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# GAIN Report

Global Agricultural Information Network

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## China - Peoples Republic of

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### **Solid Wood Annual 2012**

**Report Categories:**

Wood Products

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**Report Highlights:**

Overall, wood product trade is forecast to slow in 2012 as the property market cools, economic stimulus projects wane and the rise in environmental trade monitoring tempers demand, both domestically and internationally.

## General Information:

China's forestry area, spurred by government support and private investment, is expanding and providing more resources for the wood processing industry. Traditionally, imports of logs have eased supply tensions but lumber's lower shipping cost is influencing a trade shift to lumber. Export potential for processed wood products remains positive, but mounting obstacles, including domestic economic factors and sustainability monitoring, may impact competitiveness. Soft and hardwood log imports from the United States, mainly hemlock, Douglas fir, and white pine from the west coast and spruce/fir from Alaska, swelled to 4,677,672 m3 in 2011 from 636,245 m3 in 2009. U.S. hardwoods lumber have strong long-term potential in China due to reliable supply, sustainable management, and competitive exchange rate.

## Production:

### Forest Situation & Outlook

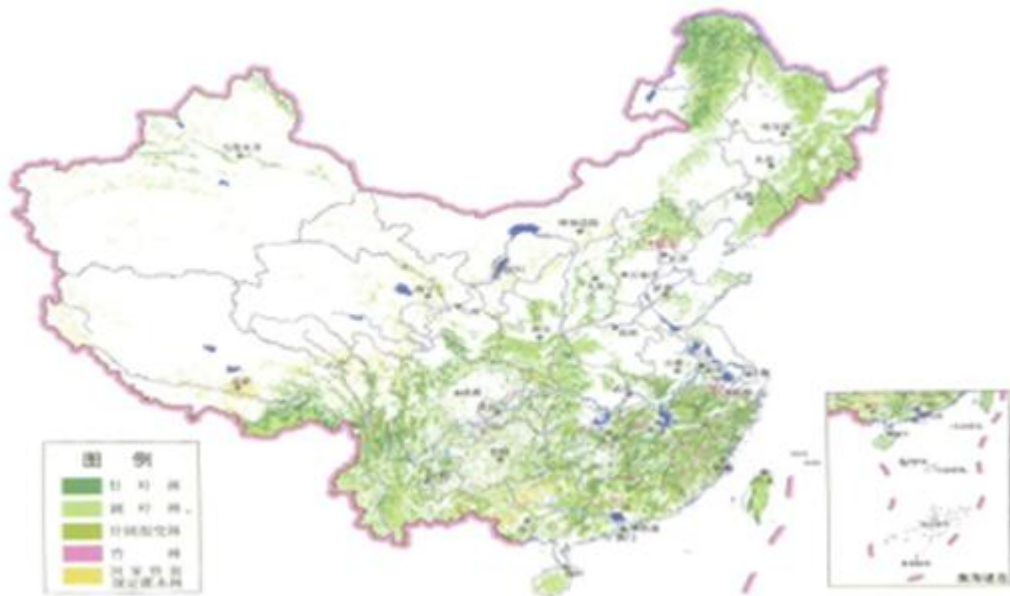
In 2011, China planted 6.1 million hectares of forest -3.2 million hectares by state or collective entities and 2.9 million hectares by private entities -raising China's forested area in 2011 to approximately 200 million hectares. According to China's State Forestry Administration, China's forested area will increase to 207 million hectares by 2015, an increase of 12 million hectares since 2008. Yunnan, Inner Mongolia, Sichuan, Shaanxi, Hebei and Shanxi provinces account for over 40 percent of China's total forest area.

Table 1. China's forest area by use classification 2011(see Annex for additional definition)

Forest Type	Area (1,000 hectares)	Percentage
Public Benefit Forest		
--Protected forest	3,689	62%
--Special-use forest	33	0.5%
Non Protected and Commercial Forest		
--Timber forest	1019	17%
--Economic forest	1,218	20%
--Fuel forest	37	0.6%
Total	5996	100%

(Source: 2011 Forestry Statistics, State Forestry Administration)

Map of Forest Distribution in China



### **China's forested area expected to continue growth trend**

Over the past twenty years, governmental policies have fostered the recuperation of China's forest base, including the banning or reduction of production from natural forests, establishing fast-growing plantations, and ongoing support for conversion of cropland to forests and grasslands. In addition, China has dedicated rmb219.5 billion (\$34.8 billion) for a second phase (2011-2020) of the Natural Forest Protection Program (NFPP). This program, launched in 1998, was established in regions which had experienced severe flooding problems due to deforestation. The goals are to improve local eco-systems and wildlife habitats, ease soil erosion, protect biodiversity and develop forestry related economies.

### **Land Tenure Reforms impacting development**

Development of forestry's economic elements is a component of China's rural policy focus. Roughly 182 million hectares, or 60 percent of China's total forestland, is held collectively and often located in areas inhabited by low-income rural residents. To provide an economic stimulus in rural areas, the government instituted land tenure reforms to transform collective forest use rights into 70 year leases for individual households. Authorities anticipate a stake in private ownership will facilitate private investment, encourage forestry management and output and raise rural incomes.

The impetus seems to be gaining traction. According to the State Forestry Administration (SFA), by the end of 2011, 84 million households have received 151 million hectares of forest property rights which have been used to secure RMB45.6 billion (US\$7.2billion) in credit. To facilitate the flow of investment to new private forest owners, China's forest cooperatives allow investors to deal with one representative entity instead of many individual landowners for land use rights.

### **Production**

#### **China's forestry output value growth continues**

China's 2011 forestry output value increased 34 percent over 2010 and 2012 production is forecast to increase by 20 percent. This growth could result in overall output topping RMB3 trillion in 2012, with primary, secondary, and tertiary output valued at RMB1.1 billion, RMB1.6 billion, and RMB285 billion, respectively. According to the State Forestry Administration,

China is targeting forestry output value of RMB3.5 trillion by 2015.

### Logging Quota

One indication of China's output value potential is the higher logging quota set for 2011-2015. The new limit will permit logging of 271 million m<sup>3</sup> compared to the 248 million m<sup>3</sup> in 2006-2010. The increase primarily benefits commercial forests, which account for almost 70 percent of the total quota. (See table below).

Table 2. China's logging quota (2011-2015)

	New (2011-2015) Logging Quota (1,000 m <sup>3</sup> )	Old (2006-2010) Logging Quota (1,000 m <sup>3</sup> )	Change (percent)
Forest type [1]			
- Commercial forest	218,359	157,697	38%
- Public benefit forest	52,695	90,458	-42%
Forest origin			
- Natural forest	82,753	91,214	-9%
- Plantation	188,301	156,941	20%
- Of plantation, short rotation timber forest	77,068	54,229	42%

Source: State Forestry Administration

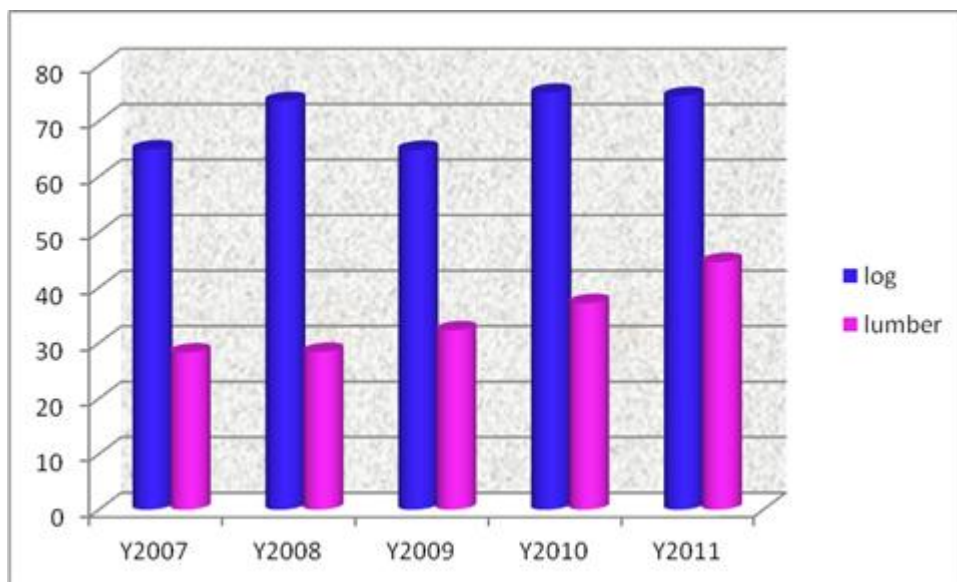
### Log production stable in 2012

China's log production is estimated to remain stable at 75 million m<sup>3</sup> in 2012. However, future large-diameter log production may decline due to strict logging restrictions in natural forests. For example, DaXing'AnLing in Northeast China, the largest state-owned forest farm, will reduce its logging quota to 1.1 million m<sup>3</sup> from the 2.3 million m<sup>3</sup> in 2010.

### Lumber production will increase in 2012

China's lumber production has grown consistently over the past decade (2001-2011), rising 20 percent in 2011 to top 44.6 million m<sup>3</sup> and expected to rise another 10 percent in 2012 to 49 million m<sup>3</sup>. As production costs rise, lumber's lower shipping costs, compared to logs, continues to positively influence its demand.

Figure 1. China's log and lumber production in 2007-2011 (million m<sup>3</sup>)



(Source: State Forestry Administration, 2011 data is Post's estimate)

## Wood processing

Approximately 80 percent of China's 250,000 forest-related enterprises are privately owned, and have traditionally benefited from locations in southern and southeastern China with cheap labor and abundant resources. Rising operational costs and competition for labor are eroding these advantages, however, causing some southern (Yangtze River Delta and Pearl River Delta) wood processing factories to relocate in more favorable economic conditions found middle and northern China.

### Wood processing sectors: moderate expansion amid challenges

In addition, China's wood processing sector faces other domestic and international challenges which will impact its expansion rate in 2012. First, wood processing is considered a low value-added, low-technology, and high resource consumption industry, thus, this industry is excluded from domestic banking's priority lending list under the GOC tight monetary policy.

Second, domestic policies, including governmental measures in effect since April 2010 to cool a hot property market, are also dampening prospects for the wood-processing sector. Slower property sales reduce the need for wood products used in construction, renovation and interior decoration.

Third, import measures implemented by China's two largest markets for wood products potentially impact trade. The EU's timber regulation, which prohibits the sale of illegally-harvested timber, and the United States Formaldehyde Standards for Composite Wood Products Act, which significantly decreased formaldehyde emission of wood products, could represent impediments for some trade. Furthermore, US anti-dumping duties and countervailing duties on Chinese engineered wood flooring will decrease China's exports to the United States. (Please refer to the trade section for more information of EU's new timber regulation, and the U.S. Formaldehyde Standards for Composite Wood Products Act).

However, opportunities are also abound for the wood processing sector. Rising incomes and real estate development are boosting demand for North American pine, and New Zealand and Chilean Radiata Pine for use in building projects, and driving consumption of interior decorating materials and furniture. China's 2<sup>nd</sup> and 3<sup>rd</sup> tier cities are emerging markets, with a growing housing supply and need for interior materials and furnishings. For example, Hefei in Anhui Province, Tongliao in Inner Mongolia, Liaoyang in Liaoning Province, Suqian in Jiangsu Province and Dazhou in Sichuan Province show strong

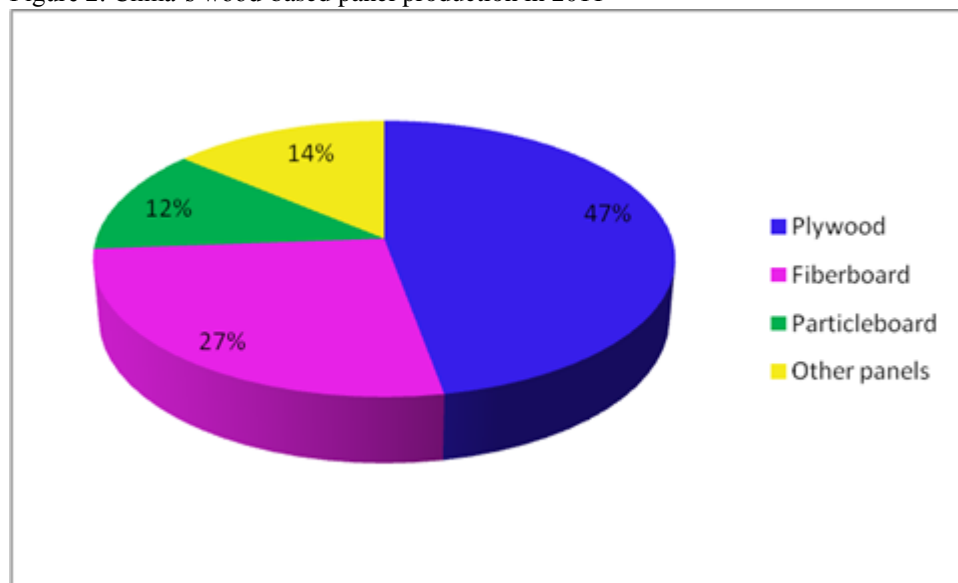
growth in home furnishing purchases in 2011. Chain stores, including DER Look, Easyhome, and Zhongqing Group, have opened outlets in 2<sup>nd</sup> and even 3<sup>rd</sup> tier cities to take advantage of this trend.

#### **Wood-based panel production: moderate growth in 2012**

Shandong, Jiangsu, Guangxi, Henan, Hebei, Anhui, Fujian and Guangdong provinces are the major wood-based panel producing provinces in China, accounting for over 80 percent of China's total production in 2011.

According to the State Forestry Administration, China's production of 209 million m<sup>3</sup> of wood-based panels in 2011 was a 36 percent increase from 2010. The primary production was plywood (99 million m<sup>3</sup>), followed by fiberboard (56 million m<sup>3</sup>), particleboard (26 million m<sup>3</sup>), and other panels, mostly block board (29 million m<sup>3</sup>). Over 60 percent of total panel production is sourced into furniture manufacturing, followed by construction (20 percent), packaging (8 percent) and flooring (7 percent).

Figure 2. China's wood-based panel production in 2011



Expectations for 2012, however, are that recent rapid expansion and overproduction, coupled with challenging economic times, will force out uncompetitive producers and drive a shift from quantity expansion to quality improvement in the sector. Therefore, the industry is forecast for a moderate five percent increase in 2012 to 220 million m<sup>3</sup>.

#### **Wood flooring production: slight increase in 2012**

There are more than 2,000 wood flooring manufacturers in China; about half are laminated flooring manufacturers located mainly in Jiangsu, Guangdong, Zhejiang, and Sichuan provinces and approximately 700 are solid wood flooring manufacturers located mainly in northeastern Jiangsu and Zhejiang provinces.

According to SFA, China produced 582 million square meters (m<sup>2</sup>) of wood flooring in 2011, a 32 percent rise from 2010. Solid wood flooring and laminated/engineered flooring production totaled 122 million m<sup>2</sup> and 460 m<sup>2</sup>, up 9 percent and 40 percent, respectively, from the previous year. For 2012, China's wood flooring production is estimated to increase slightly to 600 million m<sup>2</sup> in response to rising domestic demand. Laminated flooring products, due to their affordability and durability, are increasingly popular in smaller cities and rural areas.

#### **Wood furniture production: slight increase in 2012**

According to the China Furniture Association, China's wood furniture production is expected to continue flourishing, rising 16 percent in 2011 to 248 million pieces, and forecast to reach 260 million pieces in 2012. Most furniture manufacturers in China are small to medium-sized private enterprises, about half with \$1.5 million in annual sales or below. Nevertheless, this industry is maturing and production is diversifying from low-value traditional products to high-value, quality branded products. Higher per unit margins for producers and retailers, compared to other furniture manufacturing techniques, is driving efforts to promote solid wood furniture. Although wood furniture is primarily sourced from Spruce, Pines and Fir (SPF) material, cherry, ash, black walnut, white oak and red oak are gaining popularity as resource options.

Table 3. China's 2010 Forest Product Output

Product	Unit	2011 Output	2010 Output	Change (09/08)
Timber	Million M3	81.46	80.90	1%
- Logs	Million M3	74.5	75.13	-1%
- Fuel wood	Million M3	6.96	5.76	21%
Lumber	Million M3	44.6	37.23	20%
Wood chips	Million M3	22.37	18.74	19%
Wood-based Panels	Million M3	209.19	153.61	36%
- Plywood	Million M3	98.7	71.40	38%
- Fiberboard	Million M3	55.62	43.54	28%
- Particleboard	Million M3	25.59	12.64	102%
- Other	Million M3	29.28	26.02	12%
* Of block board	Million M3	20.34	16.52	23%
Wood Flooring	Million M2	582	440	32%
- Solid wood flooring	Million M2	122	112	9%
- Engineered/laminated flooring	Million M2	460	328	40%

(Source: 2011 Forestry Statistics by State Forestry Administration)

<sup>[1]</sup> Please refer to [CH8059](#) for explanation of forest type.

### Trade:

Overall, wood product trade is forecast to slow in 2012 as the property market cools, economic stimulus projects wane and the rise in environmental trade monitoring tempers demand, both domestically and internationally. The fall in demand will lower imports in 2012 with log imports losing market share to lumber's availability and lower shipping cost.

### Imports

#### Logs: Imports drop

- **Softwood Logs: import demand softening.** According to China Customs statistics, China's softwood log (H.S. code 440320) imports declined 11 percent in the first quarter of 2012 compared to the same period last year. A bearish property market and ebbing construction temper overall 2012 softwood log import expectations down 10 percent to 28 million m3 from 31 million m3 in 2011.

Among China's import sources, Russia's market share of imported softwood logs plummeted from 91 percent in 2007 to 42 percent in 2011 after imposition of a log export tax. Other principal suppliers, such as New Zealand, the United States, and Canada, have seized the opportunity to grow market share to 26, 15 and 8 percent in 2011. (see figure 3 below). Although the price for US and Canadian logs is higher than Russian softwood, the gap is narrowing (see figure 4 below). Softwood log imports from the United States, mainly hemlock, Douglas fir, and white pine from the west coast and spruce/fir from Alaska, swelled to 4,677,672 m3 in 2011 from 636,245 m3 in 2009.

Figure 3. China's softwood log imports from different countries (1,000 m3)

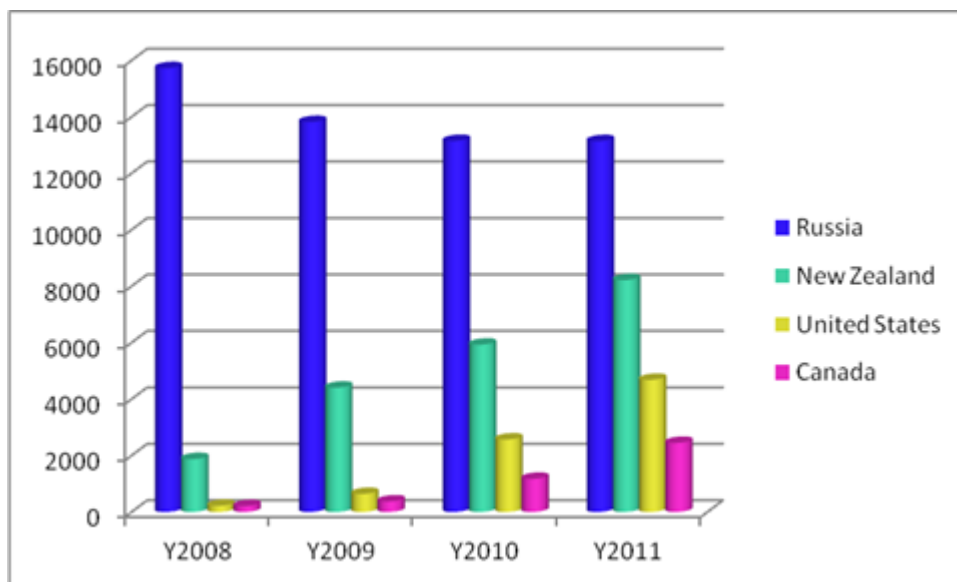
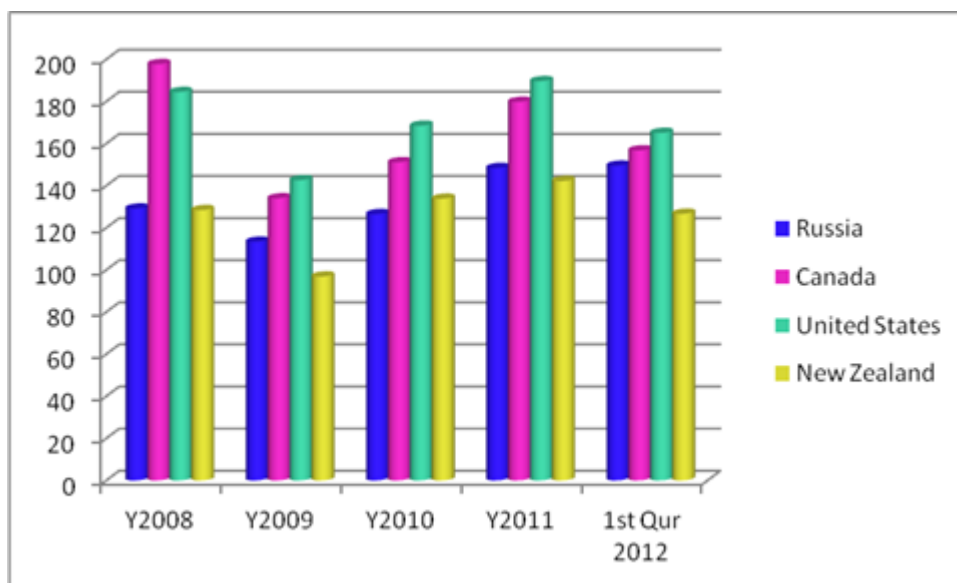


Figure 4. Softwood log importing prices from different countries (US\$/m3)



(Source: China Customs)

- **Hardwood logs:** imports softening but enhanced opportunities for U.S. product. Hardwood log imports are forecast at 10.5 million m3 in 2012, a five percent drop from 2011 as cheaper softwoods gain ground in the wood processing and interior decoration sectors. The change flows from uncertainty regarding the sustainability of China's tropical hardwood log import level which propelled a shift to softwoods and other temperate hardwoods. International monitoring of illegally logged timber, such as the EU's new timber regulation, which prohibits the sale in the EU of illegally harvested timber and products derived from such timber, requires EU traders who place timber products in the EU market for the first time to exercise "due diligence," and mandates downstream traders must keep records of their suppliers and customers, will impact supply. Enforcement of the regulation is set for March 3<sup>rd</sup>, 2013 to allow a sufficient transition period. The regulation covers a broad



range of timber products including solid wood products, flooring, plywood, pulp and paper. Please refer to [EU's New Timber Regulation](#) for detailed information on this issue. The EU's new timber regulation may oblige Chinese export-oriented manufacturers to buy legally harvested timber, which enhances opportunities for U.S. wood exports to China. Papua New Guinea, Solomon Islands and Russia are currently the top three hardwood log exporters to China.

**Lumber:** Competitive prices are expected to support the swell of China's lumber imports, which rose 118 percent from 2009 to 2011, and are expected to gain an additional five percent in 2012 to reach 23 million m3.

- **Softwood lumber:** slight import increase. China's softwood lumber imports are forecast at 15.7 million m3 in 2012, a slight increase from 2011, with 85% of imports sourced from Canada and Russia. Canadian softwood lumber exports to China soared to 6,811,676 m3 in 2011 from 331,696 m3 in 2006, moving Canada ahead of Russia as China's largest softwood lumber supplier, due to Canada's competitive pricing and sustainable supply. The majority of Canadian lumber is Spruce-Pine-Fir (SPF), which is widely used in construction and panel processing.

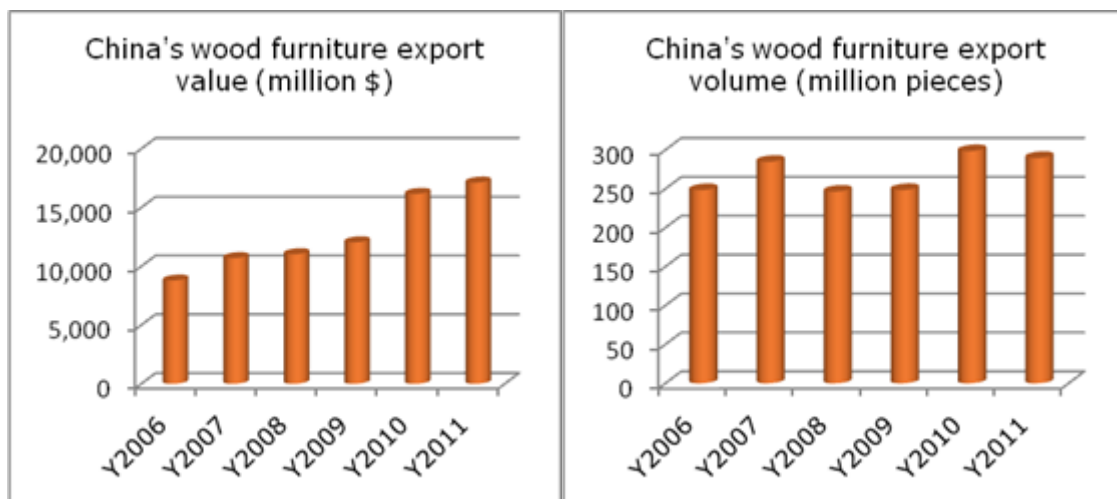
- **Hardwood lumber:** 10% increase in imports. China's hardwood lumber imports are forecast at 7.3 million m3 in 2012, a 10 percent increase from the 6.6 million m3 in 2011. The United States and Thailand are the main hardwood lumber exporters to China, with combined trade accounting for 40 percent of China's total imports in 2011. U.S. hardwoods have strong long-term potential in China due to reliable supply, sustainable management, and competitive exchange rate. The majority of Thailand's lumber exports to China are rubber, which is widely used in solid wood furniture processing.

## Export

After years of rapid increase, the forecast for China's 2012 overall wood product exports is less robust. Wood product exports face several pressures which impact price competitiveness including, increasing production costs, appreciation of the Chinese Yuan, and rising environmental protection requirements. In addition to the EU's timber regulation, the United States Formaldehyde Standards for Composite Wood Products Act is also a factor. The Act significantly decreases the formaldehyde emission level from composite wood products for hardwood plywood, particleboard and medium density fiberboard. Both composite wood panels and downstream products containing such panels are included, such as wooden flooring, furniture and more. (Please refer to [Formaldehyde Act](#) for full text of the document). Sluggish overseas markets also dampen export prospects.

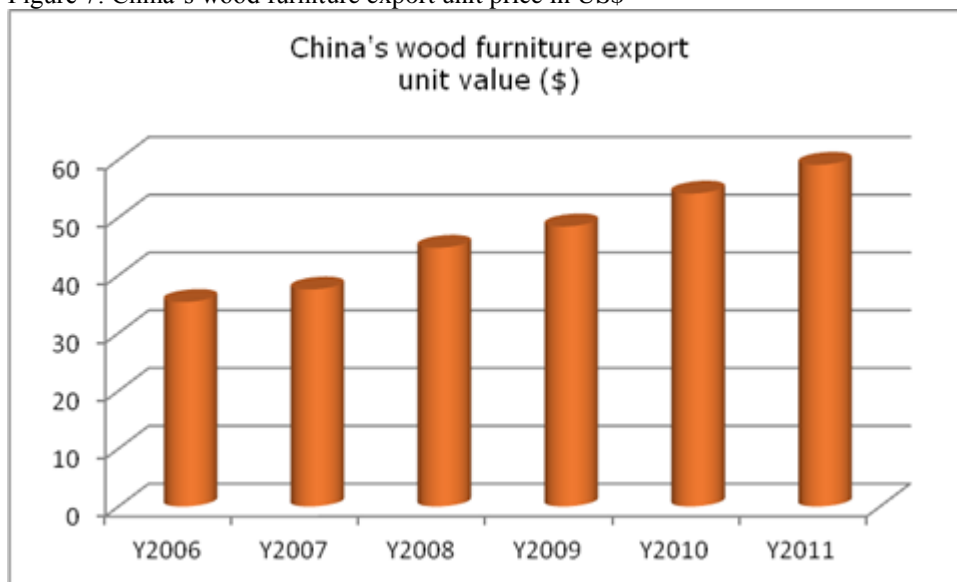
- **Wood furniture:** slight increase in exports. China's wood furniture (H.S. code: 940161, 940169, 940330, 940340, 940350, and 940360) exports are forecast at \$17.5 billion in 2012, a slight increase from the \$17.1 billion in 2011. The largest markets in 2011 for China's wood furniture are the United States, the EU, and Japan. The industry is concerned that, after years of rapid increase, China's wood furniture exports will stagnate over next few years as prices and environmental sensitivity rises, causing their products to be less competitive. (see figure 7 below).

Figure 5: China's wood furniture export value Figure 6: China's wood furniture export volume



(Source: China Customs)

Figure 7: China's wood furniture export unit price in US\$



(Source: China Customs)

- **Plywood:** 10% increase. China's plywood (H.S. code: 4412) exports are forecast at 10.5 million m3 in 2012, a ten percent increase from 9.6 million m3 in 2011, driven by growing demand from South Korean and Japan. After South Korea imposed anti-dumping duties on Malaysian plywood in March 2011, China's plywood exports expanded into this market. Japan's post-earthquake construction has also enhanced demand for China's plywood. The United States continues to be the largest market for China's plywood exports in 2011, accounting for 14 percent of China's total plywood exports.
- **Wood flooring:** 10% recovery. China's wood flooring (H.S. code 4409) exports in 2012 are forecast at 440,000 tons, a 10 percent increase from 2011 driven by the recovering demand from Canada, a historically significant export market. China's wood flooring exports dropped seven percent in 2011, with more than 30 percent decline in exports to Canada.

The United States continues to be the largest importer of China's wood flooring, accounting for over 30 percent of China's total wood flooring exports, followed by Japan (14 percent) and Canada (13 percent).

- **Wood Frame Housing: exports increase.** Wood frame houses are a miniscule part of China's housing market compared with Europe & America (90%) and Japan (60%). In 2011, certain wood associations and relevant government officials began advocating that farmers build more wood frame houses. This is in line with China's pursuit of environmental friendly, low energy and earthquake appropriate construction. Wood frame houses are also less expensive and less labor intensive to build, which is beneficial for farmers. In 2011, the import of panelized wood frame houses to China decreased slightly in volume but the unit price per metric ton nearly doubled.

Exports of wood frame houses from China increased approximately 14% in volume but 80% in value in 2011. The promotion of wood frame houses will increase demand for higher value-added wood-based panels, such as Oriented Strand Board (OSB), Laminated Veneer Lumber (LVL), Parallel Strand Lumber (PSL), and Longitudinal Strand Lumber (LSL).

## **Policy:**

**Suspension of SC/Va Logs:** China suspended the importation of logs from Virginia and South Carolina in April 2011 due to pest issues. As a result of bilateral negotiation, China agreed to launch a six-month pilot program to temporarily resume log exports from South Carolina and Virginia beginning June 1, 2012. According to the pilot program, logs exported to China during this period must meet all existing export requirements, as well as certain additional requirements for fumigations, enhanced pinewood nematode testing, phytosanitary certification and restrictions on ports of entry. At the end of the pilot program, if all logs exported to China have met the quarantine requirements, China has agreed to formally reopen the market for exports of logs from these two states.

**China Timber Protection Industry Association:** In 2011, China's Ministry of Civil Affairs approved the registration of the China Timber Protection Industry Association. The aim of the new association is to improve timber utilization, promote standardization and expand markets. The products in the association's mandate include wooden frame houses and wooden structures, wooden outdoor products, and treated and fire resistant wood.

## **Marketing:**

### **New Distribution Channels Developed – e-Business and Group Purchasing**

For wood logs and lumber, wholesale markets remain the most important distribution channel for medium or small-sized processors and interior decoration companies. Large construction projects and manufacturers, though, prefer to purchase direct from wood manufacturers and importers.

Finished consumer wood products (floorings and furniture) targeted at domestic markets are mainly further distributed through professional building material markets and specialized showrooms to urban consumers. Construction material superstores, such as B&Q, and furniture retail superstores, such as Red Star Macalline and Jisheng Wellborn play a dominant role in the distribution of mid to high end wood products.

E-business is emerging as an increasingly important distribution channel for both raw wood materials and finished wood products. Despite China having the world's largest webuser population, with over 500 million people online as of January 2012, just 10 percent shop online, compared to the U.S.' 70 percent, leaving online merchants room to expand.

For consumer products such as furniture, B2B, B2C and C2C are three E-business models for furniture distribution. One is on-line platforms, such as Taobao, which has over 10,000 furniture stores. The second category is furniture distributors' on-line stores, such as Red Star Macalline, and Orient Home. The third category is on-line stores famous brands including Qumei Modern Furniture, Quanyou Furniture, Royal Furniture, and Ximengbao Furniture. With no need for an expensive chain of storefronts, web merchants charge 30-50% less than traditional retailers.

In May 2011, Taobao, China's e-commerce giant, through which an estimated 3 percent of all retail sales in China pass, increased its rivalry with physical retailers by launching a five-story home furnishings showroom in Beijing. According to Taobao, its 25,000-square-meter mall will display 22,000 items from some 300 suppliers. Customers may try out sofas and other big-ticket items before placing an order online with one of its merchants. Taobao plans to open similar showrooms in other major Chinese cities.

Such outlets could help e-commerce sites compete even more aggressively with traditional retailers by boosting consumer confidence in a market where online sellers have an uneven reputation for quality. Meanwhile, the growing adoption of 3D technology is making it possible to offer consumers tailor-made furniture and a 3D picture of the furniture in the room. This can make up for the lack of experience and interaction, and provides a unique value to consumers shopping online.

Another purchasing method emerging in China focuses on “group purchasing” of home decoration materials and furniture. Many on-line stores and platforms, including Taobao and Liba, organize incentive schemes for “group purchasing” to encourage large quantity orders. Some famous brands admit that E-business is an important contributor to their growth. Encouraged by this, many furniture manufacturers have set up E-business departments to cater to this new trend in furniture distribution.