.1	10.7	-5.4	5.0	13.5	4.4
4. Refined production	105.8	100.1	114.0	108.0	101.5	112.0	113.8	117.9	127.3	113.4
5. Imports, refined	38.9	35.2	45.8	26.5	29.2	31.9	31.5	35.0	41.0	32.5
6. Producers' stocks, first of month	71.5	59.8	69.2	58.9	59.8	60.9	55.8	48.4	52.8	
7. Total refined supply	216.2	195.1	229.0	193.4	190.5	204.8	201.1	201.3	221.1	
Distribution:										
8. Producers' stocks, end of month	59.8	69.2	58.9	59.8	60.9	55.8	48.4	52.8	58.1	
9. Domestic deliveries, refined	138.8	125.3	143.1	125.1	117.2	133.5	142.4	136.2	139.3	132.3
10. Exports, refined	16.0	11.2	15.0	6.6	4.4	7.0	5.1	6.6	5.6	5.9
11. Total refined distribution	224.6	205.7	216.0	191.5	182.5	196.3	195.9	205.6	203.0	
12. Discrepancy	-8.4	-10.6	+13.0	+1.9	+8.0	+8.5	+5.2	-4.3	+18.1	6.2
13. Scrap exports	.8	.6	.3	.6	.8	.4	.4	.7	.5	.6
14. Total exports, scrap and refined (10+13)	16.8	11.8	15.3	7.2	5.2	7.4	5.5	7.3	6.1	6.5
15. Total imports, crude, blister, refined and scrap (2+5)	59.9	59.1	70.2	50.0	62.4	52.4	71.1	67.1	81.2	64.0

* Differences: (if +) should represent net decrease in stocks of unrefined other than scrap plus use of scrap in refinery production in excess of imports of scrap.

Sources: (See next page.)

Table 2 (Continued)

United States Copper Production and Distribution 1952 - 1954

(In thousand of short tons)

	1953						Average 2nd half 1953	1954					
	July	Aug.	Sept.	Oct.	Nov.	Dec.		Jan.	Feb.	Mar.	Apr.	May	June
Production and supply:													
1. Mine production (copper content)	76.5	74.5	75.5	80.0	75.2	77.0	76.6	74.7	65.3	71.3	67.8	71.6	74.2
2. + Imports, unrefined and scrap	48.2	32.2	49.0	35.4	26.0	19.1	34.9	20.5	41.2	32.0	32.4		
3. + Differences (*)	-2.7	1.2	-9.7	10.7	18.0	27.2	7.5	16.4	-3.0	12.1	12.4		
4. Refined production	122.0	109.0	114.8	126.1	119.2	123.3	119.1	111.6	103.5	117.5	112.6	108.4	112.1
5. Imports, refined	18.0	16.3	9.4	15.7	6.4	13.1	13.2	14.3	14.5	11.3	14.2	19.6	
6. Producers' stocks, first of month	58.1	77.1	78.8	72.9	84.3	93.3		89.2	108.1	118.4	125.8	124.5	82.1
7. Total refined supply	198.1	202.4	203.0	214.7	209.9	229.7		215.1	226.1	247.2	252.6	252.5	
Distribution:													
8. Producers' stocks, end of month	77.1	78.8	72.9	84.3	93.3	89.2		108.1	118.4	125.8	124.5	82.1	69.2
9. Domestic deliveries, refined	104.5	107.0	104.9	110.5	100.9	112.2	106.7	77.1	89.0	95.8	104.8	111.0	106.3
10. Exports, refined	10.2	13.6	10.0	11.8	10.2	18.5	12.4	19.5	15.2	12.4	20.1		
11. Total refined distribution	191.8	199.4	187.8	206.6	204.4	219.9		204.7	222.6	234.0	249.4		
12. Discrepancy	+6.3	+3.0	+15.2	+8.1	+5.5	+9.8	8.0	+10.4	+3.5	+13.2	+3.2		
13. Scrap exports	2.0	4.1	6.4	6.3	5.1	7.3	5.2	10.4	9.8	6.3	10.2		
14. Total exports, scrap and refined (10+13)	12.2	17.7	16.4	18.1	15.3	25.8	17.6	29.9	25.0	18.7	30.3		
15. Total imports, crude, blister, refined and scrap (2+5)	66.2	48.5	58.4	51.1	30.4	32.2	47.8	34.8	55.7	43.2	46.5		

* Differences: (if +) should represent net decrease in stocks of unrefined other than scrap plus use of scrap in refinery production in excess of imports of scrap.

Sources: Copper Institute (production, stocks, deliveries). Bureau of the Census (imports, exports). Imports are "imports for consumption", i.e., excluding imports entering bonded warehouses and including withdrawals from bonded warehouses.

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Table 3

Monthly Production of Major Chilean Copper Mines
(90 to 95% of Chile's production)

(Thousands of short tons)

1953 -	January	34.9
	February	33.6
	March	28.9
	April	38.2
	May	40.3
	June	32.4
	July	30.1
	August	29.6
	September	30.7
	October	21.7
	November	11.0
	December	30.9
1953 -	Total	362.3
1954 -	January	29.7
	February	28.6
	March	21.5
	April	21.1
	May	22.8

Source: Reports from American Embassy, Santiago, Chile.

Table 4

Copper Imported Into the United States from Chile 1/

(Unmanufactured in short tons)

	Concentrates (copper content)	Unrefined black blister and converter in pigs or converter bars	Refined in ingots plates or bars	Total
1952 - October	741	5,439	32,783	38,963
November	1,625	4,962	27,180	33,767
December	1,234	8,155	37,618	47,007
1952 - Total	10,261	55,544	294,425	360,230
1953 - January	578	7,686	21,855	30,119
February	570	10,264	20,865	31,699
March	1,218	8,882	21,180	31,280
April	498	10,636	18,755	29,889
May	933	12,138	16,375	29,446
June	482	14,207	19,832	34,521
July	847	17,867	6,695	25,409
August	2,453	12,666	5,634	20,753
September	1,830	9,376	2,348	13,554
October	376	8,728	8,006	17,110
November	1,690	—	300	1,990
December	1,054	1,591	5,347	7,992
1953 - Total	12,529	114,041	147,192	273,762
1954 - January	928	8,856	7,351	17,135
February	738	9,288	7,722	17,748
March	1,691	9,679	5,779	17,149
April	--	8,152	5,709	13,861

1/ Data are "general" imports; that is, they include copper imported for immediate consumption plus material entering country under bond.

Source: Monthly Copper Reports from October 1952-February 1954. Mineral Industry Surveys, United States Department of the Interior, Bureau of Mines.

Table 5

Refined Copper Exports from the United States in short tons to Specified Countries

(Thousands of short tons)

	1952			Year	1953												Year	1954			
	Oct.	Nov.	Dec.	1952	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	1953	Jan.	Feb.	Mar.	Apr.
Argentina	--	--	--	--	--	--	--	--	--	--	--	--	.8	1.6	--	1.9	4.4	1.9	--	--	.9
Australia	--	.1	--	--	--	--	--	--	--	--	--	--	.1	--	--	--	--	--	--	.1	--
Brazil	.1	.1	.3	5.5	--	--	.5	1.1	1.4	1.5	.6	1.0	.9	.6	1.3	.7	9.6	1.5	2.6	1.2	3.5
Canada	4.6	3.6	.9	12.9	.1	--	--	--	--	--	--	--	--	.2	.4	.1	.8	.3	--	--	--
France	3.7	3.5	4.0	35.6	2.6	.6	3.9	.9	.8	--	.7	2.3	1.6	2.2	1.2	1.1	17.8	1.3	1.6	1.2	2.5
Germany (West)	2.6	.2	3.3	20.4	.3	--	.4	--	--	--	.4	.9	2.3	3.0	1.9	2.6	12.1	3.0	1.5	1.8	2.3
Italy	1.1	.5	2.8	17.0	.3	1.6	1.2	1.4	1.2	1.3	.8	.8	1.1	.7	.5	.2	11.0	3.3	1.1	2.5	2.3
Japan	.1	--	--	--	--	--	--	--	--	--	--	.1	--	--	.5	1.5	2.2	2.0	1.6	1.0	.4
Netherlands	--	.2	.6	6.0	.1	1.1	--	--	--	--	1.7	1.2	1.5	1.0	1.1	3.6	11.4	2.5	2.3	1.9	1.6
Norway	--	--	--	1.7	.6	.3	.1	.5	.1	.1	.1	.4	.4	--	.2	.3	3.3	--	.5	--	.6
Switzerland	.4	.3	--	9.6	.2	.6	.4	.2	.2	.2	.9	1.1	.2	.6	1.0	.7	6.4	1.0	1.3	.6	1.3
Taiwan	--	--	--	--	--	--	--	--	--	--	--	.6	--	--	--	1.6	2.2	--	--	--	--
United Kingdom	1.4	2.5	2.7	48.1	2.2	--	--	.4	2.2	1.9	4.2	5.1	.7	.7	1.2	3.8	22.4	1.3	1.2	.4	3.1

Source: Monthly Copper Reports from October 1952 to date. Mineral Industry Surveys, United States Department of the Interior, Bureau of Mines.

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Table 6

Copper (unmanufactured) Imported into the United States from Major Sources in Short Tons

	1952			Year	1953						
	Oct.	Nov.	Dec.	1952	Jan.	Feb.	Mar.	Apr.	May	June	July
Canada & Newfoundland											
Concentrates	1.9	1.9	2.2	25.6	1.3	4.5	1.7	1.5	2.7	2.4	2.9
Blister	5.9	3.8	—	26.5	--	3.5	--	--	--	--	--
Refined	2.0	2.1	3.3	28.3	3.1	4.8	7.5	6.8	10.2	12.1	6.9
Chile											
Concentrates	.7	1.6	1.2	10.3	.5	.6	1.2	1.0	.9	.5	.8
Blister	5.4	5.0	8.2	55.5	7.5	10.3	8.9	10.6	12.1	14.2	17.9
Refined	32.8	27.2	37.6	294.4	21.9	20.9	21.2	18.8	16.4	19.8	6.7
Mexico											
Concentrates	.8	.7	.8	6.4	.6	.6	1.0	.8	.5	.7	.8
Blister	3.4	2.8	6.3	36.3	3.4	3.7	2.9	4.3	1.5	3.1	5.2
Refined	.6	—	.8	5.8	.6	1.7	1.1	.8	.6	1.4	1.0
Northern Rhodesia											
Blister	--	--	.9	28.2	--	2.2	1.5	10.2	3.9	8.3	10.8
Peru											
Concentrates	1.1	.9	.3	8.3	.1	1.3	.8	.3	.9	.2	1.2
Refined	--	.3	.7	1.7	--	--	--	.8	.9	2.2	1.1
Philippines											
Concentrates	2.3	2.5	.1	14.8	.1	2.8	.1	.1	1.0	.1	2.3

Source: Monthly Copper Reports from October 1952 to date. Mineral Industry Surveys, United States Department of the Interior, Bureau of Mines.

Table 6 (Continued)

Copper (unmanufactured) Imported into the United States from Major Sources in Short Tons 1/

	1953 (Cont.)						Year	1954			
	July	Aug.	Sept.	Oct.	Nov.	Dec.	1953	Jan.	Feb.	Mar.	Apr.
Canada & Newfoundland											
Concentrates	2.9	2.5	4.7	2.7	1.8	2.6	31.4	2.9	4.7	2.0	2.2
Blister	--	--	--	--	.6	--	3.5	--	--	--	--
Refined	6.9	5.5	3.1	3.4	2.0	2.0	67.5	2.8	1.2	2.4	4.1
Chile											
Concentrates	.8	2.5	1.8	.4	1.7	1.1	12.5	.9	.7	1.7	--
Blister	17.9	12.7	9.4	8.7	--	1.6	117.5	8.9	9.3	9.7	8.2
Refined	6.7	5.6	2.3	8.0	.3	5.3	147.4	7.4	7.7	5.8	5.7
Mexico											
Concentrates	.8	.6	.7	.8	.9	.7	8.6	.9	1.1	1.3	1.0
Blister	5.2	2.7	5.3	5.1	4.4	4.2	45.7	2.1	3.3	3.4	1.9
Refined	1.0	.4	--	--	--	--	7.5	1.6	1.1	--	--
Northern Rhodesia											
Blister	10.8	8.2	12.8	10.6	5.4	--	85.4	1.7	6.8	--	10.4
Peru											
Concentrates	1.2	.2	.9	1.0	1.2	.5	8.8	.7	.5	.8	.7
Refined	1.1	--	2.8	2.0	1.8	2.0	16.2	1.5	--	--	1.0
Philippines											
Concentrates	2.3	.1	2.5	.1	2.2	.3	13.8	--	2.4	--	5.0

1/ Data are "general" imports; that is they include copper imported for immediate consumption plus material entering country under bond.

Source: Monthly Copper Reports from October 1952 to date. Mineral Industry Surveys, United States Department of the Interior, Bureau of Mines.