

2011 Economic State of the B.C. Forest Sector

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Competitiveness and Innovation Branch

Questions Addressed

- ❖ How well is B.C.'s forest sector doing?
- ❖ How competitive is the sector?
- ❖ How big is the sector's contribution to B.C.'s economy?
- ❖ How is the sector responding to changes in markets?

Outline

- ❖ Overview
- ❖ Key Messages
- ❖ General Economic Indicators
- ❖ Major Export Markets
 - U.S.
 - China
 - Japan
- ❖ Main Forest Products
 - Softwood Lumber
 - Pulp
 - Logs
- ❖ Outlook and Conclusions

Overview of B.C. Forest Sector

- ❖ Includes forest management, harvesting, reforestation and manufacturing
- ❖ Plays a key role in the provincial economy, especially in many rural communities
- ❖ Is export-oriented, depending heavily on global markets and exchange rates
- ❖ Is very cyclical, affected by the ups and downs of the global forest commodity markets

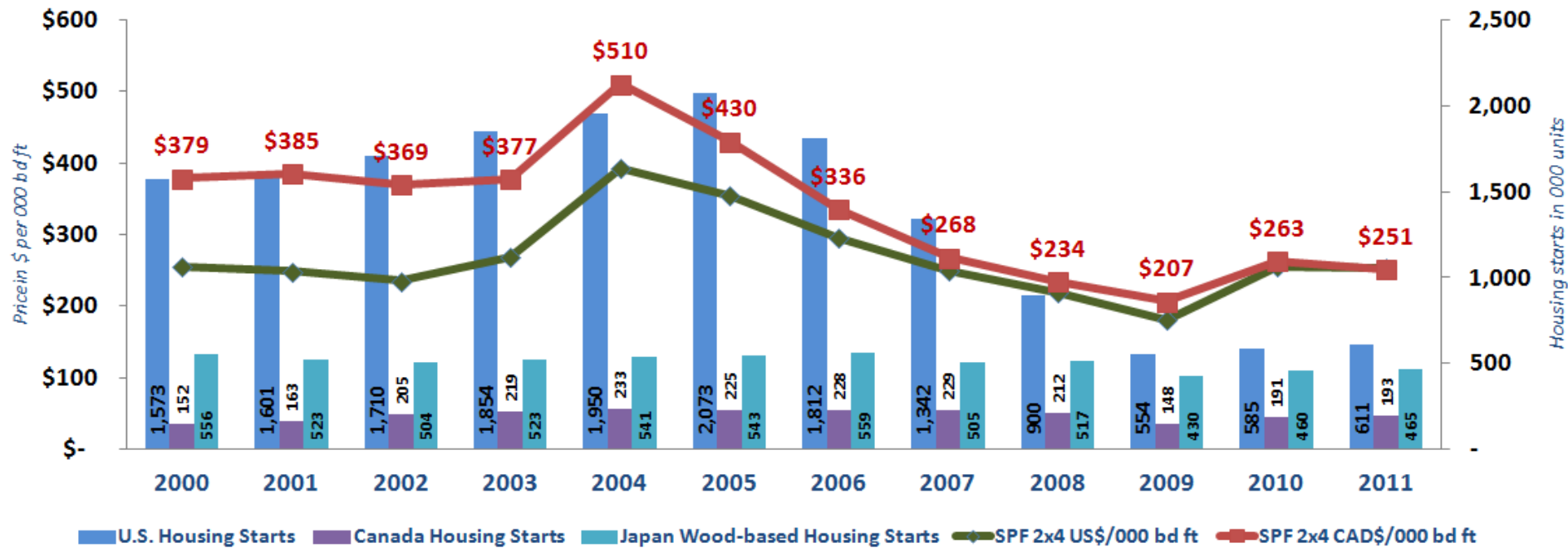
Overview of 2011

- ❖ **B.C.'s forest sector continued to recover** in 2011 from the worst cyclical downturn in history in 2008 & 2009, caused by the collapse of the U.S. housing market, historically low lumber prices and the high Canadian dollar.
- ❖ **The U.S. economy** seemed to turn the corner in 2011, with its slightly improving employment status and housing market.
- ❖ **The emergence of a new major market in China** played a key role in the recovery of B.C.'s forest sector in 2010 and 2011. China became the 2nd-largest foreign market for B.C. forest products.

Overview of 2011 Statistics

- ❖ **B.C.'s timber harvest** was 69.2 million m³ of timber, up 9.3% from 2010 and up 41.7% from the bottom in 2009.
- ❖ **B.C. forest manufacturing sales** were \$11.2 billion, up 4.9% from 2010 (up 23.3% from 2009), and accounted for **29.5% of B.C. total manufacturing sales**.
- ❖ **B.C. forestry GDP** was \$8.5 billion chained 2002 \$, up 17.6% from 2009, and accounted for 22.6% of B.C. goods sector GDP and **5.4% of B.C. total GDP**.
- ❖ **B.C. forest product exports** were \$9.95 billion, up 8.8% from 2010 (up 30.9% from 2009), and accounted for **30.3% of B.C. total export value in 2011**.
- ❖ **B.C. forest employment** was 53,340 persons, down 2.3% from 2010, and accounted for 11.9% of B.C. goods sector employment and **2.3% of B.C. all-industry employment**.

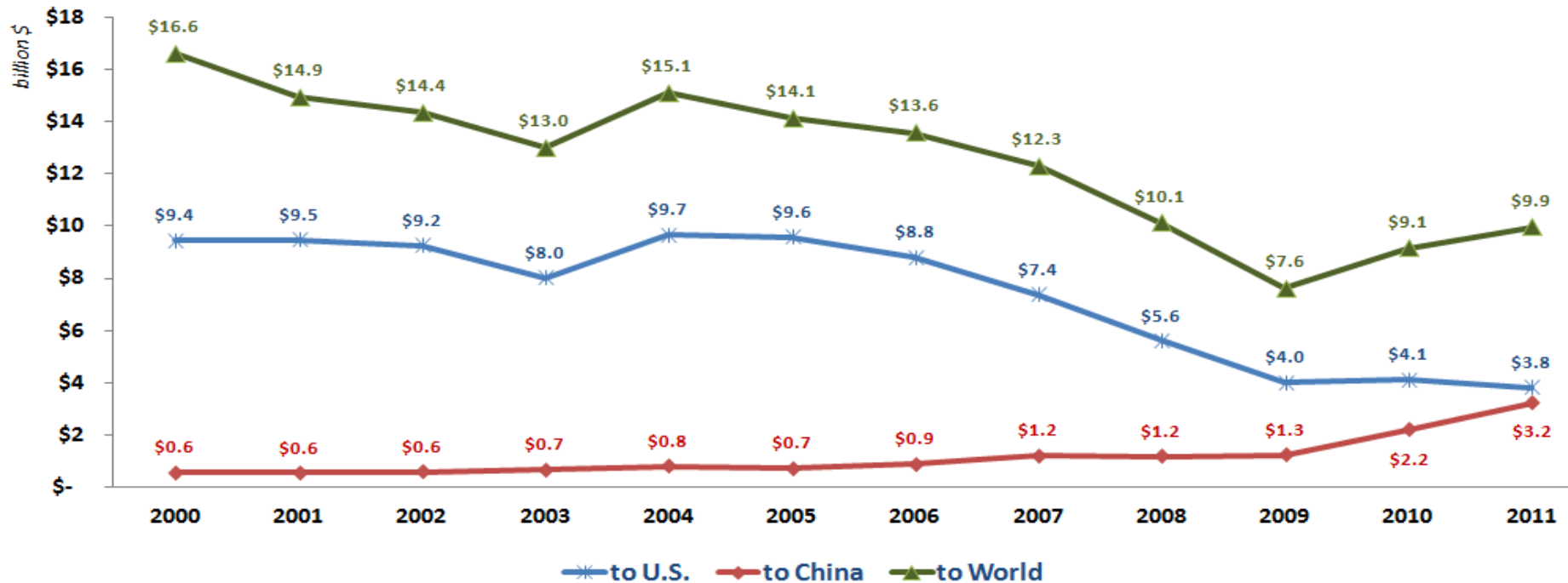
SPF 2x4 Lumber Prices and Housing Starts



Data sources: Madison's, U.S. Census Bureau, JAWIC and Statistics Canada

North America's lumber market recovered slightly but is still weak. It will take a few more years for the U.S. housing market to recover fully.

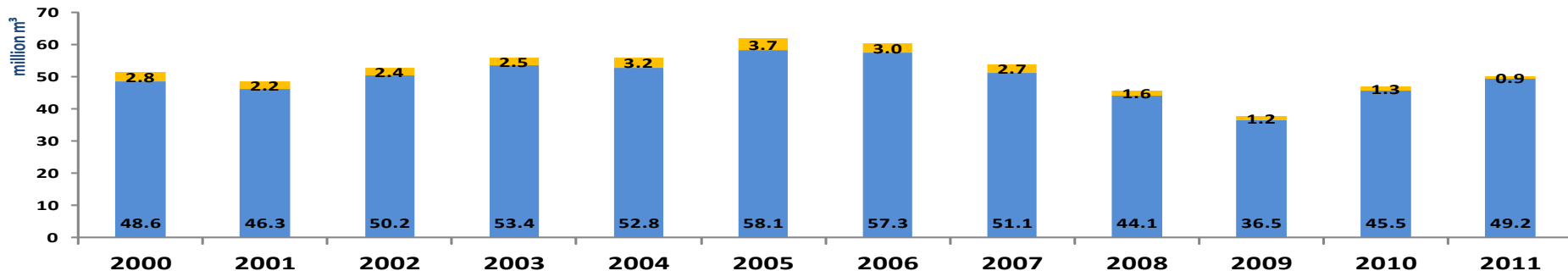
B.C. Forest Product Export Value



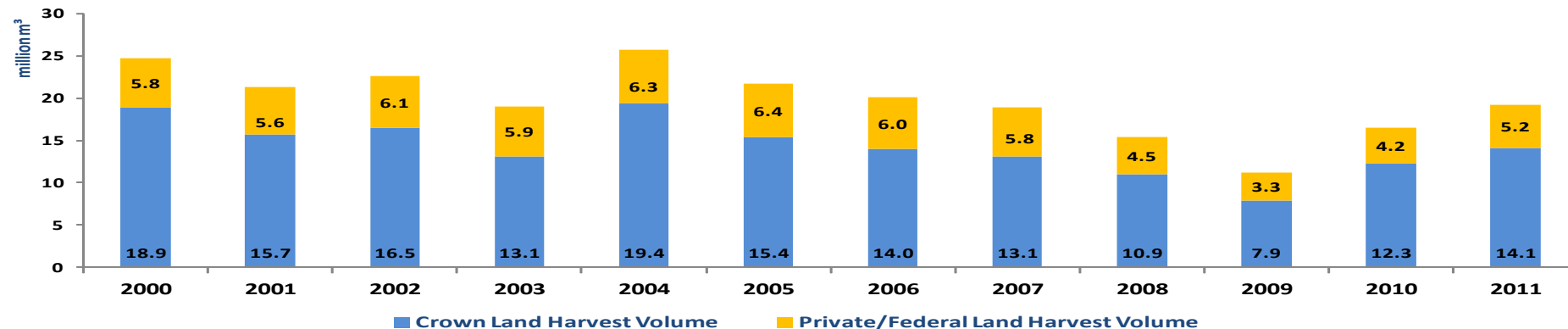
Data source: Statistics Canada

Although the U.S. has been and still is the largest foreign market, China has been the key driver of the recovery of B.C. forest product exports in 2010 and 2011. Recovery of the U.S. market and more diversified global demand would support full recovery of the B.C. forest sector.

B.C. Interior Harvest Volume

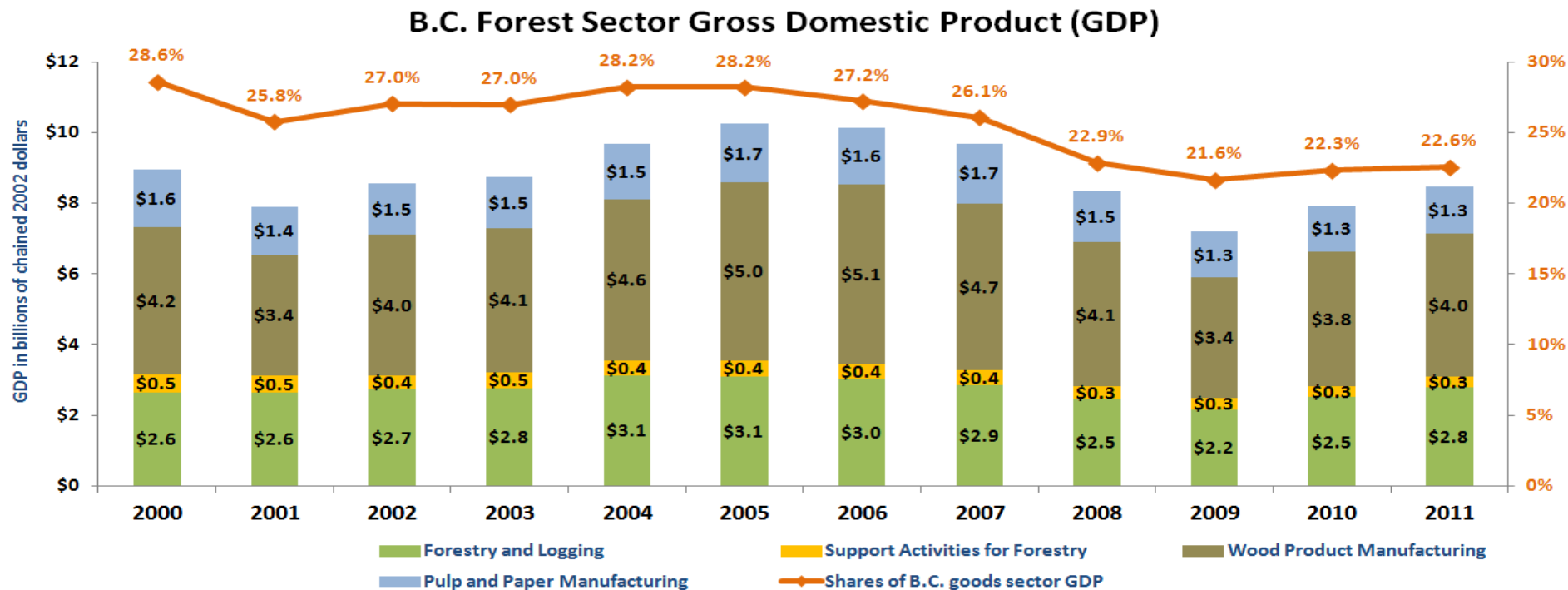


B.C.Coast Harvest Volume



Data source: FLNRO. All logs, special forest products, species and grades billed excluding waste, reject and Christmas trees, data run on March 1, 2012.

General Economic Indicator 1 – B.C. Total Harvest Volume (69.4 million m³) increased 9.6% from 2010, and up 42.1% from 2009.



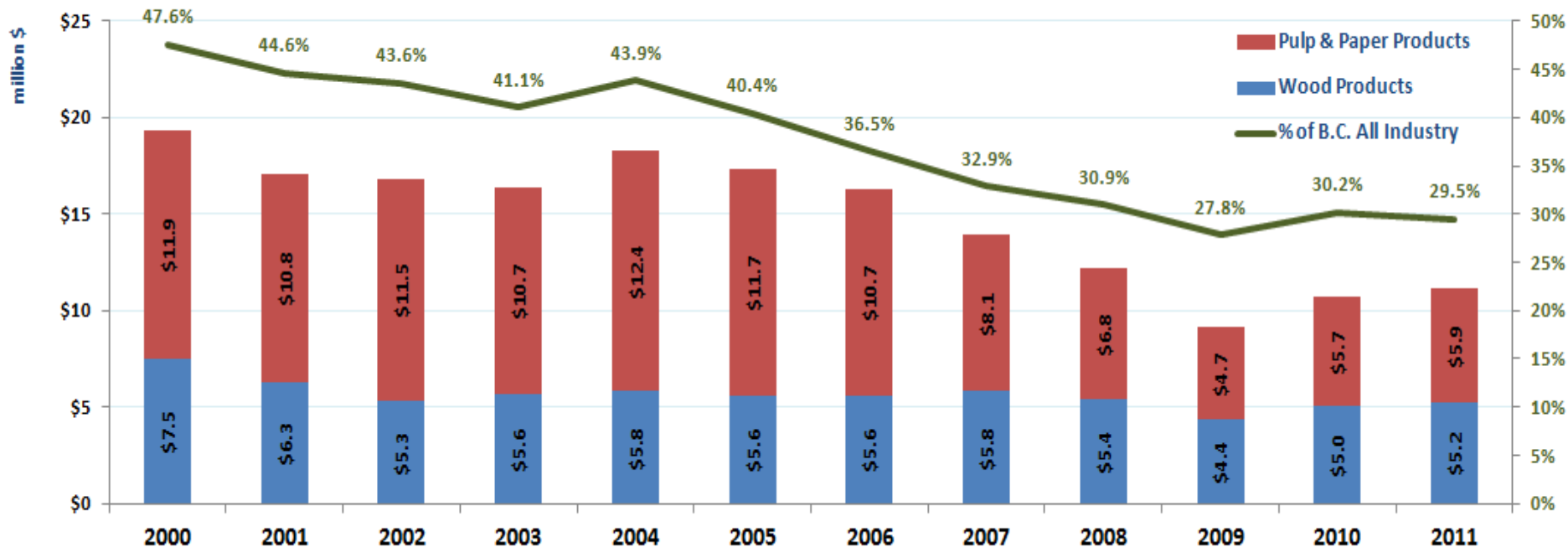
B.C. Forest Sector GDP (in billions of chained 2002 \$)

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
\$9.0	\$7.9	\$8.6	\$8.7	\$9.7	\$10.2	\$10.1	\$9.7	\$8.4	\$7.2	\$7.9	\$8.5

Data source: Statistics Canada

General Economic Indicator 2 – B.C. forest sector GDP (\$8.5 bil.) increased 6.7% from 2010 (up 17.6% from 2009), forestry & logging sector had the largest increase (11.3%).

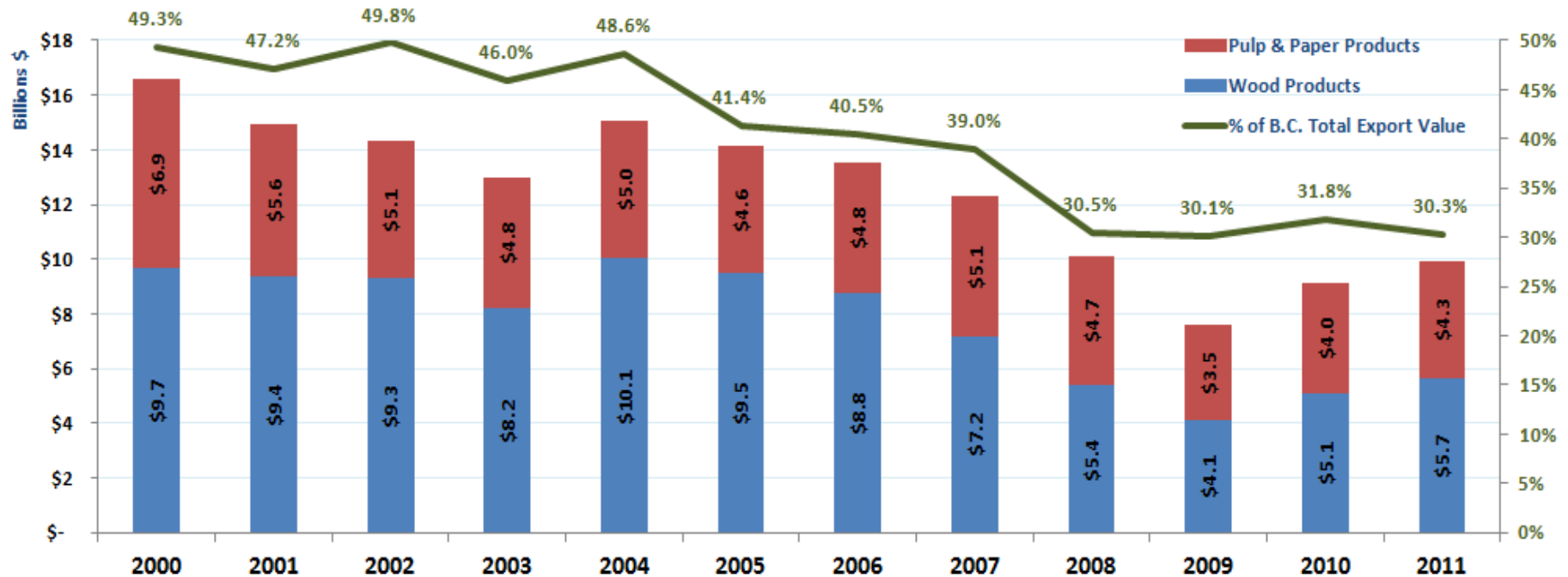
B.C. Forest Sector Manufacturing Sales



Data source: Statistics Canada

General Economic Indicator 3 – B.C. forest sector manufacturing sales (\$11.1 billion) increased 4.0% from 2010, and up 22.2% from 2009. Shares of B.C. total manufacturing sales have been trending down since 2000.

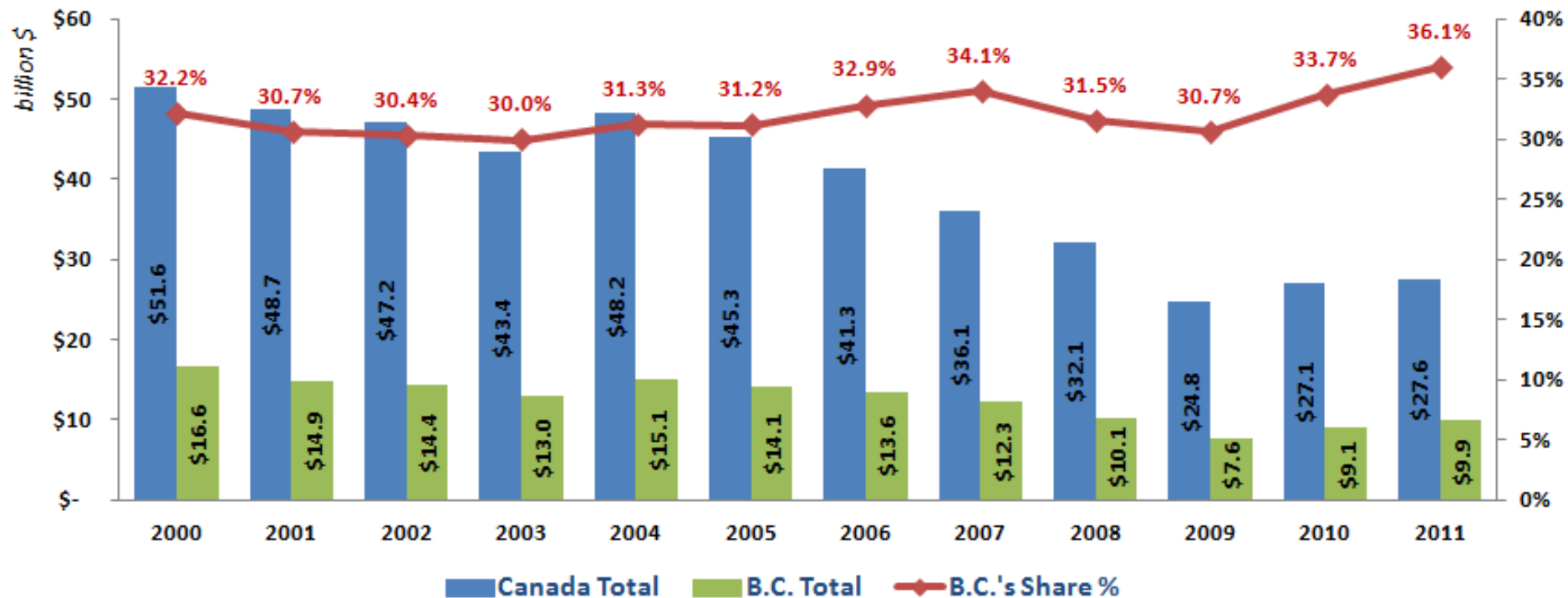
B.C. Forest Sector Export Value



Data source: Statistics Canada

General Economic Indicator 4 – B.C. forest product exports (\$9.95 billion) increased 8.8% from 2010, and up 30.9% from 2009. Shares of B.C. total export value have been trending down since 2000.

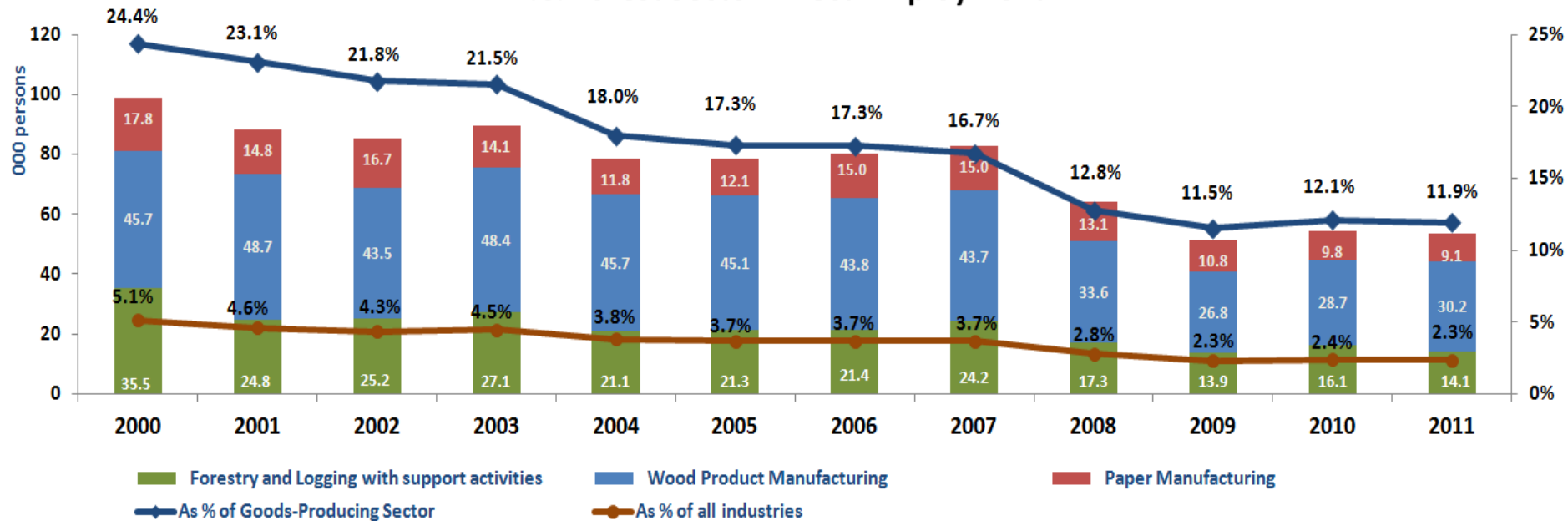
Forest Product Exports: B.C. and Canada



Data source: Statistics Canada

General Economic Indicator 5 – B.C. recovered much faster than the rest of Canada for forest product exports, mainly due to its promotion and access to China.

B.C. Forest Sector *Direct* Employment



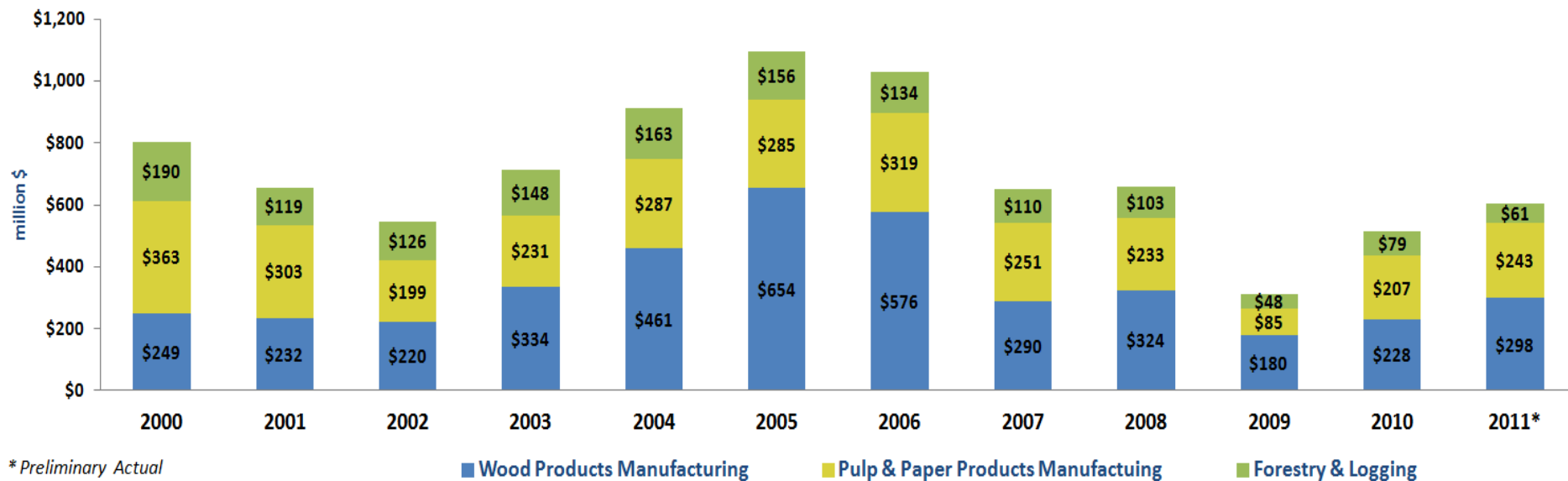
B.C. Forest Sector Employment (persons), 2000 - 2011

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
99,000	88,290	85,450	89,670	78,550	78,440	80,160	82,880	63,980	51,490	54,570	53,340

Data source: Statistics Canada Labour Force Survey

General Economic Indicator 6 – B.C. forest sector direct employment increased slightly from 2009. It has been trending down since 2000.

B.C. Forest Sector Capital Expenditures



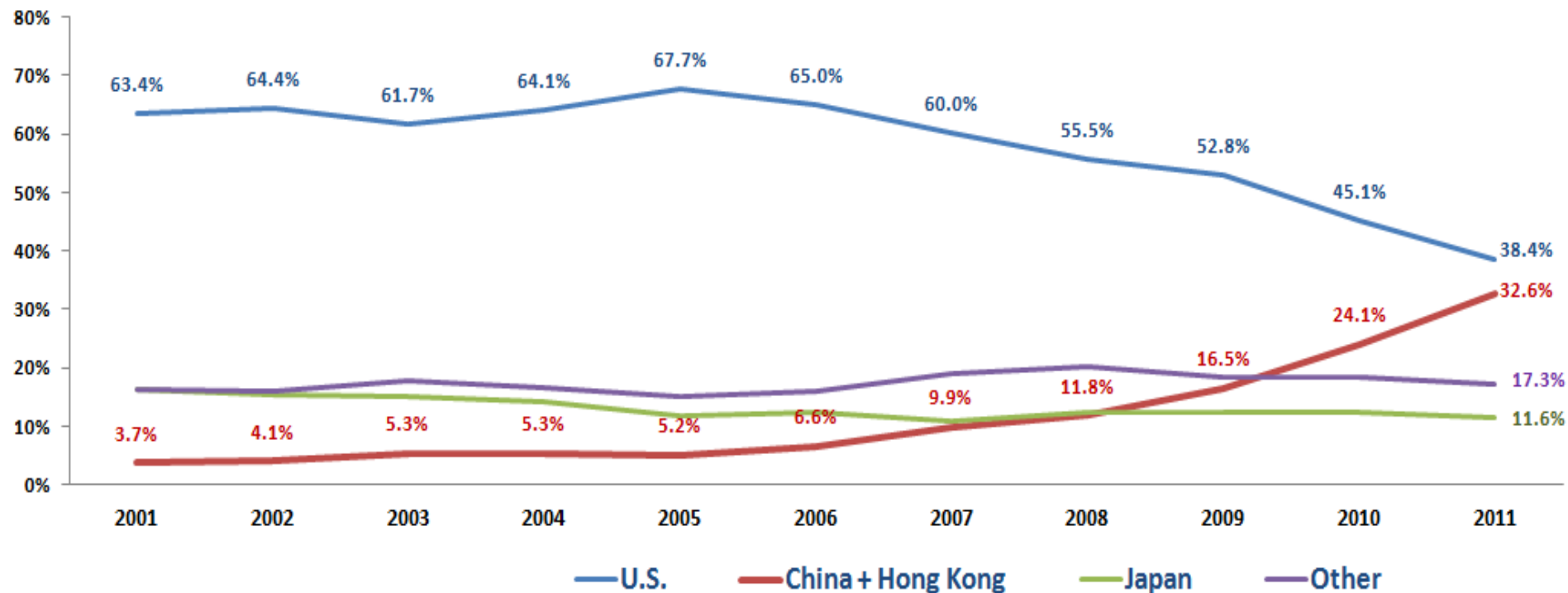
B.C. Forest Sector Capital Expenditures (in million \$), 2000 - 2011*

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011*
\$803	\$654	\$545	\$713	\$911	\$1,094	\$1,030	\$651	\$660	\$312	\$514	\$602

Data source: Statistics Canada

General Economic Indicator 7 – B.C. forest sector capital expenditures (\$602 million) increased 17.1% from 2010, and up 93.2% from 2009. Wood products manufacturing accounted for 49.5% of the total, followed by pulp & paper manufacturing (40.4%) and forestry & logging (10.1%).

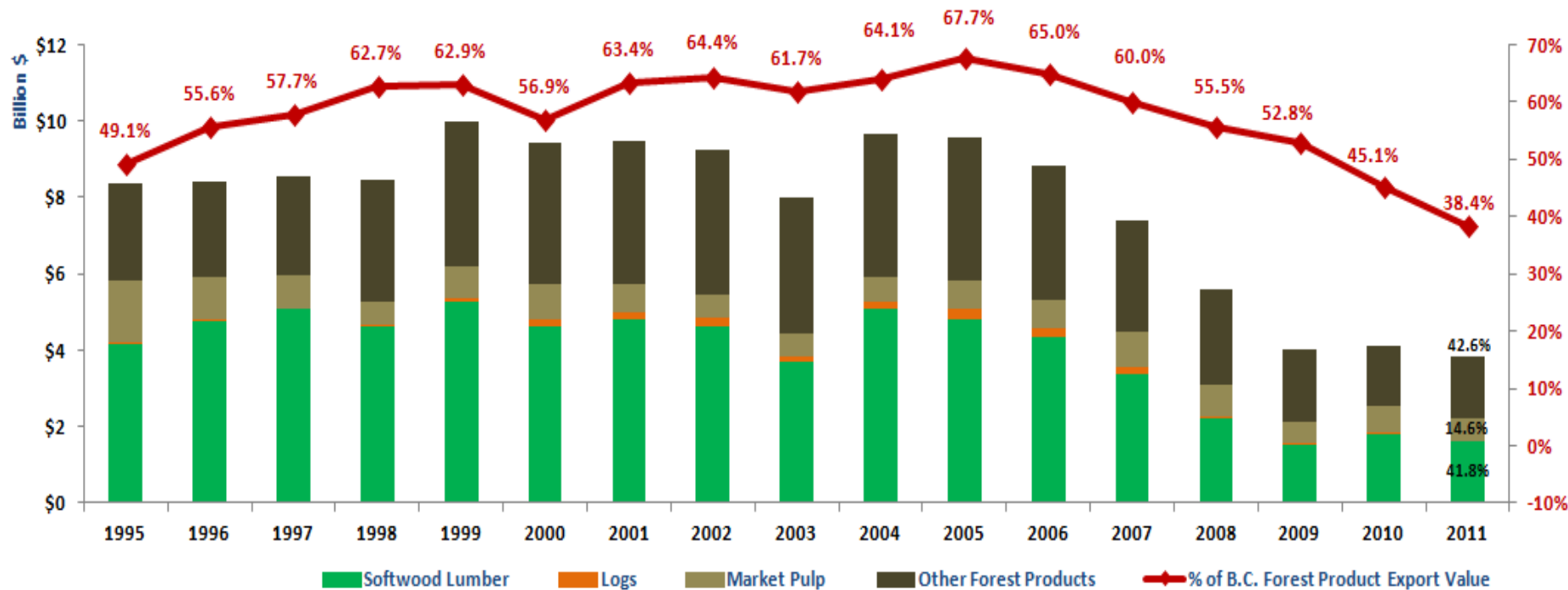
Shares of B.C. Forest Product Export Value



Data source: Statistics Canada

Major Export Markets – B.C. forest sector's export market structure changed dramatically with a declining U.S. share and a rapidly growing China share.

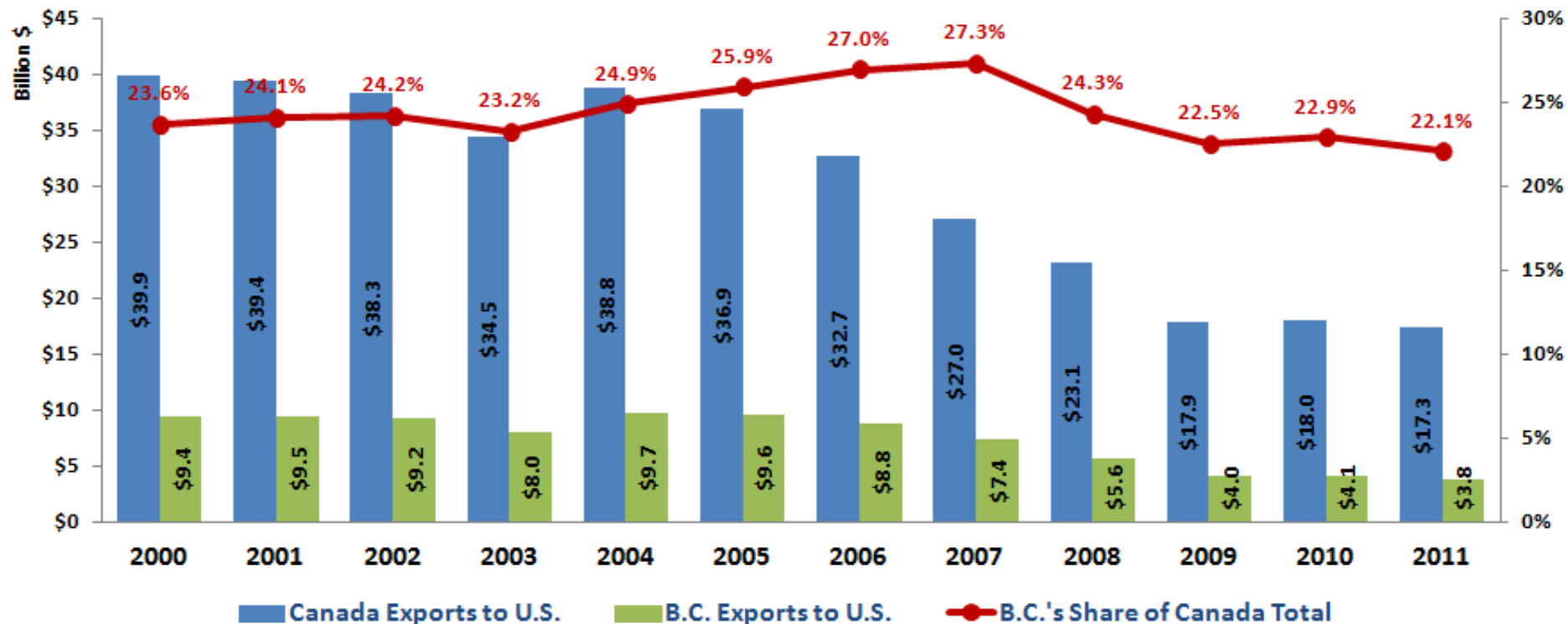
B.C. Forest Products Exported to the United States, 1995 - 2011



Data source: Statistics Canada

Major Export Markets – U.S. – U.S. is still B.C.'s largest foreign market, but its share of B.C. total forest product exports dropped from 67.7% in 2005 to 38.4% in 2011.

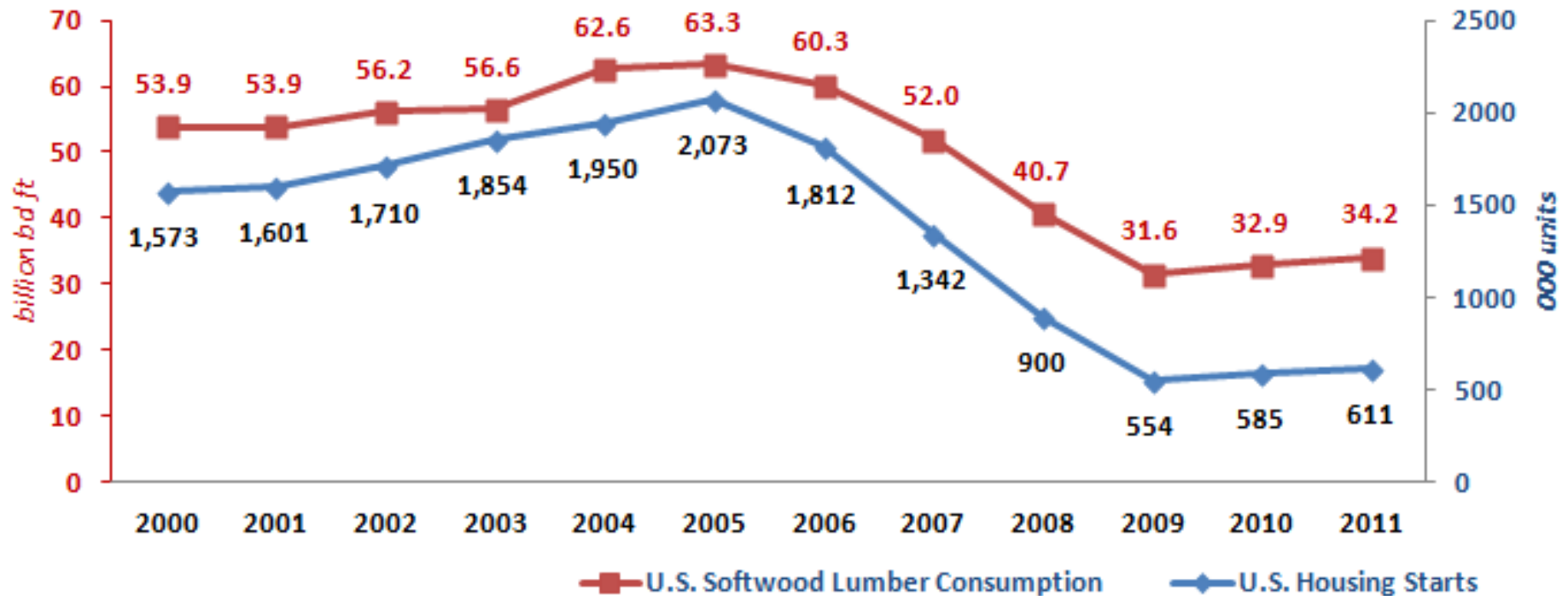
Forest Product Exports to U.S.: B.C. and Canada



Data source: Statistics Canada

Major Export Markets – U.S. – B.C. accounted for 22.1% of Canada total forest product exports to U.S. in 2011. The declining share over the past four years was mainly due to B.C.'s shift of exports to China.

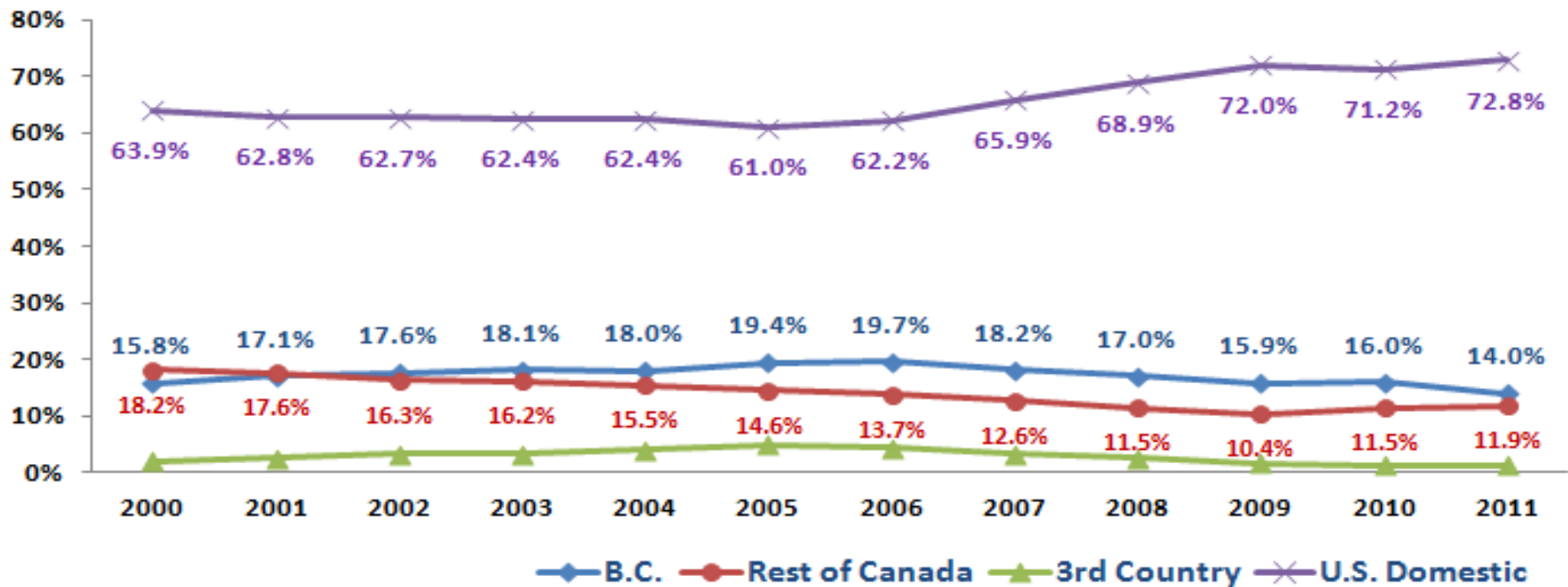
U.S. Softwood Lumber Consumption vs. Housing Starts



Data source: Western Wood Products Association and U.S. Census Bureau

Major Export Markets – U.S. – U.S. softwood lumber consumption followed the same trend as U.S. single family housing starts: Slightly recovered but far from the peak level.

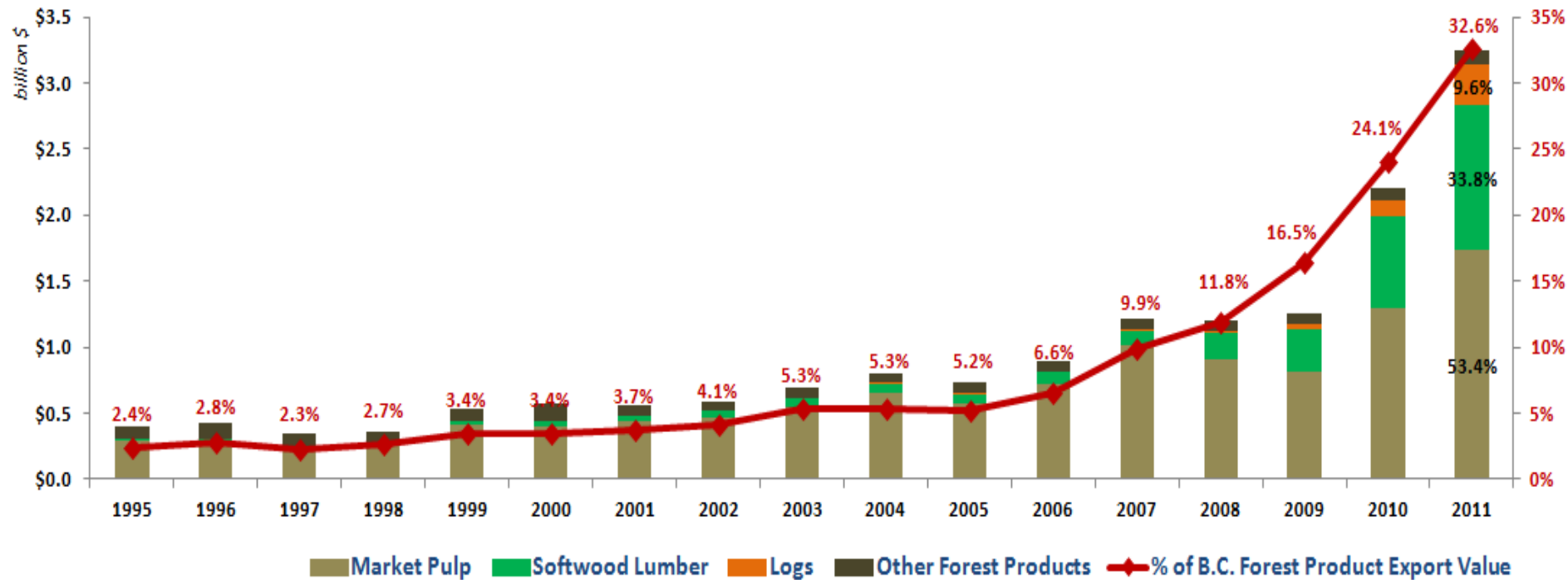
Shares of U.S. Softwood Lumber Consumption



Data source: Western Wood Products Association

Major Export Markets – U.S. – U.S. softwood lumber consumption has relied more on domestic supply, with declining foreign shares, since 2007.

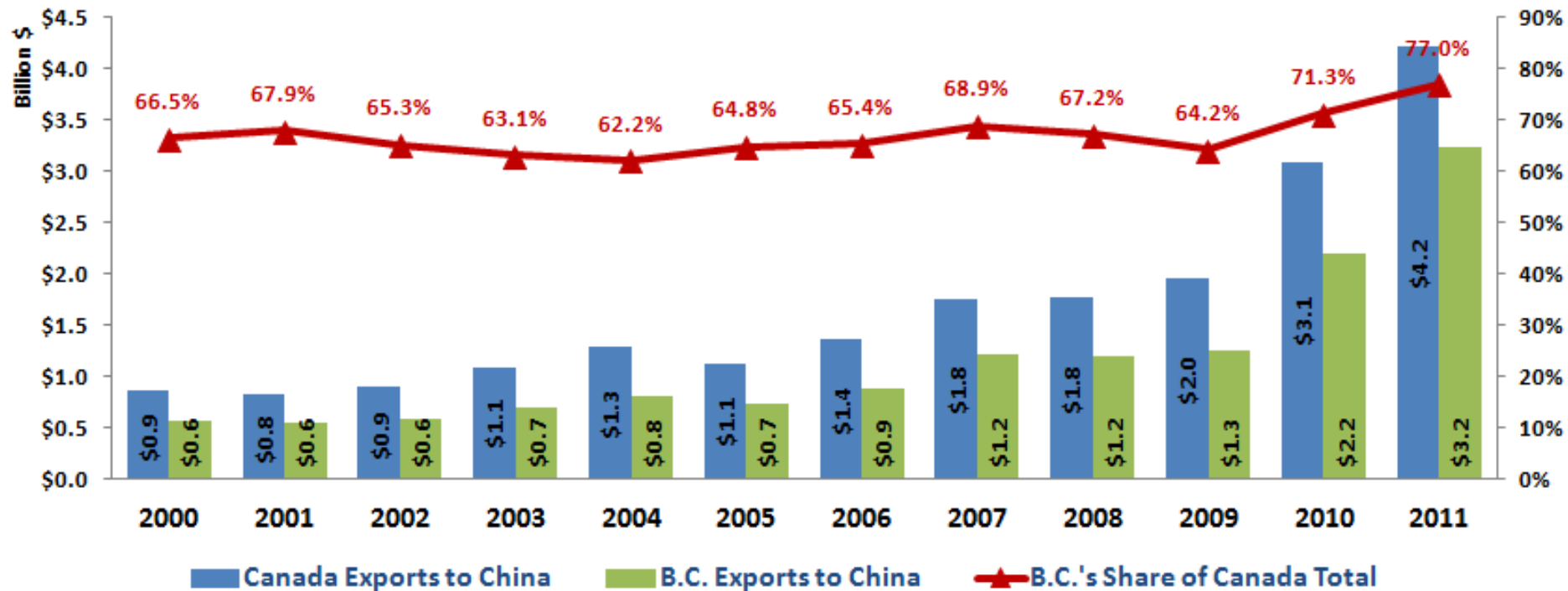
B.C. Forest Products Exported to China



Data source: Statistics Canada

Major Export Markets - China – B.C. forest product exports to China grew exponentially. Lumber and log exports grew the fastest in recent years, but pulp still dominates the total value.

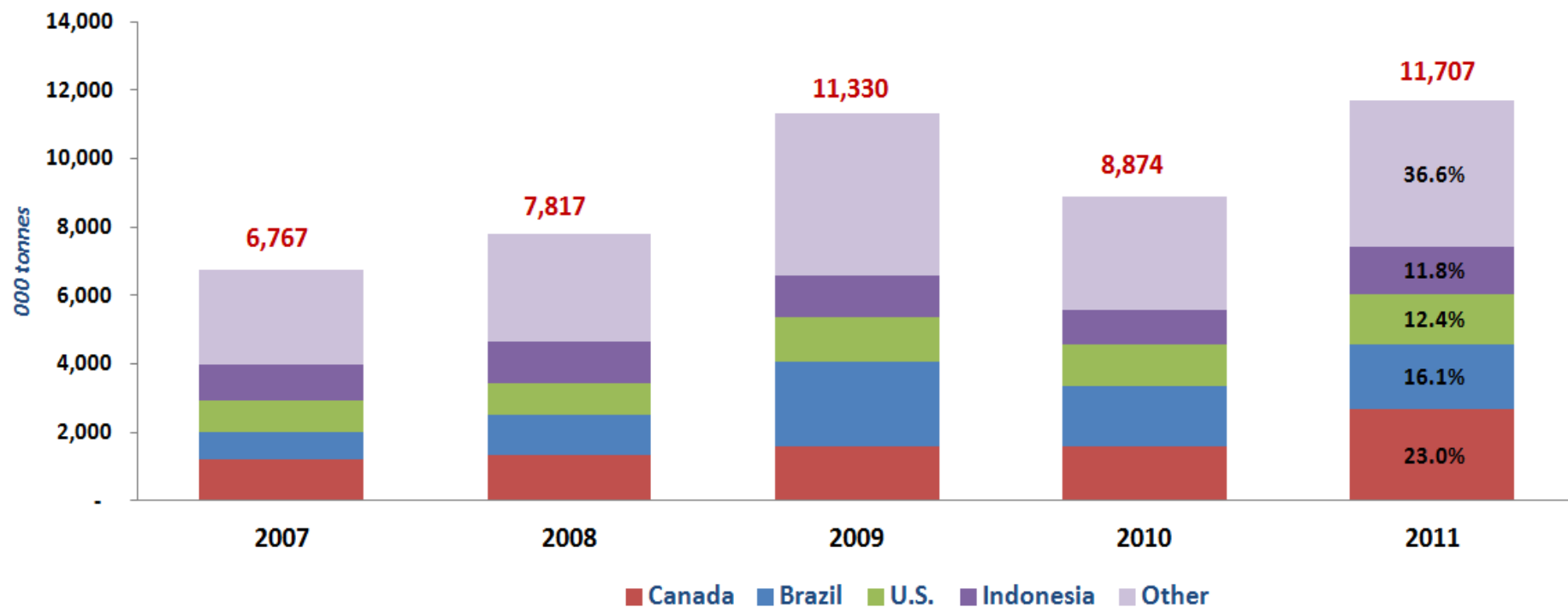
Forest Product Exports to China: B.C. and Canada



Data source: Statistics Canada

Major Export Markets – China – In 2010 and 2011, exports to China from B.C. grew faster than exports from the rest of the country. B.C. accounted for 77.0% of Canada total forest product exports to China in 2011.

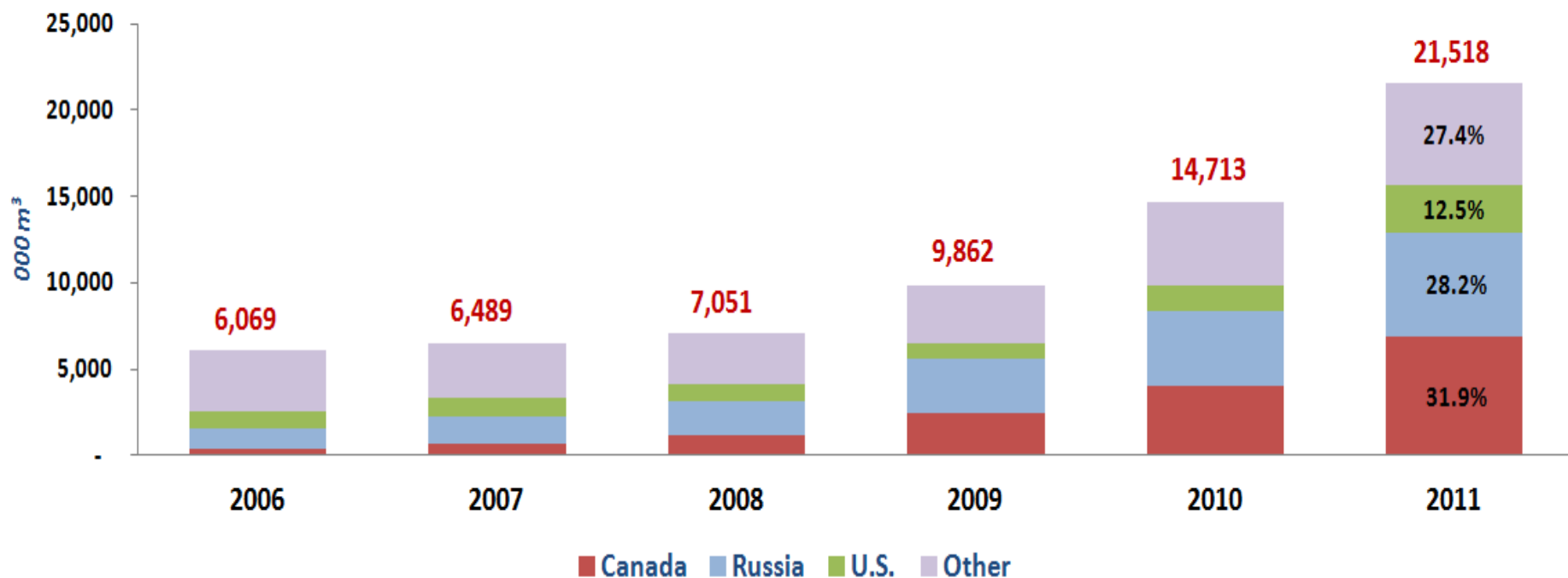
China Sulfate (Kraft) Wood Pulp Imports by Supply Country



Data source: Wood Markets China Bulletin

Major Export Markets – China – In 2011, Canada (40%+ from B.C.) became the largest supplier (23.0%) of China's kraft market pulp imports, followed by Brazil (16.1%), U.S. (12.4%), Indonesia (11.8%) and other countries (36.7%).

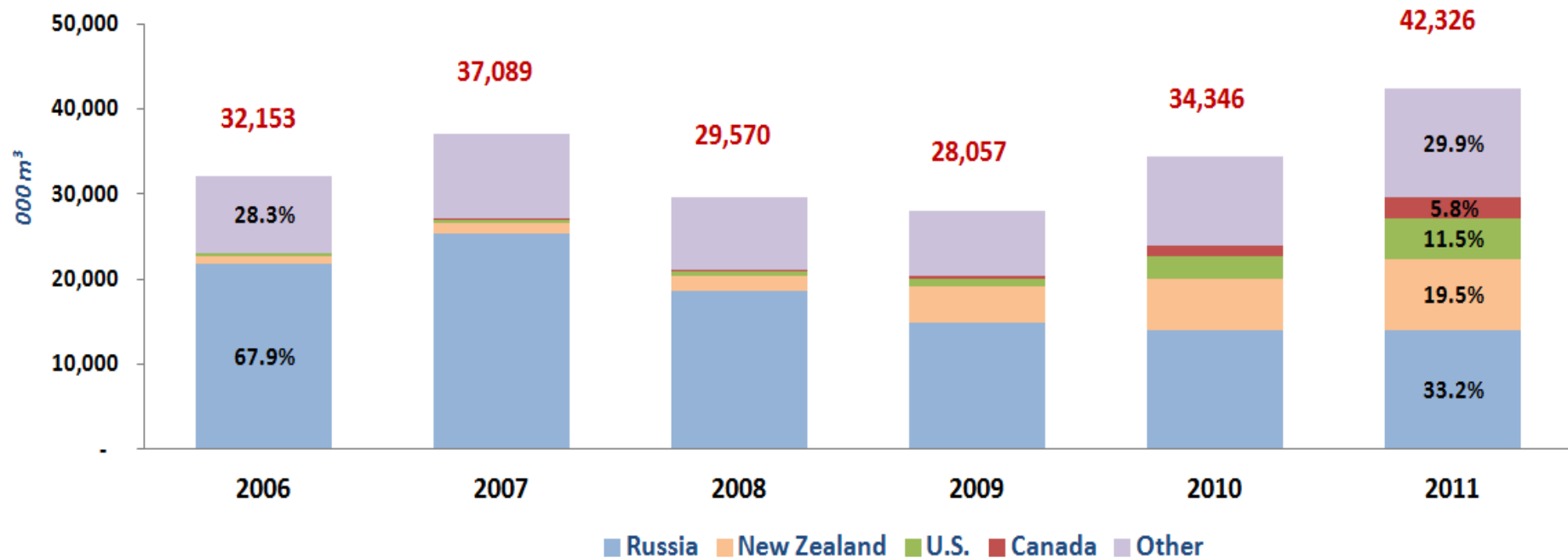
China Lumber Imports by Supply Country



Data source: Wood Markets China Bulletin

Major Export Markets – China – In 2011, Canada (70%+ from B.C.) became the largest supplier (31.9%) of China's lumber imports, followed by Russia (28.2%), U.S. (12.5%), and other countries (27.0%).

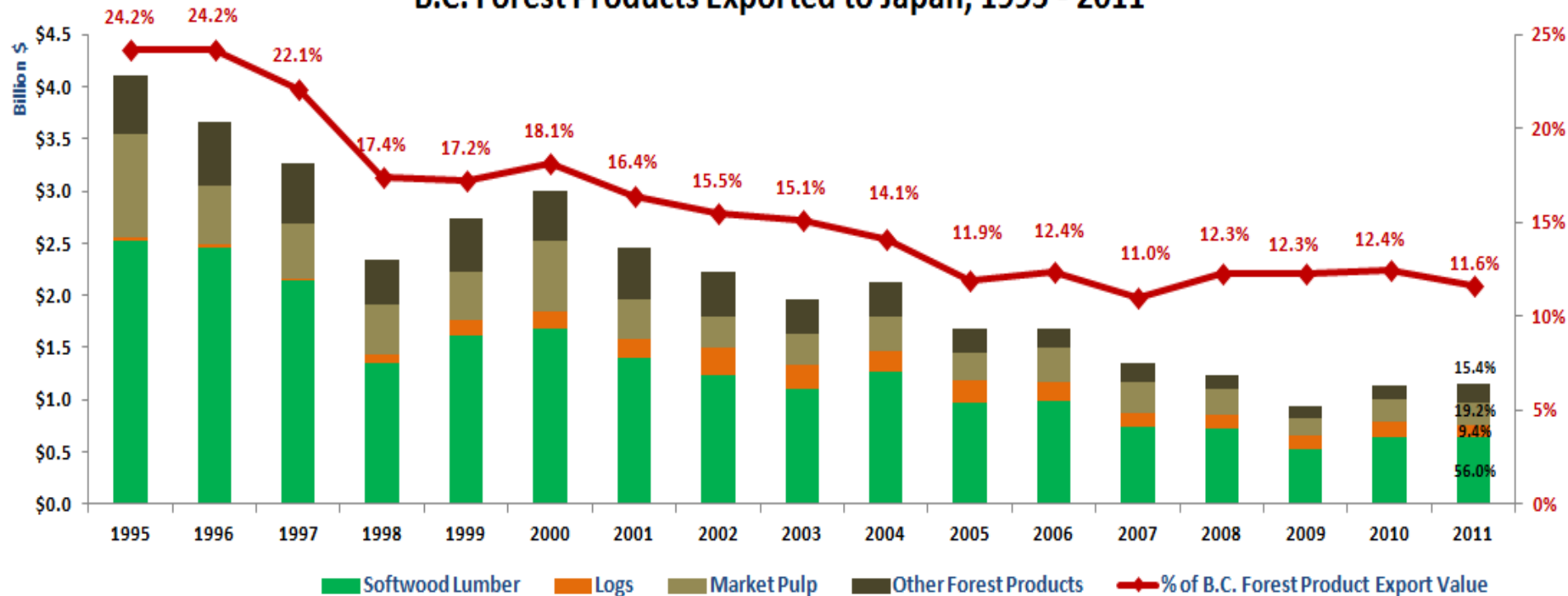
China Log Imports by Supply Country



Data source: Wood Markets China Bulletin

Major Export Markets – China – In 2011, Russia stayed as the largest supplier (33.2%) of China's log imports, followed by New Zealand (19.5%), U.S. (11.5%), Canada (5.8%, 95%+ from B.C.) and other countries (29.9%).

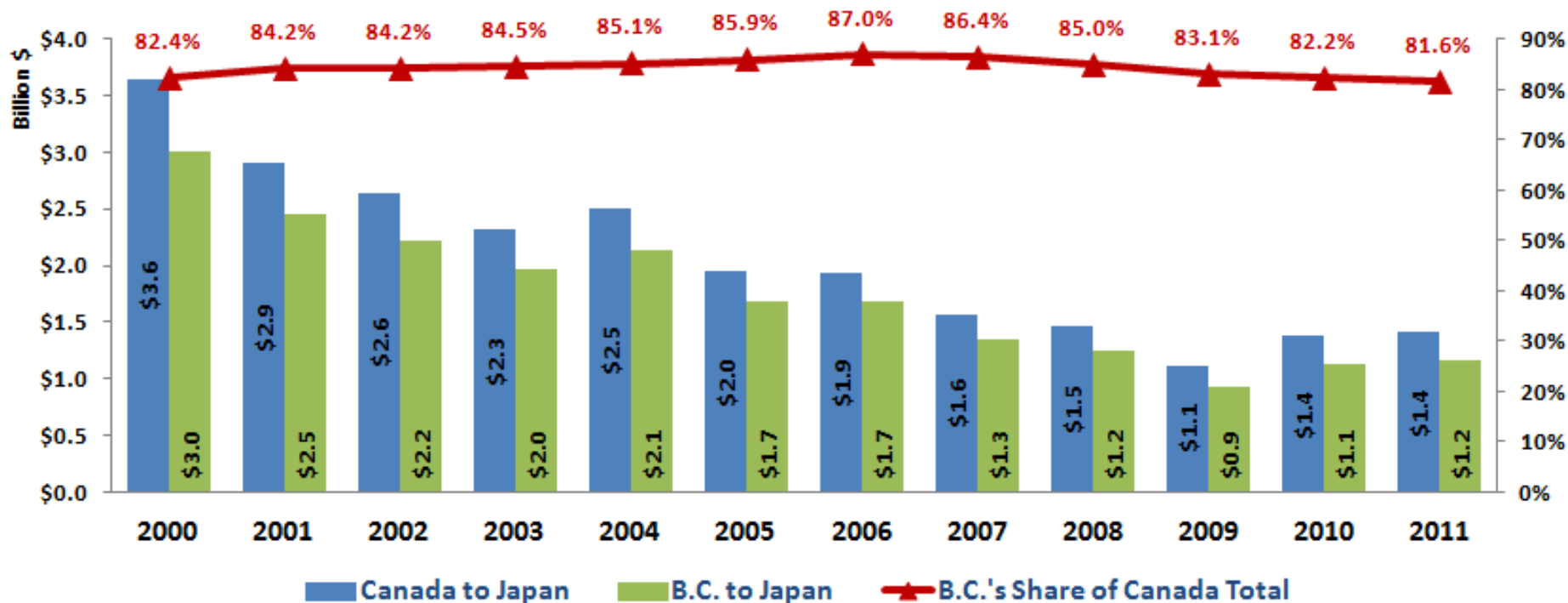
B.C. Forest Products Exported to Japan, 1995 - 2011



Data source: Statistics Canada

Major Export Markets – Japan – B.C.’s exports to Japan declined from the peak years in the mid-1990s.

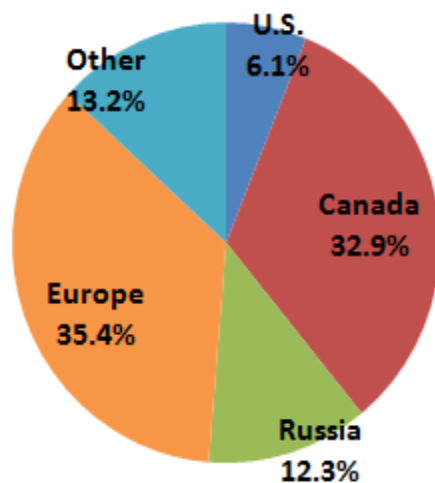
Forest Product Exports to Japan: B.C. and Canada



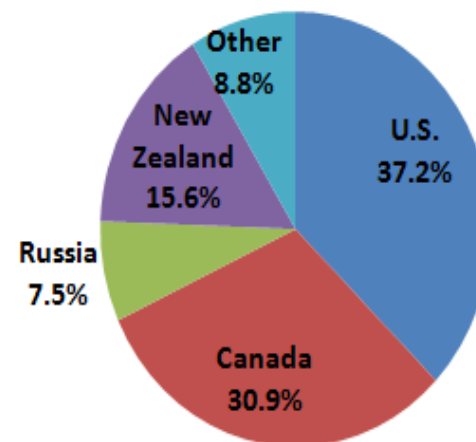
Data source: Statistics Canada

Major Export Markets – Japan – B.C. accounted for 81.6% of Canada total forest product exports to Japan in 2011, with slightly declining shares over the past five years.

Japan Lumber Imports (7.1 million m³) by
Country, 2011



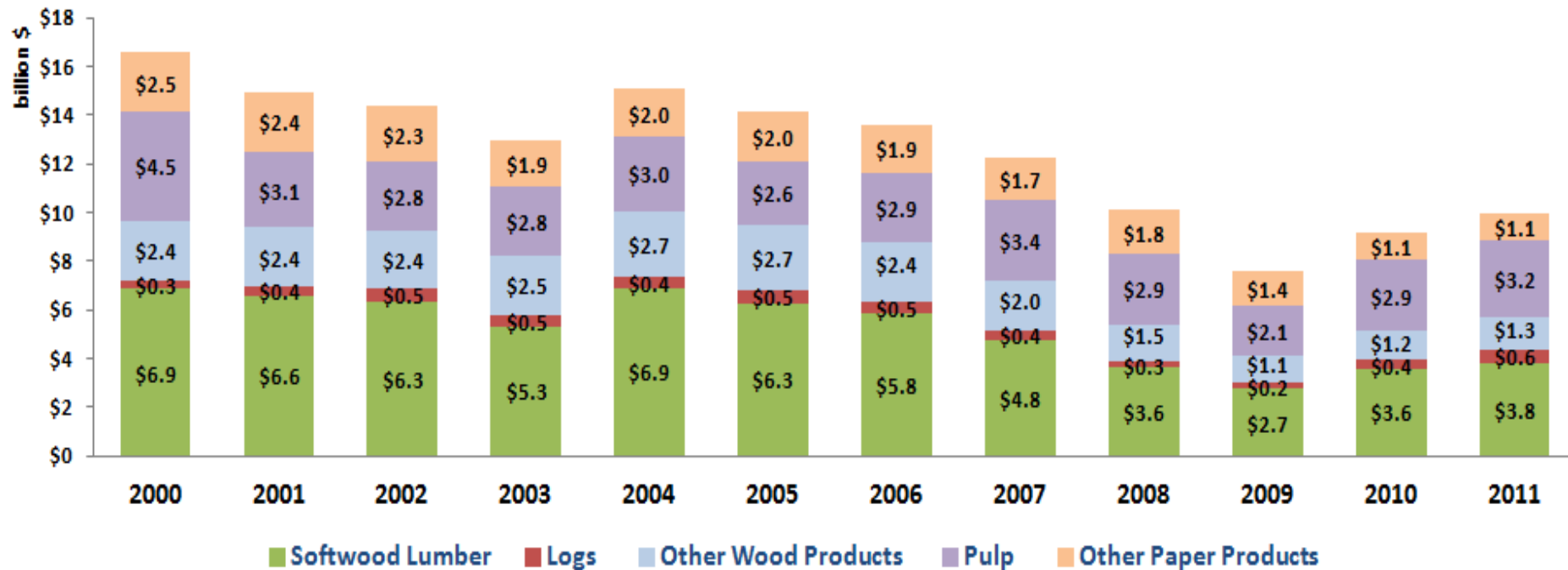
Japan Log Imports (4.6 million m³) by Country,
2011



Data source: Japan Wood-Products Information & Research Center

Major Export Markets – Japan – Canada (88.7% from B.C.) accounted for 32.9% of Japan's total lumber import volume and 30.9% (99.9% from B.C.) of Japan's total log import volume in 2011.

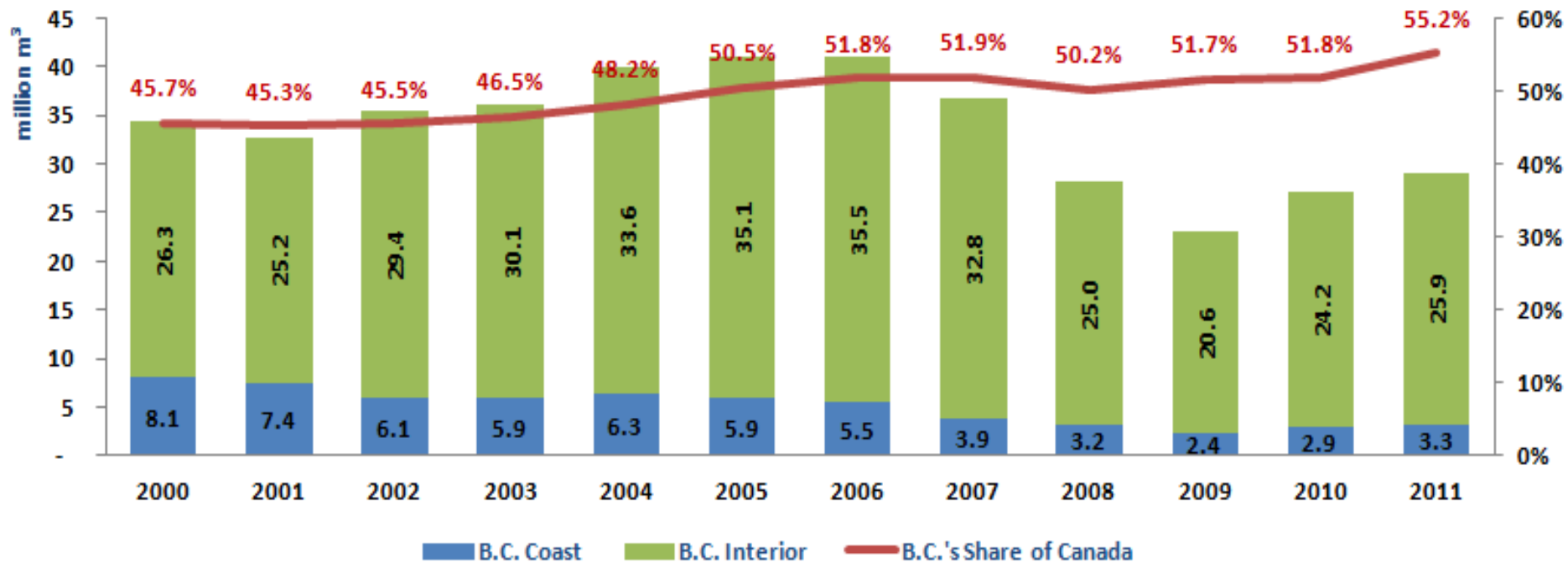
B.C. Forest Product Exports by Main Product



Data source: Statistics Canada

Main Forest Products – Share of B.C. forest product export value by main product in 2011: Softwood Lumber (38.2%), Logs (5.9%), Other Wood Products (12.9%), Pulp (32.1%) and Other Paper Products (10.8%).

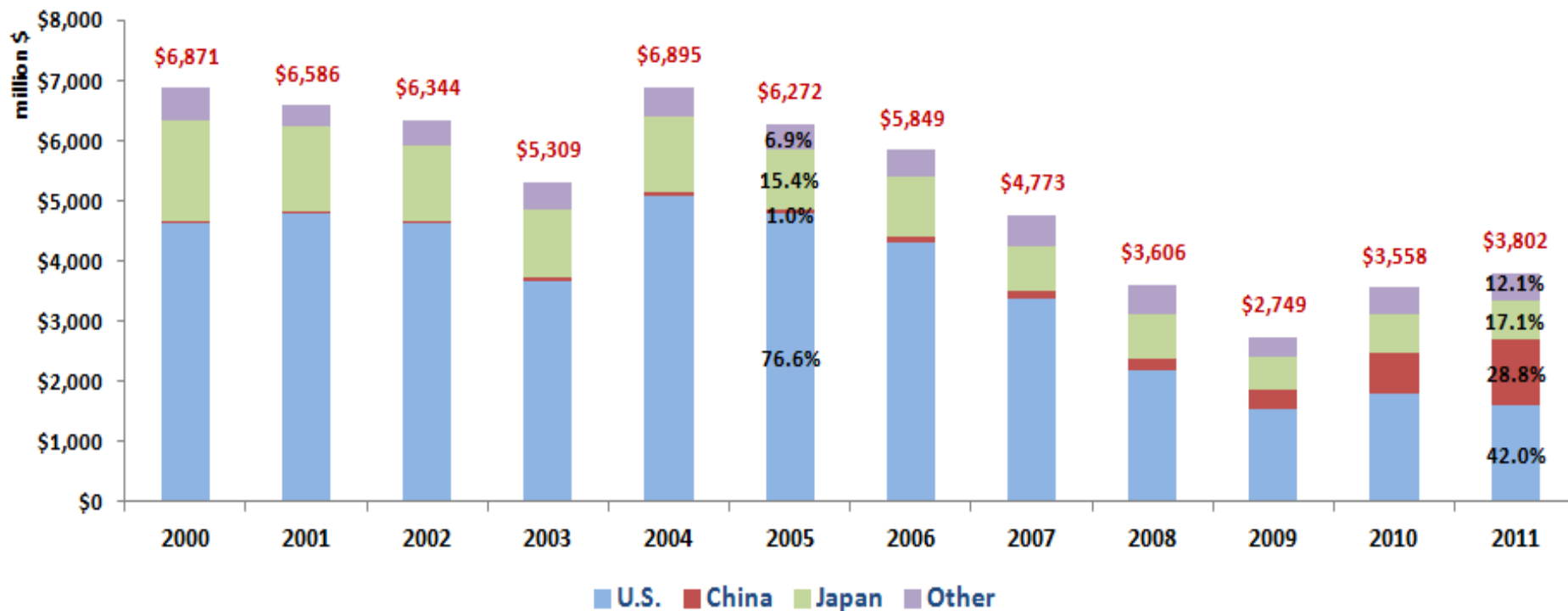
B.C. Softwood Lumber Production



Data source: Statistics Canada

Main Forest Products – Softwood Lumber – B.C.’s softwood lumber production continued to recover in 2011, but is still much lower than the peak years. B.C.’s softwood lumber production recovered more quickly than the rest of Canada.

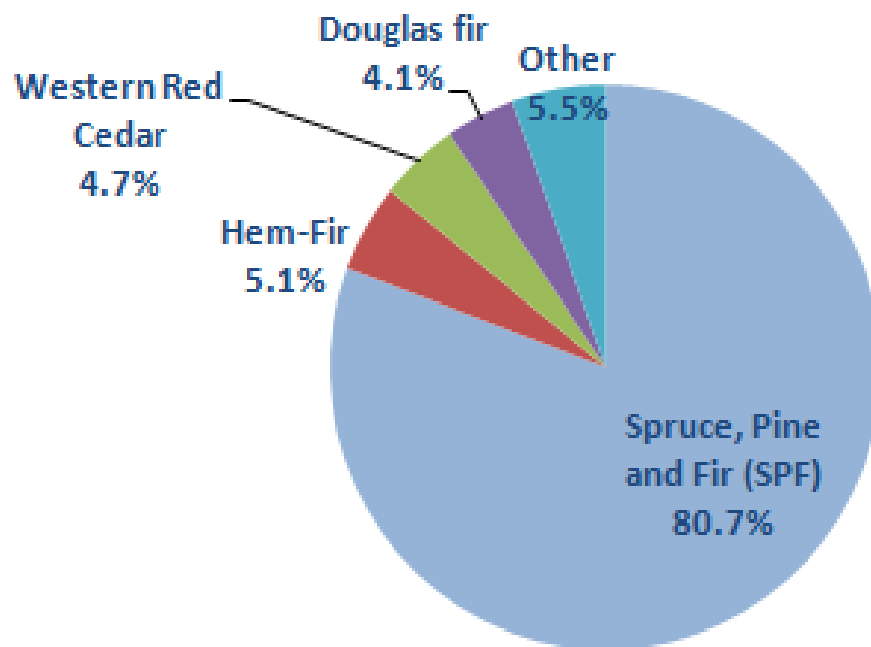
B.C. Softwood Lumber Exports by Main Market



Data source: Statistics Canada

Main Forest Products – Softwood Lumber – B.C.’s foreign markets for softwood lumber changed from U.S.-dominated to more even distribution among U.S., China and Japan.

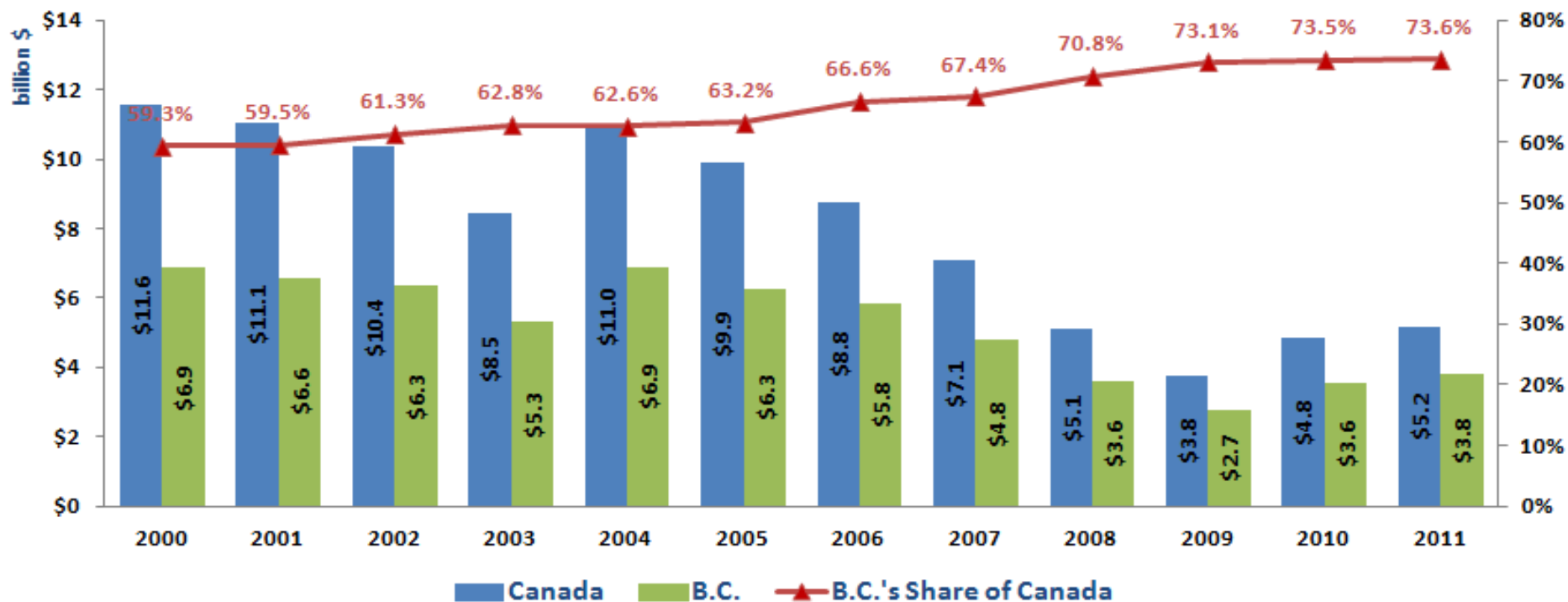
Product Mix for B.C. Softwood Lumber Exports, by Volume in 2011



Data source: Statistics Canada

Main Forest Products – Softwood Lumber – Spruce-Pine-Fir lumber is still by far the highest-volume lumber product exported from B.C., followed by Hem-Fir, Western Red Cedar and Douglas Fir.

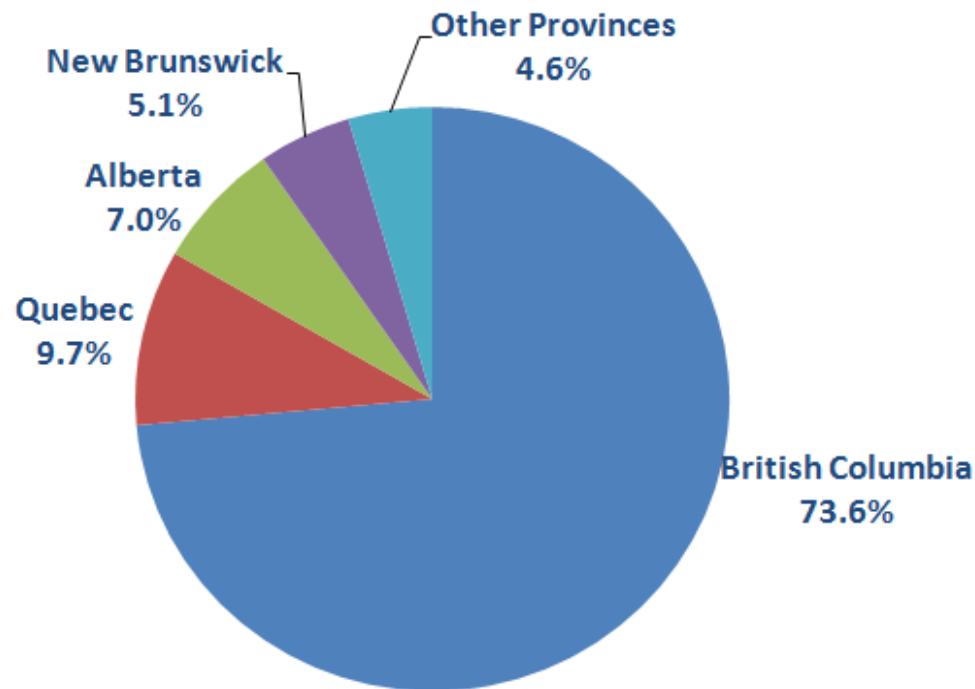
Softwood Lumber Exports: B.C. and Canada



Data source: Statistics Canada

Main Forest Products – Softwood Lumber – B.C. accounted for 73.6% of Canada's total softwood lumber export value in 2011, with faster growth than the rest of Canada, mainly due to strong demand from China.

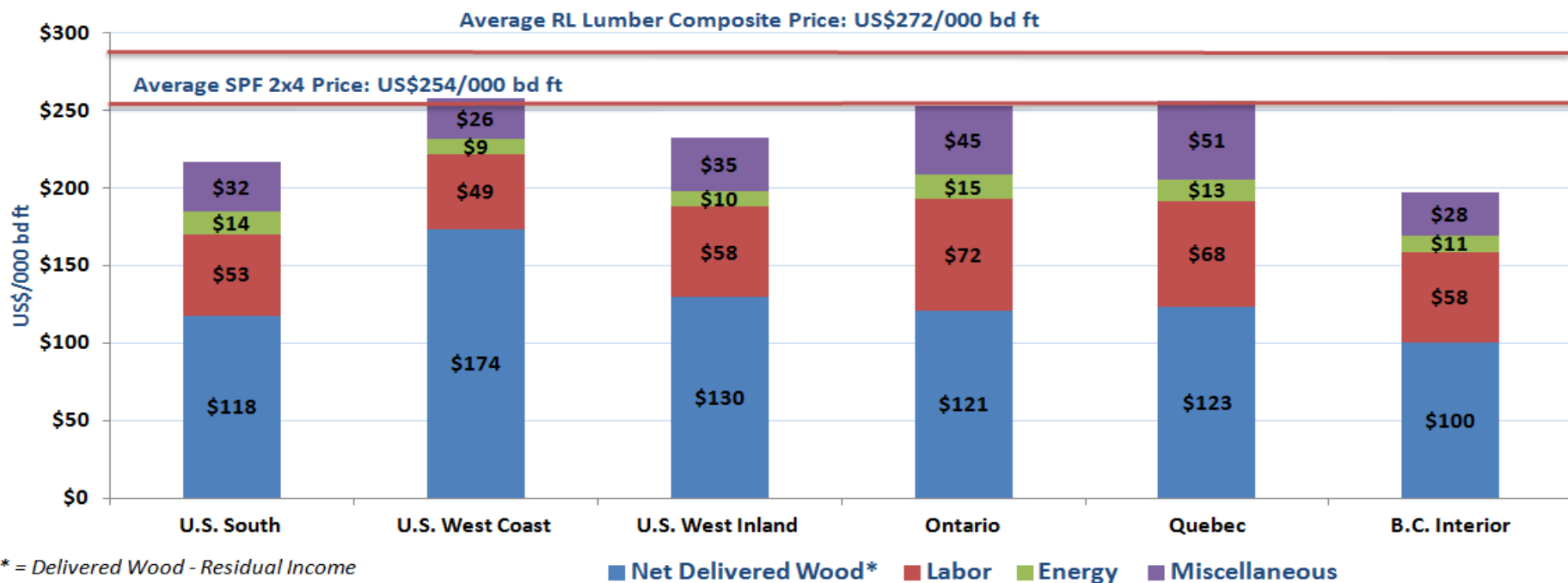
Canada Softwood Lumber Export Value (\$5.2 billion) by Province, 2011



Data source: Statistics Canada

Main Forest Products – Softwood Lumber – B.C. is the dominant supplier of Canada’s softwood lumber exports, followed by Quebec, Alberta, New Brunswick and other provinces.

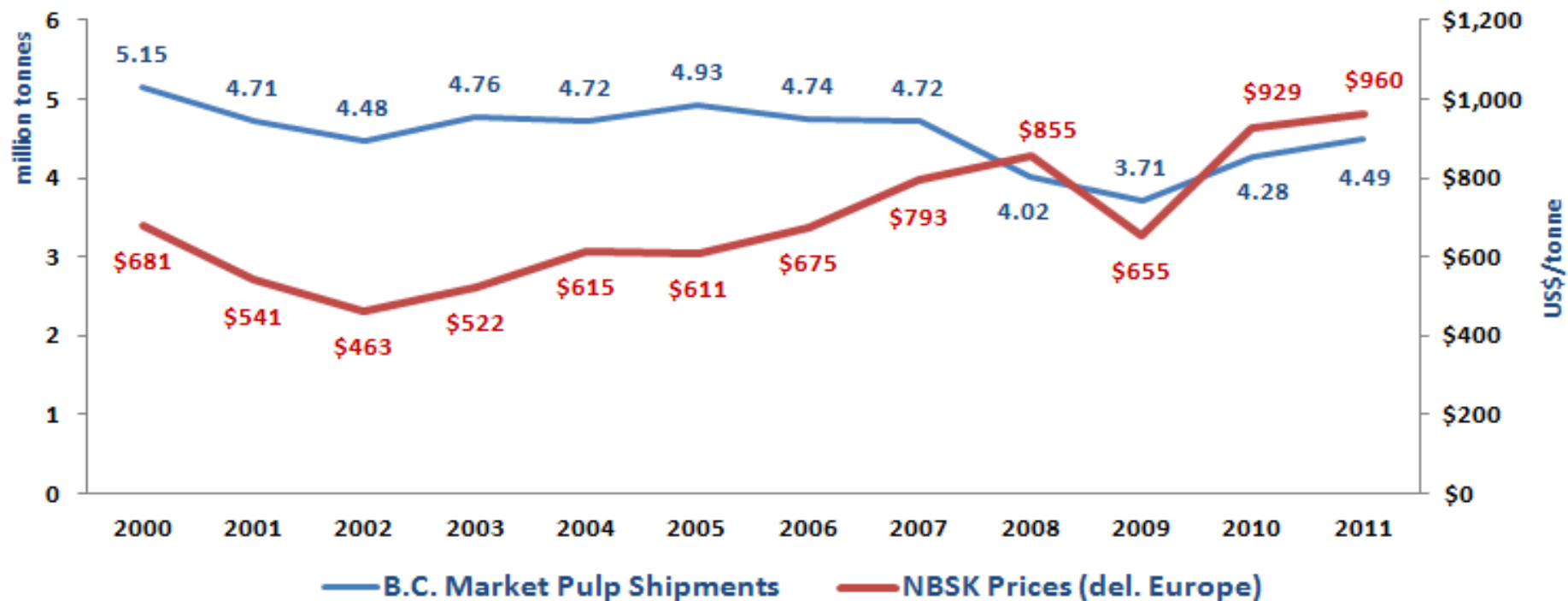
North American Softwood Lumber Mills' Average Variable Costs vs. Lumber Prices, 2011



Data source: Forest Economic Advisors

Main Forest Products – Softwood Lumber – B.C. Interior softwood lumber mills had the lowest average variable costs compared with other regions in North American, mainly due to its low delivered wood costs and efficient operations.

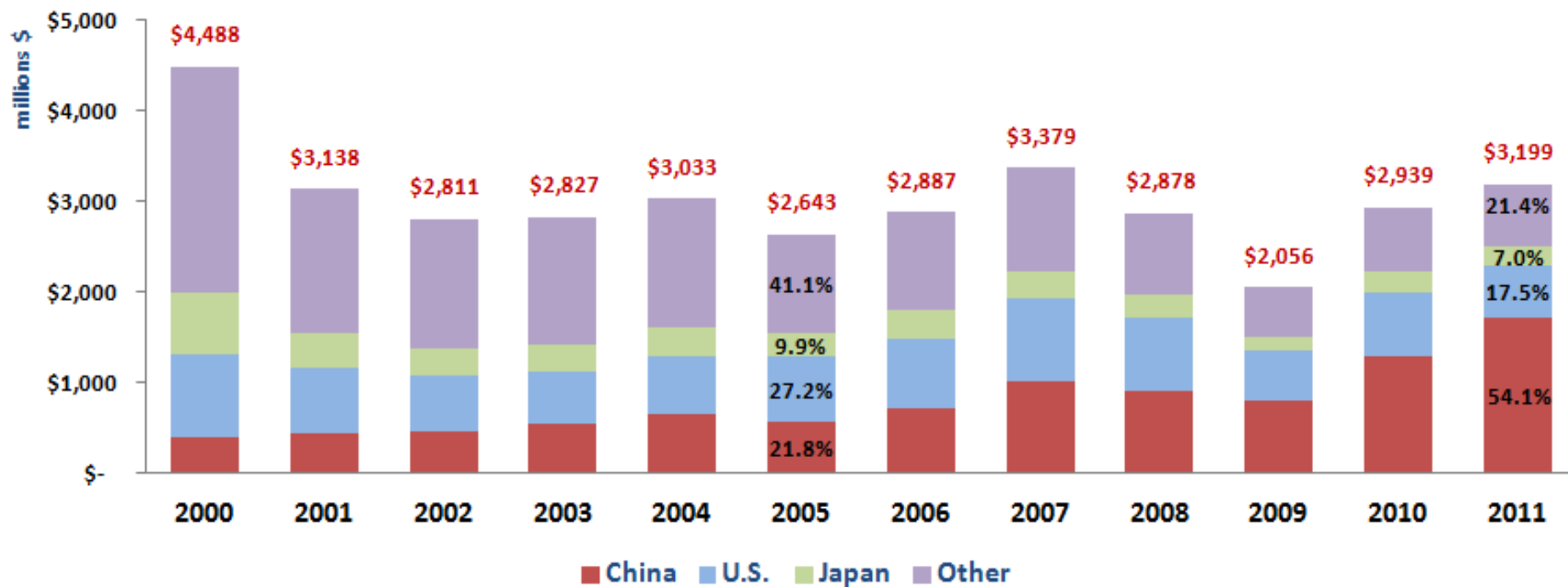
B.C. Market Pulp Shipments and NBSK Prices



Data source: FOEX Indexes Ltd. and Statistics Canada

Main Forest Products – Pulp – NBSK pulp price reached a record level in 2011. B.C.'s market pulp shipments remain below earlier levels.

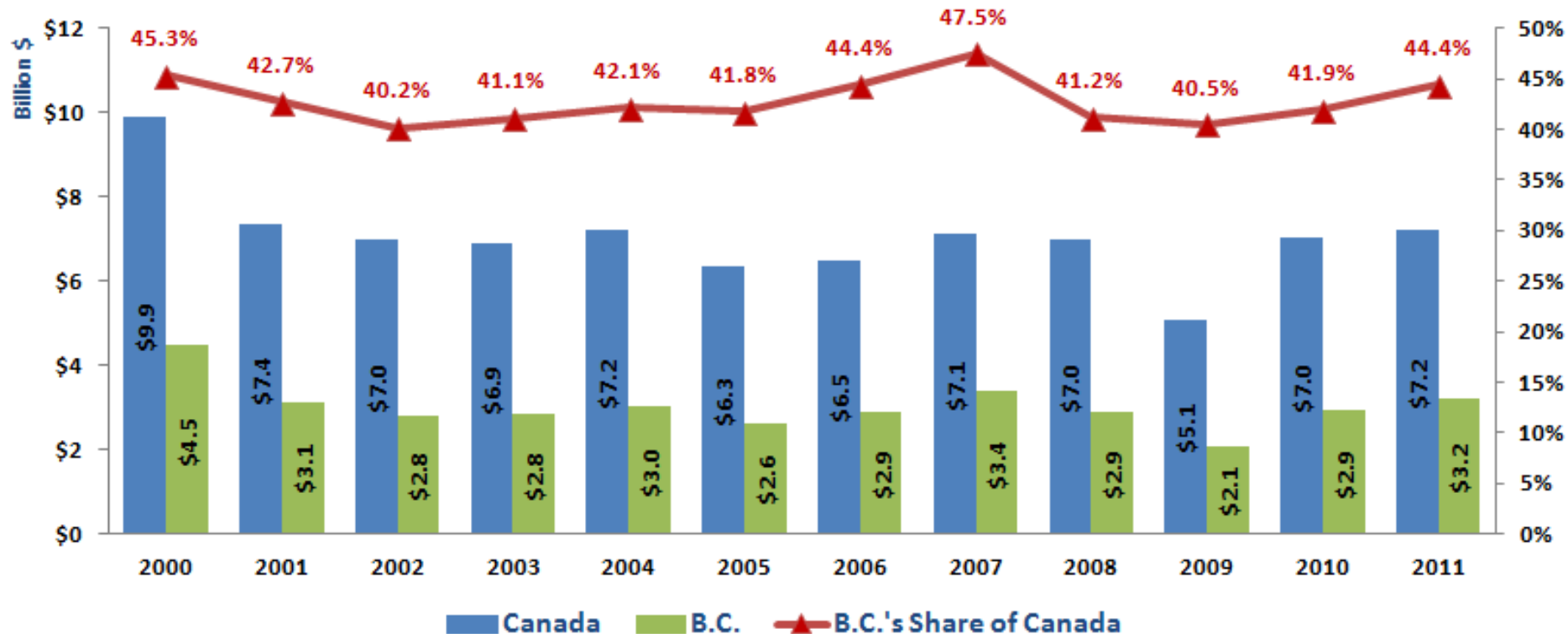
B.C. Pulp Exports by Main Market



Data source: Statistics Canada

Main Forest Products – Pulp – China is B.C.'s largest foreign market for market pulp with 54.1% share of B.C. market pulp exports in 2011, followed by U.S. (17.5%), Japan (7.0%) and other destinations (21.4%).

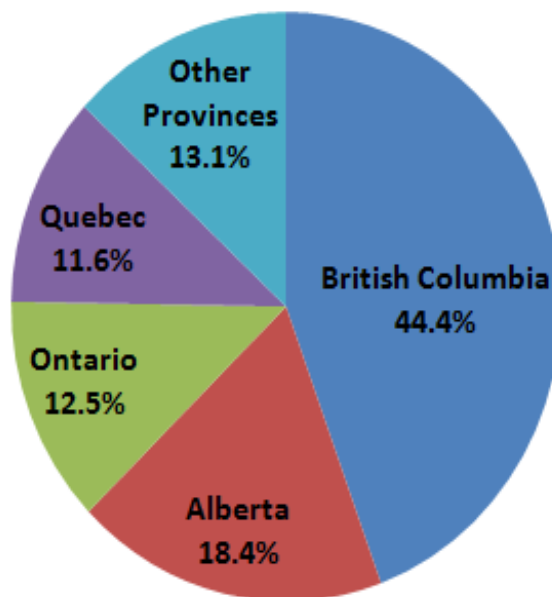
Market Pulp Exports: B.C. and Canada



Data source: Statistics Canada

Main Forest Products – Pulp – B.C. accounted for 44.4% of Canada's total market pulp export value in 2011.

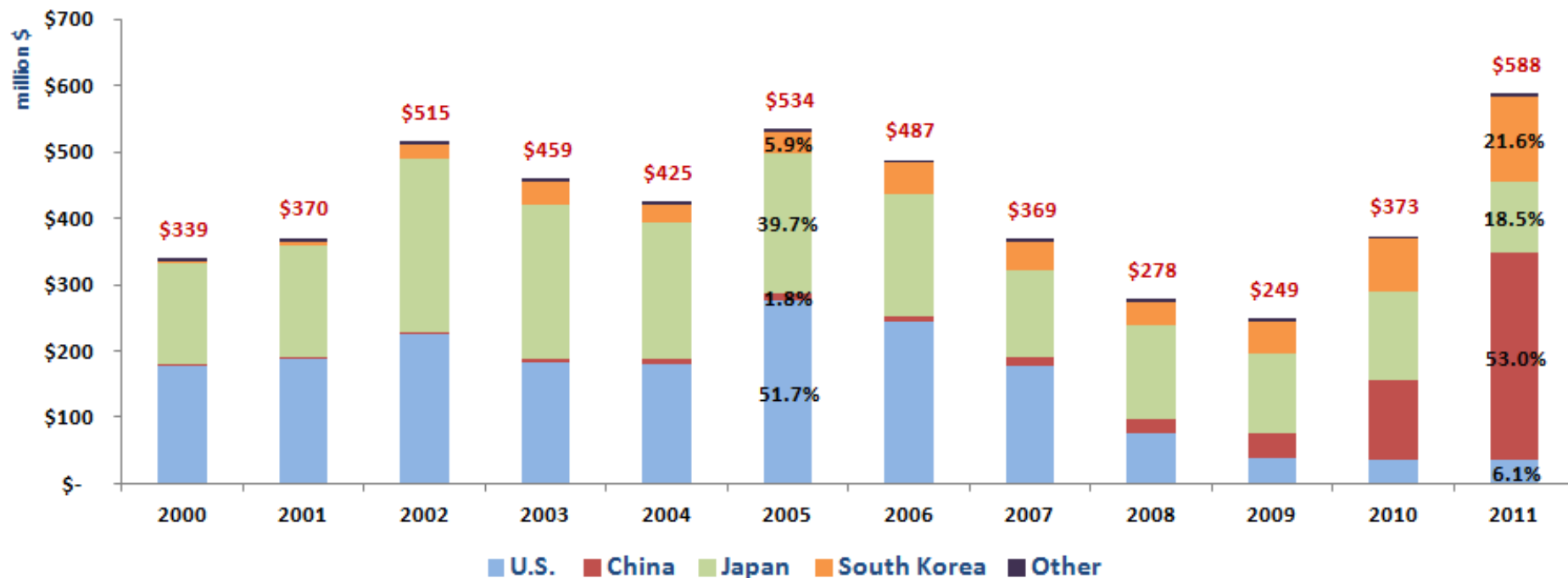
Canada Market Pulp Export Value (\$7.2 bil.) by Province, 2011



Data source: Statistics Canada

Main Forest Products – Pulp – B.C. is the largest supplier of Canada's market pulp exports, followed by Alberta, Ontario, Quebec and other provinces.

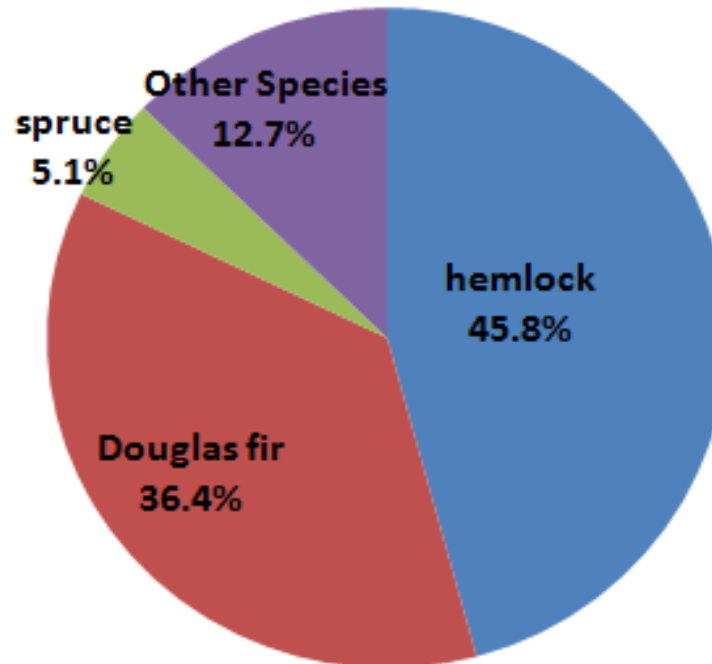
B.C. Log Export Value by Main Market



Data source: Statistics Canada

Main Forest Products – Logs – In 2011, China became the largest destination for B.C. logs.

Species Mix of B.C. Log Exports, by Volume in 2011



Data source: Statistics Canada

Main Forest Products – Logs – Almost half of the logs exported from B.C. in 2011 were hemlock, followed by Douglas Fir, Spruce and other species.

Outlook

- ❖ China became the world's largest importer of logs and lumber in 2011, and is projected to have growing demand in the coming years.
- ❖ The U.S. economy started to show positive signs of recovery. However, it will take at least a few years for the U.S. housing market to recover fully. The currently strong Canadian dollar and on-going softwood lumber dispute impact exports to the U.S.
- ❖ Lumber prices are expected to increase slightly with stronger demand (mainly from China and a recovering U.S. market) and weaker timber supply (Mountain Pine Beetle impacts).
- ❖ Pulp price has been declining from its peak level of over US\$1000/tonne in June 2011, and is expected to stabilize at \$850 - \$900 US/tonne price range in 2012.
- ❖ Log prices have settled down somewhat, but will continue to stimulate log exports.

Conclusions

- ❖ B.C.'s forest sector continued to recover in 2011 from the severe downturn in 2009.
- ❖ B.C.'s forest sector recovered faster than the forest sector in other provinces of Canada, mainly due to our promotion and access to China.
- ❖ B.C.'s forest product markets are diversifying with increasing shares for China but declining shares for U.S. and Japan.
- ❖ More robust and diversified global demand would support full recovery of the B.C. forest sector.
- ❖ Innovations and investments in markets, products & technologies and investments will make the sector more competitive.