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# THE CHILEAN FURNITURE INDUSTRY

by

Baruch Reiner Schmelser Executive Manager Arlando Lovy y Cia, Ltda, Cabildo Santiago, Chile

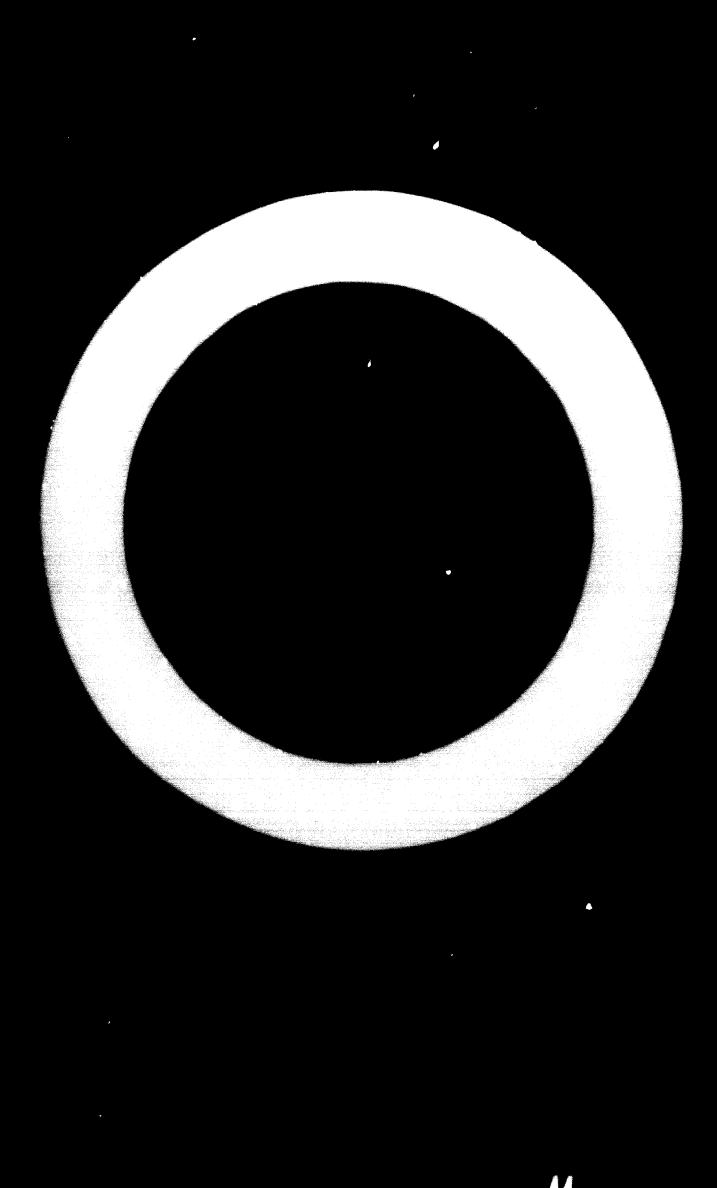
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# THE CHILEAN FURNITURE INDUSTRY

# 1. The furniture industry in Chile, and its economic role

The manufacture of wooden furniture in Chile started with the Spanish Conquest, in the year 1541. Until the beginning of the twentieth century manufacture was carried out solely on an artisanal scale copying rustic styles and using domestic raw materials. Further to this manufacture and during Chile's economic boom (in the post-war period in 1879) delicate furniture was imported from Europe up to 1930.

Since then the wooden furniture industry has developed alongside with the manufacture of plywood boards, veneered plywood, adhesives, upholstery materials, as well as metallic and hardware accessories. This trend has developed, and since 1939 the industry has become the sole supplier of exclusively Chilean raw materials. The next step was the promotion of export to the U.S.A. and other countries along the Pacific coast. This started in 1968 with the establishment of the Andean Sub-Regional Market ("Hercado Sub-Regional Andino"), which is a subsidiary of ALALC (Associación Latino-Americana de Libre Comercio).

In this internal process of expansion, the furniture industry has adopted Duropean and American industrial techniques, there being a time-lag of some five years.

At present emplusively wooden furniture is facing competition from its metallic equivalent and/or plastic furniture.

The share of furniture in the GNF is declining as a result of the demand for domestic appliances, such as freezers, washing-machines, radio and TV equipment, etc.

## Some statistical data, according to the National Statistics Institute

	Runbe	pr of	worker	s in the	"non-metalli	o" furniture	industry:	
		Yee	<b>r</b> 1970			************		8,688
ř	As fo		<b>ir</b> 1972	, extrap	plating based	on a demogra	aphical	
		owth a	1 3% ti	nken inte	account for	1971, would	make	8,933

# 2. Furniture industry raw materials

Chilean lumber is renow ed for its colour, diversity, beauty and lavishness, there being two fundamental groups; soft and hard or coloured.

Among the soft woods there is pine-wood (Araucaria Imbricata). Of the hard woods, we will mention "Coigue" ("South American Soft-Wood" or its Latin name Nothofagus Dombeyrii), "Lingue" (Persea-Lingue), "Rauli" (Nothofagus-Procera) and "Laurel" (Laurelia-Aromatica).

Lumber yield: It has been estimated that only 15% of every sawn log ends up as a finished product.

Most enterprises use the air-drying system, the home market accepting a moisture content of 14% as standard.

In the group of agglomerate boards, laminated and plywood boards, there are some accepted standards, but some problems remain on thickness and surface hardness.

As to accessories and hardware, handles are manufactured in sand-cast brass, while locks and other devices are of common quality manufacture. The lack of finished steel is motorious, likewise the absence of magnetic door catches and updated designs.

#### 3. Adhesives

There are many adhesives available on the market for different uses, some of them being exported to be Sub-Regional Market of the Andean Area. However, there is a definite lack of knowledge about their technical si. No enterprise has highfrequency equipment for the di-electrical hardening of the adhesives on the joints.

- 2 -

#### Upholstery materials

Usually all manufacturing companies use the customary means for coverage, the only improvement being in nailing, where air-pressure stuplers are used.

Customary materials are: woollen fibres, acrylic fibres, hides and sheepskins.

Of the synthetic materials, synthetic leather and plastic four have been introduced. The employment of expanded polyethylene on the frames of seating furniture is in the initial stages.

#### Ornamental laminates

There is one company, a subsidiary of a rubber-manufacturer working under foreign licence, producing prime quality products in short runs and continuously changing design.

# Production design and technological development

This point of view is applied only in those enterprises of a certain size, i.e. those with capital assets of more than US\$ 100,000 and more than 50 workmen. In the others, procedure is purely intuitive. The idea may gain ground on account of social pressure occording from wage demands. Serial production is difficult owing to the nature of the national market.

# Furniture's industrial technology

The techniques in use are the customary ones with little mechanization owing to the lack of research into new systems and procedures. As for surface finishing, pressure-spraying with nitrocellulose lacquers ("Duco") is most common, the choice being restricted to substances which are available on the Chilean market.

# Professional training of engineers and employees

The labour force is based on the system of apprentice-assistant-skilled workman, starting at primary education level, whilst administrative employees have a cultural level averaging ten years at school.

As to engineers and technicians, their professional training is essentially that of a university or technical school, but they do not have a furnituremenufacturing background as there is no such training. However there are career

- 3 -

opportunities in forestry ungineering, interior decoration, mechanical engineering, and so on.

The absence of professional training is critical where middle-ochelon employees are concerned. To help overcome these problems, our association "Nooden Furniture's Manufacturers Association" ("ASIMAD") permanently promotes a series of training studies for the workers in their enterprises with splendid results.

As to the prevention of accidents at work, there is good labour legislation, and university training for experts in this field. There is also an adequate amount of safety equipment to reduce the risk of accident.

#### Financing

Usually the enterprises operate with their own funds, selling directly to the customers through their own demonstration and sales outlets. They also finance their own sales on credit plans.

Banks are only approached for credit when the industries wish to acquire real estates or new grounds Imported machinery must be bought using irrevocable letters of credit. As for locally manufactured machinery, five-year credit schemes can be arranged, but most entrepreneurs are not aware of this.

Costing is done in a simple manner. In view of the companies' wide range of designs, it is none the less quite a complex procedure.

Where yield and profits are concerned, there are two systems in use. One of them is piece-work, an effective but archaic method which is also the starting point for labour grudges. The other one is warranted payment plus productivity bonus which is partially accepted and understood by the worlmen.

As for rationalization and time and motion studies, workers have responded favourably and interest has increased lately.

In this sector the lack of quality standards for all raw materials is problematic and accounts for the difficulty of establishing serial manufacture and exports.

- 4 -

The establishment of a Quality Cortrol Institute has been suggested, as a subsidiary to the State Technical University and under a self-financing system supported by the furniture manufacturing companies.

The purposes are:

- Investigation of quality with respect to reliability and service life;
- Research into new materials;
- The formulation of basic standards for the industry;
- The management of a quality control laboratory to test: resistance to various demands made of furniture; upholstery elasticity and structural resistance; lacquer's solid components and their wearing properties; upholstery materials and their resistance to wear, warping and fading.

#### Marketing

As was said before, most industries sell their produce directive to the customer through their own sales outlets. There is no central "furniture warket" combining the various industries in a sole complex. There is also a need for an annual fair and its corresponding managers' meeting, at a national level to debate their problems. This weakens the wooden furniture's industry position vis-b-vis other industries, such as those offering household goods, as well as increasing costs. Exports are impossible as there is no organisation comprising exporting companies owing to the high cost and dynamism an export business demands.

Admittedly State support is available in the form of tax legislation granting 30% rebate on export goods (F.O.B. value). There is also a "pre-shipment" advance up to 90% F.O.B. value.

Nevertheless, exportation per so as a systematic activity does not exist. There is only a minor movement produced by what travellers take with them abroad, resulting from the low prices in comparison with international levels.

# Future Plannings

Government plans are afost for the establishment of a nationalized industrial complex to bring together all those government-owned industries manufacturing wood, pulpwood, plywood and textiles, which have up to now met the State's and electronic industry's furniture requirements. This field may also include the demand for furniture.

### CONCLUSION

Chile's furniture industry is undergoing a change, from an artisanal system to an industrial level. Serial production is necessary owing to the limited market and lack of modern technology.



