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INTERNATIONAL SYMPOSIUM ON INDUSTRIAL DEVELOPMENT  
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Provisional agenda, Item 3(g)

Background paper

SHORT AND MEDIUM-TERM PROSPECTS FOR EXPORT OF  
MANUFACTURES FROM SELECTED DEVELOPING COUNTRIES

- CHILE -

Presented by the secretariat of the United Nations  
Conference on Trade and Development

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some idea of the possible reaction of the world market to the supply of Chilean manufactures, based on the price at which they would be thrown into competition with others. As to the scale of supply, it was not felt that placement would present any major problem in view of the small volume involved in proportion to world demand as a whole.

7. The competitiveness of the products in question has been analysed in terms of the international market rather than of the more favourable market of the countries members of the Latin American Free Trade Association (LAFTA); however, the estimates refer to total export capacity regardless of destination.

8. At a later stage of the analysis it may be necessary to examine the behaviour of the world market, but that will have to be done in terms of its component national markets. Such an examination is beyond the aims of the present report which, as already stated, takes into account only the order of magnitude of world demand as compared with the supply of Chilean manufactures. In breaking down that total demand into its national components, consideration would have to be given to the favourable and unfavourable factors affecting the various national markets. The prospects described in chapter D for exports of manufactures, to which reference was made earlier, can be considered encouraging, especially over the medium term. During this period (four or five years), this export potential might reach \$200 million, while over the short term (one or two years) the prospective figure is about \$100 million, as shown in table 12.

9. It should be pointed out once again that the above figures are given purely as a guide; they represent, not targets for an export programme, but an assessment of industrial export capacity under the specific conditions referred to in the preceding paragraphs.

## 1. EXPORTS IN RECENT YEARS

10. In Chile, as in the countries previously studied, total exports have been on the increase in recent years. Up to 1963 the increase, though not very pronounced, was constant; it became more marked in 1964, was maintained in 1965 and seemed likely to continue in 1966.

11. Of the thirteen sections into which Chilean foreign trade statistics are divided, that of mineral products (section I) is the most important, representing about 85 per cent by value of total exports in the period 1960-1965. The other sections are of minor importance; the most noteworthy among them are agricultural products (section IV) and products of the metallurgical industries (mainly articles of copper) (section X), each representing - the former fairly regularly, the latter sporadically - about 5 per cent. The remaining sections represent very small proportions - in most cases less than 1 per cent each - of total exports (see table 1).

12. The purpose of this report is to examine, within the general context of trade, the place occupied by manufactures. Under the Chilean statistical classification, as under those of other countries<sup>1/</sup>, total manufactures cannot be arrived at simply by adding together the figures for certain sections. It was therefore necessary to make a new classification that took into account products which had undergone a process of industrial transformation and which could thus be classified as manufactures.<sup>2/</sup> Accordingly a number of manufactures were picked out within the thirteen official statistical sections; the value of exports of these products is shown in table 2.

13. The total value of exports of manufactures remained steady at about \$35 million from 1960 to 1963. In 1964 this figure was more than doubled, to almost \$77 million, and rose again to more than \$92 million in 1965. Exports of manufactures also increased markedly as a proportion of total exports, from 6-7 per cent in 1960-1963 to over 13 per cent in 1965. As will be seen later, the increases recorded in 1964 and 1965 were due almost entirely to a great increase in exports of semi-manufactures of copper during those years.

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1/ See the studies on Argentina and Brazil.

2/ In this report and subsequent reports in this series, the term "manufactures" includes "semi-manufactures", which are generally those products so defined in document TD/B/C.2/3 prepared on the request of the Special Committee on Preferences. In a small number of cases and for reasons such as the special importance of a given product to the economy of particular countries, it was considered desirable to depart from this classification.

Table 1  
CHILE - TOTAL EXPORTS  
(Thousands of dollars)

Section	1960	1961	1962	1963	1964	1965
I Mineral products	427,143	438,388	469,087	479,098	516,556	564,100
II Natural products of waters and forests	2,008	3,411	3,167	2,256	3,026	3,900
III Products of animal origin	9,133	12,689	9,976	11,268	13,396	12,189
IV Agricultural products	19,082	21,030	27,171	26,243	33,881	24,647
V Food industries	3,465	2,649	2,823	4,487	3,337	4,716
VI Beverages and liquors	338	385	573	1,101	920	786
VII Tobacco manufactures	-	-	...	...	...	-
VIII Textile industries	155	48	110	27	121	21
IX Chemical industries	4,746	7,510	7,396	5,109	6,652	7,057
X Metallurgical industries	18,407	13,326	4,721	5,975	38,227	56,473
XI Machinery, tools and equipment	415	2,147	328	645	1,345	1,584
XII Transport materials and equipment	214	904	1,598	354	1,598	2,585
XIII Miscellaneous manufactures	4,911	5,677	5,133	5,399	6,670	9,794
Total	490,017	508,164	532,083	541,962	625,729	687,852
	<u>Indices</u>					
I Mineral products	100	103	110	112	121	132
II Natural products of waters and forests	100	170	158	112	151	194
III Products of animal origin	100	139	109	123	147	133
IV Agricultural products	100	110	142	138	178	129
V Food industries	100	76	81	129	96	136
VI Beverages and liquors	100	114	170	326	272	233
VII Tobacco manufactures	-	-	-	-	-	-
VIII Textile industries	100	31	71	17	78	14
IX Chemical industries	100	158	156	108	140	149
X Metallurgical industries	100	72	26	32	208	307
XI Machinery, tools and equipment	100	517	79	155	324	382
XII Transport materials and equipment	100	422	747	165	747	1,208
XIII Miscellaneous manufactures	100	116	105	110	136	199
Total	100	104	109	111	128	140
	<u>Percentages</u>					
I Mineral products	87.2	86.3	88.2	88.4	82.6	82.0
II Natural products of waters and forests	0.4	0.7	0.6	0.4	0.5	0.6
III Products of animal origin	1.9	2.5	1.9	2.1	2.1	1.8
IV Agricultural products	3.9	4.1	5.1	4.8	5.4	3.6
V Food industries	0.7	0.5	0.5	0.8	0.5	0.7
VI Beverages and liquors	0.1	0.1	0.1	0.2	0.1	0.1
VII Tobacco manufactures	-	-	-	-	-	-
VIII Textile industries	...	...	...	...	...	...
IX Chemical industries	1.0	1.5	1.4	1.0	1.1	1.0
X Metallurgical industries	3.7	2.6	0.9	1.1	6.1	8.2
XI Machinery, tools and equipment	0.1	0.4	0.1	0.1	0.2	0.2
XII Transport materials and equipment	-	0.2	0.3	0.1	0.3	0.4
XIII Miscellaneous manufactures	1.0	1.1	0.9	1.0	1.1	1.4
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Official foreign trade bulletins; for 1965, provisional data.

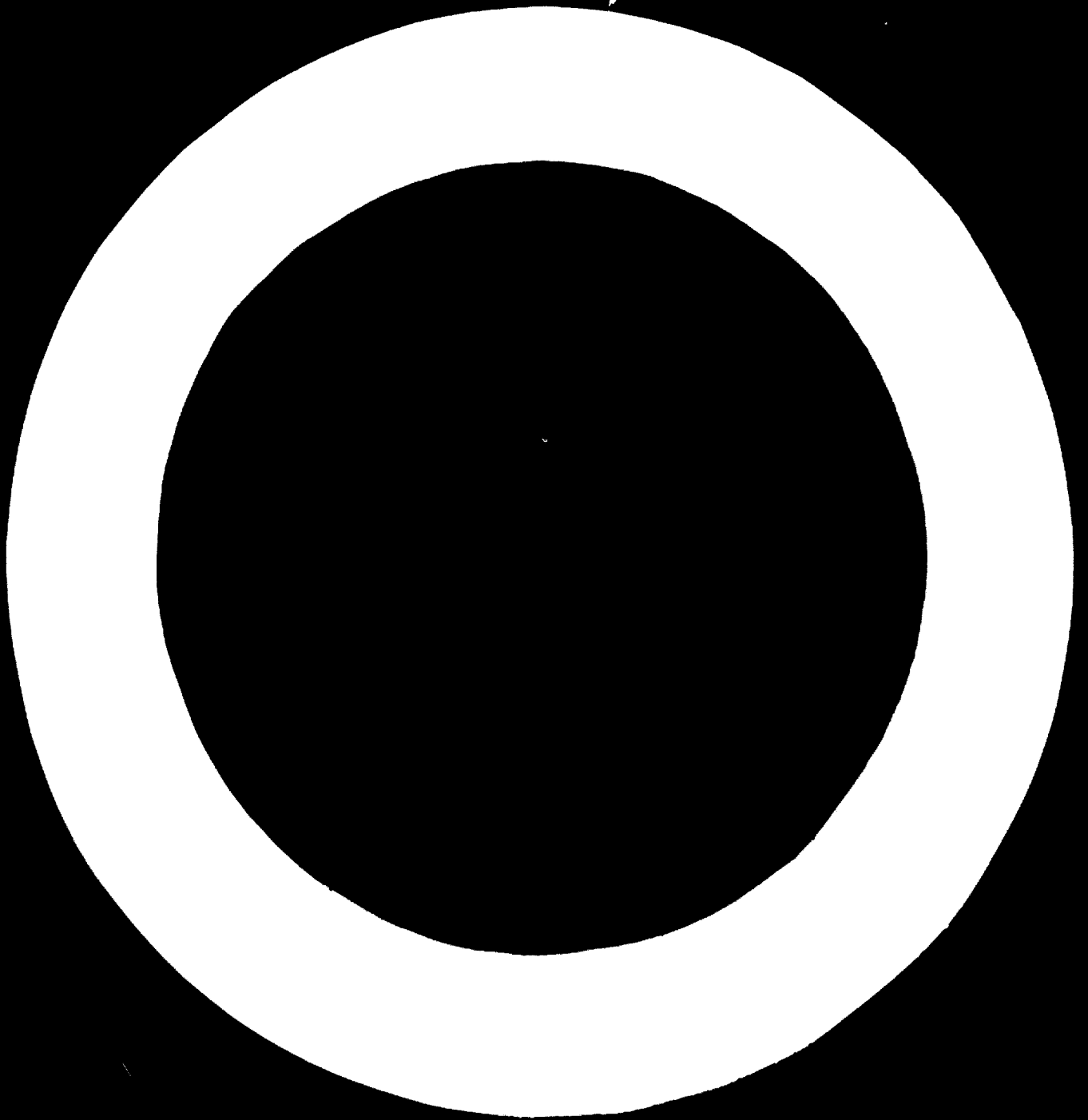


Table 2

CHILE: EXPORTS OF MANUFACTURES, 1960-1965

(Thousands of dollars)

SITC class- fica- tion	Section	1960	1961	1962	1963	1964	1965
	<b>I <u>Mineral products</u></b>	<b><u>3,282</u></b>	<b><u>4,039</u></b>	<b><u>3,736</u></b>	<b><u>2,861</u></b>	<b><u>3,168</u></b>	<b><u>3,725</u></b>
513.22	Iodine	2,747	3,609	3,624	2,792	3,148	3,645
513.25	Mercury	461	352	149	54	5	55
	Other	74	73	13	15	15	25
	<b>II <u>Natural products of waters and forests</u></b>	-	-	-	-	-	-
	<b>III <u>Products of animal origin</u></b>	-	-	-	-	-	-
	<b>IV <u>Agricultural products</u></b>	<b><u>2,340</u></b>	<b><u>4,575</u></b>	<b><u>3,799</u></b>	<b><u>10,039</u></b>	<b><u>16,762</u></b>	<b><u>9,107</u></b>
081.4	Fish meal	1,305	2,921	7,073	9,230	15,904	8,080
081.4	Whale meal	15	80	105	185	226	239
081.4/12	Other feeding-stuff for livestock	567	586	315	23	30	74
052.09	Prunes	888	950	781	617	534	648
052.03/09	Other dried fruit	65	38	25	35	68	66
	<b>V <u>Food industries</u></b>	<b><u>1,998</u></b>	<b><u>1,300</u></b>	<b><u>1,999</u></b>	<b><u>3,045</u></b>	<b><u>2,148</u></b>	<b><u>2,660</u></b>
048.2	Barley malt	883	139	462	434	1,195	1,109
053.9	Preserved fruit containing added sugar, peaches in syrup, and other fruit in syrup	512	475	535	514	573	877
032.01	Preserved fish and salmon	90	23	-	17	2	3
032.02	Preserved crayfish, spider crab and other shellfish	467	504	838	1,168	290	406
055.52	Preserved vegetables and olives in brine	79	129	149	81	37	146
	Other preserved or prepared foods	27	25	15	831	51	119
	<b>VI <u>Beverages and liquors</u></b>	<b><u>338</u></b>	<b><u>385</u></b>	<b><u>573</u></b>	<b><u>1,101</u></b>	<b><u>920</u></b>	<b><u>785</u></b>
112.12	Bottled wines	130	179	235	383	459	452
112.12	Wines in other containers	203	202	335	717	455	329
112.4	Other	5	4	3	1	6	4

Table 2 (cont'd)

SITC class- ifica- tion	Section	1960	1961	1962	1963	1964	1965
VII	<u>Tobacco manufactures</u>	-	-	-	-	-	-
VIII	<u>Textile industries</u>	<u>155</u>	<u>43</u>	<u>110</u>	<u>27</u>	<u>121</u>	<u>21</u>
651.5	Yarn and thread of flax	88	9	55	-	14	7
652.1/2	Cotton fabrics	-	21	12	-	-	-
	Other	67	18	43	27	107	14
IX	<u>Chemical industries</u>	<u>4,746</u>	<u>7,510</u>	<u>7,396</u>	<u>5,109</u>	<u>6,652</u>	<u>7,057</u>
581.3	Cellulose	1,614	4,039	3,073	1,907	1,583	2,532
411.1	Fish oil	390	476	1,042	1,292	2,074	1,370
411.1	Whale oil	289	510	1,058	310	571	1,005
512.12	Hydrocarbons, n.e.s.	522	559	466	1,076	1,746	895
	Other	1,931	1,926	1,757	524	678	1,255
X	<u>Metallurgical industries</u>	<u>13,407</u>	<u>13,326</u>	<u>4,721</u>	<u>5,975</u>	<u>38,227</u>	<u>56,473</u>
682.22	Plates of copper n.e.s.	7	408	109	94	16,697	24,637
674.11	Smooth plates of iron and steel	10,871	9,423	1,612	3,433	1,737	497
682.21	Copper wire, uncovered	850	1,429	2,250	1,595	18,622	30,376
	Other	6,679	2,061	750	853	1,171	963
XI	<u>Machinery, tools and equipment</u>	<u>415</u>	<u>2,147</u>	<u>328</u>	<u>645</u>	<u>1,345</u>	<u>1,584</u>
723.1	Electric cable, not insulated	121	332	54	35	309	56
723.1	Insulated wire and cable	-	170	2	203	15	4
729.3	Audions and valve rectifiers	70	126	28	90	152	383
	Others	224	1,513	244	317	859	1,141
XII	<u>Transport materials and equipment</u>	<u>214</u>	<u>904</u>	<u>1,598</u>	<u>354</u>	<u>1,598</u>	<u>2,585</u>
735.3	Ships and boats of iron	-	660	493	60	1,145	1,133
731.7	Railway wheel rims	4	23	913	204	13	59
	Other	210	221	192	90	440	1,393
XIII	<u>Miscellaneous manufactures</u>	<u>4,282</u>	<u>4,970</u>	<u>3,644</u>	<u>4,496</u>	<u>5,890</u>	<u>8,739</u>
641.1	Newsprint, periodical and book paper	3,954	4,642	3,440	3,872	4,995	7,345
892.2	Printed books, periodicals etc.	76	40	66	432	534	819
	Other	252	288	138	192	366	575
	<u>Total</u>	<u>36,677</u>	<u>39,204</u>	<u>32,954</u>	<u>33,702</u>	<u>76,831</u>	<u>92,736</u>

Source: ECLA, on the basis of official statistics.



14. Among mineral products (section I) manufactures account for only a small proportion of the value of exports<sup>3/</sup>. In practice exports in this section consist of iodine and mercury; between 1,700 and 2,600 tons of iodine, worth between \$2.7 million and \$3.6 million, were exported in the period 1960-1965, almost entirely and in approximately equal amounts to Europe and the United States. Exports of mercury were considerable at the beginning of the period of report (\$461,000 worth in 1960), but they declined in the ensuing years and by the end of the period had almost ceased.

15. There are no manufactures under the headings "Natural products of waters and forests" (section II) and "Products of animal origin" (section III).

16. Under "Agricultural products" (section IV), some products which can be used as livestock feeding-stuffs - meal made from fish, shellfish and whales, and cattle cake - are listed as manufactures<sup>4/</sup>. Exports of these products increased steadily from 1960 onwards, and their value increased almost tenfold in the period 1960-1964. In 1965, however, there was a steep decline due to a shortage of raw materials for the products of marine origin, which make up almost the whole of this section. Table 3 gives the situation of the two principal products in the section, fish meal and whale meal. At the beginning of the period the chief importer was the United States, which in 1960 took almost 65 per cent of the total amount exported; but later on European countries became major customers, steadily increasing their purchases up to 1964 - the peak export year - when they took 90 per cent of the total amount exported. The chief European importers were the Federal Republic of Germany and the Netherlands, which took more than \$4 million worth each; Belgium which took \$2.5 million worth; and the United Kingdom, which took \$1.6 million worth. The figures in table 2 show how rapidly the export trade in these products has grown and how large a place they occupy among exports of manufactures as a whole, except in 1965, which may be considered a freak year.

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<sup>3/</sup> Potassium nitrate and sodium nitrate are not included among manufactures because their proper classification is uncertain. Exports of these items are considerable: \$2.3 million to \$3.9 million worth of potassium nitrate and \$19 million to \$28.2 million worth of sodium nitrate. The main markets include the United States and some European and Asian countries.

<sup>4/</sup> As this example shows, Chilean foreign trade statistics frequently classify products by use instead of by origin.

Table 3

CHILE: EXPORTS OF FISH MEAL AND WHALE MEAL ACCORDING TO DESTINATION, 1960-1965

Destination	1960	1961	1962	1963	1964	1965
	(a) <u>Tons</u>					
United States	12,018	10,761	11,051	20,157	13,203	4,891
Europe	6,516	20,916	48,248	54,496	133,563	63,926
Latin America	102	4,179	6,962	12,165	1,334	205
Rest of the World	-	-	-	1,153	300	184
<u>Total</u>	<u>18,636</u>	<u>35,856</u>	<u>66,261</u>	<u>87,971</u>	<u>148,400</u>	<u>69,206</u>
	(b) <u>Thousands of dollars</u>					
United States	847	859	1,190	2,169	1,435	609
Europe	466	1,762	5,226	5,821	14,508	7,663
Latin America	7	380	762	1,304	149	26
Rest of the World	-	-	-	121	38	21
<u>Total</u>	<u>1,320</u>	<u>3,001</u>	<u>7,178</u>	<u>9,415</u>	<u>16,130</u>	<u>8,319</u>

Source: Official statistics, op. cit.

17. Exports of prunes reached a value around the million dollar mark in 1960 and 1961, and in more recent years have fluctuated about the figure of \$600,000. The main purchasers are the Federal Republic of Germany, Brazil, Peru and the United Kingdom.
18. Sections V to XIII list those products which, according to the Chilean statistical nomenclature, are regarded as manufactures. However, sections V and XIII are found to include products which are not manufactures according to the criteria applied in these reports, and they have been deducted from the total; thus in section V the figures for exports of fresh meat, fats, milk, starches, flour and edible oils (groups 24 and 28), and in section XIII those for group 81, which covers effects for members of the diplomatic corps, commercial samples, etc., have been deleted. With these exceptions, the data given in tables 1 and 2 concerning manufactures will be found to correspond.
19. In the review which follows, mention will be made of the noteworthy products in each section.

20. Products of the food industry (section V), which include preserved fruit, vegetables, fish, shellfish, barley malt, etc., produced relatively lower figures in relation to the country's resources. The export flow was very irregular. It dropped from nearly \$2 million in value in 1960 to \$1.3 million in 1961; rose to \$2 million in 1962 and \$3 million in 1963; and declined again almost to the 1960 level: to \$2.1 million in 1964 and \$2.7 million in 1965. Only in 1963 did the total of these exports approach 10 per cent of the figure for all exports of manufactures; this result can be attributed to the great increase, up to 1963, in exports of preserved lobsters and shrimp to the United States, for the decline in total exports occurred in 1964, when sales in that market shrank considerably owing to a shortage of raw materials and an increase in domestic consumption. In 1963 preserved lobsters and shrimp accounted for 65 per cent of exports in this section; preserved fruit accounted for 17 per cent and other products for the remaining 18 per cent. In 1964 the proportion of preserved fruit rose to 27 per cent, that of shellfish fell to 15 per cent, and other products represented 58 per cent. In 1965 exports of preserved shellfish increased again to a value of \$406,000, but this time over half went to Argentina. The breakdown for that year was 15 per cent for preserved shellfish, 33 per cent for preserved fruit and 52 per cent for other products.

21. The value of exports of preserved fruit (including fruit preserved with sugar and fruit in syrup) remained at about \$500,000 in 1960-1964; all these exports went to Latin American countries, mainly those contiguous with Chile. In 1965 the figure rose to \$877,000, of which about \$50,000 represented sales to the Federal Republic of Germany and almost all the remainder sales to Peru.

22. Generally speaking, exports of preserved vegetables and preserved fish are insignificant. Other products exported include barley malt (\$434,000 worth in 1963, \$1.2 million worth in 1964 and \$1.1 million worth in 1965), all to Latin America and mainly to Brazil.

23. Exports of beverages and liquors (section VI) increased rapidly until 1963 and then declined. They consist almost entirely of white and red wine, and form two separate flows of trade. The first is the sale to Europe (mainly the

Federal Republic of Germany and Belgium) of wines in large containers (tanks, demijohns, etc.); these are bulk supplies of relatively cheap wines used for blending with other wines. The second flow goes to Latin America and the United States; it is made up of bottled wines, and is much higher in unit value but much smaller in quantity (see table 4).

24. The main Latin American buyers of bottled wines in recent years have been Colombia, Brazil and Peru; the United States accounted for a high proportion of the sales to other countries.

25. No tobacco manufactures (section VII) are exported. The textile industries (section VIII) export their products only sporadically and in small quantities. Textiles had, however, been exported in considerable quantities in earlier years.

26. The chemical industries (section IX) produce exports of appreciable value. The totals for this section vary sharply. The figure was \$4.7 million in 1960, rose to \$7.5 million in 1961, dropped to \$7.4 million in 1962 and \$5.1 million in 1963, then rose again to \$6.7 million in 1964 and to nearly \$7.1 million in 1965. The principal product in this section is cellulose (see table 5). Exports of this product reached their highest level - \$4 million - in 1961, declining in subsequent years because of an increase in domestic demand. The entire volume of exports of this product was sent to Latin American countries, mainly Argentina and, to a lesser extent, Brazil and Colombia.

We regret that some of the pages in the microfiche copy of this report may not be up to the proper legibility standards, even though the best possible copy was used for preparing the master fiche.

Table 4

## EXPORT OF WINES, 1960-1965

Destination	Quantity (hectolitres)						Value (thousands of dollars)					
	1960	1961	1962	1963	1964	1965	1960	1961	1962	1963	1964	1965
(a) <u>Bottled</u>												
United States	106	158	151	226	174	168	46	82	70	110	93	94
Europe	10	7	36	23	3	15	8	5	6	14	3	14
Latin America	106	112	193	377	536	369	75	91	158	258	361	337
Other Countries	1	1	1	1	2	8	1	1	1	1	2	7
<u>Total</u>	<u>223</u>	<u>278</u>	<u>381</u>	<u>627</u>	<u>715</u>	<u>560</u>	<u>130</u>	<u>179</u>	<u>235</u>	<u>383</u>	<u>459</u>	<u>452</u>
(b) <u>In other containers</u>												
United States	-	-	-	-	-	10	-	-	-	-	-	-
Europe	1,552	1,910	4,211	11,116	4,107	3,976	182	194	325	708	422	313
Latin America	100	36	35	45	52	67	21	6	5	6	6	10
Other countries	-	19	44	27	267	52	-	2	5	3	27	6
<u>Total</u>	<u>1,652</u>	<u>1,965</u>	<u>4,290</u>	<u>11,188</u>	<u>4,426</u>	<u>4,105</u>	<u>203</u>	<u>202</u>	<u>335</u>	<u>717</u>	<u>455</u>	<u>329</u>
(c) <u>Total</u>												
United States	106	158	151	226	174	178	46	82	70	110	93	94
Europe	1,562	1,917	4,247	11,139	4,110	3,991	190	199	331	722	425	327
Latin America	206	148	228	422	588	436	96	97	163	264	367	347
Other countries	1	20	45	28	269	60	1	3	6	4	29	13
<u>Total</u>	<u>1,875</u>	<u>2,243</u>	<u>4,671</u>	<u>11,815</u>	<u>5,141</u>	<u>4,665</u>	<u>333</u>	<u>381</u>	<u>570</u>	<u>1,100</u>	<u>914</u>	<u>781</u>

Source: Official statistics, op. cit.

Table 5  
CHILE: EXPORT OF CELLULOSE, 1960-1965

Year	Quantity (Tons)	Value (Thousands of dollars)
1960	13,697	1,614
1961	33,990	4,039
1962	23,928	3,073
1963	15,538	1,907
1964	11,379	1,583
1965	17,289	2,532

Source: Official statistics, op cit.

27. Second in importance is liquid propane gas, classified among hydrocarbons n.e.s. Exports of this item increased up to 1964 (except for a drop between 1961 and 1962), from 21,951 to 61,567 tons, worth \$522,000 and \$1,746,000 respectively, and then declined to \$895,000 worth in 1965. Almost all these exports went to Argentina, though considerable sales were made to Brazil in 1963 and 1964 and small amounts have been exported elsewhere (to West Africa, the United States, the United Kingdom and Tahiti) from time to time.

28. This section also includes fish oil (a by-product of the fish meal industry) and whale oil, which are highly marketable outside Latin America (see table 6). There was a marked increase in exports of whale oil in 1965 because the raw material became plentiful once more.

29. The Netherlands was the most regular and, in some years, the biggest buyer of fish oil, taking 93 per cent of the total in 1964. The Federal Republic of Germany, Norway, Denmark, Belgium, France, the United Kingdom, Italy and other countries were also important, though less regular, customers for this item.

30. The main purchasers of whale oil were the Netherlands, the United Kingdom, the Federal Republic of Germany and the United States, followed by Norway, Finland, Spain, Belgium and Brazil as sporadic importers.

31. A product in this section which was exported in considerable quantities up to 1962 - 3,000 to 4,000 tons a year, worth roughly 1 million dollars - is explosive gelatine. However Bolivia, which had been the best market for this product, bought almost no more of it from 1963 onwards and exports virtually ceased. Explosive gelignite was exported to the same market, but in decreasing quantities, from 1960 to 1964. As against \$381,000 worth exported in 1960, less than a tenth as much (\$30,000 worth) was exported in 1964. The export trade in this product recovered somewhat in 1965.

Table 6  
CHILE: EXPORTS OF FISH OIL AND WHALE OIL

Year	Quantity (tons)			Value (thousands of dollars)		
	Fish oil	Whale oil	Total	Fish oil	Whale oil	Total
1960	3,054	1,770	4,824	390	289	679
1961	4,598	2,650	7,248	476	510	986
1962	10,909	5,452	16,361	1,042	1,058	2,100
1963	11,784	1,484	13,268	1,292	310	1,602
1964	13,709	3,477	17,186	2,074	572	2,646
1965	7,218	5,574	12,792	1,370	1,005	2,375

Source: Official statistics, op. cit.



32. It is difficult to pick out any other chemical products which were exported regularly in significant quantities. Of those listed in the foreign trade statistics, alcohol, industrial oils and fats (possibly light coal-tar oil) and synthetic resins are worth mentioning, although exports never exceeded \$100,000 worth a year and were always of a sporadic nature.

33. Products of the metallurgical industries (section X) are noteworthy, among exports of manufactures, for the violent fluctuations recorded over the period of report. The value of exports fell from \$18.4 million in 1960 to \$13.3 million in 1961 and to \$4.7 million, its lowest level, in 1962. There were signs of recovery in 1963; the upward trend was confirmed in 1964, with exports worth \$38.4 million, and in 1965 with over \$56 million worth. This section accounted for 51.5 per cent of all exports of manufactures in 1960, 34.9 per cent in 1961 and 14.7 per cent in 1962; its share increased to 18.1 per cent in 1963, recovered its initial position with 50.1 per cent in 1964, and rose to nearly 61 per cent in 1965. The irregularity was due to the fact that the two main export items in the section behaved in opposite ways. Exports of iron and steel products suffered a marked decline, while those of copper products steadily increased. The two trends were not parallel, and total exports dropped to a minimum in 1962.

34. In 1960 and 1961 the most noteworthy product in this section was smooth iron and steel plates; almost all exports of this item went to Argentina. The value involved was nearly \$11 million in 1960 and \$9.5 million in 1961, representing respectively 59 per cent and 71 per cent of exports in this section. In addition some \$3 million worth of iron and steel in round bars was exported to the United States in 1960.

35. In 1962, as a result of the expansion of domestic demand, iron and steel exports began to decline, while exports of copper manufactures began to assume importance. Exports of uncovered copper wire earned \$2.3 million: \$1.2 million worth went to Cuba, \$407,000 worth to Uruguay, \$330,000 worth to Argentina and \$199,000 worth to Venezuela. In that year the value of exports of smooth iron and steel plates - again, almost all to Argentina - was \$1.6 million. Copper wire and iron and steel plates accounted for 82 per cent of total exports in this section.

36. In 1963 the same two products accounted for 84 per cent of total exports. Smooth iron and steel plates regained first place in the section, with exports worth \$3.4 million (\$1.7 million to Brazil and \$1.5 million to Argentina), and exports of uncovered copper wire earned \$1.6 million, \$1.2 million worth going to Argentina. The Cuban market disappeared in that year.

37. In 1964 Chilean exports of copper manufactures increased strongly, in response to the rapid growth of world demand. Total exports for the section, at \$38.2 million, were almost six and a half times as great as in 1963. In 1964, while exports of iron and steel plates decreased in value to \$1.7 million (\$1.4 million worth to Argentina), exports of uncovered copper wire earned \$18.6 million, going not only to Latin America (\$2.4 million worth between Colombia, Venezuela, Uruguay, Argentina and other countries) but also to European countries (\$6.9 million worth including \$4.6 million worth to the Netherlands, \$1.7 million worth to the Federal Republic of Germany and smaller quantities to other countries), Japan (\$5.0 million worth) and the United States (\$4.2 million worth).
38. Copper plates were also exported in considerable quantities, (as compared with only a few hundred dollars' worth in previous years); the total value of these exports was \$16.7 million. Of this total, the United States bought \$7.3 million worth, the Federal Republic of Germany \$2.9 million worth, the Netherlands \$2.8 million worth and Belgium \$2.2 million worth. Only 1.7 per cent of the total value of copper plates exported went to Latin American countries. The export of other copper manufactures, such as pipes and tubes also appears to be on the increase, but the figures are not yet very significant.
39. The trend observable in 1964 was confirmed in 1965, when exports of copper products predominated in this section, earning more than \$56 million. Exports of iron and steel products fell far behind, earning less than \$500,000; all exports of this item went to Latin American countries.
40. Both these trends can be attributed to the growth of demand. The growing Chilean domestic market came to absorb more and more of the national output of iron and steel, while the international market provided extensive and readily accessible outlets for Chilean copper all over the world (see table 7), with marked increases in sales to European countries.

41. In reality the export of copper manufactures presents a very complex problem, as will be seen in chapter C, and on cursory analysis the statistics are open to misinterpretation. The exports described above are alternative to, and take the place of, exports of the corresponding raw materials. In reality these exports were a response to the price situation prevailing in the world market. That situation made it more profitable for manufacturers to buy copper semi-manufactures (wire rod and plates) from Chile, and melt them down for use as raw materials, than to buy the ordinary raw material (ingots) on the London market, where the price far exceeded that of the Chilean semi-manufactured items. Because of their very low value added (1-2 per cent), these exports made a negligible contribution to Chile's balance of payments.
42. machinery tools and equipment (section XI) also features certain copper manufactures as a major item. These are products for the electrical industry, which have a higher value added than the copper items in the preceding section. However, the total value of exports in this section was not high: \$2.1 million in 1961, less than \$500,000 in 1960 and 1962, a little over \$600,000 in 1963, \$1.3 million in 1964 and \$1.6 million in 1965. Products in this section include uncovered electric cable, insulated copper wire - almost all for export to Latin American countries - and machinery, apparatus and other electrical material, of which some small shipments went to countries outside Latin America.
43. Exports of transport materials and equipment (section XII) fluctuated widely (see again table 2). There were only two items of note, and here again exports were sporadic. The first item is ships and boats of iron, which reached their five-year peak in 1964 with a value of \$1.1 million; Liberia took \$776,000 worth, the Federal Republic of Germany \$200,000 dollars worth and the United Kingdom \$162,000 worth. Earlier years' exports included \$660,000 worth in 1961 - all to Argentina - and \$493,000 worth in 1962, of which \$485,000 worth went to Panama.

Table 7  
CHILE: EXPORTS OF COPPER MANUFACTURES, BY DESTINATION, IN 1964 AND 1965

Destination	Tons		Thousands of dollars	
	1964	1965	1964	1965
United States	16,020	19,534	12,725	17,151
Europe	21,606	32,076	15,936	29,582
Latin America	3,785	3,139	2,872	4,261
Rest of the world	6,882	6,847	5,177	4,558
<u>Total</u>	<u>48,293</u>	<u>61,596</u>	<u>35,710</u>	<u>55,552</u>

Source: Official statistics, op. cit.

44. In 1965 exports worth \$1.1 million were sent to Greece. In reality this figure represented the sale of a laid-up vessel. It is probable that a high proportion of the trade classified as exports in previous years also consisted of re-exports of this type, the remainder being fishing vessels.

45. Another product under the same heading is wheel rims for railway rolling stock. \$913,000 worth of these items were exported, almost all to Argentina, in 1962 and \$204,000 worth in 1963. In 1961, \$291,000 worth had been exported to Brazil. Almost none were exported in 1964 or 1965.

46. Exports of miscellaneous manufactures (section XIII) varied in value from \$3.6 million to \$8.7 million, without exhibiting any definite trend. The main item in this section is newsprint: in 1965 exports earned over \$7 million, after fluctuating in earlier years between roughly \$4 million and \$5 million (see table 8). Almost all these exports went to Latin American countries, although in 1965 a small quantity was exported to the United States.

47. Exports of books, periodicals, etc. were on the increase; \$534,000 worth were exported in 1964 and \$819,000 worth in 1965, also to Latin American countries.

Table 8

CHILE: EXPORT OF NEWSPRINT AND PAPER FOR PERIODICALS AND BOOKS, 1960-1965

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Year	Tons	Thousands of dollars
1960	28 940	3 954
1961	33 669	4 642
1962	25 352	3 440
1963	30 540	3 872
1964	39 147	4 995
1965	57 128	7 345

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Source: Official statistics, op. cit.

Table 9

CHILE: EXPORTS OF MANUFACTURES AND TOTAL EXPORTS  
BY DESTINATION, 1965  
(Percentage of total)

Product	Destination:				Total
	United States	Western Europe	Latin America	Rest of the world	
<b>1. Exports of manufactures</b>					
I. Mineral products	46.2	51.3	2.3	0.2	100.0
II. Natural products of waters and forests	-	-	-	-	-
III. Products of animal origin	-	-	-	-	-
IV. Agricultural products	7.4	88.0	0.3	4.3	100.0
V. Food industries	3.0	18.8	78.0	0.2	100.0
VI. Beverages and liquors	-	97.2	1.4	1.4	100.0
VII. Tobacco manufactures	-	-	-	-	-
VIII. Textile industries	-	-	-	-	-
IX. Chemical industries	-	39.9	59.2	0.9	100.0
X. Metallurgical industries	30.5	53.3	8.1	8.1	100.0
XI. Machinery, tools and equipment					
XII. Transport materials and equipment	-	100.0	-	-	100.0
XIII. Miscellaneous manufactures	0.7	0.1	99.2	-	100.0
<u>Total exports of manufactures</u>	<u>22.7</u>	<u>50.2</u>	<u>21.3</u>	<u>5.8</u>	<u>100.0</u>
<b>2. Total exports</b>	<u>21.3</u>	<u>51.2</u>	<u>11.2</u>	<u>16.3</u>	<u>100.0</u>
<b>3. Exports of manufactures as a proportion of total exports</b>	13.2	12.2	23.7	4.4	12.4

Source: Central Bank of Chile, Indicadores de las exportaciones chilenas 1961-65.

49. With regard to the destination of exports it was found necessary, in the product-by-product analysis, to supplement fragmentary information by forecasts at some points. Despite this handicap, table 9 was compiled, showing the distribution of the products regarded as manufactures, and of total exports, between the various regions of the world in 1965. The United States took about the same proportion of total exports as of manufactures: 21.3 and 22.7 per cent respectively. This proportion of total exports represents some \$19 million worth of goods, including nearly \$17 million worth of copper semi-manufactures (uncovered wire and plates), the remainder consisting of iodine and fish meal. Exports of manufactures as a proportion of total exports to the United States stood at 13.2 per cent, slightly higher than the corresponding proportion for exports to all destinations, which was 12.4 per cent.

50. Countries in Western Europe took half of Chile's total exports and half its exports of manufactures. The latter earned \$43 million, of which copper semi-manufactures accounted for nearly \$30 million. Next in importance were fish meal (about \$7.5 million), fish oil (\$1.4 million) and iodine (nearly \$2 million).

51. Here again, the ratio of exports of manufactures to total exports is very close to the corresponding ratio for exports to all destinations: 12.2 and 12.4 per cent respectively. Although Chile's exports of manufactures to the rest of Latin America constitute only a little over 20 per cent of its total exports of manufactures - about \$18 million worth - they represent a particularly high proportion of its total exports to Latin America: nearly 24 per cent. The situation, then, is similar to that found in Argentina and Brazil in that Latin America absorbs a higher proportion of exports of manufactures, in relation to total exports, than any other destination.

52. The main export items are newsprint (\$7.3 million), copper semi-manufactures (\$4 million) cellulose (\$2.5 million), barley malt (\$1.1 million) and preserved foods (\$700,000).

NOTE

The UNCTAD secretariat, in co-operation with the regional economic commissions, is carrying out a number of country studies in Latin America, Africa and Asia to determine the immediate and future prospects for increasing the exports of manufactures and semi-manufactures from selected developing countries.

The object of these studies is not to present an exhaustive analysis of the export prospects and problems of the countries concerned, but rather to draw attention to the scope for increased exports and to the measures which might be taken in this respect. In the case of developing countries which do not possess any significant export industries, an attempt has been made to estimate what would be the export prospects if export-oriented industries were established as an integral part of the industrial development of these countries.

These studies should, therefore, be regarded as only part of the examination of the possibilities of building up and expanding the exports of manufactures and semi-manufactures from the developing countries.

The attached study (document TD/B/C.2/33) analyses the short and medium-term prospects for exports of manufactures and semi-manufactures from Chile. A summary and the conclusions reached in the study are contained in paragraphs 1 to 9 below.



52. Exports of manufactures to the rest of the world are small both in absolute terms (less than \$5 million worth, only 6 per cent of total exports of manufactures) and in relation to total exports (\$112 million worth, 16 per cent of the total). This is reflected in a very low ratio of exports of manufactures to total exports (4.4 per cent) by comparison with the general ratio of 12.4 per cent. Copper semi-manufactures (\$4.4 million) and fish meal (340,000) account for almost all these exports.

53. To conclude this statistical review it should be noted that, although there was some movement in the export of manufactures, they have yet to play any major role in Chile's foreign trade, and consequently, in its economy. The value of manufactures exported was between 6 and 7 per cent of the total value of exports in the first four years of the period studied. Not until 1964 did it reach 12.2 per cent - and in 1965 13.5 per cent - of the total; and this, as explained at the beginning of this chapter, was largely due to the export of semi-manufactured copper.

54. There were not more than twelve products whose export value exceeded \$1 million a year, and of these only two or three earned more than \$10 million. Chile cannot yet be said to have achieved any wide diversification in exports of manufactures, for in order to compile a fairly long list of such exports it would be necessary to include exports worth no more than a few tens of dollars.

55. This does not, of course, preclude the possibility that a more vigorous economic policy, designed to increase exports of manufactures through greater diversification and in other ways, might prove successful in the near future. It shows, however, the magnitude of the effort that would be required to implement such a policy. This would entail making good the lack of an exporting tradition, establishing and facilitating trade relations with world markets, training personnel to engage in international trade, building up the necessary public and private services, and lastly, strengthening and spreading "export-consciousness" throughout the country.

## II INSTITUTIONAL FACTORS AFFECTING EXPORTS

56. Before the passage of Act No. 16528 of 17 August 1966 on incentives for exports, Chilean legislation to promote exports was very limited in scope. This Act, with the subsequent regulations governing its application (Decreets No. 1224 of 16 September 1966 and No. 1270 of 27 September 1966), has made it possible to tackle the problem with a better chance of success. Not enough experience has yet been gained with the application of these measures to provide a basis for sound critical judgements, but the new institutional system can be expected to yield good results in expanding exports of manufactures. Another measure adopted to this end was the establishment, early in 1966, of the Export Promotion Department of the Central Bank, equipped with a set of functions and powers that include some hitherto dispersed among various agencies and others for which no one had a clear responsibility.

57. Needless to say, the arrangements do not necessarily represent the ideal combination of institutional arrangements for the export trade, but the experience gained in applying these measures will be one of the main sources of information from which to decide what adjustments and improvements are needed to bring the system up to peak efficiency.

58. What follows is a review of the main institutional factors directly affecting exports of manufactures.

### 1. The rate of exchange

59. The rate of exchange between the escudo and the dollar is fixed by the Government and adjusted from time to time, roughly according to the movements of the cost-of-living index. In recent years, however, the aim has been to adjust the exchange rate by slightly more than the rise in the index, for the evident purpose of gradually eliminating the over-valuation of the national currency.<sup>5/</sup> This situation has, in many cases, put the Chilean exporter at a disadvantage; until a few months ago, his situation was all the worse for lack of a set of effective export incentives.

<sup>5/</sup> Taking the monthly average for 1961 as 100, the statistical series for wholesale prices and industrial wages were compared with the series for the forward dollar price on the banking market. In April 1966 the arithmetic mean of the first two was 429, as against 364 for the price of the dollar; in other words, there was a difference of nearly 20 per cent between the two indexes.

The system of incentives which is now in operation, and which is described in the succeeding paragraphs, is helping to offset that disadvantage without recourse to the expedient of faster devaluation.

## 2. Financing

60. The provisions now in force on financing are fairly comprehensive. Article 16 of Act No. 16528 authorizes the Central Bank to grant credits for export financing for periods of more than a year; this was not possible under the regulations in force up to the passage of the Act. In virtue of this authority, two main lines of credit have been established:

(a) Pre-shipment credit to cover the period of preparation for shipping the product. This credit is granted in escudos, at an all-in rate of interest of 9 per cent per annum - including commission and expenses - for a period which depends on the nature of the product but which does not exceed 180 days up to the date of shipment. The amount of credit granted must not exceed 80 per cent of the value of the export item, which is calculated from its price in the domestic market. The credit must be repaid either when the foreign exchange has been received or out of a post-shipment credit where the product also qualifies for this type of financing. By Circular No. 734 of 7 September 1966, the Central Bank specified which products were eligible for pre-shipment credit;

(b) Post-shipment credit, covering the period required for marketing the product abroad. This credit is granted in convertible currency, at an all-in rate of interest of 9 per cent - likewise including commission and expenses - for periods ranging between 120 days and a maximum of two and a half years; this is a new departure for this type of system in a Latin American country. Here again the credit is limited to 80 per cent, calculated on the f.o.b. value. The credit has to be repaid on receipt of the foreign exchange from abroad, in accordance with the payment procedure fixed in advance.

61. The aforementioned Circular No. 734 lists the products eligible for these two types of credit. The inclusion of products in either list is the responsibility of the Central Bank which, in making its decisions, takes into account the priorities laid down in the National Development Plan. In addition to these lines of credit, there is another, in the amount of \$2 million, available from the Inter-American Development Bank (IDB) to finance exports of capital goods to Latin American countries. The mode of operation is similar to that described for post-shipment credit; credit can be granted up to an amount equal to 80 per cent of the c.i.f. value for a medium term (180 days to five years) at an all-in rate of interest of  $7 \frac{3}{4}$  per cent per annum.

62. Some concern has been aroused by the fact that these credits have not been put to use, the reason being that, so far, no capital goods have been available for export at competitive prices. It would be well worth while to negotiate temporary arrangements under which these credits could be used to finance other manufactures, such as specified durable consumer goods, so that Chile does not miss this opportunity. However, it should be mentioned in this connexion that a careful study is being made of the prospects for such items as fishing vessels, railway and electrical equipment, prefabricated dwellings and machinery for industry.

### 3. Taxation

63. According to the report accompanying the bill which became Act No. 16528, the legislation in force before the passage of that Act was in practice "inadequate as a promotional factor owing to the complexity of the procedure it laid down and the lack of scope for the prompt adjustment of that procedure to the conditions governing the production of exportable goods".

64. Until repealed by Act No. 16528, Decree No. 256 of 1960 was the principal text of law governing the tax rebate scheme. In instituting this scheme, the Decree specified that the proportion of the rebate must be determined separately in each individual case. This made the administration of the scheme so complicated that it remained virtually a dead letter except in the case of a few products. Furthermore, the provisions of the Decree were interpreted restrictively and the tax rebate was applied only to the taxes levied in the last stage of production of the export item; this arrangement robbed the scheme of much of its effectiveness.

65. The new Act and regulations, in contrast, embody the principle that, in determining the proportion of the rebate, the taxes applicable at all stages of production of the item, up to and including the final marketing stage, should be taken into account. It is provided that the President shall determine the proportions of the rebate, which must not exceed 30 per cent of the f.o.b. or c.i.f. value of the exports, for all products sold abroad and that the Executive shall be empowered "freely to determine" those proportions. The proportion of the cost or price of the item represented by taxes paid can be used for reference, but there is no obligation to preserve a fixed ratio between the rebate and the taxes paid. The list of products for which such rebates are prescribed is subject to restrictive alteration - by dropping items from the list or reducing proportions of rebate - only at intervals of three years. The purpose of this scheme is to provide a stable institutional setting in which exporters will find it easier to plan their sales abroad. On the other hand the lists can be

changed to make them more liberal at any time. The tax rebate scheme is operated through the issue of certificates in amounts which can be divided up, and applied to the payment of taxes, customs and other duties, fines, interest and social security contributions, once the shipment is registered or the foreign exchange is received. As might be expected, the tax rebate is not applied to the import component of export products where this is brought into the country under one of the existing duty-suspension schemes which will be referred to later on.

66. There is an additional benefit in the form of a rebate designed to cover the taxes paid on **imports of equipment and machinery needed in the manufacture of an export product**. The proportion of this additional benefit will be fixed for a period not exceeding ten years and, in this case only, the total proportion of the rebate may exceed the 30 per cent limit.

67. Executive Decree No. 1224 of 16 September 1966 includes the list of products and specifies the percentages of rebate to be applied to the f.o.b. value. The higher percentages, of course, apply to industrial products, in particular wines in bulk (29 per cent), bottled wines (14 per cent), champagne (19 per cent), acetic acid (13 per cent) and newsprint (20 per cent). When the list of products was drawn up it included, in accordance with Act. No. 16528, those articles which already qualified for a rebate under Legislative Decree No. 256, repealed by the Act.

68. Another export promotion device is the grant of exemption from all taxes (including export tax), duties, levies and rates for those acts, contracts, documents or formalities which result in an export transaction. In this case the exemption is granted automatically and need not be applied for. This arrangement is provided for in Decree No. 1270 (article 18), issued by the Executive on 27 September 1966.

69. There is also an exemption for enterprises or sections of enterprises wholly engaged in producing articles for export. These articles, whose sale in the domestic market is prohibited, are ipso jure exempt from the taxes specified by the Act. They are not entitled to rebate under the Act because, obviously, the rebate scheme and the ipso jure exemption are mutually exclusive. Where such enterprises sell their products in the domestic market, they are liable for the full amount of the taxes for which would normally have been assessed in the absence of exemption.

70. Imports of machinery, equipment and other items needed in the production of articles made from raw materials of which at least 80 per cent are of domestic origin may be exempted from import duties even in the case of industries which are not new to Chile.

71. There are two schemes for the suspension of duties - the temporary imports scheme and the private warehouse scheme - both of which are governed by the Customs Regulations, articles 140 to 145. The first scheme comes into operation where goods are re-exported without undergoing any processing in Chile (containers, for example) and the second scheme, which is the more common and the more useful, comes into operation if the products imported do undergo processing in Chile.

72. At present, the grant of authorization for a private warehouse entails a series of customs formalities and the issue of an Executive Decree. The new Act empowers the Executive to modify the existing system so as to make it more expeditious and its advantages more readily accessible.

#### 4. Credit insurance

73. The Act empowers the President of Chile to issue regulations on credit insurance to cover not only commercial risks but also political risks and natural disasters. There is a plan for commercial risks to be covered by a mixed insurance company whose capital will be provided by Chilean insurance companies and by the State. The other risks - natural disasters and political risks - would be covered by the same company but on behalf of the State, which would also be responsible for decisions on the grant of cover.

#### 5. Quality control

74. The President is authorized to establish quality standards that must be met by the products exported. Here too the Act breaks new ground by providing in another Section that fines and other penalties shall be prescribed by the regulations for imposition by the administrative authorities in the event that goods are returned for failure to meet international standards of quality and it is established that the exporter is guilty of fraud or negligence.

75. The regulations provide that such an exporter, in addition to forfeiting all advantages acquired under the Act, shall be liable to a fine equal to the f.o.b. value of the goods exported. Furthermore mention should be made of the idea of establishing a Permanent Committee on Standards of Quality on which both public and private organizations would be represented, as they are on the Prefabricated Houses Quality Control Committee which has already been set up and whose members include the Central Bank (Export Promotion Department), the Timber Corporation, the Housing Corporation and various industrial concerns.

6. Administration

76. Before the new body of legislation which now governs exports of manufactures came into force, the situation was so unsatisfactory, with regard to the number and complexity of the formalities to be complied with, documents to be drawn up and moneys to be deposited before an export transaction could be completed, that Chile provided a classic example of complex and ramifying export procedure. The new Act authorizes the President to lay down rules designed to simplify export procedure; this shows how necessary it was to take strong measures for that purpose. The Central Bank is working hard in this direction because, although the body of legislation now in force is much clearer and simpler than the previous one, there are still rigidities to be eliminated and obstacles to be overcome before the whole procedure runs on rational lines.

77. There is no doubt that the legislation now in force covers practically all aspects of the export of manufactures, especially questions of finance and tax incentives. In short it may be said that, although the results cannot yet be evaluated in the light of experience gained in the application of the new arrangements, progress is being made towards an expeditious and rational system. Much of this progress will depend on regulations which have still to be issued to give effect to certain parts of the Act.

### C. SURVEY OF CERTAIN PRODUCTS AND THEIR EXPORT POTENTIAL

78. Although several studies, covering approximately the same items, have already been carried out in Chile, the results have rarely been published, having been used in tariff negotiations or in the formulation of economic policy. By courtesy of the bodies concerned - the Executive Secretariat for LAFTA Affairs, the Production Development Corporation (CORFO), the Planning Office (ODEPLAN) and the Central Bank - it has been possible to consult a good deal of the available material and to use it in conjunction with the results of the direct surveys made in various sectors of industry.
79. As already stated, Chilean exports of manufactures have not been marked by vigorous growth or diversification in recent years. As in other Latin American countries, industry has grown accustomed - largely as a result of a high degree of tariff protection - to operate at a level of costs and selling prices that makes it very difficult to compete on the world market. Furthermore the existing rate of exchange is of no help in this respect although, as explained in the previous chapter, the institutional setting as a whole has been improved considerably in the past few months.
80. As a result of this situation, the manufacturers most interested in exports have been those who had access to abundant domestic raw materials for the production of items of great interest to the world market, or those who could not achieve the minimum economic level of output, or of utilization of capacity, by any other means.
81. Broadly speaking, efforts to improve the quality of products, to introduce labour specialization and to make use of skilled manpower have been restricted to the level set by domestic demand, but there has been no sharp contraction in that demand such as would provide, as in Argentina and Brazil, a major stimulus to exports of manufactures.
82. The survey was not limited to the traditional list of exportable products usually taken into consideration; an attempt was made to cover, in addition, some articles which usually receive scant attention in export programmes. The existing prospects and the factors governing them are indicated in each case, and there is a quantitative assessment of those prospects. The study could have been taken further, and undoubtedly to good effect, if time had permitted. On the basis of the data collected, however, it can be stated that there are genuine prospects for setting up a considerable flow of exports of manufactures into the world market, subject to the fulfilment of certain conditions and requirements which are spelt out in each case.



1. Paper and cellulose

Cellulose

83. Chile has adequate resources of long-fibre wood of good quality (260,000 hectares planted to radiata pine) which grows faster than in other parts of the world. There is a very steady world demand for the product, and any difficulties in placing it are almost exclusively a matter of price.
84. The capacity of the main cellulose plant was recently expanded from 80,000 to 250,000 tons a year with a view to increasing exports. It is estimated that once the expanded capacity is in full operation (by mid-1967), Chilean output, including that of the small plant producing sulphite cellulose, should attain some 260,000 tons a year as compared with 97,000 tons in 1965.<sup>6/</sup>
85. The decline of exports in recent years (from 33,990 tons in 1961 to 11,379 in 1964) must be attributed to the increasing requirements of the domestic market, for the plants were operating at full capacity during that period. Once the added capacity was brought into use at the main plant at the end of 1965, exports increased sharply, from 17,289 in 1965 to approximately 65,000 tons in 1966. If the installed capacity is fully used, and if it is assumed that domestic demand will average 100,000 tons in the next few years, exports could soon increase to about 150,000 tons a year, worth \$20 million.
86. A number of projects are under consideration, including the erection of two sulphate cellulose plants and the expansion of the sulphite cellulose plant at the newsprint mill. The combined effect of these projects would be to more than double the installed capacity in five years, to a total of 560,000 tons. If all the projects were completed - a feat which would seem difficult in such a short period - there would be an exportable surplus of some 460,000 tons, worth approximately \$55 million.
87. The LAFTA countries offer a potential market for some 350,000 tons of cellulose a year; this figure represents the difference between consumption and production in those countries. Up to now that market has been supplied mainly by countries outside Latin America - in particular, by the United States, Finland, Sweden, Canada and, to a lesser extent, Norway. Introduction of the Chilean product in Latin America would

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<sup>6/</sup> Chilean output for 1966 is estimated at 180,000 tons, with the new plant contributing some 170,000 tons.

mean, to some extent, taking the place of the former suppliers, and this process would be facilitated by the preferential arrangements in force within the area. The concessions granted by the other LAFTA countries for cellulose lower the tariff barrier appreciably or remove it altogether, whereas countries outside the area face a tariff of 30 to 40 per cent.<sup>7/</sup>

88. In recent months the price of crude cellulose has varied around \$130 a ton c.i.f. Buenos Aires (net of customs duties) for the European product, and around \$160 a ton for the Chilean product. The differential tariff treatment gives the Chilean product access to the Argentine market (and the same applies to other LAFTA countries); the freightages are almost the same, but the f.o.b. value in Chile is nearly 35 per cent higher than in Europe.

89. A more detailed study of the LAFTA market needs to be made in order to assess the real prospects for Chilean exports to that market. In the first place, of the 350,000-ton deficit of cellulose for the countries of the area, some 100,000 tons represents long-fibre sulphite cellulose; there are no visible prospects for the export of cellulose of this type. Of the remaining 250,000 tons, much of the demand in Colombia, Peru and Venezuela must be discounted, since the type of cellulose produced in those countries (almost entirely short-fibre bagasse cellulose) does not seem very suitable for mixing with Chilean cellulose. Furthermore cellulose imported into Venezuela from LAFTA countries receives protection at the rate of only \$9 a ton, and freightages from Chile to Venezuela are higher than those from Canada and the United States. Owing to these factors, the markets are virtually limited to Argentina, Brazil, Mexico and Uruguay. Of these markets, the most promising is Argentina, the main importer in the region (100,000 tons of sulphate cellulose in 1965). The other countries mentioned are not large-scale importers of cellulose, Uruguay because the market is small and Brazil and Mexico because they produce all types of cellulose for themselves.

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<sup>7/</sup> Exceptions: Mexico, customs duty to outside countries 50 per cent, to LAFTA countries 0 per cent; Uruguay, outside countries 53.08 per cent, LAFTA countries 0 per cent; Venezuela, outside countries about 6 per cent, LAFTA countries 0 per cent.



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## United Nations Conference on Trade and Development

TRADE AND DEVELOPMENT BOARD  
Committee on Manufactures  
Second session  
Geneva, 4 July 1967  
Item 6 of the proposed revised provisional agenda

MEASURES FOR THE PROMOTION, EXPANSION AND DIVERSIFICATION  
OF EXPORTS OF MANUFACTURES AND SEMI-MANUFACTURES FROM  
DEVELOPING COUNTRIES; CO-OPERATION WITH THE UNITED NATIONS  
INDUSTRIAL DEVELOPMENT ORGANIZATION (UNIDO) AIMED AT THE  
ESTABLISHMENT AND EXPANSION OF EXPORT-ORIENTED INDUSTRIES  
IN DEVELOPING COUNTRIES; OTHER FORMS OF ECONOMIC,  
INDUSTRIAL AND TECHNICAL CO-OPERATION

Short and medium-term prospects for export of manufactures  
from selected developing countries

- CHILE -

Note by the UNCTAD secretariat

This study analyses the short and medium-term prospects for exports of manufactures and semi-manufactures from Chile; it is one of a series of such studies relating to other developing countries in Latin America, Africa and Asia. This study was completed in December 1966.

These studies have been undertaken in conformity with the programme of work of the Committee on Manufactures, which states that the secretariat of UNCTAD should take appropriate steps to prepare an exhaustive study of the world demand for, and supply of manufactured and semi-manufactured articles of actual or potential export interest to developing countries and of relevant trends of international trade in such articles. ✓

✓ For the programme of work, see report of the Committee on Manufactures on the first part of its first session (10-20 August 1965), printed in Official Records of the Trade and Development Board, second session, Supplement No. 3 (TD/B/22/Rev.1), pp. 4 and 5.

90. Chile's existing capacity for cellulose production can be expected to find a market in the Latin American countries because, although increasing use is being made of short-fibre cellulose, requirements of the product are steadily on the rise. It is anticipated that any output over and above that of the existing capacity would have to find markets outside the area.

91. It seems relevant here to add some remarks on the capacity of the Chilean product to compete in extra-area markets. There are several favourable factors, such as the abundant availability of raw material and manpower at costs which are low compared with those prevailing in other cellulose-producing countries. Among unfavourable factors, the first is that the new plants will not be big enough to achieve individually the maximum economies of scale. In addition the greatest care will have to be exercised with regard to quality control, and the problem of marketing-channels abroad will require special attention. If more Chilean cellulose is to be marketed abroad it will face very severe competition, to judge from the scale on which the main producing countries are expanding their productive capacity.

#### Paper

92. Exports of paper, which has a higher value added than cellulose, might form a complement to exports of the latter. The best prospects under this heading are for exports of newsprint, for which there is a large regional market. However, even these prospects are not very encouraging, and this applies still more strongly to the prospects for exports of other types of paper, since a second newsprint mill with a capacity of 65,000 tons a year was brought into operation at the end of 1964, Chile has had a total installed capacity of 125,000 tons a year. In 1966, when the new mill had solved its problems of running in, output reached 120,000 tons. Exports remained fairly steady at about 25,000 to 30,000 tons during 1960-1963, then increased to 40,000 tons in 1964, 57,000 tons in 1965 and 70,000 tons in 1966. The estimated value of exports in 1966 was \$8.5 million, or an average of \$120 a ton.

93. This product, however, has to face much keener competition than does cellulose, mainly from Canada and to a lesser extent from the Scandinavian countries. The difference between the prices quoted in those countries on the one hand and Chilean costs (which are affected by the relative smallness of the Chilean mills) on the other,

coupled with the absence of my margin of tariff preference in the main consumer countries of the LAFTA area, makes it very difficult for the Chilean industry to compete even in the Latin American market. Because of this there are no plans under consideration for increasing the installed capacity. The recent decision to grant tax rebates at the rate of 20 per cent of the f.o.b. value of the newsprint (Decree No.1224 of 16 November 1966) may possibly result in some scheme that will enable Chile to increase its export capacity.

Other papers and paperboards (excluding newsprint)

94. The export of other paper products is not considered normally feasible, at any rate in large quantities. Most Latin American countries are large-scale producers of paper - much of it from imported cellulose - and can meet a large proportion of their domestic demand; this situation is an obstacle to the grant of tariff preferences for these products within LAFTA.

95. There is a possibility that some kind of agreement could be concluded for the export of large quantities of kraft coating paper to Ecuador, which is using more and more of this paper to make the corrugated paperboard boxes in which bananas are exported. However, since this product is re-exported in box form it is free from import restrictions, and the Chilean manufacturers would have to compete on an equal footing with large-scale (1,000 tons a day) mills in the United States producing at highly competitive costs.

96. The one item under this heading for which the prospects are very encouraging is the production of blanks for the cards used in statistical machines. These prospects stem from an agreement concluded between two paper mills - one in Chile and one in the United States - on the one hand, and a large-scale statistical machinery manufacturer on the other; these items will be produced with a view to supplying most of the Latin American countries. This agreement forms part of a wider complementarity agreement on statistical machines and similar articles.

97. The plant began operating in May 1966, and nearly \$1.5 million worth of blanks were exported in that year. The figure is expected to be doubled in 1967 and to reach about \$6 million in 1972.

2. Manufactures of copper

98. The wealth of copper ore deposits in Chile, the country's prominent position in the world market and the steady world demand make it desirable to ensure that the highest possible proportion of copper exports consists of manufactures.

99. In practice very little manufactured copper has been exported until now, even in the last two years, which have seen a marked increase in such exports. In 1963 local manufacturing industry processed slightly more than 16,000 tons of copper, of which only 3,200 tons were exported. In other words, 2.7 per cent of the total output was processed in Chile, and only 0.5 per cent was exported. Of the 620,800 tons produced in 1964, 66,000 tons (10.3 per cent) were processed in Chile, and of these 51,300 tons - 8.3 per cent of the total output - were exported. In 1965 exports of copper manufactures were over 50 per cent higher than in 1964. (See again table 7.)

100. In order to interpret the significance of these exports correctly, however, it is necessary to bear in mind that world trade in manufactures and semi-manufactures of copper is very small and that, consequently, the figures given are more meaningful when compared with those for world trade in these products.

101. However, the transformation of copper into such articles as uncovered wire and plates, which are the main copper manufactures exported, means little in terms of value added. The copper is made into plates, bars or wire rod, according to the degree of refinement of the ingot metal, by simple rolling or extruding operations which add only 2 to 4 per cent, or even less, to the initial value of the metal. In the case of more refined products such as covered wire, cored wire, tubes and rolled products, the value added may be as much as 40 to 50 per cent of the initial value.

102. The sharp increases recorded in exports of copper manufactures and semi-manufactures in recent years have been due mainly to the special conditions prevailing in the world copper market, where differences in price levels have, in some instances, obliged consumers of unwrought copper to make up shortfalls in supply by using processed or semi-processed copper. This is the only explanation for the fact that in 1964 and 1965 exports were confined almost exclusively to copper plates and wire rod (products involving only simple processing) which, according to reliable reports, were to be melted down and re-wrought in the receiving countries because what they really needed was the raw material.

103. These exports of simply wrought copper products (plates, wire rod, etc.,) must be regarded as sporadic; moreover they are produced at mills which can be classed as obsolete. It remains to be seen what possibilities exist for exporting more highly wrought products, whether direct from the copper industry in the form of rolled products, tubes, fine wire, etc., or in the form of inputs by the mechanical or electrical engineering industry (parts for electric motors and generators, electrical equipment for motor vehicles, etc.). At present, however, there is no appreciable productive

capacity for these types of manufactures and, in the case of some specialized items, not even enough to supply the domestic market.

104. The Government plans to double the present output of unwrought copper by 1970, when output should reach 1.2 million tons. In addition a number of projects for new plants to produce copper manufactures for export have been submitted to the Copper Corporation. Under the farthest advanced of these projects, a plant would be installed at Antofagasta and would take advantage of the privileges available under the existing legislation on copper. It is very probable that the competitive advantages conferred by these privileges will encourage the construction of manufacturing plants, and in fact several more projects have reached an advanced stage of consideration. However, it is doubtful that a significant regular flow of exports can be achieved within the period covered by this survey (four or five years at the most); even if a project were completed, it is not possible at present to forecast accurately what quantities could be produced for export, or on what terms Chilean products would be able to compete on the world market.

### 3. Iron and steel products

105. The appreciable flow of exports recorded up to 1961 has since been diminished by the rapid increase in domestic demand.

106. In order to meet the rise in domestic demand for rolled steel products, and to produce some for export, the Huachipato steel mill is planning to expand its output to 1 million tons of steel ingots by 1971, representing an increase of 400,000 tons over the present level of approximately 600,000 tons a year. Under this expansion plan, the most important recent advances in steel fabrication and rolling technology are to be put to use, and the expansion is to take place in the following stages:

(a) Increase in the production of pig iron. For this purpose a second blast furnace was installed and began operating in April 1966. With the ancillary installations now being put in, the two blast furnaces will be able to run at full capacity in order to meet the full pig iron requirements according to plan.

(b) Increase in steel output. A steel mill is to be built to produce some 400,000 tons of steel ingots a year by the LD process.

(c) Increase in the output of semi-finished products. Studies carried out show that it is preferable to use continuous casting for the production of billets and large plates. The decision to use this method makes Huachipato the first mill in Latin America to employ the continuous casting process in the production of large plates.

(d) Increase in the output of rolled products. The production of bars and small shapes will be increased to meet the additional demand created by the Government's housing and public works plans. Plans include the installation of an electrolytic tinplating shop and the expansion of galvanizing operations. 107. The million tons of ingot steel to be produced annually by 1971, when all the installations covered by the expansion plan will be in operation, will be transformed into 600,000 tons of finished rolled products and 200,000 tons of billets. The enterprise concerned calculates that by 1971 domestic demand will be absorbing about 540,000 tons of finished rolled products from Huachipato and 100,000 tons of billets; this will leave an exportable surplus of 60,000 tons of finished rolled products and 100,000 tons of billets, which will earn about \$15 million a year. No substantial volume of exports is anticipated over the short term (one or two years).

108. Huachipato is now negotiating with Ecuadorian entrepreneurs for the installation in Ecuador of a rolling mill to produce bars and small shapes from billets produced in Chile, and it is hoped to conclude similar arrangements with a firm already established in Uruguay.

#### 4. Railway equipment

109. The railway equipment industry is now in a position to furnish a substantial flow of exports, especially when we consider the wide margin between productive capacity and domestic consumption in Chile (see table 10). This margin, measured in



terms of value, exceeds \$20 million, but the individual items involved vary widely in export prospects.

110. Those considered to have the best prospects are wheel rims, axles, wheel centres, bogies, couplings and pairs of wheels, all of which have already been exported. The prospects for the remainder - wagons, coaches, luggage vans and brake vans - are considered less promising because these items are relatively simple to manufacture and most countries have their own plants for the purpose. The surplus output of the first group of products which could be made available for export is estimated at about \$7 million worth.

111. The competitive capacity of the industry depends largely on the price of steel, which has considerable weight in the final cost of the product; generally speaking, operating conditions in the industry can be regarded as satisfactory, and the technical standard is good. However, the exports in question have been affected by the exchange rate. In some cases this adverse effect has been offset by such incentives as ~~authorization~~ for some of the foreign exchange earned by these exports to be spent on specified imports. Exports of steel wheel-rims now earn a tax rebate equal to 4-5 per cent of the f.o.b. value (Decree No. 1224 of 16 November 1966).

Table 10

CHILE: PRODUCTION CAPACITY, CONSUMPTION AND POTENTIAL EXPORT SURPLUS  
OF RAILWAY EQUIPMENT, 1964

Product		Production capacity	Domestic consumption <sup>a/</sup>	Exportable surplus
Forged wheel rims	Tons	10,000	2,700	7,300
Axles, finished	Tons	2,500	1,190	1,310
Axles, unfinished	Tons	4,000	-	4,000
Wheel centres	Units	4,000	3,840	160
Bogies, cast steel	Units	1,560	800	760
Bogies, structural steel	Units	600	60	540
Couplings	Units	5,000	2,860	2,140
Pairs of wheels, assembled	Units	2,500	1,920	580
Coaches, luggage vans and brake vans	Units	160	30	130
Goods wagons	Units	1,400	400	1,000

Source: Working Group of the Executive secretariat for LAFTA Affairs, Ministry of Finance, Chile.

<sup>a/</sup> Domestic consumption is very close to actual output, for the volume of exports is rather small.

112. Furthermore the problem depends largely on the financing programmes of the railway companies and on the action taken to make good the deficit on capital account in Government budgets, which prevents Governments from making any contribution that would make it possible to expand plant and equipment.

113. The prospects for exports outside the area remain very unpromising. For various reasons, potential outlets for the Chilean railway equipment industry are confined to the Latin American area, and it is very doubtful that the existing productive capacity can be kept in intensive use at all times.

#### 5. Ships and boats

114. The Chilean shipbuilding industry has built up a tradition in the production of fairly small vessels. This factor, coupled with the rapid expansion of the fishing industry in the north of Chile, has greatly encouraged the production of fishing vessels. As might be expected, most of the productive capacity is in the north, mainly at Antofagasta and Iquique.

115. This industry obtains about 60 per cent of its raw materials in Chile; the bulk of the imported component consists of engines. The standard of technological training and the general operating conditions are satisfactory. The product with the best prospects is the anchoveta fishing vessel with a displacement of 100-150 tons, without refrigerators or other special equipment. Given adequate incentives in the form of tax rebates it is estimated that, within four or five years, the export potential would reach \$3 million to \$4 million in value. Transactions worth several hundred thousand dollars are now in progress with Colombia.

#### 6. Wine

116. Hitherto most Chilean wine exports have gone to European markets, but the market of greatest potential value is that of the United States.

117. The exports to Europe consist of large quantities of cheap wine in bulk. As table 4 shows, these exports represented 94 per cent by volume but only 66 per cent by value of the total exported in 1963; the average value was about \$6.5 per hectolitre (the average price increased in the subsequent years). Moreover European demand is determined by the European producers' needs for wines of a quality suitable for diluting locally produced wines; consequently the

price-elasticity of their demand is very low. In addition the Chilean wines of inferior quality have to compete with those from North Africa, which benefit from the tariff preferences for countries associated with EEC<sup>3/</sup>.

118. This does not preclude the possibility of exporting bottled wine to the European markets, but there are obstacles to large-scale exportation, namely:

(a) The keen price competition faced by Chilean wines, which have to contend with high freightages and heavy customs duties (9 to 14 US cents per litre in containers holding more than 2 litres and 12 to 17 US cents per litre in containers holding 2 litres or less; this represents a duty of over 100 per cent of the f.o.b. price)

(b) The difficulty of penetrating these markets, where local producers have an extensive and deeply rooted tradition in their favour.

119. More practical prospects for increased sales within a relatively short time are to be found in the United States, which is a net importer of wine and whose wine consumption is increasing at the rate of 8 per cent a year. There is a market in that country for medium-quality and good-quality wine; the tariff is low and the main competition is from European (chiefly French) wines whose transport costs are lower, but not substantially lower, than those of Chilean wines. The United States market takes bottled wine (white and red) and demands good presentation and stable quality. The unit value of exports in the past few years has been about \$50 per hectolitre.

120. The markets of the LAFTA countries are also of interest; the customs barriers and quantitative restrictions maintained by those countries are the main obstacle to the expansion of trade.

121. Chile has a great capacity for wine production: the biggest harvest in recent decades was 600 million litres (1942) and the smallest 365 million litres (1964). Exports, in contrast, reached a peak at nearly 12 million litres in 1963, then dropped to 5 million litres in 1964 and slightly over 4.5 million litres in 1965. Chile is a heavy consumer and the exportable surplus is difficult to estimate; it would probably be more accurate to say that there is no appreciable surplus at present because the area under vines has been decreasing.

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8/ Algeria at present receives preferential treatment only from France, but the Federal Republic of Germany is also in process of granting such treatment unilaterally and by the end of the current period of transition Algeria will probably enjoy complete exemption from tariffs in the territory of the European Economic Community.

122. Any export policy would have to take into account, among other factors, expansion of the grape-growing and wine-producing area; and, as is common knowledge, a new vine takes four years to bear fruit. The most effective step, however, would be to achieve costs which were competitive not only with other countries but within Chile. The fact is that under the present conditions it is much more profitable to sell wine in the domestic market, which absorbs the high costs of production, than to sell it in the foreign market, which would not.
123. In the existing circumstances it seems highly unlikely that the wine-growers will spontaneously expand production for export purposes. The only way to achieve this result would be to apply a policy of planned growth calculated to produce, by degrees, increasing surpluses, especially of bottled wine, for export; in the first stage of such a programme it might be possible to produce a surplus of some 20 million litres, worth about \$10 million, for export.
124. Tax rebates on wine exports are already appreciable; the rate of rebate is nearly 30 per cent for wine in bulk or in containers, and 14 per cent for bottled wines.
125. There is also a compensatory system providing for the repayment, to exporters, of an ad hoc tax levied on all producers. The amount repayable varies indirectly with the quantity produced and the quantity exported. The sum involved is not large, and furthermore it tends to decrease as exports increase.
126. Wine producers complain of the high cost of labour, which represents 25 per cent of the value of bottled wine; hence there would appear to be scope for an increase in productivity in this sector.

#### 7. Fish meal and fish oil

127. For these two products, which are complementary in source of supply and successive in processing, there is an increasing world demand. Natural conditions in the waters of the Pacific Ocean off the Peruvian and north Chilean coasts make them the world's most abundant and economic source of the anchoveta, a species of fish which is used in the form of meal as a feeding-stuff for livestock. The two Latin American countries engaged in this industry are Peru and - to a much smaller extent - Chile. The Peruvian fish meal industry is the largest in the world and practically controls the international market price.

This directive was further amplified at the Committee's resumed first session, when the secretariat was requested to study the scope for the expansion of imports of manufactures and semi-manufactures from the developing to the developed countries and the measures to be taken by the developing countries for increasing such exports.<sup>1/</sup>

In addition, the Committee agreed that for the diversification of exports of the developing countries, it would be helpful to have information on the manufactures and semi-manufactures which could be produced by the developing countries and for which there is sufficient demand in world markets to warrant the establishment of export-oriented industries, due regard also being paid to the conditions of supply of the said products.<sup>2/</sup>

Lastly, it should be noted that this project gained the support of the second meeting at ministerial level of the Ad Hoc Committee on Latin American Co-ordination (CECLA), held at Buenos Aires in March 1966 (resolution 2/66).

In compliance with these directives, the Manufactures Division, in co-operation with the regional economic commissions, is carrying out a number of studies to determine the immediate and future prospects for increasing the exports of manufactures and semi-manufactures from selected developing countries. The object of these studies is not, however, to present an exhaustive analysis of the export prospects and problems of the countries concerned, but rather to draw attention to the scope for increased exports and to the measures which might be taken in this respect. In the case of developing countries which do not possess any significant export industries, an attempt has been made to estimate what would be the export prospects if export-oriented industries were established as an integral part of the industrial development of these countries. These studies should, therefore, be regarded as only part of the examination of the possibilities of building up and expanding the exports of manufactures and semi-manufactures from the developing countries. A summary, together with the conclusions reached in the study, are contained in paragraphs 1-9 below.

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1/ See report of the Committee on Manufactures on its resumed first session (28 February - 9 March 1966) (TD/B/69 - TD/B/C.2/14), para.9

2/ Ibid., para. 29.

128. The price of fish meal has increased sharply in recent years, from about \$110 a ton in 1963 to about \$180 a ton in 1964, owing to heavy demand and a scanty supply. It is now in the region of \$140 - \$150 a ton; this can be considered a sufficiently balanced average on which to base a projection for the next few years.
129. The prospect of a growing demand in the world market led the Chilean Government to make large sums available to finance the establishment of new fishery enterprises (fleets and processing plant), mainly concentrated in the north of Chile. This action was successful and the country now has more than thirty such enterprises, with a large productive capacity.
130. Despite the ideal natural conditions, the raw material supply presents some problems. In the first place, the fish are apt to be scarce from time to time, as they were in 1963 and 1964 (the season is from November to May)<sup>2/</sup>. In the second place, precautions have to be taken to save the species from being fished out; last season Peru fixed a quota for the catch allowed.
131. Owing to these factors, the raw material must be regarded as a limitation on export capacity even though the economic conditions of its supply are most favourable and there is a keen world demand. According to the experts, the attainable average supply of fish is about 1 million tons a year; this, processed at a level of efficiency slightly higher than the present one, would yield a fish-meal output of 200,000 tons. At an f.o.b. price of \$140-150 a ton, this represents a potential income of \$28-30 million.
132. The existing enterprises could produce up to twice that amount, and for this reason no new investment is provided for in current plans, at least for the near future. If the supply prospects are confirmed later on, new projects involving the use of other species of fish besides the anchovy may come up for consideration.
133. The present rate of exchange is not a major adverse factor for the export trade because, here again, provision has already been made for a rebate of 20 per cent on the f.o.b. value of exportable products, plus a rebate of 30 per cent on Chilean materials used in the product; this amounts altogether to some 100-120 escudos a ton, or about 25-30 per cent of the f.o.b. value.

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<sup>2/</sup> According to the experts, such shortages are likely to occur every five or six years.

134. The industry complains that some conditions make it difficult to export at all, and even more difficult to expand the export trade: namely, inadequate transport, storage and shipping facilities; rigidity in labour contracts; a scarcity of funds to finance deferred-payment exports and to provide working capital; and lastly, slowness in paying out the rebate. However, the last-mentioned problem will disappear when the new general Act on export promotion takes effect.

135. The foregoing remarks also apply to fish oil. The potential capacity for exports of this product may be estimated at about 28,000 tons, worth approximately \$5 million (average price \$180 a ton).

8. Shellfish and fish, preserved

136. For several serious reasons, any increase in exports of these products in the next few years must be considered problematical, despite the existence of abundant raw material and of a world demand which offers plenty of scope for sales. Under the industry's present operating conditions, the \$500,000 average value of exports over the past few years may represent a maximum that will not be easily exceeded except sporadically.

137. The first problem is that of price. Chilean prices for canned fish are 65 to 80 per cent higher than international prices; cases of 12 half-pound cans of bonito priced for the domestic market at the equivalent of \$11.5 ex factory could not be sold in the foreign market at more than \$6 to \$7 f.o.b. Domestic demand is very heavy, mainly owing to the restrictions on meat consumption, and the attractions of the domestic market discourage export operations.

138. In addition the quality of the manufactured products is unsatisfactory in several respects; this is a serious obstacle to the acceptance of the products in other markets, and must be given due weight. For example the cans, which are made in Chile, are not of uniform thickness and this has created some difficulties. The problem has been widely discussed and conflicting opinions expressed, but no satisfactory solution has yet been found.

139. This problem does not arise at the shellfish canneries at Punta Arenas which, by virtue of the special regime in force in the area, use imported timplat; in this case, however, it is very doubtful that the raw material supply can be maintained, much less increased, in the future. For other shellfish (crayfish, mussels, etc.) export in frozen form is found to be more profitable.



140. To judge from the basic resources available, exports of these manufactured products might be expected to bring in several million dollars, but the existing problems are so complex and intractable that the prospects are not particularly bright for any substantial increase in exports of these products<sup>10/</sup>.

#### 9. Dried fruit

141. Because of its favourable climate and soil conditions, Chile has traditionally been a producer and exporter of dried fruit, though the volume is very small compared with that of world trade in this item. The main fruits treated are plums, grapes, apricots and peaches. More plums are treated than other fruit, and their processing is more highly mechanized and standardized to meet international market requirements; there are exact standards for the selection and sizing of plums but not, as a rule, for other kinds of fruit, which are apt to vary in quality and size. Most of the fruit is dried by dehydration with hot air, but in the north of Chile the climate is good enough for natural drying, which is a cheaper process.

142. Exports of prunes, which account for 90 per cent of all dried fruit exports, have reached fairly high levels, earning close to \$1 million in 1960 and 1961; they are now in the vicinity of \$700,000 and the main markets are the Federal Republic of Germany, Peru, Brazil and Mexico.

143. Generally speaking, world prices for this fruit are such that as things stand there is little prospect of maintaining or increasing this flow of exports. Costs are rather high, and it would appear that the main way to reduce them would be to achieve a marked improvement in unit yields, which at present show signs of a decline. In order to increase exports of this item it would also be necessary to improve quality and presentation in certain respects, so as to compete successfully with prunes from other sources. The best prospects for sales seem to be in Latin America, and Chile might concentrate on acquiring new markets and expanding its present markets there, although it should not neglect the European market.

144. If raisins - the other important item under this heading - are included, the value of exports attainable over the medium term may be estimated at approximately \$2 million.

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<sup>10/</sup> For a rather more detailed discussion of this problem, see the section on preserved fruit below.

10. Preserved fruit

145. Fruit-growing in Chile is scattered among valleys, in each of which a small amount of fruit is produced and each of which has its own distinctive ecological and climatic conditions (microclimate).

146. No attempt has been made at specialization in order to reap different crops at different times of the year. Output is generally limited to one or two kinds of fruit in each area; this means that the fruit must be gathered very quickly, ready for processing. This applies not only to the kinds which are processed by the fruit preserving industry, but also to fruit which is sold fresh. If the fruit farms were better managed, the market could be freed of its frequent dependence on the preserved kinds.

147. Many farmers have established small canning plants, either individually or through small co-operatives. The processing capacity is more than enough to cope with the existing flow of fruit, for the output of the valleys is generally low.<sup>11/</sup> There is undoubtedly idle capacity, mainly because the variety of fruit available for processing is small, so that the plants can work only for one or two months in the year and thereafter remain idle. This applies particularly where the production lines are in some degree automated and consequently cannot easily handle more than one kind of fruit.

148. Except in some very special cases, the technical level of the processing operation is not high, and output standards are uneven or virtually non-existent. Sometimes the contents of one and the same tin vary in size, colour and thoroughness of cooking, while in other cases the lack of uniformity is due to inefficient grading when the fruit is picked.

149. The quality of the tins is also a source of problems. The lack of uniformity in thickness gives rise to difficulties in forming and sealing the can, and again when it is opened by the consumer. The greatest obstacle to the expansion of exports, however, is lack of standardization of the product itself, and the prospects have become even more unfavourable with the increase in domestic consumption.

150. Nevertheless, the natural conditions for fruit growing are certainly excellent, even exceptional, in Chile. Fruit of the finest quality can be grown there; unfortunately the domestic market does not place enough insistence on quality to stimulate an improvement in that direction.

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<sup>11/</sup> The rate of utilization of installed capacity is slightly under 50 per cent.

151. Production costs are high, mainly because of the low yield of the orchards, as was seen in the review of the dried fruit industry. In view of the foregoing it is felt that no purpose would be served by calculating export potential in terms of idle processing capacity, since the limiting factors are quality and production costs. In the circumstances, it would seem that the short-term export potential can be estimated at \$1 million worth and the medium-term potential at \$2 million to \$3 million worth.

#### 11. Chemicals

152. The establishment of the Sociedad Petroquímica Chilena, which is composed of two existing state agencies the Production Development Corporation (CORFO) and the National Petroleum Enterprise (ENAP) - and the official submission, in 1965-1966, of its projects, some of which are already in execution, have placed Chile among the Latin American countries that are gaining a foothold in the world market for chemicals. The new concern's petrochemical projects include a high-capacity industrial complex which is designed to produce anhydrous ammonia at the rate of 1,000 tons a day, and which will use the vast resources of natural gas available very cheaply in the south (Punta Arenas).

153. This complex is being planned with export in view for the greater part of its output - about 330,000 tons a year, and perhaps more later - on the assumption that its large capacity and the low cost of the natural gas will make prices really competitive. Anhydrous ammonia could be the main product if the technological and economic conditions governing the transport of this product permit. However, a plant to produce granulated urea from ammonia is to be built at the same site, and this could be made the main product instead.

154. This Chilean plant should be in operation in three or four years' time, in 1970 or 1971. If so, potential export capacity should be about \$3 million or \$9 million worth in 1970 - 1971, with substantial increases to follow.

155. Other petrochemical projects in Chile, to judge from the dimensions of the plants concerned, seem to be intended mainly to supply the domestic market, at least in the initial stages. One complex is planned for the production of ethylene and another for benzene, but they are unlikely to be commissioned within the period spanned by this report.

156. Traditional exports among chemicals include iodine; sales of this product throughout the world are controlled by the Corporación de Venta de Salitre y Yodo de Chile. Sales totalled \$2.8 million in 1963, \$3.1 million in 1964 and \$3.6 million in 1965.

157. The largest foreign buyer of iodine is the United States, which normally absorbs half of Chile's exports; next come the European countries, mainly the United Kingdom, the Federal Republic of Germany, the Netherlands and France. Buyers in Latin America, in descending order of importance, are Argentina, Mexico, Uruguay, Brazil and Peru. The export prospects for iodine, which are linked to some extent with those for nitrate, are not very encouraging, and hence no increases are foreseen above the present level which, as already stated, ranges between \$3 million and \$4 million.

## 12. Footwear

158. For the past three years certain Chilean companies have been exporting women's footwear to the United States, mainly through their own retail network but also to meet wholesale orders. The goods have been well received and the sales prospects are very promising. It is estimated that, given the right incentives and with the productive capacity already available the present export flow could be increased to some 150,000 pairs a year, worth about \$650,000 as compared with the 26,343 pairs, valued at \$117,720, which were exported in 1965. The average export price f.o.b. is between \$4.50 and \$5.0 a pair; this figure is increased by 30 per cent in the country of destination (20 per cent customs duty and 10 per cent freightage and other costs). The sale price to the public ranges from \$14 to \$20; the mark-up is particularly high in this case.

159. The Chilean product has to face severe competition, especially from Italian footwear, which is sold very cheaply and which enjoys a very high reputation in the United States market.

160. Footwear exports now qualify for a tax rebate of 6 per cent of the f.o.b. value. Negotiations are under way for a substantial increase in the rate of rebate to strengthen the competitive position of the product. It is believed that, given an appropriate rebate, men's footwear could also be exported, for the quality is quite adequate for sale in the world market.

161. It would also be very useful to promote collective advertising for the Chilean product in the United States. It is not suggested that the surplus productive capacity referred to above should be utilized by increasing shift-work, because there is no surplus of skilled workers.

13. Woollen fabrics

162. The woollen textile industry has a well-established tradition in Chile. It is well enough organized and produces goods of good enough quality, for inclusion among the industries which, given suitable conditions, could play an important part in the export of manufactures. The potential market for good quality fabrics is the United States; there are no discernible prospects in the European countries.

163. The installed productive capacity is already in fairly intensive use. Even so, production could be expanded without fresh investment, but it would be difficult to reduce marginal costs. This is because a third daily shift would have to be worked, at an additional cost which would almost wipe out the reduction in fixed costs.

164. The large mills, as distinct from handicraft enterprises, at present produce about 12 million metres a year; domestic demand is increasing, and it is calculated that up to 2 million metres mo.'s could easily be produced.

165. The industry's weak point so far as export prospects are concerned is cost and by that token, capacity to compete in price. The fact is that, under present conditions, Chilean textiles lack this capacity; for example, a worsted fabric of pure wool merino 70's, of yarn count (metric) 50, weighing 430-450 g per linear metre, would have to be priced at about 32 escudos a metre, whilst the corresponding international price would be about \$6.

166. It is estimated that a rebate equal to 30 per cent of the f.o.b. value of the Chilean product would be enough to put it on an equal footing with the international market. Woollen fabrics cannot compete to advantage in that market owing to the high cost of the raw material; as is known, Chilean wool is not suitable for the manufacture of worsteds, and the woollens industry has to import its raw material. Customs duties are very high, and in the case of wool tops discrimination is practised: those from LAFTA countries pay only some 15 per cent, and those from other countries 30 to 40 per cent. Customs duties on greasy and washed wool are also very high, with no marked discrimination according to origin. The raw material is usually imported from Argentina and, in view of the rebates granted in that country on exports of tops, it is more profitable for the Chilean industry to import tops than greasy or washed wool.

167. The whole problem is that the Chilean industry has to pay more for its raw material than do the woollens industries of other countries. It would therefore be advisable to consider granting a temporary exemption from customs duty for wool imports from any source which are intended for the manufacture of products for export.

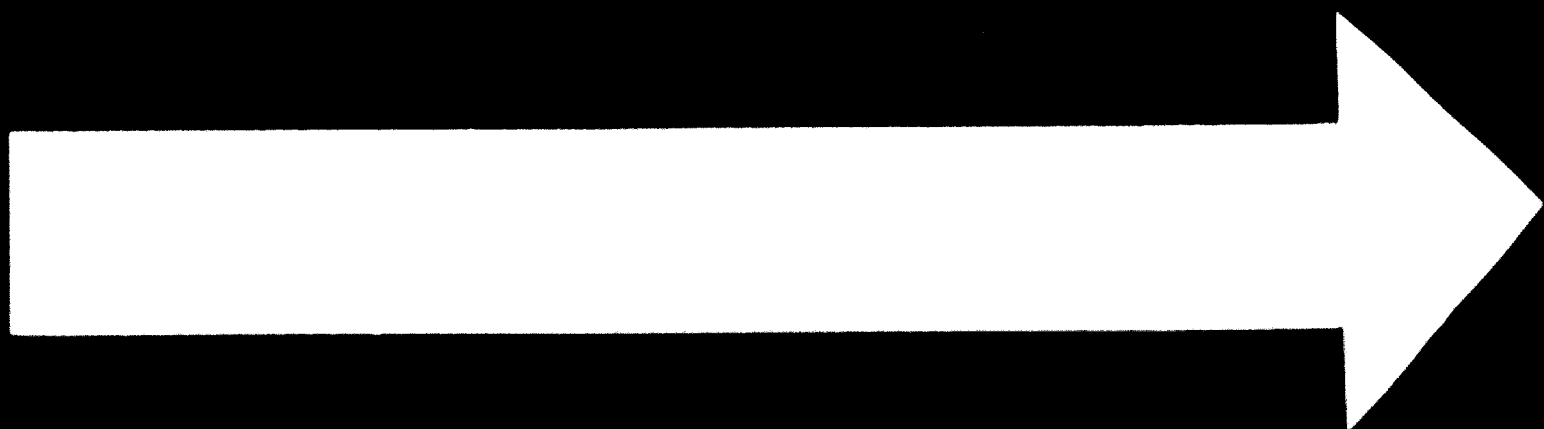
168. According to calculations based on the foregoing data, the potential export capacity of the woollens industry might attain \$12 million.

#### 14. Hat bodies

169. A few years ago, exports of hat bodies and of hats, reached fairly substantial figures. However, the flow of these exports, which went to several Latin American countries and the United States, dwindled to vanishing point because the Chilean product could not compete in price. The main reasons for this situation are the unfavourable rate of exchange and the high cost of the raw material.

170. Two different kinds of hat bodies are manufactured: those of wool felt and those of fur felt. In both cases labour accounts for about 50 per cent of the value of the product. At present the industry works a single shift, and it would not be easy to add more shifts because no additional skilled workers are available. Although there are only a few firms making hat bodies in Chile, and although their machinery, owing to the difficulty and high cost of importing, is not very up-to-date, there is a surplus of productive capacity which, under suitable conditions, could supply an appreciable quantity of goods for the foreign market.

171. It is estimated that, without additional investment or with only a small additional investment, some 24,000 to 30,000 kilogrammes of wool felt hat bodies (300,000 to 350,000 units), worth roughly \$150,000 to \$200,000, could be produced for export. This product is offered for sale in the international market at a



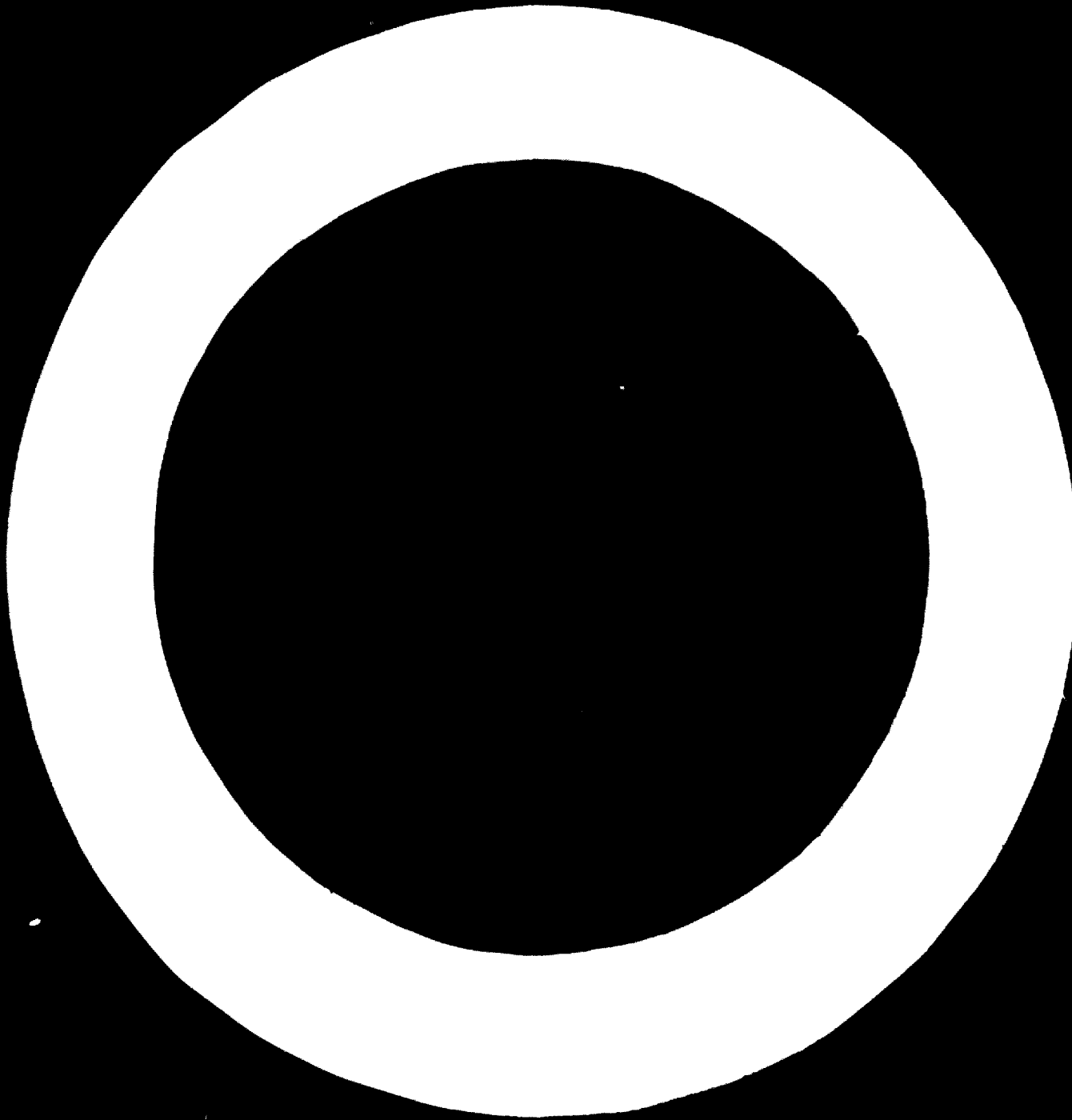
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SUMMARY AND CONCLUSIONS OF JOINT UNCTAD/ECLA STUDY ON CHILE

1. The present report concerning Chile follows those already issued concerning the prospects for exports of manufactures from Argentina and Brazil. Each report is one of a series of studies which ECLA is carrying out, in collaboration with UNCTAD in various Latin American countries and which will include in addition to the countries mentioned above, Colombia, Uruguay and Venezuela.
2. The essential aim of this report, as of every report in this series, is to throw light on certain aspects of a country's capacity to export manufactures; it does not purport to suggest a programme for the attainment of specific export targets. Such a programme could not be prepared solely from technical data of the type analysed in this report - surplus capacity, availability of raw materials, costs, prices, etc. That would, in practice, entail making a choice among several possible courses, and such a choice can be made only on the basis of government decisions concerning the industrial and general economic development of the country. It is hoped, however, that the method employed and the general and particular considerations put forward regarding the problem may prove useful in formulating an export development programme if one is put in hand.
3. This report has been given the same structure as the previous ones: a review of past performance, in which it was possible to include figures up to 1965, is followed by an examination of the institutional factors affecting exports. A third chapter sets out the results of a survey of certain products. Last comes an estimate of short-term export potential on the basis of the classification used for Chilean foreign trade statistics, together with a table showing the main requirements on which the projections depend.
4. Although, in selecting the procedure and approach, every effort has been made to maintain comparability with the previous studies, the special characteristics of the Chilean economy in the recent past and at the present stage in its development made it necessary to take some new factors into account in projecting the potential exports of manufactures. These new factors include, in particular, the export prospects afforded by

new mainly export-oriented projects for the production of manufactures of copper, cellulose, ammonia and iron and steel products, as well as export-drive legislation which is breaking new ground and which, among other things, is making it possible to restore some degree of balance to the rate of exchange. Another noteworthy factor is the upward trend of domestic demand - a phenomenon not observed in Argentina and Brazil, the countries covered by the reports already published.

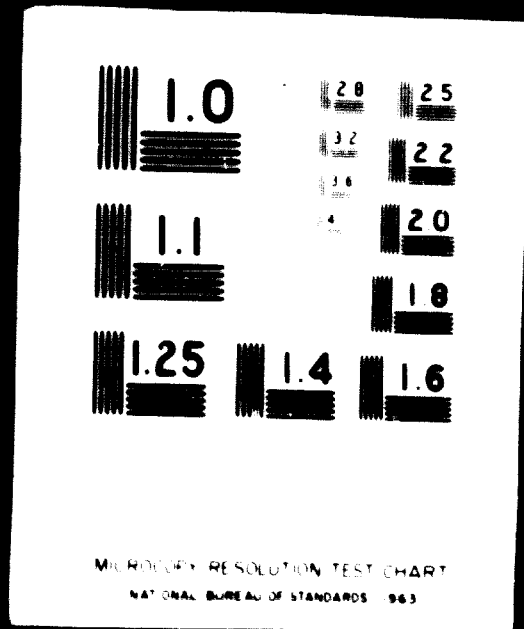
5. The estimates which are given in the last chapter of the document - and which were based on the analysis of a necessarily limited list of products - should be regarded merely as indicating orders of magnitude of Chile's export potential on the assumption that a series of conditions and requirements will be met. These conditions and requirements are explained in chapter D, and tabulated in table 11, for each section of the export statistical classification and for the most important individual products.

6. The analysis deals mainly with supply conditions and thus takes into account the productive capacity available and certain other factors - prices, the availability of raw materials, marketing procedures and so forth - which give an idea of the capacity of the products in question to compete on the world market. Although this study does not deal explicitly with certain important specific problems relating to demand - market studies, tariffs and other barriers of equivalent effect such as quantitative restrictions, and so forth - it may be said that demand conditions have in some measure been taken into account, particularly in the analysis of products. In fact, one of the criteria for the inclusion of a product in the list of potentially exportable items was the potential competitiveness of its price on the world market, to the limited extent to which this factor could be assessed from the data available. The report thus gives

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there is every indication that such exports would be feasible. It will be better to assume that exports under this heading will decline, and to work out a parallel estimate of the potential value of exports of more highly processed manufactures. However, such an estimate is bound to be uncertain, for it relates to factories that are not yet in existence (although several projects are under consideration). 190. There are several such cases in Chile, and it is therefore impossible to apply the fixed coefficients laid down in the previous studies for application to the qualitative definitions (slow or rapid, small or large) of export potential by product or group of products.

191. In the present study the only course open is to make some forecasts based not only on the movement of exports in previous years (where the relevant data are available) but also, and chiefly, on economic planning policy, considered in conjunction with the conditions reported by industry, through the survey, with regard to productive capacity.

192. The results appear in table 12, which shows, first of all, the maximum annual exports recorded in the period 1960-1965 for each section of the Chilean foreign trade statistics (for each year's data, see table 2). These data were used to make a comparison with the projections shown in the columns headed "Short term" and "Medium term" (1-2 years and 4-5 years respectively). The projections are conditional upon fulfilment of the requirements stated earlier, in table 11 and chapter C of this report. They are based on a cautious appraisal of existing conditions and of the projects in hand which affect productive capacity. If the projections for the various sections are analysed, the export prospects for their component products will be found to vary from product to product. At this stage

Table 12

CHILE: ESTIMATE OF THE POTENTIAL VALUE OF EXPORTS OF MANUFACTURES  
IN THE SHORT AND MEDIUM TERM

(Thousands of dollars)

	Maximum annual exports in 1960-1965		Potential annual exports	
	Year	Value	Short term	Medium term
I. <u>Mineral products</u> (Iodine, mercury and other)	1961	4,030	5,000	5,000
II. <u>Natural products of waters and forests</u>	-	-	-	-
III. <u>Products of animal origin</u>	-	-	-	-
IV. <u>Agricultural products</u> (Fish meal, whale meal, other feeding-stuff for livestock, and dried fruit)	1964	16,762	20,000	30,000
V. <u>Food industries</u> (Barley malt; preserved fruit, fish and salmon, crayfish, spider crab and other shellfish; and other preserved or prepared foods)	1963	3,045	5,000	7,000
VI. <u>Beverages and liquors</u> (Bottled wines, wines in other containers, and other)	1963	1,101	2,000	10,000
VII. <u>Tobacco manufactures</u>	-	-	-	-
VIII. <u>Textile industries</u> (Yarn and thread of flax cotton fabrics, and other)	1960	155	5,000	6,000
IX. <u>Chemical industries</u> (Cellulose, fish oil, whale oil, hydro-carbons, n.e.s., and other)	1961	7,510	20,000	50,000
X. <u>Metallurgical industries</u> (Plates of copper, n.e.s., smooth plates of iron and steel, copper wire, uncovered, and other)	1965	56,473	10,000	30,000

Table 12 (continued)

	Maximum annual exports in 1960-1965		Potential annual exports	
	Year	Value	Short term	Medium term
XI. <u>Machinery, tools and equipment</u> (Electric cable, not insulated; insulated wire and cable; audions and valve rectifiers, and other)	1961	2,147	20,000	40,000
XII. <u>Transport materials and equipment</u> (Ships and boats of iron, railway wheel rims, and other)	1965	2,585	5,000	10,000
XIII. <u>Miscellaneous manufactures</u> (Newsprint and periodical and book paper; printed books, periodicals, etc.; and other)	1965	8,739	8,000	10,000
<u>Total</u>		<u>102,556</u>	<u>100,000</u>	<u>200,000</u>

Source: Foreign trade bulletins, op.cit. and ECLA estimates.

in the analysis of the problem, however, in order to make a first estimate of the results which the Chilean economy should be able to achieve by following through the Government programme, it was thought wise to limit the projections to whole sections. Over the short term the export potential might amount to \$100 million. In reality this figure would represent a considerable advance on 1965 exports (\$94 million), and even on the figure shown in the second column of table 12 (nearly \$103 million), because the projected figure was worked out on the assumption that, for the reasons given in the discussion of copper semi-manufactures, there would be no repetition of the extremely high exports of those products recorded in earlier years (\$35 million in 1964 and \$55 million in 1965). Over the medium term (four or five years), it is considered possible that the value of exports projected for the short term could be doubled bringing the export potential to \$200 million.



193. Thus the results of the projections (which, as previously stated, are given purely as a guide) and the whole of the foregoing analysis of the conditions governing the export of manufactures from Chile serve inter alia to show the broad field of action open to the authorities, and to exporters, in this connexion.

194. Lastly - as was pointed out in the previous reports on Argentina and Brazil - although the conclusions arrived at are of necessity limited in scope, mainly because the study had to be approached solely from the standpoint of supply, it is believed that the results, together with those of other studies made on the same lines, could provide a starting point and a basis for the negotiations to be undertaken in UNCTAD with the object of setting up a continuous flow of manufactures from the developing countries to the industrialized countries.





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price ranging between \$6 and \$7 per kilogramme. The Chilean product, on the other hand, could be offered (at marginal cost and assuming an increase in output) at about 125 escudos per kilogramme, which is fairly remote from the international price range. In order to bring the price of the Chilean product closer to the international price, it would also be necessary to introduce an adequate tax rebate. Ways in which costs might be reduced include exemption from customs duty for imports of machinery and arrangements for temporary importation of raw material for the products intended for export.

172. The latter arrangement would be even more desirable as a means of encouraging exports of fur felt bodies, because Chile does not produce enough of the raw material even to meet the domestic demands. Here too there is idle production capacity which, according to calculations, could produce an exportable surplus of 8,000 to 10,000 kilogrammes a year, worth \$70,000 to \$100,000. The average price in the international market for a medium quality fur felt hat body is about \$9 to \$10 per kilogramme. These products are offered in the domestic market at about 100 escudos per kilogramme; this rules out any possibility of competition unless drastic measures are taken to stimulate exports.

173. Lastly, mention should be made of finished hats. Their export prospects might perhaps be better than those for hat bodies so far as prices is concerned, because they are a more labour-intensive product, but the accessories are rarely of the quality demanded by the international market.

#### IV. PROJECTION OF POTENTIAL EXPORTS

174. Chile's economic programmes reflect a legitimate desire to promote and diversify exports. This course has been followed - so far, according to plan - more as a means of developing industry than as a means of solving the problems presented by the trade balance and the balance of payments, in which the export of primary products of the mining industry and agriculture is the deciding factor.

175. An increase in exports would undoubtedly do much to encourage Chilean manufacturing industry to develop even more actively than it has in the past few years. It has already achieved a fair rate of progress in the form of an average increase of 6.3 per cent in the physical output of industry, as against a 3.2 per cent average for the total product. In order to increase exports, various general measures and certain specific measures are considered necessary. As indicated earlier, the incentives prescribed in the new Act are well calculated to encourage exports, and considerable progress can be expected in this field when they take effect. However, the exchange rate problem, referred to in chapter B, on institutional factors affecting exports, still persists in some degree.

176. The facilities provided by the new legislation for the renewal of equipment, which is a matter of special interest to some industries, are considered well suited to their purpose although the final assessment will, of course, depend on the experience gained in their application.

177. In many cases there are problems of quality to be solved. For a long time the Chilean market was relatively easy so far as consumer requirements were concerned, but now refinements are in evidence in a wide range of goods. In the world market, even if the goods are offered at acceptable prices, quality is very important, especially in products which face keen competition (such as preserved and dried fruit).

178. Lastly, an export policy that aims at presenting a sufficiently wide range of products needs the support of a firm and durable industrial base. There are now a great many small and medium-sized enterprises in Chile; 6,500 industrial establishments employing more than 10 persons each were recorded in 1961, employing on the average about 37 persons each. It is difficult for the small or medium-sized enterprise to reach the international market, and it would seem necessary to set up collective export machinery, which might be of a private nature; the activity of commercial enterprises exporting solely on behalf of third parties might be given appropriate encouragement, with public bodies providing support or working alongside private enterprise.

179. With regard to future export prospects, let us consider first of all the characteristics of the products surveyed, which were enumerated in chapter C. These products may be divided into three categories. The first category includes the traditional or natural export products (or products with a fairly regular export record) such as wine, fish meal, railway equipment, footwear, cellulose and preserved foods: in other words, the products on which estimates of export prospects are normally and automatically based. The second category comprises products whose future exportation depends on plans for the installation of new industries or the extension of existing ones; these include manufactures of copper, iron and steel products and fertilizers. The third category - one that could be widened - covers products which have not been exported regularly, at any rate in recent years, but for which productive capacity is available and other conditions are favourable; these include hats, textiles, clothing, sugar confectionery, etc. Within the third category, distinctions should be drawn between the different obstacles to exports: a price rendered uncompetitive by the rate of exchange or by high production costs; inadequate quality; and failure to seize such opportunities as the international market may offer. Even where more than one of these obstacles are found, the product concerned should not on that account be struck off the list of potentially exportable manufactures if it is still the country's policy to follow up every possibility of diversifying exports.

180. The three categories of products require the application of promotion measures of different degrees of intensity. In the first category the nature of the difficulties in the way of increasing exports is known, and it is easy to estimate the limits of exports attainable over the short and medium term if direct practical measures are taken to help the exporting enterprises.

181. In the second category too, the limits attainable are laid down in the plans, and all that is needed is to pursue a policy which does not conflict with the plans approved by the Government.

182. In the third category the problem is much more complex, because:

- (1) it is very difficult to estimate the limits of potential exports when there is no information on past performance from which to deduce a trend;
- (2) it is difficult to foresee how entrepreneurs will react to export promotion measures; and
- (3) the "cost of the operation" to the public authorities - i.e., the cost of the necessary export incentives - may be higher than for the first two categories because new products are involved.

183. It should be emphasized that such a policy should not be pursued with the sole aim of acquiring the amount of foreign currency potentially obtainable with exports, as estimated for the short and medium term in this report; the secondary effects of the export trade on productive activity and economic development in general are also relevant.

184. Owing to the present state of the Chilean economy and, more particularly, the conditions governing the problem of potential exports of manufactures, it has been necessary to depart at some points from the technique employed in the reports on Argentina and Brazil. The absence of any export data for recent years on a good many of the products manufactured, coupled with the newness of the export promotion policy, makes it more difficult to estimate the export potential of Chilean manufactures.

185. Table 11, which shows both the negative and the positive factors, should be studied very objectively, for in most cases the negative factors are the decisive ones, and unless these obstacles are removed the projections will remain unfulfilled.



Table 22

## CHILE: FACTORS LIMITING OR STIMULATING EXPORTS OF MANUFACTURES AND ESTIMATE OF POTENTIAL INCREASES IN EXPORTS

Section	Noteworthy Products	Physical availability of raw materials	Cost of raw materials	Installed productive capacity	Technical skill	System of marketing abroad	Quality of production	Rate of investment
I. Mineral products		+	-	+	-	-	-	slow
	Iodine	+	-	+	-	-	-	slow
IV. Agricultural products		-	-	+	-	-	-	slow
	Fish meal	-	-	+	-	-	-	slow
	Dried fruit	+	-	+	-	-	-	slow
V. Food industry		+	-	+	-	-	-	slow
	Preserved shellfish, etc.	+	-	+	-	-	-	slow
	Preserved fruit	+	-	+	-	-	-	slow
	Preserved vegetables	-	-	+	-	-	-	slow
	Preserved fish	+	-	+	-	-	-	slow
VI. Beverage and liquors		+	-	+	-	-	-	slow
	Bottled wine	+	-	+	-	-	-	slow
VIII. Textile industries		-	-	-	-	-	-	slow
	Woolen fabric	-	-	-	-	-	-	slow
	Clothing	-	-	-	-	-	-	slow
	Hat bodies	-	-	-	-	-	-	slow
IX. Chemical industries		+	-	+	-	-	-	slow
	Nitrogenous fertilizers	+	-	+	-	-	-	slow
	Fish oil	+	-	+	-	-	-	slow
	Cellulose	+	-	+	-	-	-	slow
	Explosives	+	-	+	-	-	-	slow
X. Metallurgical industries		-	-	-	-	-	-	slow
	Iron and steel products	-	-	-	-	-	-	slow
	Copper products	-	-	-	-	-	-	slow
XI. Machinery, tools and equipment		-	-	-	-	-	-	slow
	Manufactures of copper	-	-	-	-	-	-	slow
XIII. Transport materials and equipment		-	-	-	-	-	-	slow
	Railway equipment	-	-	-	-	-	-	slow
	Ships and boats	-	-	-	-	-	-	slow
XIII. Miscellaneous manufactures		-	-	-	-	-	-	slow
	Newsprint	-	-	-	-	-	-	slow
	Blanks for statistical machines	-	-	-	-	-	-	slow
	Footwear	-	-	-	-	-	-	slow

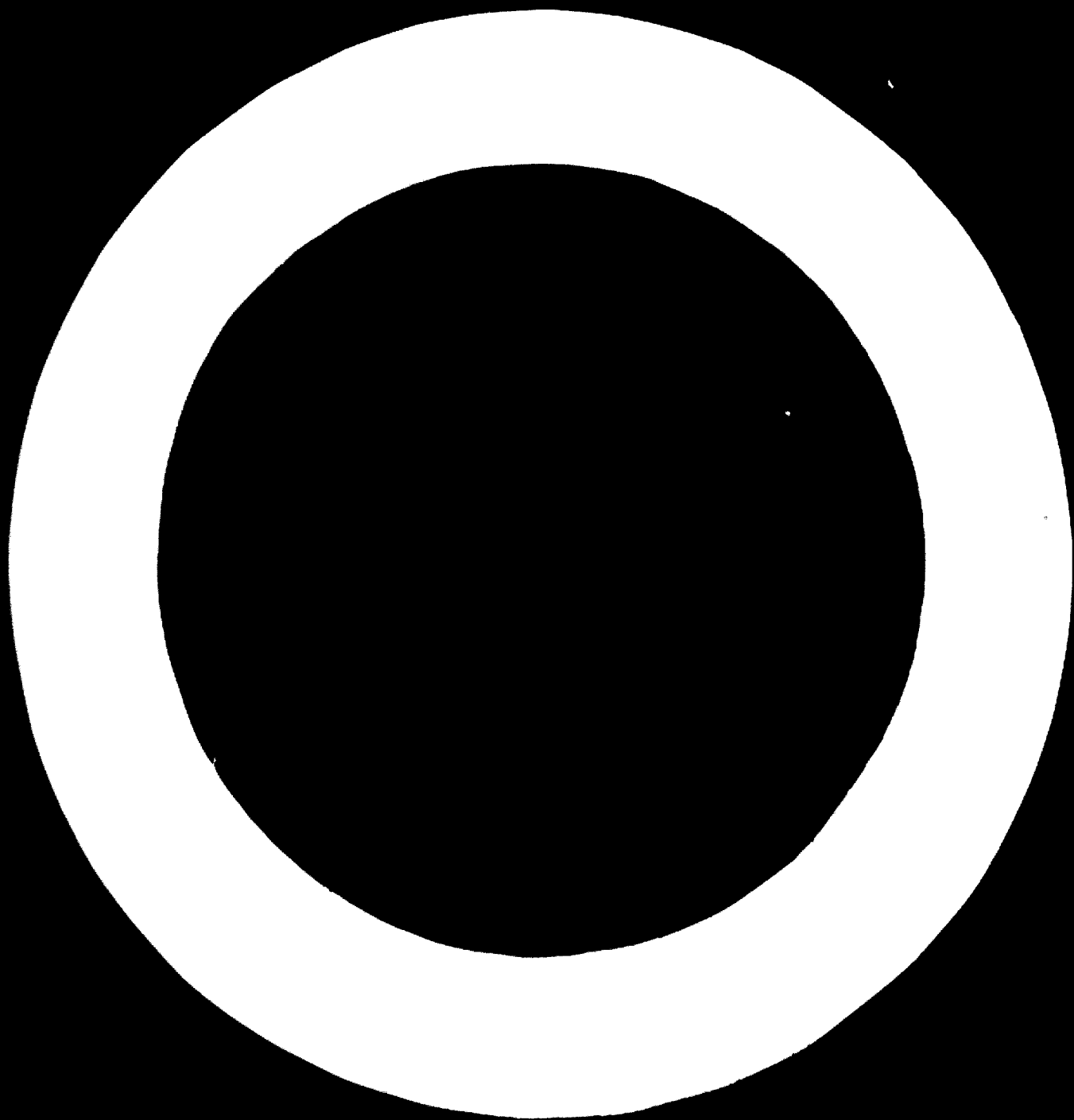


Table 11 (contd)

Source: ECLA

Legend:

Physical availability of raw materials: - scarce = adequate + abundant +<sup>o</sup> abundant, with possibility of rapid increase

Cost of raw materials: - high = fair + competitive

Installed productive capacity: - inadequate = fair + ample

Technological skill: - inadequate = fair + very good

System of marketing abroad: - inadequate = fair + very good

Quality controls: - needed = advisable + unnecessary; existing precautions adequate

186. With regard to the length of time required to fulfil them, there is a close connexion between promotion policy and export achievement. The assessments given in the right-hand columns of the table are based on estimates of productive and competitive capacity, made on the assumption that the existing policy of export promotion will be further developed and can be applied without serious difficulty.
187. Table 11 conforms to the structure of Chilean foreign trade statistics and shows, in each section, the noteworthy products which were covered in the survey or for which data were available.
188. There are not many products for which any rapid expansion of exports can be predicted, for almost every sector presents deep-rooted and complex problems. Furthermore, in almost every case, the validity of the projection depends upon the existence of the machinery needed to bring Chilean prices into line with world prices. In addition, where the table lists as a requirement "Reduction of costs", this means that, apart from the foregoing considerations, and even where the cost of materials is not listed as high, the industry must solve the problem of productivity in order to withstand world competition.
189. It should be emphasized once again that, at the time of making these projections, the Chilean economy exhibits certain special characteristics. In the other countries studied, the movement of the export potential was related to the existing productive capacity, the intensive use of that capacity and political action to develop exports. In Chile, on the other hand, the economy is undergoing major changes, and these must be taken into account if the projections are to be realistic; this applies not only to projects approved or in process of approval but also to the course charted by the Government for its economic policy in each sector. Manufactures of copper are a typical example: The Government, through the Copper Corporation, expresses the opinion that wire rod, plates and the like should not be exported and that the industry should plan to export more highly processed products. In view of this, the most reasonable projection cannot be arrived at from the productive capacity of the copper rolling mills and extrusion machinery (which would give an estimated export capacity of up to \$110 million, leaving a slightly smaller amount to be subtracted from the raw material exports figure), even though the market demand is promising and