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THE WOOD AND FURNITURE INDUSTRY IN CHILE [1]

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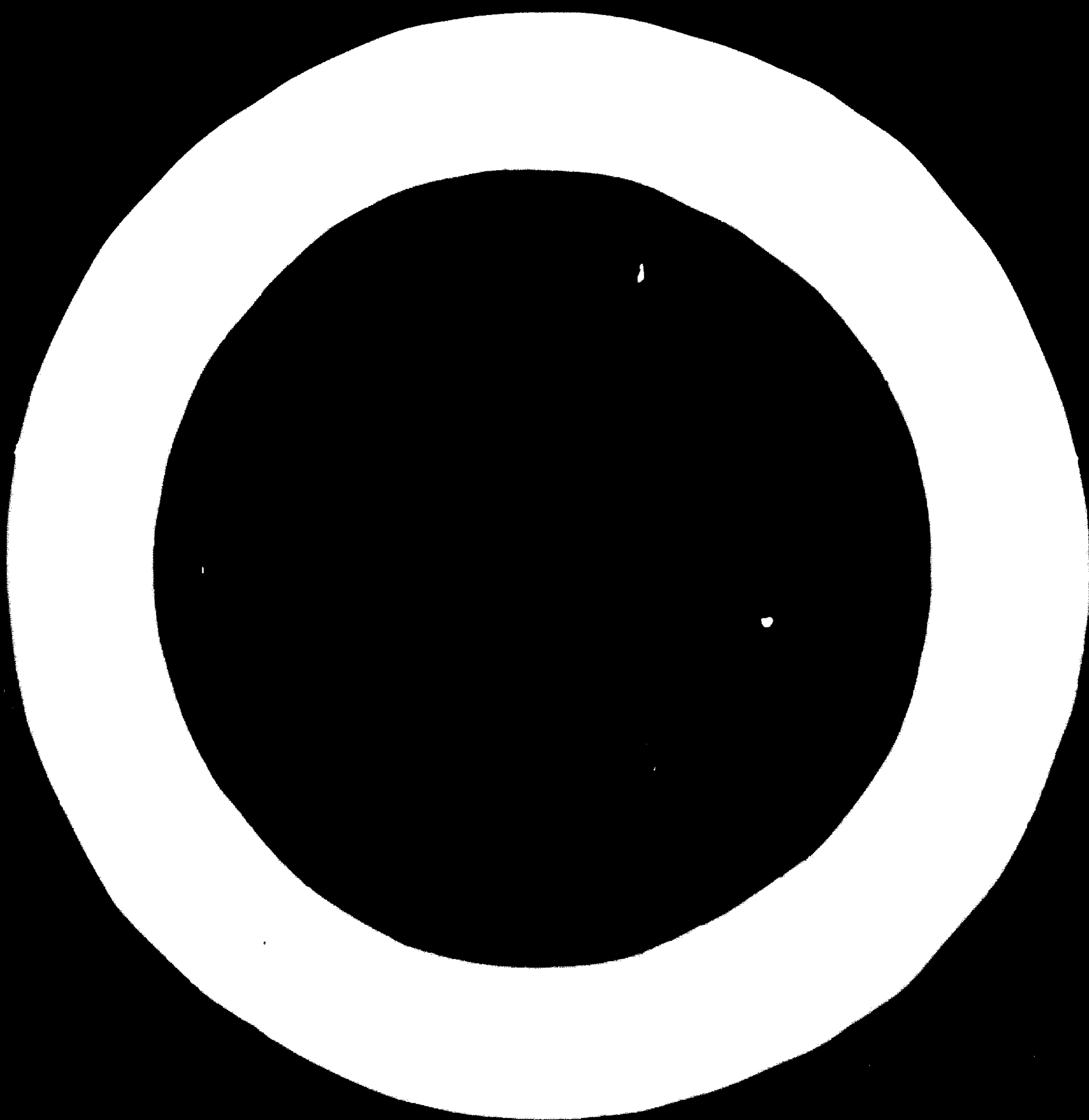

Introduction:

Chile is situated in the south-west extreme of South America, covers an area of some 750,000 square kilometers (excluding the Chilean Antartica part) and has a population of nearly 10 million. It is a country rich in natural resources with extensive forests, which cover 6,5 million of natural and plantation forests, which can be increased by another 5 million hectares. However, the Chilean wood and furniture industry hasn't reached real economic importance due to several reasons which are analyzed below. (The forest and wood sector produces only 5 per cent of the national income.) It must also be said that even today 55 per cent of the wood volume drawn from forests is used as fuel (for cooking, heating or industrial power.)

Distribution of the wood and lumber production.

As can be deduced from Table I, the wood and furniture industries are only a relatively small part of the whole forest sector. This paper will give preference to the wood construction industry group rather than the furniture sector.

The industry in Chile, including the wood and furniture one, is going through a very difficult period, without any possibility of development for political, social and economic reasons. Political: because the previous and present socialist Government are trying to take under state control and manage the greatest possible part of the private industry.
Social: because it is not well understood that big industry is the only type which is able to incorporate modern technologies and volume production. Economic: in consequence of the unstable supply and demand market, derived from a faulty monetary policy. (Inflation during the last few years has been 30 - 60 per cent per annum, currency exchange 10-20 per cent per annum, etc.)

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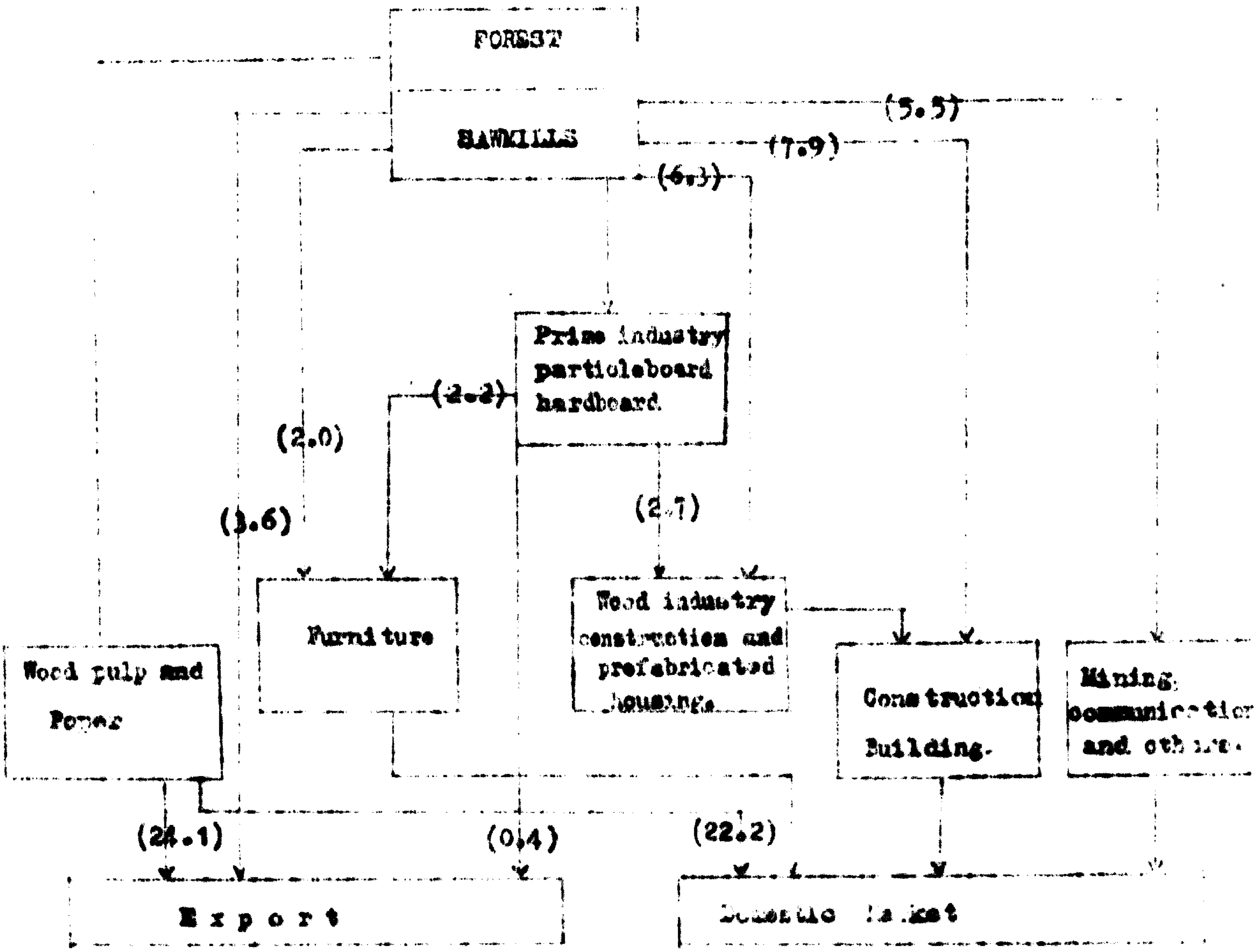
TABLE I.

Production from Forest and Wood Industries.



(#) Amount given in
Million US Dollars.

Aside from these general limitations, the wood and furniture industry, instead of complementing and specializing, is obliged to vertically integrate to avoid consecutive transfer taxes (8 per cent on each sale). The accumulation of this tax reaches between 25 and 30 per cent over the final price which the consumer has to pay and it is obvious that this percentage raises the price of the final product. A consequence of this vertical integration is that many enterprises produce "a little from all". (See Table II).

For instance if we rely on the following data we can deduce the relatively low productivity of the furniture industry sector, compared with the prime sector of wood conversion (saw mills, particleboard and hardboard mills, paper industry.) due, justly to poor specialization and to small scale production.

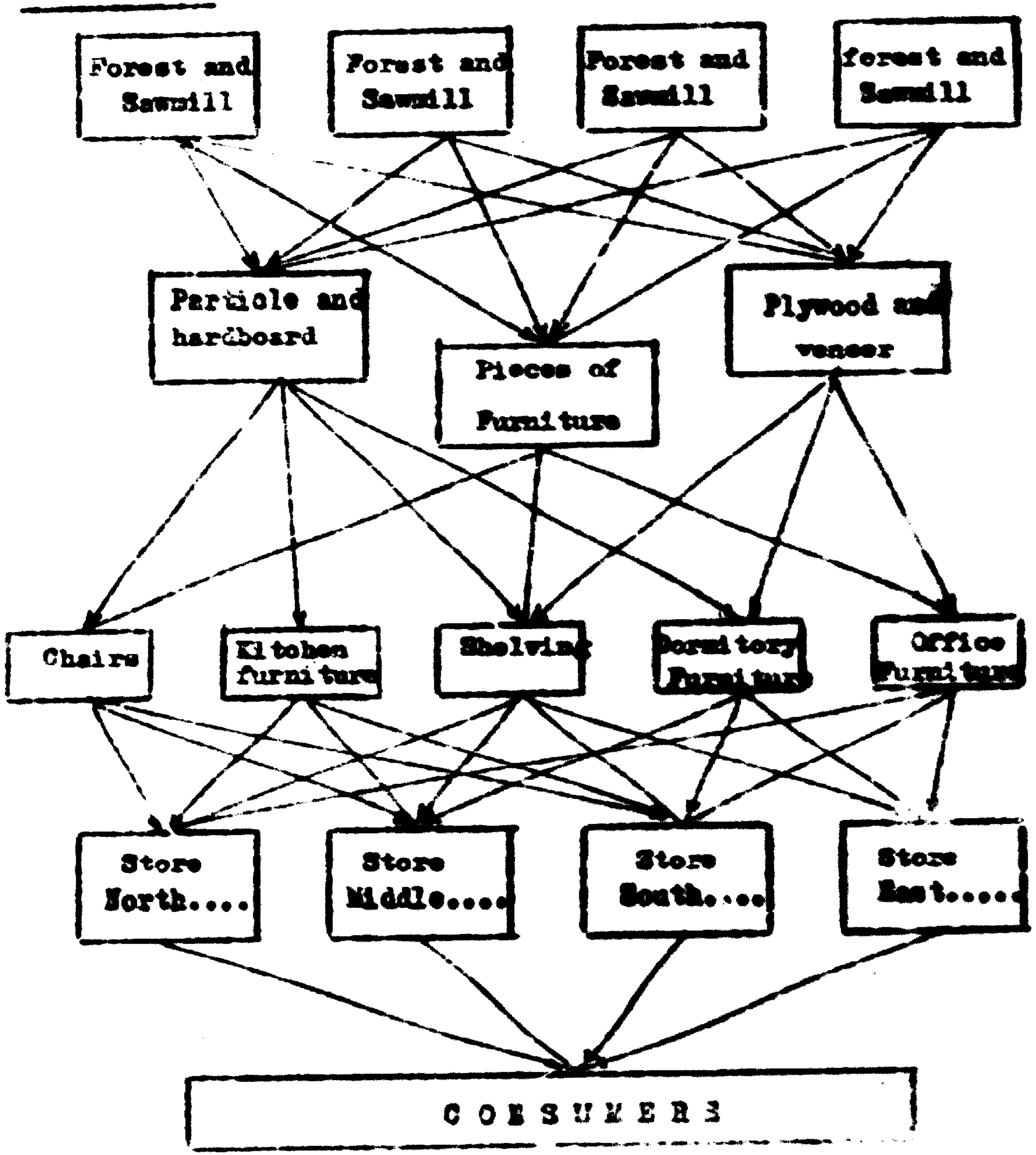
1970	Number of employees	Production million US	Capital inv. million US	Productiv. by worker	Number of Industries
Prime sector of wood and forest Industry	(1) 80,000	76,6	178	958	(3) 980
Furniture and secondary wood Industry	(1) 9,000	(4) 7,1		790	(2) 125

(1) Approximately
(2) 20 Industries produce 65 per cent of output
(3) 207 produce 75 per cent of output
(4) aggregate value

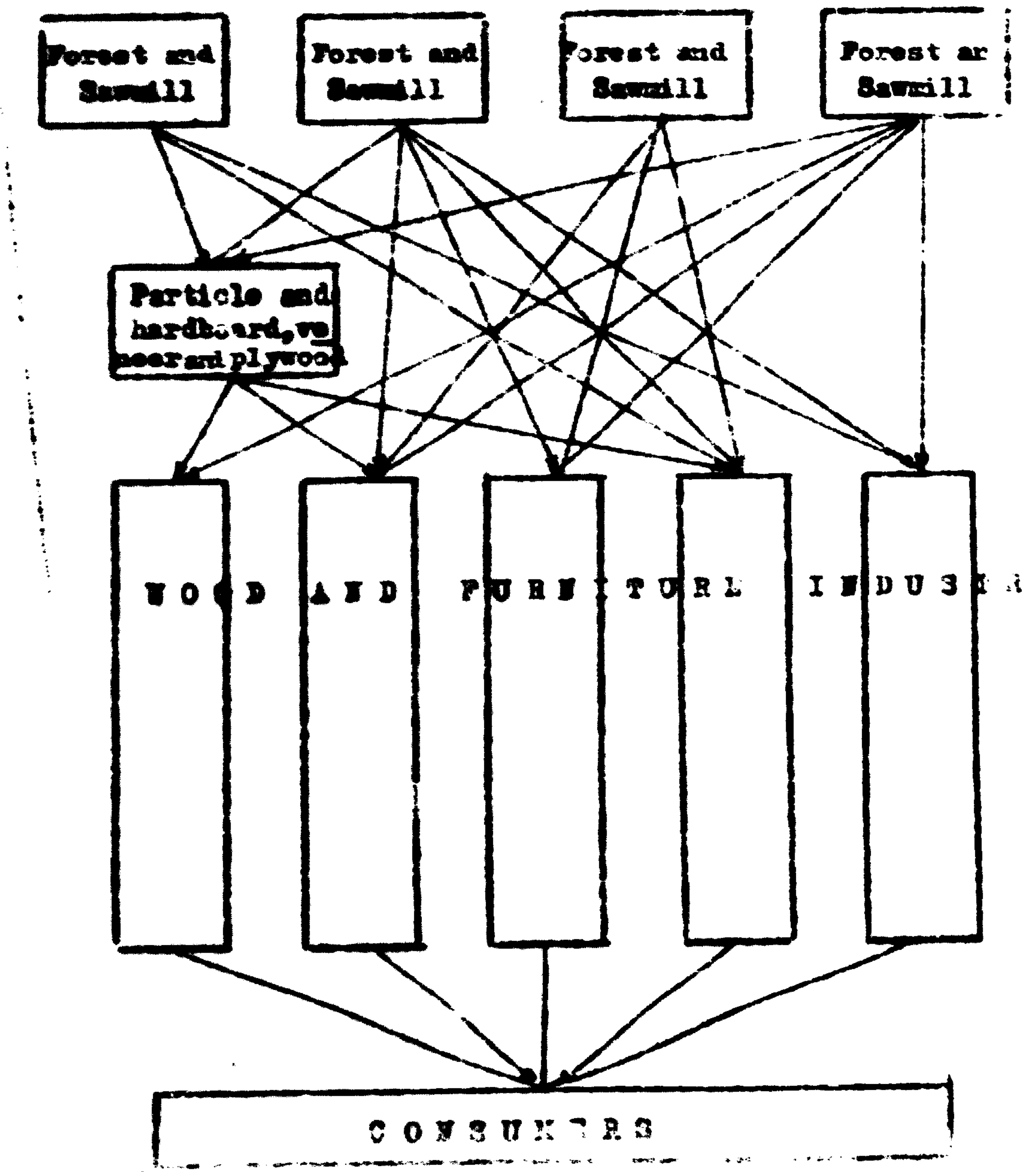
Wood and furniture processing technology, imported specially from Europe and North America, has been of great benefit for the country. However most of the time we have copied it "blindly" without studying economic considerations, i.e. the costs. For example, particleboard mills were born in Europe after the way as a sequence to the lack of wood and could logically enter the market due to its lower price. However, Chile, which has wood practically in excess, has set up great industries that produce agglomerated boards whose price is some three times that of natural wood.

TABLE II

A model of interchanged and specialized Wood Industry:



A model of vertically Integrated Wood and Furniture Industry



Prefabricated Housing:

The activity of the wood prefabricated housing industry in Chile began in in 1960 as a part of other industries and has since grown to become an independent and important industry group with great potential for development and growth. Following initial consumer resistance and use for week-end houses, prefabrication has gained increasing acceptance for home building as shown below.

Prefabricated Houses (Average size - 50m²)

1967	5,065
1968	6,800
1969	7,650
1970	4,900
1971	13,420
Capacity	50,000

Chile must actually build 40,000 housingunits each year due to demographic growth and 20,000 to restore old buildings, without considering the accumulated deficit which now reaches 250,000 homes, for which at least 80,000 new homes must be built yearly. The following statistic clearly indicates that we are very far away from meeting this need. Moreover the housing problem is getting worse from year to year.

Recent Housing Construction

	Total No. of homes	##m²	Public sector No. of homes	##m²	Private sector No. of homes	##m²
1965	52,217	3,315	36,486	1,806	15,731	1,329
1966	28,761	1,870	13,433	742	15,328	1,128
1967	44,536	2,506	28,285	1,315	16,251	1,191
1968	53,346	3,162	32,730	1,622	20,616	1,540
1969	39,128	2,536	14,460	809	24,668	1,727
1970	26,231	1,935	5,914	375	20,317	1,560
1971	85,344	4,294	74,444	3,461	10,890	833

(##) thousand of square meters

The construction cost of prefabricated housing is nearly US$ 20 per m^2 not including erection, compared with a cost of US$50 per square meter for traditional construction. Besides the reduced erection time needed by the first 100 versus 300 days for the second and the great forest resources of the country, we can conclude that the solution is in our hands, bearing in mind that we have to give at least a minimum impulse and security to the enterprise sector, so that the necessary investments can be made in this field.

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