China

Opportunities and Competition in Global Wood Products Markets

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China Market Projects at Forintek

- China's non-structural panel market in furniture and interior finish (2004)
- Opportunities for lumber in China's interior finish and furniture industries (2004)
- Benchmarking Chinese Building Specifiers (2004) (support in primary research to UBC)
- Preliminary competitor analysis for wood products in China (2003)
- A benchmarking study for structural wood products demand in China (2003)
Net Trade in Primary and Secondary Wood Products, 2004

China’s Net Trade in Wood Products

Source: China Customs, WTA
China Production, Trade and Apparent Consumption

**Softwood Lumber**

- Imports
- Exports
- Production
- Apparent Consumption

Source: FAO

**Hardwood Lumber**

- Imports
- Exports
- Production
- Apparent Consumption

Source: FAO

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China Production, Trade and Apparent Consumption

**Plywood**

- Imports
- Exports
- Production
- Apparent Consumption

Source: FAO

**MDF**

- Imports
- Exports
- Production
- Apparent Consumption

Source: FAO
China Opportunity: Raw Material Supply

Top 5 Suppliers of Logs, Lumber and Veneer, 2004

<table>
<thead>
<tr>
<th>Supplier</th>
<th>Softwood (m³)</th>
<th>Hardwood Logs (m³)</th>
<th>Softwood Lumber (m³)</th>
<th>Hardwood Lumber (m³)</th>
<th>Veneer (t)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Russia</td>
<td>92%</td>
<td>Malaysia 26%</td>
<td>Russia 38%</td>
<td>Indonesia 22%</td>
<td>Malaysia 27%</td>
</tr>
<tr>
<td>New Zealand</td>
<td>5%</td>
<td>Russia 21%</td>
<td>Canada 20%</td>
<td>Thailand 19%</td>
<td>Indonesia 21%</td>
</tr>
<tr>
<td>Australia</td>
<td>1%</td>
<td>Papua New Guinea 13%</td>
<td>New Zealand 13%</td>
<td>United States 17%</td>
<td>United States 18%</td>
</tr>
<tr>
<td>Myanmar</td>
<td>0.4%</td>
<td>Myanmar 18%</td>
<td>EU25 8%</td>
<td>Thailand 17%</td>
<td>Malaysia 18%</td>
</tr>
<tr>
<td>Korea North</td>
<td>0.4%</td>
<td>Gabon 5%</td>
<td>Chile 7%</td>
<td>Brazil 7%</td>
<td>Taiwan 6%</td>
</tr>
</tbody>
</table>

Million m³: 16 10.2 1.7 4.3

Source: China Customs, WTA

China Opportunity: Softwood Logs

China’s Softwood Log Imports

- China is now the world’s largest importer of industrial logs.

Source: China Customs, WTA
China Opportunity: Softwood Lumber

China’s Softwood Lumber Imports

- Softwood lumber imports small but growing.
- Russian supply of processed products will increase with new capacities being built in Siberia (Chinese investments).
- Competition for softwood lumber in China expected to intensify.

<table>
<thead>
<tr>
<th>Year</th>
<th>Million Cubic Metres</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>0.2</td>
</tr>
<tr>
<td>1996</td>
<td>0.2</td>
</tr>
<tr>
<td>1997</td>
<td>0.4</td>
</tr>
<tr>
<td>1998</td>
<td>0.6</td>
</tr>
<tr>
<td>1999</td>
<td>0.8</td>
</tr>
<tr>
<td>2000</td>
<td>1.0</td>
</tr>
<tr>
<td>2001</td>
<td>1.2</td>
</tr>
<tr>
<td>2002</td>
<td>1.4</td>
</tr>
<tr>
<td>2003</td>
<td>1.6</td>
</tr>
<tr>
<td>2004</td>
<td>1.8</td>
</tr>
</tbody>
</table>

Source: China Customs, ITA

Softwood Lumber End Use in China, 1999 (m³)

- Furniture: 33%
- Interior Finish: 24%
- Construction: 21%
- Structural: 13%
- Other (Packaging, Transportation, etc.): 9%

Source: Jaakko Pöyry Consulting
China Opportunity: Softwood Lumber

Material Use in Furniture and Interior Finish Manufacturing in East and South China, 2003 (m³)

Furniture
- Panels: 56%
- Solid wood: 38%
- Metal: 4%
- Glass: 1%
- Plastic: 0%
- Other: 1%

Interior Finish
- Solid wood: 66%
- Panels: 34%

Number of respondents: 129

China Opportunity: Softwood Lumber

Solid Wood Use in Furniture and Interior Finish Manufacturing in East and South China, 2003 (m³)

Furniture
- Softwood: 20%
- Temperate hardwood: 19%
- Tropical hardwood: 61%

Interior Finish
- Softwood: 24%
- Temperate hardwood: 50%
- Tropical hardwood: 26%

Number of respondents: 88 (Furniture), 103 (Interior Finish)
China Opportunity: Softwood Lumber

Roof Systems Designed in Past 3 Years

Number of Respondents: 77 Developers, 159 Engineers, 131 Architects
Knowledge of Wood Truss Roofs

China Opportunity?

Canadian Exports of Wood Products (Excl. Furniture)
China Competition: Wood Products Exports

<table>
<thead>
<tr>
<th>Wood Market</th>
<th>United States</th>
<th>EU25</th>
<th>Japan</th>
<th>Korea South</th>
<th>United States</th>
<th>EU25</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wood Furniture</td>
<td>56%</td>
<td>13%</td>
<td>9%</td>
<td>2%</td>
<td>56%</td>
<td>13%</td>
</tr>
<tr>
<td>Builders' Joinery</td>
<td>30%</td>
<td>28%</td>
<td>15%</td>
<td>3%</td>
<td>28%</td>
<td>28%</td>
</tr>
<tr>
<td>Hardwood, Moulded</td>
<td>United States</td>
<td>Japan</td>
<td>United States</td>
<td>Japan</td>
<td>Canada</td>
<td>Rest of the World</td>
</tr>
<tr>
<td>Softwood, Moulded</td>
<td>30%</td>
<td>26%</td>
<td>24%</td>
<td>9%</td>
<td>8%</td>
<td>17%</td>
</tr>
<tr>
<td>Plywood</td>
<td>Japan</td>
<td>United States</td>
<td>Korea South</td>
<td>EU25</td>
<td>Taiwan</td>
<td>South Korea</td>
</tr>
</tbody>
</table>

Million's $US: 5,700 770 264 14 1,245

- The U.S., Europe, Japan, Korea, and Taiwan are China's main export markets.
  - Competition to both domestic production and export-oriented industries in other countries.
- Geographical shift in labour-intensive manufacturing not new (e.g., Indonesia, Malaysia, Vietnam, Brazil, Eastern Europe), but scale is much larger with China.
**China Competition: Furniture**

U.S. Imports of Wooden Furniture and Components

- **China**
- **Canada**
- **Italy**
- **Mexico**
- **Indonesia**
- **Singapore**
- **Malaysia**
- **Taiwan**
- **Thailand**
- **Brazil**
- **Other**

**China Competition: Plywood**

- **China's Plywood Exports**
- Soaring plywood exports are based on low-cost, imported logs and low value of the Chinese currency.
- Chinese industry has successfully marketed combi plywood (poplar core with tropical wood face).
- Supply of low-cost tropical hardwood peeler logs expected to decline.
Furniture/Interior Finish Markets

Key Results - Panels

- Panels dominate material use in furniture production; in interior finish solid wood dominates
- MDF is the most important panel type used in both furniture and interior finish
- Lower formaldehyde emission is the key concern among panel end-users
- Low-cost surfacing materials dominate in furniture (paper foil, paint, direct printing), requiring high panel surface quality
- All panel mills interviewed expect shortages in fibre supplies and higher fibre prices in the future
Key Results - Lumber

- Hardwood dominates in both furniture (tropical) and interior finish (temperate)
- Softwood primarily utilized in
  - Chairs, beds, framing lumber for cabinets, beds and upholstery
  - Moulding, door frames
- Finger-jointed and laminated lumber is widely utilized, especially in interior finish
- Majority of softwood lumber is imported
- Lumber most frequently bought in 2m lengths, KD (interior finish), green (furniture)

Conclusions

- China remains a very large, fast growing market for wood products in non-structural applications
- Competition is fierce from an expanding, increasingly modern domestic industry and from producers in the region
- Russia and Southern Hemisphere countries will remain the dominant suppliers of softwood to China (proximity, pricing)
- Opportunities exist for exporters in high-end and niche products in panels, lumber and components
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