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市场变化

CHINA: CHANGING WOOD
PRODUCTS MARKETS

China: Changing Wood Products Markets

less *is* probably known about the forestry and wood products market *in* China than most other U.S. trading partners.

In the 1980s, China emerged as the world's second largest importer of forest products and the second largest importer of U.S. forest products (4,11,12). However, U.S. wood products exports to China declined nearly 93 percent from 1988 to 1996, from \$448 million to \$33 million (10).¹ Little is known about the reasons that caused this decline. Less is probably known about the forestry and wood products market in China than most other U.S. trading partners (11,13).

A consulting report by Ernst & Young (3) for American Forest & Paper Association explored a strategy for expanding exports of U.S. forest products to China; however, its data and information are limited to 1993-94. Other studies of the wood products market in China by DBC Associates (2), the National Forest Products Association (6), and Waggener (11) are dated, and reports by the USDA Foreign Agriculture Service (9,10) are mostly anecdotal.

This article will describe the recent trends of China's wood products imports and communicate the results of interviews with major wood products importers in China regarding the competitiveness of U.S. wood products in China.

TRENDS IN CHINA'S WOOD PRODUCTS IMPORTS AND EXPORTS

China adopted an "open door" policy and began economic reform in 1978. Its economy has since progressed rapidly. From 1981 to 1996, China's real gross domestic product nearly tripled, with an annual growth rate of 10.1 percent. Rapid economic growth and a huge population of 1.2 billion put a lot of pressure on China's forests, which only covered about 12 percent of the country's land base in 1980. Consequently, it turned to imports of foreign forest products to supplement its domestic timber supply. Between 1981 and 1983, China imported wood products worth about \$1.8 billion, which surpassed all wood products imports in the 30 years prior to 1981 (1,7). China became a major timber importer in the international market by the middle of the 1980s (4,11,12).

MAGNITUDE

Figure 1 presents the total value of China's wood products imports and exports between 1981 and 1996. Overall, the total wood products imports quadrupled in 16 years, from \$374 million in 1981 to \$1.6 billion in 1996 (1).² The declines in 1986 and 1989-91 correspond to a slowdown of the national economy. China's total exports of wood prod-

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ucts also increased every year except for 1988, and at an even faster pace, from 43 million to 1.4 billion in 16 years (Figure 1). Since 1988, the margin of net imports was dramatically narrowed, which reflects the increasing ability of China's domestic forest industry to produce wood products that are competitive in international markets.

SOURCES OF SUPPLYING COUNTRIES

The major countries supplying wood products changed during the study period. The United States was the dominant supplier, accounting for more than 42 percent of the total value of imports in China between 1981 and 1985 (Figure 2). Although U.S. wood products exports to China peaked in 1988 in absolute terms, its share started to decline 2 years earlier and was a mere 5 percent in 1996. Indonesia and Malaysia increased their share from 7 and 8 percent to 23 and 30 percent, respectively, in the same period, and became the two largest wood products exporters to China. Other Southeast Asia countries (Burma, Cambodia, Laos, Philippines, Thailand, and Vietnam) showed a similar pattern, but to a lesser extent in absolute value and share. The former Soviet Union's share of China's wood products imports increased in the middle 1980s and reached a peak of 31 percent in 1986. After the dissolution of the Soviet Union in 1991, Russia and other newly independent countries have since exported few wood products to China and accounted for only 3 percent of imports in 1996.

Canada and New Zealand are two other countries exporting wood products to China. Although the largest

volumes of wood going from New Zealand to China are logs and the wood going from Canada to China is mostly lumber, these two countries are grouped together because they are softwood exporters and they compete for softwood markets in China. Both countries collectively shared some 3 percent of China's total imports in 1996. Wood products exports from Africa, which were near 0 percent before 1992, jumped to 12 percent in 1996. Hongkong, Singapore, and Taiwan have large ethnic Chinese populations and only limited forest resources, but their share of the Chinese market has increased from 2 percent in 1981 to 5 percent in 1996.

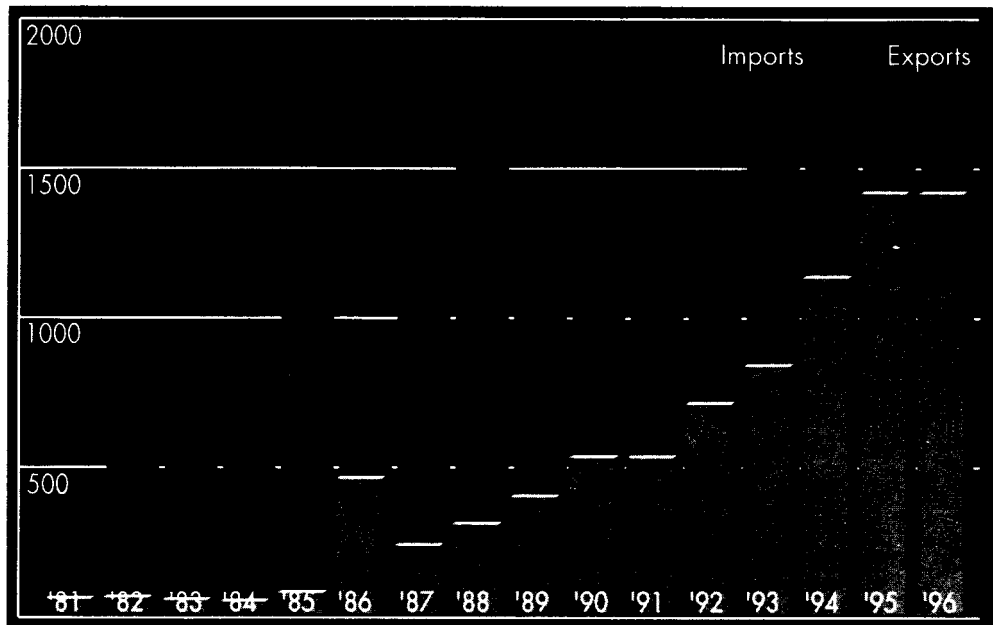


FIGURE 1. Value of China's wood products imports and exports (million \$).

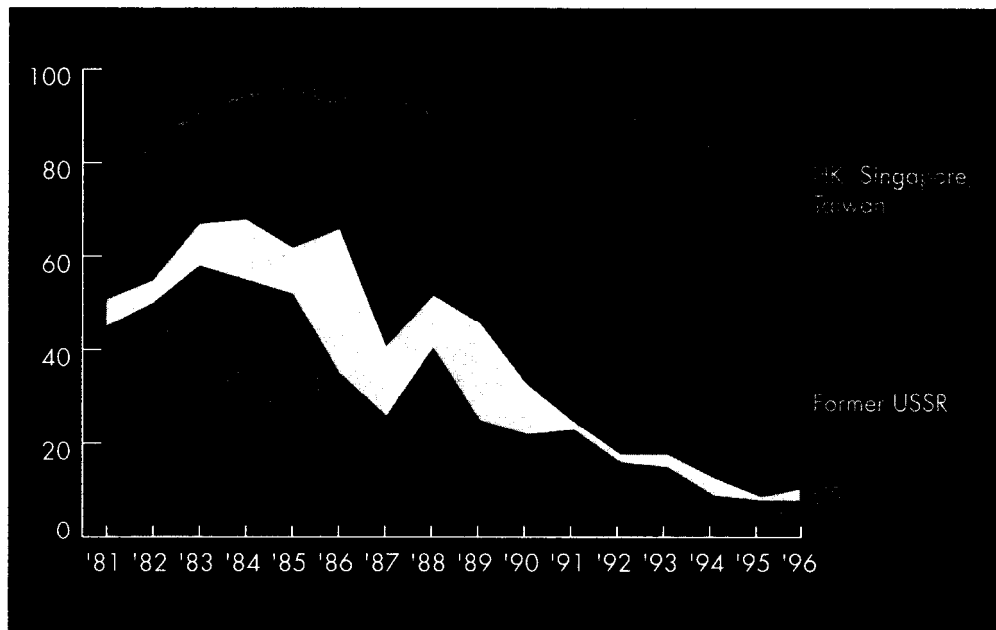


FIGURE 2. Value share of wood products exports to China, by country and region (%).

**ALTHOUGH CHINA HAS
UNDERTAKEN A SUCCESSFUL
AFFORESTATION CAMPAIGN IN
THE LAST 40 YEARS,**

This reflects, at least in part, that the transition to more Asian hardwood is allowing these three regions to play a role as middlemen. Their credit policies also give them an advantage, and this will be discussed more fully later.

CHANGES IN PRODUCT DEMAND

Along with the changes in exporting countries, a fundamental products demand shift has taken place in China. In the 1980s, imported wood products were mainly used in construction (housing, form work) and packaging. Softwood logs and veneer/plywood were the main import items, accounting for some 50 and 25 percent, respectively, of the value of all wood products imports prior to 1988 (Figure 3). The United States was the largest softwood log exporter to China, and Russia became the second largest supplier in the middle 1980s. Indonesia and Malaysia were the primary exporting countries in veneer/plywood. Softwood lumber imports, although small in value, were larger than hardwood lumber in the 1980s, but the situation reversed in the 1990s. Panel products imports other than veneer/plywood were small prior to 1992.

In the late 1980s and 1990s, due to a domestic credit squeeze for construction and high international prices for softwoods, China's imports of softwoods declined significantly, bringing down the U.S. share of total imports.³ The share of softwood log imports declined from 50 percent in 1988 to a mere 3 percent in 1996. Softwood lumber declined from 3 percent to 2 percent in the same period. On the other hand, hardwood log imports increased from 9 percent to 26 percent, and hard-

wood lumber from 2 percent to 10 percent. Veneer/plywood imports, most of which are made of tropical hardwood in Indonesia and Malaysia, increased from 33 percent to about 50 percent of the total imports. Imports of other panel products (particleboard, fiberboard, and medium density fiberboard) began near 0 percent in 1988 and increased to 6 percent in 1996.

INTERPRETATION OF TRENDS

The changes in China's wood products imports, supply countries, and products can be explained by changes in domestic supply and demand, consumer preference, government policies, and the competitiveness of various exporting countries' wood products in the Chinese markets.

DOMESTIC SUPPLY

China is a country deficient in forest resources. Due to historical reasons, forests have been exploited badly and the ecological environment is quite fragile. Although China has undertaken a successful afforestation campaign in the last 40 years, its per-capita forest inventory is well below the world's average (5). When China's economy started to make significant progress, it put huge pressure on the domestic forests. Timber produc-

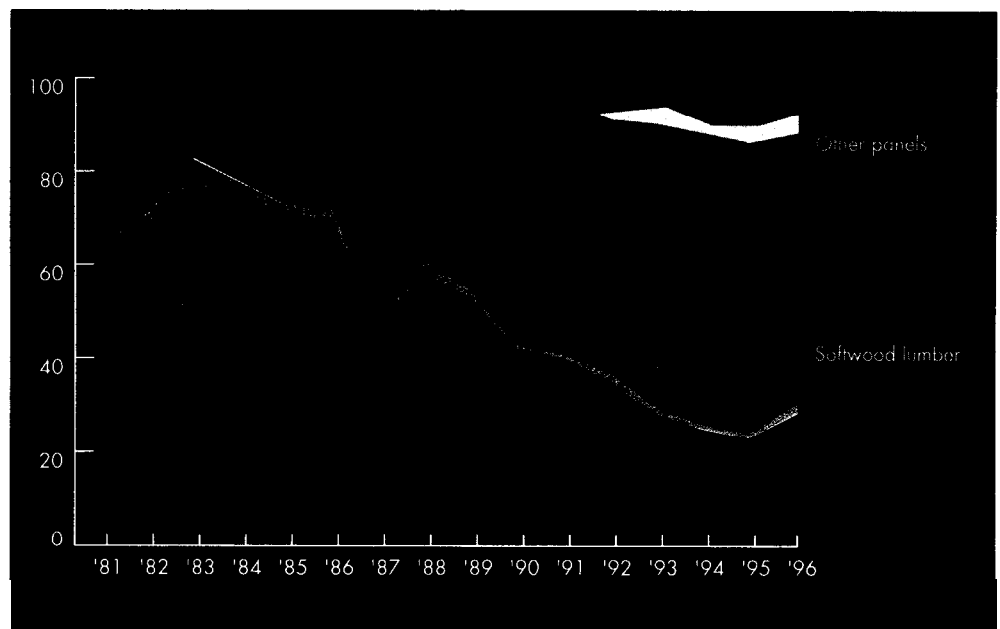


FIGURE 3. Value share of wood products exports to China, by products (%).

tion increased at an annual average of 1.8 percent in the 16 years preceding 1997. However, that figure is well below the annual growth rate of 10 percent in the economy in the same period. China, therefore, has little choice but to continue to import forest products.

A major effort to curb the imbalance of domestic supply and demand was to require increased use of non-wood substitutes such as metals, plastics, and concrete. This policy was promulgated in 1983 under the "Regulations for Economic and Rational Applications of Wood and Wood Substitutes." Although this wood substitution policy was put in abeyance recently, and was never formally applied to imported wood products, it may have had some impact on the development of the domestic wood industry and market for imported wood before 1990.

CHANGE IN CONSUMER PREFERENCE

The composition of imported wood has evolved rapidly after 1988 due to changes in demand in the domestic market. In the 1980s, China's wood imports were mainly used in construction and packaging; softwood log and lumber were the main import items and Douglas-fir was the most popular species. However, this situation changed in 1990 when the government tightened the money supply to slow down commercial construction activities and curb double-digit inflation. This effort reduced the demand for wood in construction. Faced with the high costs of imported wood (mainly caused by supply factors), builders increased their use of domestic wood products. At the same time, demand for wood in furniture and interior decoration started to boom. With 11 million newly married couples annually, the upgrade of millions of homes, and a sheer 30 percent increase in the residential housing industry each year since 1990,



The demand for wood for furniture has increased dramatically in China. This photograph was taken in the retail showroom of the Yuzhu Forestry Industry Group Co. in the Province of GuangDong.

AS CHINA CHANGES FROM A STATE PLANNING ECONOMY TOWARDS A MARKET-ORIENTED ECONOMY,

the wood products market for furniture and interior decoration increased dramatically.⁴ Since China lacks the high quality timber used by the domestic furniture industry, importing quality wood is necessary. Imports of Southeast Asia hardwood logs and veneer/plywood have increased rapidly. Hardwood lumber imports started from a relatively small quantity, but its share of total wood imports has grown rapidly. This demand, in turn, has contributed to an increase of nearly 100 percent in hardwood stumpage prices in Indonesia and Malaysia in the last 6 to 7 years (8).

Recently, importers have turned their attention to Africa for tropical hardwood and, as mentioned earlier, timber imports from Africa have increased from 0 percent in 1992 to 12 percent in 1996. The U.S. exports of hardwood to China began in 1983 and, after 9 years, its value was merely \$1.5 million in 1991 (10). The figure reached \$2.3 million in 1997 (10), due largely to high demand and possibly the promotional campaign of the American Hardwood Export Council (7).

GOVERNMENT POLICIES

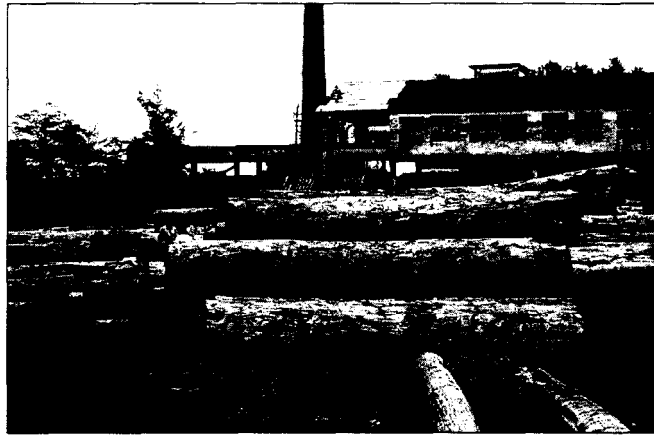
As noted earlier, government wood substitution policy may have impacted market development for imported wood in China. Another important macro-economic policy is money supply. Credit squeezing in 1983, 1986, and 1989-92, which was intended to fight inflation and overheating in the economy, negatively impacted wood products imports. On the other hand, China reduced its import tariffs four times between 1990 and 1997. The most recent round of reductions started on October 1, 1997 and covered tariffs on plywood (not veneer, which was already low), medium density fiberboard, some hardwood logs, and other wood products. These measures are seen as a government effort to join the World Trade Organization. They have and will continue to boost imports of wood products.

As China changes from a state planning economy towards a market-oriented economy, many policies have become more market-driven. The exchange rate is one of them. The exchange rate was changed according to state regulation rather than the market in the 1980s and early 1990s. During that period, the government applied exchange control and devalued its currency several times. These measures boosted exports and discouraged imports of wood products. Since 1996, the government has adopted a market-driven exchange rate system.

Another change in government planning is import monopoly. Before the economic reform, China had only one state-run firm licensed to import wood products. The government has gradually loosened its monopoly power by increasing the licensed firms. Now, more than 70 designated trade enterprises (DTEs) are permitted to import wood products. In addition, all joint-venture and foreign-owned enterprises (and there are more than 100 nationwide for forest products alone) are allowed to import wood for their own uses. The government has been openly discussing the possibility of allowing a greater number of manufacturing enterprises the right to conduct foreign trade without the need to go through one of the DTEs. Consequently, the trade in wood products with China is much easier now than at the earlier stage of the reform.

THE COMPETITIVENESS OF COUNTRIES THAT EXPORT TO CHINA

In July and August of 1997, we interviewed 20 major wood importers who together accounted for more than 90 percent of all wood products imports in China. We listed the following seven attributes of competitiveness that could be applied to exporting countries: 1) price competitiveness (in Chinese markets); 2) product quality (meeting expectations and contract specifications, performance, appearance, and durability); 3) transportation



These logs are part of the tropical hardwood log inventory at the Guongzhou (Canton) log market, which distributes logs throughout southern China.

THE MAJOR COMPETITIVE ADVANTAGES OF U.S. WOOD PRODUCTS IN CHINESE MARKETS

(cost, time, and port facility); 4) service (willingness to offer mixed species and loads, filling small and large orders, handling problems professionally); 5) credit policies; 6) reputation (frequency of damage claims, candidness, and trustworthiness); and 7) promotion. We asked importers to give an average rank for all exporters in a particular country they have dealt with in the past 10 years. Therefore, the rankings do not describe any individual firm but the respondents' overall per-

ception of exporting firms in a particular country. Five major exporting countries/ regions were included in the interviews: 1) the United States; 2) Indonesia and Malaysia; 3) Russia and other newly independent countries; 4) New Zealand; and 5) Hongkong/Taiwan/ Singapore.

The results of the interviews are reported in *Table 1*. The major competitive advantages of U.S. wood products in Chinese markets are product quality, service, and reputation. The major disadvantages are lack of price competitiveness, high transportation costs and long delivery time, lack of credit offered (the Chinese prefer Documents against Acceptance instead of Letter of Credit which most U.S. exporters insist on),⁵ and lack of promotion. There was a nearly universal complaint about the high price of U.S. wood products, especially in the last 5 to 6 years. Lack of credit may make the U.S. exporters lose some market share to Hongkong, Taiwan, and Singapore. While the price and the transportation cost problems would be difficult to address, the U.S. industry could consider ways to promote its products more effectively in China.

In contrast, the advantages of Indonesia and Malaysia are product quality, low transportation costs, and competitive prices. Russia and other newly independent countries ranked high in price and credit (mainly barter

COUNTRY	PRICE	QUALITY	TRANSPORTATION	S E R V I C E	CREDIT	REPUTATION	PROMOTION
United States	4.8	1.4	3.8	1.2	4.6	1.0	3.7
Indonesia/Malaysia	2.5	1.8	1.0	4.3	3.3	3.8	3.9
Russia & NIC	1.7	4.3	3.3	4.7	2.0	4.8	5.0
New Zealand	3.0	2.7	2.6	2.0	4.7	1.0	1.1
Hongkong/Singapore/ Taiwan	3.3	3.3	1.0	4.3	1.0	3.9	2.7

1 = excellent; 2 = good; 3 = fair; 4 = poor; 5 = very poor.

TABLE 1 Mean respondent ratings of the competitiveness of exporting countries.

in the 1980s, which has little risk), but low in other categories. New Zealand exporters have the best reputation and are doing well in promoting their products in Chinese markets, but their credit policies hurt them as well. Hongkong, Singapore, and Taiwan have the advantages of low transportation costs and credit offered (Documents against Acceptance), but exporters from these regions do not rank high in other categories. The willingness of exporters from Hongkong, Singapore, and Taiwan to engage in a seemingly risky activity in offering Documents against Acceptance is an indication that 1) these exporters understand that Chinese importers much prefer this type of credit; and 2) the exporters may believe that their close relationship and familiarity with the credit history of the importers reduces this risk substantially.

FUTURE OUTLOOK

With a new focus on furniture and interior decoration, hardwood products (logs, lumber, veneer/plywood, and other panel products) will continue to be popular in Chinese markets. Major uses for hardwood are face veneer in plywood, particleboard, and medium density fiberboard. Countries with tropical hardwood resources are expected to continue to gain a large market share. However, at the time our interviews were conducted, hardwoods from Indonesia and Malaysia had been increasing in price and many importers in China were actively looking for substitutes of wood products from other Southeast Asian countries (Myanmar, Vietnam,

Laos, Thailand), African countries, and the United States. But since that time, Asia has experienced an economic crisis that has changed the short-term outlook.

Beginning in the summer of 1997, the currency of Thailand, Indonesia, and Malaysia has been devalued 40 to 80 percent against the U.S. dollar, while Chinese currency is holding steady. Consequently, the prices of wood products imports from Southeast Asia are significantly reduced in the Chinese markets. We checked several spot markets in China in the first quarter of 1998 and found that the prices of plywood from Indonesia and Malaysia were 40 to 50 percent below the price level a year ago. Prices of other wood products were much lower as well. This, plus the current economic slowdown in China, has depressed the market for all wood products and reduced the competitiveness of U.S. wood products in Chinese markets. Therefore, the wood products importers in China will probably stick with imports from Southeast Asia rather than look for supply from somewhere else until the Asian economic crisis is over. It is expected that price levels will even out within the next few years and Chinese importers will again consider the United States as a supplier of hardwoods. However, major promotional efforts may be required in order to increase softwood exports to China.

China is a huge potential market for U.S. wood products exports in the long run. With the forecast of a 25 percent shortage of timber supply in the next decade (13), China will look for wood products imports. As

the national economy grows and household income increases, Chinese consumers may be willing to pay a higher price for better quality U.S. wood products in the future. The keys to accessing Chinese markets are more flexible credit terms, joint ventures, and promotional activities like the American Hardwood Export Council's campaign to promote American hardwood in China. Further cooperation between the various sectors of the U.S. forest industry and their Chinese counterparts through trade missions, technical exchanges, and investment should enhance opportunities for future exports and trade.



This veneer was sliced from hardwood lumber at the Beijing Timber Factory.

THE KEYS TO ACCESSING CHINESE MARKETS ARE MORE FLEXIBLE CREDIT TERMS, JOINT VENTURES, AND PROMOTIONAL ACTIVITIES

Literature Cited

1. China Custom. various years. China Custom Yearbook. Beijing, China.
2. DBC Associates. 1986. The market for softwood lumber and plywood in the People's Republic of China (2 vol.). Report to the National Forest Products Association. Washington, D.C. AF&PA, Washington, D.C.
3. Ernst & Young. 1996. Research study on wood products trade in China. Final Report to American Forest & Paper Association. AF&PA, Washington, D.C.
4. Ma, Q. 1988. China's timber imports. M.Sc. thesis. Beijing Forestry Univ., Beijing, China. (in Chinese)
5. Ministry of Forestry: 1992. Forestry development and environmental protection in China. Beijing, China.
6. National Forest Products Association. 1988. Chinese planners predict imports to quadruple by 2000. Inter. Trade Report. AF&PA, Washington, D.C.
7. Ran, C.X. 1997. Vice-President, China Timber Imports and Exports Corp., Beijing, China. Personal communication.
8. Shao, Y.F. 1997. President, Zhonglin Group, Shanghai, China. Personal communication.
9. USD.4 Foreign Agriculture Service. 1995. China's forest products market. Voluntary Report. USDA, Washington, D.C.
10. _____ 1998. Wood products trade and foreign markets: annual statistical trade issue. WP 2-96. April. USDA, Washington, D.C.
11. Waggener, T.R. 1989. Forest products and the People's Republic

of China Working paper 23. Center for International Trade in Forest Products. University of Washington, Seattle, Wash.

12. Zhang, D. 1989. The potential to explore foreign forest resources. M.Sc. thesis. Beijing Forestry Univ., Beijing, China. (in Chinese)
13. Zhang, Y., J. Buongiorno, and D. Zhang. 1997. China's economic and demographic growth, forest products consumption, and wood requirements: 1919 to 2010. Forest Prod. J.47(4):27-35.

Footnotes

¹According to China Custom, the value of U.S. exports to China was \$659 million and \$85 million in these 2 years, respectively (all values in this article are U.S. dollars). The differences in value from these two data sources are often about 20 to 50 percent in the study period. This reflects that the U.S. Department of Agriculture uses FAS (free along shipside) in valuing wood products exports and the China Custom uses CIF (cost, insurance, and freight). Secondly, some U.S. wood products exports marked for Hongkong and Taiwan might end up in Mainland China. Misclassification occurred as well, but to a much lesser extent.

² Total wood products are defined as wood, article of wood, wood charcoal, and other wood products (1), largely consistent with goods covered in

Chapter 44 of the Harmonized Tariff Schedule of the United States.

³The reduction in timber harvesting from public lands in the western United States and the ban of log exports from state lands have contributed to this decline as well.

⁴It should be noted that the residential housing industry was not affected by the economic austerity measures taken by the government in the early 1990s. In fact, the government has encouraged residential construction throughout the last 20 years. Also, the types of housing and building techniques are quite different in China and North America. Therefore, the demand for wood, especially softwood, is not closely tied to residential housing construction.

⁵Letter of Credit is a document issued by a bank guaranteeing the payment of a customer's drafts to a stated amount for a specified period. It substitutes the bank's credit for the buyer's and eliminates the seller's risk. Documents against Acceptance are a method of payment whereby an exporter presents to a bank documents attesting to the title of merchandise, so that the bank can deliver these documents to the importer of the merchandise, after the importer undertakes to pay the amounts indicated in the documents at a future date as detailed in the withdrawal document drawn on him/her by the exporter. The acceptance is executed by the importer in accordance with this withdrawal. Under Documents against Acceptance, the exporters are exposed to a higher level of risk if the importers' credit deteriorates, or they cannot afford to pay, or the market price of the merchandise declines drastically so that the importer wants to renegotiate the contract.