The Importance of Russian Wood Products in Asian Markets, and "Made-in-China" Russian Wood Products

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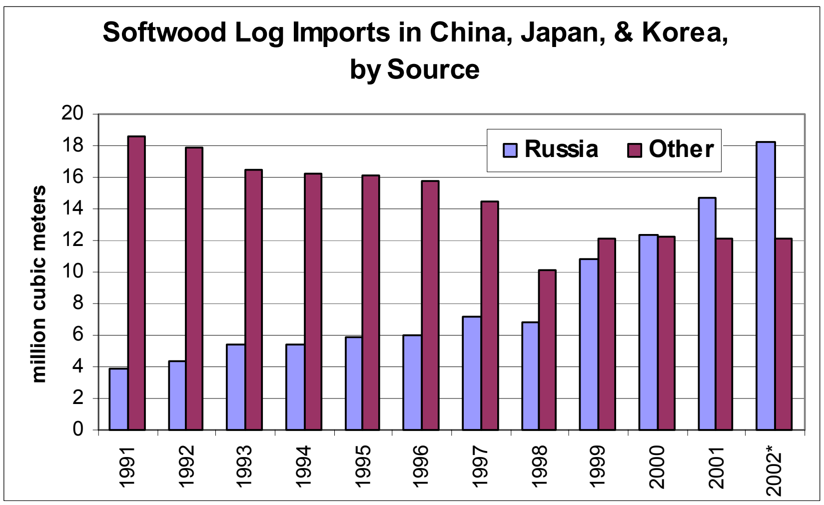
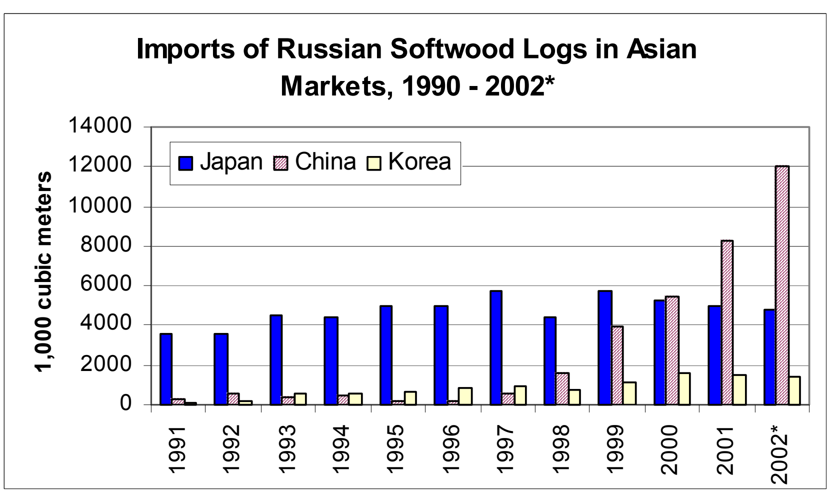
Russia has become the leading source of softwood logs for the Asian markets. In 1991, Russian timber accounted for 17% of the total softwood log imports in Northern Asia (China, Japan, and Korea). By 2000, Russian timber accounted for 50% of this market, and we estimate that in 2002 Russia will have a 60% share of the total volume.

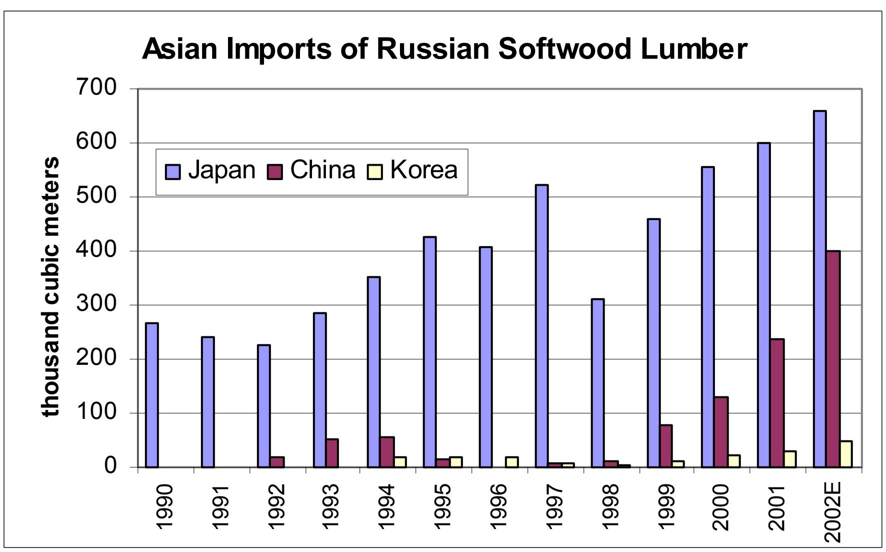


Russian softwood logs used to be exported primarily to Japan, but now the major market is China. In 1991, 92% of Russian softwood log exports to Asian markets went to Japan, with only 6% to China and 1% to Korea. In 2001, 34% of Russian softwood logs were exported to Japan, 56% to China, and 10% to Korea. Based on results through the end of July, it appears that China will increase its share of Russian log imports in 2002.

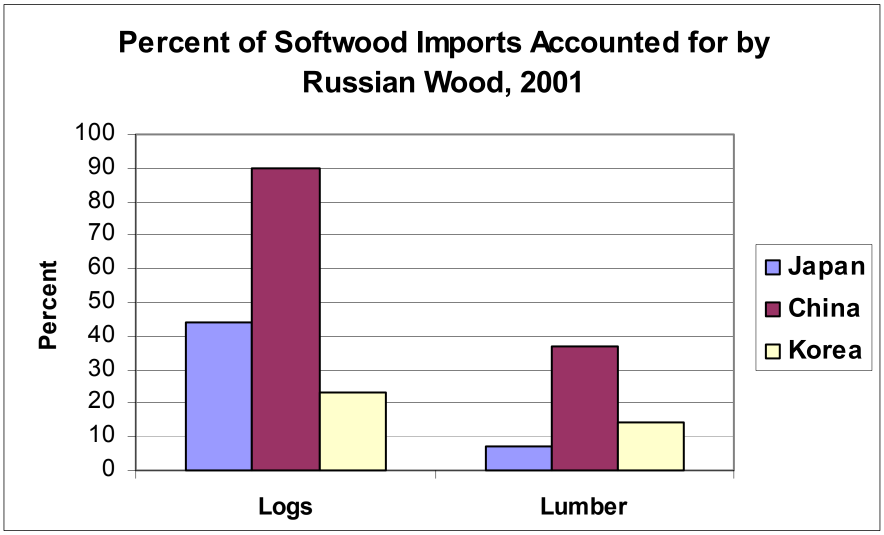


In contrast to logs, Russia's share of the softwood lumber markets in North Asia is much less, although shipments are increasing. In 1991, only 3% of softwood lumber imports in Japan, China, and Korea were from Russia, but this has now increased to an estimated 13% in 2002. We estimate that the total volume of Russian softwood lumber shipped to these markets in 2002 will be close to 1.0 million cubic meters. This is still a small volume compared to the volume of logs exported to these same markets, but it represents an increase of 242% just since 1998.

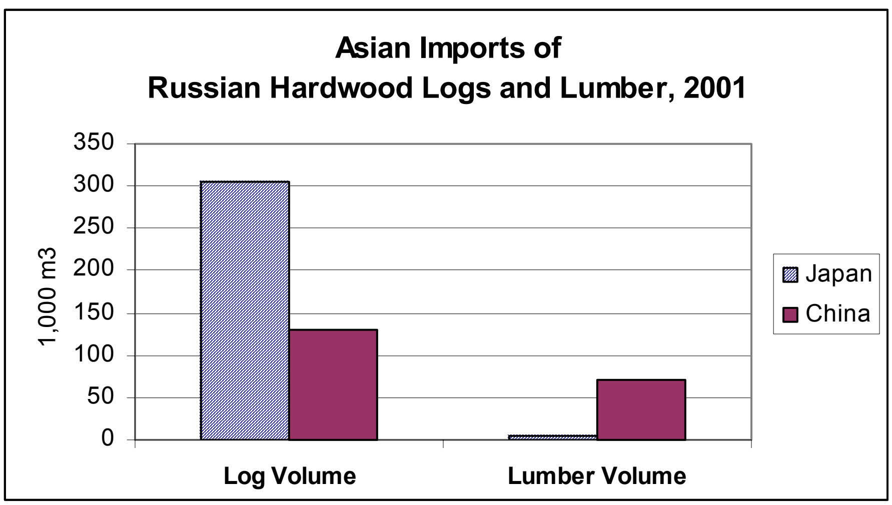
Russian softwood lumber exports have traditionally gone almost entirely to Japan, but in recent years the volume exported to China has increased very rapidly. The share of Russian softwood lumber exports going to China has increased from almost zero in 1998 to an estimated 36% in 2002. The majority (59%) are still destined for Japan, and only 5% go to Korea.



The impact of Russian softwood logs and lumber is greater in China than in other Asian markets. In 2001, Russian softwood logs represented 44% of total softwood log imports in Japan, 90% in China and only 23% in Korea. Radiata pine still makes up the majority of logs imported in Korea, because of cheaper price, while Japan maintains a balance of North American logs, Russian logs, and Radiata pine logs. In 2001 Russian softwood lumber accounted for just over 7% of total softwood lumber imports in Japan, 37% in China, and 14% in Korea.

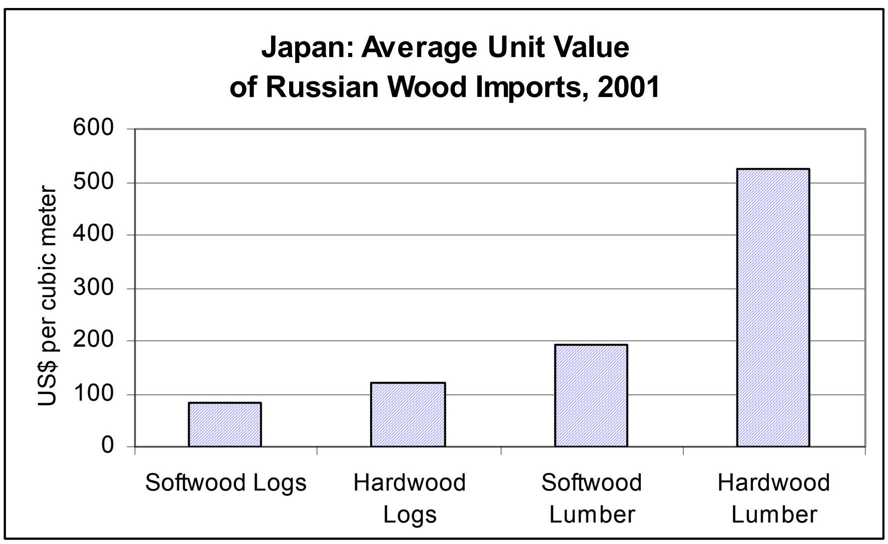


Russian hardwood logs and lumber are a much smaller part of the Asian markets in terms of volume, although the value per unit is often higher than with softwoods. In 2001, Japan imported more hardwood logs than China, but China was a much more important market for Russian hardwood lumber. Korea's volume was too small to mention.

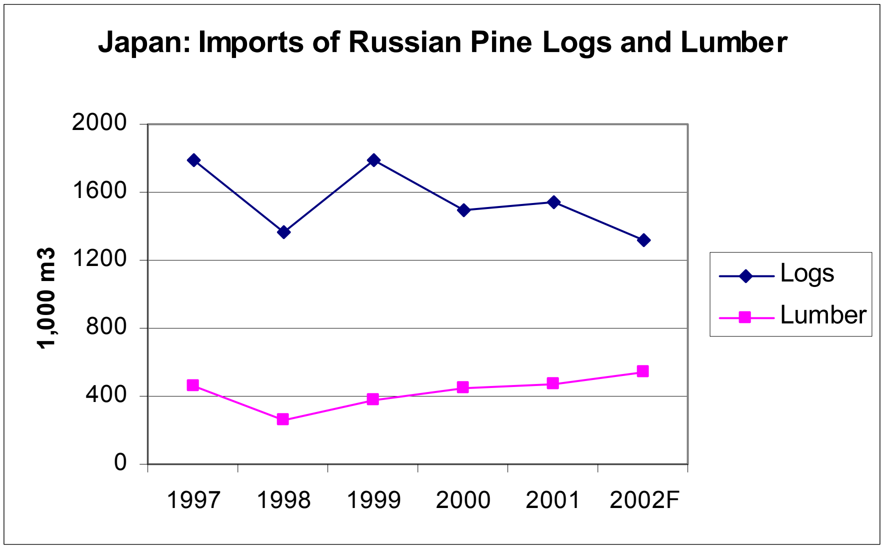


In Japan, Russian timber accounted for nearly 12% of hardwood log imports in 2001, compared with only 1.7% of the total hardwood log imports in China. However, in 2002 Russian hardwood timber increased its importance in the Chinese market, and through the end of July had increased its market share to more than 10%. Russian lumber made up only 0.5% of total hardwood lumber imports in Japan in 2001, compared with 2.1% in China. As with logs, the Russian hardwood lumber is becoming more important in China in 2002, accounting for 4.1% of total Chinese hardwood lumber imports through the end of July.

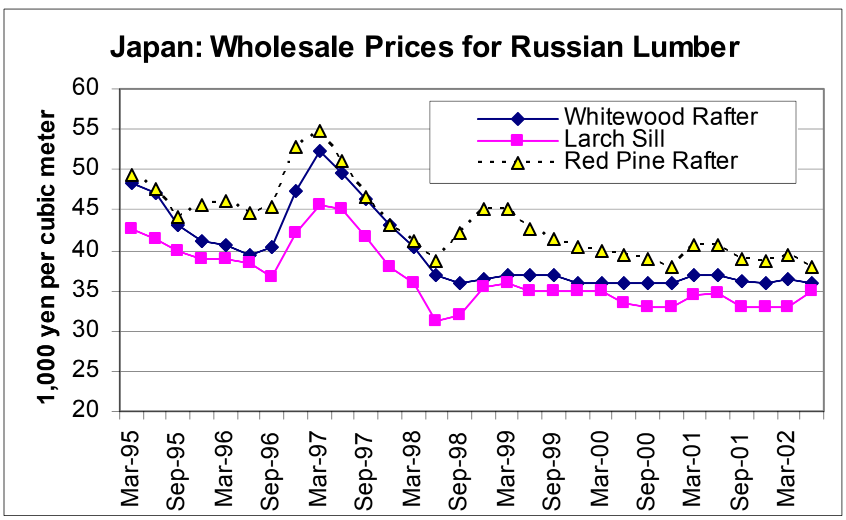
Although the volume of Russian hardwood logs and lumber exported to Asian markets is much smaller than the volume of softwood, the average unit value of hardwood products is much higher. For example, in Japan the average hardwood log is 50% higher in price than softwood logs, and the average value of hardwood lumber imported from Russia is 150% higher than that of softwood lumber.



In Japan, one obvious trend in the market for Russian wood is the current shift from imports of raw logs to imports of "genban", or rough lumber for further processing. At least 6 or 7 mills in Siberia are now supplying red pine lumber to Japan, including two Japanese-Russian joint ventures. We estimate that Japanese imports of red pine logs in 2002 will be 26% lower than in 1999, while imports of red pine genban will be 43% higher. This is driven by the high labor and other costs in Japan, their aging workforce, and in some cases problems with wood waste disposal in Japan. The trend is expected to continue, and this trade in red pine lumber to Japan will increase in the future, as the log trade declines.



Wholesale prices of lumber produced from Russian logs have generally trended lower in Japan over the past seven years, but have been reasonably stable over the past two to three years. The following chart indicates prices at the wholesale level in Japan, loaded on truck at the mill. For whitewood, the prices are for 30 x 40mm rafters ("taruki"), for larch the prices are for 24 x 48mm sills ("sangi"), and for red pine the prices are for 30 x 39mm rafters.



Source: Japan Lumber Journal; JAWIC Prices wholesale dealer, fob truck
Whitewood prices in Chukyo market, Larch prices in Tohuku, red pine prices in Tokyo

The following table indicates average wholesale lumber prices in Japan during June 2002 for a variety of sawn products, including the most common items made with Russian wood. The Japan Lumber Journal is the best source of price information on the Japanese market.

Japan Wholesale Lumber Prices, June 2002

Item	Yen/m3	US$/m3
Larch sill*	35000	$ 283.93
Hemlock, preserved sill	44500	$ 361.00
Radiata pine, laminated sill	95000	$ 770.67
Yellow Cedar, 105mm sill (pithless)	63000	$ 511.07
Whitewood rafter*	36000	$ 292.04
Red Pine rafter*	38000	$ 308.27
Hemlock rafter	40000	$ 324.49
Whitewood rail*	37000	$ 300.15
Red Pine nuki*	41000	$ 332.60
Red Pine taruki for "mansions"*	41000	$ 332.60

** indicates lumber sawn from Russian logs*

Source: Japan Lumber Journal

One of the most important uses of Russian timber in Japan is for production of plywood, and this usage has increased rapidly in recent years. This table indicates that the Japanese plywood industry is increasingly relying on the use of softwood, rather than hardwood timber, and that Russian wood (larch) makes up a sizable portion of the raw material used for plywood. In 1993, Russian wood accounted for only 5% of the plywood industry raw materials in Japan, but this increased to 38% in 2001, and is likely even higher in 2002.

Japanese Plywood Industry: Raw Material Usage, 1993 - 2001

Year	Russia	Total Softwood	Hardwood	Total All	% Softwood	% Russian
		1,000 cubic meters				
1993	357	692	6,969	7,661	9%	5%
1994	642	961	6,040	7,001	14%	9%
1995	728	1,164	5,512	6,676	17%	11%
1996	1,017	1,602	5,044	6,646	24%	15%
1997	1,129	1,696	4,755	6,451	26%	18%
1998	1,109	1,622	3,258	4,880	33%	23%
1999	1,418	1,991	3,101	5,092	39%	28%
2000	1,778	2,328	2,752	5,080	46%	35%
2001	1,643	2,341	1,973	4,314	54%	38%

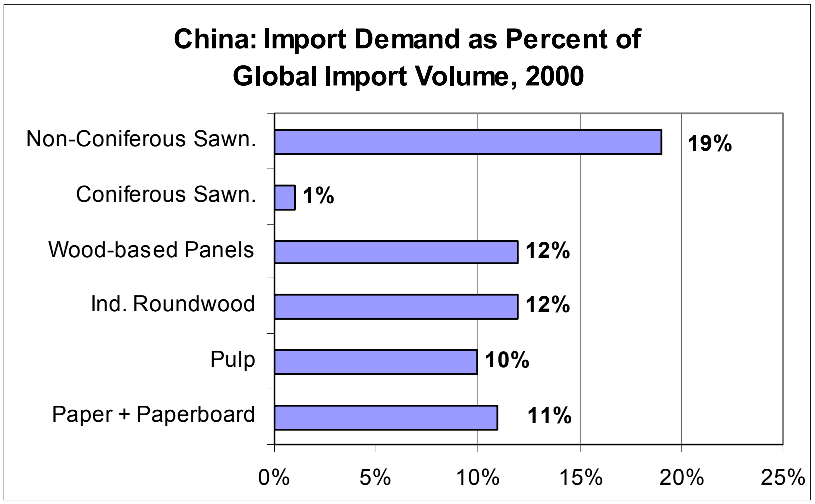
Unlike China, South Korea's wood products imports are still much lower than they were during the mid-1990s, although imports did increase in the first half of 2002.

Comparing forest product imports in 1995 and 2001, the only categories showing increases were veneer, fiberboard, and "other". Russia's major export to Korea is whitewood logs (spruce/fir), which offers an alternative to radiata pine. The logs are sawn into rough lumber, which is mostly sold green for interior applications.

Korean Value of Forest Product Imports, 1995 vs. 2001

Category	1995	2001	% Change
	Value in Million US$		
Woodchips	102	81	-21%
Logs	1047	536	-49%
Lumber	409	224	-45%
Veneer	49	93	90%
Moulding/Flooring	114	34	-70%
Particleboard	91	78	-14%
Fiberboard	40	94	135%
Plywood	594	312	-47%
Door & Window	80	32	-60%
Other	79	87	10%
Total	**2605**	**1571**	**-40%**

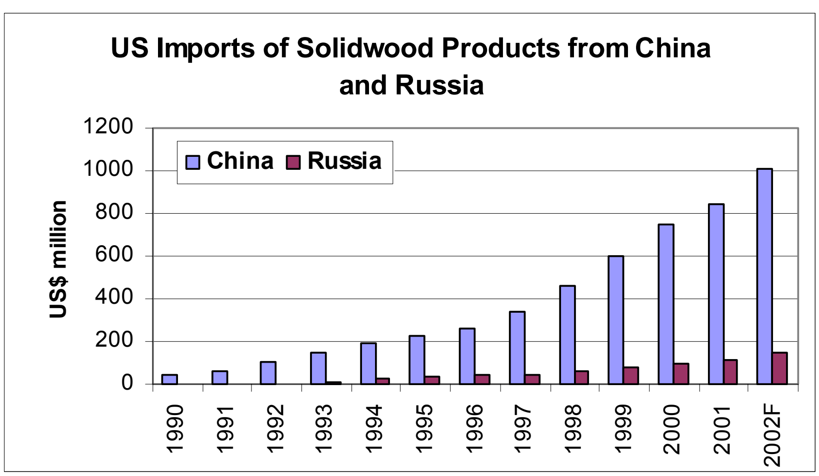
Chinese demand for wood imports has increased in recent years as domestic wood supplies have been reduced. While final data for 2001 imports has not been compiled by FAO, the 2000 statistics indicates the importance of the China wood trade in the global markets. For example, Chinese imports of non-coniferous (hardwood) sawnwood in 2000 amounted to 19% of the total global trade in this product. China also accounted for more than 10% in global imports of wood-based panels, industrial roundwood, pulp, and paper + paperboard. Only in coniferous (softwood) sawnwood is China a relatively small market, in terms of the global trade.



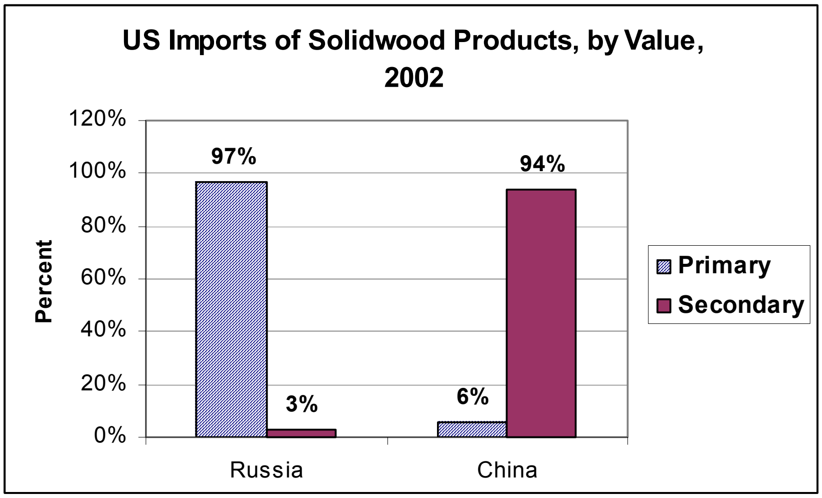
Even though the above chart is impressive, it still does not fully describe the importance of Chinese wood demand in the global markets. In 2001, China was the world's largest market for imports of logs and hardwood sawnwood, and was second only to the United States as a market for imports of wood-based panels, wood pulp, and paper + paperboard. For a country like Russia, which is the world's leading exporter of logs and has the world's largest standing inventory of softwood timber, China appears to be a natural market.

"Made-in-China" Russian wood products

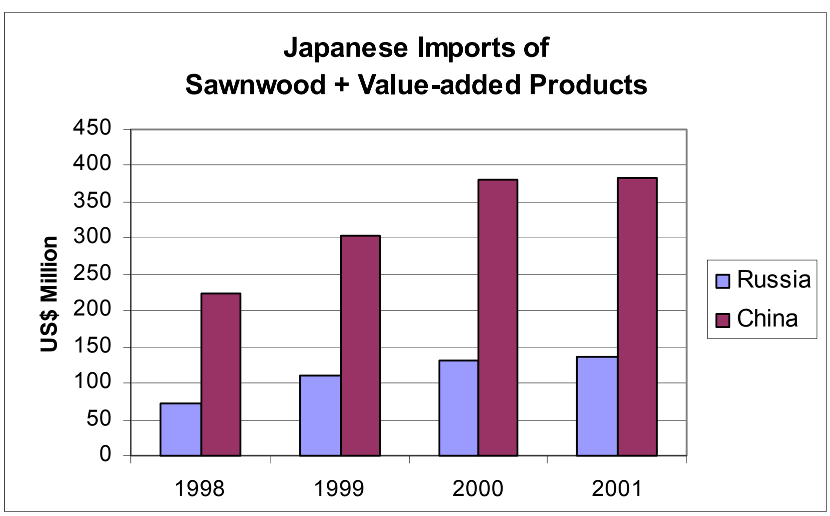
It is important to remember that China imports Russian timber and wood products not only to meet domestic demand, but also to produce finished products for export. For example, China has become the second largest supplier of solidwood products to the US market, after Canada. Total US imports of solidwood products (includes all wood products except furniture and pulp and paper) from China have increased from US$200 million in 1994 to more than $800 million in 2001, and are forecast to reach more than $1,000 million in 2002. Although we cannot identify what percent of China's wood exports to the US utilize Russian wood, we know that it is a significant amount. US imports of Russian wood products have also been increasing rapidly (up an estimated 125% in value between 1998 and 2002), but are much smaller than imports from China.



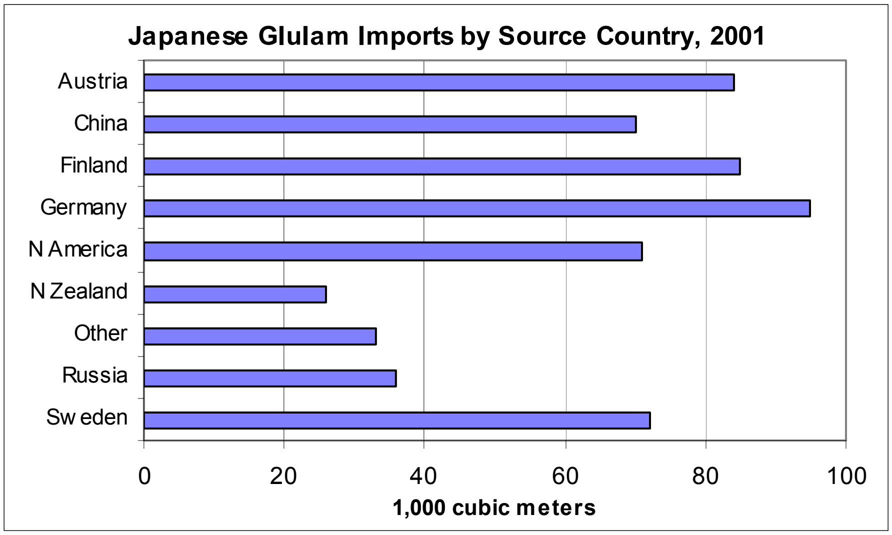
The type of products that the US imports from China and Russia are quite distinct. While most imports into the US from Russia in 2002 have been birch plywood (80% of the total) and softwood lumber (10%), most of the imports from China are either "Builder's Carpentry" (doors, windows, etc – 19% of the total) and "Other Wood Products" (includes boxes, blinds, picture frames, etc – 70%). In total, 97% of US wood product imports from Russia were primary wood products such as plywood and lumber, whereas 94% of imports of Chinese products were so-called secondary, or "value-added" products.



Also, some of the Russian wood products entering the Japan are now coming from Chinese producers. In fact, Japanese imports of Sawnwood and "value-added" secondary wood products from China have increased much faster than the imports from Russia. In 2001, Japanese imports of these products from China were valued at more than US$384 million, compared with $135 million in products from Russia. While it is impossible to say what percentage of these Chinese products are manufactured with Russian timber, it is safe to say that a significant portion of the total is produced from Russian wood. This includes products like laminated lumber, doors, flooring, etc. If furniture were included (because some Chinese furniture exports to Japan are produced with Russian wood), then the Chinese total would be even greater. Even within these categories, there is a greater emphasis in China on value-added products. For example, of the Japanese imports of sawnwood from Russia in 2001, only 14% (by value) was planed (surfaced) lumber, whereas 64% of the imports of Chinese sawnwood were planed.



A good example of the success of Chinese companies in Japan with products made from Russian wood is illustrated in the following chart. Japanese imports of glulam (laminated lumber) in 2001 from China were nearly twice as large as imports of glulam from Russia. But the glulam produced in China for Japan is produced with Russian wood.



Further evidence of the very rapid increase in the flow of secondary wood products from China to Japan is given in the following table, which is based on information from Japan Lumber Journal.

Japanese Imports of Selected Wood Building Materials from China

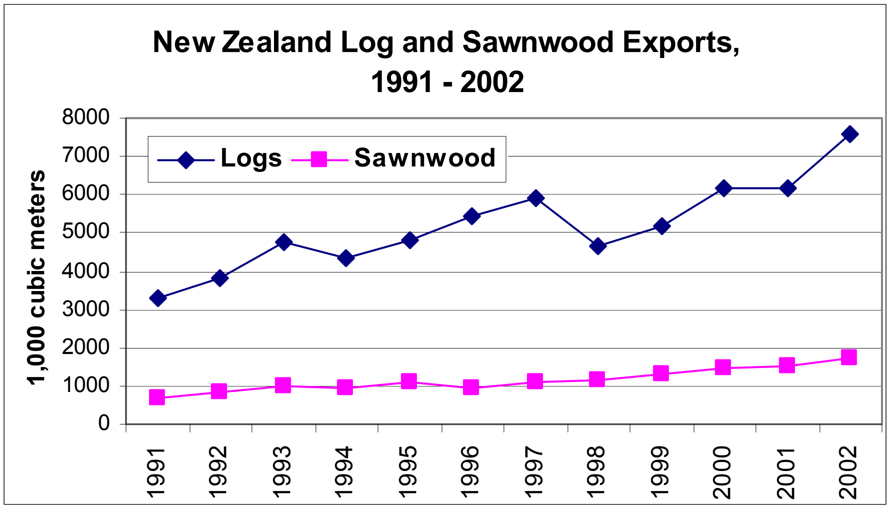
Category	units	1998	2001	% change
Larch Flooring	*m3*	791	6010	+660%
Other Softwood Flooring	*m3*	715	7462	+944%
Hardwood Flooring	*m3*	18266	54258	+197%
Doors + frames	*000 kg*	528	1269	+140%
Fittings & Fixtures	*000 kg*	137	212	+ 55%
Structural Laminated Lumber	*m3*	3544	24600	+594%

Source: Japan Lumber Journal, citing Ministry of Finance import statistics

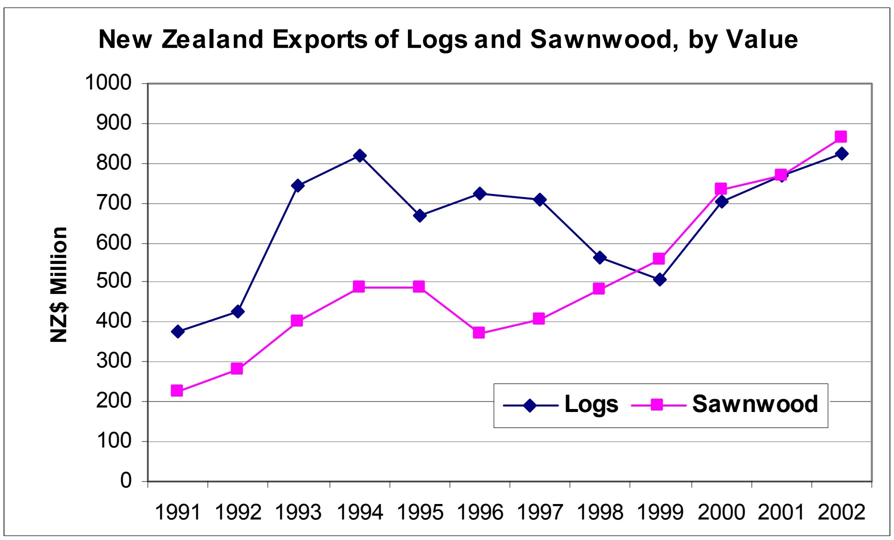
We are suggesting that a partnership is developing between Russian timber producers, who export logs and increasingly lumber to China, which then produces "value-added" products for export. Russia has the wood, and China has low labor costs and good marketing channels, which are essential for success in selling value-added wood products. To understand how these markets develop and evolve over time, it is instructive to look at the example of New Zealand.

New Zealand is a country with an open economy, and good access to modern equipment. They have relatively long experience in the export markets, language is not a barrier for their major customers, in most cases, and they have an educated work force. Nevertheless, New Zealand is largely a log exporter, and to the extent they export processed products, these are mostly sawnwood which receives further processing in Asian countries with low labor costs.

For example, since 1991 New Zealand's log exports have increased from 3.3 million m^3 to 7.6 million m^3 in the year ending June 30, 2002. Over that same time period, exports of sawnwood have increased from 0.7 million m^3 to 1.7 million m^3.

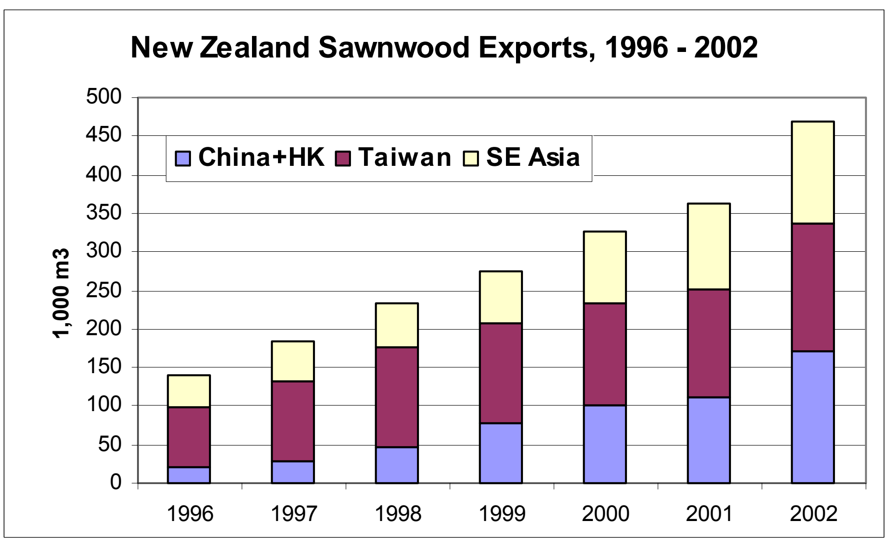


Of course, in terms of value, the smaller volume of sawnwood has increased at a much faster rate than log exports, and in fact in 2002 New Zealand's sawnwood exports were more valuable than their log exports.



While the value of New Zealand's sawnwood exports has increased rapidly, the exports of "value-added", or secondary wood products such as moulding and furniture, have not increased to any great extent. Since 1996, sawnwood exports have increased by nearly NZ$500 million, but exports of value-added products have only increased by about NZ$65 million.

The reasons for this trend are obvious. New Zealand is a good region for growing timber, and they are relatively efficient at producing logs and sawn lumber. However, compared to other regions, their labor costs are relatively high, and they are not able to compete as well in producing secondary wood products, despite having relatively well-funded companies with good equipment. Instead, they have formed a kind of partnership with other countries, such as China, Taiwan, and others in Southeast Asia, where low labor costs enable producers in those countries to transform New Zealand radiata pine into higher value products. The following chart illustrates how rapidly exports of New Zealand sawnwood to these markets have increased in recent years, as New Zealand lumber producers seek to increase their business through partnership with these countries.

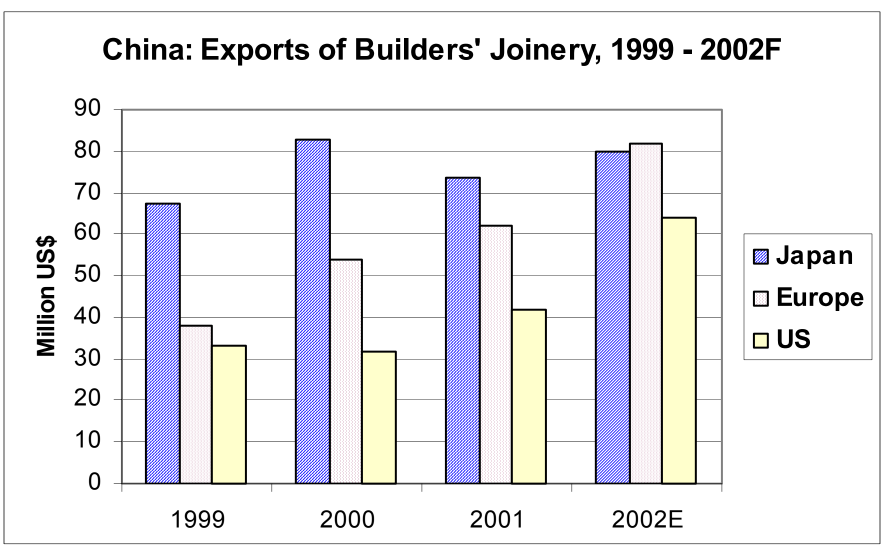


<u>European Market</u>

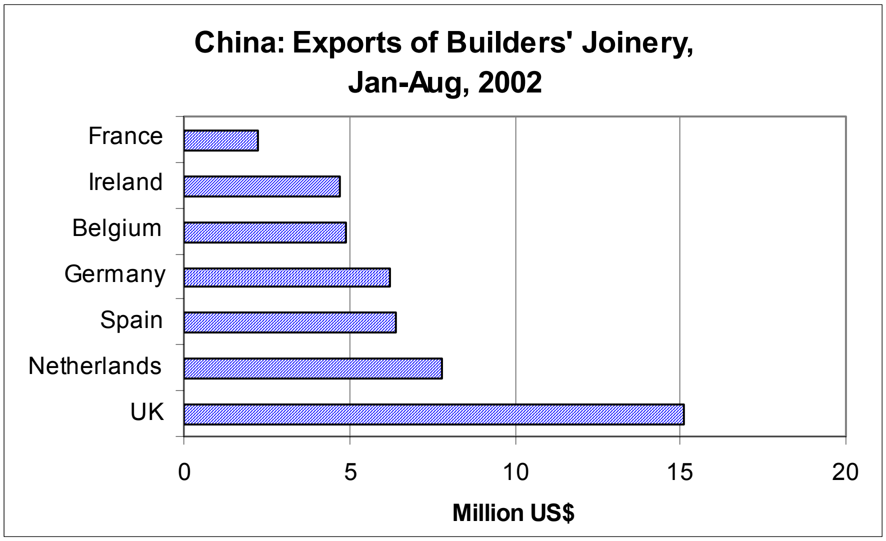
European countries represent an important market for Russian lumber exports, including a sizable percentage of the Siberian lumber production of red pine. The two largest import markets for softwood lumber in Europe, the United Kingdom and Italy, together imported more lumber in 2001 <u>than all of the Asian markets combined</u>. In total, Europe imports more softwood lumber than even the USA (in total, European countries imported more than 34 million m^3 of softwood lumber in 2001). More than 60% of

Russia's softwood lumber exports in 2000 went to Europe, including both the EU and Eastern Europe. This is primarily red pine lumber, but there are also opportunities for larch as well. In addition, some of the lumber exported to these markets receives further processing and is then re-exported. For example, we know of a company in Estonia which is importing red pine lumber from Siberia, processing this into finished moulding, and then exporting the product to the US market.

Europe has also become an important market for Chinese wood product exporters, some of whom are using Russian timber. For example, we estimate that the value of China's exports of Builders' Joinery to Europe in 2002 will be more than 100% higher than in 1999, and will exceed the value of Builders' Joinery going to Japan for the first time.



The United Kingdom is the largest market in Europe for Builders' Joinery from China, followed by the Netherlands, Spain, and Germany. Of course, China is also exporting other products to Europe such as flooring, furniture, and plywood. Some of these products are made with Russian timber, and again point out the importance of this "Made-in-China Russian Wood Products".



Summary

- Russian timber will account for an estimated 60% of softwood log imports and 13% of softwood lumber imports in the North Asian markets in 2002.
- Russian softwood accounts for a much larger share of the import market in China than in Japan or Korea.
- Russian hardwood log and lumber exports to North Asian markets are much smaller than their softwood exports, and account for a much smaller share of the total import markets in those countries.
- In Japan, imports of red pine rough lumber are replacing imports of logs, and larch has taken a major share of the raw material usage for plywood production.
- In Korea, wood imports have never recovered their pre-1997 peak, and the market is primarily one for log imports.
- Chinese exports of wood products to the US market were US$800 million in 2001, compared to $135 million from Russia to the US. China's exports to Europe are also growing, as are exports from Russia, especially softwood lumber.
- New Zealand provides a good example of how a partnership can develop between a timber producer that exports both logs and lumber and Asian markets with low-cost labor that can use the wood to produce higher value finished products.
- For both Russia and China, the European market is also increasing in importance, for Russian softwood lumber (pine and also larch) and for Chinese value-added products.
- China is the largest market for Russian wood, and much of this wood is used to produce products for export. The partnership of Russian logs and lumber and Chinese manufacturing and marketing is proving to be quite successful, with benefits to both countries. It is expected that this trend will continue for the next several years at least.