

## Innovation in China's Furniture Industry

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**Description:** China, Furniture, Innovation

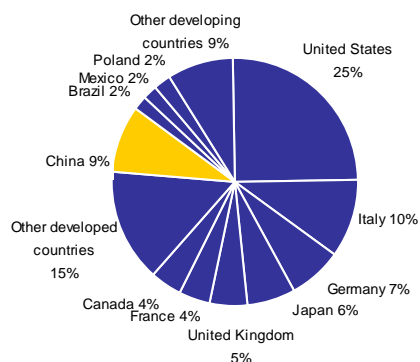
**Methods:** Personal interviews, survey

**Data Source:** China and US official data, management interviews and questionnaire survey

**Key Findings:**

- Chinese furniture manufacturers are pursuing innovation with three equal foci on product, process, and business systems, and will likely become more innovative in the future.
- Future Innovativeness will be more from product and process, than from business systems. Based on the survey, innovativeness varied with company size and export orientation, suggesting that large-sized Chinese manufacturers with export sales ranging from 1-50% of total revenue will become innovation leaders in the future.

China's furniture industry is winning the world's attention with its fast development over the recent two decades (Cao *et al.* 2004). Since 2002, China has become the world's 3<sup>rd</sup> largest furniture manufacturer and 2<sup>nd</sup> largest exporter, holding 9% of the global market share in terms of value of shipments (**Figure 1**) (CSIL 2003). The U.S. is the biggest furniture importer in the world, where imports account for over half of the country's total household furniture market value. During 2004, China exported \$8.7 billion worth of furniture products to the U.S., representing 47% of the total U.S. imports in dollar value (Carroll 2005).



**Figure1. Global Furniture Producers (CSIL 2003)**

Industry observers often attribute China's swift global expansion to its vast inexpensive labor pool and government subsidies, which enabled the

industry to compete with developed economies as a low-cost producer. In fact, aggressive Chinese investment in innovation, especially on the part of privately-owned exporting companies, contributed to much of the industry's growth momentum. In Guangdong and Zhejiang, China's most vibrant furniture manufacturing and exporting regions, new technology, product development, and marketing are increasingly being pursued by local furniture plants as winning strategies in global, high-end markets.

**Literature Review**

Innovation has a broad array of definitions in the literature. In earlier times, it was defined as "an idea, practice, or object that is perceived as new to an individual or another unit of adoption" (Dewar and Dutton, 1986). Recently, a cross-functional perspective on innovation has been increasingly employed by researchers. Boer and During (2001) suggest that innovation is "the creation of a new product-market-technology-organization-combinations".

Hovgaard and Hansen (2004) followed a similar cross-functional approach and suggested that product (new product development), process (adoption of new or improved processing technologies) and business systems (management and marketing) are three types of innovation.

**Methods**

This study of innovation in the context of the Chinese furniture industry is exploratory in nature due to the absence of previous research.

Qualitative research in the form of management-level interviews was employed as the first stage of data collection. Eighteen China-based furniture companies, all known as innovation leaders in the industry, were visited during August, 2003. Interviews were tape-recorded and careful verbatim transcription of interview data was performed.

Based on interview information, a questionnaire was developed and data collected during one of the biggest furniture trade shows in Guangdong in March, 2004.

**Results**

Innovation was considered to be multi-faceted, where product design, new material use, processing technology, employees, corporate culture, information systems, customers, competitors and distributors were all perceived as viable sources of innovation by the Chinese managers interviewed.

RESEARCH BRIEF

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This was consistent with the findings by Hovgaard and Hansen (2004), and justified a re-grouping of these sources into three larger categories as in **Figure 2**.

Product	product design, product quality improvement
Process	new material, technology, processing
Business systems	employees, management, culture, customers, competitors, sales

**Figure 2. Three Foci of Innovation and Sources**

In the survey, innovativeness was tested in terms of the three foci, on self-evaluation basis. In addition, company export orientation, size, and profitability were measured as potential variables affecting innovativeness, where export orientation and size were measured based on percentage of sales revenue, and number of employees, respectively. Likert-type scales (1-5) were employed to measure innovativeness and profitability.

A total of 263 responses were collected (furniture manufacturers 49%, distributors 30%, designers 6%, suppliers 5%, and others 10%). **Figure 3** provides a further breakdown of manufacturers in terms of company and export orientation.

		Company size			Total
		Small (1-100)	Medium (101-250)	Large (>250)	
Export orientation	None (0%)	5	4	6	15
	Moderate (1-50%)	12	23	8	43
	Heavy (>50%)	8	32	11	51
Total		25	59	25	109

**Figure 3. Distribution of Manufacturer Respondents by Company Size and Export Orientation**

In terms of current innovation, respondents demonstrated higher than the scale midpoint (3) in all three foci ( $p < .01$ ); whereas no significant difference was found among the three. The future innovation focus tended to be weighted in favor of product and process, over business systems ( $p < .05$ ).

Moderately exporting manufacturers, with exports sales ranging from 1-50% of total revenue, tended to be more innovative in process than heavy exporters (with export sales higher than 50% of total revenue) ( $p < .05$ ). In the future, moderate exporters tend to be more innovative in business systems than non-exporters and heavy exporters ( $p < .05$ ). Company

size was positively correlated to current product and business systems innovativeness ( $p < .05$ ). No significant correlation was found between innovativeness and company profitability.

### Managerial Implications

Today, Chinese furniture manufacturers are moving up the value chain to become higher-end producers, by pursuing innovation with three equal foci on product, process, and business systems. In the future, innovation in product and process will receive more attention by the industry than will business systems. This reflects China's ambition to become "the world's factory", while staying less sophisticated in business systems.

For Chinese manufacturers, innovativeness varies with company size and export orientation. Large companies tend to be more innovative than small- and medium-sized companies, whereas non-exporters and heavy exporters tend to be less innovative than moderate exporters. This suggests that diversified marketing foci (on both domestic and international markets) help improve company innovativeness. Large-sized Chinese manufacturers with moderate export orientation will be the industry's innovation leaders in the future.

No relationship was found between profitability and innovativeness. This suggests that innovation has limited influence on company financial performance, given the industry's traditional focus on low-cost, low-profit production.

### Literature Cited

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