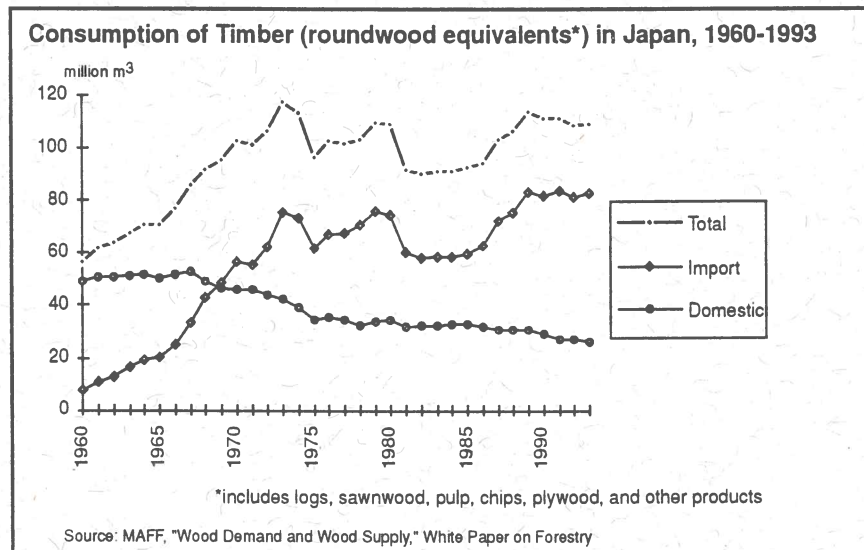


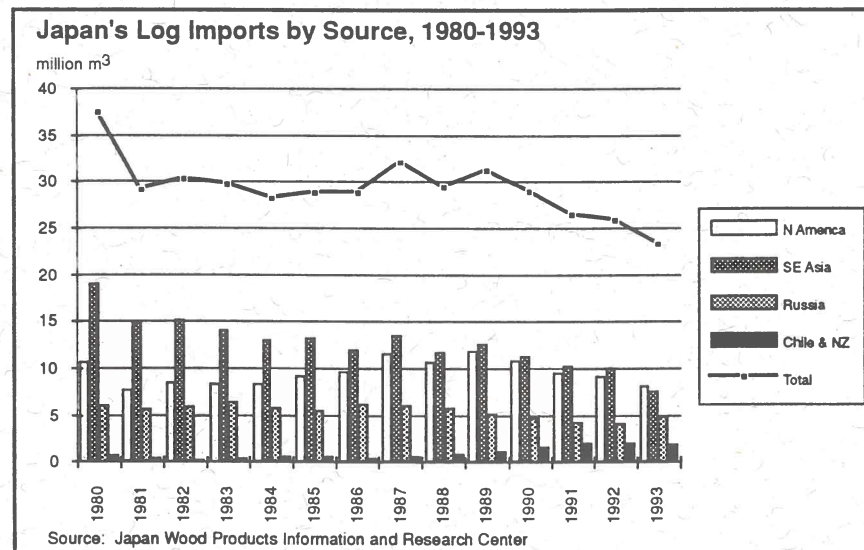
Japan's Changing Timber Consumption Shapes Pacific Rim Trade

Japan has played a pivotal role in the timber economy of the Pacific Rim. Rebuilding Japan and its economy following World War II required logs, lumber and other construction materials to expand the housing supply and improve existing housing. Despite extensive domestic tree planting, by the early 1960s Japan's timber consumption had grown beyond levels that could be economically harvested from its own forests, and timber imports increased.

Japan's total consumption of wood and wood fiber grew rapidly throughout the 1960s, and at current levels of about 110 million cubic meters (m³) per year in roundwood equivalents, Japan continues to be a major world consumer of wood. Japan's timber harvests have been contributing a declining share of this volume, decreasing from a peak of 52.7 million m³ in 1967 to just over 26 million m³ in 1993, about 24% of the country's annual wood use.



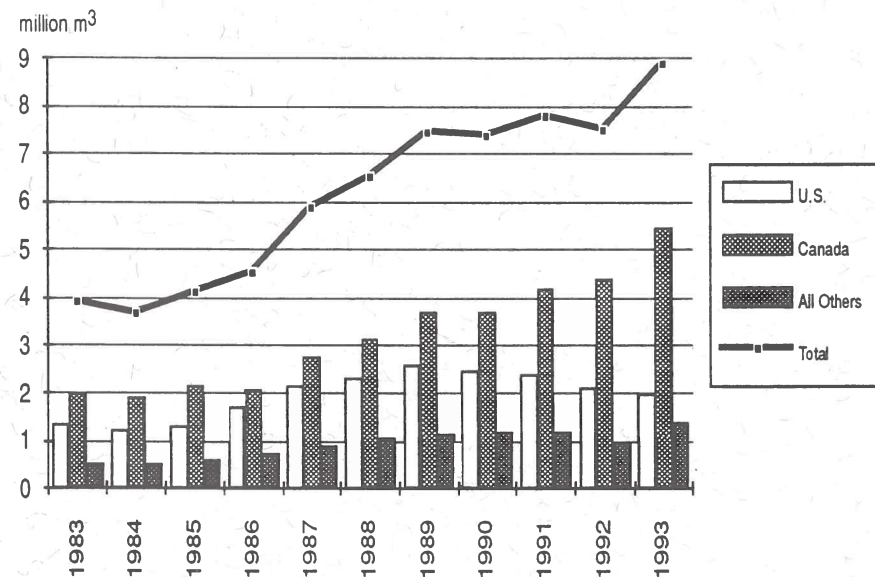
Japan's timber imports increased sharply between 1960 and 1973. Logs led the import agenda, enabling Japanese sawmills to produce the multitude of custom products demanded for traditional post-and-beam construction. Since 1973, timber imports have fluctuated with changes in domestic demand, and much of the variation has been in lumber. While total log imports were remarkably steady at approximately 30 million m³ from 1981-1990 (see figure), imports subsequently declined to 23.5 million m³ by 1993. Imports from Southeast Asia (mainly tropical hardwood logs) declined sharply from about 22 million m³ in 1979 to 7.7 million m³ in 1993. Increased imports of primarily softwood timber from North America, Russian Siberia, and more recently Chile and New Zealand have in large part offset this decline. Russia has been a diminishing source of Japan's timber imports since 1979, but exported about 5 million m³ to Japan in 1993.



While Japan has historically preferred to import logs, lumber imports are gaining significance. Softwood lumber imports increased from about 4 million m³ in 1983 to almost 9 million m³ in 1993 (see figure). Canada and the U.S. have been the



Japan's Import of Softwood Lumber, 1983-1993



Source: Japan Wood Products Information and Research Center

major suppliers of softwood lumber, but imports from Chile, Russia, and New Zealand are increasingly important. Japan's 1993 imports of both softwood and hardwood lumber reached 10.6 million m³, a record high.

The import of softwoods by Japan is closely related to the use of wood products in residential construction. Japan has experienced a steady change in the composition of housing starts. While total starts have been in the range of 1.5 million units annually, the share of houses constructed with wood declined from 1 million units in 1976 to about 600,000 units for the period 1983-1986. More recently, wood starts have again

gained market share while non-wood starts have fallen in concert with the drop in total housing starts. In 1993, wood starts of almost 700,000 units represented about 47% of Japan's total 1.49 million housing starts.

Western (2x4) platform construction was introduced in Japan as a means of increasing housing efficiency and to make semi-processed and finished lumber products from North America more competitive. In 1975, only 2,100 units were built using this technology. By 1985, 2x4 starts had increased to 24,000 units, and by 1990, 2x4 starts exceeded 50,000 units for the first time. In 1993, a reported 56,299 units were built using 2x4 construction techniques, representing 8% of the wood frame starts and about 4% of total housing starts.

Implications for U.S. Suppliers

Continuing to increase value-added wood exports from the U.S. to Japan requires a greater understanding of Japanese end-use trends, competing suppliers from other countries, and differences in product requirements and specifications. While gains in western platform construction have been significant, most wood housing units continue to be constructed using traditional post-and-beam methods. A producer targeting the Japanese market may find success in providing sawn wood in larger metric dimensions to a cooperating Japanese partner or distributor who can remanufacture such timber into the multiplicity of finished products demanded in this traditional market. It is often stated that the post-and-beam Japanese house can incorporate as many as 1,200 different dimensional parts—a nearly impossible marketing problem for any single North American producer.

Even though Japan's platform 2x4 housing market is growing, a mass market for timber processed to North American standards in Japan does not yet exist. Recently-announced Japanese targets to increase imports of panelized housing may further boost processed wood exports from North America, but only if successful marketing alliances can be formed. Strategies to shift wood exports from unprocessed timber toward value-added products should continue to strengthen the western-style building market in Japan but must also accommodate traditional post-and-beam construction, where opportunities exist for exports of wood materials specifically adapted for that market.

For more information, contact CINTRA FOR and ask about the following publications:

Working Paper 40: *Japan's Forest Production for Increasing Self-sufficiency: A Reassessment of Near-term Capacity and Economic Potential*, and

Working Paper 38: *The Development of the Japanese Wood Trade: Historical Perspective and Current Trends*.