

The furniture industry in the United States has been losing market share to imports for the past two decades. This article focuses on the market segment where most of the loss has occurred: the important

wood household (non-upholstered) sector (SIC code 2511). In the upholstered furniture sector, exports are still larger than imports. But the wood household furniture sector is the largest sector in the furniture industry.

Competitiveness of U.S. Wood Furniture Manufacturers

Lessons Learned from the Softwood Moulding Industry

By Al Schuler, Russ Taylor, and Phil Araman

Domestic furniture manufacturers are losing market share despite one of the best housing markets in over 20 years. The U.S. trade imbalance for the wood household furniture (non-upholstered) sector increased by nearly 400 percent during the 1990s, from -\$1.9 billion in 1990 to -\$7.3 billion in 2000. Imports now equal 53 percent of domestic production (Fig. 1), increasing from \$2.38 billion in 1989 to \$8.31 billion in 2000. Most of this increase is attributed to export growth from Asia (China, Taiwan, Indonesia, and Malaysia), Canada, Mexico, and others. Recently, China, Canada, and Mexico became the fastest growing exporters of wood furniture to the United States (Fig. 2). The focus of this article will be on the growth of non-European furniture exports because they are due primarily to wage cost advantages, cheaper fiber, and/or favorable exchange rates. Most European exports, by contrast, are high quality, fine furniture.

The following situations in other countries are fueling rising imports: 1) lower cost of wood and production labor; 2) ability (and willingness) to adapt/invest in new technology quickly and anticipate customer preferences; and 3) weaker currencies. In addition, U.S. economic growth has doubled that of the rest of the world since 1996. This has encouraged the export of goods to the United States to satisfy the growing appetites of American consumers and to provide other nations with a source of economic strength with which to combat domestic market weakness. For example, since 1997, average annual real Gross Domestic Product (GDP) growth (inflation adjusted) has exceeded 4 percent in the United States, compared with 2.5 percent for the other G-7 countries (Canada, France, Italy, Germany, Japan, and the United Kingdom).

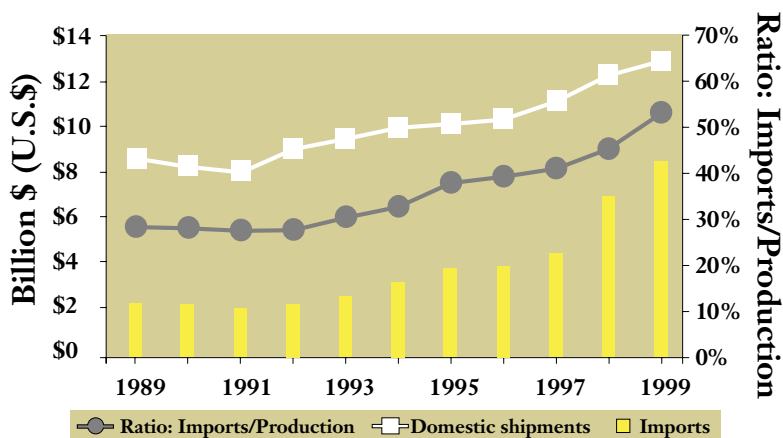


Figure 1. – Wood household furniture (non-upholstered) statistics: Imports equal 53 percent of domestic production (1).

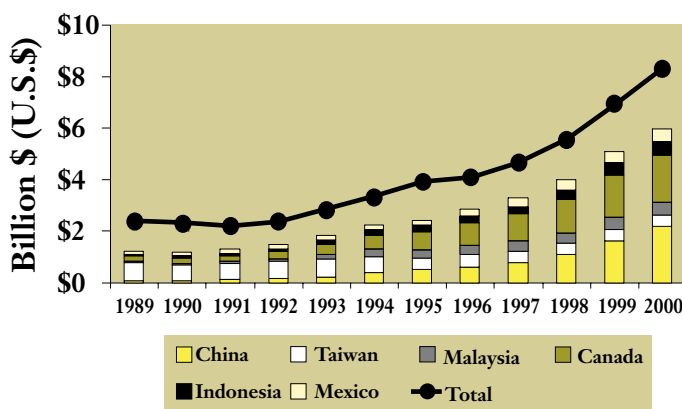


Figure 2. – Wood furniture imports approach \$9 billion (8).

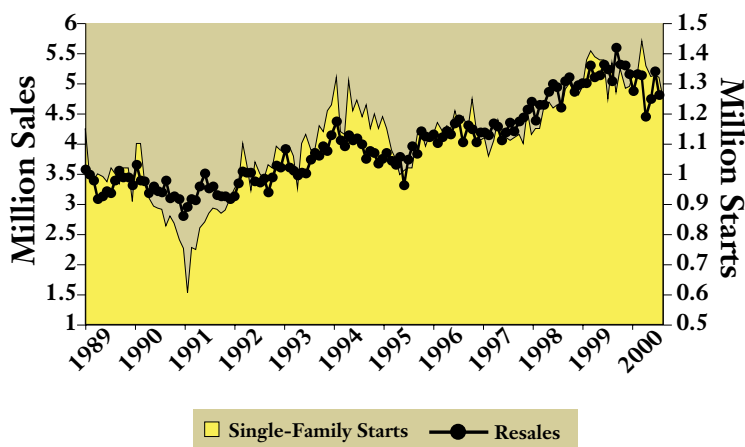


Figure 3. – Strong residential markets drive current furniture demand (4,7).

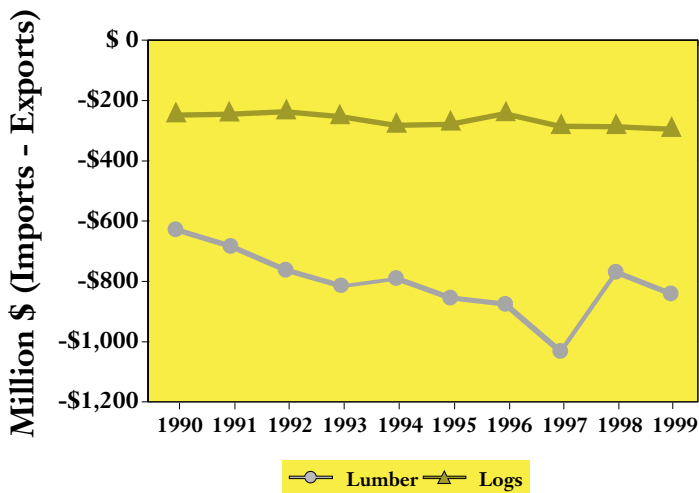


Figure 4. – Hardwood fiber trade imbalance (dollar value basis) worsens in the 1990s (1).

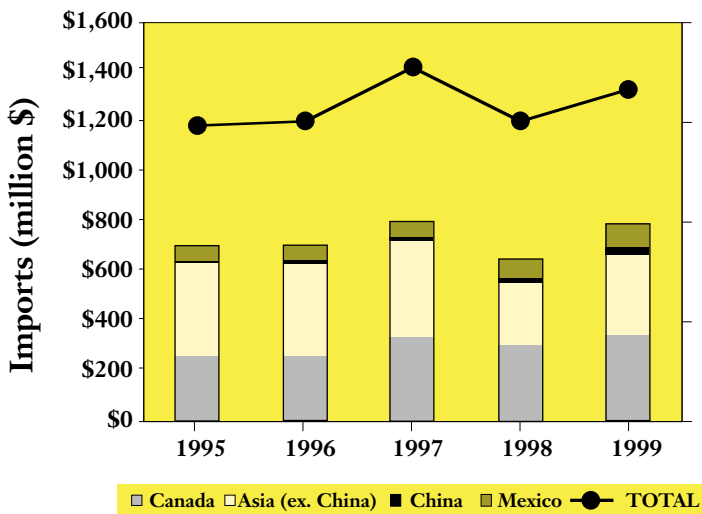


Figure 5. – More than half of U.S. hardwood lumber exports go to Asia and Canada (6).

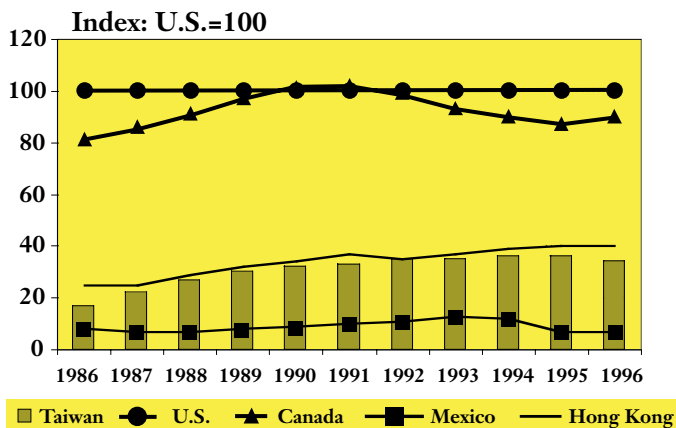


Figure 6. – U.S. furniture wage costs (index basis) are higher than our competitors (9).

A natural outcome of this unbalanced growth is a strong currency, which results in cheaper imports and more expensive U.S. exports. This “double whammy” for domestic furniture producers is particularly vexing because one can do little about exchange rates. Although we should point out that Japan faced similar problems in the late 1980s and early 1990s when the dollar/yen rate went below 100 yen per U.S. dollar. To remain competitive, Japanese car manufacturers and the steel industry, particularly, had to cut costs dramatically, and they did.

A major driver of the U.S. economy for the past several years has been residential construction. That sector now directly accounts for almost 5 percent (new residential investment including major renovations) of U.S. GDP. When we add in maintenance and repairs, and indirect impacts, we’re well over 10 percent of GDP. All aspects of the housing market have been strong, including single-family starts and resales (Fig. 3). There has also been a trend to larger homes. According to data compiled by the National Association of Home Builders (NAHB), the floor area of new single-family homes has grown to 2,250 ft.² in 1999, up 345 ft.² or 18 percent since 1987 (3).

An excellent indicator of furniture demand is the remodeling market, and the major force in remodeling activity is the resale housing market, which has remained strong for more than a decade due to the excellent economy (Fig. 3). Continued growth in this sector is anticipated because of the following factors: 1) most U.S. houses are more than 25 years old; 2) during the last decade, the 35- to 54-year-old age group, which spends the most on remodeling, increased by 16.6 million people, and this group is expected to swell to 83 million people by 2005; and 3) real values (inflation adjusted) for houses are beginning to increase following 15 years of stagnation.

To capitalize on this projected increase in demand, the domestic wood household furniture industry must look for ways to capture a greater market share.

The Furniture Industry

Softwoods

The high cost of softwood fiber is partly a function of changing environmental policies on public lands, particularly those in the Pacific Northwest. Softwoods are not as prominent as hardwoods in furniture manufacture, but the supply of softwood fiber affects the cost of hardwood fiber through product substitution. The rapid growth in engineered wood products (driven in part by rising softwood prices) has increased the use of hardwood fiber. For example, production of oriented strandboard (OSB), a softwood plywood substitute, today consumes nearly 8 percent of the industrial hardwood roundwood in the United States. Although low-quality fiber (including tree tops and species found undesirable by traditional industries) is used by the OSB industry, there is concern that the hardwood supply may not be sufficient for existing users (furniture, pallet, and hardwood dimension producers).

Hardwoods

There has been a net trade imbalance (both volume and value basis) for hardwood lumber and logs for more than a decade (Fig. 4). This suggests that foreign manufacturers are more effective (due to lower labor rates, heavier investment in new technology, and favorable exchange rates) than their U.S. counterparts in converting a portion of the U.S. hardwood resource into marketable products (e.g., furniture and fixtures). Consequently, foreign importers of U.S. lumber and logs can often pay higher prices for U.S. hardwood fiber, which adversely affects U.S. furniture manufacturers because then they also must pay higher prices for hardwood fiber. In addition, that same exported fiber often returns to the United States in the form of furniture imports.

Figure 5 shows that U.S. hardwood lumber is exported to the same countries that export furniture to the United States; the same is true for hardwood logs. These countries have more competitive labor rates and experience fewer trade barriers to the United States than to other foreign markets. Labor cost is a function of tight labor markets in the United States

(unemployment rate only about 4% over the past 3 years) as well as demographics. As shown in Figure 6, U.S. wage rates are twice those of most countries with whom we compete, particularly for medium- to low-end furniture products. Current population trends indicate that labor shortages, particularly skilled labor, will continue for at least another decade, i.e., people more than 50 years old will comprise 30 percent of the U.S. population by 2020.

Exchange Rates

Because of the booming U.S. economy, the dollar is strong against the currencies of most of our major trading partners. According to the Broad Index, the trade weighted dollar has increased by more than 200 percent during the past 20 years, and is up by more than 50 percent just since 1994. The Canadian dollar, for example, fell by about 25 percent against the U.S. dollar during the 1990s and this helped fuel additional exports to the United States (Fig. 7). Although foreign countries' weak currencies are a disadvantage when purchasing U.S. lumber and logs, the added cost is usually offset by value added through furniture manufacture (e.g., use of cheaper labor and more efficient furniture manufacturing technology, etc.). In addition, they are paid in U.S. dollars when they ship their furniture to the United States, and when they return home and convert the "greenbacks" into local currencies, that is where they derive the major benefit.

Softwood Moulding

As with the wood furniture industry, the U.S. softwood moulding industry faced stiff competition from foreign exporters during the 1990s when rising prices for softwood fiber and expensive labor allowed inexpensive imports to make major inroads in the United States. Environmental issues exacerbated this situation. For example, the spotted owl controversy led to a 50 percent reduction in the production of ponderosa pine lumber. Subsequent higher prices for this species precipitated the following substitution responses: cheaper finished moulding imports (mostly from South America), a flood of imported industrial softwood lumber (from Oceania and South America), and substitution of some domestic species (e.g., white pine) (Fig. 8). Industrial lumber imports (mostly non-Canadian) increased dramatically in the last

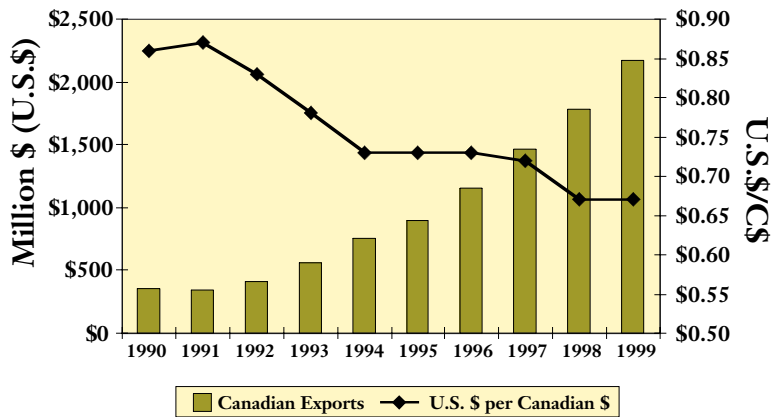


Figure 7. – Canadian exports to the United States soar as Canadian dollar falls (wood furniture, non-upholstered) (1,2).

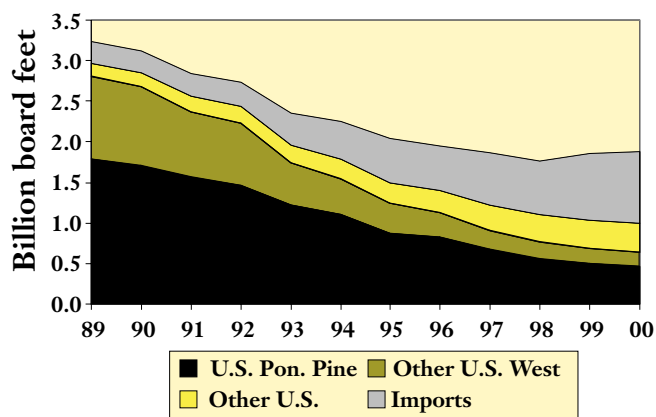


Figure 8. – U.S. ponderosa pine lumber production plummets while imports increase (5).

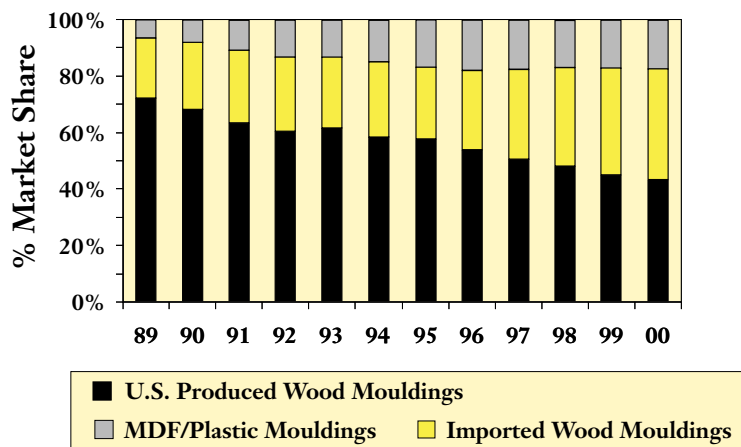


Figure 9. – U.S. share of the domestic moulding market is being eroded by imports and substitutes (5).

decade, from 100 million board feet in 1991 to 710 million board feet in 1999. During the same period, moulding imports rose from fewer than 800 million linear feet to nearly 2.4 billion linear feet. After a decade of increasing imports and additional substitution with medium density fiberboard (MDF) and plastics, the market share for domestically produced softwood mouldings (finger-joint/paint grade, solid stained) fell from 70 percent in 1989 to 45 percent in 2000 (Fig. 9). In this important moulding market, imports will soon exceed the domestic output.

Another potential problem for the moulding industry is related to the negative impact of aggressive lumber imports on domestic lumber prices. As mentioned earlier, the price of ponderosa pine has declined by nearly 30 percent since 1998 despite a strong economy and housing market. Although this might benefit the domestic moulding industry in the short term, it could present sourcing problems for the industry in the future, particularly if the financial health of the industrial pine industry continues to deteriorate.

**Lessons Learned:
Implementation of Survival
Strategies**

The U.S. moulding industry has been employing a number of strategies to deal with the competitive forces of globalization. The industry has responded to the challenges of the surge of imported pine lumber and mouldings in various ways.

A number of domestic mill closures occurred, as smaller, older, or higher-cost mills that could not compete with imports or could not change quickly enough to move with the times were forced to curtail operations.

Many of the remaining U.S. companies adopted strategies to

build on their production or marketing strengths. For example, some wood moulding companies completely exited the moulding market by moving more into millwork products that were not commodities and/or focused on the needs of small- to medium-sized customers. Other firms exited the solid softwood moulding sector and diversified into hardwood, MDF, and even plastic mouldings (e.g., Marley Mouldings). All of these companies determined that the competitive threats associated with the changing supply of pine lumber were severe enough for them to consider alternative strategies that would still utilize one of their core business strengths: meeting the demands of their customer base. By shifting from a very competitive sector to other more selective or niche sectors, they stayed in the moulding business and held onto their customer base but drastically altered their product mix.

Other firms successfully met the issue of surging imported lumber or mouldings head on. Some firms traveled overseas to develop supply contracts with plantation pine lumber producers to obtain feedstock (clear lumber, finger-joint blocks, finger-joint blanks) for their U.S. mills. Others decided that Southern Hemisphere producers had lower cost advantages on commodity mouldings and they instead developed supply contracts or joint ventures with offshore producers to import their finished mouldings back to the American market (e.g., American Mouldings with Fletcher Challenge Forests in New Zealand). Still others decided that the best way to service their customer base and remain competitive was to invest in processing plants or moulding mills in the Southern Hemisphere. Examples of U.S. companies with overseas moulding operations or joint ventures include Woodgrain Moulding, Thunderbird Moulding, and Brightwood and Snavelly.

A further successful strategy employed includes purchasing imported mouldings and then focusing heavily on distribution and customer service: prompt delivery, just-in-time shipments, and regional sales offices. This is a strategy that offshore suppliers cannot duplicate.

While the "production" of U.S. moulding companies peaked in 1999, their market share in terms of "sales" to the American market has actually increased since then. This is a direct result of the strategy to keep servicing their customers with both their own production and mouldings sourced from

other countries. The U.S. moulding industry has become more focused, has increased sales, and has determined its strategic fit in the American market. Moulding companies have been able to react to change and seize opportunities as they arise.

The options listed below are a generic listing of ones that have been used by the moulding industry and that we feel are most applicable to the furniture industry. Many of these strategies are already being employed by U.S. furniture manufacturers.

1. Consider mergers, investments, or joint ventures – These strategies can allow a firm to benefit from favorable wage rates in foreign countries etc., while developing agreements for exclusive marketing/distribution of the products in the United States.

2. Consider acquisitions – Buying a plant in an offshore location provides benefits similar to mergers or joint ventures, but it allows more control of the entire process.

3. Consider a buyout – If some furniture manufacturers no longer wish to compete in the wood household furniture sector, they could sell their plants or businesses to a foreign company.

4. Consider buying raw material from offshore sources – It could be less expensive to purchase and use offshore component lumber, blocks, and blanks etc.

5. Consider buying components and finishing them to North American standards – It could be very profitable for U.S. furniture manufacturers to purchase semi-finished components and finish them to high U.S. market standards.

6. Sell their product to your customers – It might be possible to become exclusive distributors or sales agents for offshore suppliers. If a company has a loyal customer base, then this is a good option.

7. Do what the offshore suppliers can't do well in U.S. markets (e.g., niches or customer service) – It is possible to diversify product lines, establish niche products or markets, and move away from the commodities that are easily and/or cost effectively produced offshore. Providing a high level of customer service (prompt delivery or just-in-time shipments, regional sales offices, etc.) is something that offshore suppliers cannot do.

8. Do what the offshore suppliers can't do well in their own markets (e.g., variety, high quality) – High-quality, high-priced U.S. furniture can find markets in foreign countries. Although currency rates may

be a limiting factor, the status tag "Made in the USA" can attract high-end buyers.

9. Opt to do nothing, but be prepared for the consequences! – In today's competitive environment, it is not prudent to sit back and wait until the situation is dire. Plant closings are a daily occurrence. To avoid that fate, U.S. furniture manufacturers should adopt strategies that will help them survive.

Strategies for Moving Forward

We offer three strategies for the furniture industry to consider for moving forward. These strategies center around the basics of a re-engineered business plan focusing on the following factors.

1. Understanding your competitors. This means evaluating competitors that are regional or national in North America in terms of costs (cost curve), product line, customer base, and marketing strategy; evaluate off-shore competitors on the same basis; know where you fit.

2. Determine your competitive advantage. Evaluate where you excel relative to your competitors in terms of product quality, product line, customer service, price, distribution, and customers; conversely, identify areas where you do not have a competitive advantage and determine your options. Know your niches, advantages, and your fit, i.e., identify customers whose key needs match your advantages. In general, imports reflect low labor or wood costs, but they require long lead times, large inventories, and in many cases, limited choices. U.S. producers can partner with importers to extend and/or augment import product lines. Also, by adding significantly to the customer service function, domestic producers may provide customers with the "best of both worlds."

3. Develop a competitive cost and marketing strategy. Reduce operational costs and improve product quality where possible; re-evaluate your strategic options, especially where severe competition exists; re-focus on product line, customer service, and marketing elements, remembering that "the customer is king." Automation, flexible manufacturing technology, just-in-time parts (and finished product) inventory management, and statistical quality control are a few methods to help reduce costs while improving quality.

Literature Cited

1. Emanuel, D. and C. Rhodes. 2000. Bulletin of Hardwood Market Statistics: 1999. Res. Note NE-371. USDA Forest Serv., Northeastern Res. Sta., Princeton, WV. 22 pp.
2. Federal Reserve Bank of New York. 2000. H10, Foreign Exchange Rates, Historical Data. *In*: Federal Reserve Statistical Releases. New York.
3. National Association of Home Builders. 2001. Data compiled by NAHB from U.S. Census Bureau. Compilation found on NAHB website: www.nahb.com/facts/forecast/sf.html.
4. National Association of Realtors. 2000. Existing home sales, monthly report, Historical data series. Washington, DC.
5. Russ Taylor and Associates. 2000. Data provided by Russ Taylor, President, Russ Taylor & Assoc., and Publisher of the monthly International Solid Wood Report. Vancouver, BC, Canada.
6. U.S. Dept. of Agriculture, Foreign Agricultural Service. 2000. Wood products: International trade and foreign markets, first quarter trade edition. Circular Series, WP-2-00. Washington, DC. 49 pp.
7. U.S. Dept. of Commerce, Bureau of the Census. 2000. Current construction report C20, history tables. *In*: Housing Start Statistics. Washington, DC.
8. U.S. Dept. of Commerce, Bureau of the Census, Federal Trade Division. 2000. U.S. International Trade Commission, trade database (FT 900). Washington, DC.
9. U.S. Dept. of Labor, Bureau of Labor Statistics. 1999. Hourly compensation for production workers (index: U.S. = 100), furniture and fixtures manufacturing (US SIC 25). Unpublished data prepared by Office of Productivity and Technology, May 24, 1999, Foreign Labor Statistics, Washington, DC.

The authors are, respectively, Research Economist, USDA Forest Service, Northeastern Research Station, 241 Mercer Springs Road, Princeton, WV 24740; President, Russ Taylor & Associates, Ste 501, 543 Granville Street, Vancouver, BC, Canada V6C 1X8; and Project Leader, USDA Forest Service, Southern Research Station, Brooks Forest Products Center, Virginia Polytechnic Institute & State University, Blacksburg, VA 24061-0503. This article was peer reviewed.