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Review of International Wooden Furniture Markets**

Draft Final Report

Prepared for ITTO

by

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TABLE OF CONTENTS

1.	EXECUTIVE SUMMARY	9
1.1	Status, trends and future prospects of world's furniture markets	9
1.2	Observed market opportunities	11
1.3	Guidelines for product and market development	12
1.4	Strategic advise for developing country suppliers	14
1.5	Implications of quality standards and certification & labeling for developing country exporters	16
1.6	Recommendations	17
1.6.1	Recommendations to ITTO	17
1.6.2	Recommendations to Governments	18
1.6.3	Recommendations to trade and industry sectors	18
2.	INTRODUCTION	20
2.1	Origin of the Pre-Project	20
2.2	Purpose of the Pre-Project	20
2.3	Scope of Work	21
2.4	Implementation Strategy	21
2.5	Methodology of the Pre-project	22
3.	WORLD OVERVIEW	23
3.1	World furniture production	23
3.2	Trends in world trade by major types of wooden furniture	23
3.2.1	World Imports	23
3.2.2	Leading Importers	24
3.3	Biggest exporters from developing market economies and China (DMEC)	26
3.4	Developments in the major markets	27
3.4.1	United States	27
3.4.2	European Union	29
3.4.3	Japan	31
3.4.4	Market access	32
3.5	Most promising import markets for products from developing countries	32
3.6	Recommendations on marketing, product development and promotion for the ITTO producer countries	33
3.7	Recommendations of further cooperation between industrialized and developing countries	35
3.7.1	USA	35
3.7.2	European Union	36
3.7.3	Japan	37
4.	COUNTRY REPORTS ON TOP-8 MARKETS	39
4.1	USA	39
4.1.1	Basic demand factors and market drivers	39
4.1.2	Description of US furniture consumer	41
4.1.3	Description of domestic furniture industry	42
4.1.4	Production volume	43
4.1.5	Structure and location of industry	44

4.1.6	Major players	44
4.1.7	Main raw materials	46
4.1.8	Out-sourcing and networking among manufacturers	46
4.1.9	Quality standards and certification and labeling requirements, environmental management systems	46
4.1.10	Furniture market: foreign trade and apparent consumption	48
4.1.11	Imports from developing market economies and China	52
4.1.12	Market segmentation and regional demand breakdown	53
4.1.13	Market developments by type of furniture	56
4.1.14	Furniture style and design trends	59
4.1.15	Evolution of distribution patterns	60
4.1.16	Indicative price levels	64
4.1.17	Advertising and promotion	65
4.1.18	E-commerce and Internet-based marketing	65
4.1.19	Case studies	68
4.1.20	Useful contacts	69
4.2	Japan	71
4.2.1	Basic demand factors and market drivers	71
4.2.2	Description of domestic furniture industry	73
4.2.3	Production volume	75
4.2.4	Structure and location of industry	75
4.2.5	Major players	76
4.2.6	Out-sourcing and networking among manufacturers	76
4.2.7	Quality standards and certification and labeling requirements, environmental management systems	77
4.2.8	Furniture market: foreign trade and apparent consumption	79
4.2.9	Imports from developing market economies and China	80
4.2.10	Furniture style and design trends	81
4.2.11	Evolution of distribution patterns	83
4.2.12	Case studies	86
4.3	United Kingdom	89
4.3.1	Basic demand factors and market drivers	89
4.3.2	Description of domestic furniture industry	93
4.3.3	Production volume	93
4.3.4	Quality standards and certification and labeling requirements, environmental management systems	93
4.3.5	Furniture market: foreign trade and apparent consumption	95
4.3.6	Imports from developing market economies and China	97
4.3.7	Market developments by type of furniture	97
4.3.8	Evolution of distribution patterns	100
4.3.9	Advertising and promotion	100
4.3.10	Market entry	102
4.3.11	Useful contacts	103

4.4	France	104
4.4.1	Basic demand factors and market drivers	104
4.4.2	Description of domestic furniture industry	105
4.4.3	Production volume	106
4.4.4	Structure and location of industry	106
4.4.5	Major players	106
4.4.6	Main raw materials	107
4.4.7	Favored wood species and finishing techniques	107
4.4.8	Out-sourcing and networking among manufacturers	108
4.4.9	Technology level	109
4.4.10	Furniture style and design trends	110
4.4.11	Quality standards and certification and labeling requirements, environmental management systems	110
4.4.12	Furniture market: foreign trade and apparent consumption	111
4.4.13	Imports from developing market economies and China	112
4.4.14	Market segmentation and regional demand breakdown	112
4.4.15	Classification of furniture styles	113
4.4.16	Evolution of distribution patterns	114
4.4.17	Indicative price levels	116
4.4.18	Transport and packaging	116
4.4.19	Advertising and promotion	117
4.4.20	E-commerce and Internet-based marketing	117
4.4.21	Case studies	117
4.4.22	Useful contacts	119
4.5	Canada	119
4.5.1	Basic demand factors and market drivers	119
4.5.2	Description of domestic furniture industry	120
4.5.3	Production volume	120
4.5.4	Major players	120
4.5.5	Furniture market: foreign trade and apparent consumption	120
4.5.6	Imports from developing market economies and China	122
4.5.7	Market segmentation and regional demand breakdown	123
4.5.8	Evolution of distribution patterns	123
4.5.9	Advertising and promotion	124
4.6	China	125
4.6.1	Basic demand factors and market drivers	125
4.6.2	Description of domestic furniture industry	131
4.6.3	Production volume	131
4.6.4	Structure and location of industry	132
4.6.5	Major players	132
4.6.6	Production trends by type of furniture	132
4.6.7	Main raw materials	134
4.6.8	Out-sourcing and networking among manufacturers	134
4.6.9	Technology level	135

4.6.10	Quality standards and certification and labeling requirements, environmental management systems	136
4.6.11	Furniture market: foreign trade and apparent consumption	138
4.6.12	Imports from developing market economies and China	139
4.6.13	Market segmentation and regional demand breakdown	140
4.6.14	Favored wood species	141
4.6.15	Furniture style and design trends	141
4.6.16	Evolution of distribution patterns	143
4.6.17	Market Access	143
4.6.18	Indicative price levels	145
4.6.19	Transport and packaging	145
4.6.20	Advertising and promotion	146
Case 1.	Promotion and marketing in the Landbond Furniture Group	146
4.6.21	E-commerce and Internet-based marketing	149
4.6.22	Case studies	149
5.	COUNTRY REPORTS ON OTHER MARKETS	151
5.1	Spain	151
5.1.1	Basic demand factors and market drivers	151
5.1.2	Description of domestic furniture industry	151
5.1.3	Production volume	151
5.1.4	Structure and location of industry	152
5.1.5	Major players	152
5.1.6	Main raw materials	153
5.1.7	Out-sourcing and networking among manufacturers	154
5.1.8	Quality standards and certification and labeling requirements, environmental management systems	154
5.1.9	Furniture market: foreign trade and apparent consumption	154
5.1.10	Imports from developing market economies and China	155
5.1.11	Market segmentation and regional demand breakdown	155
5.1.12	Favored wood species and finishing techniques	156
5.1.13	Furniture style and design trends	156
5.1.14	Evolution of distribution patterns	157
5.1.15	Indicative price levels	158
5.1.16	Advertising and promotion	158
5.1.17	E-commerce and Internet-based marketing	159
5.1.18	Useful contacts	159
5.2	Italy	159
5.2.1	Basic demand factors and market drivers	159
5.2.2	Description of domestic furniture industry	160
5.2.3	Production volume	161
5.2.4	Structure and location of industry	161
5.2.5	Major players	161

5.2.6	Main raw materials	162
5.2.7	Favored wood species and finishing techniques	163
5.2.8	Industry competitiveness	164
5.2.9	Out-sourcing and networking among manufacturers	165
5.2.10	Technology level	165
5.2.11	Quality standards and certification and labeling requirements, environmental management systems	166
5.2.12	Furniture style and design trends	166
5.2.13	Furniture market: foreign trade and apparent consumption	167
5.2.14	Imports from developing market economies and China	168
5.2.15	Market segmentation and regional demand breakdown	169
5.2.16	Evolution of distribution patterns	169
5.2.17	Indicative price levels	170
5.2.18	Transport, packaging, after sales service	171
5.2.19	Advertising and promotion	171
5.2.20	E-commerce and Internet-based marketing	172
5.2.21	Case studies	173
5.2.22	Useful contacts	174
5.3	Denmark	174
5.3.1	Basic demand factors and market drivers	174
5.3.2	Description of domestic furniture industry	175
5.3.3	Production volume	175
5.3.4	Structure and location of industry	175
5.3.5	Major players	176
5.3.6	Quality standards and certification and labeling requirements, environmental management systems	176
5.3.7	Furniture market: foreign trade and apparent consumption	177
5.3.8	Imports from developing market economies and China	178
5.3.9	Favored wood species and finishing techniques	178
5.3.10	Furniture style and design trends	178
5.3.11	Evolution of distribution patterns	179
5.3.12	Indicative price levels	181
5.3.13	Advertising and promotion	181
5.3.14	E-commerce and Internet-based marketing	182
5.4	Sweden	182
5.4.1	Basic demand factors and market drivers	182
5.4.2	Description of domestic furniture industry	183
5.4.3	Production volume	183
5.4.4	Structure and location of industry	183
5.4.5	Furniture market: foreign trade and apparent consumption	183
5.4.6	Imports from developing market economies and China	185
5.4.7	Furniture style and design trends	185
5.4.8	Evolution of distribution patterns	186

5.4.9	Advertising and promotion	187
5.4.10	Case studies	188
5.4.11	Useful contacts	191
6.	SPECIAL CHAPTER I: FUTURE OF PLANTATION WOODS IN THE FURNITURE MAKING	192
6.1	Wood quality assessment	192
6.2	Eucalyptus	193
6.3	Radiata Pine	194
6.4	Suitability for Laminated Solid Wood Panels and Finger-Jointing	194
6.5	Suitability for Furniture and Components	195
6.6	The marketing factor	195
6.7	Conclusions	196
7.	SPECIAL CHAPTER II: TECHNICAL STANDARDS IN THE FURNITURE SECTOR	196
7.1	Overview of furniture standards	196
7.2	Comparison of standards	198
7.3	Harmonization	198
7.4	Conclusions	201
8.	SPECIAL CHAPTER III: OVERVIEW ON INTERNATIONAL AND NATIONAL CERTIFICATION SCHEMES IN THE FURNITURE SECTOR	201
8.1	Product Certification	201
8.2	Environmental Management System Certification	201
8.3	Forest Management Certification	202
8.3.1	Forest Stewardship Council	204
8.3.2	Pan-European Forest Certification Framework	205
8.3.3	Initiatives for Mutual Recognition of Forest Certification Schemes	205
8.4	Chain-of-custody certification	206
8.5	Certification of corporate social responsibility	208
8.6	Sustainability reporting	209
8.7	Trends in labeling	209
8.7.1	CE Marking	209
8.7.2	Product Labeling	209
8.8	Ecolabeling	211
8.9	Sustainable Forest Management Labeling	212
8.9.1	Forest Stewardship Council	212
8.9.2	Pan-European Forest Certification	214
8.9.3	Keurhout Foundation	215
8.10	Conclusions	216
9.	SPECIAL CHAPTER IV: USE OF INTERNET AND E-COMMERCE IN THE FURNITURE SECTOR	218
9.1	Acknowledgement	218
9.2	Overview of the market	218
9.3	International trade	218
9.4	Internet and purchasing of household furniture on-line	218

9.5	E-procurement	219
9.6	Business-to-business	220
9.7	Showcase sites	222
9.8	Business-to-consumer	223
9.9	Portals and directories	225
9.10	Business solutions	227

1. EXECUTIVE SUMMARY

1.1 Status, trends and future prospects of world's furniture markets

Big consumers and producers

- The estimated apparent consumption of all furniture (at trade prices) in the USA was \$64.1 billion in 2001. Half of that (\$23 bill.) was made up of domestic factory shipments, and wooden furniture was holding \$11 billion share.
- The European Union was responsible for one half of the world furniture output (\$73.6 billion) and consumption (\$74.5 bill.). The EU hosts both major consumer markets (Germany, the UK, France) and the world's leading exporters (Italy, Germany).
- Germany is still the leading EU country both as consumer (at \$28.7 bill.), producer and as organized distribution power. Economic slowdown has affected imports and consumption in the recent year, however.
- Italy's furniture retail market is estimated at (\$10.1 bill.). Italian output value of furniture industry was \$17.6 billion.
- Based on trade figures and domestic production, the Japanese apparent consumption of wooden furniture would be in the range of \$13-14 billion. As the domestic output appears to shrink further, imports will come to play a more prominent role, helped by the infusion of "foreign" styles into the Japanese homes.
- China is an major emerging player in the world's furniture industry. Furniture is now one of the fastest growing export sectors in China. The Chinese figures on all types and materials of furniture give a production level of \$14.5 billion, minus net exports of \$3.8 billion, and the apparent consumption at around \$10.7 billion. Imports are still negligible.

World trade picture

- International trade in wooden household furniture has liberalized, thereby increasing the import component of consumption, and this has created more export opportunities for developing countries.
- World trade in wooden household furniture and parts was measured at \$32.1 billion in 2001, compared to \$26.0 billion in 1997 (imports at current values).
- Trade peaked in 2000 at \$33.0 billion, but then deteriorated along with the slowdown of the major economies. The average growth rate in imports was 5.4% between 1997-2001.
- Furniture parts, which comprise all materials, were traded worth \$4.5 billion, leaving the trade in wooden household furniture at \$27.5 billion in 2001.

Major importers

- The leading 35 industrialized countries forming the OECD imported 90% (\$25.5 billion) of the world total in 2000.
- Around \$9.6 billion of OECD imports originated from developing market economies and China. This DMEC group took 38% of total OECD imports.

- The world trade is fairly concentrated, as eight countries import at least \$1 billion worth of wooden furniture and parts (and Canada just below that figure).
- The top-eight importers accounted for \$24 billion of trade, or 75% of the world total in 2001.
- United States was by far the biggest market, with imports just below \$10.7 billion in 2001. Other major markets were Germany (\$3.3 bill.), France (\$2.6 bill.), the UK (\$2.3 bill.) and Japan (\$1.9 bill.). Germany was exceptional, as it was the only market with a consistent decline since 1998. All other major markets - France and the UK in particular - showed a growth trend in imports between 1997-2001.
- In all major markets, furniture imports from the DMEC have grown faster than overall imports. Influx of products from China is the single most important reason behind this development. Also deliveries from other South-East Asian countries have been on a steady rise, as also from Mexico and Brazil.

Product Trends

- The biggest product group in global imports was “other” wooden furniture (35% of total), comprising living/dining room furniture, small-occasional furniture, shop furniture and other miscellaneous items. Total import growth 26% at 5.9% annual rate between 1997-2001.
- Seats with wooden frames was the second largest import item (22%). Seats had a 5.4 % annual growth rate, which resulted in 23% total growth in imports between 1997-2001.
- Furniture parts of all materials (14%) and wooden bedroom furniture (13%) captured the next largest shares of trade. Bedroom furniture trade grew at the fastest pace (37% between 1997-2001 and 8.3% per year). Imports of furniture parts grew at 4.7% annual rate.
- Wooden office and kitchen furniture both held 6% shares of world imports. Lower growth rates (3-4% annually) were seen in these product groups.
- The remaining 4% of trade was split between seats of cane, osier, bamboo, etc. (1%) and furniture of other materials like bamboo (3%). The seating sector performed badly, and imports declined on average 1.9% per year.

Consumers change

The growth of the furniture market relies on reducing replacement cycles, stimulating consumers to buy new furniture before their existing furniture is worn out. Media coverage has come to play a bigger role, especially via television programs. Especially in Europe, TV specials are used to prepare the market by raising interest in home interior design and, therefore, prompting more consumers to buy new furniture purely for design reasons. This has also increased demand for a wider variety of products.

Furniture purchases compete with other discretionary spending on goods, and can be easily deferred as it is generally not an essential purchase. As a result, the performance of the household furniture market is dependent on the general economy as a whole, the level of house building and moving-renovation activity. Changing house often triggers the purchase of replacement furniture, even from consumers who are not first-time buyers. Those consumers setting up home for the first time will usually purchase a wider range of household furniture.

The number of single-person households has increased rapidly in the major markets of Europe. This is due in part to longevity, the decline and postponing of marriages, and the rise in separation and divorce. Single-person occupancy households are likely to be smaller than family homes, and may not contain a separate dining room, etc. They will therefore have different furniture needs, requiring multifunctional and space-efficient furniture.

The 'think cubic' promotional view for 2002-2003 is a case in point. Demand has risen for multifunctional and space-efficient furniture, while the market is declining for the traditional three-piece suite and large dining tables.

1.2 Observed market opportunities

The major market is no doubt **the US** wooden household furniture, which has become accessible for foreign furniture. The opportunities are often described "endless", but unless the required design, manufacturing and finishing infrastructure exists, plus easy container shipping access with swift feeder transport, then the chances of a strong market presence must remain slim. Observations:

- Countries once famous for exports (newly industrialized economies -NIEs -of Asia) are now declining in share and volume, in contrast to the growth of China and the strong level of investment placed there by the US companies. Growing outsourcing of semi-finished products and components by the United States furniture industry has been a key driver for this trade.
- The US imports have been growing at the fastest pace in the wooden bedroom furniture. Also "other" (living/dining room, small-occasional, shop furniture), parts and components and kitchen furniture (cabinets) have recorded healthy gains in imports.
- Occasional furniture, seen as small tables, wall stands and accent pieces, offer many new unique looks. They are dominated by imports as they are easier to ship in volume and provide new designs swiftly.
- Wider application of information technology and home/distance working calls for larger entertainment storage units and "concealed" home office furniture plus desks and shelving systems.

In Europe, the best product opportunities have been identified in the following types of furniture: ethnic-design furniture for bedrooms and living rooms and small accent items, RTA (ready-to-assemble), home office, small/occasional, and furniture for children and the elderly. Multifunctional, space-saving and flat-pack furniture are all likely to achieve a higher growth rate across the furniture ranges.

For example in the UK, the living room sector is performing well as the new home-entertainment technology seeks better storage solutions away from metallic and plastic stands for the equipment. The home-office sector is seeing growth, spurred by changing working styles and the rise in home computer ownership.

In Europe, the furniture out-sourcing activity has centered around the Eastern European countries, what is one reason for the lower import penetration from Asia and Latin America, as compared with the US.

In Japan, the continuing diversification of demand and imports has made part of the Japanese furniture market well beyond the capabilities of the local industry. Import penetration is likely to grow, with the consumers becoming more discerning about actual quality rather than simplistically using price as a guide as before. They are now more ready to accept "pricing that is justified by quality". More varied demands have also been expressed for products suiting individual lifestyles, color and design preferences.

The Japanese homes have remained small, what is calling for smaller sized furniture, corner furniture, legged furniture, together with hanging storage like closets and dressers. On the other hand, the traditional simplicity found in the Japanese kitchen/dining area has given away for more diverse kitchenware and tableware. This creates demand for larger tables and cupboards.

1.3 Guidelines for product and market development

The market realism indicates that wooden household furniture fashions remain volatile: what is "in" for this year may vanish in the next year. Basic problem is that while investments should be planned long-term, furniture markets and fashions live on a faster lane. New collections will have to be created on shorter intervals in order to keep pace with the market opportunities. Flexible production through producer networks ought to be the solution, but how does it work? The following case provided by Dr. J. Ratnasingam of University Putra Malaysia provides some answers.

Comparison of networking in furniture manufacturing: Malaysia vs. Taiwan (P.O.C)

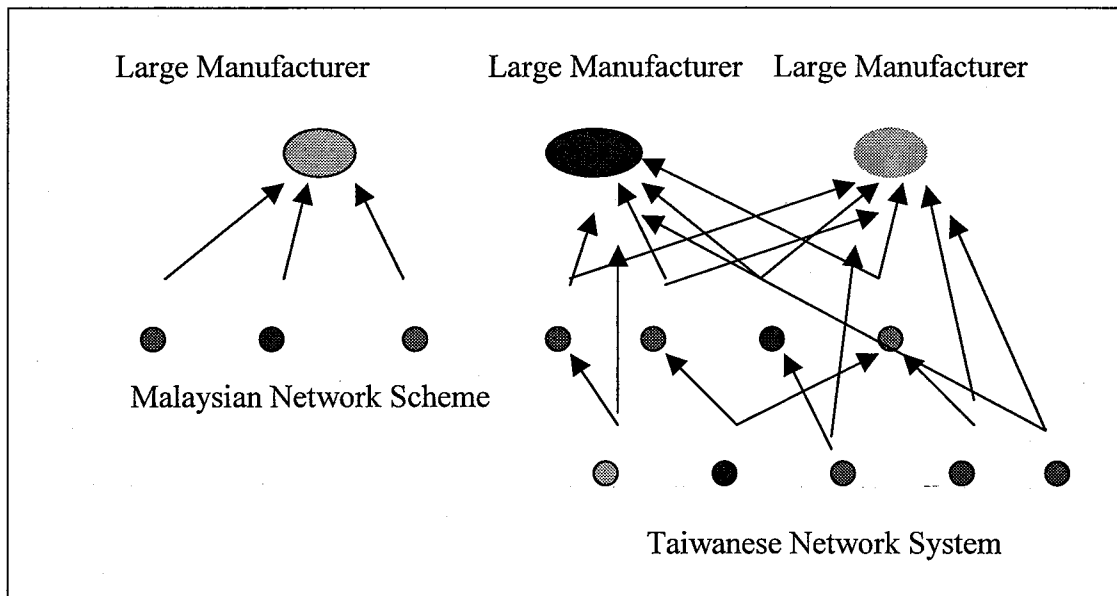
The rapid expansion of the Malaysian furniture base has been attributed to the extensive networking or sub-contracting activities prevailing in the industry. Such a practice enables economies of scale and a spread of overhead, which provides cost competitiveness.

Although networking is extensive in the industry, the activity is confined to the supply of semi- finished components/parts and finishing and services. Most of these sub-contractors are ex-employees of the large manufacturer and they are supported both financial and business wise by their previous employer. Hence, sub-contracting is very client-specific in the industry. Such a network enables economies of scale to prevail but retards expansion of the value chain. The risk of such a scheme is that when the large manufacturer suffers, as seen during the recent regional financial crisis 1997-1998, many of these sub-contractors also went out of business. The reasons that hinders the development of industrial network are:

- The ex employer-employee loyalty exhibited by most sub-contractors;
- Highly geared towards economies of scale, where the network is used to reduce cost through higher volume output, with little product diversification;
- The low entry barrier into the industry has created many sub-contractors who are essentially traders, creating intense domestic rivalry;
- The value chain is not extended beyond the supply of semi-finished parts and components.

The nature of networking practiced in Malaysia is a stark contrast of the network found in the Taiwanese furniture industry. In the latter, the industrial network not only provides for economies of scale, but it also allows product diversification. As a result, the value chain in the Taiwanese industrial network is extended beyond the mere supply of semi-finished parts and components, but it also indulges into design and new product development. The fact that the industrial network is not client –specific as in Malaysia, allows the network in Taiwan to carry out a variety of tasks aimed at creating competitive alliances (see figure below). Furthermore, the networking in the Malaysian furniture industry is very often single layered (i.e. offering one particular service/component), while the networking in the Taiwanese furniture industry is multi-layered. Hence, the value chain is extended much further in the Taiwanese furniture industry. It goes to show that although there is networking within the Malaysian furniture industry, its effectiveness in creating competitive advantage is highly questionable.

Figure 1.1 Furniture industry networking in Malaysia and Taiwan (P.O.C.)



Changing industrial concepts

Faced with the catch-all attitude and empowering scale of the Chinese furniture industry, the way forward for emerging tropical exporters would be to take the necessary steps to move away from the strategy of original equipment manufacturing (OEM) towards original design manufacturing (ODM) and ultimately to original brand manufacturing (OBM). Step-wise the development path is the following:

1. Low-cost furniture and components are typically OEM segments, where high-speed automated moulders and other high-tech machines are used with limited product design ambitions. Therefore, the production factor costs need to be pushed to the minimum (and maintained) in order to stay competitive.

2. Once this road to success has come to an end owing to lower-cost competitors designing more original products becomes a necessity in moving up in the value chain. Copying designs from competitors or from catalogues no longer confers lasting competitive edge. Moving to original design manufacturing is warranted, and it is currently taking hold in the furniture industries of the leading tropical countries.
3. But the remaining third level of sophistication, original brand manufacturing, has remained an elusive target for most of the tropical countries. Marketing of branded furniture is, however, of growing importance in the international markets, and foremost in the highest-value segments. Not surprisingly, this top-market has remained best in the hands of domestic manufacturers in Europe and North America, where branding is part of the business philosophy

1.4 Strategic advise for developing country suppliers

Development Trends

- Value-added processing (furniture in particular) tends to develop in phases, whereby industries move from manufacturing of standardized products towards originally designed products with higher value, and ultimately to branded products.
- Competition will force the industrialized countries to transform their manufacturing industries and participate in the supply chains from cost-competitive regions like Asia and Latin America.
- Increasing trade in wooden furniture creates new trade flows of primary processed products from the industrialized countries to those developing countries that sustain a potent, cost-efficient secondary processing industry with export orientation, or are scarce with wood raw material (e.g. Thailand, the Philippines, China).
- The contribution of wooden furniture to the forest sectors of tropical countries will continue to grow rapidly in the coming years, with corresponding reductions in exports of primary tropical timber products.
- The overall balance of furniture making is likely to move in favor of the Southern hemisphere, where a green “wall of wood” is maturing in plantations of Oceania, Asia and Latin America.
- In order to capture the benefits of this opportunity, the developing countries should overcome potential threats, such as the economics of logistics, low productivity and efficiency, quality control, and the quality (skills, retention) of labor. Too much of the export growth is master-minded by traders in the industrialized markets, through out-sourcing and made-to-order furniture purchasing.
- The fact that furniture manufacturing can thrive on even lower technologies, implies that the development of this industry can take place in more and more developing countries that have ample production factors.
- It is possible to emulate the success of the leading exporters of Asia in other countries, provided that they have the initial potential for furniture manufacturing, i.e. the factor endowments and industrial policies are in place.
- However, beyond the two initial phases (import substitution and export oriented growth), there will be a need to approach the furniture industry differently to ensure greater value addition, sustained growth and product diversification

through continuous innovation, flexible manufacturing systems and skilled designs.

How to capitalize on the trends

1. Competitive prices, prompt deliveries and after-sales service are needed in entering the lower segments of furniture markets. This holds true particularly when delivering larger volumes for buying groups or big chain stores. Increasingly, also manufacturers are starting to act as importers of made-to-order furniture.
2. Sizes of furniture need to be matched to meet the different requirements in Japan, Europe and the USA. While furniture for the American consumer tends to be larger in dimensions, smaller items for 1-2 person households may hold more realistic opportunities in Europe. In Japan, the living spaces per person have declined due to more offspring living with parents, hence the growing need for small, corner, and occasional furniture.
3. Creating original designs is necessary for moving to higher price points. Design should provide real added value to the product. Most of the policies adopted by tropical countries are geared towards providing comparative advantage to the furniture industry, i.e. low-cost production factors. Unless there is a policy for encouraging creativeness and continuous innovation, value enhancement would be best undertaken by private-private initiatives, lead by market forces.
4. Authenticity and material knowledge should be made to work for competitiveness of tropical furniture. Distinct handwork should serve rather as an “added quality component” than as integral part of the furniture structure.

How to approach investors?

Required is an objective and realistic audit of the fundamentals of what a developing country is ‘offering’. It should cover:

- Full materials availability, quality and source, along with environmental aspects of the use and handling at source and in furniture manufacturing,
- a willing skilled or trainable workforce, able to work without undue vacation or inclement weather down-time,
- tax benefits, labor costs, quality benefits, infrastructure investments, grants,
- easy and able cost-effective in-land transport linked to e-commerce systems,
- access to good, cost effective and regular container shipping with swift electronic response to the customer enquiries and manufacturing prowess.
- An expertise in management and a commitment to respond to customer needs and commit to a profitable exporting capability.

These are the criteria for presenting an industry prospectus to investors and buyers in the target countries. The audit and prospectus can be done at country, regional, town or industrial center level, as well as with individual companies.

1.5 Implications of quality standards and certification & labeling for developing country exporters

Standards

The objective of standardization is to ensure that all furniture available on the market is safe to use and of solid and strong construction. Therefore, standardization as such can hardly be considered harmful for outside suppliers – such as those from tropical countries.

Manufacturers normally use the standards voluntarily in their product development, process control, and marketing. Having a common language on test methods, dimensions, safety and strength characteristics is considered as a major benefit of a furniture standard.

There are over 140 furniture-related standards and labeling requirements in the United States and Canada. Most standards are voluntary but some are regulated by state or federal laws. The European Committee for Standardization (CEN) is responsible for the harmonization of standardization in the European Union. CEN has 20 national members, which are also national standards bodies.

The EN standards on furniture are not meant to serve protectionist aims. On the contrary, they are proposed as a basis for wider international work on furniture standards by ISO/TC 136 “Furniture”. At the international level, harmonization is implemented by the International Organization for Standardization (ISO). ISO is a worldwide federation of national standards bodies from more than 140 countries. Its mission is to promote the development of standardization and related activities in order to facilitate international trade and cooperation. ISO’s work culminates in international agreements published as international standards. In the furniture sector, ISO has published 24 standards.

The national standards institutions in the ITTO producer countries are split between ISO members, ISO correspondents and ISO subscribers. Apparently, their capabilities to implement ISO remain mixed. Very few ITTO countries have ISO certifying bodies which can issue certificates of compliance with ISO 7173 (chair standards for strength and durability), for example.

Certification and labeling

When it comes to individual buyers – whether institutional, industrial or, private – the decisive considerations regarding the buying decision will be based on the values the individuals in question. Certification and labeling may (or may not) be part of such values.

Institutional buyers (public building and construction segment demanding for furniture of public premises, offices, schools, etc.) often have procurement policies that include requirements on product quality, which may be specific to the institution in question. In addition to laying out bidding procedures, these policies may include special conditions on environmental load, packaging and transportation, possibility to

repair and recycle, etc. Increasingly, the demand for using certified wood is being incorporated into public procurement policies and criteria.

Commercial and industrial enterprises (their building and construction projects, hotel, office and shop furniture, etc.) are more likely to put emphasis on the safety, quality, functionality, and construction of furniture than on environmental or social aspects of furniture making. This is natural, as these organizations are more familiar with such day-to-day business needs as avoiding product liability suits and finding new contracts.

Retailers in the consumer market (mainly household furniture, ready-to-assemble furniture, small occasional furniture, garden furniture, etc.), on the other hand, must be more sensitive about the “softer” values. In order to ease their customers’ concerns, some furniture chains have developed environmental management systems and to a certain extent monitor the origin of their products and raw materials or may give preference to certified wood.

A furniture exporter from a tropical country will most likely one day confront requirements that he should prove his raw material does not come from illegal sources or he does not contribute to desertification or to the debilitation of forests. The safest bet to curtail such claims would be to obtain a chain-of-custody certificate from the FSC. This, of course, is impossible if there is no FSC-certified supply available. Any other forest management certification scheme might do as well, but the credibility – the buzzword for market acceptance – of the other systems might not be so readily established as the FSC’s.

It is recommended that a potential new furniture exporter from a tropical country discuss with the potential buyers (buying groups, wholesalers, importers, traders, etc.) what their requirements are and deal with that. It is also recommended that the producer not obtain any label or certificate expecting that it will automatically open all the doors – it won’t. It is important to understand that not having a certain label or certificate won’t close the doors, either. As discussed earlier, certification might give an edge in marketing or in the entry to a specific market, but the decision to obtain one should be based on the values of the organization or *known* client requirements.

The more alert – or responsible – companies may be the ones to reap the greatest benefits, but that is not to say that the indifferent – or just plain irresponsible – ones will be forced out of business. At the end of the day, despite all the efforts for the standardization, certification, verification, and assurance of quality, environmental performance, social accountability, or any other aspect of corporate behavior, there will always be markets where anything goes.

1.6 Recommendations

1.6.1 Recommendations to ITTO

1. Set up informal networks to facilitate regular information exchange, to improve access to the existing databases and knowledge centers on furniture quality and standards, training, technology transfer, design, marketing and trade.

2. Commission analytical case studies on furniture export supply chain management and value/profit chains for improving the market transparency.
3. Help the producer countries to realize the full potential of more accurate trade statistics and harmonization of product standards.
4. Help tropical producers to become innovative in the marketing and promotion of furniture, and assist in making certification of plantation wood products work for the expansion of exports.
5. Encourage smaller furniture makers to network more closely on the local level.
6. Assess possibilities to connect African producers better into global furniture out-sourcing business, with special emphasis on South-South partnerships, socially responsible investments, export-led poverty alleviation and fair/ethical trade.
7. Commission studies on regional/domestic furniture markets in Africa, Latin America, and Asia.
8. Identify the technical problems associated with the furniture-making with plantation timbers, and carry out appropriate R&D programs to overcome such problems.
9. Together with other international/regional organizations, organize regular workshops on tropical furniture industries in the producer regions.
10. Strengthen the ITTO MIS (Market Information System) to feature more in-depth the furniture market developments.
11. Improve the national capacities of smaller member countries to carry out furniture sector planning and market orientation.

1.6.2 Recommendations to Governments

- Improve the existing public information bases (on markets, products, standards).
- Hold furniture manufacturing as a major policy goal for export expansion because of economic, social and resource allocation benefits (high value added, high employment, potential location in disadvantaged areas).
- Provide initial support for the sector by means of e.g. investment incentives, enabling policy instruments, trade promotion activities, and restriction on export of commodities, which will spur the growth of an export oriented furniture industry.
- Channel public support to infrastructure development, establishment of industrial estates, and institutional support services, for the ultimate aim of rationalizing the manufacturing base.
- Guide the industry also beyond the two initial phases (import substitution and export oriented growth), so as to ensure greater value addition, sustained growth and product diversification; find policies to foster continuous innovation, flexible manufacturing systems and skilled designs.
- Promote foreign investment as a means to boost exports (access to distribution channels and customers, technology transfer, design and product development).
- Encourage the furniture sector take advantage of the preferential import promotion programs of wooden furniture from developing countries (e.g. in Switzerland, the Netherlands, etc.).

1.6.3 Recommendations to trade and industry sectors

- Analyze the potential benefits from wooden furniture industry clustering, supplier networking and component out-sourcing as a building block for competitiveness.

- Strengthen internal coordination and cooperation in promoting the interests of the furniture sector, through a joint forum.
- Help the furniture industries prepare strategies in light of substitution between tropical natural wood, plantation woods, and non-wood substitutes, including bamboo and rattan. Take inventories of innovative new materials.
- Create and implement industry training programs on furniture manufacturing processes, management skills and design. Embark on human resources development funds, skilled worker training programs, and ensure proper labor retention.
- Focus product development efforts on “total quality” (particularly control of raw material quality, precision, finishing, fittings and design) as key factors of success.
- Create and maintain a roster of specialized consultants on wooden furniture manufacturing, trade and design.
- Provide direct technical assistance to the business sector (enterprise-level) to enable it to take advantage of emerging export opportunities; this could include market orientation tours, design networks, business skills, negotiation skills with big buyers, etc.
- Facilitate systematically efforts by the industry to know its customers and have direct access to them rather than continuing reliance on (too many) intermediaries; an internationally targeted furniture exhibition and joint export campaigns could be part of such an effort.
- Launch initiatives to adopt Internet-based marketing of wooden furniture better into competitive strategies of the industry.

2. INTRODUCTION

2.1 Origin of the Pre-Project

In April 2000, ITTO commissioned a study **PPD 25/99 (I) *Status of Further Processing of Tropical Timber in Producing Countries*** in collaboration with the International Trade Centre UNCTAD/WTO (ITC). This study offered an ITTO producer country-wide supply outlook on further processed wood products. Regional overviews and detailed data on key producer countries were presented on wooden furniture, builders' joinery and carpentry and profiled wood. A broad global outlook was presented on demand trends for these products on international markets.

The study identified several possible lines for future action in pursuing the development of tropical timber further processing in ITTO producer countries. It was noted that there had been a significant increase in the openness of the wooden furniture sector and its markets had undergone significant changes over the past decade. Noting that there was an urgent need to conduct an in-depth study on wooden furniture products and markets where tropical timber producing countries are likely to be competitive, the Committee on Forest Industry decided to implement a pre-project by the ITTO Secretariat to conduct detailed market research on wooden furniture in the main consumer countries as a follow-up to PPD 25/99 (I). The new pre-project PPD 25/01 (I, M) was entitled ***Review of International Wooden Furniture Markets***, and it was officially endorsed at the 29th Session of the Committee on Forest Industry of ITTO in Yaoundé in 28 May – 2 June, 2001 with adequate budget ramifications.

The proposed new project is intended to take stock of a joint publication between ITTO and ITC entitled ***Wooden Household Furniture: A study of Major Markets***. This report dates back to 1990 and the re-visiting to the subject has been long overdue. The old report serves as a useful background document, but not as an outright model for re-writing an update. At the time of its publishing, that report was paving the way of the structural change of global furniture trade, and particularly it was encouraging the fundamental move to large-scale outsourcing of components and semi-finished furniture from developing countries.

2.2 Purpose of the Pre-Project

This pre-project is one of the spin-off ideas from PPD25/99 (I) for continuing ITTO's work in the field of further processing of tropical wood. The given Terms of Reference identify the main purposes of the new pre-project as follows:

1. The provision of an in-depth market study on wooden furniture and on those products and markets where tropical timber is likely to remain competitive.
2. Help tropical producer countries to interpret this information for the maximum benefit of their manufacturing industries.

2.3 Scope of Work

The scope of the work is divided into five main tasks in the Terms of Reference:

- A. Review the status and trends in the international wooden furniture markets with regard to consumption of wooden furniture and the wooden furniture industries, taking into account the report entitled “Wooden Household Furniture: A Study of Major Markets”, which was published in 1990 by ITTO in collaboration with the International Trade Centre UNCTAD/WTO.
- B. Assess the outlook for wooden furniture, including bamboo and rattan, into the 21st century, providing a view of products and markets where tropical timber producing countries are likely to be competitive.
- C. Analyze quality standards and labeling requirements in the major wooden furniture markets and their implications for manufacturers in producer countries
- D. Consider possible actions that ITTO, member governments and the trade and industry sectors could undertake to enhance their work related to the development of the wood furniture industry in producer countries for the high-value end of the market.
- E. Prepare and present for the consideration of the Committee on Forest Industry the inception/interim report at its Thirtieth session (during the Thirty-second Session of the International Tropical Timber Council in Bali, Indonesia, 13-18 May 2002) and the draft final report at its Thirty-first session (during the Thirty-third Session of the International Tropical Timber Council in Yokohama, Japan, 4-9 November 2002).

2.4 Implementation Strategy

The key elements forming the ITC approach to the pre-project implementation as summarized below:

- Take stock on the 1990 ITTO/ITC report entitled Wooden Household Furniture: A Study of Major Markets.
- Adopt relevant parts of the previous report for updating and revisions (e.g. continue to provide information according to main types of wooden furniture as defined in the report).
- Include an extended world overview chapter.
- Widen the geographical coverage of the previous report (USA, Japan, six western European countries) to incorporate emerging markets, namely:
 - China (as a major player on furniture supply side but also a growth market itself);
 - a larger number of traditional European/North American markets, which imported wooden furniture for more than US\$ 50 million from developing countries in 2000: Australia, Spain, Ireland, Denmark, Sweden, Canada;

- and non-traditional markets in the Middle East (mainly Saudi Arabia, Egypt, United Arab Emirates).
- Deepen the methodology applied in the previous report in order to bring its contents up-to-speed in today's dynamic market conditions.
- Use the highest quality consultant force, including the main author of the previous report.
- Utilize the COMTRADE and other trade data on furniture.

2.5 Methodology of the Pre-project

The work required to achieve the expected outcome of this pre-project will consist of:

1. Review of project-related documents and materials provided by ITC, ITTO and other sources.
2. Detailed work plans and scheduling of fieldwork and reporting of Consultants to ITC.
3. Extraction and distribution of the key export/import statistics from COMTRADE by Project Manager and Statistical Assistant of the Market Development Section at ITC.
4. Preparations for fieldwork: checklists of key questions in order to keep interviews consistent
5. Fieldwork missions to the European, North American, Japan and China. Consultants were fielded in two phases according to ITTO's transfer of project funds to ITC. For budget reasons, only fieldwork that was considered of vital importance for the study was carried out.
6. Preparation of the first inception/interim report, which established the study approach on the basis of detailed work plans of Consultants and their fieldwork.
7. Submission and presentation of the inception/interim report at ITTC 32nd Session in Bali, Indonesia (13-18 May, 2002).
8. Taking into account the revisions and recommendations given by the ITTO Secretariat, the Committee on Forest Industry and Committee on Economic Information and Market Intelligence, and country delegates. Refinement of the information and preparation of the final draft (synthesis) report, which will include statistical and market analysis, country reports, case studies by Consultants, and Executive Summary with conclusions and recommendations for ITTO, member governments, and trade and industry sectors. Relevant standards and labeling issues were clarified in major markets, and implications for developing countries assessed.
9. Submission and presentation of the draft final report at ITTC 33rd Session in Yokohama, Japan (4-9 November, 2002).
10. Final revisions and submission the final report to ITTO (15 December, 2002).
11. Preparation of an article for the ITTO Tropical Forest Update (TFU), containing an overview of the projects and summarizing the conclusions and recommendations. Appropriate photographs will be provided.

Note: This draft report is still incomplete as it comes to describing the global economic and population trends, and related to this, the projections for future market consumption and imports. Germany, the Benelux countries, Ireland and Australia are lacking from the individual country reports. The Middle East market section with a country report on Egypt was omitted.

All these gaps will be filled in the revised final report.

3. WORLD OVERVIEW

3.1 World furniture production

World furniture production is estimated to be worth around US\$180 billion a year. Around 60% of world's furniture production takes place in just seven industrialized countries: the US, Germany, Italy, France, the UK, Japan and Canada. The European Union produces an estimated \$73 billion a year, while the United States is the biggest single producer with around \$25 billion output. The US figure does not take into account the manufacturing of contract and company office products (\$15.4 bill. 2000), which would increase the US output to more than \$40 billion. Italy, Germany and Japan are trailing with almost equal \$17-18 billion production levels. France, the UK and Canada all record output levels between \$5-7 billion.

The output value of China's furniture industry amounts to around \$11 billion. After that, Mexico, Poland, Indonesia, Malaysia, Thailand, the Philippines, Brazil and others follow. Around one fifth of the world furniture production comes from the developing countries.

3.2 Trends in world trade by major types of wooden furniture

3.2.1 World Imports

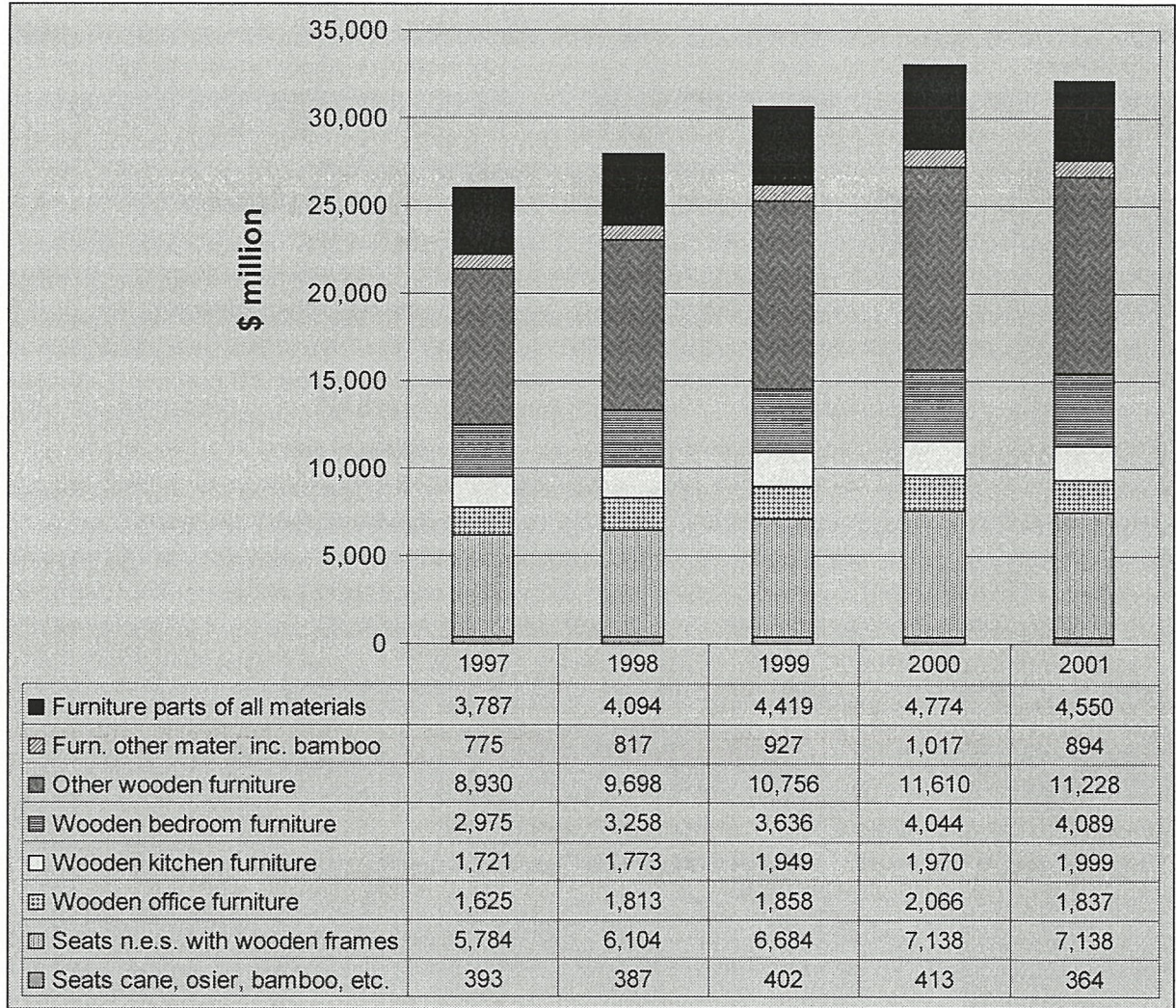
According to COMTRADE database by United Nations Statistical Division (UNSD), the world imports of wooden furniture and parts reached \$32.1 billion in 2001, compared to \$26.0 billion in 1997 (on current values). Trade peaked in 2000 at \$ 33.0 billion, but then deteriorated along with the slowdown of the major economies. The average growth rate in imports was 5.4% between 1997-2001.

The two major product groups in global imports were "other" wooden furniture (35% of total) and seats with wooden frames (22%). Furniture parts of all materials (14%) and wooden bedroom furniture (13%) captured the next largest shares of trade. Wooden office and kitchen furniture both held 6% shares of total trade. The remaining 4% of trade was split between seats of cane, osier, bamboo, etc. (1%) and furniture of other materials like bamboo (3%).

Bedroom furniture trade grew at the fastest pace (37% between 1997-2001 and 8.3% per year), followed by "other" furniture (total growth 26% at 5.9% annual rate). Wooden seats recorded a 5.4 % annual growth rate, which resulted in 23% total growth between 1997-2001. Imports of furniture parts grew at 4.7% annual rate. Lower growth rates (3-4% annually) were seen in other product groups. Seats of cane, osier, bamboo, etc. performed badly, and imports declined on average 1.9% per year.

This represents the overall import figure by all reporting countries from all partner countries. For the purpose of producing useful information for ITTO producer countries, the following chapters concentrate on those leading markets where imports showed relatively good prospects for the developing country suppliers. It should be noticed that some relatively big importers like Switzerland, Austria, and Norway are excluded from this report due to their very small shares of imports (2.5%-6.5%) arriving from the developing market economies (and tropical countries).

Figure 3.1 World imports of wooden furniture by product groups



3.2.2 Leading Importers

The world trade in wooden furniture and parts is fairly concentrated. The first group of countries all import at least \$1 billion worth of wooden furniture and parts (and Canada just below that figure). The top-eight importers accounted for \$24 billion of trade, or 75% of the world total.

United States was by far the biggest market, with imports just below \$11 billion in 2000 and 2001. Other major markets were Germany, France, the UK and Japan. Germany was exceptional since its imports declined from record \$ 4.0 billion in 1998

to \$3.3 billion in 2001. All other major markets - France and the UK in particular - showed a growth trend in imports between 1997-2001.

After these leading importers, the other nine countries identified for this report imported some \$2.6 billion combined, which was 8% of world imports. This group was headed by Italy and Sweden, both showing close to half a billion dollars of imports. Spain was a rising importer in 2001, and reached \$450 million level together with Denmark. Australia (\$303 mill.), Saudi Arabia (\$209 mill.) and Ireland (\$203 mill.) followed. China is still considered a minor importer with \$62 million incoming deliveries in wooden furniture, but the country naturally remains one of the biggest consumer markets and a good potential exists for growing imports over time.

Figure 3.2 Top-8 countries: total imports of wooden furniture and parts

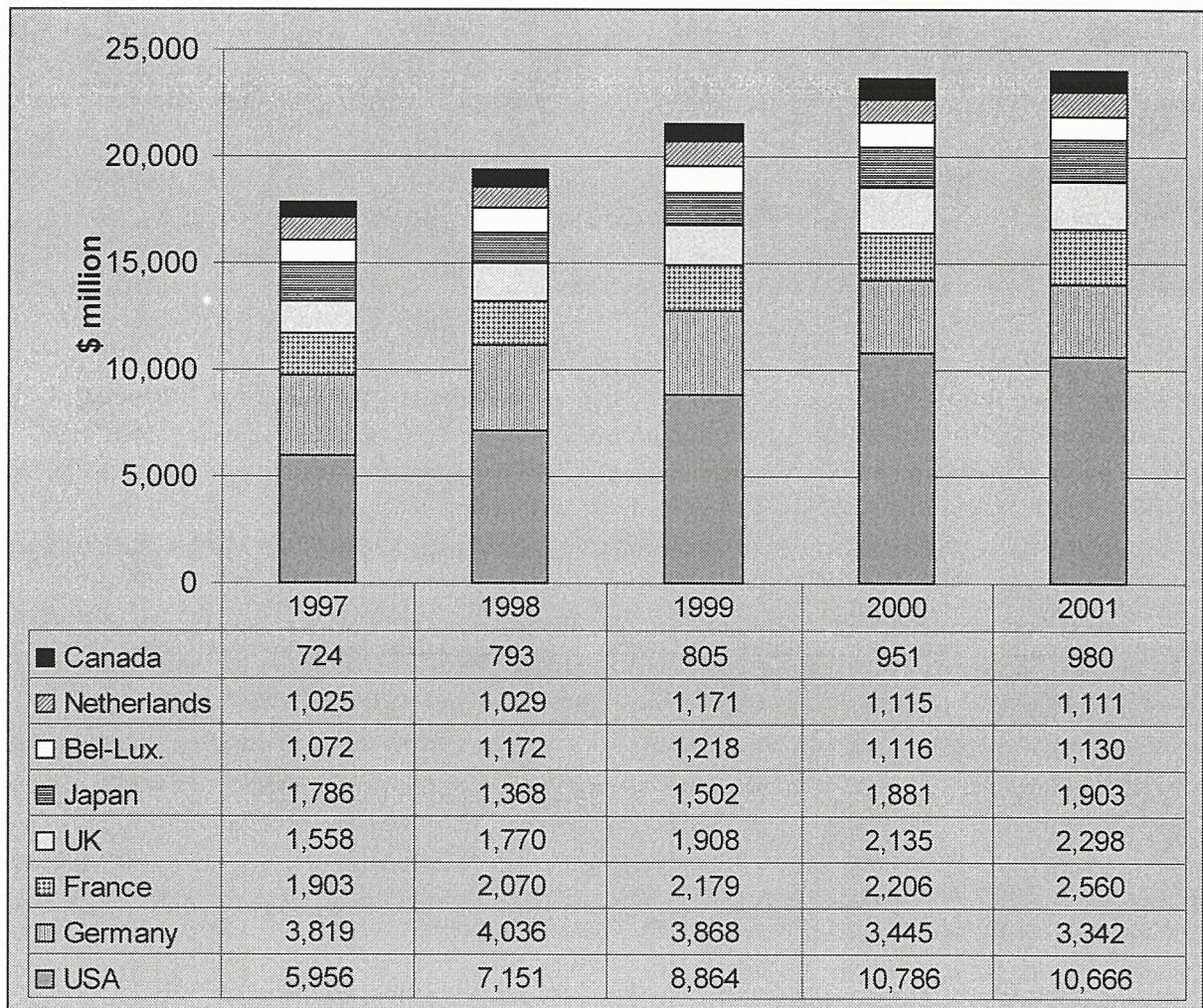
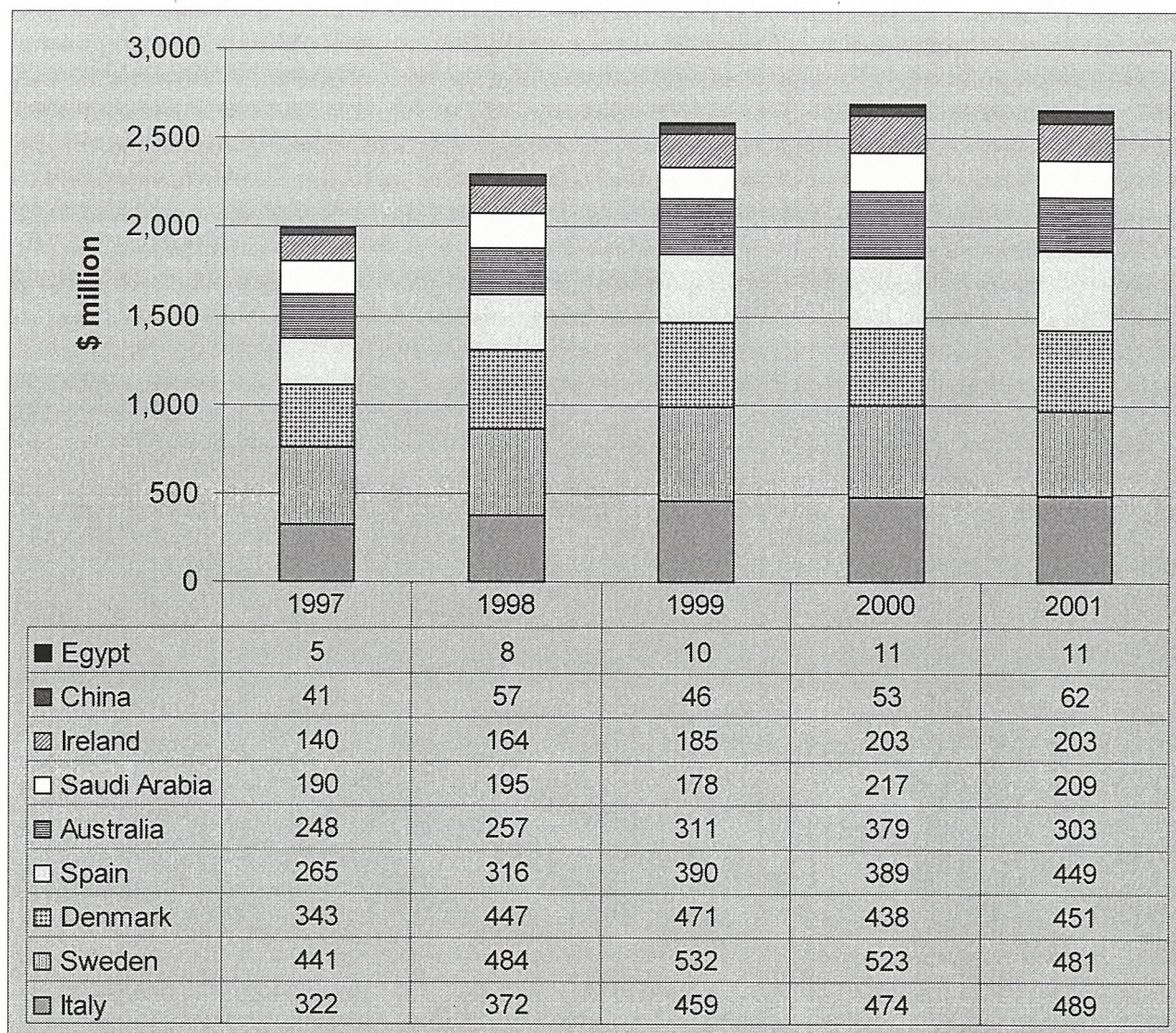


Figure 3.3 Other countries: total imports of wooden furniture and parts



3.3 Biggest exporters from developing market economies and China (DMEC)

In all the major OECD markets, wooden furniture imports from developing countries have grown faster than overall imports. Influx of products from China is the single most important reason behind this development. Behind China, a handful of other developing market economies dominate wooden furniture trade with the OECD, and hold a giant lead over some of their neighbours, who are just about to start developing their furniture industries.

OECD imported wooden furniture from China for more than \$3.2 billion in 2000, or 33% of all DMEC deliveries. Indonesia has reached the level of \$1.5 billion and ranks clearly second before Malaysia (\$1.1 billion). Thailand was the fourth country recording more than one billion dollars worth of exports. Due to the severe market conditions and devaluated local currencies in the midst of the Asian economic crisis in 1997-1998, their exports (which are here nominated in current US-dollars) declined

for the first time in the decade. Export rebound took place however, in 1999 onwards. China's export growth has continued unabated throughout the five-year period.

Table 3.1 OECD Imports of Wooden Furniture by Origin

Origin	1996	1997	1998	1999	2000	% share		INDEX
						1996	2000	2000
DMECs	5,362.22	5,915.15	6,376.60	7,955.56	9,640.30	100.0	100.0	180
of which:								
NIEs	878.70	833.15	790.59	879.32	885.55	16.4	9.2	101
of which:								
TAIWAN (P.O.C.)	677.51	640.33	619.79	681.30	667.23	12.6	6.9	98
HONG KONG	67.77	75.15	85.50	109.82	128.17	1.3	1.3	189
KOREA REP.	58.64	51.25	45.14	49.15	51.76	1.1	0.5	88
SINGAPORE	74.78	66.42	40.16	39.05	38.39	1.4	0.4	51
Other DMECs	4,483.52	5,082.00	5,586.01	7,076.24	8,754.75	83.6	90.8	195
of which:								
CHINA	987.41	1,220.15	1,552.30	2,214.94	3,222.91	18.4	33.4	326
INDONESIA	943.44	1,048.82	1,158.51	1,389.27	1,507.96	17.6	15.6	160
MALAYSIA	682.97	734.89	723.49	913.69	1,064.56	12.7	11.0	156
THAILAND	511.79	486.93	461.33	603.46	725.12	9.5	7.5	142
MEXICO	342.34	434.33	510.25	568.29	628.30	6.4	6.5	184
PHILIPPINES	215.26	244.59	264.95	308.92	347.73	4.0	3.6	162
BRAZIL	263.97	278.73	234.49	273.42	346.76	4.9	3.6	131
VIET NAM	96.37	149.40	149.02	208.74	305.26	1.8	3.2	317
SLOVENIA	167.08	165.66	165.48	177.07	163.92	3.1	1.7	98
INDIA	35.96	54.97	77.89	93.38	113.72	0.7	1.2	316
CROATIA	71.31	64.61	59.35	60.37	59.96	1.3	0.6	84
HONDURAS	20.03	26.62	30.71	36.47	33.50	0.4	0.3	167
CHILE	22.27	27.45	28.10	29.22	30.00	0.4	0.3	135
TURKEY	10.09	11.20	15.71	30.03	28.63	0.2	0.3	284
YUGOSLAVIA	4.34	9.19	12.27	9.73	13.87	0.1	0.1	320
BOSNIA-HERZG.	6.70	9.37	8.00	9.61	13.49	0.1	0.1	201
ARGENTINA	6.13	7.36	7.68	9.47	12.54	0.1	0.1	205
COLOMBIA	3.08	5.13	6.01	6.70	11.68	0.1	0.1	379
MYANMAR	2.95	3.58	4.34	5.60	11.42	0.1	0.1	387
Others	90.03	99.02	116.13	127.86	113.42	1.68	1.2	126

Source: ITC/UNSO Comtrade Database*

Note: Excludes furniture parts

3.4 Developments in the major markets

3.4.1 United States

The US market has quickly become wide open to wooden furniture imports from the developing market economies and China (DMEC group). The share of imports arriving from the DMECs has risen to 56% in 2000, and contains an ever-increasing trade with China.

Growing outsourcing of semi-finished products and components by the United States furniture industry has been a key driver for this trade. Globalization has brought about

harsh realities to the US furniture industry, which suffers from shortages of skilled labor and of high manufacturing costs (tens of times higher daily wages than in Asia).

A great number of United States furniture manufacturers have transformed themselves into assembly plants, finishing lines or merely distributors and marketers of outsourced furniture and components from China and other countries, e.g. Brazil, Mexico and the Philippines. While sub-contracting the manufacturing processes to the lower-cost countries, United States firms still capture most of the value-adding potential in design, distribution and marketing functions, which they keep strictly under their control. The manufacturing process itself (particularly with standardized machinery) represents a lower value-added potential and is therefore easily sub-contracted anywhere in the world. Transportation costs of dry semi- or fully machined components are low in relation with their value. Evidence of this is given by the Japanese import statistics, which show for the first time in 2001 a higher unit value per kilograms for imported furniture parts, compared with ready-made furniture.

There are less visible impediments for trade as the markets have become more transparent in their dealings. Tariffs have fallen to virtually zero and non-visible tariff barriers have succumbed in the hunt for price stability and profit to meet vibrant customer demands. This has been brought about, in some aspects, by the central government seeking to offer security of product, with legal and responsibility issues and a response to possible environmental, conservation and economic demands from lobby groups.

Wood products and furniture in the US markets are in the process of responding to environmental issues, albeit low key at the moment and certainly to consistency for price stability. Many of the relevant associations and industries that are seeking positive consumer benefits for their members concur. Various standards, rules and regulations, many of them closely linked to those of the European Union, are being considered or put in place. Their requirements are published and result in testing with certification to ensure compliance. Thus market entry is transparent and given that a source material and its subsequent conversion is planned to meet these regulations with the relevant tests and certification, then the competitive challenge relies once more on pricing, delivery, quality and response to design needs. The major DIY chains, home centers and furniture groups, plus regional and government buying organizations are set to exploit these market aspects.

For the smaller developing countries and those with source and manufacturing constraints, then the actual volume of product required could present a barrier. Sales and order planning with major retail and DIY groups often require a phased growth in supply that can be increased dramatically if the product is popular. Often the manufacturing and supply infrastructure is not available in the smaller countries to achieve this demand, plus transport costs and 3-4 weeks of shipping. The country best able to cover most of these trading factors now is China as seen in their progress of supplying a wide range of furniture and value-added wood products.

For lesser volumes, then better design and niche activity, often dealing with the specialist groups, smaller retailers and importers that are able to distribute across the US is a route that needs to be studied for the older exporter countries and the new entrants.

Household furniture distribution in the USA typically uses three channels to reach the consumer: gallery networks, specialty stores and full-line furniture stores. Trends in manufacturing offer more off-shore manufacturing as companies source around the globe and sell nationally. The local independent furniture store and the regional chain store are the winning concepts today. This opens up a practical opportunity for off-shore manufacturers to place owned stores in key cities, as the US manufacturers are doing right now with more product-specific stores.

3.4.2 European Union

The following description is based on information from the L'Union Européenne de l'Ameublement (UEA).

The furniture industry is one of the largest manufacturing industries in the EU, creating 82.2 billion Euro (\$73.6 bill.) turnover in 2001. The EU furniture industry accounts for about half of the world furniture production. The apparent consumption was about Euro 83.2 billion (\$74.5 bill.) due to a one-billion Euro trade deficit.

The extra-EU imports (10.9 bill. Euro) accounted for 13% of the EU furniture market. Imports from Poland accounted for 20% of total imports, and for the first time, imports from China exceeded 1 billion Euro. Imports from Central and Eastern European countries recorded double digits growth rates with Poland, Czech republic and Slovakia leading the way. With the exception of China and India, imports from Asian countries have grown only moderately (Vietnam) or even decreased (Indonesia, Thailand, Taiwan, Malaysia).

The growth rate of extra-EU exports (9,904 million Euros in 2001) was only 3.9% because main export markets entered into recession in 2001. Italy was responsible for 43% of total exports, Germany for 17% and France for 9%.

Exports to the USA continued to grow (by 10% in 2001), supported by the weakening Euro. Exports to Russia (6% of exports) rose by more than 11%. The highest export growth rates were recorded in Ukraine (+50% to 101 million Euro) and in Croatia (+26% to 95 million Euro). The largest decrease occurred in Turkey (-36% to 91 million Euro).

The upholstered furniture and the kitchen furniture sectors are the largest sectors with 15% and 13% shares. The office furniture sector (11.7% of total production), the dining room furniture one (11.5%) and the bedroom furniture one (10.3%) followed next, indicating a balanced overall production structure.

Europe's furniture industry is consolidating into larger units. Leading enterprises are investing heavily in automation and computerization, what leads into more standardized output. This hold true especially in the kitchen and office furniture industry.

In Germany, the largest enterprises have invested in Polish enterprises where labor costs are only the tenth of Germany's and to a lesser extent in other East European countries. In Italy, strong co-operation exists between small entrepreneurs in the area

of design, marketing, production, etc. Small enterprises often act as sub-contractors for larger firms by producing components, semi-finished products, or alternatively finish or assemble furniture. This creates great flexibility in production, what means that Italian industry is agile in responding to market changes.

The majority of the leading EU groups have one or more production units in several European countries and even in the USA. There are 50 groups with a turnover exceeding 100 million Euro.

Retail sales of furniture to consumers involves a complex system of different types of outlets. Country-specific differences appear between leading markets in the EU.

In Germany, the furniture market is estimated at 32 billion Euro (\$28.7 bill.) at retail prices. It is still the leading EU country both as consumer, producer and as organized distribution power. Recession in Germany's construction sector has been a precursor for decreasing furniture consumption and imports in the recent years. The new residential housing has fallen in a cyclical pattern since the peak of 1997. Construction crisis is generally deeper in the new states (East) than in the old federal states (West).

There are a total of 15,174 stores employing 110,000 persons: 8 persons per outlet on average compared with 3 persons in other EU countries. The buying groups (Einkaufsverbände) and their affiliates have a big influence on the furniture market (60% of sales). The majority of retailers (90%) and manufacturers are connected with these groups. Only large manufacturers and retailers can afford not to be members. They obtain discounts from manufacturers (10 to 30%) and buy bulk of furniture. 20 buying groups and chains control half of the market.

The country with the most furniture stores is Italy with more than 22,000 outlets. The total number of employees in the outlets is 67,000 persons. The total selling area is 7,958,000 m² or 362 m² per outlet, one of the lowest in the EU. The retail market value is estimated at 11.3 billion Euro (\$10.1 bill.). Furniture sales on the Italian market are controlled by specialized commercial systems (85% of sales). The market is specialized but also fragmented and not well-organized.

Italian furniture industries have started co-operating more actively with tropical countries. The leading companies understand (and smaller companies usually follow after a while), that competition from cheaper countries will affect their markets. The largest companies have been prompt to invest in developing countries, especially in those where there a large local market, reasonable local know-how and skilled handwork.

Natuzzi, the largest Italian producer of upholstered furniture, has made a large plant in China and others are following. Such cooperation will grow in the future. Another common belief is that there will be more exchange of technologies and joint ventures. On the contrast, it is doubtful that the Italian industries would buy more semi-finished products from tropical countries. The delivery of semi-finished items to the Italian manufacturers is too important, and equally the quality control is too strict.

In France, furniture is traded by a total of 11,700 outlets. The total selling surface of the outlets is 7,700,000 m². Furniture specialists account for 82% of furniture sales of which 32% are made by franchising companies and around 12% by buying groups.

In the UK, the non-specialized channels are important, commanding 35% of the market. In this area, department stores and DIY play a leading role. Independent furniture retailers (35% of market) tend to be specialized.

The strengths of Europe's wooden furniture and woodworking industries are generally well known: steady raw material base, technological lead, quality and design, brands, distribution (proximity), clustering and networking. Weaknesses are in labor and raw materials costs and substitution pressures, which result in low profitability of the industry.

3.4.3 Japan

Japan's economy has ground to a halt and stagnated throughout the last decade and so have the furniture imports. Dwelling construction has followed a mostly downward trend since 1990, and it is expected to continue falling. Also ageing households and increasing number of single and two-person households are trends to be reckoned with.

Over the whole range of consumer goods, the notorious "bursting of the economic bubble" around 1991 brought Japanese consumers sharply back to a price awareness that they seemed to have altogether lost in heady years. Especially in furniture, for a time there seemed to be excess to the opposite extreme: consumers rapidly fell into a pattern of buying on price, regardless of quality.

As market competition intensified, marketers tried to outsell others not on the strength of quality or design but on pricing. They turned to Southeast Asia and China where production costs were lower. Then major trading firms have come on the scene in support of transplanting furniture makers. Major residential home builders have begun to have furniture crafted overseas to their specifications to appeal to home buyers.

For the domestic producers this meant first being driven by imports mainly from ASEAN countries and recently China, almost wholly out of the low-priced ranges. Among industry sources there is an impression that this was not felt too keenly as a loss. Imports had always been acknowledged to have a place in those ranges of the market, and as long as consumers were still feeling prosperous they disdained supposedly "cheap" goods, equating low price to low quality uncritically. So the bulk of the market could command higher prices and domestic makers held their own there. But by the mid-1990s domestic producers were also feeling heavy pressure in what they had always regarded as the backbone of their market, the high-volume mid-price range.

In the most recent years the degree of balance between price and quality has been restored, with consumers also becoming more discerning about actual quality rather than simplistically using price as a guide as before. They are now more ready to accept "pricing that is justified by quality". More varied demands have also been expressed for products suiting individual lifestyles, color and design preferences, to

the point that one authoritative Japanese industry source calls it all "too complex for (domestic) suppliers to cope with".

As much as possible the domestic producers have tried to cut costs to remain competitive, but the extremely high levels of all costs of doing business in Japan make it an unreachable goal to compete with developing country producers. Effectively, the continuing diversification of demand and imports has made part of the Japanese furniture market well beyond the capabilities of the local industry.

Furniture specialty stores that continue to enjoy the lion's share of the home-use furniture market (three-quarters of total furniture sales) are fighting fiercely for survival. Paradoxically, while the furniture market shrinks, major chains are rushing to open new stores, and stores keep getting bigger.

3.4.4 Market access

Developing countries have enjoyed of tariff relief on furniture and other value added wood products under the Generalized System of Preferences (GSP) or other schemes in many of the major markets. More recently, these benefits have been eroded by general tariff reductions through successive rounds of multilateral and bilateral trade negotiations. As the tariffs in general become lower, the advantage of being exempted from them under GSP or similar systems becomes apparently smaller.

Tariffs in many countries remain higher, however, compared to those for primary products like logs and sawnwood. The European Union, Japan and the United States apply no import tariffs on imports from GSP countries, while rates for most other countries range from 2 to 6% on the major product categories. The United States, Canada, the European Union and Japan have proposed to eliminate completely all tariffs on wooden furniture by 2005, which will probably further ease exports by tropical producer countries. In contrast, many developing countries retain very high tariffs (up to 80%) on value added wood product imports to protect their producers.

Tariffs in the European Union are uniform when applied to World Trade Organization countries. When imports (or exports) are made with non-WTO countries, then each country applies bilateral agreements and there can be slight differences from country to country. Concerning furniture and furniture parts trade, duties are generally low or non-existing and generally identical duties are applied to all countries (exceptions are however possible). Duties are generally applied to the CIF value and vary from 0 (wooden home furniture) to 2,7% (wooden kitchen cabinets) to 5,6% (bamboo and rattan furniture and seats).

3.5 Most promising import markets for products from developing countries

CBI (Centre for the Promotion of Imports from Developing Countries) of the Netherlands has outlined the best opportunities for developing countries in the following sub-sectors:

1. Ethnic furniture: it is expected that there will be a steadily growing demand for authentic furniture, particularly small and occasional dining/living room furniture and bedroom furniture.

2. RTA furniture, whose quality and design ranges are widening, making it appeal to wider consumer groups, including older people. RTA (ready-to-assemble) furniture, accessories and components are relatively easy to manufacture and transport. Care has to be taken for matching the required fittings, assembly instructions and packaging. Recyclability is also important.
3. Colonial style furniture: dark shaded dining room and living room furniture, featuring a mixture of tropical-temperate hardwoods from Indonesia, the Philippines, and Mexico. The trend has been most popular in the Netherlands and the UK.
4. Bamboo and rattan furniture is in some markets a growing, fashionable substitute niche for tropical woods: especially for home interiors, gardens and second houses.
5. Home office furniture market seems to be booming in all the major markets. Home and distance working is becoming more common, because the information technologies have developed to a level that allows equal output from home offices. Savings in cost and time of commuting have encouraged employers to out-source office work. While this sub-sector has been dominated by office furniture makers and largely based on RTA-concept, there are new trends coming in favor of “concealed” home office, i.e. making the furniture pieces multifunctional and adjust their designs to other household furniture. This allows more solid wood furniture instead of chipboard, which is the common material today.

3.6 Recommendations on marketing, product development and promotion for the ITTO producer countries

Marketing and product development

From the developing country producer’s point of view, there are many challenges in assessing and accessing the furniture markets of the industrialized markets. In the current market share battle, China is adopting a “catch-all” strategy, against which other tropical producers cannot respond forever based on cost-cutting and scale.

5. Household furniture markets tend to be volatile in nature. This calls for a continuous monitoring of furniture and house-life trends to give a solid backing for new investments and creations. Basic problem is that while investments should be planned long-term, furniture markets and fashions live on a faster lane. New collections will have to be created on shorter intervals in order to keep pace with the market opportunities. Flexible production through producer networks ought to be the solution.
6. Sizes of furniture need to be matched to meet the different requirements in Japan, Europe and the USA. While furniture for the American consumer tends to be larger in dimensions, smaller items for 1-2 person households may hold more realistic opportunities in Europe. In Japan, the living spaces per person have declined due to more offspring living with parents, hence the growing need for small, corner, and occasional furniture.
7. Competitive prices, prompt deliveries and after-sales service are needed in entering the lower segments of furniture markets. This holds true particularly

when delivering larger volumes for buying groups or big chain stores. Increasingly, also manufacturers are starting to act as importers of made-to-order furniture. In the long term, move away from lower segment is warranted: China, Malaysia and the Philippines are making attempts to move to medium-high market segments.

8. Creating original designs is necessary for moving to higher price points. Design should provide real added value to the product. Generally, most of the products currently exported by tropical producers are made-to-order with little innovation or design input, which often is provided by the buyer. In order to enhance the manufacturing of greater value-added products in producer countries, there is a growing need to infuse technical and design know-how into these industries because the existing supporting infrastructure is in most cases incapable for providing such assistance to the industries. Most of the policies adopted by tropical countries are geared towards providing comparative advantage to the furniture industry, i.e. low-cost production factors. Unless there is a policy for encouraging creativeness and continuous innovation, value enhancement would be best undertaken by private-private initiatives, lead by market forces.
9. Authenticity and material knowledge should be made to work for competitiveness of tropical furniture. Furniture industries in the Philippines have adopted highly innovative designs and material combinations in order to reap higher revenues of their exports, thus relieving the pressure of the above-region-average labor costs. The Filipino industry has become famous for its ability to incorporate skilled handwork in the finishing of its furniture. Hand carving, painting, inlay work and gilding are all parts of the distinguished quality image of furniture from the Philippines. Handwork is serving rather as an “added quality component” than as integral part of the furniture structure.

Promotion

There has been a proliferation of home-style magazines, interior design and decoration magazines, as well as garden, house-building and home improvement, with dedicated furniture sections. Increasingly, also TV programs are being used to deliver new ideas on living and house-furbishing. Big catalogues are published annually by the leading household furniture retailers and mail order houses.

Much of the un-credited hype about the use of E-commerce and the Internet in furniture trade and promotion has evaporated since the dot-com collapse in 2000. What remains now is a more realistic view of using the Internet as another contact media for pulling the customers into stores. The consumers appear to use the Internet mainly for searching product information, locating the nearest showrooms and retailers. By doing so they save much time and energy usually involved with furniture shopping.

The big retailers (IKEA, MFI, Conforama) have only now marched in and have developed showcase sites and e-commerce platforms. The seriousness of their attempts will be measured against sales figures, but so far they are evolving cautiously. Sites are primarily organized as showcases which encourages clients to use classic distribution channels, but also on-line sales are provided in some national

sites like in IKEA-usa.com. On-line offering is still restricted and sites are mainly informative trying to attract customers to sales outlets.

A special chapter on the use of E-commerce and the Internet in the furniture sector is presented at the end of the report.

3.7 Recommendations of further cooperation between industrialized and developing countries

3.7.1 USA

Industry strategies change

For the past five years the US market has been inundated with imports, mainly from China. As the market has been wide open to imports from a number of countries (both industrialized and developing), it has seen imports grow in leaps even as fashions and styles have changed and consumer demand fluctuated. The exporters from the countries seeking to reach US markets always seemed to reflect the changing styles and offered their own style - and in some cases adapted the designs - to reach a niche with the US buyer. In some cases competitively priced 'entry-level' products used to create skills, in others well-designed and up-market items for discerning consumers never seemed to take hold.

Now the character of the US furniture imports has changed. The regular furniture across the wood-based sectors of chairs, dining room and bedroom at low to medium and some premium price points, are being transcended by means of transferring manufacturing facilities to China and the rest of Asia. This process is set to create unemployment and calls for a permanent change in the US furniture industry *modus operandi*.

The likely survivors will likely be high-end producers who offer customization and rapid delivery or who specialize in the highest quality (and price) furniture. Other United States furniture companies will more than likely shift their production to Asia and focus on marketing and distribution at home. However, as markets mature, retailers may increasingly source furniture directly from the foreign-based manufacturers, bypassing United States-based companies entirely. Early signs of a similar change are being seen in the kitchen cabinet industry, where many United States cabinet manufacturers are importing doors from overseas.

Design as a competitive tool

One benefit has evolved and that is the need for a number of Asian and South American countries to review their furniture exports to move them away from the challenge of China-made products. Thus better design, styles, new materials and concepts are being used to create a difference from the usual commodity products. Something that the Philippines has achieved for some time is now being used across Asia and especially Thailand and Malaysia. Use of "mixed media" such as twisted rope, wicker, rattan often linked with glass and metal plus new colors, is allowing a move to stronger shapes, styles and features.

Home office is taking on country and vintage styling with carved features, plus the newer contemporary styles of Europe with aluminium frames, glass tops and a wide range of color and natural finishes for tops and fronts. Whilst this is a move in a reasonable direction, it is not a permanent one and can not compensate for the volumes from China. But importantly, it has forced the developing countries to improve their own design infrastructure or lose at this market.

Already higher-priced, quality-orientated products are being sourced from industrializing Asian countries, backed by keener distribution systems, on both ends of the chain. Design and quality are the major moves of the various trade bodies in these industrializing countries, capitalizing on the expertise from western traders seeking better direct sourcing. A transfer of this knowledge and the accompanying technology is now underway in many sectors.

European way

An example of how the Europeans are working to improve their trade with the US is seen for Danish imports into the USA. They are setting up warehousing and distribution to offer better loads and quicker delivery. Some Danish manufacturers are looking to buy the weakened US companies for sourcing especially in the home office sector as this can cut a 6-8 week period down to 2-3 days with stocking policies.

Italy has made even stronger inroads not only supplying the leather seating sector and contemporary bedrooms, but also in establishing retail stores to take the products and expand the merchandise offer directly to the consumer.

Change in business concept

Besides having a rising import bill, the US furniture market has now become regularly serviced by US brand name companies that once made furniture in the US and now import these brands (or re-brand them after imports). The problem of transports over long water routes will be addressed, and technology plus the web will ensure rapid transit of data about purchase patterns and schedules of delivery. Retailing and distribution will take on a stronger role for the industry, as design and niche sectors proliferate to compete.

3.7.2 European Union

The European Union markets have remained a tougher ground for suppliers from the developing countries. Invasion by the Asian sources seen in the US and Japan has not been repeated in Europe. Several reasons can be cited for this:

1. European market is sophisticated in terms of quality requirements, authentic designs and furniture styles; these criteria can not yet be met by majority of DMEC suppliers.
2. EU manufacturers continue to sub-contract Eastern European furniture factories, which are much closer and more flexible in terms of meeting their specific requirements.
3. The market for rattan furniture has been effectively taken over by EU companies that have set up production units in South-East Asia.

As an example, the reproduction of US furniture classics in Asia has not an equivalent trade in Europe. In terms of new designs, the European importers are actively seeking for "new" suppliers that display fresh innovations (Philippines) low costs (Vietnam) and niches previously undiscovered. The EU furniture making appears to be heading towards more specialization, what challenges the developing countries to constantly develop new collections at shorter intervals to meet the fragmented demand.

Most successful European furniture manufacturers have realized a long time ago that their competitive advantages would have to be based on reaping the home-base advantages: flexible but efficient production with the highest technological quality, superior design, innovative market promotion and swift distribution with minimal stock-keeping. This has offered a protective shield against low-cost competition.

Sub-contracting appears to offer possibilities even for more distant suppliers from the developing countries. The fact is that furniture is increasingly being traded in semi-finished form and without accessories. The finishing and accessories/fittings are added in the consuming country in line with local specifications. Therefore, the obstacles associated with meeting the two sensitive aspects of final product quality have lessened.

3.7.3 Japan

According to the Economic Planning Agency's interpretation of results from household consumption surveys, by mid-1990s around 70% of Japanese homes had dining room sets, and 36% of households had living room sets. These have changed very little over the previous 20 years. Certainly sheer lack of space is a major limiting factor to any further adoptions.

The ending of the changeover to "Western" homelife and furnishings, coupled with population growth soon coming to a halt and reversal, is one more indication that in the furniture market at least, the late 1980s - early 1990s "economic bubble" and its bursting was not a cyclical phenomenon in the usual sense. Rather, today it seems increasingly probable to have been the turning point from a rising to a falling secular trend, and as such an early reversal is not to be anticipated with much confidence. JETRO believes that in the future, the majority of demand in the home furniture market (where wood predominates) will therefore be replacement demand.

To the encouragement of producers located in other the developing countries, nobody's market position in Japan is secure anymore on the strength of tradition alone, as it used to be quite recently. Any newcomer can hope to carve out a market share if they can show acceptable quality, versatility in meeting varied particular specifications, reliability in delivery and after-sale service, and above all a competitive price.

Despite (and indeed in large part because of) the desperate situation of the Japanese furniture and other wood products industries, in many respects the prospects have never been better for overseas manufacturers to make profitable joint-venture arrangements of various kinds with Japanese counterpart companies.

The only -but extremely important - cautionary remark is that at present and for the foreseeable short to mid-term future, Japan is a *bear market* where tough, quick and astute market players will thrive.

Put very bluntly, Japan simply *is no more* the "pot of gold" it once appeared to be to many. But it is still a very wealthy country with great appetites for quality products, backed up by more-than-ample purchasing power even after all its recent battering. No-one in Japan is going to part with their money easily nowadays, but they do still have the money to spend if they are convinced they will gain equal or better value for it. Convincing the Japanese purchaser of this is the challenge to developing-country exporters of furniture and other processed wood products.

JETRO has several specific points of advice on how best to go about this:

1. Contracting a marketing survey

For entry or expansion into the Japan market, there is no substitute for engaging on-the-ground expertise on critical questions of potential market scale, product differentiation and competitive strategies versus already-entrenched suppliers. This also entails familiarization with specifics of the Building Standards Law, Japanese construction methods and the Japanese climate.

2. Selection of Japanese importers

In general JETRO still seems inclined to support Japanese firms specializing in import-export dealings as such, in preference to the "short-cut" of direct tie-ups between overseas suppliers and Japanese companies close to the final distribution stage.

3. Preparation of catalogues for the Japanese market

In spite of the costs, a local edition of the producer's full catalogue is virtually indispensable, not only from the linguistic viewpoint but also as regards appearances, performance test values, product identification points and dimensional mounting layout diagrams.

4. Provision of a showroom for product samples

Because there remain substantial gaps in recognition between imported furniture, even from illustrious worldwide companies, JETRO proposes: "to widely appeal to end users ... provision of a showroom may be useful for enabling end users to recognize their features through samples of commodities."

5. After-sales service

According to JETRO: "It is necessary, for import products, to check the after-installation maintenance system between importers and overseas makers. Possible check items are the warranty period, scope of overseas maker's warranty responsibility (who shall provide after-sales maintenance or trouble-shooting services, and who shall be liable for making good any complaints not resolvable in that way).

6. Modification of products to conform to Japan-market technical specifications and tastes.

This can represent something of a dilemma because from the viewpoints of overseas makers, new commodities cannot be developed as a matter of course unless their sales amounts are expectable to a certain extent. However, their sales amounts will increase proportionally as these commodities conform to the Japanese market.

4. COUNTRY REPORTS ON TOP-8 MARKETS

4.1 USA

4.1.1 Basic demand factors and market drivers

The US is the world's largest economy and has enjoyed continuous growth over the last 9 years to a \$10 trillion Gross Domestic Product in 2000 at current prices, up 28% since 1996.

After the sustained growth until the middle of 2000, the economy moderated in the second half of that year, and the economy slowed down in the first half of 2001. The 'dip' started in March 2001 as the stock market plunge took its toll on share prices as company profits fell sharply and the 'tech-bubble' burst with an effect of higher prices and a less than favorable employment outlook.

After the dramatic negative impacts of the third quarter of 2001, a stronger output levels were again recorded in the first half of 2002, indicating prospects for a strong recovery, but amidst a lot of new political uncertainties.

Consumer spending and government spending were the biggest contributors to the increase in real GDP during this time. The government responded to the short and mild recession of 2001 with a \$150 billion stimulation and incentives package aimed at renewed economic activity but with an increased deficits in the general budget.

Economic reports reflect on the capacity of the US economy to grow despite the growing imports into its markets. The suggested US growth is in the 2-3% range annually over the next five years after the pull-back from the slowdown of 2000/2001. This is a static scenario as inflation will take up much of that leaving a possible 1.0/0.5% growth. Wages are rising, but with US productivity gains to offset the increases in hourly labor rates. Inflation is currently under control at 1.5% as a result of many factors, one being the Federal Bank use of monetary policy and eleven consecutive interest rate cuts.

Home ownership remain at highs of 67%, with new housing starts holding at strong levels, both supporting consumer purchases. Residential mortgage rates are at their lowest level for years, below 5-6.5%. The Federal Base rate was lowered from 6.5% in 2000 to 1.75% in late-2001 and has held beyond the first quarter of 2002. Economists record that a one-point cut in interest rates boosted US GDP by 0.6% after one year and by 1.7% after two years. A strong resurgence could come in both

2002/3, but it could take the nation's trade deficit beyond 5pc and possibly a dangerous level for the economy.

Consumer confidence, strong in 2000, but lower during 2001, returned during the 1st quarter of 2002 and has kept the economy going. Furniture retailers have not benefited very much from this drive. In fact, the US household spending on furniture (as a percentage of total consumer spending) has dipped to its lowest point in a decade. Of every \$100 spent on all goods, 91 cents (0.91%) went to furniture. This was 95 cents in 1997 and has stayed in the 0.95-0.97pc for the last seven years. In the 1980s it was over 1% of consumer sales.

Consumer credit levels are high and re-mortgaging has played a part in releasing cash for the consumer expenditure. US furniture companies are using a range of sales promotion techniques to stimulate trade, especially in the DIY (do-it-yourself)/RTA (ready-to assemble) sector covering home-builders and the discount retailers. Other sectors are recovering mainly through the consumers' bargain-hunting.

Outlook and uncertainties

With the US importing more of its goods, especially in furniture, closing down US factories and shedding jobs, then fiscal resources for consumer spending will need to continue. US productivity in 2nd quarter of 2002 was 1.5%, well down on the 8.6% of 1st quarter. Conversely, incomes are rising faster than spending to give a July 2002 average \$35,600 per person. Will consumers have confidence to continue to buy cars, houses and possibly furniture? The flight from investment in stocks, the re-mortgaging of houses at lower interest rates releases equity and the tax cuts, all put cash in consumers' pockets. Two components of GDP are government spending and consumer spending. Both should keep on rising, the first on defence and domestic programmes and as real disposable incomes rising at 3.9% annually to aid the US services industry – the largest part of the US economy. The third of business investment is the only part that is static and possibly falling. This sector needs a confidence boost to invest against an annual trade deficit at \$450 billion and nearly 5% of GDP. That needs reducing to \$250-\$300 billion. Unemployment is rising to 6% and needs to stay at or below that figure – it was 4% in 2000. Even so, fourth quarter 2002 growth should be 3.5%, with 2003 at 2.8% plus and below the norm of 3.5%. Housing starts, always a good indicator for furniture, are at 1.68 million new homes for 2002 against 1.6 million in 2001. A drop to 1.65 million is expected in 2003.

The US Federal Bank base lending rates are at 1.75% and the lowest for 40 years. In 1990 the Bank rates were 10% and in 1980 over 15% causing a different set of problems for the industry.

Now residential furniture orders were up 5% on first half of 2002 at \$12.7 billion with shipments increasing only 2% year-on-year indicating that consumer confidence has cooled, but housing and employment are still buoyant. Since the expected 2001 recession was relatively mild, it may take some time to get the economy moving again.

4.1.2 Description of US furniture consumer

How much do they spend?

The average US furniture buyer spends the largest amount on wooden furniture with an estimated value of US\$254 per household, or 44% of the household furniture total. Major items within wooden furniture include bedroom furniture (US\$88 per household), dining room furniture (US\$52), living room (US\$23) and kitchen furniture (US\$22)

The second largest category, upholstered furniture, is estimated to have accounted for US\$218 of furniture spending per household, or for 37.8% of the household furniture total.

The next category is mattresses and related products which accounted for an estimated US\$74 per household in 2001, or 12.5% of the household furniture total. Finally, the smallest category is metal household furniture which is estimated to have accounted for US\$34 per household in 2001, or 5.8% of the total. Major items within the metal category include outdoor furniture (US\$23 per household) and dining room and kitchen furniture (US\$6).

Who are the biggest spenders?

The frequency of furniture purchases increases with income, starting at about one purchase every five years among consumers with incomes under US\$5,000 and reaching one purchase every 1.7 years (approximately 20 months) among those with incomes over US\$70,000. This suggests that the mid-low income brackets may not purchase furniture frequently, but when they do, their purchase is fairly significant.

Households' furniture expenditures are greatly influenced by the household income, size of the household, age of the household maintainer and housing tenure. Household income and the size of a household over its lifetime typically rise then fall with the age of the household maintainer.

For example, as of 2000 average household income in the USA peaked between the ages of 45 and 54 at US\$58,889 per year. This compares to just US\$19,744 for households headed by a person under the age of 25 and for US\$25,220 for households headed by a person over the age of 65.

The varying income and household size over the lifecycle explains that average household spending is highest in the age bracket of 25 to 64. However, the proportion of income allocated to furniture purchases is highest in households headed by a person under the age of 25, reflecting the high degree of family formation in those age groups.

On the basis of tenure, homeowners spent much more on household furniture (an average of US\$719 as of 2000) than renters (US\$332). Homeowners account for about 66% of all households but 80% of all household furniture purchased. On the other and, renters account for 34% of all households but only purchase 20% of all household furniture.

In age terms, the 45-54 group are called the 'older baby boomers', 35-44 as 'younger baby boomers' and 25-34 as Generation X-ers (45 million). All are strong spenders on furniture and offer a series of targets markets to suit their own career and stage of family formation.

Table 4.1 USA: household statistics

	25 or less	25-34	35-44	45-54	55-64	65 Plus	Total
Number of Households (000's)	8306	18887	23983	21874	14161	22155	109366
Average Income US\$	19744	45498	56500	58889	48108	25220	44863
Average Expenditure on Furniture US\$	328	566	722	724	716	334	586
% Spent on Furniture	1.66	1.24	1.28	1.23	1.49	1.32	1.31
Total Household Income US\$	164	859.3	1355	1288	681.3	558.7	4906.5
Total Spent on Furniture US\$	2.7	10.7	17.3	15.8	10.1	7.4	64.1
Percent owning Homes	12	46	69	75	81	80	64
Persons Per Household							
Total	1.9	2.9	3.3	2.7	2.1	1.7	2.5
Children under 18	0.4	1.1	1.3	0.6	0.2	0.1	0.7
Persons 19-64	1.5	1.8	2	2.1	1.8	0.3	1.5
Persons 65 plus	0	0	0	0	0.1	1.3	0.3

4.1.3 Description of domestic furniture industry

The US census data showed the overall retail sector of furniture and fixtures increased strongly to 2000, reaching \$142.9 billion (1992 dollars), some 14% above the year before. The overall sector employs 642,440, of which 514,861 are production workers. It ships \$75.5 billion at trade prices with average wages at \$11.8 per hour. In 2000 there were 6.2% more workers with a pay rise of 8.2% from \$10.91 in 1997, but only a 7.4% rise in shipments.

For the 18,000 furniture establishments only, the figures were down 600 since 1996, with 535,000 employees and shipments now of \$69.8 billion. The ratio of imports to consumption is 18.5 with a trade imbalance of \$12.1 billion. In 1996 the ratio was 12.5 and imbalance \$5 billion.

Employment in this wood sector is separated by use:

- Wood kitchens cabinets and table tops have 115, 356 workers and produce \$11.7 billion. The wages are \$12.05 per hour (up from \$10.8 and 11% since 1997).
- Wood household furniture employs 135,488 and ships \$13 billion. They earn \$10.1 per hour (up from \$9.67 and 4.38% since 1997). This is the sector where the majority of imports are coming into.
- Wood office employs 32,000, with \$4.2 billion turnover and are paid \$11.8 per hour (up from \$10.77 and 9.5% since 1997).
- Custom architectural woodwork and millwork (suppliers to many of the component industry) with 26,000, ship \$2.7 billion. They are paid \$14 per hour (up from \$13.1 and 6.4% since 1997).

A well-reported fact in the past three years has been the transformation of many US-based furniture companies into global sourcing businesses, particularly from Asia. Growing outsourcing of semi-finished products and components by the United States furniture industry has been a key driver for this trade. A great number of United States furniture manufacturers have transformed themselves into assembly plants, finishing lines or merely distributors and marketers of outsourced furniture and components from China and other countries, e.g. Brazil, Mexico and the Philippines. While sub-contracting the manufacturing processes to the lower-cost countries, United States firms still capture most of the value-adding potential in design, distribution and marketing functions, which they keep strictly under their control. The manufacturing process itself (particularly with standardized machinery) represents a lower value-added potential and is therefore easily sub-contracted anywhere in the world.

During 2001, some of the largest United States furniture manufacturers collapsed, and some of the most famous brands were taken over by others. More than 50 furniture plants had closed by the middle of 2001, and within the next ten years, it is probable that only a few major domestic furniture manufacturers will remain. These will likely be high-end producers who offer customization and rapid delivery or who specialize in the highest quality (and price) furniture. Other United States furniture companies will more than likely shift their production to Asia and focus on marketing and distribution at home. However, as markets mature, retailers may increasingly source furniture directly from the foreign-based manufacturers, bypassing US-based companies entirely. Early signs of a similar change are being seen in the kitchen cabinet industry, where many United States cabinet manufacturers are importing doors from overseas.

The years 2000 and 2001 witnessed a race of United States furniture companies into China to find reliable manufacturing partners, and ultimately, gaining a foothold in the Chinese domestic market-in-the-making. As soon as the Chinese distribution structures strengthen, growing imports of up-scale furniture can be expected. The 2008 Olympic games in Beijing will give an additional boost to construction, information technology and the service sectors, with multiplying effects on the consumption of furniture and value-added wood products.

The start of 2002 has seen a 5% fall in employees and number of factories with possibly an increase in productivity as a result. The use of dedicated off-shore manufacturers for US branded furniture is a trend.

4.1.4 Production volume

US furniture factory shipments were \$25.6 billion in 2000, but fell by 10% in 2001 to \$23.0 billion with the top-ten producers taking 41% of shipments. Sales of 18 of the top-25 manufacturers fell in 2001, with the top-25 share at \$13 billion down from \$13.8 billion. Contract sales fell 17%.

Upholstered furniture made up 39% of shipments in 2000. Bedroom and occasional furniture were the next largest production segments.

Wooden furniture made up around \$12.1 billion, or 48% of total output in 2000.

Table 4.2 USA: industry shipments of household furniture (2000)

Type of Furniture	\$ bill	Share
Upholstery	9.2	36%
Bedroom	4.6	18%
Dining Room	3.3	13%
Occasional	4.1	16%
Metal & other	2.6	10%
RTA	1.8	7%

4.1.5 Structure and location of industry

A consolidation process has taken place among the US furniture industry, whereby only the fittest have lived on. Often the recipe for survival has been flavored with layoffs, restructuring and streamlining of operations. Foreign outsourcing is a key business strategy.

In 2001, some of the largest United States furniture manufacturers collapsed, and some of the most famous brands were taken over by others. More than 50 furniture plants had closed by mid-2001, and within the next ten years, it is probable that only a few major domestic furniture manufacturers will remain. These will likely be high-end producers who offer customization and rapid delivery or who specialize in the highest quality (and price) furniture.

In the future, retailers may increasingly source furniture directly from the foreign-based manufacturers, bypassing US-based companies entirely. Early signs of a similar change are being seen in the kitchen cabinet industry, where many United States cabinet manufacturers are importing doors from overseas.

4.1.6 Major players

The US household furniture industry chart has undergone a swift restructuring in terms of major companies. Some of the most famous companies have traditionally been Athens, Bassett, Broyhill, Century, Ethan Allen, Kimball, Lane, La-Z-Boy, Lexington, Pulaski and Universal, to name a few. But during the 2000-2001 restructuring drive, many of these have either closed down or been taken over by others. Some of them have filed bankruptcy, or continue to operate under Chapter 11.

La-Z-Boy is the biggest survivor with \$2.1 billion sales. Furniture Brands International (FBI) holds the second place owing to its purchases of other manufacturers and is seeking a turnover of \$2.3 billion. FBI is the only major domestic source of mid-high-end furniture, after taking over Drexel Heritage, Hendredon (who import 10% of their components), Maitland-Smith (100% imports), Broyhill, Lane, and Thomasville.

Table 4.3 USA: leading household furniture companies

Company	2001	2000	Change %
La-Z-Boy	\$2,072	\$2,223	-6.8%
Furniture Brands Int'l	\$1,816	\$2,031	-10.6%
Lifestyle Furnishings*	\$1,259	\$1,691	-25.6
Ashley Furniture	\$1,003	\$856	17.0%
Klaussner	\$826	\$912	-9.5%
Ethan Allen	\$739	\$740	-0.3%

Source: F/Today analysis.

* now liquidated and brands sold to other top-25 companies such as Furniture Brands.

Lane is an example of a major US manufacturer, which has closed domestic factories and moved off-shore. Lane has a turnover of \$750 million and 4,000 employees. It closed all its US plants and is now concentrating on China, Europe and S. America. A new distribution center is being built at Tupelo, Mississippi to manage these imports. The import affiliate Outlook International has 80 staff in China to look after quality with a key person in each plant. Testing labs will be maintained along with offices in each country. Containerized transport in mixed and dedicated loads will be direct or into the storage depot. Besides regular stores, Lane has over 300 showcase galleries in-stores.

Office Furniture Manufacturers

The top-25 North American manufacturing companies in contract and company office products accounted for \$13.1 billion in 2001 with a 14.9% drop from the 2000 high of \$15.4 billion. The figures are not included in the household sales figures of \$64 billion.

The decline in sales meant that a buyer's market exists where price and service are important as new office construction, project delays and cancellations resulted from the amount of used and refurbished furniture was sold off. The home office retailers selling these branded products had fewer problems even with the closure of top stores like Heilig-Myers, Roberds and Montgomery Wards and HomeLife.

Traditional office furniture dealers such as Boise Cascade, Corporate Express and National Business Furniture and buying groups (Workplace Furnishings) and other office furniture wholesalers are not included.

Table 4.4 USA: the leading office furniture manufacturers

Company	2001	2000	% change
	\$ million		
Steelcase	\$2,920	\$3,852	-24.2%
Herman Miller	\$1,855	\$2,183	-15.1%
Haworth	\$1,710	\$2,060	-17.0%
Hon	\$1,366	\$1,650	-17.2%
Knoll	\$910	\$885	2.8%

4.1.7 Main raw materials

Manufacturers in the US use lumber, hardwood plywood and MDF in the making of furniture, but not much softwood plywood or OSB. These are mainly used for cabinet interiors, backs and caskets (coffins), mostly with surface coverings of veneer, vinyl or painted. According to research by APA (The Engineered Wood Association) in October 2001, a further 10 million cubic feet of softwood plywood and OSB could be generated for furniture and fixtures use in the desire to move away from lumber to structural boards.

4.1.8 Out-sourcing and networking among manufacturers

Outsourcing is a major business concept in the US, whereby a manufacturer (domestic or foreign) provides service to customer through component production, full product production, or assembly. Outsourcing in the US manufacturing sector has grown fast from \$100 billion in 1996, to \$325 billion in 2000.

What benefits can the US-based sourcing offer for American furniture makers? US sourcing offers shorter delivery times, good service/delivery, smaller quantities down to one-off drops, probably better quality, lower inventory and local raw materials of oaks, cherry, although this is now becoming less of a feature as the importers take up US timbers with their ranges.

Yet, outsourcing from “offshore” is a winning concept due to extremely low labor costs compared to the US, and also by means of overcoming the domestic skill and retention problems of the workforce. Labor costs as low as 25-75 cents an hour can be exploited, together with skilled workforce for labour-intensive tasks (detailed hand finishing and carving). The weakness is the 22-32 days transport time across the Pacific, full container loads, long lead times of 60-90-180 days and associated costs. In the point of arrival, the US transport costs and break-load for containers have to be organized, if a central one-drop delivery is not possible. Hence multiple handling occurs and damage control becomes a prime problem if the loading and packing is not adequate.

4.1.9 Quality standards and certification and labeling requirements, environmental management systems

Standards

Two proposals exist to revise the standards for upholstered furniture, one from the federal Consumer Product Safety Commission and the other from the California Bureau of Home Furnishings. The two standards are different with California is more stringent. Both target the reduction of small fires caused by cigarette lighters, candles and matches that could soon cause major blazes. An open flame resistance of 20 seconds is the target. The Upholstered Furniture Action council, created in 1978 used voluntary standards and upholstery fires from cigarettes dropped. CPSC proposals seek fire-retardant or FR fabrics or barriers and need chemicals to treat them. The proposals, if approved may be in place in a few years and all products will be required to comply, imports included, probably at higher prices. The existing tests against for

upholstery fabrics and fillings are looked upon as being too weak as new materials and products come onto the market.

The American Furniture Manufacturers Association's Information Technology Division is now ready with approved bar code numbering systems, adapting the Uniform Code Council's international standards for use in furniture.

Table 4.5 USA: furniture standards

Reference number	Document title
ASTM D2571-95	Standard Guide for Testing Wood Furniture Lacquers
ASTM D3453-01	Standard Specification for Flexible Cellular Materials-Urethane for Furniture and Automotive Cushioning, Bedding, and Similar Applications
ASTM D5253-96	Standard Terminology of Writing Care Instructions and General Refurbishing Procedures for Textile Floor Coverings and Textile Upholstered Furniture
ASTM E1352-02	Standard Test Method for Cigarette Ignition Resistance of Mock-Up Upholstered Furniture Assemblies
ASTM E1353-99	Standard Test Methods for Cigarette Ignition Resistance of Components of Upholstered Furniture
ASTM E1375-90(2002)	Standard Test Method for Measuring the Interzone Attenuation of Furniture Panels Used as Acoustical Barriers
ASTM E1474-01	Standard Test Method for Determining the Heat Release Rate of Upholstered Furniture and Mattress Components or Composites Using a Bench Scale Oxygen Consumption Calorimeter
ASTM E1537-02	Standard Test Method for Fire Testing of Real Scale Upholstered Furniture
ASTM F1178-01	Standard Specification for Enameling System, Baking, Metal Joiner Work and Furniture
ASTM F1550-01	Standard Test Method for Determination of Fire-Test-Response Characteristics of Components or Composites of Mattresses or Furniture for Use in Correctional Facilities after Exposure to Vandalism, by Employing a Bench Scale Oxygen Consumption Calorimeter
ASTM F420-99	Standard Test Method for Access Depth Under Furniture of Vacuum Cleaners
ASTM F782-01	Standard Specification for Doors, Furniture, Marine
ASTM F825-93(1999)	Standard Specification for Drawers, Furniture, Marine, Steel
ASTM F826-94(1999)	Standard Specification for Tops, Furniture, Marine, Steel
ANSI/BIFMA/SOHO S6.5-2001	Small Office/Home Office Furniture – Tests

Certification

Wood products and furniture in the US markets are in the process of responding to environmental issues, albeit keeping consistency with price stability. Many of the relevant associations and industries that are seeking positive consumer benefits for their members concur. Various standards, rules and regulations, many of them closely linked to those of the European Union, are being considered or put in place.

Their requirements are published and compliance with certification will have to be ensured. Thus market entry is transparent and given that a source material and its subsequent conversion is planned to meet these regulations, then the competitive challenge relies once more on pricing, delivery, quality and response to design needs. The major DIY chains, home centers and furniture groups, plus regional and government buying organizations are set to exploit these market aspects during 2002. They seek good sources for reliable service without environmental risks factors.

According to APA research, the supply of certified wood products was on the increase among the US wood manufacturing industries. For public buildings and truck bodies 100% of respondents actually supplied certified materials, whether or not asked for, as it was seen as a definite product benefit. For general millwork 67% of respondent supplied certified wood products, in windows and doors 40%, in wooden household furniture 40%, and in wooden office and store furniture 61%. It would seem the industry was well ahead of consumer demands and well prepared to make good use of being environmentally conscious in its manufacturing.

According to other recent surveys, certified wood materials are increasingly demanded by the US furniture manufacturers, who have so far been less affected by the sustainability debate from consumers' side. The pressures appear to be coming from the trade intermediaries: like retailers, institutional, buyers and lobby groups. As more forests are certified, the supply of certified wood is increasing along the production chain. The pressures on certification for downstream industries – such as furniture making – will become more evident also from the supply perspective.

What are the implications to foreign components suppliers (China, Philippines) who are getting their raw materials from numerous sources before re-manufacturing and exporting them to the US markets?

One conclusion is that the demands for chain-of-custody certification will increase. CoC is understood as the identification of material throughout all the processing and transportation stages from the initial raw material source to the final product. In addition to forest certification, with which chain-of-custody certification is usually associated, it could be used for showing that wood comes from legal sources. In the short term, this would be a more pressing issue to pursue for tropical producers than full-scale forest certification.

4.1.10 Furniture market: foreign trade and apparent consumption

Imports

Imports have dramatically changed the nature of the US furniture industry over the last decade. Since 1991, the dollar value of imported furniture (at landed cost) has increased by 250%. In that time, the value of domestic shipments of furniture went up 49% even though US domestic producers used imported parts for decades or imported “in the white” goods that were finished in domestic factories. Both of these types are included in the US shipment figures.

Total US imports of wooden furniture climbed to \$10.67 billion in 2001, or 79% higher than 1997 (\$5.96 billion). The structure of US wooden furniture imports has not undergone much change (Table 4.6). Most notably, wooden bedroom furniture has

increased its share of imports, while wooden seats have lost ground. The largest category, miscellaneous wooden furniture are mainly occasional or accent items, often as entertainment storage units and not able to be categorised. They held share at 34% and remained nearly unchanged between 2000-2001. Bedroom furniture has recorded the fastest growth rate.

The dramatic increase is largely due to the US companies outsourcing parts and components manufacturing to Chinese companies, with final assembly occurring back in the US.

Table 4.6 USA: imports of wooden furniture by product group

Product Summary on Imports		1997	1998	1999	2000	2001		Index
	%	\$ million					%	97=100
Seats cane, osier, bamboo, etc.	2	92.4	93.4	107.6	129.2	116.0	1	126
Seats n.e.s. with wooden frames	23	1,372.9	1,531.7	1,863.8	2,215.0	2,146.7	20	156
Wooden office furniture	7	395.4	507.5	576.4	715.6	582.9	5	147
Wooden kitchen furniture	7	421.4	465.0	554.2	666.7	735.1	7	174
Wooden bedroom furniture	13	756.2	945.8	1,298.2	1,687.4	1,840.0	17	243
Other wooden furniture	33	1,992.9	2,505.3	3,063.3	3,653.0	3,648.8	34	183
Furn. other mater. inc. bamboo	4	233.6	277.0	341.1	402.2	371.1	3	159
Furniture parts of all materials	12	691.0	825.2	1,059.7	1,317.0	1,225.5	11	177
Total	100	5,955.8	7,150.9	8,864.3	10,786.2	10,665.9	100	179

Source: COMTRADE

Exports

US exports of wooden furniture declined to by 6% to \$1.16 billion in 1997-2001. "Other" furniture (30%), furniture parts (27%) and wooden seats (18%) made up three quarters of the US exports.

Table 4.7 USA: exports of wooden furniture by product group

Product Summary on Exports		1997	1998	1999	2000	2001		Index
	%	\$ million					%	97=100
Seats cane, osier, bamboo, etc.	0	2.5	2.2	2.2	2.5	2.3	0	92
Seats n.e.s. with wooden frames	18	223.1	218.6	210.6	227.1	207.2	18	93
Wooden office furniture	7	85.1	87.4	78.3	99.5	96.9	8	114
Wooden kitchen furniture	5	65.7	44.7	49.1	53.4	41.6	4	63
Wooden bedroom furniture	9	105.2	114.1	102.7	105.1	104.0	9	99
Other wooden furniture	33	412.3	385.8	351.9	383.1	344.9	30	84
Furn. other mater. inc. bamboo	4	51.1	59.8	68.8	72.8	51.8	4	101
Furniture parts of all materials	24	290.8	370.3	318.2	330.5	314.4	27	108
Total	100	1,235.9	1,282.9	1,181.7	1,273.9	1,163.1	100	94

Source: COMTRADE

Net trade

As a conclusion, the USA is heavily a net importer in all wooden furniture categories, with a total trade deficit at \$ 9.5 billion in 2001. In 1997 its deficit was roughly a half smaller at \$ 4.7 billion. Net imports in wooden bedroom furniture has nearly tripled in this period.

Consumption

US consumer spending on furniture and bedding was \$64 billion in 2001, lower than the \$64.4 billion for 2000, in current dollars and not adjusted for inflation (Table 4.8). For the first half of 2002 consumer spending for furniture grew at an annualised rate to \$67.1 billion, up 4.8%, but for the full year it is expected to reach only 2.4% with a further 2.5% in 2003 to \$67.3 billion.

Backing this is the forecast that average disposable household income and number of households will grow by 11% in constant terms over the next 10 years necessitating a strong need to furnish. Given that estimate then the growth in furniture sales at retail would take the household market to \$78 billion by 2010. Even with a cyclical recession in those years this value is quite feasible. However, it is the amount that imports take up from the market that will be the crucial determinant for US furniture production, employment and for national distribution, handling and service systems.

Consumer spending in the US on furniture has been declining over decades with an occasional upward blip. The current share of household income going into furniture is down to 0.86%, from over 1% in the 1980s. Much of this is due to decreasing family sizes with smaller households of 2.7 persons, and competitive leisure products.

US production of domestic furniture declined 10% in 2001 with 17% down for office furniture makers but a rebound is noted for 2002-2003. Even so, according to AFMA sources, US residential furniture factory shipments (as opposed to consumer expenditure on furniture) are expected to increase 4.1% in 2002 and 5.9% in 2003. Real increases can be seen in the table when adjustments are made for modest inflation. Upholstery is expected to have higher increases than wood in 2002, but slipping back in 2003. Consumer demand is expected to rise more in 2002 than 2003.

Total US household and office furniture consumption at trade prices (factory shipments), including imports but excluding exports was \$35 billion for 2001 of which household furniture was \$23.0 billion, showing a 10.6% fall. Of the top-25 suppliers, eighteen saw their sales decline in 2001 taking the group down minus 6.6% to \$12.9 billion from \$13.8 billion in 2000.

Office Furniture Manufacturers Association (BIFMA) estimates that US business and institutional shipments of office furniture were \$10.98 billion in 2001 and \$13.28 billion in 2000, an 18% decline. In many companies operating incomes went considerably as they moved to off-shore sourcing, incurred costs for US plant closures and sold off slow moving stocks.

Table 4.8 USA: AFMA forecasts on furniture market indicators

Indicators	2000	2001	2002	2003
	US\$ billions			
Consumer spending	\$64.0	\$64.1	\$66.4	\$67.6
Growth Rate		0.0%	3.5%	1.8%
Real growth		1.7%	5.9%	2.9%
Factory shipments	\$25.6	\$23.0	\$23.9	\$25.3
Growth rate		-10.2%	4.1%	5.9%
Real growth		-11.3%	3.1%	4.8%
Wood shipments	\$12.1	\$10.9	\$11.2	\$11.9
Growth Rate		-11.0%	2.7%	6.3%
Real growth		-12.5%	1.3%	5.0%
Upholstered shipments	\$10.82	\$9.8	\$10.5	\$11.1
Growth Rate		-9.3%	6.3%	5.6%
Real growth		-10.3%	5.3%	4.5%
Metal & other shipments	\$2.55	\$2.3	\$2.3	\$2.4
Growth rate		-10.5%	1.1%	5.1%
Real growth		-10.7%	1.0%	4.7%

Source: American Furniture Manufacturers Association

Table 4.9 USA: market size categories 2001

	Market	% of total	Stockturn	Share of selling space
Consumer spending:	\$ billion			
Total	\$64.1	100.0%		
Upholstery*	\$21.4	33.4%	4x	26%
of which:				
Stationary	\$14.3	22.3%	4x	27%
Motion	\$7.1	11.1%	4.2x	4%
Bedroom	\$10.1	15.8%	3x	9%
of which:				
Youth	\$2.9	4.5%	3.5x	3%
Master	\$7.2	11.3%	3x	13%
Infant furniture	\$1.0	0.1%	3.7x	0.2%
Dining room	\$8.0	10.5%	3.2x	7%
of which:				
Formal	\$4.1	6.4%	2.7x	9%
Casual	\$3.9	6.1%	3.9x	5%
Occasional	\$9.0	14.0%	3.0x	4.5%
of which:				
Entertainment	\$2.5	4.0%	3x	4%
Tables etc.	\$3.2	5.0%	3.1x	5%
Other/accent	\$3.3	5.0%	3x	4.5%
Home office	\$3.1	4.8%	3x	1.5%
Bedding	\$8.5	13.3%	6x	8%
Kitchen furniture	\$2.9	4.5%	-	-

* Note: Extracted from the market sales are:

Upholstery			
Leather-covered	\$6.5	26%	
Fabric covered	\$21.4	74%	

Master bedroom accounts for 29% of all cabinet items. Youth bedroom is 10% to give bedroom furniture a third of the market. Bedrooms are becoming living areas and the electronics are following this trend require better cabinets for standing and often the enclosure of these items, such as TV, DVD, editing facilities etc.

Imports are offering more wood for the money and offer a mix of media and styles unseen. In promotional ranges at a certain low price the cost of transporting the goods from off-shore sources out-weighs the savings in labour costs. With automation the US producer is able to compete and offer a better delivery service.

4.1.11 Imports from developing market economies and China

The US import picture can be best described as “sino-dynamic” with growing market invasion by the Chinese exporters across the wooden furniture ranges. The US appears to have remained an extremely open market for furniture imports from all sources, but from China in particular – when the occasion has risen with China’s move into export-oriented market economy.

There have been drastic changes in import shares between the supplier countries, as well as an overall shake-up of the US furniture market, what has lead into down-sizing of domestic production and a shift in business strategies. Currently, the US buys 56% of its wooden furniture imports from the developing countries and China (DMEC group). While this share has not changed much since 1997, the China-factor has come certainly into play in the past five years. China’s share of the US imports of wooden furniture and parts went up from 15% to 27% during 1997-2001, and the end is not in sight.

China ranks the first or second in all the four major import sectors of wooden furniture in the US. In “other” wooden furniture, which is by far the bulkiest part of trade, China hold a comfortable 34% share of the US imports, leaving only minor shares for Indonesia (Nr.3) and Malaysia (Nr.5). Between these leading suppliers rests Canada on the second place (down 2 percent units since 1997) and Taiwan (P.O.C.), which has lost 6.5%-units. Also Malaysia has been losing its market share.

In wooden bedroom furniture China’s position looks equally strong (at 31% of market). This sector has quickly fallen from the Canadians (former Nr.1) and Mexicans (former Nr.2) to the Chinese over the five-year period. China’s share of imports started to soar from merely 6% in 1997, and simultaneously Canada came down from 36.6% to 22.6%! Mexico did not do any better, as its market share melted down from 16% to 8% in 1997-2001.

In wooden seats, the Italians have stood firm against the Chinese competition by holding a nearly unchanged 31/30% share and the number one position. China strengthened its market stance from 10% in 1997 to 20% in 2001. The biggest loser has been Malaysia, which saw its market share slide from 14% to 6% in the same period. Taiwan’s (P.O.C.) deliveries fell by more than half to the US.

Finally, in furniture parts Canada (35%) and China (23%) are the key players, with the latter one growing fast. Mexico and Taiwan (P.O.C.) have lost ground more than any others. Taiwan has gradually lost its former special position as the export-import

hub of China mainland, and much of its productive capacity has been relocated to the continent and other South-East Asian countries.

Table 4.10 USA: imports of major product groups from leading developing countries and China

Product group	Imports 2001 (\$ million)	Major developing country suppliers	Share %	Rank
"Other" wooden furniture	3,648.8	China	34.2	1
		Indonesia	6.5	3
		Malaysia	5.2	5
Seats n.e.s. with wooden frames	2,146.7	China	19.5	2
		Mexico	8.8	4
		Malaysia	6.3	5
Wooden bedroom furniture	1,840.0	China	30.9	1
		Mexico	7.9	4
		Indonesia	7.1	5
Furniture parts	1,225.5	China	23.2	2
		Mexico	8.1	3
		Malaysia	3.5	6

4.1.12 Market segmentation and regional demand breakdown

Consumer segments

The US population trends show the irreversible maturing of the two 'boomer' generations in the major household sector – both are prosperous and will benefit from inheritance-generated asset transfers in the coming years. This generation, usually seeking immediate gratification, is increasingly including 'place' in its definition of self. This should mean that 'the home' including vacation property, is becoming a much more central focus for families. The proliferation of 'shelter' magazine titles, increasing by 85% over the last decade helps to press home the household, furniture items and often the DIY stories. A second wave of household formation expenditure is from the 'echo-boom' of the original boomers. These are now at college level and will soon be into home formation.

Furniture types and price points

In the 'Kids and Juvenile' market 14 companies sell \$2.5 billion (wholesale), up 9% on 2000, with little change in turnover for 2001, but with increases in profits and margins. A feature of this furniture sector is the use of licensed product designs, from Disney films, to famous child stories, TV comedy and characters.

Most of the furniture items are scaled down to suit child and juvenile sizes, but parent glider chairs are a part of the 'baby' furniture room scene. In addition to the licensed design sector is the regular routine of 'modern' and 'Youth Attitudes', with 'reproduction' styles featuring the sturdy 'Victorian' image and 'simple contemporary' under the RTA system.

Use of these styles help in the redesign of the bedroom as the child gets older. A number of retailers have moved from catalogues to online, plus opening more 'bricks

& mortar' stores. Keywords are furniture in the various stages of a child's life so that a sector for infant/nursery is \$300 million, for ages 3-7 is \$1.1 billion and the same amount for the 10+ youth bedroom ranges.

Table 4.11 USA: consumer furniture buying trends

Age group	Households (mill.)	% Plan to Spend 2001	Type of furniture sought
Generation Y (Born since 1975)	2.3	3	Necessities/popular items
Generation X (Born 1965/75)	14.6	22	Dual incomes allow strong choices, major home buyers
Younger Baby Boomers (Born 1956/64)	22.2	28	Strong earning levels, ideal furniture buyers, families.
Older Baby Boomers (Born 1946/55)	23.2	24	High discretionary incomes, refurbishing homes.
Empty Nesters (Born 1936/45)	16.6	13	Independence, vacation homes, 83% own homes.
Retirees (Born before 1936)	23.7	10	Lower spending, special, items, decorative

Source: F/Today

Parents in the 25-34 (56%) and 35-44 (33%) age group are the main purchasers. The birthrate is up with 4.1 million born in 2000. The median spending amount is \$300 and represents over half of sales at family income of \$50,000. This increases to \$700 in household incomes of over \$100,000, but represents only 7% of sales. Coordination is useful here and a range of accessories that can grow with the children can save money whilst offering scope for designs. Examples are jcpenny.com; Poshtots.com; eddiebaur.com/ebh; Bombay Kids, Pottery Barn kids, Rooms to Go Kids, Babies R Us, etc.

Within the household sector, occasional furniture, seen as small tables, wall stands and accent pieces, offer many new unique looks. They are dominated by imports as they are easier to ship in volume and provide new designs swiftly. Affordable off-shore labor can offer better surface treatments, carvings, rubbed finishes and metal/wood effects in the \$399 -\$999 price points. Woods used are pine, cherry, oak, maple, birch, mahogany and rubberwood and bamboo (crushed and split), banana bark, coconut shell, raffia, rattan, wicker and leather as the top. These styles and surfaces are often found in chair and table arrangements, especially from organic materials, mainly for the eclectic and designer end of the markets.

Entertainment units for TV, video, DVD, big screen and small item storage is often supplied boxed complete, or as RTA (ready-to-assemble). Both are a feature of the Home Centres and large Wal-Mart stores. Retailing from \$99-\$499 in wood and particleboard sides, plywood backs and either solid wood of glass doors with metal extrusions set the backing for the large-scale electronic equipment. Sauder, Gusdorf, Bush and O-Sullivan are major suppliers that are now expanding into household furniture stores with these items to offer better delivery services and quality product.

Table 4.12 USA: price points and most favored woods in bedroom and formal dining furniture

Price point	Master bedroom		Formal dining sets	
	Share	Best selling woods	Share	Best selling woods
High - above \$ 3000	31%	Oak 19% Cherry 37% Mahogany 12%	33%	Oak 23% Cherry 18% Mahogany 26% Burl 13%
Middle - \$1 000-\$2 999	55%	Oak 50% Cherry 26%	46%	Oak 37% Cherry 34% Maple 10%
Low - below \$1 000	14%	Oak 47% Cherry 10% Pine 22%	21%	Oak 50% Beech 11% Birch 11%

A different set of price points are used for segmenting the casual dining and youth furniture.

Table 4.13 USA: price points and most favored woods in casual dining and youth furniture

Casual dining			Youth furniture		
Price Point	Share	Best selling Woods	Price point	Share	Best selling Woods
High - above \$2,000	19%	Oak 26% Birch 11% Cheery 11% Wrought iron 11%	High - above \$300	40%	Oak 16% Maple 22% Painted 22% Birch 10%
Middle - \$700-\$1,999	46%	Oak 39% Birch 16%	Middle - \$150-\$299	42%	Oak 37% Maple 10% Pine 16%
Low - below \$700	35%	Oak 45%	Low - below \$150	18%	Oak 47% Pine 16% Painted 11%

Recent research indicates the importance of selection criteria - with 'low price' at 26%, 'high quality' 23%, a 'wide selection' at 18%, 'popular brand names' at 10% and 'store service' at 9%. Also a change in shopping behavior indicates that 39% of buyers now research on-line before buying at stores, A further 32% look on-line but buy by catalogue, with 10% now researching in-store and say they buy on-line.

Regional breakdown

California has the largest market for household furniture (13%) followed by New York (7.9%), Florida (5.4%) and Illinois (4.7%). In the Metro-areas it is the New York area that leads with 18.1% of the metro total, with Los Angeles area (10.6%), Chicago (7.2%), San Francisco area (6.5%) and Washington area 6.2%. In terms of spenditure per person Chicago metro area leads with \$36.9.

The different forecast growth rates reflect the changes in purchasing power and the movement (migration) of families to the 'sunshine' states such as Nevada, Phoenix, Sacramento and Portland. The northern East Coast states are suffering a decline in

population and government cut-backs and investment. Such movement will lead to changing store locations and distribution needs as the new population and site housing facilities develop.

Table 4.14 USA: regional household furniture market forecast

	Population	2001	2010	% change	\$ per person
By Metro-region	Millions	\$ billion	\$ billion (constant \$ 2001)		
1. New York/Long Island/New Jersey	20.7	6.27	7.15	14.1	30.3
2. Los Angeles/Riverside/Orange County	16.7	3.69	4.51	22.3	22.1
3. Chicago/Gary/Kenosha	9.2	2.49	2.99	19.9	36.9
4. San Franc./Oakland/San Jose	7.2	2.23	2.74	22.7	30.9
5. Washington/Baltimore	7.7	2.14	2.66	24.0	27.8
Total of 26 Metro-areas	133.1	34.58	42.20	22.0	26.0
By State:					
1 California	34.5	8.38	10.44	24.5	24.3
2 Texas	21.3	4.52	5.82	28.8	21.2
3 New York	19.0	5.07	5.74	13.1	26.7
4 Florida	16.39	3.47	4.59	32.0	21.1
5 Illinois	12.5	3.04	3.63	19.2	24.3
Total of 52 States	284.8	64.11	78.77	22.9	22.5

4.1.13 Market developments by type of furniture

Office furniture

The US office furniture market reached \$13 billion in 2000, a small increase on 1999. Since then it has declined and may go lower before the forecast pull back in 2003 but still below the value of 1998. SOHO (small office-home office) is a strong 35% sub-sector, dealing with home sales through large stores like Staples, Office Depot, Officemax, as major retailers, with United Stationers as a distributor. All are supplied by at least 11 key manufacturers ranging from La-z-boy to Steelcase and Herman Miller, with RTA suppliers taking 45% of the market. The growth is moving away from large offices and corporate businesses as downsizing in company/corporate staff continues.

Small businesses and home working has grown, hence the change in this sector and the need to provide smaller items for converted home rooms. A wide range of sizes and desk shapes are designed to suit the various home-rooms and corners that make the home office. Wood and particleboard units with laminate tops and strong edging mixes with solid wood and traditional ranges. Flat-pack (RTA) is found more in the Electronic/Office supply stores and Home Centres, with assembled and the more expensive furniture in the usual household outlets supplied by many household furniture suppliers making for this sector. Often imports are sourced to help their branded image.

New product trends in the home office sector are space savers with newer smaller scale pieces that have a high degree of function in a small 'footprint'. Extra finesse is provided with decorative mouldings, shapes and inlays to add fun and color treatments to this predictable category, where workstations with a price of around \$950 take 50%, filing/storage around \$300 and 13% and cabinets (credenzas/hutches at under \$700) take 9%. Seating has 26%. Imports are becoming a factor as they develop designs to meet this sector in both flat-pack and assembled.

SOHO market (small office, home office)

The market for home working is changing, with earlier workers often returning to office environments and others being set up in the home. Annual growth is under 1% has seen the households with a home office grow to 34 million in 2002. Of these about 40% are income-generating households with 9.6 million of these seen as full time home-based businesses. Corporate home office work is at 25 million households and as network systems develop, now at 12% of home office, the technology could provide a further 1 million sites during 2005.

The strongest retailers in this sector were the three office supply superstores with 48% (\$2,142m), but they saw an 8.7% decline in sales to end 2001. Total sector sales for the top ten was \$4.4 billion with hardly any change from 2000. It was the discount department stores at 12% and warehouse clubs with 26% of the sector that made up the difference to grow by 12% in the year. The top six outlets are shown in Table 4.15. These were followed by Best Buy – (bestbuy.com), IKEA – (IKEA.com, now showing a 26% increase to \$170 in 15 units in this sector), Lowe's – (lowes.com) to Target – (target.com). Warehouse clubs accounting for more than 25% grew by 6% in the period.

Telecommuting is high in 2002, with 31 million home workers and 27% of the US workforce. This could increase to 27% by 2006. SOHO with less than 5 employees tended to have 37% of the telecommuter sector with small businesses (5-99 employees) at 27% and enterprise of over 1000 employees using the system for home release at 26% of the market. The small company sector is the one likely to develop strongly using intros to national office stores to agree multi-purchase units for staff. Quill.com offers an insight into how office furniture purchases have been effective using the web.

Table 4.15 USA: Top 5 non-traditional office furniture retailers

Retailer	2001	2000	% change	Store units
	\$ million			
Office Depot	\$905	\$999	-9.4%	824
Staples	\$670	\$698	-4.0%	1,066
Costco	\$630	\$580	8.6%	284
OfficeMax	\$567	\$650	-12.8%	935
Sam's Club	\$540	\$525	2.9%	500
Wal-Mart	\$435	\$378	15.1%	2,744

Source: SoHo Today

With 59% of households owning a desktop computer and printer, scanner levels at 34% and notebooks at 23%, the lack of innovation in computer equipment is looked upon as one reason for falling furniture sales. It needs new electronic items to boost the entertainment and home office products. Flat –screens, now at 11% and home notebooks may help this move. Wide-screen TV’s (in 16:9 ratios are wider than the regular 4:3 ratios) are currently sold as a third of new purchases. Home theatre electronic products have recorded a doubling of sales as the industry gets the arrangement of modules balanced. Both these offer scope to increased sales of furniture to hold and often disguise the electronics in the home. Plasma thin screens for wall-hanging are still too expensive (\$20,000) to allow any furniture creation to reach a strong market potential.

Table 4.16 USA: top-10 office furniture segments and market estimates for 2001

Office furniture segment	\$ million	4-year growth %
Panel system and components	4,011	9
Desk Chairs	2,011	8
Desks (excludes RTA wood)	1,174	11
Filing cabinets	855	*
Desking systems	784	12
Bookcases/storage	553	*9
Vertical file/wall	508	*
Work/conference tables	499	8
Other file cabinets	428	
Side/arm chairs	325	11
Total here	11,148	

Source: MarketResearch.com/Stats. US Dept. of Commerce.

Office seating

Seating for home and commercial office bought from the chains has continued to grow from the lower priced \$69-\$99 levels to the \$199 and upwards with the popular Miller classic at \$749. Much if this is because of fashion designed being used by retailers commissioning own ranges, the ergonomic need, gas lifts, variations in materials and not just leather, but micro-fibre or mesh and the need to find seats suitable for the desk/storage combinations. Packages put forward at these price points help this image and meet changing retailer needs. Wood and formed wood present calming influences to the metal and black finishes.

Leisure sectors

Family rooms are moving outdoors as the declining travel market keeps families at home. Well-coordinated displays for porches, verandas, terraces and patios link products for seating, eating and storage with the appliances. All-weather wicker for seating developed from the Lloyd loom wicker of 1980s as these styles move and mix with outdoor and closed spaces. Collections of wood mixed with aluminium/wrought iron, or wicker linked to metal frames. Alternative table tops with marble, lava, faux stone, tile tops and volcanic materials link with metal uprights. The International Casual Furniture and Accessories Market. Chicago, September 2002/3 had a number

of themes ranging from wood shaped Asian chairs to aluminium frame and teak slats for dining and appointed slat-pine shapes for tables and chairs.

As the US market strengthens for imports, the European suppliers are offering quick-ship facilities, usually within 5 days. Gautier, a French manufacturer of a wide range of furniture items has 47 galleries in the US with SOHO-only, juvenile-only and full range of juvenile and master bedrooms, entertainment and office products.

Kids Furniture

In the tough retail market of 2001 when all retail sales were up 3.6%, kids home furnishings retailers grew by 5% to reach \$8.9 billion for the top twenty outlets. Department stores (Wal-Mart) led the way with 66% of the total. The highest 'kids only' store was Babies'R'Us with \$1 billion, 11% of the sector and 2% growth from 165 stores, whilst Rooms to go Kids was tenth with \$105m. and a 10.5% growth from 18 stores. Seaman's Kids at twenty with 9 stores had \$35m sales and 40% growth. The six specialist 'kids' named stores in the top twenty had 17% of sales from 320 outlets producing an average \$4.2m a store. They were the stores with the largest growth, especially as Kmart is in Chapter 11 bankruptcy protection. Plans for 2002/3 will see many new store openings as this sector expands to the extent that some groups will double their sales in the year. Bombay Kids plans to open 20-30 stores in the US during 2003 after a successful trail store in Dallas. A total of 100 is planned over the next three years to integrate the catalogue and internet marketing of Kids. Pier 1 is to enlarge its Cargokids stores to over 300 from the existing 17 now, offering new bedroom ranges.

Table 4.17 USA: Kids furniture top retailers

Retailer	2001	2000	% change	Store units
	\$ million			
Wal-Mart	\$2560	\$2300	11.3%	2,624
Target	\$1600	\$1450	10.3%	977
Kmart	\$1555	\$1585	-1.9%	2,105
Babies'R'Us	\$1000	\$980	2.0%	145
Sears, Hoffman	\$510	\$527	-3.2%	867
JC Penney	\$365	\$375	-2.7%	1,111

Source: Kids Today

The licensing of names, properties and the placing of these as attractive emblems and pictures on kids furniture has been a major factor in this growth. From the educational aspect to the enjoyment and the bizarre, all contribute in some manner.

4.1.14 Furniture style and design trends

Styles are an important factor in the case goods (cabinets) wood sector. Overall the 'contemporary' and 'American country' styles are most popular. Within case goods the value of retail sales approaches \$24 billion (36% of the market) and accounts for master bedroom 40%, youth bedroom 11%, formal dining 18%, casual dining 15% and other case goods 16%.

Formal dining shows a similar level of style arrangement so that in the middle sector 'contemporary' has 26%, 'American country' 25% and '18th century' 22%, with 'Mission' as the strongest growth style again.

These styles have been researched in three price categories (see Table 4.12 and Table 4.13) and studied for the best selling woods and finishes. At promotional price points, 'contemporary style' is followed by 'American country' to account for more than four-fifths of the market, whereas in the middle price is 'American country and traditional style' with nearly a quarter each, and 'Mission' with the strongest growth at 26%. The high end sees 'other traditional' strong at 32%, with 'European traditional' the fastest growing style at 23%. With all the styles offering greater quality and presence allows them to reach good top-end prices. Imported adult bedroom from China at \$2-3000 retail. US designs in nostalgic cherry and European with blond finish oak solids and in pine and youth sectors are covered. Brazil is developing designs for the US markets, offering a challenge to China but not competing in similar sectors.

The style choice in Casual dining has 'contemporary' at 37% and 'American country' at between 47%-33%-22% across the sectors of low-mid-high end. The fastest growth style is 'casual contemporary'.

4.1.15 Evolution of distribution patterns

The diversity of retailing in the US that led to a change in the type and coverage of store systems during the 1990s, has had further effect during the slow-down of the last two years. Sales for all furniture stores including accessories and lighting reached \$44.8 billion in 2001 (70% of the market) with no change seen except for the growth in the top-10 to 18.9% (\$8.5 billion) from 17.6% in 2000 and the top-100 to \$21.3 billion and 47.5% of the market. In 2001 the number of outlets in the Top-100 fell by 219 to 6,935 units, mainly due to the collapse of retailing chains Heilig-Myers, Krause, HomeLife and Nationwide.

Analysis of the store types showed the continued importance of furniture stores, but with the growth of the Home improvement centres to 2% of the market.

Table 4.18 USA: furniture retail patterns by type of outlet

Store type	Percent of sector	Growth in 2001
Regular Furniture stores	42%	6.4%
Manufacturers gallery stores	14%	3.9%
Office supply stores	12%	-11.4%
Department stores	11%	-6.3%
Discount department stores	10%	7.5%
Membership clubs/warehouses	9%	11.1%
Home Improvement Centres	2%	13.2%

Table 4.19 USA: the biggest department stores for furniture

Company	2001	2000	% change	Furniture % of store sales	Units
JCPenney	\$630	\$725	-13.1%	3.5%	1,075
Macy's East	\$187	\$170	10.1%	3.7%	116
Macy's West	\$183	\$185	-1.4%	4.4%	138
Rich's Lazarus	\$165	\$184	-10.4%	7.9%	76
Marshall Field's	\$155	\$162	-4.3%	5.5%	64

The top-discount department stores have increased their sales to \$2.3 billion, up 4.7% over the ten years. They have entered into furniture sales more rigorously, often with RTA products aimed at the SOHO (small office-home office) and teenage segments. The change will be dramatic for 2002 as the result of store closures and merchandising changes. Also, the RTA will have to move to better quality and styled items.

Table 4.20 USA: top-discount stores for furniture

Company	2001	2000	% Change	All Store sales (billion)	Units
	\$ million				
Wal-Mart	\$1,085	\$930	16.7%	(\$139)	2,744
Kmart	\$685	\$717	-4.5%	(\$36.2)	2,114
Target	\$267	\$240	11.3%	(\$32.6)	1,053
Ames	\$212	\$249	-15.2%	(\$3.2)	387
Shopko	\$98	\$104	-5.8%	(\$3.4)	366

* Note: both had file for Chapter 11 bankruptcy in 2001

Many national chains are important and the key ones are among the 31 specialist stores in the Top 100 who increased coverage to 4,250 units and sales of \$5.8 billion as the conventional stores decreased outlets to 2,685 units (from 3,148) and sales of \$15.5 billion. Sales per square foot varied with the median at \$275 with specialty stores taking \$334. Takeovers during 2002 will see Rooms-to-Go (\$1.35 billion sales) enter the Californian markets as they have Wickes, a national fashion-orientated value-price retailer with 39 stores and sales of \$400 million.

Table 4.21 USA: top-10 retail stores for furniture

Retail company	2001	2000	% change	Units	Sales sq/ft
Rooms To Go	\$1260	\$1050	20%	90	\$800
Ethan Allen	\$1170	\$1193	-2%	285	
Levitz Home	\$900	\$893	1%	3,791	\$235
Pier 1 Imports	\$858	\$777	10.4%	6,601	
La-Z-Boy Galleries	\$836	\$744	12.4%	3,642	\$230
Berkshire Hathaway	\$833	\$830	-	27	
IKEA	\$690	\$550	25.5%	15	
Havertys	\$678	\$680	-	103	\$190
Value City	\$675	\$625	7.9%	76	
Art Van	\$575	\$575	-	28	

Source: F/Today and US Dept. of Commerce.

Table 4.22 USA: the biggest specialty furniture stores for furniture

Retail company	2001	2000	% change	Units	Sales sq/ft
	\$ million				
Thomasville Home	475	468	1.5%	130	
The Bombay Company	394	373	2.8%	365	\$417
Breuners Home	368	406	-9.5%	48	\$200
Pottery Barn	345	305	13.1%	169	
Wickes	345	335	3%	38	
Crate & Barrel	326	300	8.7%	106	
Restoration Hardware	120	139	-13.7%	101	
Roche-Bobois USA	52	54	-4%	38	\$275

The Bombay Company with 365 units, sales per sq/ft of \$417 and a turnover of \$384m was a high flyer but recent loss of sales caused problems. Furniture is 48% of their store sales with accessories at 36% and décor 13%. The wrong type of advertising and a move from regular specialist signature catalogue sales caused a decline, this is being rectified and special sections in Sunday papers are testing the new approach.

Buying Groups are looked upon now as profit enhancers as they offer a link between national and regional, often local, buying power, identification of brands and easier merchandising in the managing of stores and suppliers' delivery systems. The strength of imports and the need to look at container loads has led to the smaller stores seeking some outside expertise to handle this aspect and still retain a profit. Their growth in the last few years has benefited the small retailer. Associated Volume Buyers, Contemporary design group, Furniture First, Furniture Smart and Mega Group are examples covering 4,000 outlets.

Manufacturers franchised stores

The entrepreneurship of retailing is running a store that is backed by experts in the franchise and licensed dealership and gallery business. Major brand names feature with La-Z-Boy (8 stores and 290 galleries within stores in 2001 from 144 in 1995 and 19 in 1990). Their top ten galleries generated sales of \$410 square foot in 2001, up \$100 a square foot in 4 years. The average gallery store generated sales of \$254-\$260

with the top store in Glendale, Arizona with \$8.4 million backed by two Arizona stores at \$5 million each. Norwalk galleries (www.norwalkfurnitureidea.com) have 80 locations, Badcock (330 stores, www.badcock.com); Kinkaid (15 up-market stores) and Ethan Allen as prime examples of full-service backed stores. A number of these have been working during the 1990s, whilst a few the result of changed manufacturing strategies in the last 3 years. Sales vary from over \$5 million annually per store and some of the smaller independents have 10-12 outlets although half have 2-5 stores.

A link between catalogues and the internet has worked for Direct Marketing Services (DMSI) as they work with Sears specialty. Turnover was \$150 millions in 2001 from 60 million catalogues from:

- www.SearsShowPlace.com,
- www.SearsKitchens.com,
- www.SearsRoomforKids.com,
- www.SearsHomeCenter.com, and
- www.HomeVisions.com

Strong products are accent items, dining sets, sofas and recliners through out the year with seasonal pieces for summer and winter. Growth is from catalogue customers ordering on-line and from links as casual web shoppers come by. Suppliers to this system need to provide fast delivery and quality as customers become more demanding.

In the retail market it is sensible to record the sales in furniture stores as opposed to other types of outlet selling furniture. These stores took 79% of all furniture consumer sales in 2001, but have declined in importance since 1995 as the discounters and DIY stores have gained prominence. Sales to the first half of 2002 indicate an annualised growth to \$65.1 billion or nearly a 2% gain just ahead of inflation.

Conclusions on retail/distribution

After 40 years of growth and success until the mid-1990s, national retail chains are no longer the norm in selling furniture or have the national strength they once had. In their place, the regional retailers and a dedication to states or metropolitan areas are dominating. This follows the rise of small specialty stores selling per styles of furniture, often serviced by large manufacturers or directly by importers through developed distribution systems. These stores may well offer direct home delivery.

Household furniture distribution typically uses the three channels of gallery networks, specialty stores and full-line furniture stores to reach the consumer. A number of each are owned by manufacturers, especially for gallery outlets found as free-standing stores, or sites within selected full-line stores. Others are often franchised. Brands using this route are Thomasville and Broyhill, as opposed to franchised stores like Ethan Allen and Drexel. Movement between the supplier and the stores can be by wholesaler, often regional in delivery; by a manufacturer regional distribution center or direct drop delivery from source, sometimes from direct imports by full container load purporting to come from an US source.

Trends in manufacturing offer more off-shore manufacturing as companies source around the globe and sell nationally. The local independent furniture store and the regional chain store are the winning concepts today. This opens up a practical opportunity for off-shore manufacturers to place owned stores in key cities, as the US manufacturers are doing right now with more product-specific stores. Rooms-to-Go, with 80 stores has this concept in different styles and price ranges within its current stores. It sells the full furnishing package of sofa, chair, coffee table, end table, lamp, mirror, or picture – all for one price. Small free-standing stores could do this with their own styles.

With a surge in supply of samples and new introductions from Asia and China, the existing pre-market for the High Point Trade show (in March in the US), could easily be held in Asia and the items selected there so that the preferred ranges could be ready more easily for the actual twice-yearly April and September markets. The internet could offer repeat business.

It is proposed that Las Vegas offers a Major Furniture market in competition to the national twice-yearly International show in High Point, North Carolina and the numerous city-based but small regional shows. The first market is scheduled for early 2004. At least three-quarters of the top 200 retail buyers have said they will attend and use this show as a buying point.

A recognized importer may deliver directly to stores and their distribution centers or through wholesalers to warehouses and split the containers for onward delivery. The systems are well-known, it is the time taken for transport to negotiate through them that can hold up delivery schedules. With imports it is useful to limit a product directly to selected stores and their systems unless the brand is strong and can sensibly compete.

Brazil competes well here with a two-week advantage on delivery times, low-cost labor supply, plus highly automated factories for RTA ranges. On the other hand, transport costs are higher: \$2,000 for the US East coast, and \$3,000 for the West coast against Malaysia's cost at \$1,000. The current \$485 million Brazilian imports are expected to reach \$600 million with a target of \$1 billion in the years to come.

4.1.16 Indicative price levels

The home office segment has shown a number of creative ideas (modular and then free-standing items) in moving up from the general lower price points. As an example:

- A traditional home office 'wall' can be had for \$1,000 retail offering desk, storage, computer and printer site with the emphasis on notebooks and flat-screens rather than the older bulky screen.
- A four-piece oak desk set is priced at \$1,699-\$1,999 retail.
- Daytona collection captain's bed, with \$129 for the headboard and \$59 for underneath storage.
- Six-drawer chest is \$169 and four-drawer \$119.
- South Shore is working in youth and adult groups with full-size group at \$379 for 4 pieces and \$449 for five.

4.1.17 Advertising and promotion

A survey on advertising effectiveness asked what medium consumers would use when seeking help on purchases. Inserts and circulars play a strong regional and local use and these are the favoured media (27%) when first seeking help in choosing furniture. Newspapers at 24% feature strongly with television and internet running at 13% each. Magazines have fallen to 6%, with direct mail 3%. Inserts seem to have captured the 'visibility' aspect for consumers and are read for interest and use.

Co-op advertising funds from manufacturers were received by 57% of small stores and 86% for large ones with 5% of sales spent on advertising for each. Where the advertising and copy came from is useful to appreciate as owner and store personnel designs took 45% (41% for large stores), material from suppliers 22%, publication/radio/TV station preparation 19% and outside agency 14% (31% for large stores). Advertising featuring sales promotion was 61% in small stores and 75% in large ones as opposed to image at 39%/25% and 22% of advertising in small stores was for special interest-free credit purchases with no deposit, but 47% in medium stores and 72% in large ones providing 20%, 30% and 25% of sales generated respectively. Interior designer were an important aspect of sales with 45% of stores having them. Delivery time was 5 weeks for youth bedroom and occasional table to 6 weeks for the other items. Other points of interest about the merchandising by the stores showed the following results.

Table 4.23 USA: furniture advertising media by region

Areas of USA	Western	Midwestern	Southern	Northeastern
Media use:				
Newspapers	42%	41%	25%	37%
TV	13%	20%	31%	20%
Radio	10%	13%	13%	10%
Direct mail	14%	11%	14%	14%
Yellow pages	15%	-*	-*	9%
Other*	6%	15%	17%	10%

* includes billboards, magazines, special events, web-site

Source: F/Today market research – September 2002.

In the decade ahead, the industry will use many strategies to meet customers' needs while competing in a global economy. Vertical integration or short-cycle manufacturing may look easier. Going offshore may have some advantages but requires a measure of warehousing (possibly large quantities) the advantage can lessen, even if the quality is perfect. Brands will be increasingly important.

4.1.18 E-commerce and Internet-based marketing

It is said that deregulation across a number of industry sectors has led to the US economy's flexibility and a rapid reaction to changes in demand. Undoubtedly the use of E-commerce has had some effect here, even if it is for the availability of data and thus information use on-line to smooth the order/delivery process. Full, integrated E-commerce, is some way off, although the use of developing country programmers and proprietary software is able to allow a cheaper route to this success for both large and

small companies. It is the business and managerial effort to use and value E-commerce that is crucial to this up-take.

In the last two years many middle-market US firms moved away from selling to consumers online. The real cost of getting to these consumers requires advertising and promotions – how do you do it and not spend a lot, plus the latent effect of touch and feel for bigger ticket items. Recently changes in consumer perception have raised expectations and 5pc of firms expect 20pc of their sales to be B2C next year with 21pc expecting B2B sales to rise to this level. Important in this context are:

- Improvement of supply chain management
- Effective communications and cuts in administration costs
- Cost reductions unlikely unless the website and ordering facilities are supported with fulfillment and customer-service operations.
- Offers an improvement in existing relationships with suppliers to take better control of purchases.
- Access to a 'live' person is confidence building.

E commerce in the furniture industry

Some criteria for developing better Internet-sites for furniture have been the following:

- Sharpening a web image as customers use the internet as a research tool for products, prices, styles and shop-locations to see the items.
- Especially for big-ticket purchases, good and easy-to-navigate sites are needed to attract seriously interested buyers.
- High quality product information, shopping tips, dealer locating systems.

The following are some providers of E-procurement and market places:

Merloni, Corian, Formica, Purchasepro.com, Hafele, Cabinetparts, Peterblack.com

B2B sites:

These are manufacturer sites offering access to production control and direct ordering. They can operate from any country and a number work from Asia, for example Asian furniture Hub, www.globalfurniture.com.

In the US, www.FurnishNet.com picked the ashes of crashed net companies to build a link and automate transactions, acknowledgements, shipping notes and invoices for suppliers - the target is to shorten cycle times and drive down operating costs. Currently they manage \$885 million in purchase-order volume.

RTO On-line (www.rtoononline.com) is web site for the rent-to-own industry. It has added an online Marketplace for b2b to allow rent-to-own buyers a platform to find and purchase new products and services. The site had 75,000 hits a month, with visitors staying an average of 12 minutes each. The site has members in 31 states and four countries. Recent activity has seen the need to work with manufacturers for electronic transactions and to develop XML-based digital products using wireless, bar

code-scanning in an attempt to get correct manufacturing and delivery information to the consumer.

Thomasville is an example of both B2B and B2C with different tasks for each sector. It offers retailers the edge in preparing their own sites, linked to Thomasville and for direct access to sales leads to these retailers. A dealer extranet using XML standards by the Furniture Industry Data Exchange and approved by industry associations handles the orders and information side for delivery and content. Product catalogues are regularly updated and the individual item pictures can be printed by customers to set out in room sets for pre-order or pre-store visit ideas and presentation results before purchase. Their own company stores are ensuring the systems work from experience.

B2C sites:

The 2001 crisis occurred in this sector after the 2 years of the 'dotcom' wave and bursting of that bubble. The use of internet only sites as opposed to those linked to 'bricks & mortar' fell sharply. This has since reversed and better presentation with greater usage has begun. Manufacturers, especially those with galleries and in-store display are offering new concepts that the consumer can use to make decisions. Thomasville (www.thomasvillecabinetry.com) is using on-line imaging technology, exclusivity for Home Depot sites for semi-custom cabinetry. Browsing a variety of kitchens, bath, home office and home entertainment styles, allows them to select molding detail, wood grain, and accessories. Wickes (www.wickes.com) have added a point-of-sale imaging and room-planning tool for design in whole rooms with 12% of sales being generated in this way.

Other significant B2C sites are found in the following:

- EthanAllen.com,
- www.Thomasville.com,
- www.Ashleydirect.com,
- www.Behome.com,
- www.HermanMiller.com,
- www.Officefurniture.com,
- www.FurnitureFan.com (offers e-mail coupons to send enquirers to the stores).
- www.FurnitureFind.com,
- www.Furniture.com. (tied in with Levitz stores and thus linked to bricks and mortar).
- www.Crateandbarrel.com, www.Pierone.com, www.Lexington.com use designers and ask customers' views to build a room, or house pictures for purchase. They direct users to retailers by zip code and provide links with accessory and other furniture makers.

Portals and Directories:

wwwFurnitureFan.com (consumer), www.Furnituretoday.com (industry news and sourcing) and www.Homefurnish.com (consumer) are major search engines working in the industry. Homeportfolio.com shows that customers shopped by product

category 80%, rather than brand 85% on an analysis of 400,000 page views clicked by 17,000 visitors. Hence the need for manufacturers to participate in an online environment that quickly leads customers to their products through choices, rather than brand selection.

The FurnitureFan.com portal allows the designs of brands for groups and retailers across the US, as well as catalogues of mainliners such as Drexel, Lexington and Berkline. This is a 'bricks-and-clicks' model offering attractive traffic on-line with referrals. The best Brands with 550 retailers and 1,300 stores are using it. They are testing e-mail marketing for online coupons and money off offers. The system is beating the 3% of direct marketing and the campaign seems to achieve over 30% responses with 5pc redemption rate. Currently 1,600 retailers subscribe to this portal for access to customers.

ASID has a web directory of designers for the interior design industry (www.asid.org) with 1,535 companies and is found on the website under industry partner link.

4.1.19 Case studies

Case 1. Globalization pressures on the US manufacturing-retailer businesses

Changes in sourcing, distribution and in their final presentation to consumers are now combining to open up an opportunity for brand and style imaging. This presents an opportunity for imports to meet most market demands, albeit to the detriment of the home manufacturing industry and its workforce. Perversely the use of materials handling technology, product tracing, scheduling and delivery sequencing via e-commerce has hastened the changes.

In the 1990s and progressively into the 2000s, importing into the US has grown to be an acceptable method of obtaining wood-based furniture. This was not always so. Originally imports were of exotic woods and materials, often eclectic in style and featured the unique designs of a country. Today they can be completely 'American' in style, design and finish, able to replicate US made products in US sourced woods, but made at lower prices and totally from an off-shore manufacturing source. This process allows the importer, often a US manufacturer and the US retailer to hold prices. In some case offer prices lower than a few years ago as incentives to new customers. Imported price stability works.

The inexorable growth of imports has seen the systems for importing now fully in place and the US distribution business as receptive to the process. The consumer is rarely aware of the sourcing of product, except by legal statute, and if quality and price are consistent with their expectations, then a sale is made. New products, innovation and the better use of design often offer scope for movement away from expected shapes in styles, woods and finishes, so that the consumer can be pleased with the value-added offer. Hence the stage is set for a widening movement of furniture across the world that will falter only on economic and protection grounds if a weakened home-industry loses its workforce and unemployment, becomes vocal and less able to retrain for other roles. The US furniture industry is undergoing this change to hold price points.

It is the industrialization and opening up of China that has allowed the strong importing infrastructure to develop to a depth that can support the needs of the US markets in the sheer volumes required. Taiwan in the 1980s was the precursor of this change that was imitated to a lesser degree by various ASEAN countries, before the expertise was transferred to China – the current powerhouse. Around 46% of the US furniture market at trade prices is accounted for by imports with China now taking a third of that from a negligible figure ten years ago. China is expected to grow to over 60% of imports within 5 years, taking furniture imports to at least \$18 billion (a 50% increase on 2000/1) and a dominant 65% share of the declining US furniture manufacturing sector at trade prices. The high penetration will come from China, backed by a resurgence of Asian countries and S. America as they target niche sectors and support China sourcing with ancillary items. Consistent levels of imports (as in the 1990s) will continue from European and new African sources as they cannot meet the competitive criteria for profitable imports. Australasian exporters could use Asian manufacturing points for their sourced materials and design content without the cost of equipping their own factories.

How this high level of imports in the US marketplace will resolve itself long-term is open to query, as the current wholesale failure of intensive US furniture manufacturing, its skill-base and job losses could result in an economic and political back-lash. The cost of transport and double-movement of source materials will increase, against the undoubted rise of labor costs that will afflict the China manufacturing base as they gain a decisive share of the market.

4.1.20 Useful contacts

Statistics:

The Office of Consumer Goods at the US Department of Commerce, Washington DC.
Tel: 202 482 5783 Fax: 202 482 3981 www.ita.doc.gov/org

US Industry & Trade Outlook	www.yntis.gov/product/industry-trade.html
Census of Manufacturers - Annual Survey of Manufacturers	www.census.gov/epcd/www/97EC31.html

www.ita.doc.gov/td/ocg/furniture.html#manufacturing

Industry Trade Surveys	www.usitc.gov/webpubs.htm
US Imports & Exports (of household and office furniture)	www.export.gov/ocg/furniture.htm

Changes from SIC to NAIC codes are now occurring for furniture products.
The Census already made this change and the rest of Gov. is 2002.

www.census.gov/epcd/www/naics.html

Industry contacts:

American Furniture Manufacturers Association (AFMA).
Tel: 336 884 5000. Fax: 336 884 5303. www.afma4u.org

National Home Furnishings Association (NHFA),
Tel: 336 801 6100 Fax: 336 883 1195 www.nhfa.org

International Wholesale Furniture Association (IWFA)
Tel: 336 884 1566 Fax: 336 884 1350 inwfa@nothstate.net

Association of Progressive Rental Organisations (APRO)
Tel: 512 794 0095 Fax: 512 794 0097 www.apro-rto.com

BIFMA Grand Rapids Office Furniture Manufacturers Association
Tel: 616 285 3963 Fax: 616 285 3765 www.bifma.org

Office furniture manufacturers:	Office furniture retailers:
www.steelcase.com	www.officedepot.com
www.hermanmiller.com	www.costco.com
www.haworth.com	www.staples.com
www.honcompany.com	www.officemax.com
www.knoll.com	www.samsclub.com
	www.wal-mart.com

Trade Shows:

May International Contemporary Furniture Fair – Javits Center. New York.
 June Dallas Furniture Market. Texas.
 June Neocon World’s Trade Fair – Chicago. (merchandisemart.com)
 July Showtime Fabric market (ITMA-Showtime.com). High Point.
 Jan/July San Francisco Summer Furniture Market (sfmart.com)
 Chicago Gift & Home Market (merchandisemart.com)
 Feb/August Tupelo Furniture Market (601 844 1473).
 April/October High Point. N. Carolina USA.
 www.highpointmarket.org for information on the markets, places to stay, itineraries,
 transport, access and registration.
 Showplace Kids 4th Floor. (showplace-highpoint.com)
 October Las Vegas A Furniture Building is planned with opening in 2004.

Nine smaller regional and city exhibitions are proposed for the small independent outlet. Mainly along the East Coast (Tampa, Fitchburg Mass., Mid-Atlantic at Edison, NJ.) with Las Vegas, Long Beach, Neocon West, California they target buyers directly within an hour’s drive of furniture centers. An example is www.karel.com for the East Coast.

Trade Press:

Furniture/Today weekly magazine

Tel: 336 605 0121 Fax: 336 605 1143 www.furnituretoday.com

An industry portal and full of information on a daily basis with links to manufacturers and other sources of use by consumers, the trade and importers. During market, twice a year, the magazine runs a special edition for 4 days with market content in the weekly editions of 2 weeks either side.

Other:

A 2002 web-site by AFMA for consumer education about buying and caring for furniture is at www.findyourfurniture.com. It provides also information on styles, new products and room-by-room checklists. It directs users to member web-sites and categorizes these by product style and price range. The site should be useful to other countries seeking to educate consumers and offer a comprehensive review of their country suppliers.

FIDX (Furniture Industry Data Exchange www.fidx.org) is a neutral industry group promoting standards of data exchange. FIDX members are committed to making the exchange of information faster, easier and less expensive. The work is open to all interested members of the community active in furthering the development and implementation of e-business standards. Members are USA companies across the furniture industry, but the world furniture industries should affiliate, especially as sourcing and direct imports continue to grow. The basics on bar-codes, XML transfers, product identification, catalogue schemes, etc. are available for free use.

4.2 Japan

4.2.1 Basic demand factors and market drivers

There is as yet no sign of reversal, "bottoming out" or even slowing in the downward trajectory that the Japanese economy has taken for more than ten years. Nor is there any encouraging evidence of will or ability to lay out and implement effective curative measures. On the contrary, the most noteworthy recent events and pronouncements in Japan's economic policy arena give unmistakable impressions of frustration, desperation and resignation.

The reality of the sudden further slump heralding the current period of stagnation is reflected in the fact that the measured whole-year 2001 data mostly revise downward the previous estimates from the first three quarters' performance.

Main economic indicators

GDP

From 1995 all-time peak of \$5,208.2 billion the Japanese economy had already slid by slightly more than a quarter of a trillion dollars, to \$4,995.0 billion in 2000. The annual growth rates averaged -1.0%. But then in the single year 2001, a drop well more than a half billion dollars occurred, GDP reaching only \$4,370.9 billion. Negative growth has now been posted for four of the last six years, and the latest fall is by far the most severe, -12.5% in constant-price US dollar terms.

Dwelling Construction

New orders for dwelling construction in Japan had actually peaked at \$2.478 billion in 1994, a year earlier than GDP, and then during the same 1995-2000 five-year period,

went down by more than a quarter of a billion dollars to \$2.189 billion, equivalent to average annual growth rates of -2.2%. Again there was a very sharp fall from December 2000 to 2001, \$387 dollars for negative growth of -19.4%.

Another potentially very important recent development has been the growth (or birth) of markets for renovating and for re-selling houses. Because of extremely high land prices especially in urban areas, as well as a complex set of other cultural attitudes, almost without exception houses are destroyed and replaced whenever the property changes hands. Effectively, only building lots are bought and sold.

This is backed up by these statistics: in 1997 the total housing stock in the United States is said to have been 117.589 million, while 4.381 million (3.7%) used houses changed ownership intact. In the same year the total housing stock of Japan was 50.246 million, but only 159,000 (0.3%) used house transactions were concluded without demolition.

But evidently the extremely severe recent general economic conditions of Japan have at last begun to impose some restraint on the previously almost automatic impulse to demolish and re-build from the ground up.

Unemployment

There are concerns about the possible understatement in Japan's officially-measured unemployment rate. It has followed a similar pattern of worsening from 1995 to 2000, and still more workers were put out of jobs in 2001. The rates of increase in the numbers of unemployed Japanese were 8.0% annually over the whole decade from 1990 to 2000, 8.3% on average from 1995 to 2000, and 6.2% during 2001. As mentioned earlier, in that most recent year the rate of joblessness rose to two-and-a-half times higher than in 1990. Moreover, during 2001 the number of job offers per applicant stayed at the 2000 level of 0.59. For the second year in a row, fewer than three Japanese job seekers in every five found work.

Interest and Credit

As remarked previously, at 7.45% in 1990 the level of Japan's benchmark long-term interest rate was already fairly low compared with the average of 10.55 percent for 19 major industrialized countries. At that time the lower bound of their band was set by Switzerland's at 6.45 percent, but ever since then Japan's rates have been driven down unrelentingly. The indicator long-term rate reached a new low of 1.32 in 2001, that year's cut of 0.42 points again being sharper than any other between 1995-2000. Now completely out of the range set by other industrialized nations, there is no more room for trying to stimulate Japan's economy by interest-rate policy. In any case it has proven ineffective in stimulating legitimate borrowers.

One implication of this divergence is, that while the Japanese savers have stuck to domestic deposits earning almost nothing, investors in other countries have virtually abandoned Japan's securities markets. The only exceptions are occasional moves by individual "heavy players" targeting takeovers of specific Japanese companies.

Once more following the same cross-the-board pattern of sudden worsening in the Japanese economy's state since the fourth quarter of 2001, credit contraction for the whole of that year turned out to be by far the sharpest in the entire study period.

Household disposable income and expenditure

Over the first half of the decade of the 1990s, Japanese households continued to enjoy significant gains in their disposable income, and responded to this with almost-matching rates of increase in their living expenditures, but this trend was reversed from 1995 onward. From that peak year up to 2000, monthly household disposable income shrank by \$718 from its high of \$5,478, down to \$4,760, equivalent to -2.8% average annual loss of purchasing power; and at the same time households cut back their actual monthly living expenditures by \$539, from \$3,972 in 1995 to \$3,433 in 2000, a 2.9% average annual curtailment. Up to that point, these findings were still entirely in keeping with the well known strong savings motive of Japanese householders.

But by the end of 2001, the average Japanese household saw their monthly disposable income plummet almost as much in that one year as in the whole of the preceding five: down by a further \$659 to \$4,101, a jarring -14.9 percent. This time they appear to have been unable to avoid some degree of previously uncharacteristic dissaving: Actual living expenditures were reduced by less than the shortfall in income, \$448 monthly or -14.0% from 3,433 to \$2,985.

Retail trade of department stores

Commercial activity in this sector is especially relevant to the wooden furniture trade, as department stores are one of the more important outlets for furniture made for household uses. A 1990-based index of their overall sales has declined in every year but two since 1991. Over the 1995-2000 period they lost business at an average annual rate of -1.7%, then dropped a further -3.1% by the end of 2001. Their trade index on 1990=100 base came down to 81.5 in 2001, accompanied by highly publicized and lamented failures of several of the oldest and "prestigious" department stores in Japan.

4.2.2 Description of domestic furniture industry

The original yen-denominated data for total production value, value added and total wages in the furniture industry have been falling steadily ever since 1991. The apparent early-1990s growth in those indicators seen in the US-dollar series is an artifact of the currency conversion, due to the fact that the Yen/Dollar rate fell over 40 points, from 134.5 in 1991 to 94.1 in 1995. Readers must keep this in mind because it is reflected in some differences between the discussion of the industry development prepared for this report, and that which is quoted from the Japanese sources.

All statistics and all sources of advice are in full agreement, however, that the whole story of the last decade has been one of great contraction in Japan's wood furniture industry, and that no short-term relief is in sight. Among the firms covered by the industrial surveys of the Ministry of Economy, Trade and Industry (METI), that is all those employing at least 30 persons, by 2000 there were only 428 survivors of the 761

companies in business in 1990, their total sales had fallen from \$9.245 billion in 1990 to \$6.421 billion in 2000 (-30.5%). Almost half the labor force had lost their jobs as employment in the sector contracted from 58,593 in 1990 to only 31,206 in 2000 (-46.7%).

Moreover the actual total losses of the wood furniture industry are surely considerably larger by all measures, because there are thousands of smaller firms and tens of thousands of workers not covered by the METI survey, as explained in the remarks on industry structure below. They have been especially vulnerable.

So while the official statistics have recorded 333 business failures, in reality about ten times that number of Japanese wood furniture companies have almost certainly gone under during the last decade. The number of displaced workers must also be at least half again as large as indicated in the paragraph above.

Wood and metal furniture developments compared

Simple comparisons are made between wood and metal furniture industry in Japan, in order to shed light on materials substitution in furniture and the relative competitive position of wooden products within the overall furniture manufacturing sector.

One striking fact is that metal furniture making in Japan shows considerable year-to-year volatility of ups-and-downs in all the standard size measures, in contrast to wood furniture's steady multi-year trends of progress and decline with unmistakably marked turning points. Because in this study metal is only of interest as a backdrop of comparison for the target wood furniture sector, in-depth examination of the causes of this annual volatility is not warranted.

In any case, over the whole decade the metal sub-sector does not seem to have performed markedly better over time in productivity than wood. The absolute levels of value added per worker in metal furniture industry began and ended higher, some \$90,700 in 2000 versus \$90,800 in 1990, while the value added produced by the average wood-furniture worker rose to \$82,100 in 2000 from its 1990 start of \$62,500, so the gap in productivity between wood and metal workers was narrowed. Metal workers were much more successful in securing higher wages, however, widening the differential between themselves and wood-furniture makers.

In 1990 average annual wages & salaries per worker were \$24,000 in the wood sub-sector versus \$28,490 in metal. Especially considering the continuously and steeply falling numbers employed in making wooden furniture in Japan, from 58,593 to 31,206, the remaining wood furniture workers made significant gains to reach average annual pay of \$36,270 in 2000. But metal furniture workers, whose numbers had actually increased slightly from 19,583 to 20,757, each earned \$50,230 on average in 2000. Of course the technologies and skills involved are very different between the two, as are the organizations of the industries and their labor-relations practices.

Over the decade wood lost some market share vis-à-vis metal, from 67.9% of the total for the two in 1990, to 59.4% in 2000, although in the interim wood's share had risen as high as 69.4% in 1994 due to the greater year-to-year variability of the metal furniture industry, remarked in the paragraph above. Note also that these figures do

not take account of furniture made of other materials such as plastics, but the two sub-sectors studied are by far the most important in the Japanese domestic industry.

4.2.3 Production volume

Historically, the Japanese wood furniture industry has been characterized by considerable regional diversity. The geographic spread of the Japanese furniture production shows quite evenly distributed industry, with Aichi and Fukuoka regions taking the lead with just below 12% shares of all types of furniture listed in Table 4.24. Five leading furniture regions take nearly 50% of the country-wide output. But there are considerable changes in the product mixes of each region.

Desks, tables and chairs accounted for 41% of the production value in the country. Shelves and cupboards followed with a 30% share.

Table 4.24 Japan: regional output by product group in the wooden furniture industry

Region	Desks, Tables & Chairs		Beds		Chests & Bureaus		Shelves & Cupboards		All Furniture Types Listed	
	Value \$1 000	% of total	Value \$1 000	% of total	Value \$1 000	% of total	Value \$1 000	% of total	Value \$1 000	% of total
Aichi	591,967	21.9	110,017	24.0			92,967	4.6	794,955	11.9
Fukuoka			29,008	6.3	333,967	22.4	408,306	20.4	771,285	11.6
Hiroshima	170,983	6.3	44,273	9.6	276,463	18.5			491,722	7.4
Gifu	282,240	10.4					85,843	4.3	368,084	5.5
Hokkaido	130,496	4.8			57,752	3.9	119,413	6.0	307,662	4.6
Shizuoka			25,273	5.5	76,215	5.1	170,992	8.6	272,481	4.1
Tokyo	132,405	4.9							132,405	2.0
Saga					62,223	4.2			62,223	0.9
Chiba			32,504	7.1					32,505	0.5
Top-5 total	1,308,091	48.3	241,074	52.5	806,620	54.1	877,521	43.9	3,233,322	48.6
Other areas	1,399,281	51.7	217,851	47.5	683,860	45.9	1,121,909	56.1	3,422,917	51.4
Japan total	2,707,372	100.0	458,926	100.0	1,490,479	100.0	1,999,430	100.0	6,656,240	100.0

4.2.4 Structure and location of industry

The limitations in coverage of the Japanese industrial statistics might easily lead to misconceptions about the nature of the domestic wood furniture industry and the magnitude of its problems. Drawing on more comprehensive data available for only one year, Table 4.25 reveals that there are -or have been- actually about twenty times as many "micro" companies as small-medium-large companies! The average firm size is less than 10 workers. Wood furniture making in Japan is mainly characterized by very small workshops, almost a cottage industry, although many of them work as contractors for larger enterprises. In that capacity they produce both parts for assembly, and finished furniture pieces.

Table 4.25 Japan: size classes and employment in the wooden furniture industry (1998)

Employees/Firm	Firms	Share	Employees	Share	Output, million Y	Output, \$1 000	Share
1 to 3	5,128	48.6%	10,567	11.3%	61,133	467,021	4.1%
4 to 9	3,495	33.1%	20,353	21.8%	203,181	1,552,185	13.5%
10 to 19	977	9.3%	13,296	14.3%	177,331	1,354,706	11.8%
20 to 29	441	4.2%	10,817	11.6%	169,376	1,293,934	11.3%
Total under 30	10,041	95.2%	55,033	59.1%	611,021	4,667,846	40.6%
30 to 49	237	2.2%	9,077	9.7%	165,668	1,265,607	11.0%
50 to 99	172	1.6%	11,595	12.4%	238,681	1,823,384	15.9%
100 to 199	68	0.6%	9,078	9.7%	185,540	1,417,418	12.3%
200 to 299	14	0.1%	3,467	3.7%	140,675	1,074,675	9.4%
300 to 499	7	0.1%	2,662	2.9%	78,797	601,963	5.2%
500 to 999	4	0.0%	2,278	2.4%	83,420	637,280	5.5%
Total over 30	502	4.8%	38,157	40.9%	892,781	6,820,328	59.4%
Grand total	10,543	100.0%	93,190	100.0%	1,503,802	11,488,174	100.0%
<i>All-firms average</i>			9		142.6	1090	

4.2.5 Major players

Only about 1% of the furniture manufacturers have more than 100 employees. The ten largest Japanese furniture makers are Kokuyo, Okamura, Uchida Yoko, Itoki, France Bed, Itoki Crebio, Karimoku, Paramount Bed, Kariya Mozukai, and Kurogane Kosakusho. The biggest kitchen furniture makers are Sun Wave, Takara, Cleanup, Nas and Matsushita.

4.2.6 Out-sourcing and networking among manufacturers

Some efforts have been made to modernize and consolidate the traditional production centers and establish industrial parks, to emulate European and North American organizational models and foster technological advances. There are calls for the Japanese industry "striving to be the Asian furniture powerhouse". This seems far-fetched on a volume-sales basis, but a handful of the high-end domestic producers have distinctive design concepts and turn out pieces of uncommonly high quality in both materials and workmanship, which could indeed earn them a certain niche in high-fashion international markets. But even among these, only a minority have so far established overseas outlets.

The only remarkable exceptions are the items produced in overseas plants that the Japanese firms have established in countries like Indonesia and China, and this in itself only contributes to "hollowing out" of the domestic Japanese manufacturing base. For these reasons, the inability to compete successfully with imports, together with the generally falling furniture market for demographic and economic reasons, has driven the swift and relentless decline of the Japanese wood furniture industry. A dispassionate view can only conclude that the future holds more of the same.

A variety of direct and indirect mechanisms are employed, originally focusing on overseas production of components but increasingly taking the form of develop-and-import operations for entire finished products.

4.2.7 Quality standards and certification and labeling requirements, environmental management systems

Three categories of wooden furniture are required to bear labels specifying their dimensions and the materials used in each of their major components separately. The product groups covered are Desks and Tables, Chairs and Other Seats, and Chests and Dressers. The figure below summarizes the labeling required for each.

Table 4.26 Labels Required in Japan on Wooden Furniture by Type

Label detail	Desks and Tables	Seats and Other Chairs	Chests and Dressers
Dimensions	X	X	X
Surface material	X		X
Surface processing	X	X	X
Structural members		X	
Upholstery		X	
Cushioning		X	
Labeler	X	X	X

Note: X indicates labeling detail required

The information items to be specified on the label should follow these guidelines:

Dimensions: External dimensions (width x depth x height in mm) must be labeled on all three types of furniture. The range of allowable error is ± 10 mm for desks and tables as well as chairs and other seats, and for chests and dressers it is +5 mm and -10 mm. Also required is the seat height (height of seat center) of chairs and other seats; and for chests and dressers, the inside dimensions of the drawers in mm (to an allowable error of -10 mm) and the maximum storage volume.

Surface Materials: Surface material must be specified for the tops of desks and tables and the doors of chests and dressers. "Natural wood" can include blockboards and similar "boards made by pieces of natural wood assembled in a mosaic and adhered together". Wood-veneered materials must specify the core material, e.g. "plywood with natural wood veneer" or "particleboard with natural wood veneer".

Surface Processing: This means the type of resin, varnish, paint etc used for the final finish coat, e.g. "polyester resin" or "urethane resin". When different finishes are applied to different parts of a furniture piece, for example the top and legs of a table, each must be specified separately.

Structural Members: The type of material used for the structural members must also be given. Wood parts follow rules like those for surface materials above. In case of any metal components, besides the word "metal" the kind of metal must be given in parenthesis, and similarly for plastics.

Upholstery: The surface material of upholstered chairs and other seats must be given. In the case of leather, the kind of leather must be stated parenthetically after the word "leather".

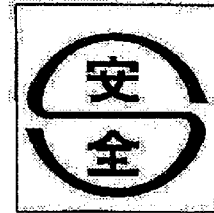
Cushioning: The material of each main part of the cushions must be indicated, e.g. "steel springs" or "urethane foam".

Handling Instructions: In principle according to new guidelines, the label should also include any special usage requirements or restrictions, e.g. "Keep away from space heaters", but these may also be relegated to separate instruction manual.

Labeler: Name and address of the company affixing the label and determining its contents.

Recent deregulation allows the label and its lettering to be of any size. It is now also permissible to include special features of the product, such as the use of plywood or particle board with low formaldehyde emissions. Some Japanese consumers may be looking for this since awareness has recently arisen about the so-called "sick house syndrome".

Besides the tables, seats and storage-furniture products covered by the labeling described above, home-use wooden beds are subject to three separate Japan Industrial Standards for "ordinary beds" (JIS S1102-1993), "baby cribs" (JIS S1103-1995) and "bunk beds" (JIS S1104-1995). In addition, baby cribs designed for home use of infants up to 24 months old must either pass government inspection under the Consumer Products Safety Law, or manufacturers can register and obtain type approval. Then they are allowed to display this "S Mark" without which they are not allowed to be sold.



A collection of Japanese JIS standards is given in the next table.

Table 4.27 Japanese furniture standards

Reference number	Document title
JIS A 0016:1979	Modular coordination-coordinating size of opening for built-in appliances in storage furniture
JIS A 1531:1998	Furniture – Assessment of surface resistance to cold liquids
JIS C 0364-7-713:1999	Electrical installations of buildings Part 7: Requirements for special installations or locations
JIS S 1010:1978	Standard size of writing desks for office
JIS S 1011:1994	Standard size of chairs for office
JIS S 1015:1974	Sizes and dimensions of fixed desk and chair for lecture room
JIS S 1016:1995	Fixed desk and chair for lecture room
JIS S 1017:1994	General rule for test method of furniture
JIS S 1018:1995	Test methods of vibration and earthquake tumbling for furniture
JIS S 1021:1999	School furniture – Desks and chairs for general learning space
JIS S 1031:1999	Office furniture – Desks and tables
JIS S 1032:1999	Office furniture – Chairs
JIS S 1033:1999	Office furniture – Storage cabinets
JIS S 1037:1998	Fire-resistive containers
JIS S 1038:1994	Castors for office chairs
JIS S 1039:1989	Steel shelves
JIS S 1040:1994	Steel racks
JIS S 1061:1998	Domestic furniture – Student desks
JIS S 1062:1998	Domestic furniture – Student chairs
JIS S 1102:1993	Beds for domestic use
JIS S 1103:1995	Baby beds
JIS S 1104:1995	Bunk beds for domestic use
JIS S 1200:1998	Furniture – Storage units – Determination of strength and durability
JIS S 1201:1998	Furniture – Storage units – Determination of stability
JIS S 1202:1998	Furniture – Tables – Determination of stability
JIS S 1203:1998	Furniture – Chairs and stools – Determination of strength and durability
JIS S 1204:1998	Furniture – Chairs – Determination of stability – Part 1: Upright chairs and stools
JIS S 1205:1998	Furniture – Tables – Determination of strength and durability

4.2.8 Furniture market: foreign trade and apparent consumption

Japan's foreign trade has remained fairly unchanged over the years, indicating a growth since 1998 in imports, and flat trend in exports. The domestic industry is inward-looking and lacks export incentive. Exports are altogether negligible, while imports approached \$2 billion in 2001 (Table 4.28, Table 4.29). Japan continues to remain a significant net importer and the fifth largest importer of all countries.

Around 46% of all imports belonged to the "other" furniture class, while wooden seats took another 25% of the import cake. Furniture parts were the strongest export item (46%), but on extremely low values.

Table 4.28 Japan: imports of wooden furniture by product group

Product Summary on Imports		1997	1998	1999	2000	2001	Index	
							%	97=100
	%	\$ million					%	97=100
Seats cane, osier, bamboo, etc.	2	35.6	28.0	26.4	26.2	23.5	1	66
Seats n.e.s. with wooden frames	28	493.0	371.7	407.4	475.3	467.3	25	95
Wooden office furniture	1	16.1	10.6	8.9	13.4	11.5	1	72
Wooden kitchen furniture	4	68.5	50.2	43.2	51.8	54.1	3	79
Wooden bedroom furniture	5	94.6	73.6	85.5	101.2	118.7	6	125
Other wooden furniture	39	689.5	557.2	640.4	857.7	881.9	46	128
Furn. other mater. inc. bamboo	4	79.7	53.9	51.6	54.8	55.5	3	70
Furniture parts of all materials	17	309.0	222.3	238.9	301.0	290.4	15	94
Total	100	1,786.1	1,367.6	1,502.2	1,881.4	1,902.9	100	107

Source: COMTRADE

Table 4.29 Japan: exports of wooden furniture by product group

Product Summary on Imports		1997	1998	1999	2000	2001	Index	
							%	97=100
	%	\$ million					%	97=100
Seats cane, osier, bamboo, etc.	0	0.0	0.1	0.0	0.0	0.0	0	183
Seats n.e.s. with wooden frames	5	1.4	1.8	1.1	1.4	1.4	5	101
Wooden office furniture	4	1.0	0.9	0.3	0.7	0.2	1	23
Wooden kitchen furniture	9	2.3	2.2	2.6	2.5	1.6	6	69
Wooden bedroom furniture	1	0.3	0.6	0.4	0.4	0.4	2	127
Other wooden furniture	31	8.1	8.7	10.0	10.3	10.2	39	126
Furn. other mater. inc. bamboo	2	0.6	1.0	0.4	0.4	0.3	1	45
Furniture parts of all materials	47	12.3	10.8	9.4	12.7	12.1	46	98
Total	100	26.2	26.1	24.3	28.5	26.3	100	100

Source: COMTRADE

The views are that the Japanese furniture market can only be considered "internationalized" in the true sense of the word "when domestic manufacturers begin to explore their export markets in earnest and achieve exports on a sustainable basis". But by and large it remains true as International Development Association of the Furniture Industry of Japan (IDAFIJ) laments, "Japanese furniture makers make virtually no effort to sell their products overseas."

Japanese makers have had somewhat greater success in developing new products measuring up to the workmanship, materials and style standards of European and North American furniture. There is also talk of a "new blend of Japanese and Western styles called *shimwayo*. But certainly this school of style does have a distinctively Japanese character and at the same time a universal and modern appeal.

Based on trade figures and domestic production, the Japanese apparent consumption of wooden furniture would be in the range of \$13-14 billion. As the domestic output appears to shrink further, imports will come to play a more prominent role, helped by the infusion of "foreign" styles into the Japanese homes.

4.2.9 Imports from developing market economies and China

As much as 80% of Japan's imported wooden furniture came from the developing countries and China. By comparison, in 1996 the figure was 69%. Asian countries

ranked on the top of each major product category. China was dominant in the “other” wooden furniture with one third of the imports. Thailand and Malaysia followed far behind. China has won over market considerably from other suppliers, as its market share was merely 14% in 1997. Other suppliers, in particular those from Europe and North America, have seen their market shares been eaten out by China’s catch-all exporters.

Thailand kept a 29% leading position in wooden seats before China contending at just below 19%. Both have gained higher market shares since 1997, while Indonesia, Taiwan (P.O.C) Italy and the US have declined notably. In furniture parts, China has grown into a leading 15% share of imports, at the expense of Thailand and Indonesia.

Table 4.30 Japan: imports of major product groups from leading developing countries and China

Product group	Imports 2001 (\$ million)	Major developing country suppliers	Share %	Rank
“Other” wooden furniture	881.9	China	32.5	1
		Thailand	12.5	2
		Malaysia	9.8	3
Seats n.e.s. with wooden frames	467.3	Thailand	29.1	1
		China	18.6	2
		Malaysia	12.7	4
Furniture parts	290.4	China	14.8	1
		Thailand	9.2	4
		Indonesia	9.1	5

4.2.10 Furniture style and design trends

Modernizing house-life

The modernization trend of the Japanese society has brought around certain positive implications for imported furniture of “foreign” styles and concepts. It is important to recognize that much of the growth in consumption of all types of fixed furniture in households has been driven by a major movement of lifestyle change in the Japanese household over the last decades. Well into the second half of the 20th century, most Japanese at home kept sitting and sleeping directly on their floors covered with straw “tatami” mats; by day using only small low tables, by night spreading “futon” bedding pallets (not to be confused with the wood-frame sofa-bed called a futon in the US)- often in the same room. So all its contents had to be light, movable and easily put away in folded storage. Use of actual beds, tables and chairs only began around 1955-1960!

Up to now, there has been an increasing fashion consciousness with a growing affection for “Western” and “foreign” designs. Yet the Japanese homes have remained small, what is calling for smaller sized furniture, corner furniture, legged furniture, together with hanging storage like closets and dressers. On the other hand, the traditional simplicity found in the Japanese kitchen/dining area has given away for more diverse kitchenware and tableware. This creates demand for larger tables and cupboards.

In large part because the whole concept of fixed-position furniture has been imported to Japan from outside relatively recently, professional Japanese buyers as well as makers freely acknowledge that they still are very much influenced by style "trend-setting" originating from abroad, and seek ideas as well as purchases at the major international furniture shows. According to industry sources, pre-eminent among the furniture shows is the Cologne Furniture fair, as "the place where the Japanese furniture industry is informed of directions worldwide furniture makers are taking ... from environmental protection and recycling to stylization conforming to the new lifestyle trends toward 'naturalization' and 'functionality'."

Other furniture-show venues of high priority to the Japan trade, are Highpoint (North Carolina, USA), Paris and Milan. Singapore gets special attention primarily on the strength of its distribution infrastructure including pioneering the role of information technology and internet marketing, and is conceded to be "the furniture distribution leader in the Asian market."

Species promotion

The Japanese International Furniture Fair Tokyo (IFFT), is obviously a must for exporters seriously targeting the Japan market. At IFFT 2001, the American Hardwood Export Council highlighted an intriguing marketing campaign for "lower-grade" materials they have begun waging in Japan. This may be especially timely in view of the broad-based severe price competition on the Japan wood furniture market that we have remarked in several contexts. The mechanism is a design competition for Japanese furniture designers, who are given supplies of various North American hardwoods that have been assigned "common" grades because of (what have long been considered) defects such as knotholes, bark enclosures and the like which are now more politely termed "features".

The inspirational thrust of the competition is not to cut out and discard these parts, but rather to try incorporating them to the greatest extent possible as artistic features of the finished furniture piece. The response from Japanese designers was enthusiastic, and many of the resulting pieces very strikingly attractive. The same "home-grown" aesthetic appears among certain leading Japanese furniture designers, especially Asahikawa, Hokkaido.

Given the resonance of this approach with the more sophisticated Japanese design aesthetic, and with consumers in what remains of the high-price end of the Japan wood furniture market, similar initiatives might well prove fertile ground for DMEC producers as well as environmentalists and other parties promoting utilization of wood now wasted as defective in tropical forests. There would seem to be prospects for getting around some of the price-resistance lately plaguing the Japan market.

As in the case of the North American "common" hardwoods, the wood around the "defects" or "features" is often just as dense and well-colored, and very often has even more intricate and attractive grain patterns because of their presence. Yet it can be bought by the furniture maker at a fraction of the cost of "clear" stock, enabling production of very high quality pieces at prices competitive with inferior species.

4.2.11 Evolution of distribution patterns

For a broad range of consumer products, the highly fragmented, localized and personalized nature of retailing has succeeded in curtailing imports. The extremely complex and tightly-scheduled network of supply chains serving them in the almost total absence of space to maintain inventories at the point of final sale, has long been recognized as one of the most formidable barriers to penetrating the Japanese market.

In the most recent years, there have been new and accelerating trends which already have substantially changed the relative importance of distribution routes, and promise to alter their balance still more in the future.

Increasingly, the traditional multi-step Japanese distribution chains are being bypassed by large firms at or near the final-sales and end-use stages in Japan, who are dealing directly with overseas suppliers.

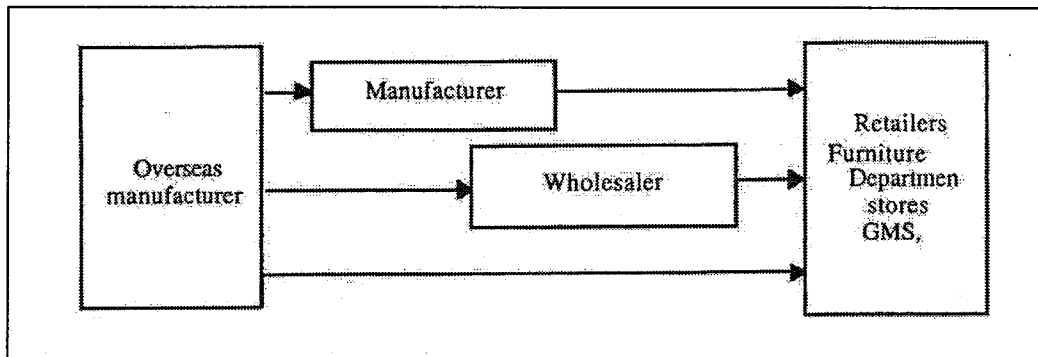
This has caused large numbers of intermediaries, as well as smaller retailers and installers to go out of business. But from the point of view of the overseas manufacturers and exporters, the development has been largely though not wholly positive:

- It means that market access can be gained more efficiently, by establishing relations with a smaller number of domestic Japanese partners who are more visible, more easily identified, and more sophisticated e.g. in the use of international languages.
- The larger domestic players have both the customer bases and the financial means to make large and regular purchases, a distinct improvement over earlier times when the highly fragmented Japanese markets made for inefficiently small individual sales and often-prohibitive information and transactions costs.
- Opening of the Japanese market in this way has launched an unprecedented degree of price competition, whereas earlier any overseas supplier astute and/or lucky enough to find a receptive Japanese buyer might have enjoyed quite high margins over long periods, protected by the Japanese propensities for dealing with known partner companies and for maintaining business relations on a personal basis.

JETRO and other sources concede that there are no proper statistics on the volumes of imports by type of importer. The general consensus among Japanese experts is that larger market shares are taking the short-cut routes both for building materials and furniture, effectively cutting out the middlemen.

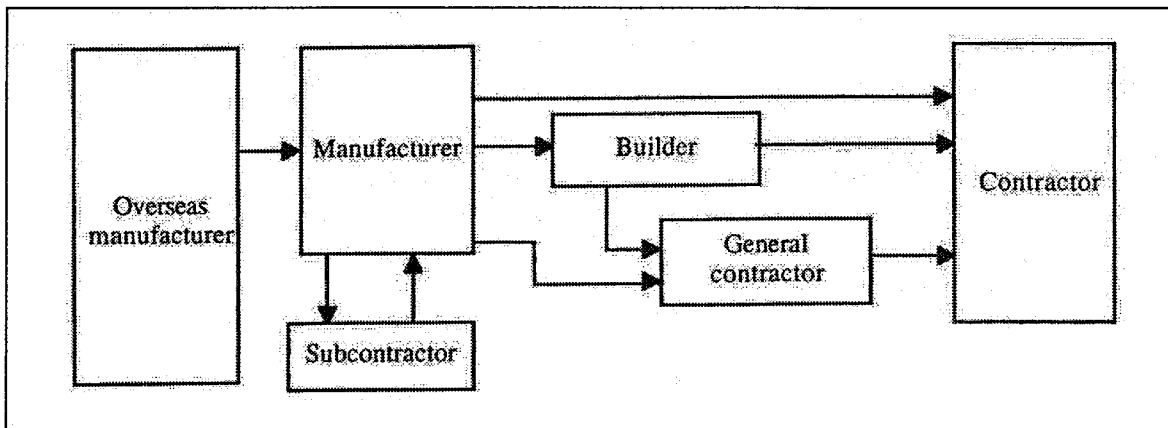
In the case of wooden furniture, an important distinction is made between "ready-made and semi-order" products on the one hand, and "order-made" products on the other. Ready-made is self-explanatory, but semi-order refers only the possibility of selecting from a menu of standard options on offer, such as upholstery of furniture, or sizes of table-tops. Order-made furniture, on the other hand, refers to truly "custom-made" items, but they are typically bought in large quantities for commercial customers.

Figure 4.1 Japan: distribution channels for imported ready-made and semi-order wooden furniture



Source: JETRO

Figure 4.2 Japan: distribution channels for order-made imported wooden furniture



Source: JETRO

JETRO cautions overseas suppliers interested in pursuing this trade, to be prepared to maintain much closer and continuing contacts with the purchasers right through to final installation because, for example, "in the case of hotels, rooms sometimes slightly differ from the initial drawings" due to the leeway given to craftsmen in the traditional Japanese building trades. But the increasingly fierce competition in the order-made trade is believed to be a major factor favoring selection of imports over domestically-manufactured products.

Mark-ups on imported furniture

Until recently, the domestic Japan-market retail prices of imported ready-made and semi-order furniture came up to about three times the FOB (free on board) price:

- Wholesalers, as well as domestic furniture manufacturers acting as wholesalers for imports (an increasingly important phenomenon) re-sold their imported goods to retailers with mark-ups of 50-60% over the import price.
- The retailers then set their prices to the final consumers so as to gain an additional 60-80% markup.

But the dramatic rise of very-large-scale furniture retailers, fully capable both financially and organizationally to import directly from overseas manufacturers, has brought stiff price competition into the Japan market along with the sweeping changes it has made in the market structure and modes of selling to final consumers.

When possible, direct-importing retailers also try to maintain mark-ups of 150-230% over their import price, but nowadays often competition with other giant stores drives them to discount sales, shaving their margins to little over 100%.

This steep price-cutting by the direct-importing retailers is one of the main forces driving companies following the traditional business model out of the trade. A mark-up still yielding a reasonable profit rate for one firm becomes sub-marginal for sharing among two or more in the traditional Japanese multi-step importing system.

Recent Rise of Very-Large-Scale Final Sales Outlets

The rising importance of very large-scale final sellers of furniture has been monitored annually by IDAFIJ.

Traditionally the main retail outlets for wooden furniture have been specialized furniture retailers (many of them very small, neighborhood stores), department stores and general-merchandise stores (GMS), in that order. In 1991, their relative market shares were 72.6% for the specialized retailers, 15.7% for department stores and 11.7% for general merchandise stores.

Japan's so-called "economic bubble" burst in 1991 and the previously freewheeling marketing environment for all these outlets suddenly tightened. This threw the retail outlets into unaccustomed rivalry with each other for the shrinking overall customer base. Department store sales were the first to plummet, and each of the other major players subsequently also have steadily lost ground while contending among themselves for the fewer and smaller sales each year.

Furniture specialty stores that continue to enjoy the lion's share of the home-use furniture market (three-quarters of total furniture sales) are fighting fiercely for survival. While the furniture market shrinks, major chains are rushing to open new stores, and stores keep getting bigger.

The result has been an annual round of openings of "mega-stores" by the top-ten furniture companies. In fact for the last several years, none of these market leaders has dared to let a year pass *without* opening at least one new store of a size which would be considered huge in any country, most of all space-constrained Japan. In 1999 the top-30 furniture stores ranged in size from 8,827 m² to 30,714 m². The total number of stores had already fallen by almost 40% in just six years, from 25,033 in 1991 to 15,495 in 1997.

4.2.12 Case studies

Case 1. Three Hokkaido furniture firms

Background of the Hokkaido furniture industries

In the main text of the Japan report there is commentary on the strongly traditional nature of Japanese thinking about their further-processed wood industries, reflected *inter alia* in the prominence given to uniquely-Japanese handicraft lines of minuscule weight, while several major internationally-traded products go unrecorded. Also, in sharp contrast to thinking in northern Europe about preservation and restoration of ancient wooden buildings and ships, in Japan even the most revered of all religious structures are periodically destroyed and rebuilt, e.g. the paramount Ise shrine on a 25-year cycle for more than two millennia. On this timescale, attribution of the Chubu and Hokoriku regions' present luxury wood-products industries to traditions arising in the 16th century reign of emperor Shokuho even appears a relatively recent development.

This context is important to understanding the very real fact that the northernmost island of Hokkaido is still regarded as a rustic and sparsely-settled frontier territory, and was the only extensive region of Japan retaining significant mature forests into the second half of the twentieth century. Japanese white oak, and to a lesser extent maple, were the most valuable resources. By now these are also largely depleted, but the local industries still restrict themselves exclusively, so far as could be determined, to botanically very closely related species even if imported from overseas, with the narrow but significant exception of North American cherry and black walnut which have never been grown in Hokkaido.

The city of Asahikawa in central Hokkaido is the most important center of this industry. The Asahikawa Furniture Industry Cooperative has large showrooms displaying representative pieces from many local firms, and organizes an annual international design competition which draws participation of top-flight designers including talented newcomers from around the world. Winning pieces often become Asahikawa products. Not least important though most difficult to capture in either statistics or text, there is a distinctive flavor to the whole style, pace, and above all space-consciousness of life in Hokkaido that sets it apart from the highly congested, frenetic existence of most of the rest of Japan. Surely it is no accident that less stressful life breeds freedom in design.

This area has by no means been immune to the general downtrend in the Japanese furniture industry during our study period, with its own share of the business failures, but the CEO of Conde House claims that so far at least, most displaced workers are trying to stay in the industry, often by making their own new start-up ventures using plant and equipment of the failed firms. In the best side of the traditionally supposed mutually-supportive or one could say paternalistic Japanese business relationship, Conde House gives trade to such smaller firms as subcontractors for some pieces or components. But this does not mean that it is a potential market target for overseas subcontractors, as are many other Japanese firms now, for reasons discussed below.

Common characteristics shared by the three firms

Conde House, who provided the most complete financial information, have very high value added, total sales being more than 10 times the value of raw materials purchased. While neither Kitanosumai nor Takumi Kohgei supplied quantitative raw materials purchase data, from the product prices observed by the consultant in their showrooms, there is little doubt that their margins must be comparable to those of Conde House.

Just as firms of the class in this case study seem best-placed to remain as enduringly successful "survivors" of the currently-ongoing general surrender of Japanese furniture manufacturers to overseas competition, they also seem the least likely of all Japanese companies to become customers for developing-country producers of finished products, components or even raw materials. The reason is their unswerving exclusivity in wood species used, a common characteristic of these three firms and reportedly also all other Hokkaido producers, in keeping with the displays of a large number of firms seen at the Asahikawa Furniture Industry Cooperative.

They use only temperate-zone hardwoods in two narrow groups: One is light-colored white oak, hard maple and elm like the original indigenous species of Hokkaido on which this industry center was founded. Some of these woods are still harvested from Hokkaido forests and local producers claim that particularly the northern-grown Japanese white oak is "the best in the world", but due to depletion of the indigenous resource, now similar species are also imported particularly from Russia and North America.

However all of these three firms claim their light-colored hardwoods to be all Hokkaido grown. The only imported hardwoods any of them use at all are Black Walnut (*Juglans nigra*) and cherry from North America. They produce some pieces entirely from these dark exotic woods, and also make some striking color-contrast effects in combination with the light-colored local oak, maple and elm. The members of the small woodcrafts (small, typically one-person firms as well as being makers of small articles) guild also seem to stick to just the same walnut and cherry in combination with light-colored local or closely-substituting imported temperate hardwoods. In its questionnaire response, Kitanosumai mentions importing some pine from Russia, but it is not prominent in their furniture lines on display.

The extraordinary care taken in raw materials selection is exemplified by the CEO of Takumi Kohgei, who travels to North America every year not only to personally select each one of the black walnut logs he purchases, but also to give detailed instructions to the American sawyers as to exactly how each log is to be cut to reveal its grain patterns to best advantage in the furniture stock produced.

It should be noted in passing that this strict species exclusivity is not common throughout the Japanese industry, for either low or high-end producers. For example in Ogawa City far to the south, beyond the main Honshu island on Kyushu, a maze of more typical-looking cluttered workshops freely uses low-density, rather low-grade imported tropical woods in cheap mass-market furniture. Also a high-end producer visited in the same area used a broad range of quite different, high-density and high-quality imported hardwoods, including several of tropical origin such as rosewood.

Interestingly, that otherwise highly artistic and painstaking Ogawa firm deviated from the uncompromising product quality standard of the best Hokkaido makers in one respect important to truly discerning buyers: Its cabinet pieces had only their fronts and sides made of the high-grade hardwoods, while interior parts and backs were of other materials. But when Kitanosumai, for example, sells a chest of drawers as "walnut" or "cherry", every part of it is made from solid pieces of those woods. Admittedly this is a rarity in the furniture industry of any country nowadays, being found mainly in antique pieces.

Significant differences among the three firms

One obvious difference, though not necessarily one of causative importance, is scale: of the two written questionnaire respondents, Conde House is roughly six times larger with current sales of over 30 million US dollars, compared with about \$5 million for Kitanosumai. Judging by physical scale of operations, the product quality and pricing of all three being comparable, Takumi Kohgei must be intermediate between the other two, making perhaps two or three times the sales of Kitanosumai and a third to a half those of Conde House.

Conde House makes some overseas sales through a shop in California, though these presently account for only 1% of their total sales. While the CEO doesn't anticipate great expansion in this, many of his "signature" pieces are of sizes clearly calling for spacious American rooms, as well as of free-style designs more likely to be appreciated by non-Japanese owners. But several production pieces come closer to defining a distinctive "modern Japanese" style than those of any other company we have seen. Paradoxically, they don't look like furniture commonly seen in Japanese homes, but something about the subtly flaring lines could not have been designed elsewhere.

Kitanosumai sells its products exclusively in Japan, and all of its pieces are both compact in size and conservative in design. The simple, clean lines bear strong likeness to mid-range Finnish or Swedish furniture and unquestionably are inspired by the CEO's contacts in Scandinavia where Kitanosumai buys most of the small articles sold in the boutique/teahouse reception area of their showrooms. Both the furniture materials and workmanship are impeccable, but pricing could be problematic if there were any ambition to sell overseas in competition with similar-looking Nordic designs.

These design differences between Conde House and Kitanosumai are especially interesting in view of the fact that it is Conde House with its much more automated, production-line style of operation that produces many of the more imaginative designs, while Kitanosumai's emphasis on individual craftsmanship using only simple tools and machines, is coupled with relatively staid designs. This evident reversal of commonly-held stereotypes may be due to nothing more than differences in aesthetic approaches of the CEOs, but other more instructive explanations are also possible: For example the larger firm obviously has more financial leeway for design experimentation, while the smaller, particularly in Japan, may be risk-averse about making bold departures from "proven sellers" to its fundamentally conservative clientele.

While Takumi Kohgei also concentrates on the high end of the domestic Japanese market, a number of their products, most notably the Amedeo tables, cupboards and especially chairs, display a world-class high-fashion flair and refined quality that undoubtedly could win them a place among worldwide customers to whom price is no object. The CEO has harmonized his business and personal styles to a degree seldom seen in Japan, for example choosing his particular factory site for its spectacular view of snow-capped mountains, a locally notorious fact, and gives considerable display space in the factory's airy, sunlit reception area to wooden art objects, particularly bird mobiles, made by members of the local small-woodcrafters guild. He also takes justifiable pride in the fact that the extensive array of hand woodworking tools covering one wall of that display area are not idle museum pieces, but his own implements that he routinely uses himself to craft the first prototypes of new Takumi Kohgei pieces.

There are also significant differences among the studied firms in their appraisals of the present business situation and outlook. Of the two who made written questionnaire responses, Kitanosumai is distinctly the more nearly satisfied with the current situation and optimistic for the future, while Conde House finds current business only "so-so" for itself and "bad" for other firms in the industry; expects next year to be worse; and believes that changes in the world situation since September 2001 have had substantial adverse effects which are apt to last for some years in the future.

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4.3 United Kingdom

4.3.1 Basic demand factors and market drivers

The economic climate is showing signs of weakening, even in consumer spending that has been the powerhouse of the economy for two years. Growth in 2002 is cut to 1.5% (against the 2-2.5% estimates of the UK Treasury) and 2.5% for 2003 (against 3%). This may cause higher government borrowing, or taxes, to fulfil the planned expenditure levels that are unlikely to be met if a recession or deflation occurs.

Commodity prices are falling with many consumer durables falling 3.6% in last 12 months. Furniture prices are acting in the same manner with keener prices for pine products (60% of the market) as that sector becomes saturated and competitive in the extreme.

The inflation target set for the Bank of England by the government is 2.5% but it is likely to be well below this in 2002 as underlying inflation is 1.9%. Economic expansion slowed markedly during the third and fourth quarter of 2001, but is still positive at 1.1% for the first quarter and 1.5% for the second in 2002. The Bank interest rate is 4% and has remained so for 10 months, the lowest for 38 years, factory prices are static or falling, some retail prices increased, but many fell and helped to push the consumer economy whilst the stock market fell by 20%.

Manufacturing and investments

Currently UK manufacturing output is down 5% with retail sales up 0.7% with GDP at up 0.6% to show an annual estimate of 1.2%. Raw materials are down 2.2%, with factory gate prices +0.3%, retail prices up 1.45 and average earnings ahead at 4.1%. Unemployment is still 3.1% at 943,000 unemployed but the global trade balance is the problem at over £16.89 billion (\$24.3 billion).

Public investment dropped to a 50 year low in 1999-2000 at below 5% of GDP. It is now rising due to planned government investment in the various hospital, roads and infrastructure needs. Private investment has changed also. In manufacturing it has declined from 1997 level of \$8.7 billion to current \$5.1 billion (at 1995 prices). In the meanwhile, output has been stagnant with little incentive to spend on new plants and equipment. Capacity has tended to expand overseas and not in Britain. Since 1997 and the change of government, an increased level of regulation of the labour market and higher taxes has pushed the UK down in the list of choice for foreign firms to relocate. Such action will hold back change and slow investment in the future growth and productivity performance necessary to sustain consumer spending. Higher taxes to pay for government plans and promises of high spending on public services is likely to affect the amount of money and the freedom that consumers have been spending in the last few years.

The UK Housing Market

The level of activity within the housing market has important implications for the home-improvement market, in terms of income available to spend on the home and providing consumers with the impetus to purchase new furniture.

Interest rates are currently at their lowest level since the early 1960s. Due to sustained low interest rates, more householders have chosen to release equity by re-mortgaging their houses in order to fund refurbishment projects (such as installing a new kitchen, conservatory, or replacing furniture, buying garden furniture etc.). Current economic conditions, including high employment levels and low mortgage rates, have contributed to continuing price rises in the housing market. For the first time, the Council of Mortgage Lenders (CML) has urged the Bank of England to raise interest rates in order to cool the housing market gently and avoid a housing 'crash'.

In June 2002, it was announced that house prices had risen by nearly 20% over the year. This was the highest rise for 13 years. This rate of increase has pushed first-time buyers out of the market in many parts of Britain, and raised fears of a sudden collapse. Completion levels of new houses in 2001 were at their lowest for 20 years, adding to the shortage of properties on the market. A continuing surplus of buyers creating excess demand for property is likely to sustain the market and continue pushing up prices in future months.

The right to buy of houses originally built for public use (council houses) has seen 1.5 million transferred to buyers since 1979 using a discount technique of a third the proved cost. It allowed many to get onto the housing route and helped in the current boom to upgrade. In 2000 some 52,000 were sold in this manner, supplementing the fall in new house build. The last peak year was 1990 with 150,000 were sold at the height of the last housing boom when on its collapse many were caught with overpayment problems.

The average house price is now over £153,000 (\$220,000) compared to £136,000 (\$230,000) in mid-2001. New houses completed in second quarter 2002 totalled 38,226, slightly down on previous year when building was at a 70 year low.

Household expenditure

In 2001, expenditure on furniture and furnishings accounted for 14.3% (\$15.5 billion) of all household spending on durable goods (\$108.2 billion). With the exception of 2001, expenditure on furniture and furnishings has increased at a higher rate than total expenditure on household durables. Furniture is not generally considered as an essential purchase, with perhaps the exception of beds. The vast majority of furniture sales are replacement purchases, which are considered deferrable in difficult economic periods, or will have to compete with other discretionary purchases.

Performance in 2001 has been strong despite the general economic downturn. Expenditure on household durable goods went up by 3%. Conversion into US dollars affected this figure, as in Pound terms the growth rate was as high as 8.4%. Growth has varied between sectors as they compete for limited disposable spending on discretionary items. Further growth is foreseen for 2002, but possibly at a slightly lower rate if interest rates are increased.

Table 4.31 UK: Household Expenditure on Durables and Furniture & Furnishings

Year	Durables \$ million	Change % y/y	Furniture & Furnishings \$ million	Change % y/y	F/F % of Durables	Change % y/y
1997	101,112	N/A	13,601	N/A	13.5	N/A
1998	107,755	6.6	14,527	6.8	13.5	0.2
1999	110,055	2.1	15,167	4.4	13.8	2.2
2000	105,073	-4.5	15,320	1.0	14.6	5.8
2001	108,206	3.0	15,494	1.1	14.3	-1.8

Note: Furniture and furnishings includes all household furniture, lights, lamps and pictures, but excludes works of art and antiques.

Source: Consumer Trends, fourth quarter 2001, National Statistics website, converted into US dollars

Implications on furniture sector

The UK retail market for new household furniture was valued at \$10.9 billion in 2001, with growth of 3-4% each year since 1997. The sectors that make up this market include living room furniture, bedroom furniture, kitchen furniture, dining room furniture and 'other furniture' (for occasional, accent pieces, home office, halls and bathrooms, garden items). The living room sector is performing well, as the increase of home-entertainment technology seeks new storage solutions away from metallic and plastic stands for the equipment. The home-office sector is seeing growth, spurred by changing working styles and the rise in home computer ownership.

The growth of the furniture market relies on reducing replacement cycles, stimulating consumers to buy new furniture before their existing furniture is worn out. Also media coverage has come to play a bigger role, especially via television programs. A series of TV specials has prepared the market by raising interest in home interior design and, therefore, prompting more consumers to buy new furniture purely for design reasons. This has also increased demand for a wider variety of products.

Furniture purchases compete with other discretionary spending on goods, and can be easily deferred as it is generally not an essential purchase. As a result, the performance of the household furniture market is dependent on the general economy as a whole, the level of house building and moving-renovation activity. The buying cycle of furniture tends to be in a narrow time span of expenditure. Changing house often triggers the purchase of replacement furniture, even from consumers who are not first-time buyers. Those consumers setting up home for the first time will usually purchase a wider range of household furniture.

The number of single-person households has increased rapidly in recent years and in 2001, there were an estimated 5.8 million single-person households (a figure projected to rise to 8.5 million in 2021). This is due in part to longevity, a decline in marriage, an increase in the average age at marriage, and the rise in separation and divorce. Single-person occupancy households are likely to be smaller than family homes, and may not contain a separate dining room, etc. They will therefore have different furniture needs, requiring multifunctional and space-efficient furniture.

The 'think cubic' promotional view for 2002/3 with IKEA is a case in point. Demand has risen for multifunctional and space-efficient furniture for example and the market is experiencing a decline in demand for the traditional three-piece suite and large dining tables.

The household furniture market is highly competitive, with discounting playing a decisive role. The January and June sales are still important for the industry but sales and offers are found year-round, and consumers are aware of this aspect and 'shop around' before purchasing.

Rapid growth for the market is not anticipated or if it does then it is a one-year leap before a second year of decline to provide a balanced 3% growth pattern. However, home-office, multifunctional, space-saving and flat-pack furniture are all likely to achieve a higher growth rate than other products.

4.3.2 Description of domestic furniture industry

The UK has the fourth largest furniture production in the European Union, after Germany, Italy and France. Upholstered furniture is the most important sector. Wooden furniture is estimated to account for 80-85% of all production.

4.3.3 Production volume

Table 4.32 UK: production of household furniture by product group

Market Segment	Product Type	1996	1997	1998	1999	2000
		1 000 \$				
Upholstery	upholstered wooden framed seats	2,132,678	2,003,315	1,993,307	1,806,900	1,814,262
	sofa-beds	46,322	53,759	79,530	86,457	71,448
Kitchen	wooden fitted kitchen units	1,223,611	1,449,581	1,256,817	1,486,367	1,291,923
	other wooden kitchen furniture	210,848	228,138	241,101	235,924	189,819
Bedroom	wooden bedroom furniture	1,124,002	1,102,184	940,663	1,267,669	1,009,233
Living/Dining Room	wooden liv/dining room furniture	956,532	915,399	926,608	773,011	657,984
	non-upholstered wooden seats	38,579	52,225	46,021	36,160	32,528
Other Furniture	seats of cane, osier, bamboo	4,687	12,090	15,941	13,559	12,171
	metal furniture (including parts)	557,802	723,911	618,115	666,551	608,055
	wooden furniture (including parts)	519,435	656,746	575,480	626,845	701,825
	plastic furniture (including seats)	205,488	208,347	222,768	191,605	188,814
	other materials for furniture (including parts)	74,880	70,382	58,703	59,013	24,740
TOTAL		7,094,864	7,476,074	6,975,054	7,250,060	6,602,802

Source: ONS Product Sales & Trade Reports on Furniture

4.3.4 Quality standards and certification and labeling requirements, environmental management systems

Standards in the UK are directly comparable and equate to the EU Norms. The EN-BS is the code given to that standards when tested in the UK, although testing can be carried out in most European countries and a number of registered Test Centres throughout the world. FIRA, the Furniture Industry Research Centre (www.fira.co.uk) will provide full details of the requirements, or SATRA (email: admin@satra.co.uk) and their Furniture Technology Centre.

Checking quality criteria with these organizations and standards is always critical when entering the UK market, unless the imported product has already met EU Norms or has a relevant certificate of conformity. Especially if seating is concerned, the adherence to the flammability regulations for fabrics and surface materials and their

fillings/foams are mandatory for all upholstery of UK and imported manufacture. Non-compliance is a criminal offence. Glass in furniture is a particular hazard and safety glass is mandatory.

Table 4.33 UK: production of office furniture by product group

Market	Product	1996	1997	1998	1999	2000
Segment	Type	1 000 \$				
Seating	upholstered swivel	190,741	230,372	257,956	24,433	286,502
	non-upholst. swivel	825	603	0	123	0
	upholstered metal	85,862	104,757	115,463	108,552	113,917
Desks, Desking & Tables	metal drawing tables	217	283	N/A	379	118
	metal desks <80cm	20,533	19,091	23,990	N/A	16,776
	wooden desks <80cm	396,414	421,442	463,747	415,128	471,407
Other Office Furniture	metal furnit. <80cm	218,418	179,292	199,035	182,719	185,775
	metal cupboards >80cm	106,456	134,701	137,571	118,528	111,611
	metal filing cabinets >80cm	118,627	125,508	126,517	117,098	111,756
	metal furnit. >80cm	311,739	221,574	275,057	274,513	281,308
	wood furnit. <80cm	173,121	134,589	138,306	141,188	158,002
	wooden cupboards >80cm	75,196	88,285	92,477	106,191	82,791
	wood furnit. >80cm	91,420	84,147	87,559	79,861	77,110
	other wood furniture	699,298	685,730	564,907	644,513	724,764
TOTAL		2,488,867	2,430,375	2,482,584	2,213,227	2,621,837

Source: ONS Product Sales & Trade Reports on Furniture

Standards are available but may be too severe and a discussion with FIRA or SATRA will set out the requirements as they must be considered within the meaning of the General Product Safety Regulations.

As an example, in the children's furniture, standards are important for bunk-beds of sleeping surface of 800mm or more above the floor. The Regulations of 1987 and BS EN 747 Parts 1 and 2:1993 are the key standards. Even if the bed is below 800mm height it should be checked and tested against structural failure. The reason is the General Product Safety Regulations of 1994, which is an extension of the Consumer Protection Act of 1987. Article 3 states that: 'producers shall be obliged to place only safe products on the market'. It is a criminal offence to supply or distribute consumer goods that are not safe. The Act goes on to define a safe product and states that testing to standards is an important criteria for compliance, even standards that are not directly applicable but possibly relevant to the product. Standards of stability, function, fitness for purpose and flammability are available for household furniture and should be applied to children's items.

4.3.5 Furniture market: foreign trade and apparent consumption

Foreign trade

According to COMTRADE data, the United Kingdom has become much more a net importer in furniture. Its trade deficit went up from \$ 680 million in 1997 to \$ 1.9 billion in 2001. Much of the import increases have been seen in the "other" furniture class (living/dining room, small-occasional), whereas the UK exports have drastically declined in this product group. Overall, the UK has lost 58% of its furniture exports since 1997 (current US\$ terms).

Table 4.34 UK: imports of wooden furniture by product group

Product Summary on Imports		1997	1998	1999	2000	2001		Index
		\$ million						%
Seats cane, osier, bamboo, etc.	2	24.6	23.8	23.7	25.9	26.2	1	106
Seats n.e.s. with wooden frames	21	323.5	390.0	438.6	490.7	562.4	24	174
Wooden office furniture	7	105.5	112.0	126.5	156.6	168.6	7	160
Wooden kitchen furniture	6	93.7	89.0	84.0	80.9	79.2	3	85
Wooden bedroom furniture	11	172.6	194.0	200.7	222.5	227.7	10	132
Other wooden furniture	29	450.4	554.6	650.7	762.4	830.3	36	184
Furn. other mater. inc. bamboo	3	39.5	44.1	44.3	51.5	49.2	2	125
Furniture parts of all materials	22	347.9	362.5	339.4	344.1	354.3	15	102
Total	100	1,557.7	1,770.0	1,907.8	2,134.6	2,297.9	100	148

Source: COMTRADE

Table 4.35 UK: exports of wooden furniture by product group

Product Summary on Exports		1997	1998	1999	2000	2001		Index
		\$ million						%
Seats cane, osier, bamboo, etc.	0	1.2	0.5	0.6	0.7	1.3	0	113
Seats n.e.s. with wooden frames	13	113.0	105.7	95.1	86.8	75.5	20	67
Wooden office furniture	7	62.7	63.6	55.9	56.3	31.0	8	49
Wooden kitchen furniture	9	77.9	68.5	62.9	49.6	41.0	11	53
Wooden bedroom furniture	8	68.6	41.2	47.3	38.2	31.5	8	46
Other wooden furniture	45	392.2	392.4	432.7	393.1	126.9	34	32
Furn. other mater. inc. bamboo	2	20.6	23.6	17.7	16.5	3.7	1	18
Furniture parts of all materials	16	140.5	166.7	134.8	125.4	59.9	16	43
Total	100	876.6	862.1	846.9	766.5	370.9	100	42

Source: COMTRADE

Consumption

The retail household furniture market (all materials), excluding beds and mattresses, was valued at \$10.9 billion in 2001 and has experienced only modest growth since 1997. The market shrank in US dollar terms in 2000-2001 partly due to the strengthening of dollar, and because of fear of recession and a drop in consumer confidence in the third quarter of 2001. However, the market was not overly affected despite the economic downslide. On Pound terms, the growth continued at around 3% in 2001.

Table 4.36 UK: household furniture market by product group

Furniture Type	%	1997	1998	1999	2000	2001	%
		\$ million					
Upholstery	38.3	4,163	4,338	4,358	4,231	4,104	37.7
Kitchen	23.0	2,497	2,601	2,534	2,449	2,392	22.0
Bedroom Cabinet	26.4	2,871	3,008	3,033	2,964	2,910	26.8
Dining Room Cabinet	7.7	832	863	856	814	795	7.3
Other Furniture	4.6	504	573	618	655	677	6.2
TOTAL	100.0	10,866	11,381	11,397	11,099	10,879	100.0
% change year-on-year		N/A	4.7%	0.1%	-2.6%	-2.0%	

Source: National Statistics website & Keynote Publications

The UK home office furniture market is valued in the range of \$237.6 million. It is a growing part of the entire office furniture market of \$1,25 billion in 2000 at trade prices. The office sector is expected to grow to \$1.58 billion by 2006 against \$1,35 billion in 2002.

Helped by boom of home computer ownership in the late-1990s, fashion of home working and general consumer confidence, desks and desking is the largest sub-sector at 43% of the market (\$102 mill.), with storage at 29% (\$70.6 mill.) and seating 28% (\$66 mill.).

Purchases tend to be at the lower-price end, which is now being widened in choice by offering new styles to rooms and home spaces with a designer content as well as upgrading for refurbishment. Many people working from home do not have a dedicated room available as home office. Instead they use part of another room or convert a bedroom for work base. This increases the need for coordinating and aesthetically pleasing furniture, so the computer area does not look out-of-place with the rest of the room.

Flat-pack office furniture traditionally has a down-market image, but it has lived through a resurgence of popularity with companies such as IKEA and MFI, plus a number of fitted kitchen suppliers offering flat-pack as standard. Design and material use is strongly changing consumer perceptions, as do many pine ranges delivered in flat-pack form, too.

Table 4.37 UK: home office furniture retail market

	£mill. (\$ mill.)	£ Index	£m at 1998 prices	Index
1998	117 (\$ 194)	100	117	100
1999	130 (\$ 210)	111	130	111
2000	143 (\$ 217)	122	143	122
2001	155 (\$ 223)	133	154	132

Source: Mintel

As the number of people choosing to work from home for at least part of the week grows, the demand for home office furniture will continue to rise.

Call centers have made as big an impact on the market for office furniture as the now conventional open-plan office did in the early years of the change from cellular

offices. Call centers require dedicated desking, seating and acoustic controls to make them comfortable for shift working and 24-hour operation. Demand for this type of office was growing rapidly in the latter half of the 1990s, but it is now entering into Asia and other cheaper locations. Unless the equipment moves then high volumes of desking will come onto the second hand market.

4.3.6 Imports from developing market economies and China

The United Kingdom market has been one of the main buyers of wooden furniture from the developing world. In 2000, it purchased 37% of its imports from the DMEC region (compared to 30% in 1996). China led the way in “other” wooden furniture, which is by far the biggest category of imports. It was also extremely competitive sector, because China held the leading position with only 9.4% of total imports. Malaysia (Nr.2) and Indonesia (Nr.5) followed in close range. In the other two product groups, Italy was a dominant player and downsized the market share opportunities for developing countries. In wooden seats, it took 47% of the imports, and 37% in furniture parts. China trailed in wooden seats on the third place (6%) before Malaysia and Thailand.

Table 4.38 UK: imports of major product groups from leading developing countries and China

Product group	Imports 2001 (\$ million)	Major developing country suppliers	Share %	Rank
“Other” wooden furniture	830.3	China	9.4	1
		Malaysia	9.0	2
		Indonesia	6.1	5
Seats n.e.s. with wooden frames	562.4	China	5.9	3
		Malaysia	2.8	5
		Thailand	2.7	6
Furniture parts	354.3	China	2.5	9
		Indonesia	1.6	15
		South Africa	0.9	18

4.3.7 Market developments by type of furniture

Bedroom storage furniture – example of a sector market

This sector is mature and replacement of styles and woods has been the feature, especially in pine items. Replacement cycles are long as few problems occur and refurbishment, moving house, or new starter homes are the prime cause for buying.

Free standing storage is 75%, fitted and often supplied by off-page advertising. Direct sell brands take the 25%. Around 46% of all bedroom storage is kept by the flat-pack style or self-assembly ranges.

A sub-sector offering growth is that of children and teenager styles and sizes. Pushed by strong presentation in IKEA and imports, some national chains and local specialist children outlets it has encouraged existing UK manufacturers to add these ranges. Many feature styles with wood or panel materials similar to adult units thus allowing the ranges to be added as the child grows, but a few are using branded licensed ‘child

themes' and styles and bright color finishes. Retailers strong in the sector are MFI with their own brands of Hygena and Schreiber, making for their own retail stores, Silentnight Holdings (making Silentnight Furniture, Ducal and Stag for the retailers), and Homeform Group with Sharps for direct-sell fitted ranges.

Children's Furniture

The market is growing and becoming identified as a useful sector for manufacturers and importers to deal with in a mix of industry and non-industry chain stores such as Toys-R-Us, IKEA, MFI, Mothercare, Wal-Mart, Argos, John Lewis and House of Fraser departmental stores, Mark & Spencer, a wide range of furniture independents and local nursery retailers.

Buyers are seeking regular access to well-designed and 'child-based' products for this sector. Moving on from the single bed and bunk-bed offerings with combined storage and writing desks has developed into full ranges of furniture aimed at the three sectors of child growth – baby/nursery – young child – teenager. Individual room sets, colorways and accessories for child growth and for changing learning patterns seem to be the route now. Storybook and film characters play a strong part in the surface decoration of the cabinets. The use of play-stations and then computers has seen the growth of surfaces needed to use them and store the components. Extensive testing for use and safety is essential for these products, not only for parent use, but also for child use as they grow. Two trade shows deal specifically with the children's furniture, as also do the regular furniture shows.

Outdoor furniture

Consumers are seeking mainly wooden garden furniture, as trends in furniture move up-market and yet the wood ranges are able to meet lower price points. It seems that the consumer understand that designs change, often with the colors of the umbrellas and seating covers and thus wish to buy wood garden sets that have a life of 5 years. Repeat purchases are often on the 3-4 year time. Price is important and the expensive ranges whilst offering durability do not meet with the consumer short-term needs. Hence a proliferation of low-priced well merchandised hardwood (mainly tropical) and soft wood (pine) units are found across a wide type of stores, from supermarkets selling food, to DIY stores, garden centers, discount stores and local independents. As 80% of the furniture displayed is of wood, emphasis is on FSC certification to ensure that wood is from sustainable sources. Special lacquers are used to ensure that the softwood endures for at least 4 years.

The market is valued at \$720 million at retail level. Tables and chairs accounted for 65% of purchases in 2001. The recliner sector has 12% and benches 10% with smaller figures for chairs (4%) or tables (1%). Parasols, often of the wood pole type, take 10%. Industry information for consumers is at www.lofa.com as the trade organization developing the industry and running an annual GLEE Show each September.

Kitchen furniture

UK consumers spent \$3 billion) on fitted kitchens in 2001. As much of that was on high-end priced appliances and worktops, it reduced the amount available for fitted furniture in 2001 to nearly half from the level of 10 years ago. The DIY sector performed well but the contract sector declined.

At the top-end of the market is a website for Designer Kitchens magazine on-line linked with a product directory portal called (www.thekitchendesigner.co.uk).

Franchising is a main route for the development of the kitchen specialist store. Often independent owners are encouraged to enter under group banners. www.Intotofranchise.co.uk is a site for entrants into the retailing business seeking e.g. branded Wellmann German kitchens. The franchise target is not just for household kitchen business, but also for commercial and contract sites - schools, hotels, builders and housing associations. www.Cuisines-schmidt.com, www.snaidero.com, www.mobalpa.com, www.crown-imperial.co.uk offer design on-line.

Kitchen www.restoration.com, www.atkinsonskitchens.co.uk, kitchen-magic.com are three advertisers in the marketplace that seek to improve kitchens without major reconstruction of the storage structures by offering to refurbish doors/drawers and worktops direct to the consumer. Color ads, in the Sunday supplements and Friday papers offer this service. This is also a back door exercise to get into the kitchen refitting business with new units as the work is carried out by company people. DIY stores also sell doors to fit without the need to refurbish the rest of the units.

The industry trade magazine is:

Kbbreview Monthly (<http://groups.yahoo.com/group/kbbnewsforum>)
Tel: 01858 468 811 Fax: 01858 432 164

ChairWorks offers direct imports from the China factory of textile and leather office chairs in 'scandinavia' style.

Do-it-Yourself stores

Focus Wickes the UK's second largest DIY group also owns Do-it-All and Great Mills. These units have been re-branded into a group giving a total annual sales of \$2.1 billion. The UK DIY and gardening sector has sales of £12.2 billion and a total of £22 billion if builders' merchants are included. With the original 93 Focus stores and 133 Wickes units the group covers 50% of the DIY market controlled by the three companies of B&Q, Focus and Homebase. Home Depot of the US is looking at entering the sector.

The supply side is fragmented with traditional suppliers, importers, new entrants and regular furniture sources moving into ranges that supplement their dining and bedroom items. Multiples and chains dominate the buying and coverage with IKEA, office superstores and furniture dealers taking their share. The web is mainly a

marketing tool, with some direct sales from the computer web-shops that now offer home office desk and seat systems at keen prices and good delivery rates.

4.3.8 Evolution of distribution patterns

There are three big retailers in the UK, of which IKEA and Courts have recorded clear growth, while MFI has lost ground. MFI is partnering with Ethan Allen (a major US 100 top company) in a pilot store in Kingston, London. Ethan Allen is targeting the \$1.5 billion premium furniture market in the UK offering a wide range of products including quality wooden furniture and the accessories necessary for a complete designer home and room delivery service, as in the US.

Among the other important retailers, the use of in-store galleries such as the 20 Laura Ashley home furnishing stores is a common concept, and 30 more stores are planned for the end of this year. They also have concessions in Homebase, the third largest DIY outlet.

Table 4.39 UK: Leading furniture retailers

Company Name	Sales £ million	Compound sales growth
		1998/9 – 2000/1
IKEA	745	24%
MFI	659	- 5%
Courts	658	17%
Allders department store	387	-3%
DFS Furniture	357	13%
Harveys Furnishing	271	5%
Laura Ashley	247	-15%
Homestyle	239	-
Habitat UK	137	10%
Overall industry average		14%

Source: Business Ratio Report-Home Furnishing Retailers.

4.3.9 Advertising and promotion

There are a wide variety of home-interest weekly and monthly magazines and television programs dedicated to home design and DIY to fuel consumer interest. This has affected the market by encouraging consumers to purchase new furniture in order to change 'the look' of a room, rather than because their existing furniture has worn out and needs replacing. The interest has also stimulated product design, as consumers become more adventurous in their purchases.

Advertising expenditure in the UK can be apportioned from the retailer to the consumer and from the manufacturer to the stockist and the consumer. Retailers' advertising fell in 2001 by 2.75% to \$232million, not because of less spending but by the collapse of large spenders such as World of Leather, Uno (now defunct) in the upholstery sector and Kingsway and Landmark as discount retailers. They alone took nearly \$9million out of the advertising market. The 20 largest retailers took 71% with DFS (an upholstery retailer and manufacturer) at the top with \$80million and 27% of all spending. Press advertising took 55% of the market with TV at 33%, radio 7.6%, followed by direct mail at 3.9%.

Table 4.40 UK: advertising expenditure by leading retailers of furniture

Retail outlets	Expenditure	Press	TV	Radio
	£ million			
DFS (60 stores, seating manufacturer)	50.7	23	26	1.7
MFI (180 stores, all ranges/manufacturer)	16.2	8	8.2	-
Courts (140 stores, all ranges)	15.0	7.1	7.1	0.8
ScS (20 stores, seating manufacturer)	4.5	-	3.1	1.4
IKEA (11 stores, all ranges)	4.0	-	3.1	0.9
Furniture Village (26 stores, all ranges)	7.0	4.1	2.5	0.5
Harveys (all ranges)	3.1	3.1	-	-
Moben (kitchen/bedroom manufacturer)	5.1	2.2	2.9	-
Kitchen Direct (kitchen/bedroom manufacturer)	1.4	1.4	-	
Multiyork (seating manufacturer)	1.9	1.9	-	-
Total	108.9	49.4	54.3	5.3
Percent of total	54%	44.5%	82%	34.5%
Overall totals:	201	110.9	66.23	15.34

Source: Cabinet Maker

Note: The expenditure figures are for the top-ten in each category. If individual spending is too low for the top ten, it has not been included.

The overall industry advertising amounts to nearly \$360 million with 17% directly from manufacturers and a further 33% from manufacturers that have their own retail stores. Advertising from manufacturers attempting to brand their products is most important in spring and autumn. Retailers advertise throughout the year with peaks in spring and autumn and at special sales times. Catalogue advertising, not included here, appears at least once a year from the IKEA-type of stores, as well as monthly from direct mail order companies, general catalogues and catalogue stores such as Argos, Mothercare, Littlewoods, MFI.

A number of 20-40 pages catalogues reach households by inclusion in Sunday newspapers, TV magazines, direct mail drops and local deliveries. These feature a mix of furniture, furnishings, accessories and some durables. Examples are House of Bath (www.houseofbath.co.uk), The Cotswold Company (www.Cotswold.com), Home & Garden Direct (www.readersoffers.co.uk/cx09), Scotts of Stow (www.scottsofstow.co.uk).

Table 4.41 UK: advertising expenditure by leading manufacturers of furniture

Sector (leader manufacturers)	March 2001	March 2002	% change
Lounge & Dining Room (Land of Leather with 56%, Ligne Roset with 5%)	14.6	14.8	1.3
Bedroom (Sharps with 59%, and Hammonds with 11%)	6.6	6.4	-3.1
Kitchen (Clive Christian with 12% and Kitchen magic with 10%)	6.6	7.7	16.9
Others	13.2	14.0	6.4
Total	40.9	42.8	4.7

Source: Nielsen Media Research

Note: others include beds, bathroom cabinets, outdoor.

Consumers look upon furniture as a major investment and they make an effort into making a sound choice. Distance of travel to the nearest or a choice of stores is important as is the type of store available to visit.

To buy new furniture – how far would you travel? The context is to look at usage of city stores as opposed to edge-of-town/retail parks and multi-purpose hyper-stores such as IKEA and factory outlet centres. The competitive aspect is for retailers to provide entertainment and convenience for the family and value for price points, be they high, medium or discount. Travel time, car parking and convenience are important with a preference for retail parks that have a number of furniture stores for comparison. The context here for suppliers is to look at where the groups, chains and independents are placed and attempt to be stocked in at least one of each sector to ensure coverage of the marketplace. Some survey results are featured below.

Distance covered	Percent willing to travel
Up to five miles	19%
Up to 10 miles	22%
Up to 20 miles	27%
Up to 50 miles	21%
Over 50 miles	9%
Would not travel	1%

Source: NOP/Cabinet Maker, September 2002.

4.3.10 Market entry

Reaching the UK market requires representation and this is often by using agents to cover specific regions of the country. A base of four agents and a UK contact number is crucial for household furniture, although it can be less for kitchens and for contract where designers and architects are more involved.

Coverage of the UK can be successful with 200 retailers, either as independents, or a mix of these and chains or department stores. This coverage lets retailers offer goods without too much price competition in their area. The use of a stocking warehouse would be helpful as this level of retailers rarely take container loads. The link with this stock and reaching the retailer is difficult and a carrier that offers good systems, even with ordering, cash handling and full financial reconciliation can be vital. Swift

delivery is a bonus with 7 days offering the consumer a practical 2-week or better waiting period.

It is useful to appreciate that in stocking 200 outlets with displays, room sets or standalone items will take at least 5 containers valued at \$20,000 each and cash-flow could be a problem unless sound payment terms are a part of the introductory package. Size can be important, as furniture designed for Europe and the US is often not suitable for the UK due to smaller homes and rooms. Equally, designer pieces that appeal to city dwellers in apartments are not a problem as they would be purchased to fit the image and style to suit the space available. Reaching these consumers requires access to specialist boutique outlets, direct mail order in up-market press and magazines and by key department stores.

Items of choice for household require a range of accent pieces to take special displays and entertainment units, occasional tables, side tables and small storage plus dining sets. In the bedroom a mix of units as free-standing can be strong contenders as opposed to the semi-fitted wardrobes and drawer storage. Over-large units need to be partially assembled (able to be disassembled) for ease of movement into the homes and stairs.

If made in solid woods then between 8%-10% moisture content is required to ensure satisfactory use throughout the year. Lacquers are important for a good finish, or as hand-polished for extra care, but the after-care does need to be detailed clearly on a ticket with the delivery units. New product offers, possibly launches linked to the regular annual furniture trade shows should be looked for each year as that process allows a growth in the retailing base. At some time key buyers could be awarded with pre-product selection and design from the feed-back of their sales and visit the factory to discuss details with the appropriate workforce and management. Such close contacts should ensure the quality of the product delivered as the designer requires and is simply not in the minds of workers that may not be able to appreciate what that level of quality demands. A promotional approach to the market is being used by a number of East European suppliers to set out single and multi-packs of ranges suited to rooms and display as well as multi-delivery of repeat sets of bed heads and bases, chairs and tables. All are designed to maximise pallet loads and truck delivery from the stocking warehouse.

4.3.11 Useful contacts

Publications

Furniture News, a monthly magazine for the retail and supplier trade. Subscriptions at 01424 774 988 and editorial at 01424 776 104 (email: dennis@nigelgearing.com). An excellent new magazine full of UK information, views and promotional advertising for the trade.

Cabinet Maker, a recognised weekly magazine for the retail and supplier trade. Subscriptions at 01858 438 893 (email: custcare2@subscription.co.uk and editorial at 0207 579 4321 (email: akidd@CMPinformation.com). Provides comment and research detail.

Furnishing, a monthly magazine for the retail trade and is mailed free to registered subscribers, plus post and packing for overseas, 01737 855 399. Editorial 020 8515 2000 and fax 020 8515 2080. Provides comment and research detail plus financial data of retailing.

Retail Furnisher is a monthly trade magazine for the buyer and specifier (www.furnishernet.com) with numerous articles of product launches and comment.

Kbbreview (<http://groups.yahoo.com/group/kbbnewsforum>) is a key monthly trade magazine for the kitchen and bathroom industry.

Household Furniture (www.thefurnitureshow.co.uk).

Interactive web site from **G Plan** (www.gplancabinets.co.uk) features trade only segments for replacement parts ordering, prices and promotions. The consumer section is for room-set planning (panning) as this allows visitors to look around corners and see the items in a place setting. A store finder identifies local stores and ranges.

Trade fairs:

- January for the International Furniture Show, Design, Lighting and Accessories, - NEC, Birmingham
- Kitchens and Bathroom alternate 2-yearly with the January Furniture show and Interbuild at NEC in May.
- BFM show at Earls Court, London, August.
- Design 100 is a key trade show in September. Earls Court 2.
- GLEE for outdoor, NEC, Birmingham, September.
- Long Point in Derbyshire is the up-market trade show, usually twice a year in May/October.
- Baby & Child International, Earls Court 2, October.
- ASFI and Woodmex, NEC, November, every 2 years.

A major retailer show for the consumer is **Ideal Home** at Olympia each May when a number of national retailers have show houses or store windows of their latest ranges.

4.4 France

4.4.1 Basic demand factors and market drivers

France, like most other European countries, has made severe efforts to match the required standards for entering in the European currency (Euro). This has squeezed consumption and the GDP increase has been moderate. The new government (year 2002) has promised an economic improvement, but the world situation do not allow to believe that the French economy will show other than moderate improvements in the next year.

French consumers spend almost 30% of their budget on their home. They are in fact the Europeans that spend the most on their home (29%, of their budget). They are

followed by German and Spanish consumers (about 28 and 27%) and by Italians at 22%.

French consumers are well oriented towards durable goods and furniture purchases, particularly in the top-end. The housing market should remain stable for the next two years. Indeed, it could experience a development in new collective housing sites, whereas individual housing sites should decrease. All in all, reasonable prospects for furniture. Finally, in the domestic market it is worth noting the increasing love of the French for arranging their habitat, helped by increasingly convincing distribution channels. In 2001, 7.3 million French households or nearly 30% of the total household population bought at least one new piece of furniture. It must be noted that at the end of year 2001 furniture sales likely profited from the reassignment of budgets initially planned for travel. Estimated annual spending of French families for furniture was Euro 1,250.

4.4.2 Description of domestic furniture industry

The French furniture industry is made up of over 17,000 companies of which only a small part (about 670 companies, or 4 %) employs more than 20 workers (see Table). The total workforce in the sector in 1998 totaled over 104,000. The industry therefore shows a low degree of concentration. Of the companies with more than 20 employees, only 4% are large companies with over 500 workers, whereas a much larger quota (58%) are small and medium-sized companies with between 20 and 50 workers.

The French kitchen furniture segment includes about 80 companies with 8,000 workers. Supply in this sector is quite concentrated: the three main companies control 60% of sales, while the quota of craftsmen's production accounts for 12% of demand. The French supply of upholstered furniture is becoming more concentrated: the top-40 companies account for about 65% of the total compared to the 57% of a few years ago. The French leading companies are trying hard to restructure their activity in order to be more competitive in the European market.

Table 4.42 France: number of furniture companies and employment

	1990	1995	1998	1999	2000
Number of companies*	835	750	693	704	671
Number of workers	76,222	76,154	78,821	73,384	74,318

Source: SESSI

Note: * only companies with more than 20 employees

This sector is facing strong challenges because styles, production and marketing are quickly changing and industries must face a twofold restructuring movement: on one side on the distribution side, to which the production sector is responding. On the other side, consumer tastes are shifting, and certain companies specializing in given furniture styles must adopt new strategies. In all cases, these involve significant investments relating to all posts in the production chain. The distributors' need for loyalty development when faced with active consumers who are looking for increasing numbers of services, which is resulting in the development of collaboration programs between industry and the distribution sector. These are more and more often based on the development of differentiating marketing strategies.

4.4.3 Production volume

France is the fourth largest furniture producer in the EU with around \$7.2 billion in 2000. Between 1996 and 2000, an average growth rate of 5% was recorded in furniture output.

Table 4.43 France: furniture production by type (2000)

Type of furniture	\$ million	Share %
Office	913	12.6
Kitchen	886	12.3
Upholstery	876	12.1
Others	4.543	62.9
Total	7.218	100.0

Source: SESSI

4.4.4 Structure and location of industry

The 10 largest companies hold a share of 24,6% of total sales (1998). The average number of workers (for the companies with more than 20 workers), is 110. The number of artisans is slowly decreasing. 67% of French companies are independent, 26% belong to larger French groups, 7% belong to larger foreign groups.

The geographical breakdown of manufacturing companies shows that distribution is fairly uniform throughout the country. However, there is a greater concentration in central France where over 24% of all productive plants are situated, which provide a quota of 22% of total French furniture production. 21% of companies are located in the western regions and they provide 20% of total national production.

Table 4.44 France: breakdown of production by geographic area

Region	Productive plants	Effective production
	%	%
North	9.7	9.8
East	14.8	21.0
South-East	19.6	18.2
Center	24.4	22.0
West	21.0	20.1
South-West	10.5	8.9

Source: SESSI

Note: * only companies with more than 20 employees

4.4.5 Major players

Some of the main furniture producers are:

- Steelcase Strafor
- Gautier France
- Roset
- Dumeste
- Capdevielle et Fils

The main kitchen cabinet producers (the big three control about two thirds of the market):

- Schmidt
- Mobalpa
- Parisot

4.4.6 Main raw materials

Table 4.45 France: use of the main wood raw materials in furniture industry

Wood product	1999
Sawn hardwood	30%
Sawn softwood	8%
Chipboard	46%
MDF	10%
Other panels	6%

Source: Gardino research

French furniture industries use very small amounts of edge-glued panels. On the contrary they use large amounts of solid hardwood (mainly oak). Chipboard is the main used material. The following chart reports results of a recent research of Gardino Consulting (year 2002) based on a limited sample (the main 50 companies) of large furniture industries:

Table 4.46 France: percentage of top-50 furniture companies using the main wood raw materials

Wood product	Percentage of companies using the wood product
Softwood	47%
American hardwood	35%
European hardwood	80%
Tropical hardwood	5%
Plywood	25%
Edge-glued panels	22%
MDF	60%
Chipboard	87%
Veneer	20%
Mouldings	9%

Source: Gardino research

It is worth noting the very limited use of tropical hardwood in the sample. It is also of interest the fact that all companies use many different wood products for their production and that chipboard and domestic hardwood are those more commonly used.

4.4.7 Favored wood species and finishing techniques

These are the main wood species used by French furniture industries:

Table 4.47 France: favored wood species by type of furniture

Use	Wood species
Children's and low budget furniture	Spruce, pine
Chair, seats and institutional furniture	Beech, ash
Bedsprings and frame's support furniture	Poplar, beech
Traditional furniture (antique and country)	Oak, cherry, pine
High quality antique furniture	Walnut, cherry
Indoor furniture	Chestnut, maple
Modern furniture	Elm (scarce)

Source: USDA

It can be noted that French industries use a large variety of species, and favorites differ according to types of furniture. However, the volume of wood consumption is heavily concentrated on few species: number one is oak, followed by cherry and pine.

Tropical species are little used. Teak is used for garden furniture (a growing consumption), as well as iroko. Ipe and jatoba are used for pool sidings and garden fittings, and these durable woods are occasionally being promoted for bathroom uses as well. Little ayous or similar species are used for furniture mouldings. Okoume is quite commonly used for plywood, but it finds a use in furniture industries in small quantities only. Bamboo and rattan keep a niche market, where most of the used furniture is now imported from tropical producer countries (some is also imported from "design countries" like Italy and Spain).

French furniture finishing techniques are quite traditional. Environmentally friendly and non-polluting materials must be used. Noting the popularity of traditional furniture in the country, wax and oil finishing is also frequent.

4.4.8 Out-sourcing and networking among manufacturers

The manufacturing process of French furniture industries is quite traditional. Industries prefer to produce all the items they need within the factory. Only few items are purchased out of the factory, mainly drawers, some veneered panels and some cut-to-size panels. However things are starting to change also in France. Some companies are now importing semi-finished parts from other countries, mainly from Italy, but also from China or Brazil. Component factories are beginning to be active, although these intermediary companies for the time being are much less important than in other countries. There is little networking among manufacturers (production side), although there are powerful purchasing groups and franchising chains.

A recent analysis of SESSI indicates that some leading home furniture producers are pushing the outsourcing process, in order to be able to concentrate more on internal production units and in order to be able to reach a bigger creativity and higher innovation. According to SESSI this is the structure of furniture parts makers (more than 20 workers)

Table 4.48 France: furniture parts makers (with more than 20 workers)

Number of companies	39
Number of workers	2018
Annual sales	170 billion Euro
Investments	9,2 billion Euro
Added value	36,8%
Export rate	10,5%
Investment rate	14,8%
Rough margin	22,3%
Profitability rate	7,8%

Source SESSI

They are mainly located near the main industries, where they improve production flexibility, but also profitability. These companies invest considerably, compared to the sector on average. The main sectors of production are furniture legs, doors, drawers, carcasses. The main customer companies are home furniture producers, followed by kitchen cabinets and, with small quantities, office furniture and others.

This market segment is largely supplied by imported goods. In year 2000 imported goods accounted for 52% of the French net consumption of furniture parts. Two thirds of imported goods are supplied by Italy.

Table 4.49 France: consumption of furniture parts

Euro million	1997	1998	1999	2000
imported	130	145	150	180
domestic	130	150	155	140

Source: SESSI

There is good co-operation between furniture industries and their suppliers. This is especially true for suppliers of overlays. Furniture industries ask exclusive drawings and colors for the overlays to be used in their production, and paper producers study special items for their biggest customers. Also machine industries co-operate with furniture industries, with a two-ways process of information. It is necessary to note the considerable power of the main clients of furniture industries. The main distributing French companies are very powerful, often they can influence the small and medium (and even the large) French furniture industries. More than "co-operation" one ought to speak of leadership of some chains of distribution in certain parts of the market.

4.4.9 Technology level

The French furniture industries (at least the leading companies) are advanced technologically. On a side of the modernly equipped leaders still exist a large number of artisans, often producing traditional furniture, with less modern and sophisticated equipment. Investments in the sector are considerable at about 9,9% of turnover (worth FF. 2.2 billion in 2000).

Around 20% of investments are made by independent French companies, 62% by French companies belonging to larger groups, 18% by companies belonging to larger foreign groups. Investments of home furniture companies (7,7% of added value) are insufficient, and this is a break to competitiveness of the sector.

4.4.10 Furniture style and design trends

Visual design

There are several activities in France for improving the quality of design, including competitions like the competition held at the furniture show of Paris. There is a fierce competition among designers of all the countries, although French designers, often prevail on their foreign competitors. Since 1993 at the Paris Furniture Show, exhibitors organize important design show under the umbrella of "Le Village". In year 2002, trends to research color and comfort were noted. The use of opalescent glass, new plastics, metallic structures, as well as the use of unexpected materials, the use of new composites, were also present.

Technical design is needed to translate products from designer's table through the manufacturing processes onto the marketplace. French leading companies are ready to translate design indications into mass production and co-operate strictly with the top designers. However this co-operation is limited to the top of the industries, since it has already been noted that in France often "top quality" means traditional furniture, respecting old materials and lines.

Training of designers

There are several design schools, and these often participate through their students to furniture design competitions. A well know training center is VIA – Institute for promotion of furniture and design of Paris. Another important institute is ENSAD.

4.4.11 Quality standards and certification and labeling requirements, environmental management systems

French industries are quite strict in their requirements as far as standards are concerned. Moreover they often require the respect of "French Standards" (NF Ameublement), although European standards (EN) at the moment have substituted almost all the national standards. Standards applied to furniture are many. A clear and complete view can be found in the CTBA (Centre Technique du Bois et de l'Ameublement) web-site: <http://www.ctba.fr>.

Many standards concern safety both of furniture and of the used raw materials (e.g. breaking level of pieces of wood: NF-EN 1727). These can apply to tops, doors, beds (including children beds: NF-EN 716, finishing must be according to NF-EN 71-3). Norms provide rules both for "normal use" and "non-normal use", which can be "reasonably" foreseen. There are also quality standards which establish rules for a long term use of furniture. In this case the standards provide test based on long repeated cycles of use.

Certification agencies usually advice for obtaining ISO14001 first, and then EMAS by request. In France, 165 furniture industries have obtained the ISO 14001 Certification (end of 1999). 18 industries have obtained the EMAS (European Regulations Conformity) certification.

Another way is to obtain European eco-label certification for firms products (defined by directive 93/42/EEC): the manufacturer, importer and service provider trader or retailer could contact the national competent body and after completing an application form and provide all necessary details to prove that its product complies with the ecological criteria. Ecological Criteria are fixed by European Union Eco-labeling Board and issued on Official Journal of European Communities. Transparency is granted by representative participants from industries, commerce, environmental and consumer organizations. Eco-label is fee-based (0.5% ca. of sales turnover) and could be use 3 years long.

The French forest owners have not supported actively FSC (Forest Stewardship Council) certification, and there are merely about 13.000 ha. of FSC certified forests in the country (mid-2001). Instead, there were 250.000 ha of forests in France certified according to PEFC (Pan European Forest Certification) rules (August 2002).

There is very limited demand for eco-certified furniture in France. Mostly this demand comes from the large do-it-yourself (DIY) store chains, such as Castorama and Leroy Merlin. These corporations prefer FSC certification, but are also assessing PEFC certification.

4.4.12 Furniture market: foreign trade and apparent consumption

Both French imports and export of wooden furniture have recorded healthy growth rates over 1997-2001. Imports have been growing faster, however, resulting in a widening net import situation. France imported wooden furniture and parts worth \$2.56 billion in 2001, which was \$1.29 billion more than exports (\$1.27 billion).

Bulk of the imports are in "other" wooden furniture (35% of total) and wooden chairs (23%). Furniture parts rank third with 14% share of imports. Imports have been growing at the fastest rates in furniture of other materials like bamboo and in kitchen furniture. These products make are, however, relatively minor import items in terms of trade value.

Table 4.50 France: imports of wooden furniture by product group

Product Summary on Imports		1997	1998	1999	2000	2001		Index
		\$ million						%
Seats cane, osier, bamboo, etc.	1	18.0	20.9	22.2	26.5	28.5	1	158
Seats n.e.s. with wooden frames	25	475.3	520.0	534.5	500.6	593.3	23	125
Wooden office furniture	6	122.2	126.1	111.5	131.1	142.8	6	117
Wooden kitchen furniture	6	111.8	127.0	149.2	147.0	181.8	7	163
Wooden bedroom furniture	13	245.4	245.0	254.2	249.5	287.6	11	117
Other wooden furniture	34	649.3	711.1	767.9	775.6	890.6	35	137
Furn. other mater. inc. bamboo	2	45.7	48.2	58.6	71.4	81.8	3	179
Furniture parts of all materials	12	235.3	271.3	281.4	304.6	353.8	14	150
Total	100	1,903.0	2,069.6	2,179.5	2,206.3	2,560.2	100	135

Source: COMTRADE

Table 4.51 France: exports of wooden furniture by product group

Product Summary on Exports		1997	1998	1999	2000	2001		Index
	%	\$ million					%	97=100
Seats cane, osier, bamboo, etc.	0	2.1	3.2	2.7	2.7	3.5	0	169
Seats n.e.s. with wooden frames	12	121.1	126.3	123.6	114.2	134.4	11	111
Wooden office furniture	4	39.6	52.4	50.3	51.4	57.7	5	145
Wooden kitchen furniture	13	123.9	126.8	114.6	102.3	123.0	10	99
Wooden bedroom furniture	13	129.6	140.4	137.9	129.3	131.1	10	101
Other wooden furniture	44	434.1	514.4	520.0	525.2	591.3	47	136
Furn. other mater. inc. bamboo	3	32.4	42.5	46.1	35.4	42.3	3	131
Furniture parts of all materials	10	95.4	107.4	133.4	173.3	184.4	15	193
Total	100	978.2	1,113.4	1,128.6	1,133.9	1,267.7	100	130

Source: COMTRADE

According to data covering all types and materials of furniture, the country consumed worth \$8.4 billion of furniture in 2000. Consumption growth for 2001 was 5%.

Table 4.52 France: furniture consumption by type (2000)

Type of furniture	\$ million	Share %
Office	996	11.8
Kitchen	929	11.0
Upholstery	1.127	13.4
Others	5.367	63.7
Total	8.419	100.0

Source: SESSI

4.4.13 Imports from developing market economies and China

France imported 21% of its incoming wooden furniture from the developing countries. By comparison, in 1996 the figure was 13%. Asian suppliers were accompanied by Brazil (ranked 8th) in "other" wooden furniture class, where Indonesia held the sixth position (with 6.7% of imports). Indonesia was the third source in wooden seats with a 5% share. In furniture parts, developing countries did not feature well, with market shares starting from China's 1.3% only. France's neighbors supplied most of the imports in furniture parts.

4.4.14 Market segmentation and regional demand breakdown

The breakdown of supply according to quality ranges is quite balanced as far as the middle (44%) and economic ranges (46%) are concerned, whereas the market is smaller for upper range furniture (10%). In recent years the middle range market has witnessed sharp contraction, losing 5% of the market between 1995 and 1998. In the kitchen segment, kit furniture is widely produced (57%), and it has recorded significant growth in recent years.

The major consumption regions are the Paris area (Ile de France) with more than 10 million inhabitants, the Rhône-Alpes (around Lyon), with more than 5 million and the Provence-Alpes-Côte d'Azur (around Marseille) with little less 5 million.

Table 4.53 France: imports of major product groups from leading developing countries and China

Product group	Imports 2001 (\$ million)	Major developing country suppliers	Share %	Rank
"Other" wooden furniture	890.6	Indonesia	6.7	6
		Brazil	5.0	8
		China	4.5	9
Seats n.e.s. with wooden frames	593.3	Indonesia	4.9	3
		Vietnam	2.4	6
		China	1.9	8
Furniture parts	353.8	China	1.3	14
		Indonesia	0.5	21
		Malaysia	0.4	26

4.4.15 Classification of furniture styles

French furniture production has leaned fairly strongly on its old traditions, but this appears to be changing towards more contemporary fashion. The market still requires traditional furniture and there is an important niche, covering also the top share of the market, demanding reproduction of antique furniture. However demand for modern design keeps growing. Therefore many French producers, especially in the medium and low part of the market, have shifted parts of the production to "modern" design, which now represents the absolute majority of the market. The "modern design" is interpreted in different ways. "Return to the 70's", according to some, and "priority on functionality" according to others. Modern-contemporary at the moment represents 64% in value. Rustic-traditional offerings are nevertheless preserving a considerable market share.

Table 4.54 France: domestic market breakdown by furniture styles

Furniture style	Kitchen		Upholstery	
	by value	by volume	by value	by volume
Modern - contemporary	65%	71%	67%	74%
Traditional - classic	35%	29%	33%	26%

Source: Csil

The downward evolution of traditional/classic style in France is remarkable. For example kitchen market value for traditional style furniture was 50% in 1990 but only 35% in 2000.

French living style is led by two basic principles: basic and luxury. Basic design offers what is necessary to the daily life with simple and essential lines, with proven materials and shapes. Luxury is associated with "space", "safety", "technology", "home automation".

The classic furniture offering rides on the authenticity and knowledge of the products and integrates a touch of exoticism.

The consumer of design furniture willingly places individual pieces into a contemporary or modern environment. The main consequence of this is a drop off in the market of furniture that is sold as complete bedrooms or dining rooms – to the benefit of furniture sold separately. The consumer is searching for a new style which is establishing itself between heritage and modernity, a relaxed mixing of genres. Design furniture is following this trend and explores the possibilities of art deco and ethnic furniture. An increasing interest for ethnical furniture has been noted, which is now acquiring an interesting niche.

Design and technical evolution in the office furniture sector has been spurred by various factors. New technologies (information and communication) have influenced the work stations design into modular and functional systems. New materials have been used, allowing new shapes to unfold. Environmental issues have influenced finishing techniques as well as the life cycles of the product.

In the field of techniques, the laser-cutting with extra short impulses will influence the manufacturing processes. They need special laser technology, which will be commercially available only in a couple of years time.

4.4.16 Evolution of distribution patterns

In France furniture is distributed by a total of 11,700 sales outlets that cover a total sales area of 7.7 million square meters. The specialist circuits dominate the market with 81% of total turnover. Large-scale distribution active on the low-end segment takes control of 49% of the market, thanks to 4 leaders. On their own, the companies Conforama, But, IKEA and Fly hold nearly 35% of the market, versus 23% in 1992. Two out of three furniture consumers in 2001 chose to buy furniture from one of these four companies. In terms of optimum efficiency, the record goes to IKEA which now holds 6% of the French market with only 11 stores, as opposed to But, with 10% of the market and 228 sales outlets; Conforama holds 15% of the market with 171 stores; and Fly holds 5% of the market with 125 stores. The large DIY stores and mail order channels have also gained ground, accounting for 4% and 7% of the market respectively.

The 10 biggest distributors are: Conforama, But, IKEA, Fly, Monsieur Meuble, Atlas, Mobilier de France, Camif, La Redoute, Roche-Bobois

The market has a growth in the range of 3% a year. The four main distribution groups account for about 50% of sales. In 1992 this share was of 23%. The large and powerful groups keep growing and in a few years they will dominate the market. It is also reasonable thinking that their number will decrease thanks to a concentration process. Smaller traditional furniture stores sell about 20%

Table 4.55 France: distribution channels of furniture

Distributor	Share % (2000)
Specialists	77
Independent retailers	10
buying groups	15
Large scale specialist distribution	40
other specialist channel	12
Non-Specialists	23
Department stores	2.5
DIY stores	3.5
Mail order	6
Direct sales	6
other non specialist channel	5
Total	100

Source: Csil

Distribution in France is shifting more and more to large store surfaces. Also DIY stores keep growing and distribute furniture in some market segments. Table 4.56 gives an idea of the growth of large store surfaces in France in the last years.

The strong French sales groups are also growing in other countries (both directly and through franchising). This is promoting sales of French furniture abroad.

Table 4.56 France: new furniture store surfaces authorized per type (in %)

Store type	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999*
Hypermarkets	20,7	13,6	15,6	8,9	6,8	8,5	9,0	7,7	8,5	7,3
Supermarkets	9,6	8,9	10,1	6,6	12,6	14,5	11,0	12,6	12,7	13,7
Home equipm.	11,5	18,3	16,6	13,0	10,7	9,6	15,0	9,9	12	12,7
DIY-gardening	18,3	15,8	14,7	30,7	40,7	36,8	26,0	43,9	40	37,4
Others	39,9	43,3	43,1	40,8	29,2	30,6	39,0	25,9	26,8	28,9
Total	100	100	100	100	100	100	100	100	100	100

Source : Decas

Some indications on furniture market distribution trends are given in the following for 2001:

- Furnishing Specialists will continue to re-organize their networks, and a concentration seems inescapable. However, their activity decreases by 3.5% in 2001;
- Living room Specialists will virtually disappear, now representing only 2.5% of the market;
- Mail Order sales will drop 30 million Euros compared to 2000. Mail Order is trying to find its way ahead. After the good years between 1994-1997, the product-offers and the selected strategies confirm that one cannot improvise on an equipment market.
- Discounters and works councils have difficulties in adapting to the market. They lose more than 45 million euros.

The offering of “products + services” is taking its place on the market, with the recovery of the Furnishing-Decoration branch, craftsmen and certain kitchen specialists.

The future is increasingly itself towards an organized or specialized distribution. The “mid-range” segment is caught between the large-scale distribution and the “top-end” brand companies.

In 2001, the companies specializing in “Bargain prices” and those offering “Top-end” products have grown more than others. The “low-end” is gaining ground by always adapting more quickly to the market. At the same time the “Top-end” is reinforcing its image and its cultural identity.

4.4.17 Indicative price levels

Some retail prices are reported below. Prices include VAT.

- Table in beech, modern style 105x70 cm. 53,5 Kg weight - € 898,00
- Chair in oak – Structure solid oak, tissue treated scotch-guard € 226,00
- Rectangular table in oak, cm. 180 - € 805,00
- Small TV furniture set cm. 101 x 81 x 52 solid oak. Interior oak veneered. Drawers in solid pine. Finished with wax. € 835,00
- 2 doors bookset cm. 124x185x51 – solid oak 1st choice, interior oak veneered, drawers pine, wax finish. € 1064,00
- Etagère with glass doors. Interior halogen lights in the upper part. Front solid oak cm. 189x217x50. Interior and sides in sight in veneered oak. Solid pine drawers. Wax finish. € 1903,00.

4.4.18 Transport and packaging

French furniture consumers usually buy “personalized” furniture. This is especially true in sectors like kitchen cabinets. It is less important in sectors like upholstered furniture. However buyers either prefer immediate delivery (this is especially true for discount items, knocked down furniture, etc.) or they personalize their order and they want a very prompt delivery. The country therefore has a very efficient system of order transmission and quick transport, favored by the relatively limited distance existing between the consuming areas and main producing areas, including some producing areas in the surrounding countries (Spain, Italy, Belgium). Transport is almost always made by truck. Goods are properly packaged in order to eliminate damage.

Cheap items are almost always sold and delivered knocked down in pieces. Goods shipped from overseas countries are always transported with containers. Buyers and sellers dedicate great care in establishing sizes and shapes of the furniture (when it is not knocked down), allowing to fill completely the container, without empty spaces. Buyers prefer shapes allowing to pile the furniture pieces one inside the other.

4.4.19 Advertising and promotion

Home furniture producers invested 168 million Euro in advertising in year 2000. Seating furniture invested 21,3 million Euro. Kitchen cabinet and bathroom manufacturers invested 40 million Euro. Office furniture industries invested 6 million Euro. (Source: SESSI).

Table 4.57 France: investments in advertising of home furnishing

Indicator	1999
Number of companies	1,379
% of companies with an advertising budget	88,6%
Advertising expenses in BN Euro	0,61
In % of total advertising expenses in France	7,5%
Advertising in % of annual sales	2,5%
Annual growth in advertising expenses (1994-1999)	0,0%

Source SESSI

There is no official figure concerning investments of branded versus non-branded advertising expenses. However direct information suggests that branded furniture industries spend considerably more than non-branded ones. Branded industries invest also in advertising to the consumers, while non-branded spend only in advertising to traders, mainly through specialized magazines.

4.4.20 E-commerce and Internet-based marketing

E-commerce Business to Consumers in France in year 2000 jumped + 246%, from 1,3 billion French Francs up to 4,5 billion. However only very few furniture companies are really involved in this trade. A recent study of the Benchmark Groups ascertained that out of a sample of 2500 traders (all goods), only about 100 depend for more than 80% from the Internet. The study quotes the site Camif, offering 27,000 products. Its average sales are 195 €. This site is selling about 13% of its sales through the Internet, and about 30% of its sales are furniture. It is clear that this is the case of very few companies. It is hard giving precise figures concerning Internet sales, but they are probably below 1% of total sales of the sector.

There were about 9.0 million Internet users in France in 2000, of whom 6.3 million reported weekly use.

4.4.21 Case studies

Case 1. Public support to furniture industry in France

The French Government has traditionally been very active helping the national industry to grow and to export. The wood industry (including the furniture industry) benefits from supports from the State through the Ministry of Industry and Trade, as well as from the regions and counties, to modernize its equipment. The state moreover partially gives support to research and to technical institutions such as CTBA (Centre Technique du Bois et de l'Ameublement). There is a structure of trade assistance to exports, as well as export credit insurance and financing.

Framework Program of the European Union for Research, Innovation in Small and Medium-sized Enterprises (SMEs)

This European Union program promotes innovation at European level and encourages SME participation in research projects. The program supports European businesses from all industrial sectors (including furniture and related areas) to innovate, to develop, market and integrate new technology and to manage change more effectively. The program also aims at contributing to a more innovation friendly environment in Europe, improved conditions for the creation and development of new companies, the diffusion of new technologies, the emergence of new economic activities and at fostering the "innovation culture" in Europe. To optimize the economic impact of Community RTD, the program lubricates the effective use of Community RTD results. In areas such as Intellectual Property Rights and Innovation Finance the program will provide help services to 5th Framework Program participants and carry out pilot activities. Specific emphasis will be given to help with the setting-up and development of innovative firms.

The program serves three main functions:

- As a "service provider", the program offers information services and assistance to SMEs, other firms and relevant players and supports the Thematic Programs in their approach to Innovation and SMEs.
- As a "clearing house", the program collects innovation data and analyses trends, initiatives and policies at Community and Member States level. It offers platforms for trans-national experience exchange and contributes to Community policy initiatives.
- As a "test bed", the program launches pilot actions in the areas of Innovation and SME participation and aims at the continuous improvement of Community instruments.

Specific projects for furniture SMEs

A project proposal can be submitted in two steps. The submission of a proposal may, optionally, give rise to an Exploratory Award (called step 1), which covers part of the costs of conceiving and preparing a complete project proposal (step 2) to one of the RTD programs.

The five different types of project proposals (step 2) which may be prepared using an Exploratory Award are:

- co-operative research projects (CRAFT): these enable groups of at least two SMEs with similar technical problems and without adequate in-house R&D capabilities to engage third parties ('RTD performers') to carry out most of the research on their behalf;
- RTD projects or collaborative research projects: these are open to enterprises which possess the internal capacity to undertake their own research; at least two companies must pool their efforts;
- demonstration projects: these are designed to prove the viability of new technologies on completion of the research phase, where the technologies

concerned still face technical and technological uncertainties and are thus not yet ready for marketing;

- combined research and demonstration projects: projects which combine research and demonstration activities in respect of new technologies;
- innovation projects: pilot projects resulting from research, where the transnational transfer of a technology is involved.

4.4.22 Useful contacts

SESSI – Le Bois en chiffres – Edition 2002

SESSI – France Meubles 1999

SESSI - Enquête annuelle d'entreprise 2000 and 2001 – many papers

SESSI – Conjoncture 2001

SESSI – Les 4 pages N. 155-2001: Les entreprises industrielles et la publicité

SESSI – on-line data bank: <http://www.evariste.org/sessi/>

US Department of Agriculture – Solid wood products annual reports (2001)

PME – Gouvernement Français – information sur la distribution: <http://www.pme-commerce-artisanat.gouv.fr/economie/onc/chap13.htm>

Industries Françaises de l'Ameublement: Economie et marchés 2002

BMSI – French furniture production – February 2002 N. 322

Gardino Consulting – many researches made in years 2000-2001 and 2002, especially “The main European woodworking industries, second processing industries – edition 2002”

Csil –information to Gardino Consulting

CTBA – Info various issues, including N. 88/2001

Insée statistical data base: http://www.insee.fr/fr/home/home_page.asp

DIRECTION DES ENTREPRISES COMMERCIALES ARTISANALES ET DE SERVICES (DECAS) Information on distribution system.

www.decas.finances.gouv.fr

4.5 Canada

4.5.1 Basic demand factors and market drivers

The economic climate during 2001 and into 2002 has kept consumer spending at 3% growth pace and possibly higher at 3.5% in 2003. Housing construction was stronger with 175,000 housing units in 2002 against 165,000 last year and the market is about one-tenth the size of the US size. It is driven by low borrowing costs and moving homes in the apartment and town house sector with the Ontario and Toronto in particular benefiting from 25% of the country's total market. Real disposable income growth is slowing from a high of 4.7% in 2000 to 2.5% last year and an estimated 2.7% for both 2002/3. The housing market is responding to the low mortgage rates and first quarter residential construction reached 204,000 units on an annual basis.

Expenditures seem to be slowing as consumers react to slower income growth and durable goods including furniture reflect this quickly. Furniture consumption in the short term however, is growing: it enjoyed 7% growth in 2001 with 9% anticipated for 2002 before falling to 5% in 2003. The furniture retail market is valued at \$5.35 billion in 2002, and it is estimated to reach \$5.61 billion in 2003.

4.5.2 Description of domestic furniture industry

The Canadian furniture industry is traditionally made up of small single factory companies mainly located in Quebec and Ontario provinces. In 1996, they accounted for 82% of the 1,400 producers with the remainder located in western Canada and some Atlantic states.

4.5.3 Production volume

Canada's household furniture industry shipments to domestic markets stand at \$ 1.48 billion in 2001 (Table 4.59). Office furniture production was \$ 2.2 billion in the same year (Table 4.58).

The leading office furniture producers for the contract and home sectors are all down on their sales in 2002 of at least 30%.

Table 4.58 Canada: office furniture production

	Production	Exports	Imports	Apparent cons.
Year	\$ billion			
1997	1.27	0.90	0.17	0.53
1998	1.65	1.12	0.20	0.73
1999	1.83	1.18	0.21	0.86
2000	2.29	1.40	0.27	0.62
2001	2.20	1.16	0.64	1.68

4.5.4 Major players

Palliser and Shermag are the two big household furniture makers in Canada. Teknion, Amisco and Bestar are Canada's office furniture producers.

After the leading US companies, three of the largest North American office furniture makers are from Canada. Teknion (www.teknion.com) with sales at \$491million, Inscape (www.inscapesolutions.com) at \$91million and Dorel (www.dorel.com) at \$83million were the major players.

4.5.5 Furniture market: foreign trade and apparent consumption

The apparent market for household furniture in Canada reached its highest in 2001 at \$2.29 billion up from \$2.23 billion in 2000 (at trade prices). The large growth rates of previous years have now fallen off, but still stay above inflation rate. The growth for domestic sales ran up 4.9% to \$1.48 billion.

Imports now total 35.4% of the Canadian market in value terms, at wholesale prices. The apparent market shows a growth of 6.7% to 2001. Imports from the US dropped to 40.6% of total from the high of 45.9% in 2000.

Table 4.59 Canada: furniture market at wholesale values

	2001	2000	% change
	\$ million		
Manufacturers' shipments	2,781.1	2,765.0	0.6
Apparent market	2,286.8	2,233.2	2.4

Source: Statistics Canada, converted into US dollars

Cabinet items are the main force of Canadian exports. Even so, imports of these items have increased, possibly indicating the lack of promotional price points. The factories producing these fell by half in numbers in the last decade.

Upholstery producers were still dominant in their market with shipments of \$370 million (59% of total) remaining for the home market.

Foreign trade

Canada's imports of wooden furniture were just below \$1 billion in 2001, and show consistent growth. But exports were on a much higher level at \$2.7 billion, making the country a net exporter at \$1.7 billion, and one of the leading wooden furniture exporters in the world. Much of the trade surplus is made with the USA.

Imports have increased mostly because of the growing sourcing from China and double-digit growth from Italy and Malaysia. The USA is the dominant source of imports, but China could take the lead in the next two years. Imports from the US slipped in 2001, while China-sourced goods grew by 30%. This high growth level is consistent for the last five years and the items are mostly of wood. This is the effect of more Canadian furniture makers sourcing and producing at least a part of their range in the Pacific Rim, mainly now China, but with Malaysia, Indonesia and Vietnam also strongly in the picture. According to Canadian quotes from Shermag, China has usurped almost all products that are very labour intensive.

Palliser, another large producer of assembled household furniture, imports from Indonesia with two factories and believes that it has advantages. This is mainly due to the lack of those raw wood materials that Indonesia has. The workforce is known to be more skilled currently than in China and a number of woodworking schools are keeping that tradition going. Indonesia sourced goods were \$21 million in 2001, up from \$18 million a year earlier.

An aspect to consider is that much of the China sourcing is from US producers that have moved their factories to China and now deliver directly to Canadian retail and wholesale customers.

Table 4.60 Canada: imports of wooden furniture by product group

Product Summary on Imports		1997	1998	1999	2000	2001		Index
	%	\$ million					%	97=100
Seats cane, osier, bamboo, etc.	0	3.2	3.9	3.9	4.4	5.8	1	179
Seats n.e.s. with wooden frames	27	192.1	189.5	186.2	221.5	241.9	25	126
Wooden office furniture	5	37.3	40.8	45.0	61.0	60.0	6	161
Wooden kitchen furniture	3	24.9	17.2	18.5	27.4	30.7	3	123
Wooden bedroom furniture	9	62.7	66.3	68.8	79.0	80.2	8	128
Other wooden furniture	31	225.9	247.8	265.6	299.8	310.9	32	138
Furn. other mater. inc. bamboo	2	12.4	13.6	13.4	16.1	15.3	2	124
Furniture parts of all materials	23	165.0	213.3	203.5	242.2	235.1	24	143
Total	100	723.6	792.5	804.7	951.4	979.8	100	135

Source: COMTRADE

Table 4.61 Canada: exports of wooden furniture by product group

Product Summary on Exports		1997	1998	1999	2000	2001		Index
	%	\$ million					%	97=100
Seats cane, osier, bamboo, etc.	0	0.2	0.1	0.3	0.3	0.6	0	253
Seats n.e.s. with wooden frames	10	157.7	200.6	242.4	290.8	294.4	11	187
Wooden office furniture	18	289.5	359.5	399.3	459.8	397.9	15	137
Wooden kitchen furniture	17	270.1	316.6	395.3	478.8	520.3	19	193
Wooden bedroom furniture	17	281.8	316.4	370.5	420.3	421.6	16	150
Other wooden furniture	23	381.7	476.2	554.3	650.5	605.1	23	159
Furn. other mater. inc. bamboo	1	9.0	7.7	7.6	7.3	7.5	0	83
Furniture parts of all materials	15	240.8	300.5	405.2	521.8	440.6	16	183
Total	100	1,630.9	1,977.6	2,374.8	2,829.6	2,687.8	100	165

Source: COMTRADE

4.5.6 Imports from developing market economies and China

Canada's furniture import picture is rather straight-forward, as the US dominates all wooden furniture categories except those containing bamboo, rattan and similar materials. Canada imports 31% of its wooden furniture from the developing countries and China, which actually captures most of the non-US import market. By comparison, in 1996 the figure was 20%.

Table 4.62 Canada: imports of major product groups from leading developing countries and China

Product group	Imports 2001 (\$ million)	Major developing country suppliers	Share %	Rank
"Other" wooden furniture	310.9	China	21.2	2
		Malaysia	5.6	3
		Thailand	4.8	4
Seats n.e.s. with wooden frames	241.9	China	11.7	3
		Malaysia	5.0	4
		Thailand	4.3	5
Furniture parts	235.1	China	7.7	2
		Malaysia	0.9	10
		Mexico	0.6	11

4.5.7 Market segmentation and regional demand breakdown

Naturally, in a sparsely populated country like Canada, the major urban centers absorb most furniture. Toronto, Vancouver and Ottawa will be strong markets for household and office furniture for the foreseeable future, as economic opportunities materialize along the population growth of these cities. Spread of major retail outlets supports this view (Table 4.63).

Table 4.63 Canada: leading retail outlets of furniture by location

Company	Location	1999	1998	% change	Units
		\$ million			
United Furniture Warehouse	Coquitlam, BC, - promotional ranges	119.8	109.9	9.0	129
Costco Wholesale	Vancouver, BC, -part of a US company	87.5	N/A	N/A	59
The Bay	Toronto: - 5% of total departmental sales of Hudson's Bay Company	86.2	83.6	3.1	34
Furniture Plus	Mississauga, Ontario – part of Cantrex buying group	64.6	53.9	19.8	39
Countrywide Stores	Peterborough, Ontario – part of Mega Group buying group	59.9	53.9	11.1	63
The Bombay Company	Mississauga, Ontario – the Canadian arm of Bombay in USA	40.4	39.1	3.3	51
La-Z-Boy Canada	Waterloo, Canada – wholly-owned subsidiary of La-Z-Boy in USA	35.7	27.0	32.3	10
Mobilia Group	Montreal – upper middle to high end specialist	26.9	24.3	10.9	13
Bad Boy Furniture	Toronto – promotional store system	24.2	18.9	28.4	5

4.5.8 Evolution of distribution patterns

The top five retailers account for \$1.22 billion, up 14% and with 238 outlets of furniture sales in Canada. Sears Canada with 214 stores with 118 of them in shopping malls, 37 free-standing and 20 dealer stores will convert its 12 Eaton's brand stores into Sears units to increase their share of the market.

Mobilier Europeen, a major retail player in the French market is introducing the Fly format in to Quebec, Canada. It has 150 stores operating as Fly in France, Switzerland and Spain with turnover of \$640 million. The target is product at contemporary styling with a presentation into three styling groups, plus a cash-and-carry RTA section.

Table 4.64 Canada: top-5 retail chains of furniture

Company	1999	1998	% change 1999/1998
	\$ million		
Sears Canada (Toronto)	437.5	374.1	16.9
IKEA (Burlington, Ontario)	278.0	231.9	19.9
Leon's Furniture (Toronto)	243.7	221.8	9.9
The Brick W/house (Edmonton, Alberta)	200.6	178.6	12.3
Groupe BMTC (Montreal)	142.0	136.2	4.3

Table 4.65 Canada: top-4 buying groups of furniture

Company	1999	1998	% change 1999/1998
	\$ million		
Cantrex Group (St. Laurent, Quebec)	413.9	N/A	N/A
Mega Group (Vancouver, BC)	214.7	193.5	11.0
Les marchands (Vancouver, BC)	119.1	110.5	7.8
Allied Home Network	59.2	49.9	18.7

Office furniture retailers

Canadian retailers saw sales improve by 8% in 2001, fall a little flat this year but should move ahead next as a change in the education system will see a double entry to universities in 2003. These retailers have some 5-15% of sales in furniture, depending on their merchandising split.

The big-three are IKEA, Staples/Business Depot and Office Depot with 35 stores. IKEA Canada has set an aggressive expansion programme with new stores in Toronto and Montreal to add to the nine already in use. The Toronto store is the fourth for the city and will have a new concept to present a 10,000-item core line-up based on low price and design. This is especially so in the work-space as consumers tend not to spend little for this type of furniture. Even so it seems that home buyers are spending more for quality professional-looking home office. IKEA has launched a SOHO (small office – home office) furniture catalogue and featured it on the web.

SOHO furniture is now being designed to complement existing furniture and home décor. This move allows retailers to present home solutions, such as a bedroom and office, or sitting room and home office, rather than a 'den' or spare space response. This allows storage to be designed so that when not working, the home office becomes 'invisible'. Staples/Business Depot has expanded to 196 stores and plans to add 20 units during 2003. They will increase a colour collection image and go for more quality with oak and cherry finishes.

4.5.9 Advertising and promotion

Three furniture associations operate in Canada, dealing with suppliers, retailers and the industry. They offer three separate furniture shows, of which Toronto in January is

the biggest one. Many Canadian companies also show at both High Point (USA) markets in April and October.

- Canadian Home Furnishings Market – Toronto, January/June (www.tchfm.com) and run by QFMA.
- Salon du Meuble de Quebec, Quebec Furniture Manufacturers Assoc. (QFMA) – September, mainly from Quebec province and supported by the buying groups that have a strong presence in Quebec.
- Furniture West, Market Showplace in Calgary, Alberta – September. This group administers the Canadian UFAC programme used by upholstery producers.

4.6 China

4.6.1 Basic demand factors and market drivers

As indicated in Table 4.66, China's GDP in 2000 was USD 1,081.718 billion, while the average growth rate between 1996-2000 was 8.3%. The fixed capital investment was increased to USD 398.278 billion in 2000, the average growth rate in 1996-2000 was 11.2%.

Table 4.66 China: national economic development

Items	1990	1995	1999	2000	Avg. Growth (1996-2000)
	\$ billion				
GDP	224.416	707.538	992.958	1,081.718	8.3%
Primary Industry	60.702	145.106	175.1	171.954	8.3%
Secondary Industry	93.37	345.287	490.72	550.369	3.5%
Tertiary Industry	70.345	217.145	327.139	359.395	9.8%
Investment in Fixed Assets	54.652	242.218	361.218	398.278	11.2%
Foreign Capital Used	1.245	5.823	6.371	7.182	4.3%
Exports and Imports	13.967	33.982	43.633	57.385	11.0%

Source: 2001 China Statistics Yearbook

In 2001, China's GDP was USD 1,161.42 billion, what indicated a 7.3% growth rate at constant prices. The sales of both producer and consumer goods went up in a stable manner. The gross retail of the consumer goods hit USD 455.15 billion in 2001, a 10.1% increase over 2000. Compared with the year 2000, the consumer prices rose by 0.7%.

Cost of housing went up by 1.2%, while the ex-factory price of the industrial goods went down by 1.3%: The prices of materials, fuel and power decreased by 0.2%.

The employment increased continuously in 2001. Compared with the year 2000, employed population rose up to 730.25 million, an increase of 9.4 million. Employed people in urban areas reached 239.40 million, an increase of 7.89 million. The registered urban unemployment rate was 3.6% at the end of the year.

The international balance of payment were kept in good shape. The balance of foreign trade was USD 22.5 billion, a USD 1.6 billion reduce to that of the year 2000. The

exchange rate of RMB kept stable. Export and import kept increasing. The gross import and export value rose up to USD 509.8 billion, a 14.9% increase over the year 2000.

The direct investment from foreign countries went up quickly. The number of the certified foreign investing enterprises was 26,139 in 2001, 16.0% higher than in 2000. The actual direct foreign investment was USD 46.8 billion, an increase of 14.9% over the year 2000.

Tenth Five-year plan 2001-2005

The Outline of the Tenth Five-Year Plan for National Economic and Social Development sets forth China's major targets for national economic and social development during the next five years as follows:

1. The average annual economic growth rate is expected to be around 7%, and the GDP based on the price of 2000 will reach USD 1.51 trillion by 2005, while the per capita GDP will be USD 1,138.
2. Newly employed urban population and diverted rural labor will reach 40 million respectively in the next five years, and the maximum registered urban unemployment rate will be 5%.
3. The primary, secondary, and tertiary industries (e.g. agriculture, processing industry, and service industry) will take 13%, 51%, and 36% respectively in the increase of GDP by 2005
4. The three segments take 44%, 23%, and 33%, respectively of China's total industrial labor force.
5. Natural population growth rate will be controlled under 0.9% per year, and the total population will be controlled under 1.33 billion by 2005.
6. Forest cover will increase to 18.2%, and green lands will take 35% of the total established urban areas.
7. The emission of major pollutants in town and rural areas will be reduced by 10% than that of 2000.
8. The per capita disposable income of urban residents and per capita net income of rural residents rise by about 5% each year.
9. the per capita gross housing area will increase to 22 square meters by 2005, and the cable television network will be expanded to 40% of all the families in China.
10. The total value of import and exports of goods will reach USD 680 billion by 2005.

Disposable Incomes

The per capita annual disposable income of urban dwellers reached \$759.83 in 2000 from \$89.41 in 1985, an increase of 8.5 times on average respectively in real terms after allowing for price changes. The per capital net income for rural residents reached USD 272.60 in 2000 from USD 48.15 in 1985, an increase of 5.7 times. During 1996-2000, the per capita disposable income of urban dwellers was increased at a growth rate of 5.7% annually, and that of rural residents was increased at a rate of 4.7%.

In 2001, people's living standards in both urban and rural area continually improved. Disposable income of urban dwellers reached USD 830.51. The per capita income of

rural dwellers averaged USD 318.77, the real growth rate was 4.2% in 2001, and that of rural dwellers was USD 211.62, the real growth rate was 5.7% in 2001. The dwellers' housing condition was improved continuously. The area of completed urban dwellings totaled 0.54 billion square meter, and 0.74 billion m² in rural areas.

Table 4.67 China: incomes in urban and rural areas

Items	1985	1990	1995	2000	Av.Growth (1996-2000)
Total population (10000 persons)	105851	114333	121121	126583	0.9%
Total Number of Households (10000 households)	23804	27738	31676	34837	1.9%
Population in Urban Area (10000 persons)	25094	30191	35174	45594	5.4%
Population in Rural Area (10000 persons)	80757	84142	85947	80739	0%
Per Capita Annual Disposable Income of Urban Households (\$)	89.41	182.81	518.52	759.83	5.7%
Per Capita Net Income of Rural Residents (\$)	48.15	83.05	191.04	272.60	4.7%
Total Wages (mill. \$)	167.33	357.26	980.63	1289.29	5.6%
Average Wages of Staff/Workers (\$)	138.90	259.08	665.86	1133.82	9.0%
Retail Sales of Cons. Goods (mill. \$)	459.89	877.72	2496.37	4132.24	10.6%

Source: 2001 China Statistics Yearbook

Table 4.68 China: consumption averages of households

Year	Consumption Average (\$)			Index	
	All Households	Rural residents	Urban Dwellers	(Previous year=100)	(1978=100)
1980	28.57	21.55	60.05	108.7	115.8
1990	97.22	69.13	204.12	103.4	221.0
1991	108.47	75.18	233.05	108.3	239.4
1992	129.54	86.92	285.23	112.9	270.3
1993	161.14	103.51	366.46	108.1	292.2
1994	211.38	135.35	471.07	104.3	304.8
1995	270.70	173.61	590.07	107.5	327.7
1996	319.73	214.04	657.38	109.1	357.5
1997	343.10	227.12	701.69	104.2	372.4
1998	359.81	229.42	752.66	105.5	393.1
1999	416.83	232.20	817.19	107.9	424.1
2000	411.01	-	-	108.3	459.4

Source: 2001 China Statistics Yearbook

Consumer spending patterns

With the acceleration of economic growth, the Chinese have been moving (i) from basic necessities of life to higher-grade products, (ii) from commodity consumption to service consumption, and (iii) from quantitative consumption to quality consumption. The changes in consumption structure show that the proportion of basic consumables such as clothing and food has dropped, while consumption on living conditions and recreation has gone up, such as housing and travel. Services consumption, such as education, tourism, culture and sports, is going to become new stimuli for consumption.

Table 4.69 China: consumption structures of urban and rural residents

		1985	1990	1995	2000
Population	Consumption Item	%			
Urban Dwellers	Food	52.25	54.25	49.92	39.18
	Clothing	14.56	13.36	13.55	10.01
	Articles for Daily Use and others	28.4	25.41	29.46	40.8
	Residence	4.79	6.98	7.07	10.01
Rural Residents	Food	57.79	58.80	58.62	49.13
	Clothing	9.69	7.77	6.85	5.75
	Articles for Daily Use and others	14.29	16.09	20.62	29.65
	Residence	18.23	17.34	13.91	15.47

Source: 2001 China Statistics Yearbook

Demographic structures, urbanization, household composition

According to the result of the fifth census, the population in China now is 1,265.83 million. Age structure is the following:

- 0-14 yrs. 289.79 million (23%)
- 15-64 yrs. 887.93 million (70%)
- over 65: 88.11 million (7%)

Compared to the result of the fourth census in 1990, population aged from 0 to 14 reduced by 4.8% and that aged over 65 rose by 1.4%.

On educational terms:

- population with college education is 45.71 million,
- population with high school education (including vocational school) is 141.09 million,
- population with preliminary school education is 429.89 million,
- population with primary school education is 451.91 million,
- illiterate population is 85.07 million.

Compared to the result of the fourth census, the illiteracy rate fell from 15.88% to 6.72%.

In the entire population, the amount of urban dwellers is 455.94 million sharing 36% of the total. That in rural area is 807.39 million, 64%. Compared to the result of the fourth census, the proportion of urban population went up by 9.86%.

Housing ownership evolution

In July 1998, Housing Reform Legislation formally legalized a trend, which had been growing in China for several years. Previously, the government owned all housing in China, or at least controlled enterprises who awarded free or low-cost housing to citizens based on their positions in society, their work groups, and/or their social needs. Chinese law now clearly permits and encourages citizens to buy their own housing and apartments. While the vast majority of Chinese still reside in state-owned housing, it is projected that most Chinese in major cities will have ownership of their personal residential housing over the next two decades.

Continuous Improvement in Housing Conditions

Per capita living space of urban dwellers in 1978 was 3.5 m²; and increased to 8.8 m² in 1997 m², and 9.0 m² in 2000. In 1997, the purchase of personal residential housing accounted for 58.7% of all housing sold. As residential housing becomes privately owned, kitchen facility, sanitary apparatus and the interior decoration will develop at a high speed. In 1985, the per capita living space of rural residents was 14.7 m², and went up 24.8 m² in 2000.

Table 4.70 China: residential standards

Indicator	1985	1990	1995	2000
Residential Buildings in Urban Areas(10,000 m ²)	51.5	47.4	102.7	150.1
Private Residential Buildings in Rural Areas(10,000 m ²)	190.5	185.8	181.5	218.4
Per Capita Net Floor Space of Urban Residents (m ²)	5.2	6.7	8.1	10.3
Per Capita Net Floor Space of Rural Residents(m ²)	14.7	17.8	21.0	24.8

Source: 2001 China Statistics Yearbook

Privatization of home ownership in China has sparked growth in the home improvement and furnishing markets. It has been observed that those citizens living in buildings converted into private ownership have made dramatically higher home improvement investments than those living in publicly owned housing.

Table 4.71 China: furniture ownership per 100 urban households

	1985	1990	1995	2000
Wardrobe Closet	102.08	99.85	88.3	83.45
Sofa	131.49	157.3	210.12	198.92
Writing Desk	80.06	87.23	88.14	83.44
Composite Furniture	4.29	19.29	46.23	57.82
Soft Bed	5.53	16.45	36.46	44.43

Source: 2001 China Statistics Yearbook

At present, China has 70 million urban households. Over the next 15 years, China's construction of residential buildings is projected to increase at the rate of 15% each year. China's Tenth Five-Year Plan makes plans for the construction of over 1.2 billion square meters residential buildings, meaning that more than 240 million square meters in residential buildings must be completed each year.

Chinese Real Estate Sector Soared in 2001

According to the National Bureau of Statistics, funding for real estate development soared 29.7% year-on-year to USD 58.8 billion in the first 11 months of the year. And the growth rate is 13.5 percentage points higher than that of fixed asset investment. Real estate investment accounted for more than 20% of the country's fixed asset investment in the period. In the first 11 months of 2001, land development and newly completed houses increased by 34.8% and 17.6%, respectively. On the other hand, unsold buildings were on the increase, especially since May 2001.

China's housing industry is expected to enjoy robust growth in the next 20 years. By the year 2020, the average housing space for urban residents will rise from the current 20 m² to 30 m², with better appliances and improved home environment.

In 2000, housing investment totaled USD 40.47 billion across the country, up 25.8% from 1999. During the first eight months of 2001, housing investment increased 311.7%, compared with the same period of the year 2000.

Housing starts & renovation activity

In the end of 1998, China abolished the old house allocating system and implemented a monetary housing allocation policy. The monetary allocation system was constituted by a part of personal wages, public reserve funds and a housing subsidy. That enabled the common workers to afford to buy a house. The policy change assumed that high-income families buy or rent their houses on the market price, while medium- and low-income families buy affordable houses supported by the government and the lowest-income families rent the cheap-end houses. More effort was put on constructing affordable houses, and this led into booming construction and sales in many cities.

The second hand housing market also started to emerge. The dwellers were encouraged to buy the houses they are living in, and to move in new houses by selling their old houses and buying new houses when possible. The house consumption tax and loan policies were adjusted. The trade tax and the loan interest of housing consumption were reduced. The proportion of the down-payment was reduced to 20%, and loan terms were prolonged to 30 years. Up to July of 2001, the amount of housing loans totaled USD 24.78 billion.

The above mentioned policies have greatly promoted the construction and consumption of residential housing, resulting in the development of supplier industries.

China's entry to World Trade Organization

China's entry into the WTO will speed up China's reform and its participation in the world economy and trade. The entry marks a milestone in China's reform and opening-up, and also a milestone for more transnational companies to enter the Chinese market.

The integration of Chinese and international markets will be accelerated. It will be seen in the improvement of China's investment environment, more foreign investment into China's new and high-tech industries and adjustment of China's industrial structure.

Accession of Trading Rights to Foreign Companies

The existing PRC laws and regulations restrict the foreign enterprises to trade their products in China. After the entry to the WTO, China undertakes to provide trading rights to foreign companies in the mainland, to be phased in within the next 3 years for most products. Commencing one year after accession, full rights to import and export will be granted to the joint ventures with minority foreign stakes. This will be further extended to joint ventures with majority foreign share beginning two years after accession. All enterprises in China would be granted the right to trade most products upon three years after accession.

The opportunities brought by financial liberalization in the mainland, in the context of WTO, are immense. In two years' time, foreign banks will be able to conduct RMB business with Chinese enterprises in Shanghai, Shenzhen, Tianjin and Dalian. Within the next five years, they will be able to deal with all Chinese enterprises without any geographical restriction. As the foreign direct investment in the mainland will be anticipated to soar following the entry to WTO, foreign banks will stand to benefit considerably from the increased demand for trade-related and retail banking services in China.

In a bid for compliance with the rules of WTO on product piracy, China has changed its trademark and copyright laws to be effective from December 2001. Trademark holders will be allowed under the new laws to apply to the local courts for speedy injunctions to stop counterfeiters from producing and selling goods. The change makes it much easier for brand owners to use the legal system to block pirates because enforcement of the laws will be easier than previously.

Impact of China's Furniture Market from Its Accession to the WTO

The accession to the World Trade Organization (WTO) is not only a milestone in the economic development of China but will also have a great impact on the global business arena in the 21st century. After the WTO entry, China will gradually lower the import tariffs and give foreign business unprecedented access to the vast market. China will remove the tariff barriers on a broad range of imports, resulting in a substantial opportunities for foreign furniture manufacturers, among others. Tariffs of most furniture will lower down from 22% to 11% in 2002 and further down to zero percent in 2005. The removal of tariff barrier gives opportunity for imported furniture to compete with local products with high quality branded furniture.

4.6.2 Description of domestic furniture industry

With a population of 1.2 billion people, rising incomes, and a revival of traditional Chinese values regarding the accumulation and expression of wealth, China is a market with great potential for furniture industry. It is estimated that by the end of 21st century, China will become the world's second largest furniture manufacture and be among the world's five largest furniture market.

4.6.3 Production volume

The annual output value of China furniture industry has grown fast since 1990. The total output value of furniture industry in 2000 has reached RMB 120 billion (\$14.5 billion) and increased 15.4% from 1999, maintaining a steady increasing momentum throughout the decade. In 2001, there were over 50,000 furniture enterprises registered, with about 5.5 million employees.

At present, wooden furniture still dominates the market, and various wood based panels have become the major raw materials for furniture making. The current status of China's furniture industry could be described as below:

1. industrialization has been realized in the furniture manufacturing;

2. relatively advanced production equipment is being used;
3. a large number of domestic furniture marketplaces have been set up;
4. supporting wood products for furniture industry are developing fast;
5. a large variety of furniture is being produced.

Most of China's furniture factories are of small-medium scale with relatively low productivity. In next five years, larger furniture industries with international competitiveness will be further developed, and more small and middle industries will merge. International furniture industries will have their joint-venture factories in China and make branded furniture in China.

Furniture production is expected to increase at 10% annual pace, and China is expected to become one of the largest furniture production countries in the world.

4.6.4 Structure and location of industry

Among the furniture manufacturing enterprises, non-state-owned enterprises take a predominant place with foreign funded enterprises and privately-run enterprises occupying major parts. Foreign funded enterprises especially have played a decisive role in the expansion gear of the industry.

Most furniture manufacture enterprises are small-scaled, with distinctive regional characteristics. They are mainly distributed in South China, East China, North China and Northeast of China. Guangdong province is most important, having more than 6,000 enterprises and accounting for 12% of the total number. Its total output value is RMB 36 billion, taking up 30% of the total, and furniture export value is RMB 1.8 billion, making up 50.5% of the national export value.

4.6.5 Major players

With the gradual development of China furniture industry, furniture brands are becoming increasingly important.

The famous brands nationwide are MeiKe Xinjiang, Guangming Heilongjiang, TianTan Beijing, Richman and Land Bond Guangdong and XiLinMen Zhejiang among which, MeiKe and Guangming are the only two listed enterprises in Shanghai and Shenzhen stock markets in China.

4.6.6 Production trends by type of furniture

Trends of **office furniture** production in China could be presented as below:

1. Standardization, systematization and easy-to-assemble of furniture parts and components

With the implementation of ISO standard, quality controls are requested in each link of furniture production. Standardization and systematization of furniture parts and components could satisfy the demand.

In addition, because of its advantages in design, production, transportation, installation, utilization and etc, easy-to-assemble furniture like KD (knock and down) furniture, RTA (ready to assemble) furniture, 32MM systematic furniture will become the main products of office furniture.

2. Various materials

Various materials like steel, plastic, rubber and etc. are used in office furniture production, the utilization of those materials makes durable and with modern style. However, the investment for production equipment is rather high. Wooden furniture is the main product of office furniture. Solid wood laminated wood and various wood-based panel are the key materials of wooden furniture, in addition, grain decorated paper, grain impregnated paper, timber veneer and etc. Are used as furniture surface. As this kind of furniture has relatively good quality and is with relatively low price, it is very popular in the market.

3. Mechanization, automation and cooperation of office furniture production

With the development of production technology, mechanization and automation are accomplished gradually in office furniture production. In addition, professional manufacturers of furniture parts and components have appeared in some cost areas.

Kitchen furniture

Kitchen furniture was not available in China's market until 1990s, because of poor housing conditions in China. From 1993 the cabinet producing factories with industry scale began to appear in China, but they developed in rather high speed. According the statistics from China furniture association, currently there are more than 1 millions kitchen furniture manufacturers in China with annual sales of over 20 million RMB, and the annual output of kitchen furniture industry in 2000 was over 7 billion RMB.

Though most kitchen furniture industries in China are still based on semi-mechanization and semi-handwork production, but production in large-scale and industrialization are the trends for the whole kitchen furniture industry. Some domestic cabinet manufacturers cooperate with European manufacturers and introduce the advanced technology from Europe to China to develop modern kitchen furniture, thus to shorten the distance between China and Europe in kitchen furniture design and quality.

Bedroom Furniture

With better housing condition and renovation of the concept of furniture consumption, the cycle for replacement of furniture is now shortened to 4-8 years from over 10 years in the past. In addition, as the living standard is improved the farmers prefer to purchase the finished furniture products instead of making furniture by themselves. As the main products of indoors furniture, bed room furniture has great markets in China.

Wood is the key material for bedroom furniture. There are mainly two kinds of bedroom furniture: traditional furniture and panel furniture. Panel furniture, esp. elaborately-made MDF furniture has the advantages of flat texture, insect-resistant

and not easy to be cracked, in addition, it could be assembled easily, its style and colour could be updated frequently, and its price is rational. So this kind of furniture is becoming more and more popular. At present, panel furniture occupies about 70% of solid wood furniture in the market.

Out-door furniture is a new product among furniture products. In domestic market the out-door furniture is mainly made from plastic, metal, stone and etc.

Self-assembly furniture in China's market is mainly represented by KD furniture, RTA furniture, ETA furniture, 32MM systematical furniture.

4.6.7 Main raw materials

At present, solid wood furniture still dominates the traditional Chinese furniture and parts, as well as decorative materials such as mouldings. Wood-based panels have become the major raw materials for the mass furniture.

Panel furniture, especially elaborately-made MDF furniture has the advantages of insect-resistance, less prone to cracking, easy assembly, and its affordable pricing. At present, panel furniture occupies about 70% of wood furniture in China.

Furniture made of bamboo and rattan, and the production process itself, could satisfy the demand of environmentally-friendly furniture. Rattan furniture enjoys good fame of arts and crafts furniture and is vastly favored by consumers for its pleasing and elegant appearance, light and delicate design, strong and enduring structure. As the growth of rattan relies on tropical nature forests, China imports cane mainly from Indonesia, Malaysia, Myanmar, etc. Though China does not have abundant nature rattan resource, China has skilled workers and could produce high quality products. The rattan furniture made in China is known for its excellent quality and has a steady demand in the world markets.

China has the richest bamboo resource in the world, and shows the best example for wide bamboo utilization. Traditional furniture made from round bamboo looks simple and classic. Bamboo panel is a newly developed material for bamboo furniture. It breaks the old style of traditional bamboo furniture and has no difference in appearance with the modern wood furniture. The physical properties of bamboo panel are equal to medium/high grade hardwood. Furthermore, its special texture, abundant resources and short growing circle make it to be an ideal material for furniture.

4.6.8 Out-sourcing and networking among manufacturers

Presently, there are about 600 woodworking production enterprises, and the number is even continuously increased. These enterprises mostly distribute in Shanghai, Zhejiang, Guangdong, Shandong, Sichuan, Yunan and Northeast area, and already come into a relatively complete systems. According to the statistics, the annual demand of woodworking machines is around \$615 million in China.

4.6.9 Technology level

The overall technique level of Chinese furniture industry is still on the elementary phase of industrialization. The production scales are still quite small: there are about ten enterprises with annual sales over hundred million US dollars. The industry is short of offering branded furniture for the consumers. Domestically manufactured furniture dominates the low-medium quality segments of the Chinese home and office furniture markets, with a market share of at least 90% of those segments. Imported furniture and higher quality furniture made by foreign joint-ventures account for less than 10% of the China market combined.

Management. The industry management is backward and low efficiency. Most of the circulation system is short of wholesale links and still at the low level using direct selling or selling through leased marketplace and needs to be improved. The Table 4.7 shows the economic indexes of wood furniture manufacturing industries by ownership.

Product quality. Problems also exist on poor product and design quality, insufficient high-grade products, superfluous low/medium-grade products. According to the State Bureau of Supervision of Technology Quality Testing and Monitoring, in 2000 only 57.1% of the inspected wood furniture researched the quality standard. Among which, the qualified rate of bedroom furniture was 45.3%, wood bookcase was 64.3%, wood cabinet was 89.5% and wood dining table and chair was 40%.

Product design. Most small and medium-sized manufacturers in China do not have design teams. Instead, they commonly copy existing products of competitors that are selling well domestically or abroad. Compounding this problem, even for those companies who wish to employ designers, there is an appreciable shortage of qualified furniture design professionals in China. The majority of designers in China are artists who do not have extensive knowledge of the industry and market. Chinese manufacturers are also very reluctant to purchase rights to foreign designs or employ foreign designers because they consider their fees to be too high.

Table 4.72 China: wood furniture industry by type of ownership

Ownership	Number of Firm	Loss-makers	Employees	Revenue (\$ mill.)	Production Value (\$ mill.)
Industry Overall	1,103	208	193,807	3,003.75	3252.78
State-owned	123	44	13,030	82.57	86.20
Collectively-owned	212	20	35,573	591.89	663.08
Joint stock	138	23	32,534	402.54	412.83
Privately-owned	323	27	45,084	819.49	908.35
Overseas Chinese	304	94	67,388	1,102.66	1177.48
Others	3	1	198	4.60	4.72

Source: 2001 China Market Yearbook

Table 4.73 China: economic performance of wooden furniture industry by type of ownership

Ownership	Profit (\$ mill.)	Average profit (1000 \$)	Profit of Revenue (%)	Return on Assets (%)	Yield of net assets (%)	Profit margin (%)
Industry Overall	137.65	0.71	4.58	3.99	6.51	4.86
State-owned	-1.33	-0.11	-1.66	0.26	-0.75	-1.51
Collectively-owned	29.06	0.82	4.91	6.61	13.92	5.08
Joint stock	23.00	0.71	5.73	3.86	5.07	6.11
Privately-owned	37.53	0.83	4.58	5.83	8.13	4.88
Overseas Chinese	49.27	0.73	4.47	3.26	6.15	4.83
Others	0.12	0.59	2.51	2.00	2.58	2.62

Source: 2001 China Market Yearbook

On the other hand, big progress has been made in the past few years. As a consequence, China has become strong enough in the international furniture trade to compete with market giants like Italy and the United States. China offers various types of wooden furniture (known as “catch-all” player). Items are of relatively stable quality and prices are competitive. With highly developed CAD technology, many Chinese companies deliver the latest trends in furniture design. At least 30% of the 6,000 factories in Guangdong province are using CAD technology. A lot of these are set up by investors from Hong Kong or Taiwan, most with a strong trading network all over the world. These factories have R&D offices in Hong Kong, Taiwan and design centers in Italy, Germany and France. To improve their quality image for exports, some big companies have obtained ISO 9000.

4.6.10 Quality standards and certification and labeling requirements, environmental management systems

In 1979 China joined ISO/TC136, and in 1981 the furniture standard system and implementation plan were set up. Under the implementation plan, five different players (furniture research institute, forestry university, quality inspection center, furniture trading companies and furniture manufacturers) were responsible for drawing up various furniture standards. Up to end of 2000, the following authorized standards have been issued:

1. General technical basic standard;
2. Quality standards for furniture;
3. Standard for testing methods of furniture;
4. Standard for testing of coatings for furniture;
5. Standards for furniture parts and their testing methods;
6. Green evaluation standards.

The furniture factories can use above mentioned standards as a base to make enterprise standards for production management and quality control.

Improvement of furniture inspection equipment, establishment of quality supervision institute

By the end of 1970s, China started to do the research on furniture inspection equipment, and to establish quality supervision and inspection institutes for furniture. These were set up on different levels: national, provincial, and enterprise levels.

The main responsibilities of the quality supervision and inspection institutes are:

1. inspect the appearance of furniture, including wooden, metal, upholstered furniture;
2. test the physical, chemical and mechanical characters of furniture;
3. inspect processes, production lines, and prototypes in furniture enterprises;
4. provide formal testing and inspection reports, including which index value, testing value and inspection conclusions.

Utilization of ISO 9000

After its announcement by ISO in 1987, the ISO 9000 standard got widely approved all over the world, and became the base of trust and understanding of quality in international trade. Implementation of ISO 9001 and ISO 9002 could effectively control the key quality factors in furniture production, like wood drying, shaping and processing, gluing, coating, etc. Up to now there are more than 500 furniture factories with these certificates.

Improvement of product quality through standards

Due to the national laws on product quality and on consumer rights and protection, the enforcement of product quality is greatly strengthened. Using quality standards as a base, the inspection of furniture quality could be undertaken more accurately. In some areas in China, the national standards or industry standards are becoming more and more important for furniture manufacturers. Amidst growing foreign competition, only quality products have the competitive edge in the market.

Environmental management systems and mandatory recycling requirements

The 14000 Environmental Management Standards were issued by ISO in September 1996. In China, it is widely used in many industrial areas. At present the State Environmental Protection Administration is responsible for the certification of environmental protection. However, certification of 14000 Environmental Management Standards is not available in furniture industry. At present there is no mandatory recycling requirements on furniture in China.

Advancement of certification and eco-labeling schemes among Chinese furniture industries for the domestic and export markets

Certification and labelling of wood products is still a new concept for most of the Chinese industries. Due to strong demand from international trade, more and more wood processing factories, especially export-oriented factories, have started to have CoC (chain-of custody) certification.

Up to June 2001, there were a total of 17 wood processing factories being certified for CoC in China, among which eight companies were certified by SGS, six by Smart Wood, and three by SCS. However, in China there is no forest which has been certified with FSC or other similar system. All the processing factories have to import certified wood as their raw material.

With the rise among the younger and wealthier consumers who are aware and mindful of the current depletion of China's domestic forest cover, there is a large potential of Chinese market for exporters of environmentally-friendly wood products exposing "green" properties. Convinced of the rising demand, several of the world leading retailers on wood and furniture products established themselves in the Chinese market.

In early 2000, Britain based B&Q, the world's third largest retailer of wood and building products, established two stores in China. B&Q has committed that they only sell FSC certified (or equivalent) wood products in the United Kingdom, and it also commits to help the certified wood products from China to the European markets.

IKEA, which is a world-wide furniture and home accessory retailing chain, has also opened two pilot stores in China. Now they are looking for Chinese partners to conduct certification for forest management and CoC.

4.6.11 Furniture market: foreign trade and apparent consumption

The striking feature in China's foreign trade is of course the continuous growth in wooden furniture exports, coupled with minuscule imports. Thus the country is major net exporter and a furniture powerhouse in Asia. Net exports in wooden furniture were according to COMTRADE data at \$2.2 billion in 2001, up from \$1.2 billion in 1997. The Chinese statistics put total exports to more than \$3.9 billion, of which 59% were of wooden furniture. Also COMTRADE mirror statistics looking at imports from China by the OECD report \$3.2 billion worth of trade.

Export were mostly in "other" furniture category (35% of all), followed by wooden seats (19%) and bedroom furniture (16%). Bedroom furniture exports have tripled in just five years, and shipments of seats and "other" furniture have nearly doubled. Imports have mainly come in as parts and components, often sourced from the neighboring countries, and assembled into furniture for exports.

Table 4.74 China: imports of wooden furniture by product group

Product Summary on Imports		1997	1998	1999	2000	2001		Index
								97=100
	%	\$ million					%	
Seats cane, osier, bamboo, etc.	0	0.0	0.0	0.1	0.1	0.2	0	557
Seats n.e.s. with wooden frames	8	3.4	5.8	4.9	5.6	6.4	10	186
Wooden office furniture	10	4.2	5.2	2.9	2.0	1.7	3	42
Wooden kitchen furniture	6	2.4	3.4	2.7	3.8	6.8	11	286
Wooden bedroom furniture	11	4.5	8.1	7.9	7.0	7.9	13	178
Other wooden furniture	20	8.1	9.0	6.4	4.7	5.8	9	71
Furn. other mater. inc. bamboo	8	3.3	2.8	3.9	8.7	8.5	14	256
Furniture parts of all materials	37	14.9	22.3	17.5	21.4	25.3	40	170
Total	100	40.7	56.6	46.3	53.2	62.5	100	153

Source: COMTRADE

Table 4.75 China: exports of wooden furniture by product group

Product Summary on Exports		1997	1998	1999	2000	2001		Index
								97=100
	%	\$ million					%	
Seats cane, osier, bamboo, etc.	1	16.5	16.6	21.8	24.4	16.9	1	103
Seats n.e.s. with wooden frames	19	236.3	224.4	305.6	382.9	435.3	19	184
Wooden office furniture	5	59.2	76.4	72.4	85.8	79.2	3	134
Wooden kitchen furniture	8	102.2	120.9	152.1	167.1	175.4	8	172
Wooden bedroom furniture	10	118.7	141.6	183.6	265.9	360.4	16	304
Other wooden furniture	36	442.8	521.3	595.8	766.8	801.9	35	181
Furn. other mater. inc. bamboo	8	100.4	121.0	111.8	155.2	153.4	7	153
Furniture parts of all materials	12	146.9	136.1	175.8	223.7	241.6	11	165
Total	100	1,222.9	1,358.3	1,618.9	2,071.8	2,264.0	100	185

Source: COMTRADE

There are several discrepancies between the COMTRADE data and original Chinese data on furniture trade, mostly due to different classification and aggregation criteria applied. This makes the estimation of apparent consumption of wooden furniture difficult. Taking into account the Chinese figures on all types and materials of furniture, the estimated production in 2000 (\$14.5 billion) minus net exports of \$3.8 billion puts the apparent consumption at around \$10.7 billion.

The share of wooden furniture in total production is difficult to establish with great accuracy, while in exports, wood accounted for 59% of all deliveries, as also COMTRADE data rightly indicates.

4.6.12 Imports from developing market economies and China

China's import requirements have remained on a low level, and have tended to concentrate on upper market products. This explains why in nearly all the product groups, there is a European country or the US as the leading supplier. In kitchen furniture it is Germany, in bedroom furniture Denmark led the pack, in wooden seats and "other" wooden furniture (living/dining room, small-occasional) Italy dominated, and in furniture parts, the US was the biggest import source!

In the three biggest import categories, Malaysia reached the highest rank in furniture parts (Nr.4) with 8% market share of imports. Vietnam succeeded on the fifth place in wooden bedroom furniture.

Table 4.76 China: imports of major product groups from leading developing countries

Product group	Imports 2001 (\$ million)	Major developing country suppliers	Share %	Rank
Furniture parts	25.3	Malaysia	8.4	4
		Vietnam	3.5	7
		Thailand	2.8	8
Furn. other mater. inc. bamboo	8.5	Thailand	3.7	7
		Indonesia	1.3	16
		Malaysia	1.2	17
Wooden bedroom furniture	7.9	Vietnam	5.7	5
		Indonesia	1.6	8
		Malaysia	1.5	9

4.6.13 Market segmentation and regional demand breakdown

Consumer market

Two factors contribute to growing demand for residential furniture in China: (1), rising disposal incomes of Chinese consumers, and (2), new housing reform laws which permit and encourage Chinese citizens to purchase their homes and apartments.

Rising personal incomes have enabled many urban Chinese to purchase high quality furniture. The cycle for replacement of furniture is now shortened to 4-8 years from over 10 years in the past. In addition, as the living standard is improved, the rural population prefers to purchase the finished furniture products instead of making furniture by themselves.

Children furniture consumption tends to grow up. There are 0.2 billion children in China now. Along with the improvement of living conditions, many singleton children now have their own rooms. Accordingly, the sales volume of children furniture will have a big increase to about 8% of the total sales volume of furniture, including bed, table and chair, bookcase, etc.

Institutional market

The recent construction boom in many major Chinese cities has resulted in a market surplus of prime office space. As a result, commercial rental rates have dropped significantly and many Chinese and foreign enterprises are now taking advantage of this by relocating their offices, or upgrading their office furnishings when they move. This phenomenon has created a significant rise in the middle and upper end of the office furniture market. Presently, the sales volume of office furniture accounts for 30% of the total sales volume of furniture.

Commercial and industrial market

The interior decoration of hotels has turned into a renovation period. There are nearly 2,000 star-graded hotels in China. Not only the newly established hotels need to buy furniture, but also 300,000 rooms in the existing hotels need to be renewed with furniture and interior decoration.

4.6.14 Favored wood species

The most popular wood species for solid wood furniture are ash, Chinese fir, walnut, maple, oak, rosewood, teak, elm, zelkova, and rubber wood. Due to the characteristics of high quality and appearance and value, rosewood furniture become the principally selected furniture in well-off families and by senior citizens. The youth prefer furniture made of zelkova and oak. Bamboo furniture is gradually gaining success due to its short growth period and abundant resource.

4.6.15 Furniture style and design trends

More than before, the Chinese have come to recognize furniture, door and windows and flooring as the major elements of total interior decoration of their housing. The Chinese consumer purchases furniture after comprehensively considering how the particular items co-ordinate with other interior furnishings.

In the opinion of Chinese customers, the western (international) style furniture represents succinct, modern and practical. It is more and more popular in China and especially welcomed by the young customers. Traditional Chinese furniture has two characters: one type is made entirely of solid wood, mostly hard wood, another is the design copies from the furniture made in Ming (1368~1644) and Qing (1644~1911) Dynasty in China. Traditional Chinese furniture - although more expensive - is still quite popular in the domestic market because of graceful designs and elegant craftsmanship.

The latest development in consumer purchasing, especially among younger couples, is a move away from heavy, bulky, dark-colored furniture to more practical, functional and lighter-colored ranges. This is likely to be an effect of the entry into China of IKEA, the Swedish retail group, offering such styles and backed by heavy promotional activity.

One of the most dominant trends in furniture arrangement is towards individualism and larger variety. Chinese consumers are becoming more adventurous and are mixing colors, designs, fabrics and styles. In living/dining room it is now not unusual to see woven fabrics, leather, steel and wickerwork together. Some trends in design and style of furniture include:

- Going modern. The choice of color becomes unlimited. Chrome brass, wood, cane, and upholstered materials for furniture create endless possibilities of successful combinations with wood-clad rooms.
- Simplicity. A common trend in selection of furniture is simplicity, especially in the official business environment.
- Creativeness. Design and style should be creative to attract especially younger consumers. The combination of wood material and other materials for furniture is opening up the new feature of demand.

- Client-orientation. The design of product has been attached more importance on the focus of consumers, and the products are designed and produced according to the consumer's own interest and taste.
- RTA (Ready-To-Assemble) furniture. RTA furniture also called flat-pack furniture, can be summed up as "components + metal connectors", and mainly featured with components production at factory and assembling on site. The components of RTA are standardized and in series of size. Flat-packaging not only reduces the volume and cost, but also the risk of damage in storage and transportation. The RTA furniture has obtained more and more recognition by the manufactures and consumers.
- Dining/living room furniture. As dining/living room furniture reflects the social standing of the consumer, the furniture tends to be a higher quality than that in other rooms. A typical dining set comprises a table and six chairs plus cabinets for television and high-fidelity equipment. Traditional leather and fabric upholstered suites are predominant in the living room furniture sector.
- Bedroom furniture. Bedroom furniture is taking increasing shares of the market. The trend is towards lighter colors. Storage furniture is made of particleboard, MDF and blockboard carcasses surfaced with natural wood finish. Cupboards are often built to the ceiling and mirrored cupboards are becoming more common. Upholstered beds are gaining in popularity as are beds with head-rests.
- Kitchen furniture. The trend towards light-colored woods is apparent in the kitchen, too. Kitchens are more comfortable- edges are rounded and worktops come in various heights.
- Home office furniture. Furniture for the home offices is becoming popular. The major items in this sector include desks, chairs/sofa and bookshelves.

China's furniture industry generally suffers from backward technical level, lower labor quality, and especially lacks technicians and designers. Their training is going to receive more attention from industry and enterprises, because of the consumer's increasing requirement of good-quality products, the renovation of furniture industry equipment, and the competition by imported high-grade furniture.

The training targets conclude room decoration project conservator, decoration woodworker, painter, individual house decoration designer, furniture woodworker – to mention a few. The staff will obtain the national qualified certificates after accomplishing the training courses. The courses touch upon various fields of the furniture manufacturing process, ranging from timber drying and material sciences to furniture design (visual, structural), manufacturing techniques, CAD-applications, to finishing techniques.

The Chinese Furniture Society will conduct the "2002 Furniture Design Competition" in Shanghai in the late-2002. The design subjects include: cultural furniture, scientific furniture, environmental-friendly furniture and various kinds of innovative furniture, lamps and ornamental articles for Beijing's Olympic gymnasiums, hotels and public premises. The awarded products will be exhibited in the "10th China's International Furniture Fare" in Guangzhou in August 2002. Later on, these will be included into the "Collections of Excellent Furniture Design" compiled by the Furniture Designing Committee of China's Furniture Society.

4.6.16 Evolution of distribution patterns

Furniture in China is a relatively localized industry. This is because it is difficult to transport bulk items across China and distribution channels are still relatively underdeveloped and expensive. A common strategy then is to target regional urban centers. Furniture “towns”, specialty stores and trade marts claim the majority of furniture sales.

Foreign furniture companies doing business in China typically divide the country into at least three main regions, each centered round a major city. A certain amount of furniture products is sold in the contract market to commercial/institutional buyers.

Most Chinese representatives and agents of foreign furniture manufactures work on a consignment basis, and earn commissions paid by the foreign manufacturers. Although there are some exceptions, most foreign furniture manufacturers assign exclusive distribution rights only for limited regions within China - often assigning different agents in various regions of China.

4.6.17 Market Access

Market conditions and market access for all types of consumer goods are rapidly evolving in China. Recent trends in retail market access, furniture import channels, furniture distribution channels and recent furniture duty rate reductions are highlighted in the section below.

Retail Market Access

Twenty years ago, Chinese consumers had two alternatives for purchasing furniture. They could either get a "purchasing permit ticket" from local government authorities - then waited in long lines to purchase furniture at state controlled distribution centers, or they could buy raw lumber and have the furniture made at home. China is no longer a seller's market. Sales and marketing channels for furniture in China are still relatively unsophisticated - but progress is made rapidly.

In China's coastal cities "furniture cities" have begun to emerge - which are usually retail hangars at which factories can rent space to market their wares to consumers. (Both Beijing and Shanghai have more than ten such “furniture cities”.) Major coastal cities have also recently witnessed the clustering of up-scale furniture importers in furniture marts and luxury shopping malls.

“Grey” Import Market

Historically, most imported furniture in the Chinese market was trans-shipped through Hong Kong by agents who employed various tactics to avoid China's high furniture import tariffs. These grey market methods included: smuggling; reporting lower invoice prices to reduce duties; intentionally misclassifying goods; making inappropriate use of special economic zone duty-free permits; and, obtaining false documentation reporting full duty and/or VAT paid when it had not been. However, many companies report that as a result of recent dramatic duty rate cuts on furniture

and an aggressive crackdown on corrupt customs officials, the grey channels are slowly diminishing in their volume and influence in the Chinese furniture market.

Furniture Tariffs

After China entering WTO, the import tariff on furniture has dropped down from 23% to the present 11% and will further down to zero in next few years, under this influence, imported furniture would show more competitive in China's market. The furniture market in China will become an international market, medium/lower grade furniture from Southeast countries and regions and high-grade furniture from Europe and America would have the opportunity to compete with local furniture industry under the equal conditions and have more opportunities to enter into China's market.

Environmental and health regulations (non-tariff barriers)

Along with people's intensified consciousness of environmental protection, the theme of environmental protection is also increasingly stressed on the design and production of wood products. There is a tendency to implement "Green product concept" in China. The term "Green" means that more and more concern is given to the environmental aspects during the design and manufacturing, i.e. by avoiding use of harmful adhesives, chemicals and maximizing the use of natural raw materials. Moreover, measures should be taken to prolong product service life to realize better and rational utilization of natural resources and energy saving.

In July 2001, the first environmental protection standard for the furniture industry—"Green Furniture" label was released by the China Certification Committee for Environment Label Products. "Green Furniture" label specially regulates the green standard for the materials of assembled furniture, such as plank materials, metal, paint and adhesives. This will lead into new competition within the wood products industry, focusing on environmental protection.

Non-tariff barriers in imports to China have mostly affected trade in logs, sawn timber, wooden packaging materials and paper. Non-tariff barriers have been less common (and useful) on furniture, because import pressure is lower and tariffs higher than for commodity products.

China has committed to establish a "tariff-only" import regime. All WTO-inconsistent non-tariff barriers will be eliminated. All other measures, such as testing, inspection, etc. must be made consistent with the WTO rules, requiring transparency. China has agreed over a five-year period to eliminate quotas and other quantitative restrictions such as licensing and limitations on who can import and export.

4.6.18 Indicative price levels

Table 4.77 China: indicative prices for office furniture in Guangdong

Item	Dimensions	Finish	\$/piece
Big worktable	Main desk 3400*1050*760	Wooden skin	\$ 520
	Auxiliary desk 1700*480*540	Paster	387
	Main desk 2200*950*760	Wooden skin	350
	Auxiliary 1600*450*540	Paster	242
	2.8M	Wooden skin	483
		Paster	378
	3.2M	Wooden skin	592
		Paster	411
	2M	Wooden skin	302
		Paster	242
Middle worktable	Main desk 2000*1000*760	Wooden skin	280
	Auxiliary desk 1200*430*590	Paster	211
	Main desk 1800*900*760	Wooden skin	230
	Auxiliary desk 1500*410*420	Paster	181
Small worktable	Main desk 1600*800*760	Wooden skin	167
	Auxiliary desk 1200*410*470	Paster	121
Meeting table	2400*1200*760	Wooden skin	196
		Paster	136
	3700*1900*760	Wooden skin	465
		Paster	356
	4500*1500*760	Wooden skin	441
		Paster	356
Document bookcase	800*420*1800	Wooden skin	118
		Paster	85
	1600*420*1800	Wooden skin	205
		Paster	151
	2400*450*1900	Wooden skin	332
		Paster	266
Oak meeting chair			26
Bend wood meeting chair			58
Office sofa			302-725
Tea table	Wooden skin		68
	Paster		129

4.6.19 Transport and packaging

The furniture sellers provide free delivery for large purchases, and use container trucks. For the suburban areas, goods will reach the consumer in 5 hours after purchase and be conveyed up to the designated room free of charge. For rural areas/counties, goods will be delivered to the designated place in 24 hours (within 49 km) free of charge.

Table 4.78 China: indicative prices for furniture in Beijing

Item	Dimensions	\$/set
Student bookcase	W900-D390-H1850	71
Bookcase with several drawers	W900-D390-H1850	75
Bookcase with two parts	W900-D400-H1800	85
Bookcase with two parts and drawer	W900-D400-H1800	88
Document bookcase with double doors	W900-D400-H1800	91
Bookcase with four doors	W900-D400-H1800	94

Table 4.79 China: indicative prices for furniture in Chongqing

Items/Specification	Price range	
	\$/set (low)	\$/set (high)
Chair	11	54
Meeting table	242	1087
Ordinary desk used in office	46	217
Furniture for double room in hotel	393	683
Furniture for single room in hotel	375	1167
Furniture for suite room in hotel	822	2247
Artware screen	36	103
Rostrum (platform)	139	225
Bookcase	60	272
Wooden sofa with 5 items	181	272
Cloth sofa with 3 items	423	785
Leather sofa with 3 items	242	423

4.6.20 Advertising and promotion

As there are few aggregated data available on furniture advertising and promotion in China, an illustrative company case is presented here.

Case 1. Promotion and marketing in the Landbond Furniture Group

The company

Landbond Furniture Group (Guangdong) was founded as a small plant in 1984 in Nanhai, Guangdong. It has gradually become a leading manufacturer, exporter, and retailer of wood benches, occasional tables, panel wall units, dining furniture, bedroom furniture and office furniture. Landbond produces solid wood case products, panel furniture, and upholstery.

With its own design team and a French the chief designer, Landbond has established its reputation on modern design and unique style. Its catalogue contains over a thousand different furniture pieces and parts. New products are launched every month.

Brand strength

Landbond is noted for its modern marketing concept, innovative design, high-quality products, and wide range of selection, superior service and honest value. These attributes have made the company a definitive leader in the home furnishing sector in China. It focuses mainly on the middle-up consumers with an existing sale network over more than 30 big cities throughout China. It operates under five brands: Landbond Furnishings Center, Landbond Furniture, Lesduke, Landbond Accessories, Landbond Office & Hotel.

For promoting their furniture reputed for quality, creativity and medium price points, Landbond has branches and showrooms in the major cities, including Guangzhou, Shanghai, Beijing and Chongqing. It is also established in Singapore and Hong Kong as a leading furniture group with multi-national operations.

The products pass the ISO certification and CTA environmental-protection certification. Its four main workshops have a total area of 40,000m².

Landbond has increased its export since early 1997. With an experienced team and knowledge of both Chinese and international markets, Landbond successfully introduced its products to East and South East Asia, Australia, Middle East and Africa.

Brand management

Brand management is the main means for Landbond Furniture to seize market opportunities and set new trends for furniture. The brand increases the added-value attached to the furniture.

Landbond is one of the earliest furniture manufacturers in China who uses industry logo. The president Mr. Du Zehua, first started the business from "Nanhai Yanbu Landbond Furniture Factory", after establishing the name of "Landbond", he also designed the industry image of "LB Furniture". As early as in 1985, Landbond began to use "LB Furniture", and set up its first brand store in Huangqi, Nanhai City. After that, the logo has appeared in all printed materials and products of the company.

Marketing, distribution and promotion

The marketing system of Landbond includes four parts: (1) self-supporting sub-companies, (2) licensed league system, (3) wholesale system, and (4) general distribution.

At present, Landbond has set up its sub-companies in Beijing, Shanghai, Guangzhou, Chongqing and already become the leader in the sector in China. For its leagued partners, the company offers additional support on shop design, management, e-commerce, market evaluation, investment forecasts, quality control, product development, and staff training.

Whole course service

In 1999, the company opened up an internationally advanced mode of promotion with Landbond Furniture Plaza. This expanded the connotation of their brand from only

selling furniture product to the management of furniture culture. The whole course service provided by the Landbond Furniture Plaza is a new kind of integration of various kinds of services, in addition to the household furniture, special housing environmental culture design center, coffee bar and housing furniture saloon are set up, too. It provides consumers a new kind of life through furniture products show and specialty consultation service from a position as a “Residential Furnishing Adviser.”

Design of the brand chain stores

The integrated design for final distribution, including the store environment, display of furniture combination, product recommendation, etc, all strives for reflecting the living style and taste of target consumers and also presenting to consumers with brand fascination and Landbond product’s individuality and indeed top start up or pilot the new consumption demand. All the self-support monopolized stores, licensed store for furniture plazas, not only sell furniture, but also spread out the Landbond Brand through the display of furniture products.

Chain store system

After the establishment of Landbond International Distribution Center, the brand’s pilot chain stores were set up one by one in Guangzhou Area. The chain system is today formed of six stores in Foushan area. All the brand-loyal stores undertake group purchasing, joint stocking, coordinated distribution and pricing and share the manpower and capital resources together.

“Landbond Housing Furniture Club” Program

As the extension of its distribution network, Landbond Group created the “Landbond Housing Furniture Club” Program is to cover the Furniture Plazas and the brand’s chain stores all over China. Membership progresses into silver card and golden card levels. Members can enjoy discount when purchasing products from the Furniture Plazas and chain stores and regularly receive free information on furniture, new product and discount messages, and attend various membership activities organized by the program.

After-sales services

- Free Goods delivery: any consumer buying Landbond furniture can enjoy the free delivery service within appointed area zone of each brand chain store.
- Installation: goods delivered freely by Landbond can carry a free installation service.
- Landbond Guarantee: Within one year of the delivery date, the company provides free repairing of quality defects, replacing or returning for refund service. The order of “three service” provided is to repair, replace and return for refund. The repaired products may be replaced if still prove unsatisfactory, or even be returned for refund if no similar product available.
- Upholstered Furniture (leather, cotton cloth sofas): If quality problem appears after three months of delivery, and replacing and returning is necessary, the company will charge a depreciation fee of 0.1%/day of selling price since the delivery date.

- After one year of delivery, if product needs fixing for any reason, the company provides repairing only at the charge of service costs.
- After one year of delivery, if product is damaged for any reason, the company will provide repairing at the charge of service costs, but withdraws from replacing and returning goods.
- The company may provide product's re-disassembling, re-packaging, re-transportation and re-installation without limits, only at the charge of service costs.
- The company provides reconditioning service to hardwood furniture for consumers only at the charge of service costs.

To ensure all the promises of after-sales service being kept, the after-sales service is continuously improved, including:

- Goods delivery process: take consumer's trust into consideration, the worker responsible for the first-time delivery should follow up or provide follow-up service from the beginning to the end.
- Optimize the distribution group operations and emphasize the communication with consumers; to employ qualified staff.
- Intensify on-the-job training of delivery workers.
- Hold periodically staff competitions on installation skills.

4.6.21 E-commerce and Internet-based marketing

Along with the fast development of information industry and the Internet, the furniture industry is striding forward to the B2B e-commerce market. Numerous furniture producers, purchasers, salesmen and retailers already take on the Internet as for dealing trade and payments with domestic/overseas buyers. Accelerated by the development of Internet technology, more and more enterprises take part in the B2B commerce. Some well-known internet sites are This B2B.com (www.thisb2b.com), tpage.com (www.cn.tpage.com), (www.2t2.net/b2b/--B2B), China Commercercer (www.dg.chinacommercercer.com). They provide services like the supply/demand information of products, general world outlook for the products world, complete-set of service for import/export commerce and web-page construction, etc.

4.6.22 Case studies

Case 2. Beijing: local economy motivated by the Olympic Games

In July 2001, Beijing won the 2008 Olympic Games. As a catalyst for economic development, the games are expected to boost annual GDP growth in China by another 0.3 percentage point in the next seven years.

The positive influence of Olympic Game to Beijing's macro-economy will be felt in the following ways:

- enhancing the confidence of the foreign investors,
- promoting the reform and open-policy,
- improving the industry structure for Beijing (especially to the high-tech and tertiary industries),

- as a direct Olympic Games related demand, which will promote the development of sports facilities, cultural scheme, information services, real estate, tourism , transportation, commerce, financial and insurance industries and exhibitions.

It is estimated that the value-added of high-tech industry will yield over 45% of the total industrial value-added and become the most important growth point of Beijing's economy till 2008, partly thanks to the Games.

Capital Construction in the Coming Six Years

From now on till July 2008, Beijing's investments in infrastructure will achieve \$33.90 billion. This would pull up the consumption in many sectors of economy. It is estimated that the volume of retail sales of consumables will increase by \$13.32 billion in the coming six years. The impetus will accelerate the whole city's economy to keep double-digit increasing in the coming ten years, and may help achieving the objective of the per capita GDP of \$6,000 ahead of schedule. The standard of city infrastructure will be advanced by 20-50 years ahead of time, according to some estimates.

Employment Opportunities and Resident Income

Driven by the Olympic projects, Beijing's construction sector would create 2 million job opportunities and meanwhile improve employment quality. The most promising industries would include construction, communication and service. In 2008, the average per capita disposal income of urban and rural households in Beijing would achieve about \$3,026.63.

Development of Real Estate Industry in Beijing

In the coming seven years, Beijing will establish the Olympic Garden, Competition Arena and Games Village, Athlete Apartments, Press Center, etc. Large-scale infrastructure establishment, including airports, rail stations, urban highways, telecom system, and auxiliary facilities, will come into play, too. Furthermore, the city will reconstruct about 9 million square meters of dangerous and old houses in Beijing city zone: This is expected to improve per capita living space up to 18 m² in Beijing. The number of star-rated hotels will be increased to about 800.

5. COUNTRY REPORTS ON OTHER MARKETS

5.1 Spain

5.1.1 Basic demand factors and market drivers

Spanish economic performance in the last years has been among the best in Europe, especially as far as the wood-sector economy is concerned. Its GDP per capita is slightly lower than the European average, although the Spanish purchasing power is higher than official exchange rates show. Spain has a relatively large black economy, which further increases the country's GDP above official figures.

About 80% of Spanish families own their homes. This is among the highest home ownership levels in Europe. Another unique detail is that house building has increased constantly since the Second World War. Spain has today Europe's newest houses, 44% of homes have been build since 1970. Therefore, while investments in new residential buildings keep growing (and only in the next years they are expected to slow down), the percentage of remodeling on total construction is one of the lowest in Europe, even if it will show a large increase. This is due precisely to the young age of Spanish homes. Spanish consumers spend about 27% of their budget into their homes.

5.1.2 Description of domestic furniture industry

Spain is the fifth largest European furniture manufacturing country, following Italy, Germany and the U.K. About 20% of Spanish furniture production is currently exported, primarily to other EU markets, Russia, the United States and some Asian countries. Design and a fairly good price/quality ratio are behind the competitiveness of Spanish furniture.

The furniture industry has been strongly growing since 1993 due to increased domestic sales and exports. Total furniture sales continued to grow in year 2000 but this tendency reversed in 2001-2002.

5.1.3 Production volume

Spain's production value of furniture sector peaked in 1999 at around \$5.6 billion, but it has since then declined in US-dollar terms onto the current level of \$4.9 billion.

Table 5.1 Spain : furniture production by type in 2001

Type of furniture	\$ million	Share %
Office	383	7.8
Kitchen	472	9.6
Upholstered	661	13.5
Others	3,382	69.0
Total	4,898	100.0

Source: Anieme

5.1.4 Structure and location of industry

The number of furniture industries in Spain is very large and companies are fragmented. The size of the companies does not seem to grow in the last year. Only about 12% of companies have more than 20 workers.

Table 5.2 Spain: workforce in the furniture industry

Year	Number of workers
1993	110,295
1994	105,990
1995	107,133
1996	114,857
1997	117,019
1998	126,996
1999	131,234
2000	133,008

Source: INE

Table 5.3 Spain: furniture industry size by employees

	Companies total	more than 20 workers	less than 20 workers	Number of workers total
1999	12,666	1,557	11,110	131,234
2000	13,263	1,494	11,769	133,008

Source: INE

The main furniture industries concentration is in the Valencia area (16,5%), followed by Barcelona (13%), then Madrid (9%). The Valencia area works like an “industrial cluster”. In the area are also located the main associations, the research institutes, quality control organizations, etc.

Furniture exports in Spain are led by Valencia Community, exporting furniture for a value of 27.171 millions pesetas (Jan-April 2001). Catalonia -in the second position, has increased its exports for 9.6% (17.728 millions pesetas). The Basque Country remains in the third place with 7.998 millions pesetas (an increase of 22.4%). Navarra has become the fourth region with an increase of 46.5% in exports with 5.225 millions pesetas during this four-month period.

5.1.5 Major players

Some of the main Spanish furniture producers are:

- Mostoles Industrial
- Danona
- Jevit
- Ofita
- Kemen-Haworth
- Muebles Tapizados Granfort

Some of the main kitchen cabinet producers are:

- Novoperfil

- Xey SA

5.1.6 Main raw materials

Table 5.4 Spain: main wood raw materials in furniture

Wood Material	Share
Sawn softwood	13%
Sawn hardwood	12%
MDF	10%
Chipboard	62%
Plywood	3%

Source: Gardino research

Spanish wood panel producers are large and powerful and offer abundant cheap material to local furniture industries. Chipboard is therefore by far the main used raw material. MDF demand is growing. Spanish industries use also considerable amounts of softwood, mainly pine. They use quite large amounts of softwood edge-glued panels; these are often manufactured by the furniture factories by themselves.

The following chart reports results of a recent research of Gardino Consulting (year 2002) based on a limited sample (the main 50 companies) of furniture industries:

Table 5.5 Spain: percentage of top-50 furniture companies using the main wood raw materials

Wood product	Percentage of companies using the wood product
Softwood	91%
American hardwood	19%
European hardwood	44%
Tropical hardwood	21%
Plywood	19%
Edge-glued panels	36%
MDF	61%
Chipboard	72%
Veneer	44%
Moulding	25%

Source: Gardino research

It is worth noting the fairly low use of tropical hardwood in the sample. All the companies use many different wood products for their production and softwood and chipboard are those more commonly used. Spain is also one of the countries where MDF is used extensively by furniture companies. There is a bigger use of overlaid panels, pre-varnished, melamine-faced, and PVC-faced. Some Spanish industries are specialists of real wood veneer facing, and these will have to compete against synthetic overlays in furniture panels.

The most recent design trends mix different materials (steel, glass, textiles, wood) and different colors (cold and warm colors) more freely than before. Light colors still dominate, but there is a definite trend to include also dark ones (brown, black).

5.1.7 Out-sourcing and networking among manufacturers

Traditionally, the Spanish furniture industries prefer to produce all their parts and components within their factories. However, in recent years they have noted the advantages of outsourcing more parts. This has created rapidly a good network of sub-contractors, especially in the Valencia area, but also near Barcelona and Madrid. Several companies are now producing cabinet doors, tops, legs, drawers, but also items such as edge-joined veneer, marquetry veneered parts, upholstered furniture frames, overlaid mouldings, etc. Even though outsourcing still commands a minor share of parts and components, it is expected to grow steadily.

5.1.8 Quality standards and certification and labeling requirements, environmental management systems

The Wood Industries Association Confemadera is carrying out a program, jointly with the main woodworkers unions, aimed at increasing the workers' safety. It also establishes strict rules on the handling of varnishes and other chemicals, dust, etc. Product quality seals can be issued by AIDIMA and by other quality control organizations.

An association called ASERMA was established in 2001 for recuperating wood waste. Confemadera and CAM (a financing organization) have signed in 2001 an agreement for financing solutions against pollution (water, smoke, dust, etc.)

In the European Union countries, almost all household waste, which is collected by private and/or public companies, can be considered as municipal solid waste (MSW). Furniture as durable good at the end of its lifetime becomes a municipal solid waste. Recycling furniture means that, when discarded, they can easily be disassembled and that parts can be reused while materials can be recycled into new materials or exploited for energy purposes.

To facilitate recycling during the conception and production, materials should be marked and guarantee should be given for the separation of materials to allow reuse of components or handling at the best as waste.

5.1.9 Furniture market: foreign trade and apparent consumption

Spain is a net exporter of furniture with around \$465 million margin. Spain imports (42% of total) and exports (45%) mostly furniture belonging to "other" category (living/dining room, small-occasional). Imports have been growing faster (69%) than exports, which have remained flat (+3% in five years).

Table 5.6 Spain: imports of wooden furniture by product group

Product Summary on Imports	%	1997	1998	1999	2000	2001	%	Index 97=100
		\$ million						
Seats cane, osier, bamboo, etc.	4	10,6	11,7	14,3	13,8	13,4	3	126
Seats n.e.s. with wooden frames	14	36,5	42,8	47,7	47,7	59,1	13	162
Wooden office furniture	6	15,7	19,4	18,6	17,9	22,9	5	146
Wooden kitchen furniture	7	17,9	22,7	28,9	33,6	40,4	9	226
Wooden bedroom furniture	9	23,3	25,7	34,3	32,5	36,1	8	155
Other wooden furniture	39	102,7	130,4	172,7	174,6	190,4	42	185
Furn. other mater. inc. bamboo	6	15,8	15,0	18,3	18,3	20,2	5	128
Furniture parts of all materials	16	42,7	48,0	55,4	50,9	66,1	15	155
Total	100	265,3	315,6	390,1	389,2	448,6	100	169

Source: COMTRADE

Table 5.7 Spain: exports of wooden furniture by product group

Product Summary on Exports	%	1997	1998	1999	2000	2001	%	Index 97=100
		\$ million						
Seats cane, osier, bamboo, etc.	1	6.4	7.1	5.2	4.7	4.8	1	74
Seats n.e.s. with wooden frames	13	115.5	129.2	129.9	121.3	130.5	14	113
Wooden office furniture	5	45.1	57.3	47.3	53.7	56.7	6	126
Wooden kitchen furniture	7	64.7	75.6	87.8	80.7	70.4	8	109
Wooden bedroom furniture	16	142.1	161.7	141.9	138.2	115.8	13	81
Other wooden furniture	42	368.2	386.1	397.7	388.6	406.8	45	110
Furn. other mater. inc. bamboo	9	75.2	58.1	62.6	64.6	66.3	7	88
Furniture parts of all materials	7	65.8	66.7	65.8	61.2	61.9	7	94
Total	100	883.0	941.8	938.4	913.0	913.2	100	103

Source: COMTRADE

5.1.10 Imports from developing market economies and China

Spain purchased 36.5% of its wooden furniture imports from the developing countries (22% in 1996). Indonesia was an important supplier in the overall trade, by ranking the first source in "other" wooden furniture (with 18% of import market), and the second in wooden seats (13.7%). Vietnam held nearly 10% of the seats imports and the fourth place, before China (8.7%) which was the fifth largest supplier. Market shares were small in furniture parts as the European sources dominated this trade in Spain.

5.1.11 Market segmentation and regional demand breakdown

The Spanish population is roughly concentrated along the coastlines, and in the center of the country in the Madrid area:

- Madrid region: almost 6 million people;
- Barcelona and its surrounding region: more than 6 million;
- Valencia region: 4 million;
- The area along the North Coast: 3,5 million.

Table 5.8 Spain: imports of major product groups from leading developing countries and China

Product group	Imports 2001 (\$ million)	Major developing country suppliers	Share %	Rank
"Other" wooden furniture	190.4	Indonesia	18.2	1
		China	6.5	5
		Vietnam	3.7	8
Furniture parts	66.1	China	2.3	8
		Malaysia	0.7	18
		Indonesia	0.6	20
		Indonesia	13.7	2
Seats n.e.s. with wooden frames	59.1	Vietnam	9.7	4
		China	8.6	5

5.1.12 Favored wood species and finishing techniques

The main used wood species are beech and pine. These species are followed by many imported species: oak, chestnut, cherry, alder, spruce, walnut. The main tropical species is ayous (for mouldings). A few other tropical species are used: iroko, koto, sapele, acajou, jatoba, tauari, teak, etc. The use of tropical species is quite limited in the furniture sector.

The required finish varies according to the furniture sectors. Matt finish is the most required finish in the sectors of office furniture, upholstered, and modern design. Gloss finish is more required in the sectors of bathroom furniture, and bamboo rattan furniture. Satin finish is the most required in the classic furniture sector. Finish showing the wood texture is limited to a small part of sales, although it represents a quite large part of kitchen cabinet sales.

5.1.13 Furniture style and design trends

Spanish market is quite traditional. It has been noted that Spanish industries produce quite large amounts of pine furniture. This is reflected in a relatively heavy weight of traditional-rustic and classical styles. Modern style is however growing and it is dominating at the moment (about 54% of the market in year 2000).

Table 5.9 Spain: main styles in furniture production

Style	% Change 2000/1999
Rattan	6,9
Design	5,0
Rustic	-1,4
Classic	6,3
Modern	8,1

Source: Anieme

According to a recent research the favored room for furniture purchases in Spain is the bedroom (16% of purchases).

Until years 1983/84 Spanish furniture was little known abroad, and there was no “Spanish school of design”. Things have changed since then, and the growing success of Spanish exports has also been driven by the “School of Spanish design”. Industries have adapted their production to these designs, and *vice versa*, the designs have accepted some “formalities” in order to be manufactured by the industries.

Spanish furniture industries are investing in new design project only between 1,7 and 3,5% of their annual sales. In order to improve this situation the Industries Association, Confemadera, is investing on a project to be developed by the technical assistance organization, AIDIMA of Valencia. During the Valencia furniture fair (September) an important design competition will be held.

Design trends in kitchen cabinets

Consumers want to be able to modulate space. Among recent innovations is for example a corner seating for kitchen table which has pull out extensions on the ends of the benches. It has a bench running along two sides of a corner and jointed by a corner section, to provide seating along two sides of a table, and with attached back cushions. Guides under the bench control the movement of the pull out sections.

A simple, space-saving mechanism to open and close door, flap or drawer was also patented . The device has a release element and drive unit having at least one spring made of shape memory alloy.

5.1.14 Evolution of distribution patterns

In Spain furniture distribution is highly fragmented. Traditional shops represent still the vast majority of the market. Shops are aggregating more and more into sales groups and are increasingly specializing either selling only a specific style, ether selling only certain product lines. Home-kitchen furniture industries sell directly a considerable part of their production.

Table 5.10 Spain: furniture distribution channels

	% total turnover
Specialists	83
Independent retailers	52
Buying groups	13
Large scale specialist distribution	10
Other specialist channel	8
Non-Specialists	17
Department stores	5
DIY stores	1
Mail orders	1
Direct sales	10
Other non specialist channels	-
Total	100

Source: Csil

Table 5.11 Spain: furniture distribution channels by type of furniture

Type of retailer	Home	Upholstered	Kitchen cabinet	Home office	Upper end furniture
Independent retailers	52	60	50	40	85
Purchasing groups	13	18	-	-	-
Large organized stores	10	2	18	30	15
Large non-specialist stores	5	9		-	-
Specialists	8	10	16	20	-
Mail order	1	1	-	-	-
Direct sales	10	-	15	10	-
DIY	1	-	1	-	-
Total	100	100	100	100	100

Source: Csil

Some of the main sales outlets are the following:

- ARTIMUEBLE S.A.
- ALM Y CIA., S.L.
- CIA. DE EQUIPAMIENTO DEL HOGAR, HABITAT, S.A
- CONFORAMA ESPAÑA, S.A.
- DIMURESA, DISTRIBUCIONES MUEBLES REY, S.A.
- GESTION Y COMPRAS, S.A.
- GRUPO INTERNACIONAL DEL MUEBLE, S.A.
- HIPERCOR (EL CORFTE INGLES)
- IKEA ESPAÑA AB, SUCURSAL EN ESPAÑA
- KEMEN COMERCIAL, S.A.
- KIBUC, A.I.E.
- MERKAMUEBLE, S.A
- NUEVAS GALERIAS TARRAGONA, S.A.
- OKAPI, S.A.
- SANCHEZ GINER, S.A. (SAGISA)

5.1.15 Indicative price levels

- Beech chair, with seat in wood or in straw: (in 30 different colours): Euro 16,23
- Beech chair with seat in wood or upholstered: (in 30 colours): Euro 48,68
- Upholstered arm chair: Euro 196,71
- Small stained oak table Euro 236,98
- Lacquered chipboard bed: 90x200: Euro 210,05

5.1.16 Advertising and promotion

The Spanish furniture manufacturers spend the biggest shares of their promotional budget in participating trade shows (about 50% of the budget). Of the remaining amount the largest expenses are for publicity in specialized magazines (about 30% of the budget), followed by minor expenses (direct promotion, publicity on non specialized magazines, etc.)

5.1.17 E-commerce and Internet-based marketing

In 2000, there are around 5.6 million Internet users in Spain, of whom 3.6 million utilized it on a weekly basis. According to a survey made by the web-site El Portal del Mueble in 2001, only 5,2% of the consumers already using Internet had considered making purchases on furniture through the net in the next 12 months.

Furniture sales through internet (B2C) is expected to grow 0.5% in the next 3 years. Browsing the net for pre-purchase information is growing. In particular consumers search for new styles and designs, shop addresses, customer services. About 2% of consumers check from the Internet before purchasing new furniture.

Some of the bottlenecks for furniture sales through the net include

- Lack of appropriate product imaging technology in the web-pages;
- lack of qualified personnel for selling with the help of new technologies;
- lack of catalogue purchasing traditions in Spain.

5.1.18 Useful contacts

Union Europeenne de l'Ameublement – information. Some can be found at the site:

<http://www.ueanet.com/outlook.htm>

INE Instituto Nacional de Estadística (España) - Encuesta industrial anual de empresas año 1999 - 2000

INE - Índice de costes laborales. 4 trimestre 2001

INE - Estadística de I+D. Indicadores básicos 2000

INE – on,-line data bank: <http://www.ine.es/>

US Department of Agriculture – Solid wood products annual reports (2000 and 2001)

Aidima – Informe de Expectativas Trimestral – Dec 2000

DSBB – General economic information

Anieme – periodical information on Spanish furniture industries and exports

Gardino Consulting – many researches made in years 200-2001 and 2002, especially “The main European woodworking industries, second processing industries – edition 2002”

Csil –information to Gardino Consulting

Rivista Muebles de Espana: LA INDUSTRIA DE LA MADERA EN ESPAÑA, UN SECTOR EN CRECIMIENTO

Rivista Muebles de Espana: EL SECTOR DEL MUEBLE ATRAVIESA UN PERÍODO DE ESTANCAMIENTO EN LAS VENTAS

Rivista Muebles de Espana: various charts

Madera y Mueble – various issues

El Portal del Mueble – various issues, including some on Internet use and investments in publicity.

One can find a list of Spanish trade magazines in the web-site: http://www.mueble-madrid.ifema.es/tecpres_m.html

European custom duties: http://europa.eu.int/comm/taxation_customs/dds/en/tarhome.htm

5.2 Italy

5.2.1 Basic demand factors and market drivers

Italian economy has had a moderate pace of growth in the last years. The country has had some problems in the stabilization of its currency (Italian Lira) and entering in the

European unique currency (Euro). It still has the highest debt in Europe. This has forced in years 2000 and 2001 the government to economic growth in order to keep the state deficit under stricter control. It is necessary to remember that Italy has a quite high percentage of “black” economy. Many studies have tried to evaluate its amount, which is usually evaluated around 10/20% of the official economy. The country will grow at a slow pace, comparable to that of the other European Union countries.

Italian families furnish about 800.000 homes a year, with budgets varying between 10.000 euro for low quality furniture, to 50.000 euro for top quality furniture. Italian families spent an average amount of Lire 5,666,000 for a piece of furniture. A high share (58,8%) of consumers purchased furniture in a shop, even if a relevant percentage was directed respectively to specialised distribution groups, department store centres or large distribution - mercatone (17,6%) or to an artisan for furniture made to measure (13,9%).

5.2.2 Description of domestic furniture industry

The Italian furniture industry structure is extremely fragmented with nearly 38,000 companies, the vast majority of which in the “micro” or “cottage” industry categories. Most of the small and medium-sized and organized into productive districts. The sector total workforce is 230,000.

Table 5.12 The furniture industry sector in Italy

	2000	2001	% change
Number of companies (more than 20 workers)	1,657	1,657	0%
Number of companies (total)	38,136	37,840	-0,8%
Number of workers (in companies with more than 20 workers)	102,150	103,360	1,3%
Number of workers (total)	226,142	230,315	1,8%

Source: Federlegno

88% of sector companies employ less than ten workers, and the average company employs merely six workers! Companies with over twenty workers account for 4% (about 1,600) and their combined workforce totals about 103,000 (approximately 62 workers per firm). Companies with over a hundred employees account for just 0.4% of the total (roughly 140) employing a total of 28,000 workers (about 200 per firm).

The industry doubles in size in terms of the number of companies and workers if we look at the productive chain, that is if we include all of the segments active in the field of intermediate woodworking (panels, profiles, components, etc.) which are linked to the final furnishing product. According to the industrial census of the Italian Wood-Furnishings (1996), the productive system comprised about 100,000 units with a total of over 400,000 direct workers.

There is a considerable lack of skilled workers, especially in the North-East and in Lombardia, but also generic workers often are not enough. Federlegno estimates that in year 2002 the sector might have employed about 4000 additional workers, if they were available. “New jobs” workers are especially scarce, such as those who might use numeric/computerized machines. Also in the design sector young experts of CAD drawing are scarce.

Moreover, the Italian furniture industries are not very profitable. A recent research shows that among the 2000 biggest industries annual net profit has been in year 2000 3.2% on sales. Home furniture producers have outperformed others (profit 4,5%), and the best profitability is achieved probably in the upholstery segment. Kitchen cabinet producers perform at a lower level than the average (0,7% profit), while office furniture producers make a profit of 2,1%.

5.2.3 Production volume

Italian output value of furniture industry was \$17.6 billion in 2000. Upholstered furniture accounted for a substantial quota of Italian production (18% of total supply), with kitchen furniture claiming 12% and office furniture 8%.

Table 5.13 Italy: furniture production by type in 2000

PRODUCTION	\$ million	Share %
Office	1.327	7.5
Kitchen	2.047	12.0
Upholstery	3.237	18.0
Others	11.034	62.5
Total	17.645	100.0

Source: ISTAT

5.2.4 Structure and location of industry

Furniture producers are mainly concentrated in certain geographic areas where SMEs make up the productive systems called “industrial districts”. The highest concentration is in the Brianza district (between Como and Milan) which also has a strong penetration on foreign markets. As a whole the Lombardy region has the highest concentration of companies with 22.9%, and workers in the region account for 20.3% of the national total. The Veneto region exceeds Lombardy for concentration of workers (22.8%), and is home to 18% of total firms. Companies in these regions are to a great extent craftsmen’s companies. Other regions with a significant presence of sector operators are Friuli-Venezia-Giulia (4.5% of companies and 10.5% of workers), Tuscany (10.2% of companies and 8.4% of workers) and the Marche (5.4% of companies and 8.1% of workers). Companies in these regions tend to be more industrial in structure.

The Italian government actively supports Italian export oriented companies. Assistance has been particularly active after 1998, when an ad hoc law for the support of Italian exports was issued. Export credits are financed by a state organization named SIMEST. Export credits are insured by a state organization SACE. The Italian Chambers of Commerce abroad make a considerable activity, as well as ICE (Institute for Foreign Trade), which has offices all over the world. There are also aids given for the education of young (IPSIA), university students and for professionals (CFP). The furniture sector spends about 0.15% of its turnover for educational purposes of which about 22% is financed by PA.

5.2.5 Major players

These are some of the main Italian furniture industries: Industrie Natuzzi, B&B, Doimo International, Haworth.

The main kitchen cabinet manufacturers are: Snaidero, Scavolini, Veneta Cucine, Lube Over.

Natuzzi is the leading Italian producer of furniture. It specializes in the production of leather upholstered and controls 2.4% of the world market for upholstered goods and over 10% of the world market for leather upholstered.

However, with the exception of Natuzzi, all Italian furniture industries are “small” companies on international standards and the industry is fragmented in a huge number of medium and small units.

5.2.6 Main raw materials

Italy uses very large quantities of chipboard for making furniture. MDF consumption is steadily growing. Italy uses only small amounts of edge-glued panels.

Table 5.14 Italy: use of the main wood raw materials in the furniture industry

Wood raw material	1998
Sawn softwood	10%
Sawn hardwood	21%
Chipboard	52%
MDF	10%
Other panels	7%

Source: Gardino research

Based on a limited sample (the main 70 companies) of furniture industries, the following usage rates of various wood raw materials were reported:

Table 5.15 Italy: percentage of top-70 furniture companies using the main wood raw materials

Wood product	Percentage of companies using the wood product
Softwood	72%
American hardwood	47%
European hardwood	57%
Tropical hardwood	54%
Plywood	23%
Edge-glued panels	15%
MDF	56%
Chipboard	74%
Veneer	52%
Mouldings	18%

Source: Gardino research

It is worth noting the quite large use of tropical hardwood in the sample. It is also of interest that all companies use many different wood products for their production and that chipboard and softwood are those more commonly used. Almost all companies use “some” softwood, but this remains a small amount in the overall consumption.

5.2.7 Favored wood species and finishing techniques

Italian furniture industries keep using lightly colored species, like all European industries. Fashion in Italy does not require extremely light color, like in Germany or in Scandinavia. Buyers prefer cherry, beech and there is some demand for oak. However the typical “cherry furniture”, which has dominated the market for the last 4-6 years seems to give signs of weakness. There seems to be a trend to darker colors, mainly walnut, which has always been a favored species in Italy.

Modern furniture in this moment does not require much wood in sight. Fashion requires rather lacquered surfaces and large use of steel, aluminum and glass.

Composite panels and components play a prominent role in Italian furniture making. There is high demand for wood panels combined with PVC, steel, glass, and the same applies for furniture components. There is strong demand for honeycomb panels, for producing large furniture doors light in weight.

Among reconstituted wood materials, MDF demand is growing, while chipboard is stable. Little plywood is used for furniture, but there is a small growing demand of birch plywood. Italy uses little edge glued panels, mainly softwood ones, mainly for high quality furniture carcasses (export to Germany). Consumption of hardwood edge glued panels is limited: a few cabinet doors and kitchen tops. Consumption is growing.

There is a limited use of tropical wood species in Italian furniture. Few species are used for appearance purposes: teak, little mahogany. Other species are used as support for overlaid mouldings (ayous, frake) or for stained mouldings (ramin, ayous). There is a small consumption of tropical wood plywood (mainly fromager). There is also a small but growing use of garden items: non-perishable Asian and South American species. A niche market uses acajou for boat furniture.

It has been mentioned that lacquered surfaces are preferred at the moment. When wood is in sight fashion favors very smooth surfaces, therefore industries required wood species with closed pores (like maple), rather than with open pores (like ash). Water varnishing and other environment friendly finishing is often required, if this does not influence the final cost.

A recent research, based on a limited sample of furniture industries, ascertained that these are the most popular finishing techniques for parts in sight of the furniture presented at a show (based on 45 companies of all sector: office, home, kitchen). Industries were mainly of high quality.

- Veneered surfaces: 22%
- Melamine paper surfaces: 23%
- Solid wood: 9%
- Lacquered surfaces: 22%
- Metal: 17%
- Glass: 5%

Main colors were:

- White: 18%

- Brown: 14%
- Ivory: 9%
- Blue: 7%
- Cream: 7%
- Sand: 7%

Main wood species (including paper imitating wood) were:

- Oak: 22%
- Walnut: 20%
- Cherry: 14%
- Wenge: 12%
- Beech: 8%
- Maple: 6%

Italy uses little softwood for furniture construction: rustic pine is no more in fashion.

5.2.8 Industry competitiveness

A recent research of Pambianco, Strategie di Impresa shows the following results.

Table 5.16 Average of results of the biggest 166 Italian furniture producers

	2000	1999
Annual sales (MM euro)	31	27
Sales increase	15,2%	
Sales per worker (000 euro)	210	195
Cost of work per worker (000 euro)	26	27
Incidence of cost of work on sales	12,6%	13,6%
Sales on capital	1,7	1,7

Source: Pambianco, Strategie di Impresa

The cost of labor per worker of furniture industries grows during the period more than monetary inflation.

Table 5.17 Italy: labor cost per worker (annual percentage change)

Sectors	1999/98%
Industry	2.9
Upholstered	5.5
Office	2.4
Others	3.1
Kitchen	2.3

Source: Federlegno

Furniture production prices of furniture continued the phase of cooling down that began in 1995, recording quite limited rates of growth of 1%, lower than those of Italian inflation and consumption..

Table 5.18 Italy: furniture production prices (annual percentage change)

	% change
1995	4.5
1996	3.5
1997	1.5
1998	0.9
1999	1.1
2000	1.2

Source: Csil

5.2.9 Out-sourcing and networking among manufacturers

Italian furniture industries have been the world leaders in creating a sophisticated network of outsourcing for the furniture production. Each company has a different position under this point of view, dictated by the quality standard, by the visibility of the company's brand, by the sales policy, etc. However in the "furniture system Italy" outsourcing of furniture parts is extremely common. Many furniture industries do not actually manufacture any raw material, but simply outsource any sort of component and assemble the semi-finished parts. Almost all industries do some sort of outsourcing. The most common parts are cut-to-size overlaid panels (often drilled and sometimes grooved), cabinet doors, tops, furniture mouldings, carcasses, drawers. A rough and unofficial evaluation of the size of this market indicates that furniture industries globally buy as "components" about one fourth of their raw materials purchases.

There is a close co-operation between furniture industries and producers of wood-working machinery within each district. It is necessary to remember that Italian wood-working machinery producers are second in Europe for size of production and first for export. These modern industries are often located near to wood-working industries and there is a continuous communication in both directions between machines producers and furniture industries. Therefore furniture industries contribute to the engineering of new machines (and to the planning of new lay-outs), but also machine producers co-operate towards creating new furniture industry plants. Several furniture producers claim that they give their know-how to machine producers, and later machine producers use this know-how with their foreign clients, therefore creating indirect competition.

5.2.10 Technology level

Italian furniture industries are extremely advanced under a technological point of view. This is due to two facts. The first one is the co-operation with machine manufacturers. Machine industries are usually located near furniture industries and there is strict co-operation between the two sectors. The second reason is the relatively small average size of Italian industries. Companies are always managed by the owners, who are generally experts of the production cycle and love using new production processes, also for keeping the labor cost low. It is well known that one of the pluses of Italian furniture is innovation and design. A recent research has found out that top quality Italian industries are investing 5% of their annual sales in research and development.

Table 5.19 Italy: furniture industry investments (percentage of turnover)

	1997	1998	1999	2000	2001
Office furniture	6,9	6,4	10,6	5,5	-
Kitchen furniture	7,0	7,2	9,0	6,7	8,0

Source: Csil

Table 5.20 Italy: return on investments by segment (% values)

	1997	1998	1999
Upholstered	21%	19%	21%
Office	10%	11%	4%
Other	9%	6%	8%

Source: Federlegno

5.2.11 Quality standards and certification and labeling requirements, environmental management systems

In Italy, 34 firms had obtained EMAS certification (end of 1999) and 403 ad obtained ISO 14.000 certification.

Italy is a country little sensitive to environment problems. Therefore few industries use “environment” as a sales tool. There is a European project for a furniture “eco-label” that is creating strong resistance among Italian furniture industries. Some industries that are strongly export-oriented to more environmentally-sensitive markets are starting to certify all or part of their production and of their chain-of-custody. At mid 2001 about 11.000 ha. of Italian forests had been certified, all according to FSC rules.

5.2.12 Furniture style and design trends

One can say that Italy is the country of fashion and design. One of the main reasons of success of Italian furniture industries is design know-how coupled with a reasonable price/quality ratio. The main furniture design center is Milan, where most of the large design offices are located.

During the April Milan furniture show there are several design competitions where all the main designers participate.

Technical design

The success of Italian furniture industries is, among other factors, driven by the capacity of translating products from the designer’s table to the factory, and also the opposite way round. The leading furniture industries, those who make the fashion in Italy and often in the world, decide the new product lines in a team, which usually includes a designer, the production manager, the purchasing manager, sales manager and the company’s owner. The designer prepares some drawings for challenging his interlocutors, then, after discussion, samples are manufactured and exposed to the next furniture shows. Here the sales manager collects the reply of the market, and the production with adjustments follows.

Training of designers

There are many technical schools for furniture workers in Italy, although the sector claims that these schools are not sufficient. However technical design is not favored at these schools. At the recent furniture show of Milan (April 2002) there was a contest for young designers.

Style trends

Traditional furniture still constitutes a large share of the market. It represents about 40% of sales. However this style is living a crisis since a few years. It keeps the market in Southern Italy, but in Northern Italy it is leaving the market to modern style. This style is divided in different trends, according to the lines more or less "extreme". The real "trendy" lines grow more slowly than more moderate lines.

Italian furniture production by style, 2000.

Modern	55%
Traditional	20%
Design	15%
Classic	10%

Source: Csil,

Other traditional styles such as rustic furniture or art furniture keep a small share of the market, but demand is weak. Some companies try to sell "Eco-furniture", often without explaining well what does "eco" mean, but market reactions are quite negative.

A recent survey found out that in their home Italian consumers prefer the kitchen to other rooms. In kitchen furniture, consumers expect more technological and intelligent solutions.

Current trends in Italy focus on specific details such as ergonomic furniture, ethnical furniture, etc. Another trend is the connection of furniture with other decorative parts of homes: lighting, furnishing complements, and so on. Some companies have prepared furniture prototypes made with recycled materials, in order to match the demand for environment friendly goods. In the classical segment there has been an increase of "home-office" furniture. Some producers are now selling home-office furniture with 3-4 shelves which can accommodate the computer, but also scanner, printer, accessories, etc. These furniture types can represent up to 30% of their sales and it is increasing. The straight lines of past years are leaving space to more curved lines in order to optimize space and ergonomics.

5.2.13 Furniture market: foreign trade and apparent consumption

Domestic market for furniture has been estimated at \$10 billion in Italy. This takes into account all materials and not just wooden furniture. It is therefore not consistent with the import-export figures detailed for wooden furniture.

Table 5.21 Furniture Consumption (2000)

Type of furniture	\$ million	Share %
Office	860	8.5

Kitchen	1.750	17.2
Upholstery	1.145	11.3
Others	6.408	63.1
Total	10.163	100.0

Source: ISTAT

The trade figures extracted from COMTRADE show the Italian wood furniture exports staying above \$6 billion level every year, but with a minor slump in 1999-2000 in US dollar terms. 2001 imports remained on a 2% lower level than those of 1997. Imports have remained small but grew 52% within 1997-2001.

Wooden seats feature prominently in the Italian exports, mainly thanks to its famous "Chair Triangle" in Udine and Gorizia. One third of all exports were in wooden seats. "Other" furniture comprising living room/dining room furniture and mixed items (occasional and accent furniture) is another major export heading for Italy.

Table 5.22 Italy: imports of wooden furniture by product group

Product Summary on Imports	%	1997	1998	1999	2000	2001	%	Index 97=100
		\$ million						
Seats cane, osier, bamboo, etc.	3	8.3	9.4	10.2	10.3	10.4	2	126
Seats n.e.s. with wooden frames	14	45.1	53.0	65.9	69.1	65.7	13	146
Wooden office furniture	4	12.2	15.7	19.8	19.7	20.3	4	167
Wooden kitchen furniture	6	18.0	20.9	25.9	23.2	19.9	4	110
Wooden bedroom furniture	7	22.9	26.2	32.9	31.5	29.4	6	128
Other wooden furniture	36	116.4	130.7	168.6	180.5	195.3	40	168
Furn. other mater. inc. bamboo	4	13.0	15.8	17.3	17.8	19.0	4	147
Furniture parts of all materials	27	85.8	100.5	118.4	122.0	128.7	26	150
Total	100	321.7	372.2	458.9	474.1	488.7	100	152

Source: COMTRADE

Table 5.23 Italy: exports of wooden furniture by product group

Product Summary on Exports	%	1997	1998	1999	2000	2001	%	Index 97=100
		\$ million						
Seats cane, osier, bamboo, etc.	0	30.2	29.5	30.8	33.8	34.7	1	115
Seats n.e.s. with wooden frames	32	2,098.3	2,053.2	2,068.0	2,088.6	2,125.1	33	101
Wooden office furniture	5	301.9	290.3	254.7	255.5	273.8	4	91
Wooden kitchen furniture	5	322.3	332.1	317.7	334.2	376.7	6	117
Wooden bedroom furniture	8	544.0	518.9	454.4	437.1	437.8	7	80
Other wooden furniture	31	1,993.1	1,980.5	1,872.5	1,807.3	1,812.7	29	91
Furn. other mater. inc. bamboo	5	333.2	307.0	285.9	315.2	347.0	5	104
Furniture parts of all materials	13	869.9	904.2	885.2	914.6	946.1	15	109
Total	100	6,493.0	6,415.7	6,169.2	6,186.3	6,354.0	100	98

Source: COMTRADE

5.2.14 Imports from developing market economies and China

Italy imported 34% of its incoming wooden furniture from the developing countries and China in 2000. By comparison, in 1996 the figure was 22%. In the major product groups of imports, Indonesia ranked very high (Nr.3) in "other" wooden furniture and in wooden seats (Nr.2) with one tenth of the both markets. Particularly in furniture parts, developing countries rank far behind the suppliers from Central and Eastern

Europe, which serve as the main sourcing region for Italy's chair and other wooden furniture production centers.

Table 5.24 Italy: imports of major product groups from leading developing countries and China

Product group	Imports 2001 (\$ million)	Major developing country suppliers	Share %	Rank
"Other" wooden furniture	195.3	Indonesia	10.2	3
		China	5.6	7
		India	4.7	9
Furniture parts	128.7	China	1.6	13
		Malaysia	0.3	27
Seats n.e.s. with wooden frames	65.7	Indonesia	10.0	2
		China	6.4	7
		Vietnam	4.0	11

5.2.15 Market segmentation and regional demand breakdown

The Italian regions variable incomes. Lombardia is by far the richest and most populated region, followed by Lazio,, Veneto, Emilia and Piemonte. These are the regions where furniture consumption is concentrated.

Table 5.25 Income of inhabitants of Italian regions – billion lira (1996)

Lombardia	280550	Marche	37274
Lazio	139163	Friuli Ven. Giulia	35052
Veneto	131419	Calabria	28811
Emilia	125474	Sardegna	28665
Piemonte	120526	Trentino A. Adige	27950
Toscana	92160	Abruzzo	27025
Campania	89061	Umbria	19339
Sicila	78899	Basilicata	9833
Puglia	68350	Molise	6158
Liguria	45633	V. Aosta	3668

Source: Istat

5.2.16 Evolution of distribution patterns

Below are two evaluations of furniture distribution in Italy. Both confirm that Italian distribution is still dominated by "traditional" distribution systems, and relatively small changes have taken place in patterns of distribution over the past years.

Table 5.26 Distribution channels in Italy 2000

Type of distributors	Share %
Specialists	84
Independent retailers	76
Buying groups	
Large scale specialist distribution	7
Other specialist channel	1
Non-Specialists	16
Department stores	
DIY stores	2
Direct sales	14
Total	100

Source: Csil

Table 5.27 Italy: Trends of furniture distribution

	1997	1999
Traditional distribution	46%	44%
Upper end outlets	15%	16%
Groups	15%	16%
Craftsmen	14%	12%
Large-scale organized distribution	8%	10%
Direct sales	2%	2%
Total	100%	100%

Source: GDO

Average number of employees per sales outlet in 1999 was 7.5 showing an increase of 4.9% compared to 1996 meaning higher concentration of distribution. Organized large distribution systems in the country are still relatively undeveloped. However modern distribution concepts are growing. These are the main sales organizations:

- Large furniture sales organization non-specialized: IKEA, Mercatone Uno, Semeraro
- Large furniture sales organization specialized: Divani & Divani, Chateau d'Ax, Ricci Casa.

According to Federmobili, this is the picture describing Italian furniture stores. Federmobili is the association of about 5000 furniture stores.

5.2.17 Indicative price levels

- Chairs in solid walnut L 45 P 45 H 103 cm price about € 180,00
- Solid wood table, 160x80x76 cm traditional style: € 452,00
- Wardrobe solid wood and glass (doors), with veneered sides, walnut color 300x 60x245 cm: € 2141,00

Table 5.28 Italian distribution system for furniture

	No. of companies	No. of stores	Avg. sales surface	Avg. employees
Traditional stores				
Small	11,755	11,755	243	2,0
Medium	3,167	3,167	1,081	4,8
Large	423	423	3,044	12,1
Store chains				
Small	1,052	3,156	746	4,4
Large	396	1,783	2,546	10,7
Franchised shops	350	350	430	3,4
Office furniture shops	149	149	272	3,7
Others	1,328	1,328	136	1,9
Total	18,620	22,111	523	3,0

Source: Federmobili

5.2.18 Transport, packaging, after sales service

With the exception of cheap furniture, generally furniture is sold on catalogues and it is often personalized (especially kitchen cabinet). Delivery is done with a specialized network of trucks. Transport from overseas is always done with containers and furniture is often knocked down in order to save on transport cost.

After sales service is considered very important by Italian consumers. This is quoted as being one of the reasons of resistance of many independent stores, which, according to consumers, give more guarantee of after sales assistance than large department stores. All furniture industries are very conscious of the fact that exporters from cheaper countries are aggressively competing in many markets, and also in Italy. Therefore Italian furniture producers are heavily investing in after sales services.

As an example, 94% of buyers of kitchen furniture demand for professional assembling, and only 6% buy RTA furniture for their kitchens.

5.2.19 Advertising and promotion

Promotion for non-branded furniture is mainly made through participation at trade shows. Another important tool is advertising on trade magazines addressed to professionals (about 100 different magazines). Promotion for branded furniture producers is quite different. The main advertising system is through specialized magazines, both for consumers (100 magazines) and for professionals (another 100 magazines). In the last few years branded companies have increasingly used daily newspapers and their weekly supplements. TV is very little used (only local TVs).

One stop purchases (purchases made at the first visit of the shop) represent about 30% of purchases, and the percentage increases in specialized shops. Buyers mostly lack of information, and depend heavily upon suggestions of sellers. Brands are not very important for buyers, with the exception of kitchen cabinets and of upholstered furniture. The choice is also influenced by new needs, such as the need of placing dish washers in kitchens, PCs in living rooms, etc.

Promotion has an incidence of about 3,9% on annual sales (1999). Incidence is higher for bigger companies and lower for smaller companies. Below is a rough estimate of investments in the different promotional channels (year 2000).

- Trade shows 45%
- Media advertising 29%
- Sponsorships 4%
- Sales store advertising 10%
- Other 12%

Source: Csil

5.2.20 E-commerce and Internet-based marketing

Internet is a growing tool for furniture advertising, but for the time being it represents a small percentage of total investment. The advertising message is mostly directed to young couples (25-50 years of age), although older couples are growing in importance.

E-commerce (Business to Consumer) is almost non-existing. Sales ought to be less than 1% of total sales. There is also widespread pessimism about the future of this tool for sales to consumers, due to the particular relationship between furniture sellers and buyers (with some exceptions of very cheap items). Other exceptions are tables, chairs and furniture with extremely strong brand image (e.g. plastic furniture of Kartel).

Some companies mentioned as a strong deterrent the logistic problems created by Internet sales: it is almost impossible delivering within one-two days personalized furniture, which represents the majority of the market. Kitchen cabinets must respect safety norms and are always personalized (sizes, accessories): impossible delivering on-time personalized kitchen cabinets. On the contrary there is a bigger market and more optimism on Business to Business sales development. At the moment most furniture industries use Internet web-pages only for publishing their catalogues. However a growing number of companies I using the Internet also for keeping contacts with sales outlets, which can make on-line personalized orders. The browser of Federmobili (www.webmobili.it) presents furniture of about 120 stores (10.000 items).

A recent investigation on Italian Internet users looking into furniture sites has found the following results:

- Internet Consumers who declare information picking before an expansive purchase is roughly 3 times higher than one year before.
- The internet user profile is of a young professional (less than 34 years old, living in large cities)
- About 850'000 people have chosen internet to select a bouquet of shops and their addresses before shopping
- Web surfers tend to prefer some types of furniture, in particular small items and day furniture

Even though generalizations should not be drawn from the conclusions of a study carried out only among the families of those purchasing household furniture in Italy, the following points are of note:

- around 2% of families (total) buying household furniture to a value in excess of 500 Euro in the last 12 months have tried to use the Internet to gather information before visiting the sales outlet;
- around 38% of families buying furniture have an Internet connection;
- the process of buying an item of furniture is rather long and complex, involving on average three visits to sales outlets, consultations with magazines and the involvement of at least another member of the family close to the actual purchaser of the furniture.

5.2.21 Case studies

Case 1. Exporting an Italian furniture cluster to Brazil

A recent agreement between an Italian regional association (Federlegno Triveneto) and a Brazilian community is aimed at creating a real “industrial district” in Brazil, imitating the districts existing in the Italian North-East.

The Italian association started from the analysis of these absolute needs:

- To find a production base with cheaper general working conditions
- To be nearer to potential markets with high growth potential

In Brazil the Association has found the following positive conditions:

- Good availability of raw material
- Reasonably skilled handwork
- Interest of local authorities
- Large potential domestic market
- Short distance to other large potential markets

Brazil was assessed in competition with many other competing countries, including China, Indonesia, Thailand, Venezuela, Mexico and others. Brazil complied best with all the selection criteria, while the other countries were missing some pre-requisites.

The Italian association identified the best possible location in Brazil. They selected the city of Uberlandia, in the state of Minas Gerais. The town has 600,000 inhabitants, and it is a good logistic area. An additional positive input is that about 50% of the local population is of Italian origin. This was deemed important because small Italian industry owners, or their workers sent to start production of the cluster firms, do not speak easily foreign languages.

A district industrial plan was prepared in terms of economic, financial, and productive parameters, analyzing several possible development scenarios. Once the potential location was identified, the association and individual companies started negotiating with local authorities and industries. This stage was supported by European Union assistance between 2000-2001.

At the end of this process 16 Italian companies, mainly from the North-East, decided to participate in the project. In the meantime, also a Brazilian industry group has been created. At mid-2002, a joint venture between the Brazilian and the Italian groups was created, for managing the first investments. The city of Uberlandia has made available one million square meters of land.

The participating companies are beginning to create a network of companies reproducing exactly the Italian network. It will include the entire supply chain from the first manufacturing process of raw material to the commercialization of finished products. Currently, infrastructure and industrial development is under way in the site.

5.2.22 Useful contacts

ISTAT – Compendio Statistico Italiano various years

ISTAT – on-line data bank: <http://www.istat.it/index.htm>

Federlegno – many publications, including: Sistema legno arredo Italiano, consuntivo economico 2000 and 2001

Federlegno – Evoluzione Congiunturale, various issues from 2000 to 2002

Federlegno – on-line data bank: <http://www.federlegno.it/>

Federlegno – Evoluzione del mobile domestico, del mobile da ufficio, delle cucine, editions 2001 and 2002

Cosmit – Grand Hotel Salone 2002

Cosmit Press releases – Schede economiche del settore mobile 2002

Cosmit Press releases – Risultati positivi nel 2001

Il Sole 24 Ore – Supplement 10/4/2002

US Department of Agriculture – Solid wood products annual reports (2001)

Gardino Consulting – many researches made in years 200-2001 and 2002, especially “The main European woodworking industries, second processing industries – edition 2002”

Csil –information to Gardino Consulting

Pambianco, Strategie di Impresa – Analisi delle maggiori imprese del mobile.

Federmobili information on the sales network at the Federmobili web-site:

www.webmobili.it

Pambianco Strategie di Impresa: web-site: <http://www.pambianconews.com/>

5.3 Denmark

5.3.1 Basic demand factors and market drivers

Economic restraints in 1998 affected consumer spending and this has discouraged spending by households through 2000/1. With inflation steady in the 2%-3% band real wages have increased to stabilize the economy in 2001 for a possible slow growth during 2002 onwards. Unemployment is relatively low at 5.4%. The Danish tax burden is high at close to 50% of GDP to ensure a degree of supply from the State of various public services of health, education and care for children and elderly. The public sector has 29% of the workforce leading to difficulties in real wage increases for consumer spending. Two-thirds of Danish trade is with the EU, giving a difficult time for these exports, but as the currency is closely linked to the euro it has depreciated to other currencies and exports to non-euro countries have increased strongly.

5.3.2 Description of domestic furniture industry

Even though Denmark is a country of three main islands, the transport infrastructure is good and rail/road access to Europe has allowed the successful manufacturing and marketing of consumer goods. Furniture is one of these successful items with strong furniture clusters working as synergetic export powerhouses.

The Danish furniture industry consists of 500 companies producing \$2.37 billion in 2001 with a workforce of 18,595 backed by a combination of advanced technology and high technical competence. Productivity is high at \$124,700 per employee. Nearly 80% of this production is exported (\$1.89 billion) with Germany as the major market. Furniture exports are the fifth largest export sector in Denmark (5% of all industrial exports, but this has declined slightly from 5.5% in 1997). Imports are \$0.7 billion suggesting an apparent consumption of \$1.18 billion in 2001.

5.3.3 Production volume

In terms of production the share taken by the product sectors over the last 5 years has changed so that seating and dining room have both declined by 20% each with office (up 31%) and kitchen production (up 9%) taking up the slack along with parts (up 11%) and other (up by 18%, mainly occasional items).

Table 5.29 Denmark: production of furniture by type

		1996	1997	1998	1999	2000	2001		Index
	%	\$ billion						%	96=100
Seating	19	0.47	0.39	0.40	0.37	0.35	0.34	16	73
Office	9	0.22	0.23	0.26	0.26	0.25	0.26	12	118
Kitchen	10	0.24	0.24	0.26	0.25	0.22	0.23	11	99
Bedroom	15	0.36	0.31	0.33	0.33	0.33	0.34	16	94
Dining room	31	0.76	0.71	0.76	0.71	0.64	0.55	26	72
Other	8	0.20	0.20	0.23	0.22	0.21	0.22	10	107
Parts	8	0.20	0.19	0.21	0.20	0.22	0.20	9	99
Total	100	2.45	2.27	2.44	2.35	2.22	2.13	100	87
Y/y change %			-7.30	7.37	-3.71	-5.36	-3.91		

Overall production (in Danish krone) has increased by 29% since 1996, but when using the deflator the figure was 15%. Within this timescale is reflected the government squeeze on consumption referred to earlier.

Converting the production figures into US dollars gives a manufacturing decline of 13% from the 1996 value with large losses in seating and dining room of 27% each. Even with depreciation of the Danish krone over the dollar at 43% taken into account, the slowing down in overall production and for these two sectors is clear and is possibly the result of the change in emphasis in some export markets, especially Germany with its currently difficult consumer climate.

5.3.4 Structure and location of industry

The main production base is Aarhus on Jutland supported by a furniture center. The industry workforce has declined to 22,600 in 1998 as technology has developed.

5.3.5 Major players

The top ten manufacturers have a combined turnover of \$0.73 billion and rely on exports of \$0.61 billion and 84% for their turnover. It is only at number eleven in size that a producer (Kvik Kokkenet) with 8% in exports reaches the home market more and is the leading brand at DKr 256 million (US\$30 million) and a 2.6% home market share. Including this firm and extracting exports gives the top-11 a 12% share of Danish apparent consumption, but only the top four home market suppliers are strong enough to be shown.

Table 5.30 Denmark: top-11 furniture manufacturers

	Turnover	Domestic sales	Rank	Share of exports
	DKr million			
Tvilum-Scanbirk	2.052	239	No 2	90%
Club 8	701	87		87%
Fovling	562	63		88%
Comad	465	195	No 3	58%
Kvadrat	464	65		86%
Fritz Hansen	433	124	No 7	71%
Scancom	387	60		84%
Flexa Mobler	351	41		83%
Licentia	335	40		87%
Kjellbergs	309	18		94%
Total Top-ten	6.059	1.188		84%
Kvik	278	256	No 1	8%

5.3.6 Quality standards and certification and labeling requirements, environmental management systems

Trade regulations, Customs and Standards are simple and non-trade barriers mainly absent. Within the EU, all tariffs and barriers are down and the EU external policy applies for most non-EU trade. A 25% value-added-tax (VAT) is applied goods, whether imported or locally produced. The clearance of goods through customs and payment of duties (including the 25% VAT) on entry in Denmark and other EU countries are the responsibility of the importer or freight forwarder. An original commercial invoice from the exporter/factory always required for the clearance of the goods through customs.

Labelling and marking needs for the items at retail require information on country of origin, type of product, material, finish and quite often an EN standard, even a CE mark, for selected items such as child furniture and some types of contract seating according to EU regulations and directives. The purpose is to replace and harmonise national laws and allow free movement within the EU. Responsibility for these falls on the importer, although it is often easier for items and the outer packing to be fully labelled with the correct detail prior to loading and shipping. Most store groups dealing directly are fully aware of this and ensure all entry requirements are covered as a part of the order and supply process.

5.3.7 Furniture market: foreign trade and apparent consumption

Pine products, once a strong contender across Europe in bedroom and dining room items is finding it harder to compete with East European country sources in the Euro area, but is succeeding in the UK market. In terms of US\$ exports have been quite static for the last two years, and are 7% lower than in 1997. Imports are 31% higher but have remained flat for three years. Dining room items (inside "other") account for a quarter of exports and bedroom a fifth, with seating at 11% and office furniture increased to 9%.

Trade balance was heavily on net export side, with \$1.05 billion surplus in 2001. It had slightly narrowed from 1997 (\$1.27 bill.) because of stagnating exports and increasing imports.

Table 5.31 Denmark: imports of wooden furniture by product group

Product Summary on Imports	%	1997	1998	1999	2000	2001	%	Index 97=100
		\$ million						
Seats cane, osier, bamboo, etc.	3	11.8	12.4	8.9	6.0	5.9	1	50
Seats n.e.s. with wooden frames	27	93.3	111.5	109.1	107.6	117.3	26	126
Wooden office furniture	5	16.4	28.3	40.2	34.0	33.6	7	205
Wooden kitchen furniture	2	7.9	11.0	13.4	11.7	9.7	2	123
Wooden bedroom furniture	6	20.3	36.9	36.5	35.9	36.6	8	180
Other wooden furniture	33	112.0	147.2	137.7	125.0	125.0	28	112
Furn. other mater. inc. bamboo	2	6.6	8.5	7.8	6.4	5.1	1	77
Furniture parts of all materials	22	74.8	91.1	117.1	111.3	117.9	26	158
Total	100	343.2	446.9	470.6	437.9	451.1	100	131

Source: COMTRADE

Table 5.32 Denmark: exports of wooden furniture by product group

Product Summary on Exports	%	1997	1998	1999	2000	2001	%	Index 97=100
		\$ million						
Seats cane, osier, bamboo, etc.	1	8.3	8.9	7.4	3.0	2.9	0	35
Seats n.e.s. with wooden frames	9	145.3	149.9	140.7	140.3	166.7	11	115
Wooden office furniture	7	109.8	136.6	139.0	146.9	137.4	9	125
Wooden kitchen furniture	4	60.1	66.9	83.8	82.3	87.5	6	146
Wooden bedroom furniture	24	387.5	428.9	411.3	399.3	404.3	27	104
Other wooden furniture	48	776.9	776.7	686.4	631.6	603.2	40	78
Furn. other mater. inc. bamboo	0	5.6	5.6	5.5	2.8	3.9	0	70
Furniture parts of all materials	7	119.9	108.5	105.8	89.1	97.4	6	81
Total	100	1,613.4	1,682.0	1,580.0	1,495.2	1,503.3	100	93

Source: COMTRADE

"Other" furniture (living/dining room, small-occasional) has a 28% share of imports, before seating and furniture parts (both 26%), indicating the need to use parts for pine and beech furniture. Imports from developing countries go for the home market like dining room sets and outdoor garden furniture (teak about 85% of the visible items in this sector, the rest being pine and painted items). Also, onward transit takes place to European retailers through wholesalers such as Solo (www.solofurniture.dk), which carries out containerised trading based in Vejle from Indonesian sources.

The consideration of the Danish figures indicates an apparent consumption and home market for Danish consumers of Dkr 9.8 billion (\$1.18 billion) in 2001. How this has changed and the shares taken by each product group is important for marketing. Direct indications show a strong home market for seating, office, kitchen and dining room but a negative market for bedroom.

5.3.8 Imports from developing market economies and China

Around 23% of Denmark's wooden furniture imports originated from the developing countries and China in 2000. The figure has lowered by one percent point since 1996. It appears that Vietnam has found a market in Denmark, because the country appears the second largest developing country supplier (after Indonesia) in the two key product groups. In "other" wooden furniture, Indonesia ranked the second largest supplier (12.7% of total) and Vietnam the fourth (6%). In wooden seats the market shares were roughly a half smaller and ranks fell to six and seven. In furniture parts, which is of growing importance to Denmark as a big re-exporter, Indonesia again ranked well on the sixth place but with a small 3% market share. Denmark's neighboring countries in Europe capture much of that trade.

Table 5.33 Denmark: imports of major product groups from leading developing countries and China

Product group	Imports 2001 (\$ million)	Major developing country suppliers	Share %	Rank
"Other" wooden furniture	125.0	Indonesia	12.7	2
		Vietnam	6.0	4
		China	3.9	9
Furniture parts	117.9	Indonesia	3.3	6
		China	1.4	14
		Thailand	0.5	21
Seats n.e.s. with wooden frames	117.3	Indonesia	6.8	6
		Vietnam	3.1	7
		Thailand	1.8	11

5.3.9 Favored wood species and finishing techniques

The conversion of imported parts in this sector and the widespread use of sheet board with painted, veneer and laminated surfaces, plus the use of glass and Perspex fronts has resulted in recording anomalies. Production for export tends to be in pine, beech and oak solid wood items, often of RTA boxed sets that do not find ready markets in Danish homes.

5.3.10 Furniture style and design trends

According to the Danish Furniture industry association trend survey for 2001/2, simplicity is the key trend in lifestyle products linked possibly to the need for relaxation. The feel of the 50s and 60s in cool nostalgic Mediterranean hazy days and ideas of past pleasures suggests bright colours on small items and offers sandy urban neutrals as background to off-set the steel/silver effects found with many kitchen surfaces. Possibly this is a reaction to the current 'blond' range of furniture items in

birch, beech and light oaks with little recognition of the darker woods and finishes so popular in this market of 30 years ago.

An improvement in consumer expenditure is leading to a firm market as this year progresses. Retailers are using promotional plans to gain customers and are seeking ways of making the home concept desirable. The use of design in many retailers and the presentation of rooms sets in clean clear lines with colour coordination helps to meet the market needs. The 'blond' colours of previous years have given way to pastels and various muted shades, which in due time will revert back to darker colours.

Outdoor living is strong for 3 months of the year and garden furniture offers scope for development as designs change to meet surroundings. With 80% of production aimed at exports, trends are viewed from international magazines, imports and advertising. The remaining manufacturers tend to be insular and work with retailers and own factory outlets for the consumer. Buying groups and discount retailers are open to good design and keenly priced quality products that can be competitively sourced to meet their relatively small home market.

5.3.11 Evolution of distribution patterns

The Retail Market

The retail market is assessed at Dkr 18.4 billion (US\$2.21 billion) in 2001 and including VAT at 25% with the top ten stores taking 62% of the sales. Of these IKEA is by far the largest branded chain with 4 stores, 7% of the market and an average of Dkr 321 million (US\$38 million) per store, although some of the stores are small 'city' outlets. In the Danish market IKEA is classed as a discount store, as is Ilva, an out-of-town furniture centre offering a wide range of local and imported items. Buying groups offer the most scope for coverage with 115 stores and 13% of the retail market.

The breakdown of the Danish retail sector is not clear as a number of the buying groups are also duplicated within chain stores and department stores with DIY centres taking furniture amongst their sales.

Buying Groups	13.2%
Chain stores	2.6%
Discount stores	14.5%
Department stores	3.0%
DIY	28.8%
Kitchen/bedroom	
Specialists	18.7%
Total	80.8%

Some examples of Retail store turnover and contact points.

Buying Groups for regular furniture

Outlets	Turnover (DKr million)	Web-site
---------	------------------------	----------

Ide Mobler*	42	1413	www.ide.dk
Dan-Bo Mobler	34	734	www.danbomobler.dk
Mobelkaeden	35	260	www.moebelkaeden.dk
Edel's Design Mobler	4	33	Tel: 4738 5150
Total	115	2440	(13.2%)

Chain Stores

Leo Jacobsen*	3	part of Ide mobler	www.ide.dk
M. Aleandersen*	3	part of Ide mobler	www.ide.dk
Smag & Behag	34	470	www.smagogbehag.dk
Total	34	470	(2.6%)

Discount Stores

IKEA	4	1285	www.IKEA.dk
Ilva	3	772	www.ilva.dk
Biva Mobler	31	192	www.biva.dk
Hansen Mobler	6	175	www.hansen-mobler.dk
Trip Trap Traestudie	8	68	www.triptrap.dk
Trae Design	11	70	-
Drommeland	7	62	www.droemeland.dk
Dux Industrier	5	40	www.duxiana.dk
Total	73	2664	(14.5%)

Department Stores

Ide Mobler			
Illums Bolighus			www.royalshopping/dk
Meak Mobeleentre			www.Mek.dk
Daells Bolighus			www.daells-bolighus.dk

DIY Stores

Bauhaus Danmark	9	1300	www.bauhaus.dk
Harald Nyborg	14	835	www.harald-nyborg.dk
Jem&Fix	41	747	www.jemogfix.dk
Silvan Kaeden	38	2300	www.damsketraelast.dk
10-4 Byggecenter	7	132	www.10-4.dk
Total	100	5314	(28.8%)

Seven main outlet chains or buying groups exist for kitchen, bath and fitted bedroom furniture. A number of these are franchised and able to stock competing brands, others (marked with * below) are factory owned studios dealing directly with the public offering designer, planning and fitting services. In their retail turnovers are accessory and appliance sales.

Kitchen/bathroom/fitted bedroom studios

	Outlets	Turnover (DKr million)	Web-site
HTH Kokkener	41	1550	www.hth.dk
*Kvik Kokkoenet	41	545	www.kvik.dk
Svane	25	430	www.svane.dk
*Invita	38	400	www.invita.dk
Biga	36	220	www.biga.dk
*Vordingborg	16	165	www.vordingborg.dk

Skab Selv	25	130	www.skabselv.dk
Total	222	3440	(18.7%)

In Copenhagen a particular street (Gammel Kongevej) is well known for its furniture outlets. Present are a large Ide Mobler chain store**, an upmarket designer store Bo-Concept** (with Club 8), Living Room** as amid-price range store, and a wide range of kitchen showrooms with Danish (Multiform, Invita, Svane), and imported kitchen and seating franchises, some of them branded. Some branded European kitchen studios are Boffi, Poliform, Alno, Siematic.

The Bella Center has a permanent display of Danish furniture producers' items and the annual trade show. Ilva Ishoj**, a major competitive store to IKEA, is at Industrial zone 10, close to the airport with two stores, one each on the islands of Arhus and Lyngby. Their 163 page catalogue features a full range of furniture items and offers delivery and easy credit payments with their own in-store credit card. Arranged in room settings, but with a special area for fitted bedrooms, tall robes and kitchens, the 16,000 m² store is well presented for day-long browsing and comparison with an IKEA** close-by. Brand include Club **, Beds4kids.

*(Note: ** all these stores have well-presented annual catalogues with clear pricing)*

5.3.12 Indicative price levels

A large garden centre at Roskilde (www.plante.dk) advertises end-of-season sales for a wide designer range of wood garden seats and tables from \$360 down to \$234 for a bench, 2 seat and 2 metre hardwood table set; \$78 for the bench; \$312 for curved 3 seater teak bench; \$140 for a teak octagonal table and \$54/\$62 for various teak chairs.

Weekly information for public purchases is issued by Statens og Kommumernes (www.SKI.dk) as a part of the government service for all orders over DKr 200,000. This is for most furniture items of contract use for any government and local commune use. In most cases the type, sizes, standards and material details of the items will have been specified by the architect as these State and Business projects are always architect driven, whether new or for refurbishment. In some case where the DS/EN standard for use is insufficient or some deviation from the norm is required then the Ministry of Labour may issue an 'A' certificate and require Danish standards to apply (www.ds.dk). In private houses and apartments often an architect or designer is hired to make best use of their skills, mainly from a designer studio with links to factory sources. The major stores of Ilva, Bo-Concept and studios plus most of the kitchen studios offer these services for all types of furniture and fittings. The cost is a factor as 25% VAT is charged on design services and the discount factor comes into play to offer a reasonable 'all-in' price for design and product to the consumer.

5.3.13 Advertising and promotion

Advertising expenditure during 2000 reached \$25 million with the strongest spend (35%) in newspapers, usually on Sunday and in colour monthly furniture supplements. TV accounted for 25%, although kitchen brands used this as the strongest medium, although radio advertising is important to reach consumers.

Retailers account for 55% of all media spend with newspapers as their strongest share at 35% followed by radio at 24%.

The largest expenditure of 22 retailers was Ide Mobler (\$3.2 million), Ilva (\$1.21 million) with Jysk third (\$0.76 million). Other retailers spending below \$125 thousand accounted for 27% of advertising. The strongest of 14 kitchen brands were HTH (\$2.5 million) and Kvik (\$2.3 million) and in 33 suppliers Dux, as bed/mattress producers spent (\$0.26 million). In addition are four 'Furniture Sundays' throughout the year in Jan/March and Oct/Dec.

Table 5.34 Denmark: media expenditure on furniture advertising

Sector	DKr mill.	%	MAIN MEDIA (% FOR EACH SECTOR)				
			News-paper	Radio	Maga-zines	TV	Leaf-let
Manufacturers	16.8	8	13	3	76	2	*
Kitchen Brands	74.3	36	22	7	15	39	7
Retailers	114.1	56	35	24	7	15	14
TOTAL	205.2	100	35%	18%	11%	25%	12%

Source: Gallup Adfacts

5.3.14 E-commerce and Internet-based marketing

Association of Danish Furniture Industries, Center Boulevard 5, Bella Center, DK-2300 Copenhagen. (www.danishfurniture.dk) plays a central role in promoting the Danish furniture industry. It ensures that awareness of the industry is world-wide and prepares a wide range of detail for prospective customers. A manufacturers index allows contact directly with 200 on-line manufacturers and exporters with home pages or info-sites. Twelve different product categories are available. The association accounts for 90% of all Danish production with 320 companies plus designers and sales companies, as these are well-known throughout the world and an access point for their skills for commercial and contract items is important.

5.4 Sweden

5.4.1 Basic demand factors and market drivers

The growth in the economy has been stronger recently allowing Sweden to number eight in the OECD table of GDP per capita at \$25,800. The recent September 2002 election saw the same government returned with a high personal tax policy for strong social services and investment indicating that the economy is set for continued growth along this path. This should benefit the consumer as seemingly a greater proportion of disposal income is becoming available as prices are kept low and inflation is under control. More of the workforce is employed rising to 47% in 2000 from 45% in 1995 making a further 130,000 in employment. New dwellings have increased, but the expenditure on refurbishments has declined over the last few years. GDP has increased by 35% since 1995 at current prices with consumer expenditure up a smaller 22%. Even so within that figure food costs have declined and allowed other items to take a stronger share of expenditure.

5.4.2 Description of domestic furniture industry

Little detail is known about industry sectors beyond the breakdown below.

Industry product sectors Percent of market.

IKEA	19%	
Office (home & office)	26%	(includes 5.7% of IKEA office furniture)
Home traditional	12%	
Beds	10.5%	
Interiors	10.5%	
Sub contract	10.5%	
Designer for home	4.2%	
Designs for public buildings	3.7%	
Traditional public buildings	3.7%	

Source: SMI

5.4.3 Production volume

Swedish furniture production was assessed at nearly SEK 18 billion in 1999 (\$2.2 billion) with an increase to SEK 19.5 billion (of 8.3%) in 2000 (contracted in US\$ terms to 2.12 billion). Not much of a change was reported for 2001, according to the statistical office.

5.4.4 Structure and location of industry

IUC, the research and industry base in Tibro (www.iuctibro.nu), was founded in 2000 and has developed from the TFM organisation for the Tibro furniture manufacturers. Tibro, near the city of Skovde in Mid-Sweden is the furniture centre of Sweden with 75 companies and 100 workers. The region boasts an IKEA factory (Swedwood for kitchen furniture) and a major distribution centre for the industry in Sweden. (LBC Sweden – www.lbcsweden.se).

Also in Tibro is the key distribution base for LBC Sweden with coverage across Scandinavia and Europe, plus links to the US markets. Tel: +46 504 401 00. Fax; +46 504 401 01. Email: info@lbcsweden.se.

The Swedish Furniture Industry Association (SMI) based in Stockholm comprises over 115 companies and 60% of the country's production or SEK11.7 billion. A fortnightly published newspaper is published for members, along with press releases for the export business and statistics for the industry. Mobelfakta, the voluntary reference and quality system for home furniture, kitchen furnishing and contract furniture is a part of the organisation. It uses stringent testing and documentation against Swedish and European standards to approve manufactured products in the markets.

5.4.5 Furniture market: foreign trade and apparent consumption

According to COMTRADE data, Sweden had a trade surplus of \$270 million in wooden furniture in 2001. While imports were up 9% since 1997, exports have come

down 13% mainly due to big decreases in office, kitchen furniture and wooden seats. Kitchen furniture imports grew at the fastest pace (31%) over the five-year period.

Table 5.35 Sweden: imports of wooden furniture by product group

Product Summary on Imports		1997	1998	1999	2000	2001		Index
		\$ million						%
Seats cane, osier, bamboo, etc.	1	2.8	3.1	3.1	2.8	3.4	1	121
Seats n.e.s. with wooden frames	27	116.9	133.7	143.0	152.0	138.1	29	118
Wooden office furniture	4	16.8	18.3	15.4	16.8	19.0	4	113
Wooden kitchen furniture	4	17.5	21.5	21.5	23.6	22.9	5	131
Wooden bedroom furniture	8	33.2	36.0	38.1	35.1	23.9	5	72
Other wooden furniture	37	164.9	173.8	201.9	188.4	176.8	37	107
Furn. other mater. inc. bamboo	1	5.1	4.5	4.7	5.6	6.4	1	125
Furniture parts of all materials	19	83.5	93.3	104.0	98.3	90.5	19	108
Total	100	440.7	484.3	531.8	522.6	480.9	100	109

Source: COMTRADE

Table 5.36 Sweden: exports of wooden furniture by product group

Product Summary on Exports		1997	1998	1999	2000	2001		Index
		\$ million						%
Seats cane, osier, bamboo, etc.	0	0.6	0.5	0.5	0.6	0.8	0	136
Seats n.e.s. with wooden frames	13	107.3	112.5	100.7	99.4	86.6	12	81
Wooden office furniture	19	165.6	184.8	147.3	140.8	105.3	14	64
Wooden kitchen furniture	8	65.8	57.4	57.9	52.6	49.7	7	76
Wooden bedroom furniture	5	42.4	42.2	48.4	53.7	38.9	5	92
Other wooden furniture	32	273.1	300.8	299.7	297.6	272.4	36	100
Furn. other mater. inc. bamboo	1	4.9	4.5	3.8	4.3	4.3	1	87
Furniture parts of all materials	23	198.1	215.4	239.3	234.5	192.1	26	97
Total	100	857.9	918.1	897.6	883.4	750.0	100	87

Source: COMTRADE

With total exports (furniture of all materials) at SEK 11.1 billion in 2000 (\$1.21 billion) and imports at SEK 8.0 billion (\$0.9 billion) the apparent home consumption is SEK 16.4 billion (\$1.8 billion). These trade figures are higher than in table above, which feature only wooden furniture. Apparent consumption increased by 112% as imports increased and exports decreased slightly (all in SEK currency).

Much of this change in external trade was probably the result of decisions by IKEA in its method of distribution and handling of furniture into its European stores. The growth of IKEA owned manufacturing facilities in East Europe during the 1990s and of items sourced from client factories throughout the world has seen a change to direct delivery of containerized product to IKEA distribution centers based across Europe, rather than the centralized situation based on Almhult in Southern Sweden. This external movement of furniture items will not be recorded in the Swedish trade figures and thus the country trade figures are more likely to imply a more regular trade within Sweden that is less accountable to the IKEA retail values of nearly \$10 billion world-wide.

Notwithstanding the trade balance changes, the apparent consumption at trade prices has improved as the country finances and spending power strengthened in the last few

years by twenty percent to release more consumer spending. At least part of this growth found its way into spending on furniture and floor-coverings as that share of consumer expenditure increased from 4.4% to 4.8% in 2000. This relatively small increase of nearly 10% in spending has resulted in growth in the turnover of the major retail furniture stores and selected buying groups and a change in their attitude to merchandising.

5.4.6 Imports from developing market economies and China

Around 16% of Sweden's total wooden furniture imports came from developing market economies and China (12% in 1996). In major product groups imported, China, Indonesia and Malaysia appeared as biggest suppliers from the DMEC, but their market shares were between 1-4% only. They ranked among the ten most important sources in wooden seats, and China also in furniture parts and in "other" (living/dining room, small-occasional) wooden furniture.

Table 5.37 Sweden: imports of major product groups from leading developing countries and China

Product group	Imports 2001 (\$ million)	Major developing country suppliers	Share %	Rank
"Other" wooden furniture	176.8	China	3.7	10
		Indonesia	3.6	11
		Malaysia	1.7	15
Seats n.e.s. with wooden frames	138.1	Indonesia	4.1	7
		China	3.7	8
		Malaysia	2.2	11
Furniture parts	90.5	China	4.0	8
		Malaysia	1.2	20
		Thailand	0.9	23

5.4.7 Furniture style and design trends

In terms of styling the Swedish look is clean and often compact in appearance with firm functional seating, clean lines and a modern view on how furniture should present itself to the home. It presents simple appreciation of visual effects, backed by a quality of workmanship, design and innovation, according to the SMI.

Leather coverings has strong market in muted colours. Not cluttered, multi-coloured or flowery in fabric, but strong use of single colours, metal supports and visible metal surrounds rather than wood, although where wood is used it is often fabricated into bentwood and laminated frames. Light coloured woods are found throughout the house in bedroom, dining and occasional cabinet items with the kitchen still strong for wood doors/drawers as opposed to the European metal look further south. Direct advertising from the UK, Denmark, Italy, Germany, Holland and France is featured in the magazines for kitchens, dining/living ranges in traditional and reproduction styles.

5.4.8 Evolution of distribution patterns

The importance of retailers in Sweden is typified by the amount of detail given for annual sales. The details are produced each August by Mobler & Miljo, the trade magazine. According to sources the retail value of sales is SEK 32 Billion (US\$3.1 billion) in 2001 with no change from 2000. The top 100 stores account for 46.8% of this amount. With a clear 20% accounted for by contract and public buildings and a further 10% by interior designers, that leaves some 23% for the other retailer outlets, DIY stores and direct sales either from the factory or by catalogue.

A review of the top 10 stores shows the sheer strength of IKEA in the marketplace and thus the effect it has on Swedish home style and type of furnishings. IKEA is the largest retailer with half of the market and 13 stores. This leaves the remaining stores and buying groups to carve a different route to gain consumer acceptance as price competitiveness for similar items cannot be an issue. Designers and design stores are a strong part of this market and their export trade. Companies such as Galleri Stolen (www.galleristollen.se), Ifrom (www.iform.net) with 2 showrooms, Swedese (www.swedese.se) with 3 showrooms, one in each of the Scandinavian capitals, Offecct (www.offecct.se) and Kallemo (www.kallemo.se) with 2 stores. All are featuring new ideas for chairs, laminated wood, office, contract and the home sectors

Top 10 furniture retailers, taken from Top-100 (Source: Mobler & Miljo) (SEK billion)

Retailer	2001	2000	1999	1998	2001/00 % change	Outlets	Turnover % top-100
IKEA	7.82	7.56	5.5	5.1	3.4	13	51.8
Jysk Baddlager	1.90	1.66	1.4	1.3	14.8	101	12.6
Skeidar Mobler	..	0.51	0.55	0.65	..	(10)	3.3
Stalands Mobler	0.27	0.26	0.21	0.15	2.2	6	1.8
Bro Mobler	0.17	0.18	0.17	0.16	-3.7	5	1.2
Erik Tiberg	0.17	0.18	0.17	0.16	-3.7	3	1.2
E18 Gruppen	0.17	0.15	0.14	0.15	13.3	4	1.2
Sangjatten	0.12	0.12	0.09	0.05	-0-	9	0.8
Mobler och Stodj	0.12	0.11	0.09	0.08	9.0	2	0.8
R.O.O.M	0.11	0.11	0.09	0.08	-0-	2	0.7
Bromolla	0.11	0.12	0.12	0.11	-8.4	3	0.7
Top 100 Total	15.09	15.10	12.6	11.2	-0.1	195	46.7*
% change y/y	-0.1	19.8	12.5	-			

*Top-100 retailers as a percent of apparent retail market at SEK 32 billion.

The major buying groups (below) are important as they held their shares in 2001 to represent 29.7% of the top-100 for the last two years (compared to 34.1% in 1998). It is worth noting that the total number of outlets for buying groups is larger than the number of outlets for the Top-100 stores.

The largest buying group is Mio with 70 outlets and an 11.9% share of the Top-100 stores and one-fifth the size of IKEA with 13 stores. Mio achieves \$250,000 per outlet with Europa Mobler, the Europe-wide group has 7.9% (SEK 1.2 billion or US\$116

million and \$200,870 per store) and the Svenska Hem as third at 7.6% and \$272,300 per outlet. IKEA achieves sales of \$759 million and \$58.4 million per store.

Top group/chains

Retailer	2001	2000	1999	1998	2001/00	Outlets	Turnover % share
AB Mio, Tibro	1.80	1.78	1.70	1.56	0.8	70	11.9
Europa Mobler	1.20	1.24	1.06	1.11	-2.8	58	7.9
Svenska Hem	1.15	1.20	1.09	1.00	-4.2	41	7.6
Mobelmastarna	0.32	0.27	0.17	0.15	21.0	27	2.1
Total	4.48	4.49	4.02	3.82	-0.3	196	29.7*

Percent of Top 100 29.7% 29.7% 31.9% 34.1%

% change y/y -0 11.6 5.2 -

* percent share of Top 100 stores.

Mio is the second largest furniture group in Sweden selling nearly SEK 2 billion (including VAT at 25%) and taking a 15% share. The 70 Mio stores are managed by entrepreneurs, many with franchise agreements, with ten company run units. Central buying, showroom, studio and warehouse are located at Tibro. Working with 150 suppliers, of which 30 supply over 80% of the product range and 50% comes from imports, Mio uses designers in Sweden and overseas to create the collections. In keeping with this design image, Mio ensures that the home and room decor can be coordinated by the customer with the use of key numbers and wall swatches on each room-set. A brochure presents a series of colorways linked directly with the furniture fabrics and backgrounds created by the designers and shown as room-sets in the stores. During 2002/3 four colour collections have been created to complement the furniture displayed.

To continue the growth of Mio, it is planned to link with Bo Concept (Club 8) from Denmark and convert some stores to designer boutiques as that group expands internationally. The concept is high-quality well-designed contemporary furniture to people who have modern values. This is expressed in the company brochure designed for the press and investors

5.4.9 Advertising and promotion

Consumer magazines play a strong part in the advertising of furniture and the home design concepts. Four monthly magazines are important and cover architects and the home (German language with English and Italian summaries: www.architektur-und-wohnen.de), inspirations, home and home specials (in Swedish only, Hus&Hem – www.husohem.se).

As an example, Mio stores uses a full range of media to reach the consumers with regular TV slots in spring and fall, newspapers covering the monthly buying periods and catalogues delivered in August to reach homes as the tax rebates become due each September. Their customer database uses direct mail and regular contacts for product launches backed by strong press relations and a web-site. The full-colour 188 page catalogue is fully priced for items and sizes, plus store and order details.

5.4.10 Case studies

Case 1. IKEA: a global retailer

Globally IKEA operates 154 stores in 22 countries, has 260 million customers and sells most things to do with comfort and use in the home. A further 21 stores are owned and operated by franchisees outside the IKEA Group 13 countries/territories. IKEA Trading is represented in 33 countries and works with 1,800 suppliers from 54 countries. Overall 70,000 co-workers (the term used by IKEA for its workforce) are said to be using a code of conduct for working conditions and the environment.

The business at retail

IKEA Group is privately owned and started in Amhult, Sweden in 1958. The operation started as catalogue selling for a range of small gift items before flat-pack tables were introduced in 1956. The group headquarters is now in Delft, Holland with marketing placed in Helsingborg, Sweden and the core operational part of the business in terms still based at Almhult, Sweden. Distribution centres are placed strategically in countries and regions to handle product from over 2000 suppliers in 55 countries for the existing stores and the expansion planned for the ever-growing number of stores world-wide. It is said that 260 million people visited IKEA stores in 2001. In 2002/3 a commitment to good design, called 'demographic design' aims to offer the widest product range at the lowest prices. One target is to be significantly lower in price than the competition – possibly up to 40%.

Future growth in Russia and China is looked upon favourably as the chain seeks wider world markets and understands the need for good simple designs in houses and flats that may be cramped and yet need furniture for modern living, hence the 'Go-Cubic' look concept designed to meet differing housing conditions.

World turnover was €10.4 billion (\$9.6 billion) in the year ending August 2001, a 9.4% increase on the previous year. Currently Europe takes 80% of turnover, North America 17% and Asia 3%. Germany is the largest market at 21% of world sales with the USA next at 13%, the UK the third largest market with 12% of global sales, France 9% and Sweden 7%. In its "home" market, Sweden, IKEA has only 13 stores but it takes 55% of the furniture retail value.

Unusual for IKEA was the purchase of Habitat the UK store group, bought by IKEA in the 1990s but run separately. Habitat may be devolved soon as the two concepts are found to be different, although for 25 years Habitat was looked upon as a close competitor, at least from the design viewpoint.

IKEA is said to be planning for 50 more stores in North America over the next 10 years, 9 in 2003. If so, then IKEA will have 74 stores with sales of the furnishing business at \$3 billion. Currently 7th in the US for furniture sales, IKEA generated \$690 million at 15 stores to mid 2001, a 25% increase over 2000.

Canada sells C\$359m in furniture and C\$677m for the store group as a whole and is the country's third largest retailer of furniture and bedding. The 11th store in Canada and the fourth for Toronto will join London and Paris to have 4 metro-centres each

and hence the opportunity here is to test new display concepts. This fourth metro Toronto store will test a new coordinated room-setting concept to present product in the way people live rather than the showroom and market sections of a typical store. In Canada its target is C\$100 million in year 1 and C\$150m the next from over 1.7 million customers. Should this work a second test store will come in Holland and could be rolled out into the world chain of 167 stores in 30 countries.

As an example of country growth IKEA in the UK generated sales of £800.9 million, up 7.6% from 10 stores in the year to August 31 2001. Operating profits climbed 13.6% to £169.3 m and the operating margin was boosted to 21.14%. Average prices were cut 3% even though this was the slowest sales growth as previous annual growth saw sales up by 27% or more as the chain expanded. An increase in perception of the company giving value for money reflects the price reductions. In 15 years the company has established itself as the largest and most profitable furniture and furnishings retailer in the UK. Eleven stores are open in the UK (Glasgow was the latest in Sept 01) with Southampton approved and others planned for Edmonton, north London, Stockton plus applications lodged for Cardiff and Sheffield. The stores take 10-11 months to build and a further nine are planned. Each store employs 500-600 people with occupations such as carpenters, interior designers, chefs, office workers and floor staff – with over 6000 in the UK alone.

Some IKEA company operations

Swedwood is the manufacturing arm of IKEA making a wide range of furniture products from 33 company owned factories and sawmills in 10 countries mainly in East Europe. The unit in Almhult deals with kitchen ranges, whilst others in Poland and east Europe cover pine products, beech and birch items in solids and veneers often with particleboard and MDF structures. Textile factories in Turkmenistan supply upholstery fabrics whilst others deal in plastics, glass and metal, many for furniture. Teams from the 40 Trading Service offices in 33 countries travel the world in search of efficient and cost-effective factories, many in developing and some war-ravaged countries, which can be urged to get back into manufacturing. All are asked to improve to make agreed volumes of suitable products over strict time, quality and cost parameters whilst using that opportunity to improve their workforce and benefit that community.

Modul Service AB

This is the international wholesaler in furniture fittings with the head office in Almhult and new units in China and Slovakia. Modul is a subsidiary of IKEA, has 270 workers and a turnover of SEK 750 million. It started in 1986 to supply IKEA with items associated with the need to fit stores and carry out repairs, but during the mid-90s Modul developed into a wholesaler for furniture fittings and electrical components, reinforced by increased packaging requirements and product development. Modul is in competition with normally sourced fittings suppliers and shows the way to cost efficiencies in these items to furniture manufacturers working for IKEA. The market share of IKEA (Modul) fittings used is 54%. Current capacity at Almhult is 20,000 pallet spaces producing 50 million bags for the IKEA RTA kits. The majority of the fittings are sold in hardware kits, assembled at the plant and packed by the full automatic machines. Drawer runners, slides and larger items are

packed separately. Great care is taken to ensure the precise numbers, sizes and quantity of packed items coincide with the IKEA assembly instructions for each outer product pack to ensure a perfect item of furniture sold to the customer. Since 1998 an Asia office dealt with purchasing and selling and now a new factory in Shenzhen, China will supply IKEA manufacturers in that region.

IKEA Quality Assurance requires a series of testing procedures that are a mix of IKEA's own demands for durability, design and usage and those of statutory standards across the world for safety, environmental, materials and product markings. The laboratory in Almhult is the key to this during the design process and prototyping stages, backed by the use of approved Testing Centres around the world to ensure a credible series of product usage tests can be made without excessive transport of testable product to Sweden. Some additions to adverse customer reaction has seen the group responding to specific difficulties in a plan to keep sales improving as the store group expands. Waiting times seem to be the most aggravating aspect and new systems have been brought in to speed this flow. Further IKEA company growth saw the setting up in 2001 of IKEA Rail to handle goods transportation. IKEA packaging for the making and handling and reuse of consumer packing, store delivery packing systems, euro-pallets, consumer packing and any cleaning up systems needed to save costs in-store and with disposal. Distribution and logistics is naturally a further topic for close management control and scrutiny with their numerous centres, ordering and purchase functions necessary to coordinate this international business.

IKEA Design

Backing this is a design theme for 2003 – Go Cubic - to make use of the whole room and not simply the floor-space. Five product groups feature this view with space savers, double taskers, modular solutions, mobile solutions and 'high' performers. Many of these are a part of the Swedish IKEA theme for the next 12 months.

Kungens Kurva, the IKEA store in Stockholm has been refurbished in this manner. It is the world's largest IKEA store, attracting more than 3 million visitors a year to the selling space of 8,000m² for furniture, 7,800m² for self-serve and 6,200m² for the furnishing accessory shops. With parking included, the total area is 56,000m² in four floors containing eleven complete homes ranging from 22m² to 111 m² in size. The store has 22 room settings, including 5 teenage rooms, 2,000m² to Children's IKEA, nine offices and twelve kitchen displays, and of course 500 seater restaurant, according to the July 2002 edition of 'Read Me', the IKEA in-house magazine published 4 times a year in 15 languages. The magazine also highlighted the adverse customer reaction research that has seen the group respond to specific difficulties in a plan to keep sales improving as the store group expands. Waiting times seem to be the most aggravating aspect and new systems have been brought in to speed this flow.

IKEA New Ideas

Two new manuals for Selling in Showroom and Selling in the Market Hall are from Inter IKEA Systems BV based in Delft, Holland. Backing these is a new manual for Marketing The IKEA Way (IWAY) is targeted at the retailer to show how they can successfully market the company Concept. Store communication techniques for in-store promotion and the surrounding access roads can be looked at in IKEA Toolbox,

where these and other manuals can be ordered. IKEA Marketplace is being developed for an on-line launch in January 2003. This will be a communication platform for IKEA, for their suppliers and for subcontractors. It will be used to invite tenders and suppliers will be able to reply online. The objective is to reduce purchasing prices for the factories, boost cooperation and offer routes to win a process-orientated flow to ensure good stocking policies and delivery to the store. Simplification of paperwork flow in the purchase sequence is a bonus.

A trial for internet and mail order is underway in Scandinavia to be ready not only in processing but in picking orders from that warehouse and dealing with returns, damaged goods and transport for delivery. Over 110 million catalogues are issued in at least 34 languages and feature a core of similar products, which with the prices printed allows for the most cost-conscious price comparison exercise the world can know today at a suggested production cost of SEK 80 million.

Different buying sections exist for each product group and these are able to be contacted directly by phone, fax and email. A booklet of 'Who does What' is published and should be available from the management group.

5.4.11 Useful contacts

Retailers:

IKEA of Sweden AB
Box 702
S-343 81 Almhult
Sweden
Tel: +46 476 810 00
Fax: +46 476 154 38

AB Mio
Box 59,
SE-543 21 Tibro.
Tel: +46 504 412 00 Fax: +46 504 143 96
Email: mio@mio.se. Web: (www.mio.se).

Trade Press:

Mobler & Miljo
Box 17559
Rosenlundsgatan 54
118 01 Stockholm
Sweden

Tel; +46 8 505 970 10
Fax: +46 8 505 970 19
Email: elisabet@moblermiljo.se (The editor)

Swedish Retailers Association:

Sveriges Möbelhandlare
CEO: Anders Stromberg
Tel: +46 8 505 970 10/11
Email: furniture-a.stroemberg@swipnet.se

Swedish Furniture Industry Association:

Sveriges Möbelindustriförbund
Box 141012
Address – Grevgatan 5
104 40 Stockholm

Tel: +46 8 23 07 80
Fax: +46 8 783 05 96
www.mobelindustrin.se:
email: info@mobelindustrin.se

6. SPECIAL CHAPTER I: FUTURE OF PLANTATION WOODS IN THE FURNITURE MAKING

6.1 Wood quality assessment

The dominant species in tropical forest plantations include pines, rubberwood, acacias, teak, gmelina and eucalyptuses. In general, their wood comes in smaller dimensions, of mediocre qualities compared with natural timbers, and with lower natural durability. These “handicaps” call for immediate improvements in wood drying, jointing and edge-gluing technologies, and wood preservation and finishing of products. But like the example of rubberwood has shown, many of the obstacles can be overcome with sufficient research and development devoted to them in the early phases of development.

Plantation-grown teak is posing a different type of challenge, as the quality downgrade from natural teak tends to be inevitable, unless high standards in silviculture and log and sawn timber grading are applied. This is likely to threaten teak’s position in the high-market niches, where the properties of planted teak fall short of expectations. This may also pose a long-term risk for the market positioning of natural teak if supplies are mixed or irregular.

Growers of another high-value plantation wood, mahogany, have been confronted with grading problems in Fiji. This small island nation has a maturing plantation base of 50,000 hectares of mahogany, and plans are ready for starting the commercial logging and saw milling for exports to the USA. Fiji’s national grading system has been developed for planted mahogany, while in the USA, the National Hardwood Lumber Association (NHLA) applies a stricter grading system for mahogany from natural forest. The discrepancies between the two systems lead into a considerable downgrading of Fiji’s planted mahogany by the US importers. This situation poses a practical trade impediment for Fiji until some harmonisation of grading rules is made.

When considering the suitability of any potential timber species for value-added wood products like furniture, it is necessary to take into account (at least) the following performance criteria:

- grade quality;
- engineering properties (density, strength, stiffness, hardness, creep);
- stability;
- drying quality (moisture content and drying degrade);
- machining characteristics (planing, moulding, drilling, CNC routing, turning and sanding);
- gluability; and
- veneering and surface finishing characteristics.

A detailed knowledge of these characteristics is essential in the whole production process: product design, selection of appropriate materials and tools, selection of most suitable manufacturing techniques and methods and recommendations on intended service (end-uses) and environmental condition.

The technical information on those timbers, which have been traditionally used for the production of high value wood products is generally well documented. The changing timber resources have stimulated the industry in a number of countries to search for an alternative supply of species suitable for appearance products. Traditional techniques and methods used in the manufacture of value-added wood products often have to be modified for “new” timbers to accommodate their different properties and processing characteristics.

6.2 Eucalyptus

Majority of the eucalypt timber resources has been utilized for wood chips or for structural products in the local markets. Due to the growing interest all over the world in the utilization of eucalypts for high value products such as furniture, joinery, flooring and architectural products, importance of understanding the technological suitability of eucalyptus into these applications should be raised.

The fastest progress has been made in Australia, the home of eucalyptus, where old-growth eucalyptus has been utilized for decades in the absence of other hardwood timbers in larger quantity. Even though the focus has been in natural stands of old-growth eucalyptus, an important shift in the focus of research has come into play. Several research programs have begun to assess the properties of young, fast-growing eucalyptus for solid wood production.

The appearance-type properties of timber such as texture, grain pattern, color and lustre have a significant decorative value in high value wood products. Wood features, which in the past were considered as defects, have become more readily accepted and are highly sought after in some markets. Timber with features such as kino veins, sound knots, some insect galleries, borer holes, resin pockets, burls and others is well known on the market as “natural feature grade” timber in Australia and “character marks timber” in the USA. Natural features in timber are being heavily promoted by the timber industry.

However, some wood technological properties such as high wood density, high levels of extractives, hardness and strength, may sometimes be a deterrent to the production of high-class products and requires the application of new processing and manufacturing techniques.

6.3 Radiata Pine

Pinus radiata has for many years suffered in the export markets from poor image in higher-value end-uses compared with other species. Some of the shortcomings been real product limitations, but others have reflected a lack of knowledge or incorrect perceptions in the market. As an example, for many years Radiata pine was deemed only suitable for packaging uses in the Japanese market.

In New Zealand, the Public Good Science Fund (PGSF) has funded research for widening the range of wood products, which could be made from the existing Radiata pine resource. It aims at improving both the quality and competitiveness of the existing product mix and developing databases for e.g. preparing codes and standards and answering basic questions about markets and international trade flows.

Examples of research for improving product range and quality include a wood-hardening process that offers improved performance qualities for low-density timbers in applications such as flooring and furniture. Another one is the development of a finger-jointing process known with registered trademark **Greenweld®** for unseasoned wood. It promises economic advantages over conventional finger-jointing methods, by reducing processing costs and by increasing kiln-drying efficiencies.

6.4 Suitability for Laminated Solid Wood Panels and Finger-Jointing

With the growth in the processing of rubberwood in certain Asian producing countries, finger-jointing and laminating has turned into a high-volume industry. Special lines to finger-joint and then laminate the strips into defect-free solid wood panels have become popular in furniture plants seeking an immaculate appearance to their wood surfaces. A wide range of different equipment is in use, which is at various levels of sophistication and capacities. Equipment is generally large, and is never found in the smaller plants. The majority of production takes place either in Europe or in the Taiwan Province of China. There are factories that exclusively produce these types of panels either for export exactly as they are, or with solid wood moulded frames which might serve as table-tops. This type of panel is also sold to smaller furniture plants in the local market.

With the growing usage of plantation wood and smaller diameter logs, it is expected that production of this type of panel will increase in the future. The quality of panels can vary, depending on the homogeneity of the kiln-drying processes and the amount of care taken in matching the color of the strips prior to assembling the panels. Production planning and control in such plants is relatively straightforward.

Plantation pines and rubberwood both suit well for finger-jointing. But a fundamental difference between softwoods and hardwoods is in the marketability of wood features (sound knots, insect galleries, borer holes, resin pockets, burls and others). It is well known on the market as “natural feature grade” or “character marks timber”. These

were considered defects in the past, but have become desirable characteristics more recently. They are highly sought after particularly in softwood timber used for high value wood products, provided that they do not affect the structural performance of products, most of all in furniture and components.

For eucalyptus, the Brazilian sources indicate that the technology to remove defects, produce finger-jointed blanks, laminated boards, etc. is technically and commercially more difficult than for pine. The eucalyptus timber is not so stable, there are gluing problems and in most cases a lot of defects that reduce final yield. Market is still not equally receptive for finger-jointed euca as for pine, because the perception is "eucalyptus should replace tropical or other hardwood", which calls for clear wood.

6.5 Suitability for Furniture and Components

Ideally, design of any wooden structures should be based on the technical characteristics of the timber put into use. This would involve the optimisation of dimensions of each member based on the strength of the timber and on the load carried in service. Furniture is usually constructed from short length components with small cross sections. From the engineering point of view it is required that the timber used for highly stressed furniture components (e.g. chair legs and back rails, sofa rails) should be defect free. For such application the use of structural design criteria is essential. Furniture made from high-strength timbers can be built from thinner and narrower components than furniture made from low and medium strength timbers.

Properties, which should be considered essential in the engineering design of furniture, are: stiffness, which is measured by the modulus of elasticity (MOE), and bending strength, which is measured by the modulus of rupture (MOR).

The majority of eucalyptuses have higher densities and higher stiffness and strength than some of the most commonly used species for furniture production. MOE and MOR of young plantation eucalyptuses indicate that the two properties, which are essential in the engineering design of furniture, were found to be unexpectedly high for the majority of evaluated timbers, in fact higher than for timbers commonly used for furniture. For example, the 17-year old red gum (*E. camaldulensis*) had already higher properties than teak, which is considered as one of the most desirable furniture timbers.

6.6 The marketing factor

Very often the plantation wood producers are pushing natural wood producers of-the-hill from the life cycle curves of common products by means of price slashing. It sometimes leads into an export-industry at a permanent loss. Instead of cut-throat price competition, the focus should be on accessing into new product innovations, which in general are receptive for fast-growth wood (engineered & furniture products). Once a presence in export markets is claimed, the companies need to diversify products and add value in order to stay competitive. Those producers that show innovation in product development, search for direct access to end users and cultivate new marketing ideas, will have the best chances to survive.

6.7 Conclusions

On the tropical plantation front, the development of new engineered wood products (e.g. MDF, LVL), together with more advanced surfacing and finishing techniques, is allowing the use of a wider range of species in furniture and other value added production. Consequently, steady increases in production and exports from the tropics can be expected. The contribution of furniture and related products to the forest sectors of ITTO producers and other developing countries will continue to grow rapidly in the coming years, with corresponding reductions in production and especially exports of primary tropical timber products.

As stocking levels of main plantation species are approaching their first prime (approximately in 2005), forest industries throughout the tropical world will have to adjust their product development, processing technologies and promotional tools accordingly. The overall balance of furniture making is likely to move in favor of the Southern hemisphere, where a green “wall of wood” is maturing in plantations of Oceania, Asia and Latin America.

7. SPECIAL CHAPTER II: TECHNICAL STANDARDS IN THE FURNITURE SECTOR

7.1 Overview of furniture standards

North America

There are over 140 furniture-related standards and labeling requirements in the United States and Canada. Most standards are voluntary but some are regulated by state or federal laws. In addition to protect end users, standards are used to protect manufactures and retailers against product liability suits.

European Union

The European Committee for Standardization (CEN) is responsible for the harmonization of standardization in the European Union. CEN has 20 national members, which are also national standards bodies (Table 7.1). The members must implement European standards as national standards and withdraw all conflicting national standards on the same subject.

The Technical Committee 207 “Furniture” (CEN/TC 207) is in charge for the standardization of furniture. TC 207 has eight working groups that deal with different aspects of standardization.

The eight working groups are:

- WG 1 – Domestic furniture,
- WG 2 – Kitchen and bathroom furniture,
- SC 3 – Office furniture,
- WG 4 – Outdoor furniture,
- WG 5 – Contract and educational furniture,
- WG 6 – Test methods for fire behavior,

- WG 7 – Surfaces and surface finishes of furniture, and
- AH – Glass in furniture.

The major aim of TC 207 is to have the EN standards on furniture established at the European level. It is scheduled to finish its work program by 2004, and after that there will be approximately 90 voluntary EN standards on furniture, their finishes and materials. A current list is presented in Appendix.

The EN standards on furniture are not meant to serve protectionist aims. On the contrary, they are proposed as a basis for wider international work on furniture standards by ISO/TC 136 “Furniture”. All the EN standards are voluntary in nature, and as there will be no harmonized product standard for furniture, furniture will not be carrying a CE marking.

Table 7.1 CEN national members

Country	Abbreviation	Standards body
Austria	ON	Austrian Standards Institute
Belgium	IBN/BNI	Belgian Institute for Standardization
Czech Republic	CSNI	Czech Standards Institute
Denmark	DS	Danish Standards Association
Finland	SFS	Finnish Standards Association
France	AFNOR	Association Française de Normalisation
Germany	DIN	German Institute for Standardization
Greece	ELOT	Hellenic Organization for Standardization
Iceland	IST	Icelandic Standards
Ireland	NSAI	National Standards Authority of Ireland
Italy	UNI	Italian National Standards Body
Luxembourg	SEE	Service de l’Energie de l’Etat
Malta	MSA	Malta Standards Authority
Netherlands	NEN	Netherlands Standardization Institute
Norway	NSF	Norwegian Standards Association
Portugal	IPQ	Instituto Português da Qualidade
Spain	AENOR	Asociación Española de Normalización y Certificación
Sweden	SIS	Swedish Standards Institute
Switzerland	SNV	Association Suisse de Normalisation
United Kingdom	BSI	British Standards Institution

Source: CEN

Japan

Japan has three levels of industrial standardization: national level, industrial sector level and company level. Japanese Industrial Standards (JIS) are voluntary national-level standards that cover industrial and mineral products. Industry associations and companies may also make their own standards for their specific needs (e.g., operation manuals, products specifications, etc.).

There are 27 furniture-related national standards in Japan, and they deal with safety aspects, test methods, and dimensions.

7.2 Comparison of standards

Product quality standards that rank products based on their appearance, stability, materials, or other properties are atypical to the furniture sector. International and national furniture standards concentrate rather on the safety and health-related aspects, test methods, dimensional coordination, and terminology. Lists of selected furniture-related standards are given in Appendixes 1 through 6. A brief comparison of standards is shown in Table below.

ISO and EN represent international standards that are used in many countries. DIN standard is given as an example of national European standards that coexist with ISO and EN standards. DIN standards are often used as *the* benchmark standards if no comparative international standard exists. Eventually, all EN standards will be implemented as national standards by DIN and other CEN member organizations.

JIS are Japanese industrial standards used in the Japanese market. As they were not available for a more detailed study, it was not possible to make a comprehensive comparison with the other standards on the basis of titles alone and, therefore, Japan seems to have little in common with the rest of the world. This, however, may be misleading. American and Canadian standards could not be directly accessed, either, and the extent of the lists of standards were not adequate to justify their comparison with other standards here.

7.3 Harmonization

At the international level, harmonization is implemented by the International Organization for Standardization (ISO). ISO is a worldwide federation of national standards bodies from more than 140 countries. Its mission is to promote the development of standardization and related activities in order to facilitate international trade and cooperation. ISO's work culminates in international agreements published as international standards. In the furniture sector, ISO has published 24 standards (Table 7.3).

Table 7.2 Comparison of furniture standards

Standard indicators	ISO	EN	DIN	SFS	JIS
Safety requirements and test methods					
Beds and mattresses		•	•	•	
Built-in and free standing kitchen cabinets and work tops		•	•		
Bunk beds and high beds for non-domestic use		•	•		
Bunk beds for domestic use	•	•	•	•	
Chairs and tables for educational institutions		•	•		
Children's cots and folding cots for domestic use	•	•	•	•	
Children's high chairs for domestic use	•	•	•	•	
Cribs and cradles for domestic use		•	•	•	
Domestic storage furniture		•	•	•	
Foldaway beds	•	•	•	•	
Office furniture, screens		•	•	•	
Office storage furniture		•	•		
Office work chair		•	•	•	
Seating		•	•	•	
Seating and tables for camping, domestic and contract use		•	•	•	
Tables		•	•	•	
Work tables and desks		•	•		
Assessment of the ignitability of upholstered furniture					
Ignition source: smoldering cigarette	•	•	•	•	
Ignition source: match-flame equivalent	•	•	•	•	
Determination of strength, durability and/or stability					
Seating (upright, with tilting or reclining mechanisms and/or rocking chairs)	•	•	•	•	•
Tables	•	•	•	•	•
Work tables and desks		•	•		
Storage furniture	•	•	•	•	•
Bunk beds and high beds for non domestic use		•	•		
Ranked seating		•	•	•	
Test for surface finishes					
Assessment of resistance to dry heat	•	•	•	•	
Assessment of resistance to fat on surfaces with scratches				•	
Assessment of resistance to impact	•			•	
Assessment of resistance to wet heat	•	•	•	•	
Assessment of surface resistance to cold liquids	•	•	•	•	•
Assessment of the light resistance of the surface		•			
Assessment of the surface gloss		•	•		
Assessment of the surface resistance to abrasion		•			
Assessment of the surface resistance to scratching		•			
Behavior at abrasion			•		
Behavior at chemical influence			•		
Behavior at glowing cigarette			•		
Behavior at scratches			•		
Behavior on subjection to wet heat			•		
Behavior subjection to dry heat			•		
Measurement of the surface reflectance		•	•		
Dimensions					
Chairs and tables for educational institutions	•	•	•	•	
Fixed desks and chairs for lecture rooms					•
Kitchen furniture and kitchen appliances		•	•	•	
Kitchen sinks, connecting dimensions		•			
Office furniture, screens		•	•	•	
Office storage furniture		•			
Office work chair		•	•	•	
Work tables and desks		•	•	•	
Terminology					
Storage units, terminology				•	

Table 7.3 ISO Furniture Standards

Reference number	Document title
ISO 4211:1979	Furniture – Assessment of surface resistance to cold liquids
ISO 4211-2:1993	Furniture – Tests for surfaces – Part 2: Assessment of resistance to wet heat
ISO 4211-3:1993	Furniture – Tests for surface finishes – Part 3: Assessment of resistance to dry heat
ISO 4211-4:1988	Furniture – Tests for surfaces – Part 4: Assessment of resistance to impact
ISO 5970:1979	Furniture – Chairs and tables for educational institutions – Functional sizes
ISO 7170:1993	Furniture – Storage units – Determination of strength and durability
ISO 7171:1988	Furniture – Storage units – Determination of stability
ISO 7172:1988	Furniture – Tables – Determination of stability
ISO 7173:1989	Furniture – Chairs and stools – Determination of strength and durability
ISO 7174-1:1988	Furniture – Chairs – Determination of stability – Part 1: Upright chairs and stools
ISO 7174-2:1992	Furniture – Chairs – Determination of stability – Part 2: Chairs with tilting or reclining mechanisms when fully reclined, and rocking chairs
ISO 7175-1:1997	Children's cots and folding cots for domestic use – Part 1: Safety requirements
ISO 7175-2:1997	Children's cots and folding cots for domestic use – Part 2: Test methods
ISO 7617-1:2001	Plastics-coated fabrics for upholstery – Part 1: Specification for PVC-coated knitted fabrics
ISO 7617-2:1994	Plastics-coated fabrics for upholstery – Part 2: Specification for PVC-coated woven fabrics
ISO 7617-3:1988	Plastics-coated fabrics for upholstery – Part 3: Specification for polyurethane-coated woven fabrics
ISO 8191-1:1987	Furniture – Assessment of the ignitability of upholstered furniture – Part 1: Ignition source : smoldering cigarette
ISO 8191-2:1988	Furniture – Assessment of ignitability of upholstered furniture – Part 2: Ignition source : match-flame equivalent
ISO 9098-1:1994	Bunk beds for domestic use – Safety requirements and tests – Part 1: Safety requirements
ISO 9098-2:1994	Bunk beds for domestic use – Safety requirements and tests – Part 2: Test methods
ISO 9221-1:1992	Furniture – Children's high chairs – Part 1: Safety requirements
ISO 9221-2:1992	Furniture – Children's high chairs – Part 2: Test methods
ISO 10131-1:1997	Foldaway beds – Safety requirements and tests – Part 1: Safety requirements
ISO 10131-2:1997	Foldaway beds – Safety requirements and tests – Part 2: Test methods

7.4 Conclusions

The objective of standardization is to ensure that all furniture available on the market is safe to use and of solid and strong construction. Therefore, standardization as such can hardly be considered harmful for outside suppliers – such as those from tropical countries. On the contrary, voluntary product standards can enable an efficient exchange of information between the importer and the supplier. Instead of having to deal with nonspecific and constantly changing requirements of various counterparts, the supplier will have the benefit of working with a stable set of requirements. As the standards are voluntary in nature, they cannot be regarded as barriers to trade.

Manufacturers normally use the standards voluntarily in their product development, process control, and marketing. Having a common language on test methods, dimensions, safety and strength characteristics is considered more important than giving explicit criteria on what the piece of furniture should look or feel like. This is left for the designers to decide.

8. SPECIAL CHAPTER III: OVERVIEW ON INTERNATIONAL AND NATIONAL CERTIFICATION SCHEMES IN THE FURNITURE SECTOR

8.1 Product Certification

Product certification is carried out against the requirements of one or several standards, and it is closely associated with testing. The certificate is an indication that the product meets the requirements of a standard or standards. In addition, product certification means that quality is continuously controlled by the manufacturer's own quality control and a third party audits the manufacturer's quality processes as well as tests the products on a spot-check basis. Companies apply for product certification mainly to fulfill customer requirements in the export trade but sometimes also for marketing purposes domestically. Product certification is usually publicized with the use of product labels.

In some countries, buyers are more prone to ask for certificates and product labels than in others. France, Germany and Sweden, for example, are countries where product certification may be required for imported furniture.

Many manufacturers are reluctant to apply for the certification of their products because it is expensive. The testing involved is very time consuming. Testing an auditorium chair, for example, takes three months if carried out to the full extent of the standards. Therefore, manufacturers that test for their own purposes, use accelerated methods applying increased loads or exposures for a shorter period. The accelerated test for that auditorium chair would be done in just two days.

8.2 Environmental Management System Certification

Many organizations have their environmental management systems certified according to ISO 14001 or registered under the Eco-Management and Audit Scheme (EMAS). Environmental management systems approach the other elements of environmental sustainability than forestry but may include some aspects of it as well.

ISO 14001 is an international standard that outlines the requirements for environmental management systems. It can be adapted to any type of production in any kind of organization. There are probably tens of thousands of companies that have environmental management systems certified according to ISO 14001. Some of them might require that their suppliers obtain ISO 14001 certification as well – but not necessarily. It is possible, however, that a furniture importer with a certificate might inquire its tropical supplier about the origin of the raw material.

EMAS is a management tool for companies and other organizations to evaluate, report and improve their environmental performance. Originally EMAS registering was restricted to companies in industrial sectors but since 2001 it has been open to all sectors, including services. Participation is voluntary, and at the moment EMAS registration can be obtained in 18 European countries. At the moment, there are more than 3 500 EMAS-registered sites – a few dozen operate in the furniture sector.

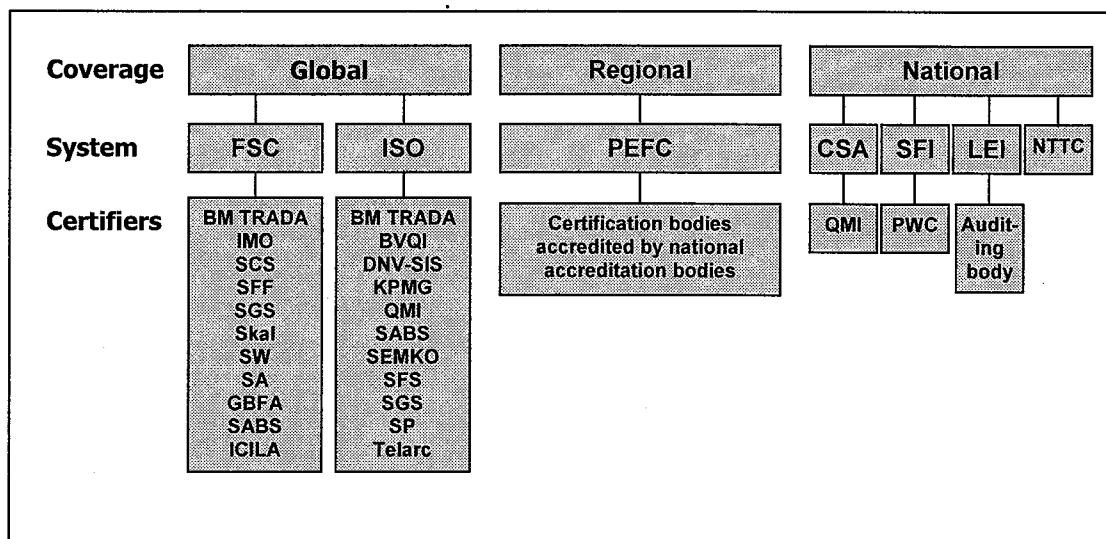
8.3 Forest Management Certification

The certification of forest management has evolved rapidly in the past few years and a multitude of different forest certification schemes has been developed around the world. The organizations that have been active in forest certification include:

- Forestry Stewardship Council (FSC)
- Pan-European Forest Certification (PEFC)
- Canadian Standards Association (CSA)
- American Forest and Paper Association (AF&PA), United States
- National Timber Certification Council (NTCC), Malaysia
- Indonesian Ecolabeling Institute (LEI)
- Brazilian Association of Standards (ABNT)
- Keurhout Foundation, Netherlands
- Pan-African Forest Certification (PAFC)

Many other certification initiatives are being developed either independently or under frameworks. Two major forest certification schemes – FSC and PEFC – are reviewed in more detail in the sections that follow.

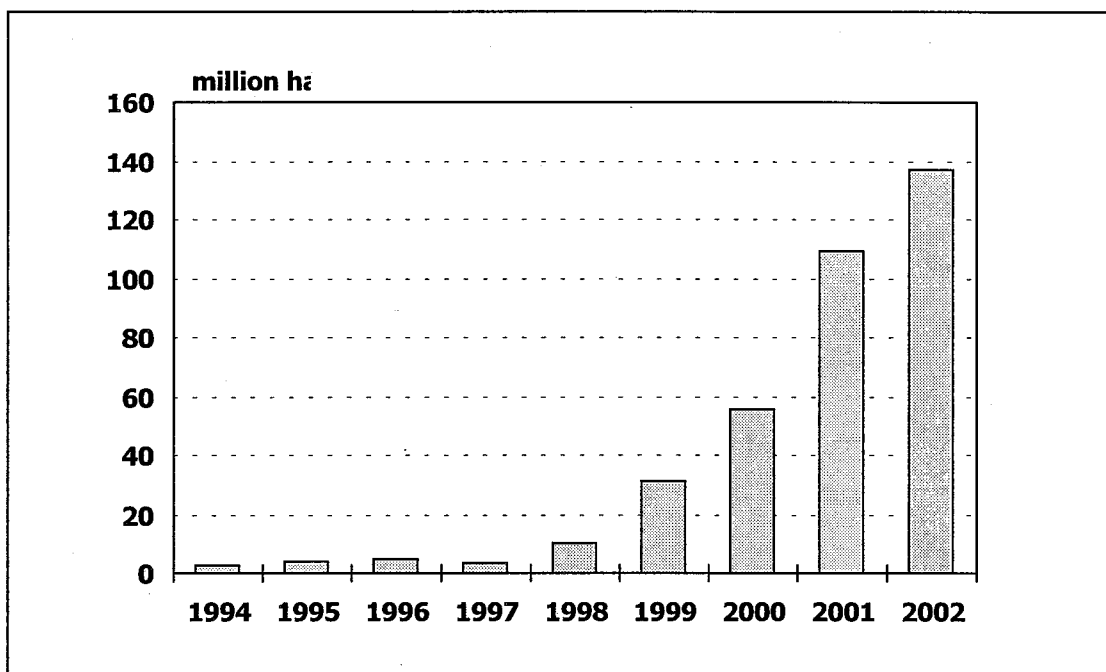
Figure 7.1 Certification systems, their geographical coverage and certifiers



Source: Forest World and Indufor

Forest certification is going forward at an unprecedented pace. Since 1998, the growth has been exponential. Nevertheless, certified forests still represents less than 4% of world's forests.

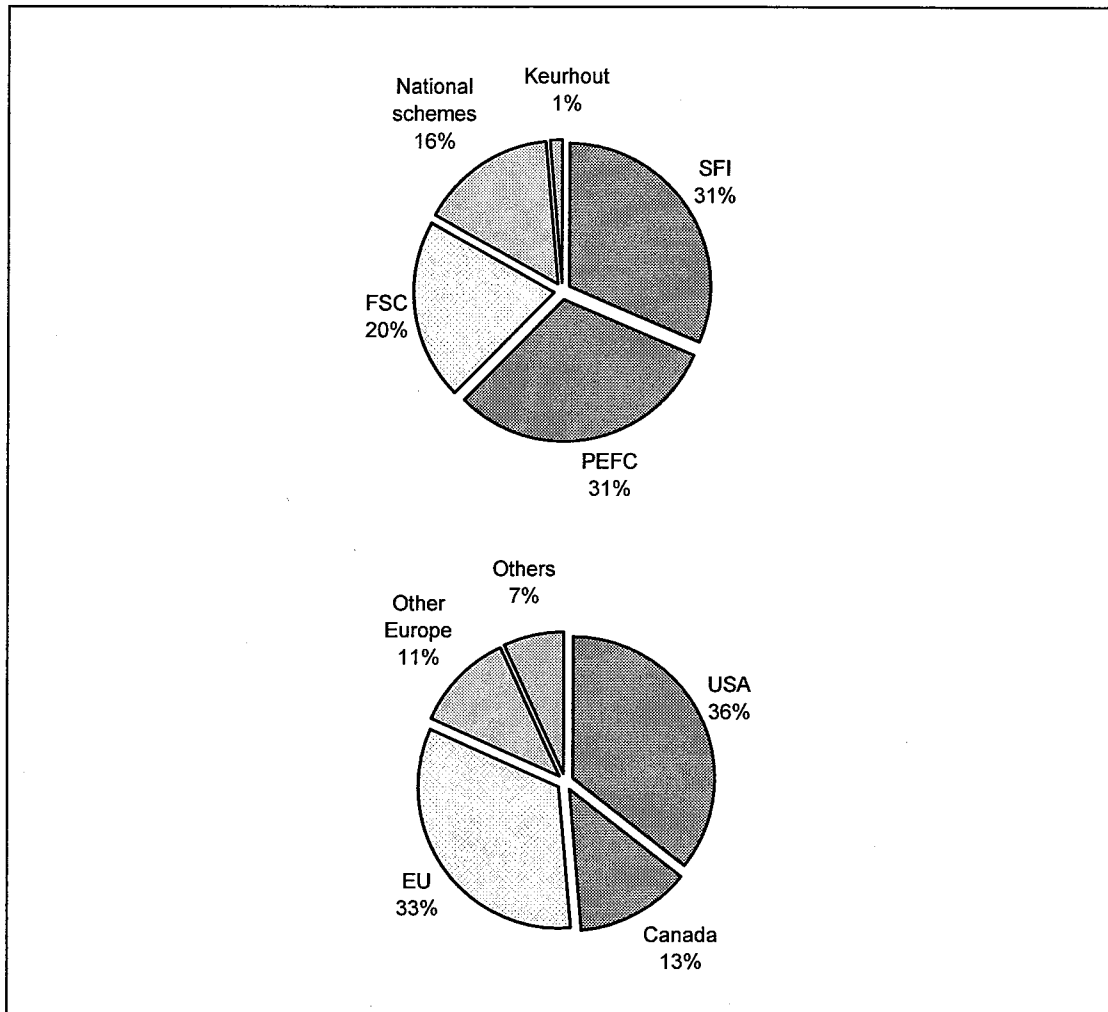
Figure 7.2 Certified forests in 1994-2002



Source: Indufor

SFI and PEFC are currently the “market leaders” in forest certification in terms of certified area. The largest concentrations of certified forests are in North America (49%) and Europe (45%). Only 7% of certified area is in the tropical or subtropical countries.

Figure 7.3 Certified forests in 2002 according to forest certification scheme and region



Source: Indufor.

8.3.1 Forest Stewardship Council

The Forest Stewardship Council (FSC) is an international nonprofit organization founded in 1993 to support environmentally appropriate, socially beneficial, and economically viable management of the world's forests. FSC is an association of a diverse group of environmental and social nongovernmental organizations (NGOs), the timber trade and the forestry profession, indigenous peoples' organizations, community forestry groups, and forest product certification organizations from around the world.

The membership is open to all who are involved in forestry or forest products and share FSC aims and objectives. FSC is strongly supported by environmental and social NGOs and somewhat by forest industry and trade. Forest owner's organizations, on the other hand, are very critical toward FSC.

FSC supports and approves the development of regional standards that comply with the FSC principles and criteria on sustainable forest management. The standards are usually developed – or approved – by national and regional working groups that

should have a balanced representation of social, economic and environmental interests:

8.3.2 Pan-European Forest Certification Framework

The Pan European Forest Certification scheme (PEFC) was established in 1999 to provide mutual recognition of national forest certification schemes. It was specifically developed to accommodate the small-scale forest ownership structure prevalent in Europe. PEFC was initiated by forest owner's organizations from six countries, and it has gained support from the forest industry and social NGOs but only to a limited extent from environmental NGOs. To date, PEFC has member organizations in eighteen countries.

PEFC assesses and approves national forest certification standards submitted by national PEFC committees. The national standards should be elaborated in a participatory process and comply with the pan-European criteria.

8.3.3 Initiatives for Mutual Recognition of Forest Certification Schemes

Due to the large number of different forest certification schemes, several initiatives have been taken aiming at facilitating the mutual recognition of certification schemes. The mutual recognition is a formal recognition that the incorporated certification systems are equivalent in their inputs, operations, and outputs. It would facilitate the consumers in the "jungle" of different sustainability labels and enhance efficiency by avoiding double labeling, removing trade barriers, etc. PEFC and FSC both agree on the need of mutual recognition but have differing views on how it should be implemented.

According to the **FSC**, the mutual recognition is the acceptance of different national initiatives under the FSC umbrella. FSC has reviewed national, non-FSC standards in several countries (e.g., the United Kingdom, Indonesia and Malaysia) for FSC approval. In the United Kingdom, the effort led to the recognition of the national scheme, UKWAS, through a forest audit protocol in 2000. The FSC General Assembly has agreed to develop the mutual recognition policy and a FSC working group on mutual recognition was established in 2000.

The **PEFC Council**, on the other hand, considers non-PEFC forest certification schemes and standards with a view to facilitating mutual recognition. The PEFC Council has determined the basic requirements for a credible mutual recognition system and continues the development.

The **Confederation of European Paper Industries (CEPI)** established a comparative framework between different certification schemes as early as 1996. The framework includes a list of eleven criteria for a "perfectly credible" scheme with a number of indicators for each criterion. The CEPI database contains entries from 18 national certification schemes and one international scheme (PEFC).

The **International Forest Industry Roundtable (IFIR)** initiative has prepared a proposal on mutual recognition, which should cover the requirements of objectivity, credibility, and feasibility.

The **European Commission** cautiously agrees on the need of mutual recognition systems, either at the European or global level. Mutual recognition could only be reached by an initial acceptance of varying sustainable forest management standards whilst working toward higher, common standards in the long term.

FAO, GTZ and **ITTO** hosted a seminar on “Building Confidence among Forest Certification Schemes and their Supporters” in Rome in February 2001, which aimed to encourage improved dialogue about forest certification. There is still a long way to go before a real consensus can be reached, and further direct dialogue is needed in order to build up the necessary mutual trust between various stakeholder groups.

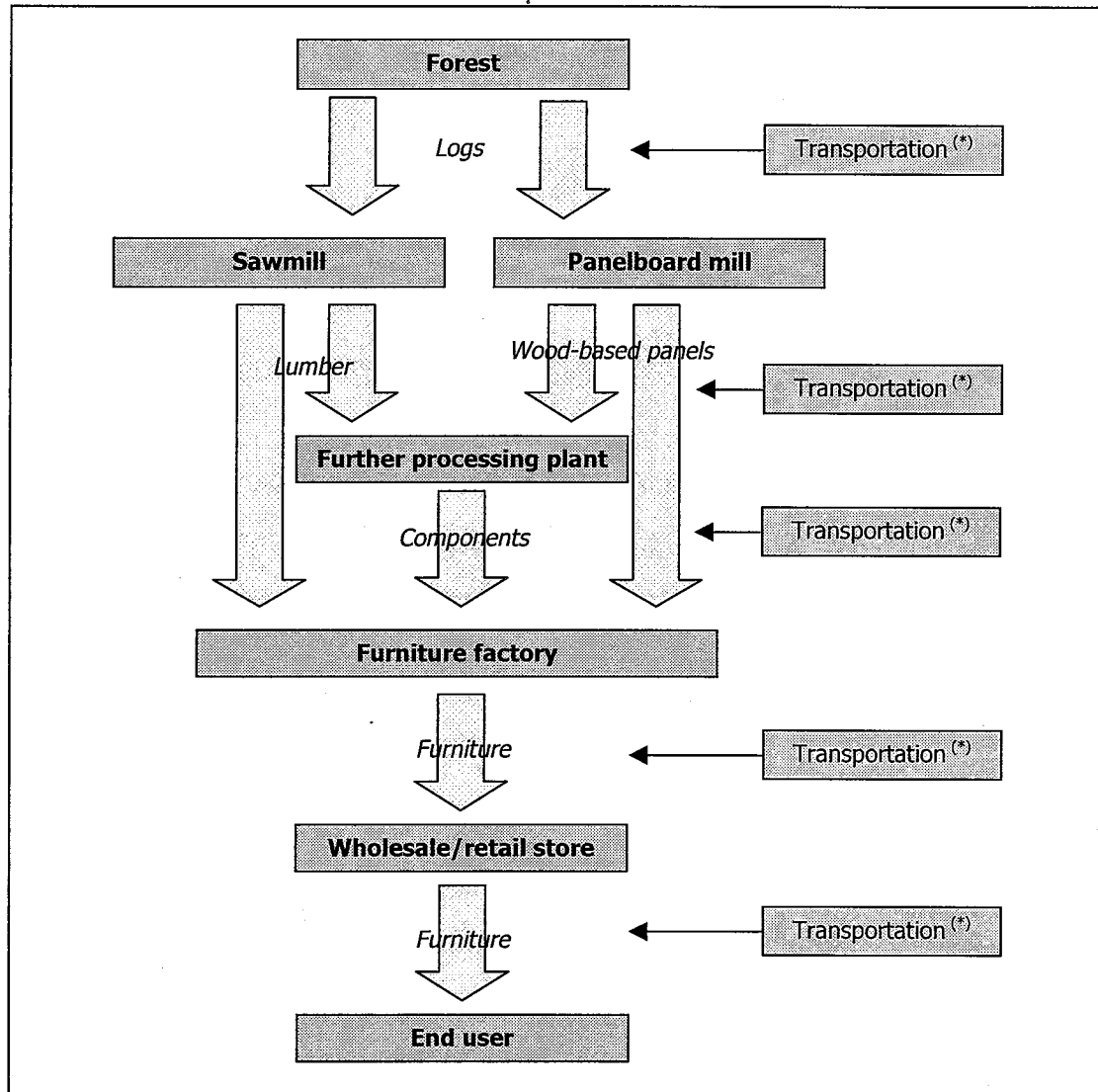
Some **certification bodies** are also in the process of preparing mutual recognition systems. These include the National Timber Certification Council of Malaysia (NTCC), the Indonesian Ecolabeling Institute (LEI), the Keurhout Foundation of the Netherlands, the Canadian Standards Association (CSA), and the American Forest and Paper Association (AF&PA).

8.4 Chain-of-custody certification

It is foreseen that one focus of the certification debate will move from the forest certification to the chain-of-custody certification. The chain-of-custody – or wood tracking – is a sequence of ownership or control from one to another along the supply chain. To be specific, wood tracking is not a synonym for chain-of-custody rather than an aspect of it, but in this chapter the two terms are used interchangeably. Chain-of-custody can also be understood as the identification of material throughout all the processing and transportation stages from the initial raw material source to the final product.

The chain of custody is required to be *certified* in connection with the labeling of forest-based products. A label shows that wood raw material – or a known portion of it – comes from sources that are acceptable to a particular labeling system. In addition to forest certification, with which chain-of-custody certification is usually associated, it could be used for showing that wood comes from legal sources. In the short term, this would be a more pressing issue to pursue than full-scale forest certification.

Figure 7.4 Simplified example on chain of custody of wood in furniture



(*) Each transportation phase may include one or several intermediary phases that might or might not include processing.

Wood tracking can be implemented in the following two alternative ways:

- as a sequence of separate stages that each consider only what is going on within that particular stage, or
- as one comprehensive system that considers all the phases from the forest to the final product.

Normally, processing and transportation stages are looked at, and certified, separately. The benefit is that each stage needs to interact only with the directly preceding stage. Therefore, a downstream manufacturer that obtains raw material from primary processors, or intermediary component makers, does not have to try to trace backward through several processing and transportation stages in order to find out whether the raw material is considered “acceptable”.

The role of intermediaries (sourcing agents, brokers, importers, wholesalers, retailers, etc.) complicates the controllability of the chain. Even though each actor were

responsible for his/her own part, the complication would become in the fact that with the increasing number of actors in the supply chain, materials would get increasingly mixed and harder to control and track. In addition, the importance (and impact) of an individual manufacturer would get less and less significant.

In September 2002, there were about 2 800 chain-of-custody certificates in the world, a relatively small number considering the size of the forest products sector and the complexity of wood and fiber flows. A main factor in the slow introduction of certified products in the markets is the lack of certified timber. As more and more forests are certified, the supply of certified wood is increasing along the production chain, and the pressures on certification for downstream industries – such as furniture making – will become more evident.

8.5 Certification of corporate social responsibility

Corporate social responsibility has been increasing its appeal in the international forum in the past few decades. NGOs and the concerned public have organized campaigns, demonstrations, boycotts, etc., against companies that they feel are undermining human rights. In recent years, standardization and certification has been introduced to solve the issue. Currently, there are at least two standards related to corporate social responsibility:

- Social Accountability 8000 (SA 8000) standard (published by Social Accountability International - SAI); and
- AA1000 Series (published by the Institute of Social and Ethical Accountability).

SA 8000 is performance oriented and has requirements on child labor, forced labor, health and safety, freedom of association and right to collective bargaining, discrimination, disciplinary practices, working hours, and remuneration.

On the other hand, the **AA1000 Series**, which is still under preparation, use a more process-oriented approach, and its keyword is “assurance”. The series will consist of a core framework and specialized modules, which can be used on their own as elements of the overall AA1000S. The modules are:

- guiding principles;
- risk management;
- integration of accountability processes with existing management and metric system;
- measuring and communicating the quality of stakeholder engagement; and
- accountability for small and medium organizations.

The two standards are tools that organizations may voluntarily decide to follow in order to show that they have nothing to hide. At the moment there are 150 facilities in 27 countries that have obtained certification for their social accountability according to SA 8000. Four furniture companies are included – one in Italy and three in Indonesia.

8.6 Sustainability reporting

In recent years, the requirements on corporate reporting have extended to include social accountability in addition to financial and environmental information. The Sustainability Reporting Guidelines (Published in the Earth Summit in Johannesburg in September 2002 by the Global Reporting Initiative - GRI) were developed to combine these three aspects. There are about 150 companies worldwide that have published reports according to these guidelines; one of them is in the forest products sector.

8.7 Trends in labeling

8.7.1 CE Marking

CE Marking is a mandatory mark for 23 product groups sold in the European Union. It has been referred to as the “Trade Passport to Europe” for non-EU products. With CE marking manufacturers inform the authorities that the product conforms to the relevant EU safety requirements of directives.

CE Marking is based on the Council Directive 93/68/EEC and relevant other directives. Specifically for furniture no such directive exists, but the council directive (89/106/EEC) on construction products could be applicable. *Construction product* is a product that is produced for incorporation in a permanent manner in buildings. This could include fixed furniture, such as built-in kitchen cabinets.

Figure 7.5 CE Marking



8.7.2 Product Labeling

Voluntary product labels are given as a proof of conformity on the basis of product certification carried out by accredited certification bodies. Usually product certification is based on national or international standards such as ISO or EN standards. There is probably in every country some kind of a mark or label that indicates conformance to quality, safety, health, or other requirements. These marks are voluntary, but may be required by a particular customer or in a particular market.

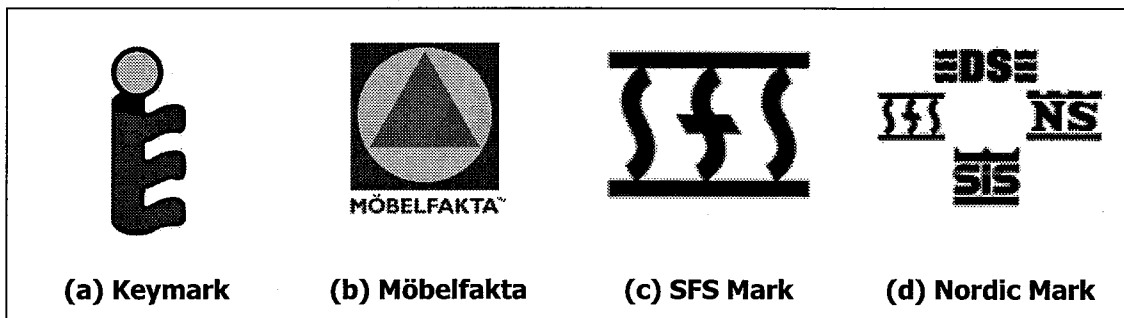
Keymark is the European certification mark, jointly owned and offered by CEN and CENELEC (European Committee for Electrotechnical Standardization) It is a voluntary third-party certification mark, indicating product compliance with the requirements of the European standard(s). It is available for five product groups but not for furniture. Keymark has been proposed to be adapted also for furniture, but the European furniture industry strongly opposes such a development. They prefer a voluntary approach because testing is time consuming and expensive with little additional benefit to the manufacturer or the consumer.

Möbelfakta is a Swedish reference system for furniture quality determination that helps designers, buyers, architects and others who use or work with furniture. The system is based to CEN and ISO standards. Furniture with a Möbelfakta label has been extensively tested against the criteria on the:

- strength and durability (performance)
- surface resistance
- fire resistance / flammability
- safety
- upholstery covers

The label contains information on the identity of certificate holder and the date of manufacture, and it should be permanently attached to the product. There are twenty-one furniture manufacturers in Sweden and one in Norway that have Möbelfakta certificates.

Figure 7.6 Examples of product labels



An example of a national product label is the Finnish **SFS Mark**. The SFS Mark acts as proof of the product's conformance to standards. Standards include SFS and EN standards. Three Finnish companies have received the SFS Mark for kitchen furniture. The SFS Mark indicates compliance to the following standards:

- SFS 2457 – Kitchen furniture. Quality requirements
- SFS 4839 – Cupboards for dwellings, types and fittings
- SFS 4969 – Fixed units for dwellings, functional characteristics, testing and requirements
- SFS-EN 1116 – Kitchen furniture. Coordinating sizes for kitchen furniture and kitchen appliances
- SFS-EN 1153 – Kitchen furniture – Safety requirements and test methods for built-in and free standing kitchen cabinets and work tops

The **Nordic Mark** which is a common mark of the national standards bodies in the Nordic countries, acts as proof of the product's conformance to standards and Nordic certification rules. The Mark also tells that the countries involved have uniform product standards.

8.8 Ecolabeling

Ecolabeling is a voluntary method for the certification and labeling of environmental performance. It identifies overall environmental preference of a product on the basis of lifecycle considerations. An ecolabel is awarded by an impartial third party after the product has been determined to meet specific environmental criteria. There are many different voluntary (and mandatory) environmental performance labels and declarations. These include those in:

- European Union (Flower)
- Nordic countries (Swan)
- Germany (Blue Angel)
- Austria
- Netherlands (Milieukeur)
- Spain (AENOR Medio Ambiente)
- France (NF Environnement)
- United States (Green Seal)
- Canada (Environmental Choice)
- Japan (Eco Mark)

The criteria for furniture in the various ecolabeling schemes have common elements. Wood must be either certified or its origin must be indicated otherwise. The product must not contain or release more than a specified amount of formaldehyde. The manufacturer must guarantee that functionally compatible replacement for wearing parts be available for five years.

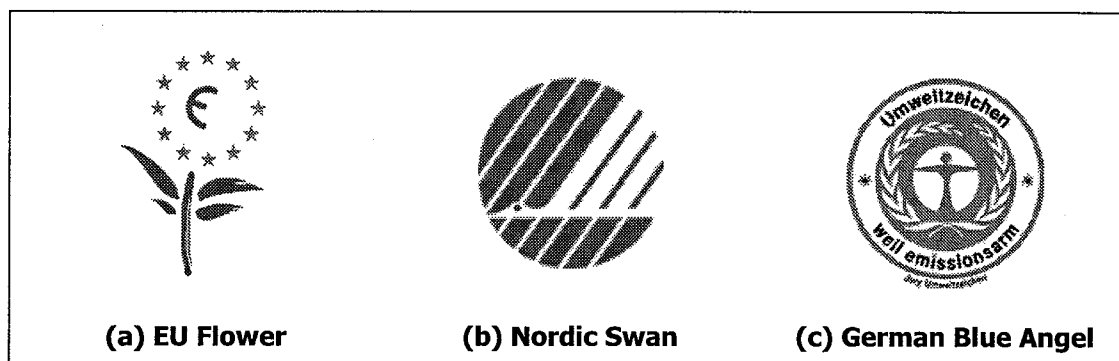
The **EU ecolabel** award scheme has been in operation since 1993, when the first product groups were established. In 2000, the scheme was comprehensively revised. In all product groups, the relevant ecological issues and the corresponding criteria have been identified on the basis of comprehensive studies of the environmental aspects related to the entire lifecycle of these products. Appropriate testing and verification procedures for the criteria are elaborated in separate user's manuals. An individual product must comply with all criteria in order to be awarded the EU Flower.

The finalization of the criteria for furniture is underway. The criteria aim at promoting a reduction of the impact of furniture on the environment. More specifically, the objectives are:

- the use of materials produced in a more sustainable way,
- a reduction of the use of hazardous substances and of emissions of polluting substances, and
- a durable product.

Issues that are addressed in the development work include criteria for different materials, durability and ergonomics, prevention of waste, and consumer information. For wood and wood-like materials including wood based panels, bamboo, and rattan, the issues include forestry, use of chemicals, coatings, emissions of formaldehyde, and possible other issues (none so far).

Figure 7.7 Examples of ecolabels



The Swan is the official **Nordic ecolabel**, which demonstrates that a product is a good environmental choice. The logo is available for about 60 product groups, including furniture and fittings, and wooden outdoor furniture. The Swan criteria are checked using independent laboratories, certificates and control visits.

The label is usually valid for three years, after which the criteria are revised and the company must reapply for a license. In this way, a constant development of products better suited to the environment is guaranteed. Issues that are addressed in the development work include criteria for different materials, upholstery, minimization of waste, packaging, and functionality. For wood and wood-based panels, the issues include origin of wood, use of chemicals, energy consumption, emissions into air during production, coatings, glues, and emissions of formaldehyde.

The Swan ecolabel is voluntary, and it is given to the leading environmental performers in their respective fields. At the moment there are fewer than 20 furniture companies that have been awarded the label – all in the Nordic countries.

The **German Blue Angel** has criteria for office furniture. The criteria refer to the manufacture of the products and their materials, the period of actual use as well as to the disposal of used wood products, wood-based products, old furniture, and packaging material used for the transportation of new wood products and furniture. The label may be awarded to furniture that:

- mainly consist of the renewable raw material wood;
- distinguish themselves by an environmentally compatible manufacture;
- are no risk to health in the living environment; and
- do not contain any hazardous substances aggravating recycling.

There are eight Blue Angel label users in the furniture sector in Germany and abroad.

8.9 Sustainable Forest Management Labeling

8.9.1 Forest Stewardship Council

The FSC has introduced an international labeling scheme for forest products made from FSC-certified raw material. The organizations wishing to use the product label must have an FSC chain-of-custody certificate. Chain-of-custody audits are carried

out by certification bodies accredited for the task by the FSC. There are more than 2 500 FSC-accredited chain-of-custody certificates in the world. The number has increased sharply during the past years and, consequently, the number of FSC-labeled products is rising.

The FSC sets the minimum requirements for the content of wood in labeled products in its Policy for Percentage-Based Claims. The requirement for wood coming from FSC-certified forests is categorized for three product groups:

- solid wood products at least 70% by volume of the wood used in manufacturing the product line, or the collection of products
- chip and fiber products at least 17.5% by weight of total chip or fiber AND at least 30% by weight of the new virgin wood chip or fiber used in the manufacturing the product
- assembled products at least 70% of wood volume used in manufacturing the products

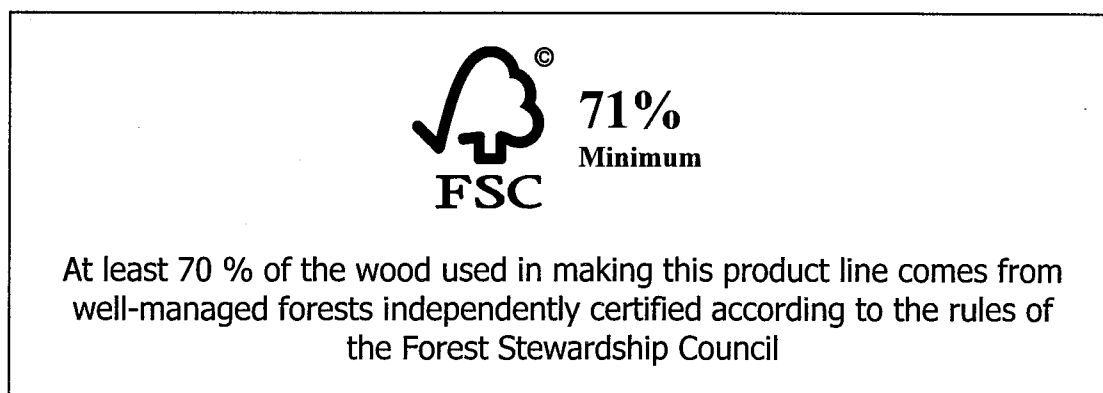
All percentages may be calculated according to a batch system. The minimum percentage has to be applicable to a batch length or a production unit. The recommended batch length is thirty days, the maximum is sixty days but exceptions may be allowed. The percentage must never drop below the minimum requirement, which is calculated as the moving average of the batch period.

The FSC groups raw materials into four categories:

- Category A – FSC Certified – includes wood; pulp, paper, chips, fibers, etc., derived from FSC-certified sources; mill broke; sawmill co-products; and pre-consumer recycled wood and wood fiber or industrial by-products.
- Category B – Neutral – includes pre-consumer recycled wood and wood fiber or industrial by-products, including mixed waste paper, but not including mill broke or sawmill co-products; post-consumer recycled wood and wood fiber; non-wood plant fiber; driftwood; and urban wood.
- Category C – Non-Certified Wood – includes wood unless covered by a valid FSC- endorsed chain-of-custody certificate: wood, mill broke, and sawmill co-products.
- Category D – Other – includes other non-wood materials are ignored for the purposes of this policy. Such materials include metal, plastic, mineral fillers and brighteners, etc.

The FSC recognizes the use of claims and labels both on and off product. The on-product labels should show the FSC logo with the actual content of FSC-certified wood. If the product contains 100% FSC-certified wood, the label does not need to state 100%. The labels must include descriptive statements to explain the meaning of the FSC Logo and to disclaim responsibility for other attributes of the product.

Figure 7.8 Example of FSC label and on-product claim



As additional information, the labels may also provide a more detailed list of ingredients and their proportions. In all cases, the labels must state the mean minimum percentages of FSC-certified material as a percentage of the total wood, fiber and neutral raw materials used in the batch manufacturing process.

8.9.2 Pan-European Forest Certification

The PEFC Council has also introduced a logo to be attached to or associated with wood and wood products from PEFC-certified forests. The logo usage requires the verification of the chain of custody and a logo usage license. In practice, a chain-of-custody certificate is required. At the moment, there are more than 250 PEFC chain-of-custody certificates.

The minimum requirements for the content of wood coming from PEFC-certified forests is differentiated according to the approach to the verification procedure of the chain-of-custody of wood and applicants are offered three mutually non-exclusive options:

- In the input/output system, the percentage of the PEFC-certified output must not exceed the known percentage of the PEFC-certified input.
- In the minimum average percentage system, at least 70% of wood must be PEFC-certified. This applies to all product groups (including solid wood, assembled goods, pulp, paper, chips, and fiber).
- In physical separation, the wood must be PEFC certified if so claimed.

The percentages can be applied over a specified time period, or a “batch”, which may be up to twelve months. A batch is here understood as a time slice of the production process. All calculations shall be based on verifiable documentation.

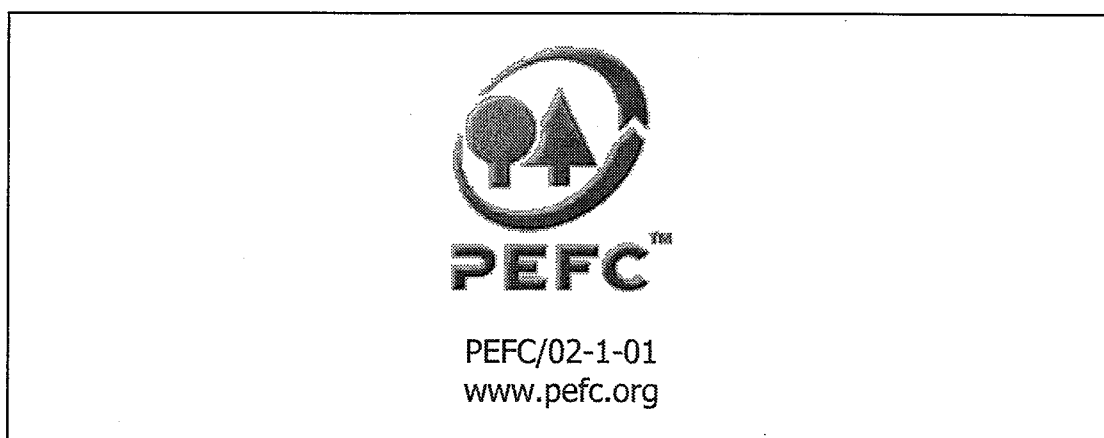
The PEFC groups raw materials into four categories:

- Category 1 – includes PEFC-certified wood or wood certified under other certification schemes recognized by the PEFC Council.
- Category 2 – includes recycled wood and recycled fibers (post-consumer wood and fibers) and reclaimed pre-consumer by-products from processes in manufacture, where these are not traceable to virgin wood sources.

- Category 3 – includes non-wood material, starch and pigments as well as wood harvested from urban forestry.
- Category 4 – includes non-certified wood.

A PEFC-certified product can carry the PEFC logo without a claim, but it is recommended to have a claim. Claims can be on or off product. When the PEFC logo is used on wood or wood-based products, it signifies that the logo user has a valid PEFC forest management or chain-of-custody certificate based on the PEFC requirements and that the user can prove it. The registration number links the product label with the organization, which has the right to use it.

Figure 7.9 Example of PEFC label and on-product claim



The labels may provide additional voluntary information such as a PEFC claim and the name, designatory letters, logo, or mark of the accredited certification body, or any combination of these with the PEFC logo. The PEFC claims that can be attached to the labels are:

- with inventory control and accounting of wood flows systems
 - “www.pefc.org”
 - “Promoting sustainable forest management – For more info www.pefc.org”
- with physical segregation system and a 100% certified wood content:
 - “From sustainably managed forests – For more info: www.pefc.org”.

The official claims are written in English, but translations are allowed, if and as approved by the PEFC Council. Voluntary product information may also be included on the label.

8.9.3 Keurhout Foundation

The Keurhout Foundation has been established by companies and trade unions in the timber trade and timber processing industry with the support of the Dutch Government. The Keurhout verification process includes the requirements regarding –

- the management system,
- the performance of forest management,
- the certifying body, and
- the chain of custody.

The origin of the timber must be traced from the forest area concerned to the ultimate consumer. Within the producer's country this must be done by an independent certification body. In the Dutch territory, the Keurhout Foundation provides a system for the chain-of-custody verification, which is done by independent third parties – at the moment by FSC-accredited certification bodies.

Figure 7.10 Keurhout logo



Keurhout has verified and accepted certificates in the following countries: Brazil, Canada, Finland, the Solomon Islands, Sweden, Gabon, and Malaysia. The total area is 36 million hectares.

The FSC and the Keurhout Foundation have made a partnership to avoid duplication of efforts and costs in chain-of-custody certification. The FSC-accredited certification bodies are authorized to include in their assessments and reports additional items required by the Keurhout Foundation. Under the arrangement, an FSC chain-of-custody certificate and report may also include Keurhout elements, not included in FSC requirements, and they may be submitted for recognition to the Keurhout Foundation. After both schemes have approved the chain-of-custody certificate, market claims may be made in accordance with either (or both) scheme(s). The agreement maintains independent decision-making, acknowledgment and quality control by both schemes. This alliance allows third-party chain-of-custody certificates and/or reports – within the Netherlands – to be endorsed by both systems thus reducing duplication and maintaining quality.

8.10 Conclusions

When it comes to individual buyers – whether institutional, industrial or, private – the decisive considerations regarding the buying decision will be based on the values the individuals in question. Certification and labeling may (or may not) be part of such values.

Institutional buyers (public building and construction segment demanding for furniture of public premises, offices, schools, etc.) often have procurement policies that include requirements on product quality, which may be specific to the institution in question. In addition to laying out bidding procedures, these policies may include special conditions on:

- environmental load (including materials and additives in the product as well as energy used in the production, packaging and transportation),

- possibility to repair and recycle,
- volatile compounds (e.g., solvents in glues, paints and varnishes),
- ergonomics,
- durability,
- adaptability, and
- availability of additional components.

Increasingly, the demand for using certified wood is being incorporated into public procurement policies and criteria.

Commercial and industrial enterprises (their building and construction projects, hotel, office and shop furniture, etc.) are more likely to put emphasis on the safety, quality, functionality, and construction of furniture than on environmental or social aspects of furniture making. This is natural, as these organizations are more familiar with such day-to-day business needs as meeting deadlines, avoiding product liability suits and finding new contracts.

Retailers in the consumer market (mainly household furniture, ready-to-assemble furniture, small occasional furniture, garden furniture, etc.), on the other hand, must be more sensitive about the “softer” values. In order to ease their customers’ concerns, some furniture chains have developed environmental management systems and to a certain extent monitor the origin of their products and raw materials or may give preference to certified wood.

A furniture exporter from a tropical country will most likely one day confront requirements that he should prove his raw material does not come from illegal sources or he does not contribute to desertification or to the debilitation of forests. The safest bet to curtail such claims would be to obtain a chain-of-custody certificate from the FSC. This, of course, is impossible if there is no FSC-certified supply available. Any other forest management certification scheme might do as well, but the credibility – the buzzword for market acceptance – of the other systems might not be so readily established as the FSC’s.

It is recommended that a potential new furniture exporter from a tropical country discuss with the potential buyers (wholesalers, importers, traders, etc.) what their requirements are and deal with that. It is also recommended that the producer not obtain any label or certificate expecting that it will automatically open all the doors – it won’t. It is important to understand that not having a certain label or certificate won’t close the doors, either. As discussed earlier, certification might give an edge in marketing or in the entry to a specific market, but the decision to obtain one should be based on the values of the organization or *known* client requirements.

The more alert – or responsible – companies may be the ones to reap the greatest benefits, but that is not to say that the indifferent – or just plain irresponsible – ones will be forced out of business. At the end of the day, despite all the efforts for the standardization, certification, verification, and assurance of quality, environmental performance, social accountability, or any other aspect of corporate behavior, there will always be markets where anything goes.

9. SPECIAL CHAPTER IV: USE OF INTERNET AND E-COMMERCE IN THE FURNITURE SECTOR

9.1 Acknowledgement

The following chapter is based on multi-client report "E-Commerce in the Furniture Industry" prepared for ITC by CSIL Milano in November 2001.

9.2 Overview of the market

Characteristics for the household furniture market are its numerous suppliers as well as very high number of manufactures and distributors. Therefore the "network" of operators in the market is wide covering in fact at least 200,000 sales outlets and thousands of suppliers. Due to a low concentration, the market shares of furniture distributors are also relatively low with Swedish distributor IKEA on top in Europe with 5,1% market share of the European market. Europe and the United States are responsible of over 70% of the world market.

9.3 International trade

In the furniture sector around 25% of the total production is imported/exported. Organized distributors control the most of the sales, but also at least 10% of the world supply is still craftsman based. The three biggest import countries are the United States, Germany and France. The biggest exporter is Italy before Canada and Germany. China is rising fast to contend the latter two.

9.4 Internet and purchasing of household furniture on-line

Spread of Internet and trends of purchasing on-line

The numbers of Internet users are growing rapidly with many countries having over 50% growth rate between years 2000 and 2002. The biggest Internet using country is the United States with 135 million users in 2000. The second biggest is Japan (34 million) ahead of Germany (20 million). It has been forecasted that the use of the Internet will grow from 414 million people in the year 2000 to 840 million in 2002. At the same time as the number of users are growing, the sales through the Internet are growing as well. In the United States the quarterly growth rate is around 25%-30% (year 2000). Business-to-business represents approximately 80%-85% of total over 250 billion dollars transactions through the Internet in USA.

Internet and household furniture

In the United States 543 million dollars sales of furniture in general represents 1.1% of total on-line sales. The furniture e-business is growing very rapidly (70% in 1999), which means more presence on the Internet for manufacturers and dealers. At the same time as number of users is growing, the Internet is considered by manufacturers and dealers as a possibility to obtain a better distribution channel compared to traditional ones. In USA as well as in Europe, where the figures are much lower than American estimates, the e-commerce still relies rather on B2B than on B2C.

The rapid growth rates of the use of the Internet will naturally have a significant impact on household furniture market. There are many opportunities, and future effects will be various. The following list presents some of those opportunities:

- Possibility to B2C sales by sites with no traditional distribution structure or by sites connected to traditional distribution structure
- Emerging of “showcase sites” and general interest sites in order to improve companies and businesses image, to increase web traffic as well as to direct potential customers to specific pages
- More developed relationships between suppliers of components, furniture manufactures and dealers
- Opportunity to sell specialized software via Internet

9.5 E-procurement

The main advantage of E-procurement is cost reduction. Degree of savings depends on physical location of business and on the type of furniture being produced. Large businesses are able to take more advantage of E-procurement due to their scale advantages. But E-procurement suits also businesses with high supply costs due to an outlying location. E-procurement will more likely benefit more producers of highly standardized types of furniture than manufacturers of specialized and small items.

An on-line electronic marketplace is more developed shape of E-commerce, which offers an opportunity to transactions between several buyers and suppliers at the same time. E-marketplace can be open to any company or to only certain companies. In the following, the web pages of several furniture companies that use E-commerce are being shortly analyzed.

Accuride International (USA)

- Produces hinges for use within the furniture industry and the electronic industry
- At www accuride.com lots of data for each product is available, the products are well organized and instruments for architects are provided
- Identification and locating of distributors is possible

Häfele (Germany, United States, Canada)

- Produces hardware products for the furniture and building industries and electronic closing technologies
- Information about the company and the products with drawings and illustrations of their functions by product categories are provided at www.haefele.com
- Simple and advanced ordering system as well as identification system of Häfele branches

Hettich International (Germany)

- Hettich international site covers over 10,000 pages with the tailored sites for different countries
- Production is organized specifically in different sectors and products are presented with the picture and text
- Ordering possibility and wide catalogues are provided

Burlington House (United States)

- Producer of textiles for house furnishings
- Uses Internet to supply its products, to manage customer relations, to improve market range and to give real time information of orders

Lectra Systems (France)

- Significant supplier of software and services for companies that use for example furniture
- www.lectra.com gives various technological solutions including real time data-exchange, on-line purchasing and e-catalogues for clients
- LectraOn-line is a B2B marketplace for different interest groups in the sector

Merloni Elettrodomestici (Italy)

- Up to date information of orders, and interactive catalogues are provided on-line
- Is developing and investing significantly in e-business

Corian (United States)

- Surface made up of mineral and synthetic materials produced by company Dupont
- Lots of information about products and their maintenance and applications as well as B2B platform is available at www.corian.com

9.6 Business-to-business

Introduction

Due to a faster delivery times, saved staff time, speed of the whole procedure and fewer processing errors, the B2B relations on-line can lead to significant cost reductions. Both the furniture manufacturer and site manager can benefit from reduced costs. More than from pure price reductions the sales outlet can benefit from improved on-line services such as real-time information of orders and products as well as wider product range. In the beginning of 21st century the B2B continues to be a dominating way of on-line transactions in the furniture industry.

B2B sites around the world

Ashley (United States)

- Household furniture manufacturer
- On-line electronic forms together with consultancy service make procedures more efficient

Hooker Furniture Corporation (United States)

- Specialized in the production of home office furniture, home entertainment and wall systems
- Uses EDI and platforms for real time order monitoring
- www.hookerfurniture.com is divided two sections: customer section provides information of company and product showcase with technical data and pictures, dealer section offers more specific information for the dealers

Broyhill (United States)

- Manufacturer of household furniture
- Web-based platform aims at improving order management and deliveries, as well as product information

Erpo (Germany)

- Producer of upholstered furniture
- Informative web-pages giving lots of data on products and providing the route to the nearest distributor
- Encrypted area for trading partners allows on-line communication and ordering of promotional material and advice

Euromobil (Italy)

- Producer of kitchen, household and upholstered furniture
- Encrypted area of the site concentrates on information management and public area provides information of products and current events in addition to possibility to design own room using the furniture produced by the company

VKG (Germany)

- Originally purchasing group, today represents numerous sales outlets
- Internet application to consumers offers lots of information and locator of outlets
- Intranet platform concentrates on real time information management

Der Kreis (Germany)

- Purchasing group specializing in kitchen furniture
- Both end-user Internet application with basic data and B2B platform are provided

Arena furniture channel (Italy)

- Electronic B2B commerce system for design furniture industry
- Encrypted site allows firms to offer services to their partners, configuration of product and order transmission systems are also available

Corridor (Great Britain)

- B2B marketplace for the furniture sector
- Supplier and purchaser are able to plan and manage their transactions through real time interaction
- www.corridor.com offers up-to-date information on products, news and events

Alibaba.com (China)

- Horizontal B2B market place

Buylateral (Singapore)

- B2B portal of furniture makers

9.7 Showcase sites

Main idea behind the company showcase sites is to promote and give information about the company and its products. Sites also try to attract new clients and make it easier for them to find their way to sales outlets. Furthermore, the interaction with customers is one of the sites' objectives. In the following, various web pages of furniture industry companies are shortly presented.

Homeportfolio (United States)

- Showcase which offers services to the furniture industry
- Provides wide range of information about products and tools for improving purchase procedures

Merillat (United States)

- Kitchen furniture producer
- Provides a vast range of information and an encrypted area with more in-depth information about products

Thomasville (United States)

- Household and upholstered furniture producer
- Well organized site which offers various services including store finder and customer feedback services

Palliser (Canada)

- Household furniture manufacturer
- Virtual showroom presents products by category, information about product quality and dealer locator are provided

Doimo (Italy)

- www.doimo.it gives up-to-date information to both dealers and consumers within the all areas of furniture sector
- On-line architect and sales outlet locator are provided

Flou (Italy)

- Specialized in bedroom furniture
- Site offers information about products with high quality images and other product oriented services are also provided

Huelsta (Germany)

- Household furniture manufacturer
- No on-line selling yet but a lots of free information including newsletters and on-line product catalogue

Vibel (France)

- Distribution chain for furniture and complementary items for children's bedrooms
- The site is organized with high quality graphic according to average child's day providing also product catalogue and possibility to interact with company

9.8 Business-to-consumer

Troubles of B2C portals

In the year 2000 many B2C sites with huge expectations and previous investments began to show signs of a problems. Several dotcoms disappeared from the web or began to move away from B2C activity. "Pure" on-line furniture distribution wasn't considered as promising any more. Main reasons for the failure were too high quality expectations, poor know-how of furniture business, low quality of services and deliveries as well as abuse of the "free shipping" policy.

Furniture.com is perhaps the most famous example how the traditional sales outlet can go under if the expectations are set too high and if expected delivery times as well as customer expectations are not met. Goodhome.com and Officefurniture.com are also examples of failures in on-line furniture sales.

Examples of B2C sites

Ethan Allen (United States)

- Manufacturer/distributor of household furniture
- On-line selling only of accessory products but in addition to that site also includes store locator and gives information about products with the idea of supporting sales via traditional channels

Behome.com (United States)

- Web site of Benchmarks industries including numerous manufacturers
- The showcase contains lots of information about products and various services are provided including individual guarantee for each product
- On-line selling is advanced and customers are informed about state of deliveries

Pottery barn (United States)

- The showcase includes several product categories, state of progress of order can be monitored and store locator among other services is provided

Herman Miller (United States)

- Office furniture manufacturer with very advanced Internet applications
- Links with both suppliers and customers as well as effective electronic commerce have allowed faster and more accurate deliveries
- Product showrooms by categories, 3 newsletters, a lots of other information and virtual shop are provided in the site

Furniturefind.com (United States)

- The site contains over 100 manufacturers with huge amount of furniture products and is visited by hundreds of thousands people every month
- Main function for site is to be a showcase but on-line purchasing is also possible

Affordablefurniture.com (United States)

- The site mainly sells easily transportable products, offers product showroom and provides possibility to follow the status of order

Furnitureitalia.com (Italy)

- On-line sales of products consist of Italian furniture and French products organized by environment in the site

Ezshop.com (United States) (not available, suspended operations 8/2002)

- Multi-product site which sells also furniture
- Clear and effective selling system with proper data of products
- Manufacturer takes care of deliveries

IKEA (Sweden)

- The largest furniture distributor in Europe which web-site directs customers to their national sites
- Sites are primarily organized showcases which encourages clients to use classic distribution channels, but also on-line sales are provided in some national sites like in IKEA-usa.com and in Scandinavian countries
- On-line offering is still restricted and sites are mainly informative trying to attract customers to sales outlets

Conforama (France)

- The third largest furniture distributor in Europe
- The site aims at benefits for both e-business and sales outlets
- On-line showcase tries to encourage customers to sales outlets but possibility to on-line purchasing and booking are also provided

MFI (United Kingdom – France)

- Significant home furniture distributor
- Web-site includes easy comparison, data and images of products as well as on-line purchasing possibility

Kika/Leiner (Austria)

- Furniture distributor with Internet activities aiming at increasing both on-line and traditional sales

Mobel Walther –walthereiving.com (Germany)

- Household furniture distributor
- Products are categorized and displayed with informative images
- On-line sales, customer services as well as B2B solutions are provided

Meubles.com (France)

- A relatively small on-line furniture seller, co-branded with the Carrefour group

Karstadt quelle (Germany)

- The distribution group that offers on-line sales

Furniturewebstore (United Kingdom)

- On-line seller for Abbey, a distributor of upholstered goods

Furniture123.co.uk (United Kingdom)

- Significant on-line distributor with commercial partnerships with the main Internet portals
- Application for real time supply chain monitoring and management, data and images of products are provided in the site

Furniturebusters.com (United Kingdom)

- Distributes on-line furniture and guarantees lowest prices
- Products are categorized and showcase with product information and images for each manufacturer is provided

Saporiti Italia (Italy)

- Innovative solutions like exclusive on-line sales of furniture products designed specifically for e-commerce
- Modern and sophisticated site including wide FAQ section

Unicahome.com (United States)

- A site of small furniture and design object dealer

9.9 Portals and directories

Furniturefan.com (United States)

- Search directory of furniture manufacturers providing preview of the products
- Helps customers in purchasing decisions and in finding nearest sales outlet

Homefurnish.com (United States)

- Portal, which gives information on various types of furniture
- Manufacturers and distributors are both well represented for example by virtual showrooms and by links to company sites

Asid.org (United States)

- Interior design directory offering information for example about current events laws and standards

Portalmoveleiro (Brazil)

- Portal of Brazilian furniture industry
- Products are presented with average quality image and also information about products and sector is available
- Lots of information on individual companies and links to their sites are provided

www.brazilbiz.com.br

- Marketplace with office furniture manufacturers as one product category

Arredamento.it (Italy)

- On-line magazine and display window for companies related to living
- Provides articles, company press releases and other information about the "living" sector as well as furniture sector

E-interiors.net (Italy)

- Interior design portal presenting both manufacturers and their products
- Various free services including search engine, data and images of products and also directions for finding sales outlets, agents and showrooms

Timberandmore.com (Italy)

- Information service site offering event calendar, useful links within the timber sector, downloadable data and marketplace with company information

Webmobili.it (Italy)

- The site offers visibility to sales outlets in the furniture sector on the net

Ambienti e oggetti (Italy)

- On-line magazine concerned with kitchen issues
- Provides articles, weekly on-line magazine, product and company information as well as other services to both public and sales outlets

British-shopping.com (United Kingdom)

- On-line shopping directory including furniture sites

Shopsmart.com (United Kingdom)

- Portal that helps users in purchasing decisions

Moebelnews.de (Germany)

- A massive collection of articles and news related to furniture sector

Livingathome.de (Germany)

- Portal mainly dealing with living
- Services include articles, redecorating advice, marketplace for manufacturers and distributors as well as possibility to on-line purchasing

Muebleshop.com (Spain)

- Portal for furniture sector with services for manufacturers, dealers and other professionals
- Aiming at organization of B2B and consumer sales, product database is provided

Cetelem –dynamique commerciale (France)

- Portal offering consumer credit and information about distribution

Nf.ameublement.net (France)

- Site offers information services primarily of furniture quality and provides place for companies to increase their visibility in the Internet

Hkenterprise.com (Hong Kong)

- General portal including furniture sector, provides mainly product information

Rattanlink.com (Indonesia)

- Portal that hosts an on-line magazine, provides up-to-date information, discussion forums and virtual marketplace

9.10 Business solutions

Furnishnet (United States)

- Offers e-business solutions for the furniture industry
- Platform for commercial transactions facilitates the interaction between interest groups and transaction management system makes order processing more fluent

Schuler (Germany)

- Supplies software and consultancy services for the timber and furniture industries
- Lots of information, tools for order monitoring and invoicing as well as sales support services are provided for both manufacturers and dealers

Planit (Great Britain)

- Provides information services and software solutions
- Offers sales support, product catalogues, order management services and database of relevant information

Bizomnia (United States)

- Hosts marketplaces and provides services for B2B activities

Scene7 (United States)

- Former Goodhome.com supplying nowadays software for image management

Ecommerce-guide.com (United States)

- Provides information on e-commerce, relevant up-to-date news and calendar of current events

