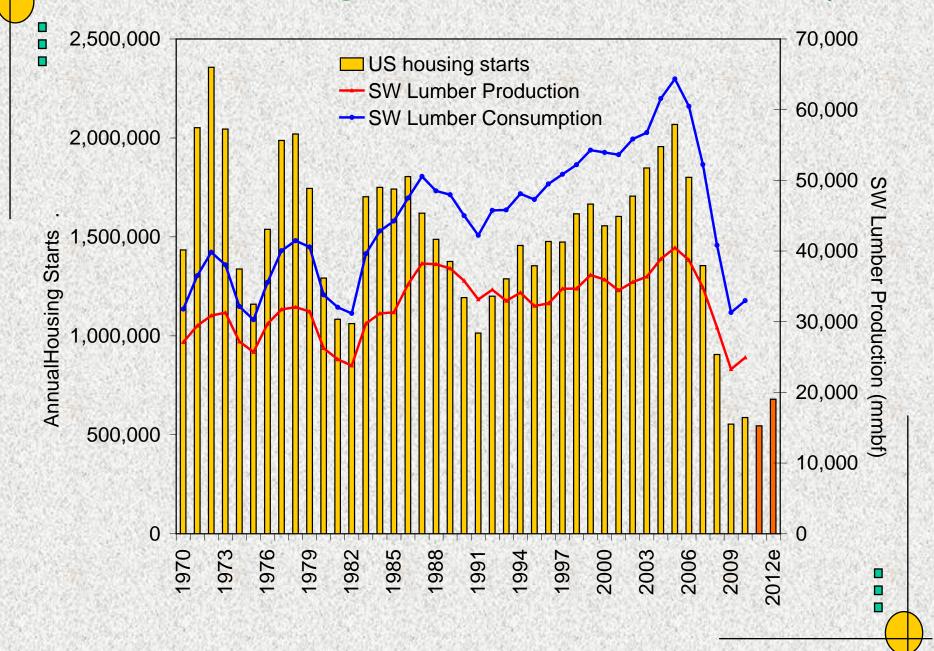


Overview of US housing market Overview of US export stats US log and lumber exports (species and unit values) Wood imports in selected foreign markets (China, Japan, S. Korea, India and Taiwan) Strategic Market Factors to Consider: China Case Strategic observations

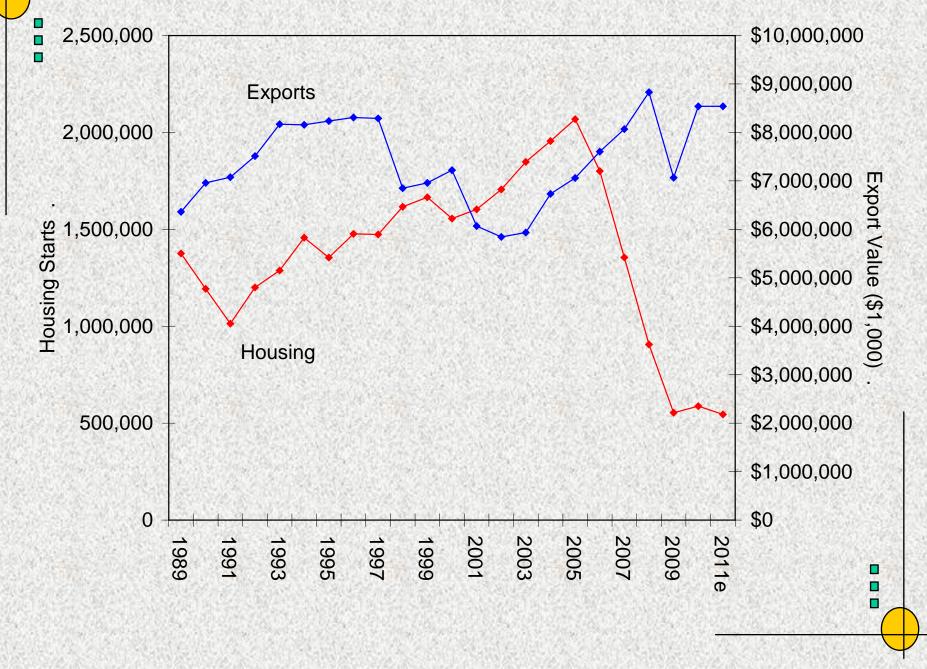
Agenda



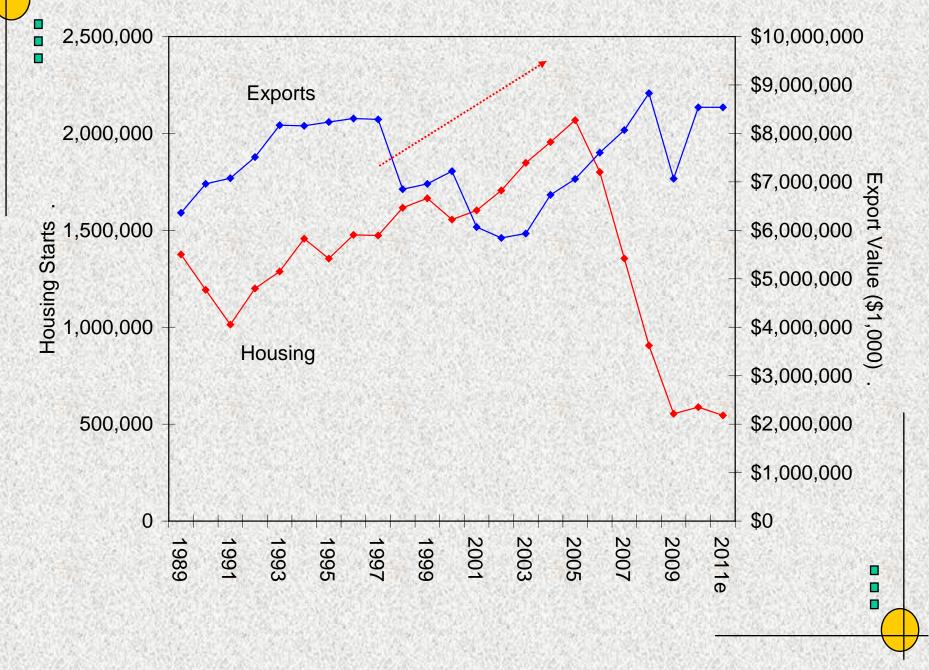
Housing Starts and Lumber Consumption



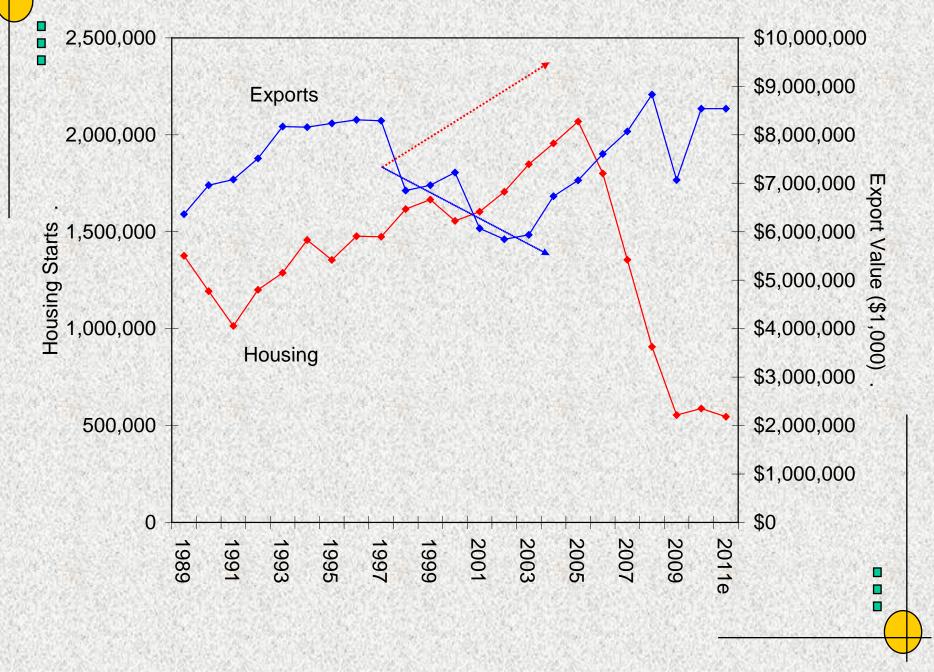
Housing Starts and Exports



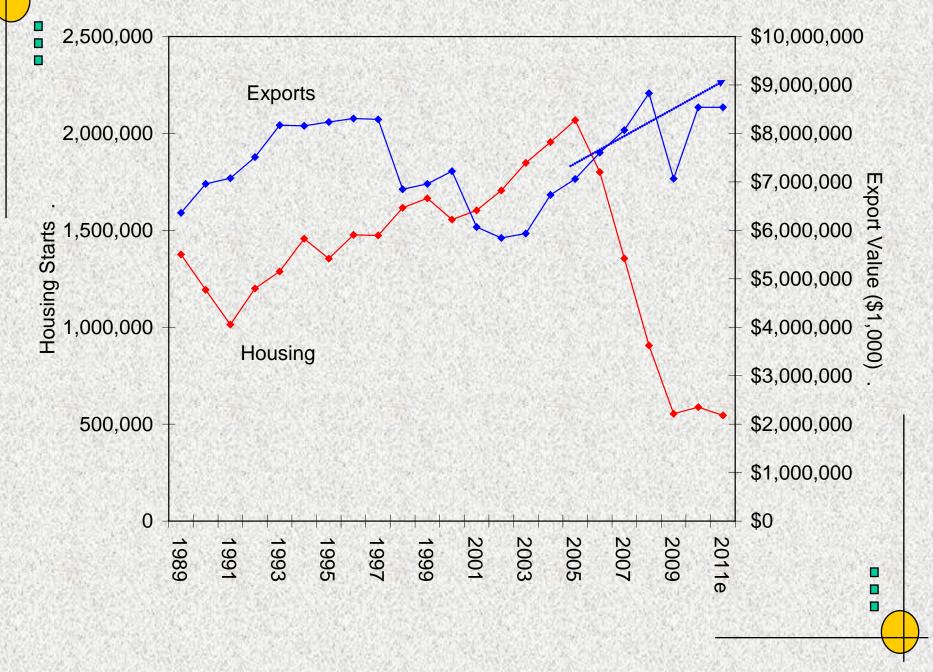
Housing Starts and Exports: Pre-Crash



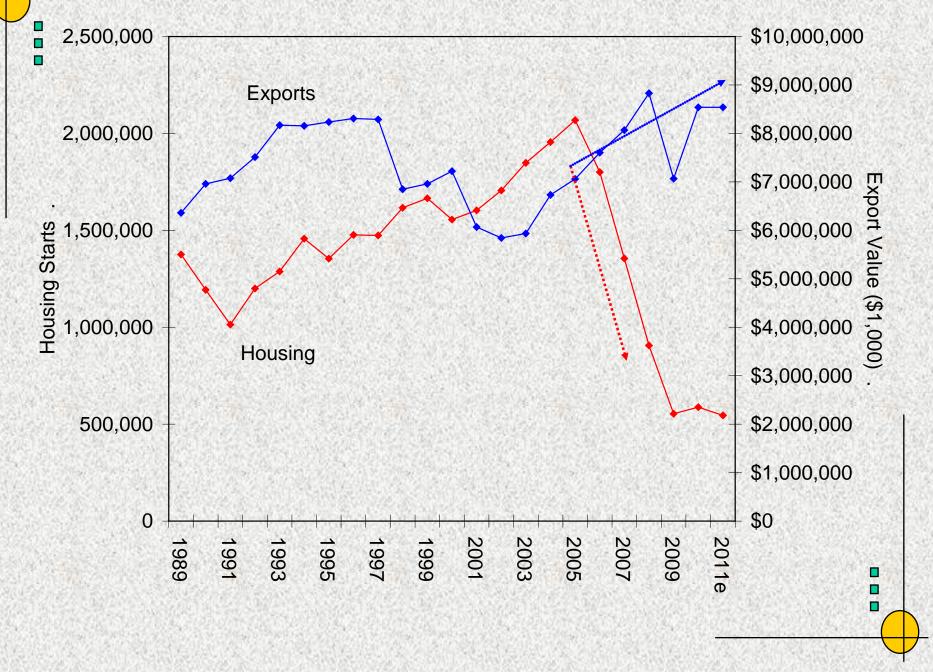
Housing Starts and Exports: Pre-Crash



Housing Starts and Exports: During-Crash

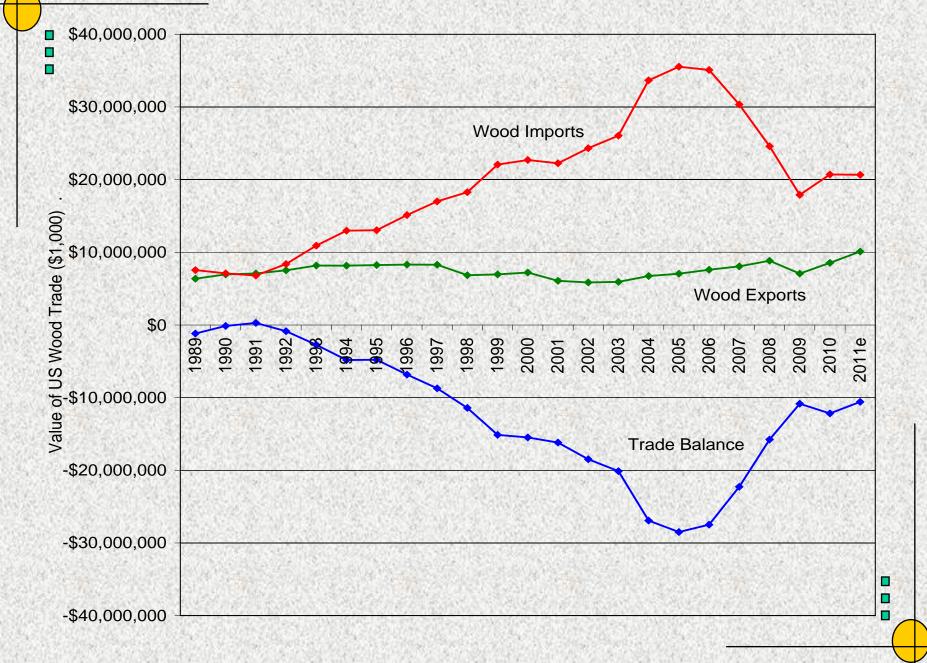


Housing Starts and Exports: During-Crash

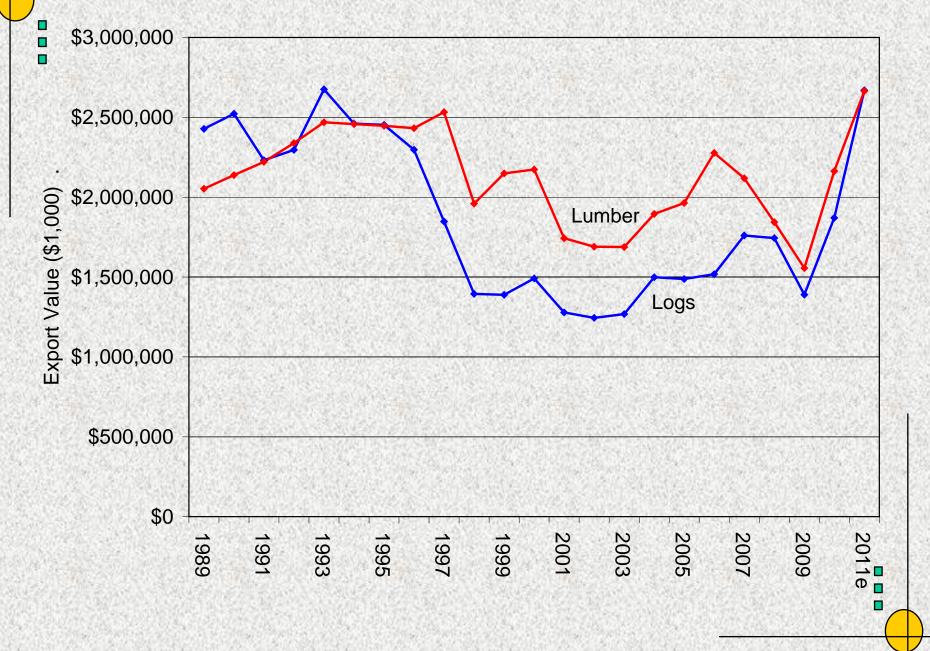




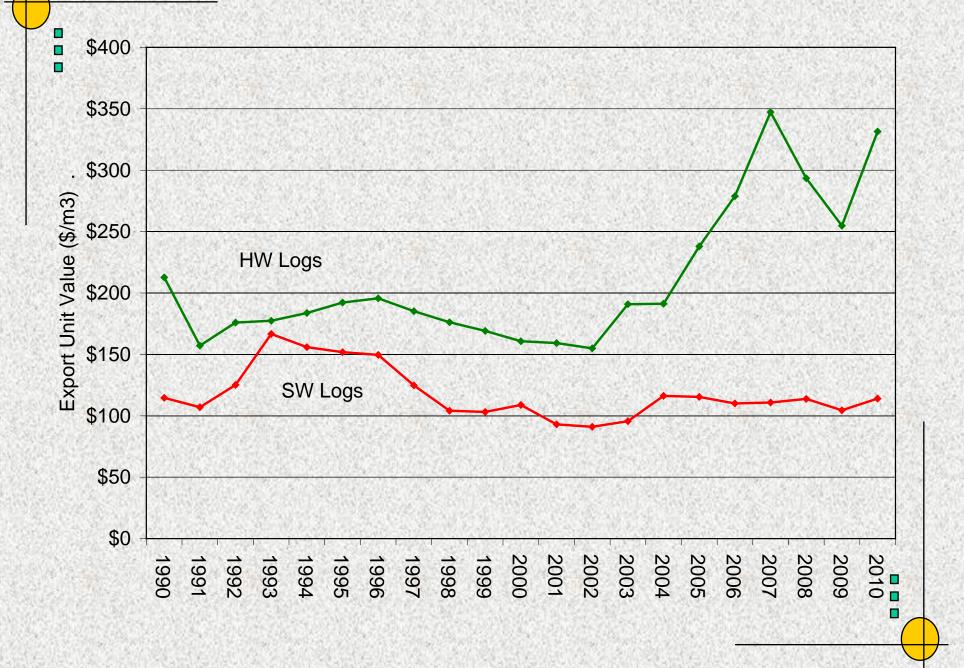
Balance of Trade for Wood Products



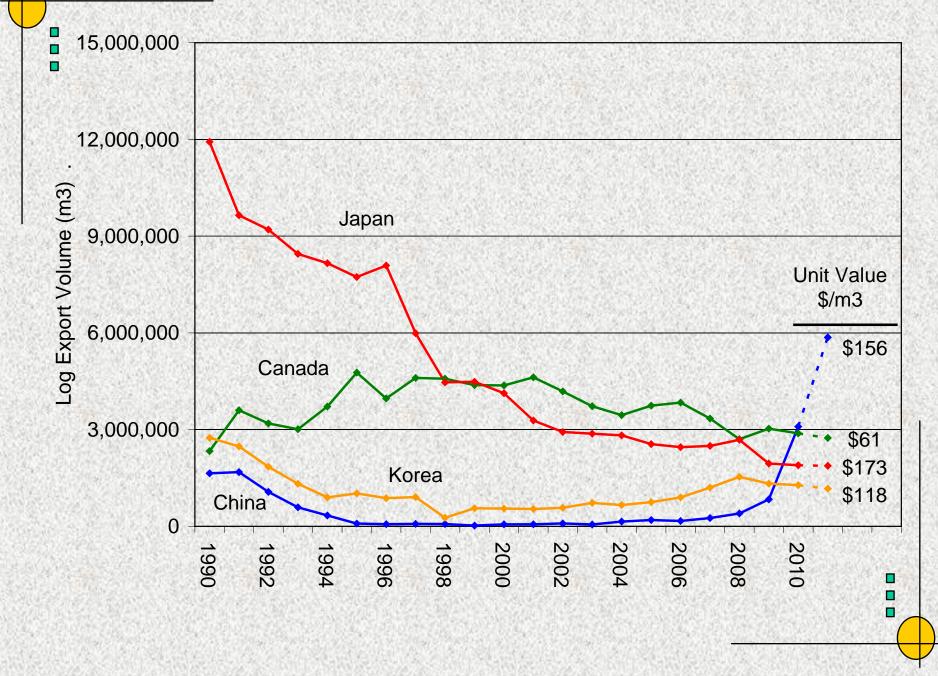
US Log and Lumber Exports



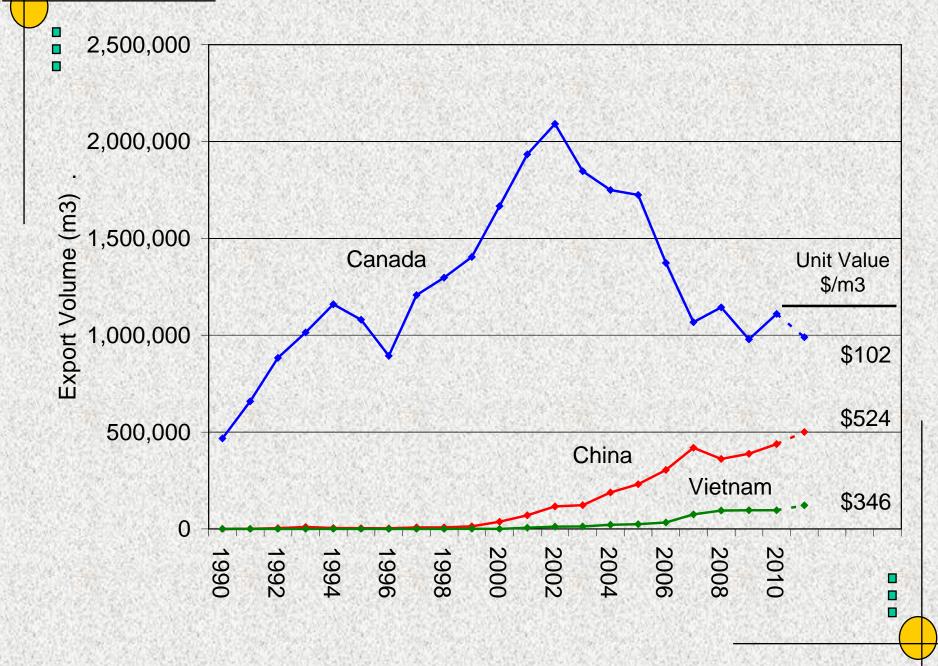
Unit Value for Log Exports



Major SW Log Export Markets



Major HW Log Export Markets



Analysis of US SW Log Exports to China

	2010	2011e	Share	Unit Value
Doug-fir	1,141,963	3,238,457	55.3%	\$187.54
Hemlock	1,004,080	1,088,916	18.6%	\$113.25
Spruce	645,164	296,266	5.1%	\$79.86
Total	3,093,663	5,861,254		

2011 volume (m3) estimate based on January to May data Unit Value based on May 2011 data

Analysis of US SW Log Exports to Japan

	2010	2011e	Share	Unit Value
Doug-fir	1,646,720	1,698,098	90.5%	\$187.03
Hemlock	59,714	21,957	8.8%	\$100.00
Spruce	135,821	165,023	1.2%	\$62.07
Total	1,896,124	1,877,163		

2011 volume (m3) estimate based on January to May data Unit Value based on May 2011 data



Analysis of US SW Log Exports to Korea

	2010	2011e	Share	Unit Value
Doug-fir	80,567	77,095	6.6%	\$167.41
Hemlock	575,403	712,752	61%	\$116.19
Spruce	318,978	298,755	25.6%	\$102.13
Total	1,276,065	1,169,258		

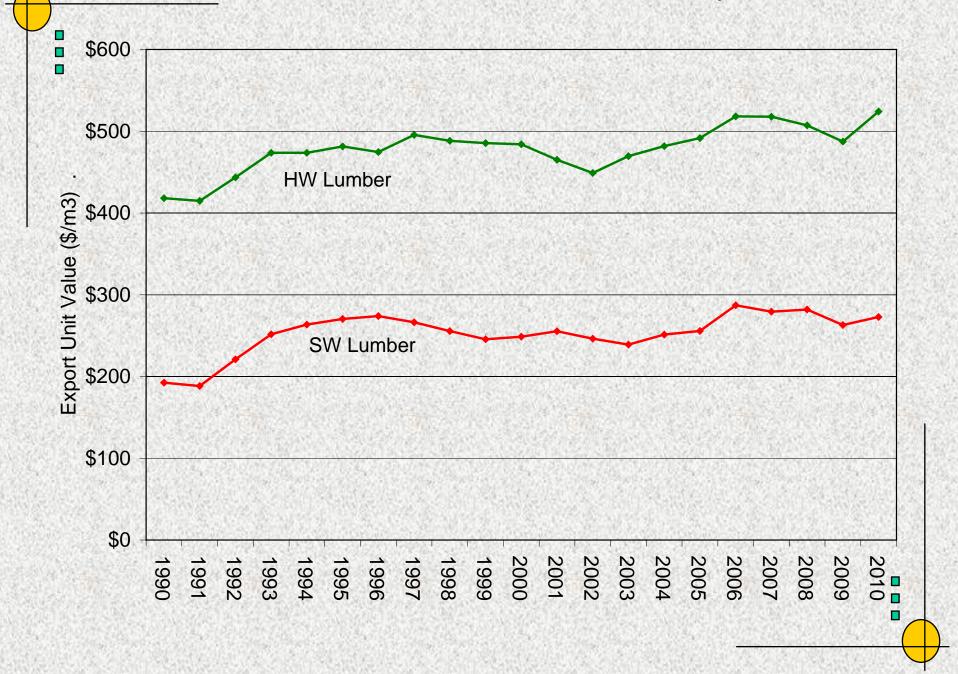
2011 volume (m3) estimate based on January to May data Unit Value based on May 2011 data



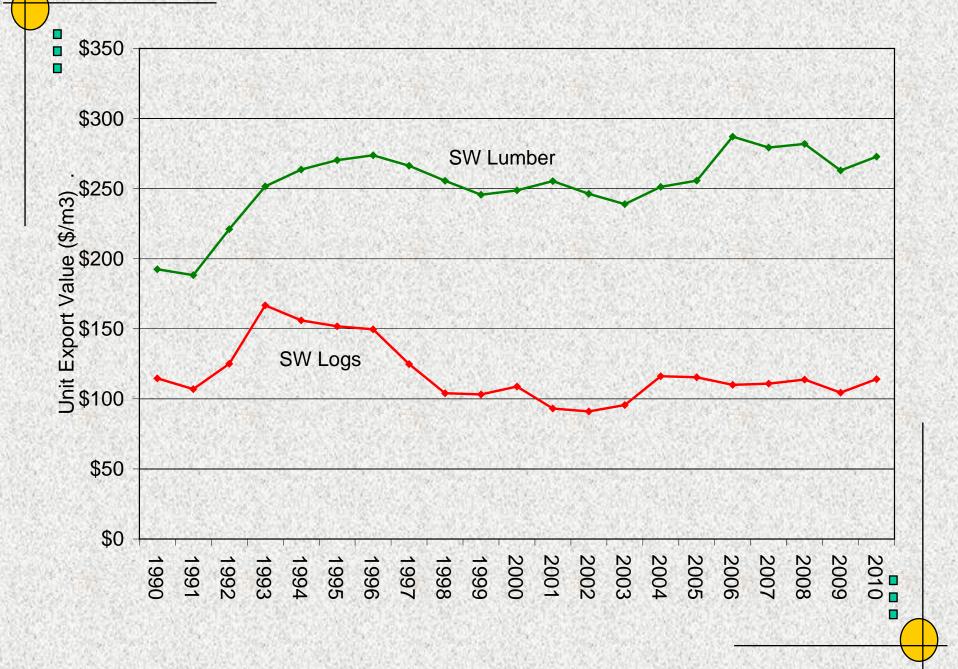
US SW Log Export Prices

	Doug-fir	Hemlock	Spruce
China	\$187.54	\$113.25	\$79.86
Japan	\$187.03	\$100.00	\$62.07
Korea	\$167.41	\$116.19	\$102.13

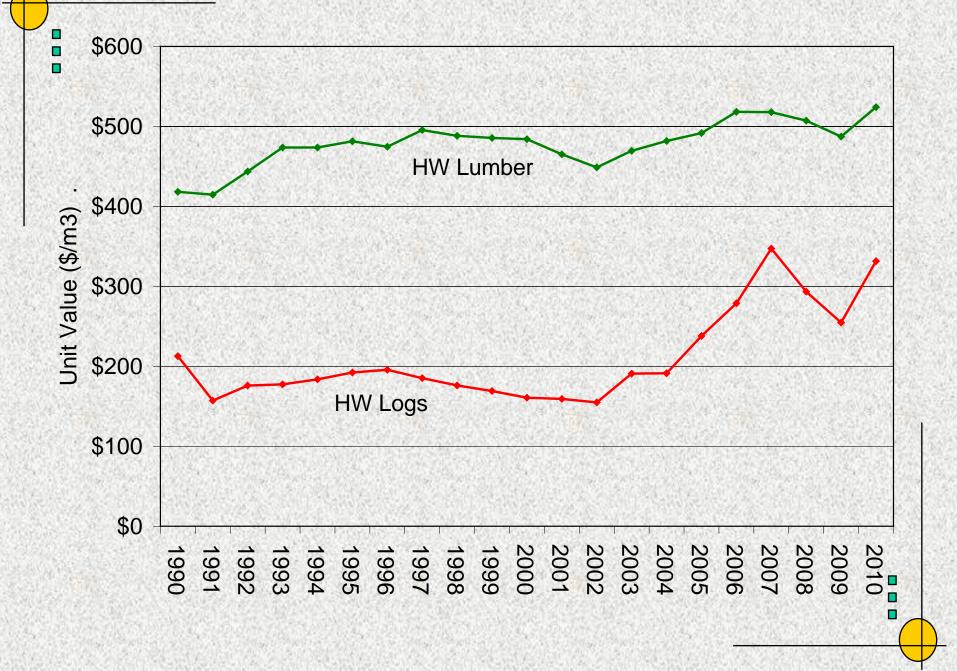
Unit Value for Lumber Exports



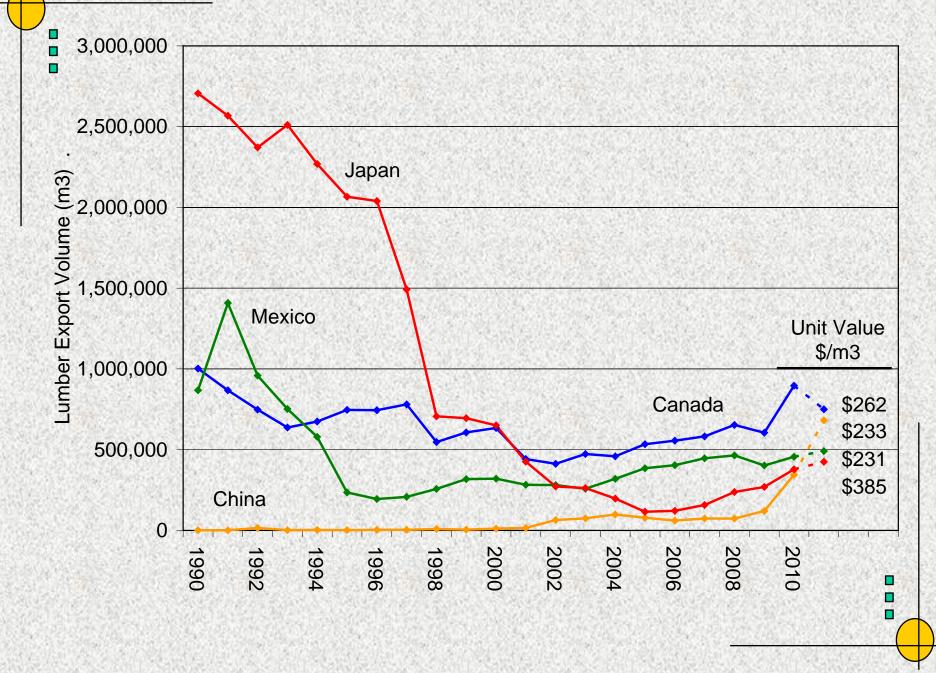
Unit Values of SW Logs vs SW Lumber



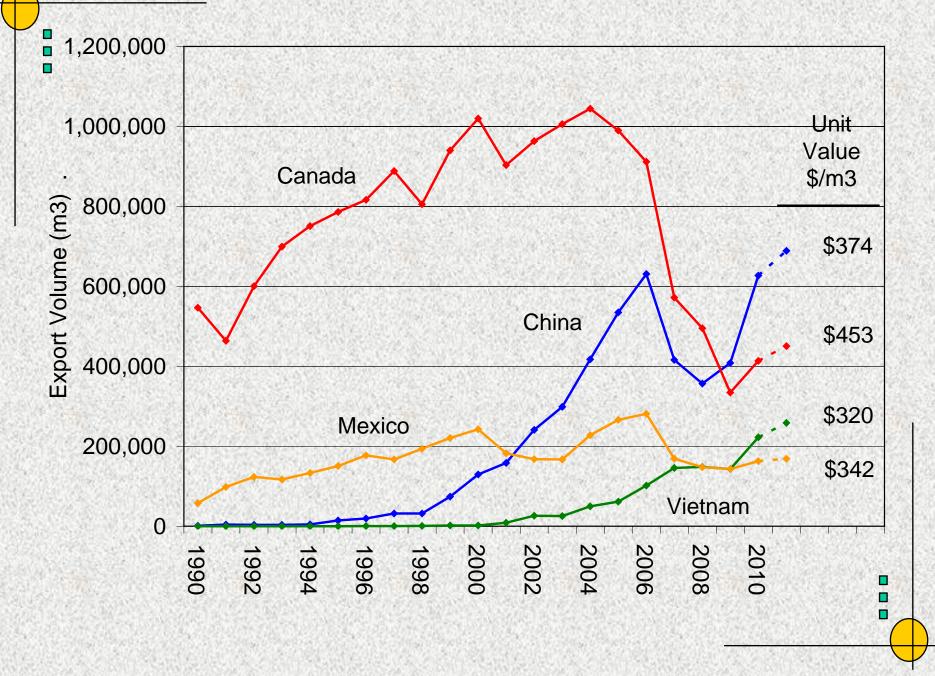
Unit Values of HW Logs vs HW Lumber



Major SW Lumber Export Markets



Major HW Lumber Export Markets



Analysis of US SW Lumber Exports to China

	2010	2011e	Share	Unit Value
Hem-fir	162,653	394,779	57.9%	\$219
SYP/pine	58,086	92,152	13.5%	\$280/\$242
Doug-fir	54,143	134,478	19.7%	\$216
Total	344,605	681,594		

2011 volume (m3) estimate based on January to May data Unit Value based on May 2011 data



Analysis of US SW Lumber Exports to Japan

	2010	2011e	Share	Unit Value
Doug-fir	349,117	460,834	90.4%	\$384
Hemlock	10,855	21,710	5.1%	\$356/\$561
Sitka Spruce	8,318	4,159	1.0%	\$1,011
Total	378,567	424,979		

2011 volume (m3) estimate based on January to May data Unit Value based on May 2011 data



US SW Lumber Export Prices

	Doug-fir	Hemlock	SYP
China	\$216	\$219	\$242/\$280
Japan	\$384	\$356/\$561	\$401



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Wood imports in selected foreign markets

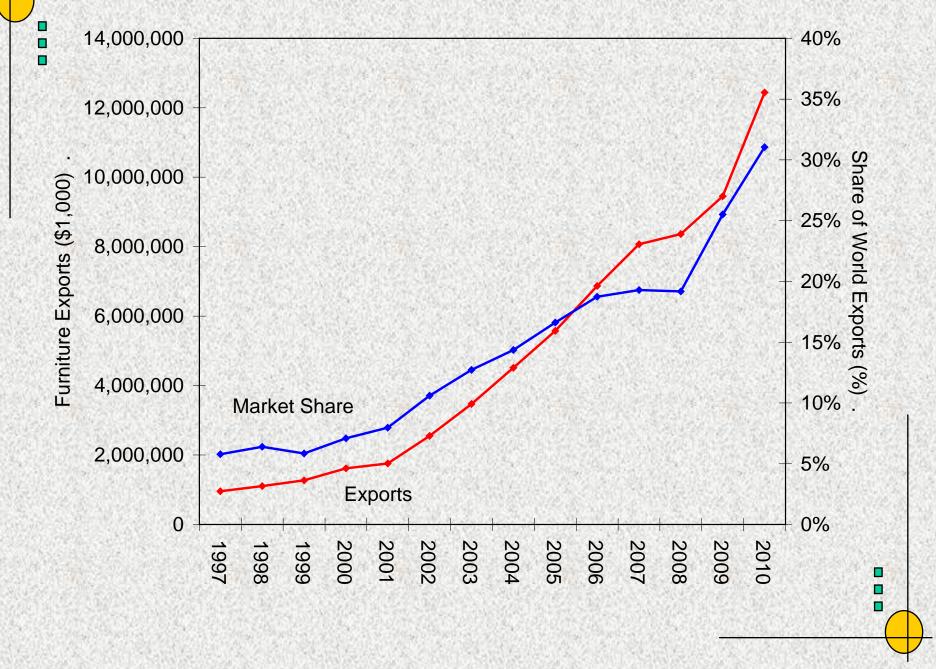
	China	Japan	Korea	India	Taiwan
Total log imports	34,346,609	4,757,235	6,051,761	4,646,222	777,211
Total lumber imports	14,757,564	6,414,749	1,951,015	158,445	1,148,955
Log change 2010-2011	+26.4%	-3.1%	-11.5%	-8.7	+16.5%
Lumber change 2010-2011	+53.4%	+20.7%	-0.9	-0.7	+43.6%
Global log share	42.3%%	7.0%	5.1%	9.1%	1.3%
Global lumber share	14.8%	8.9%	1.3%	0.2%	1.2%
US log share	8.1%	35.8%	37.7%	0.1%	3.5%
US lumber share	9.7%	6.1%	7.5%	5.4%	14.0%

Change is for January to May, 2011 relative to same period 2010 Imports are cubic meters Market shares are for 2010

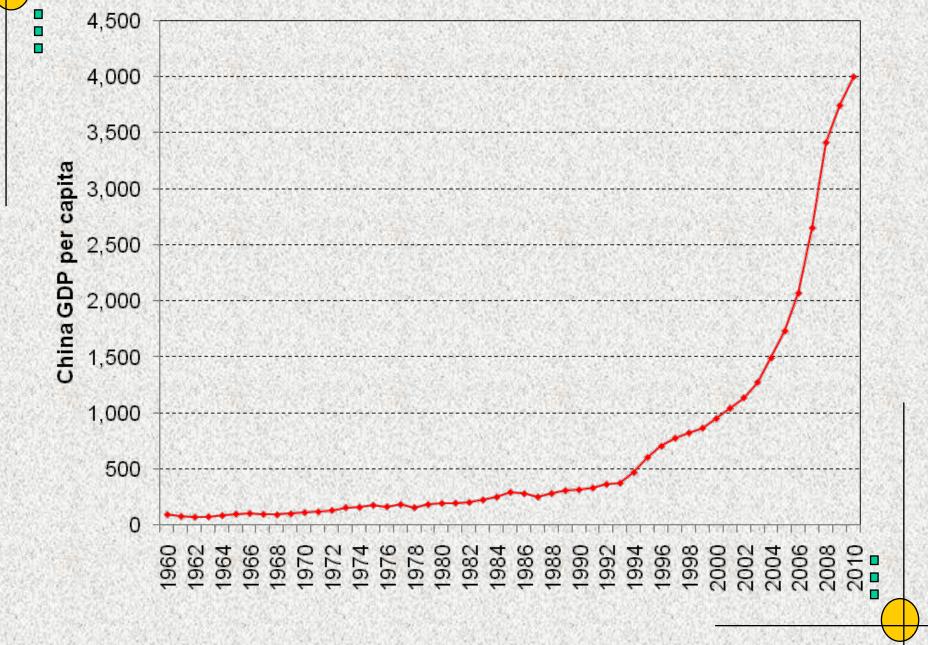
Center for International Trade in Forest Products



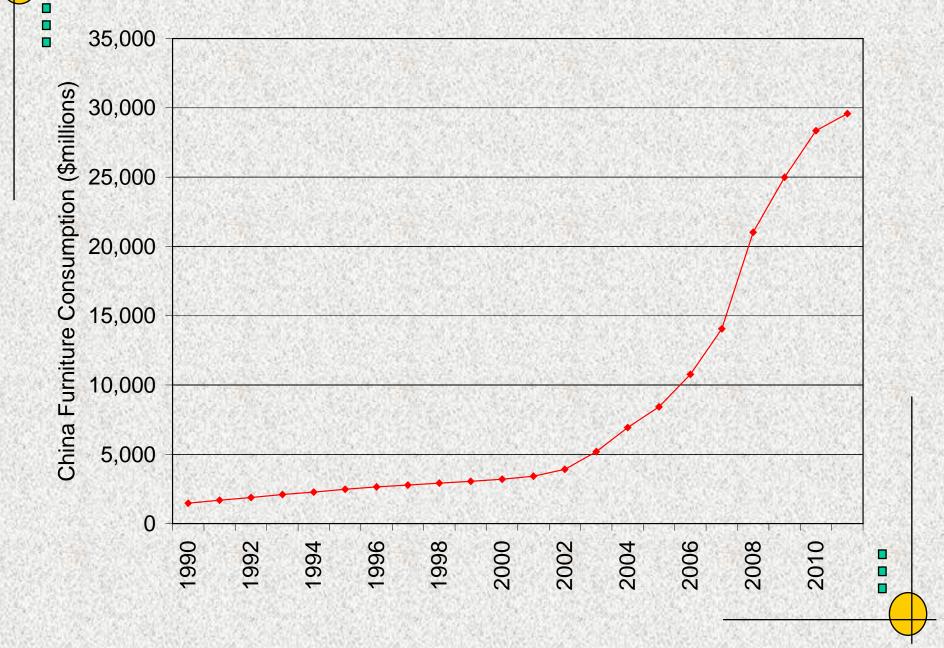
China Furniture Exports



China GDP per Capita Growth



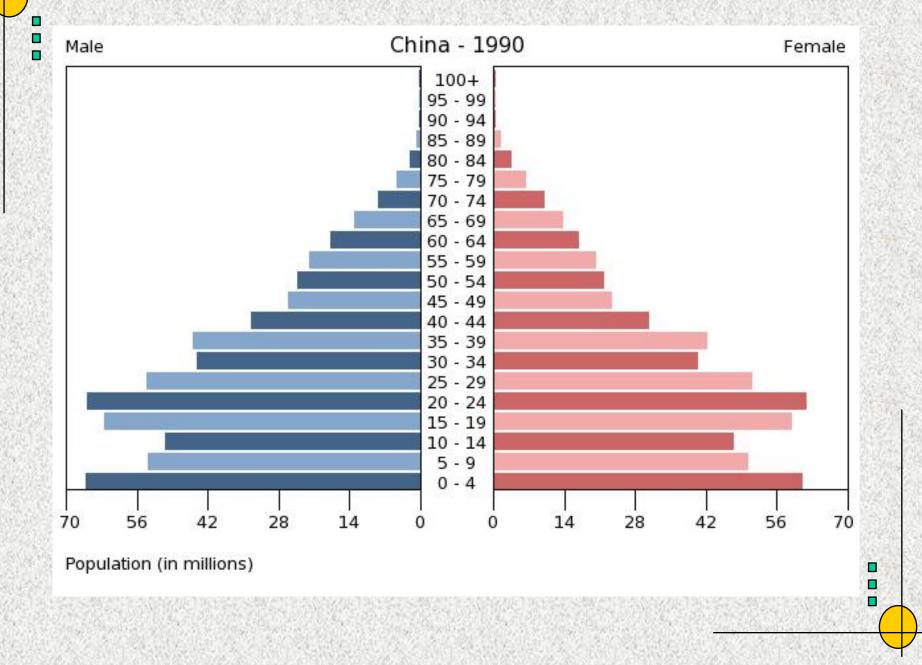
China Domestic Furniture Consumption



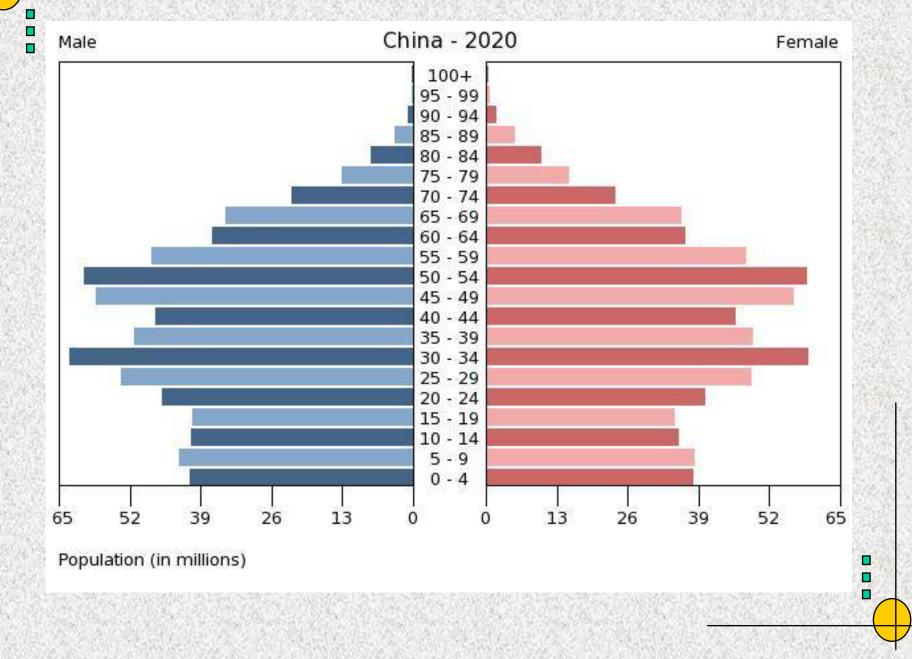
Forest Sector Trends

Even as China per capita income continues to grow, China's population is aging at a rapid rate. China is likely to become the first country to begin graying before it becomes a rich country. Lack of a strong pension system, the 4-2-1 problem and movement of young people away from their parents to urban areas means that China will need to develop a robust senior housing sector to support the rapidly growing senior population.

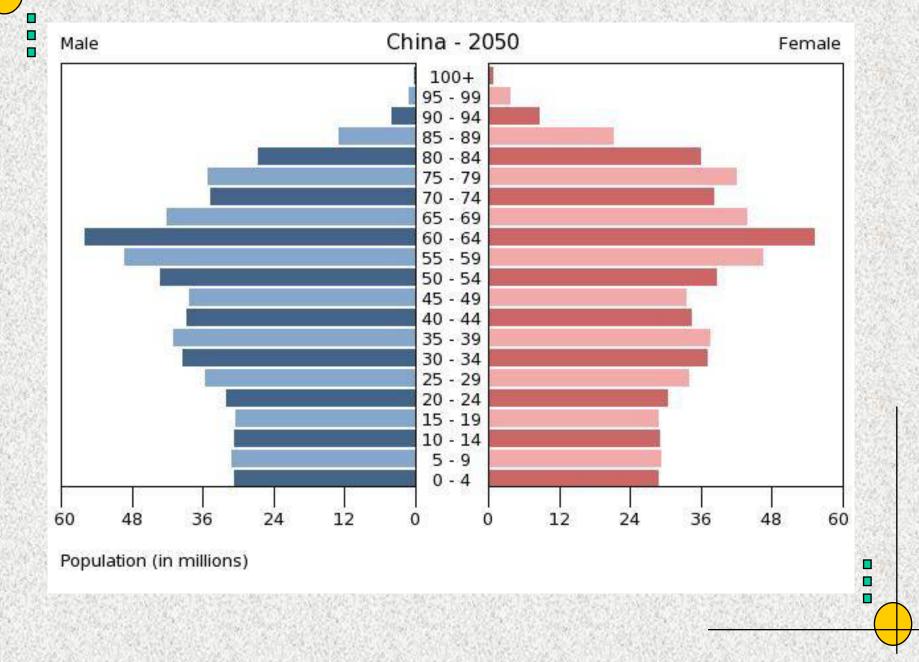
China Population 1990



China Population 2020

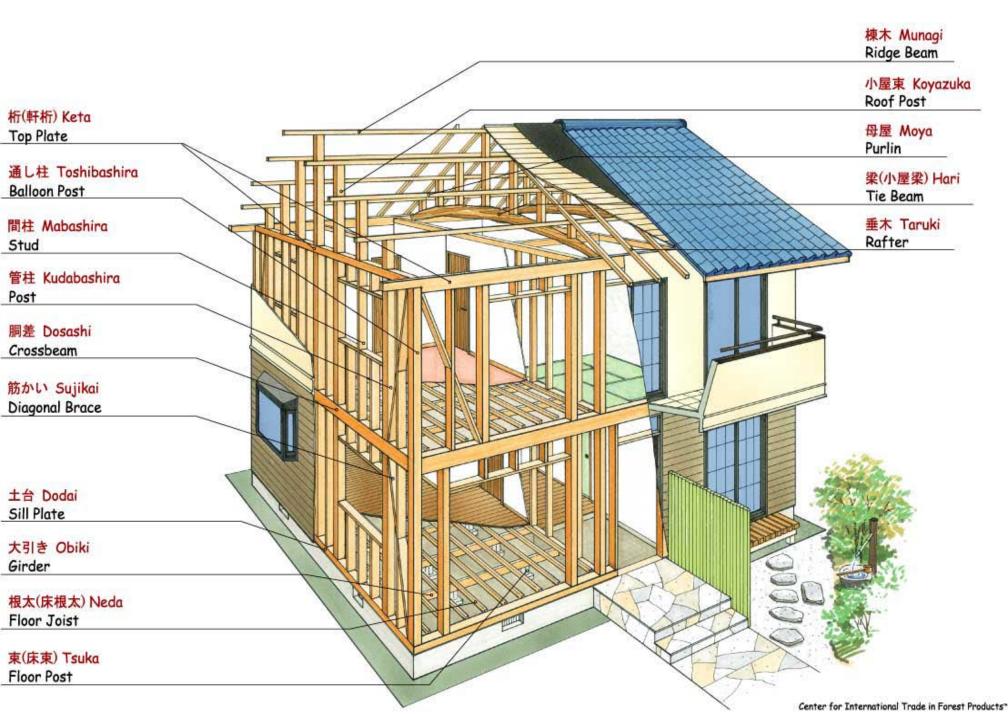


China Population 2050

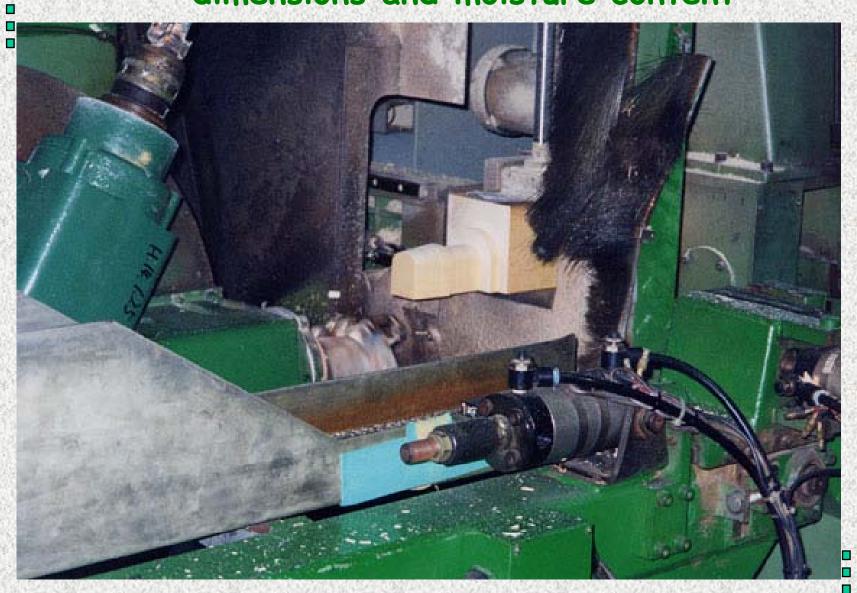




JAPANESE POST & BEAM CONSTRUCTION



Precutting requires close tolerances in dimensions and moisture content



Components for post and beam house



Understand the End-Use



Center for International Trade in Forest Products

Yellow-cedar posts (hashira) and ground sills (dodai)

Red cedar and yellow cedar in tatami room



Doug-fir is often used for beams (hirakaku) and cross-bracing (sujikai) in post and beam houses



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P&B Technical Specifications

Structural Member	English Translation	Cross-section size (millimeters)	Length (meters)	Lumber Volume
Dodai	Ground sill	105x105 (80-90%) 120x120 (10-20%)	4.0* 3.65, 3.0	0.8 m ³
Tsuka	Floor post	90x90	Short lengths	0.2 m ³
Obiki	Girder	105x105 (80-90%) 90x90 (10-20%)	4.0* 3.65, 3.0	0.2 m ³
Neda	Joist	45x45, 45x60, 60x60, 45x105	4.0* 3.65, 3.0	0.7 m ³
Toshibashira	Balloon Post	120x120 105x105	6.0	0.7 m ³
Kudabashira	Post	105x105 (75%) 120x120 (25%)	3.0* 2.8 (2 nd floor)	1.7 m ³
Mabashira	Non-structural stud	27x105 (70%) 30x105 (25%) 45x105 (5%) new size	3.0* 2.8 (2 nd floor)	1.7m ³
Sujikai	Diagonal wall brace	45x90	3.0	0.5 m ³
Hirakaku	Structural beam	120x240, 105x210 105x180	4.0* (70-80%) 3.0 (20-30%)	5.0 m ³
Keta	Top Plate	105x105	4.0	0.4 m ³
Koyazuka	Roof support post	105x105, 90x90	Short lengths	0.4 m ³
Моуа	Purlin	90x90	4.0	0.7 m ³
Tarouki	Rafter	45x45, 30x40	4.0, 3.8 3.65, 3.0	0.5 m ³

Strategic Observations

- Exporting helps diversify market risk
- Foreign markets can compliment domestic markets
- Important to match foreign market requirements with firm competency and available resource
- Foreign markets value long-term business relationships
- Understand how wood is used in foreign market
- Clearly specify product technical specifications with customer to eliminate misunderstandings
- Not considering foreign markets is like fighting with one hand tied behind your back