



2014 Economic State of the B.C. Forest Sector

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Outline

- ❖ Overview
- ❖ Products
- ❖ Markets
- ❖ Sector Indicators
- ❖ Conclusions and Outlook
- ❖ Appendix *(additional slides for all topics)*

Ministry Economic Reports

- ❖ Weekly Prices: Tracks weekly prices relevant to the B.C. forest sector.
- ❖ Monthly Exports: Export values by major market and product groups, including some quantity information.
- ❖ Annual Mill Report : Summary outlining B.C.'s harvest and timber processing activity during the year.
- ❖ Economic State of the BC Forest Sector: Annual year in review of B.C. forest sector.

Overview of B.C. Forest Sector

- ❖ **Includes** forest management, harvesting, reforestation, wood product manufacturing, and paper product manufacturing.
- ❖ **Plays a key role in the provincial economy**, especially in many communities outside the lower mainland.
- ❖ **Is export-oriented**, depending heavily on global markets and exchange rates.
- ❖ **Is cyclical**, affected by the global forest commodity markets and general performance of the world economy.

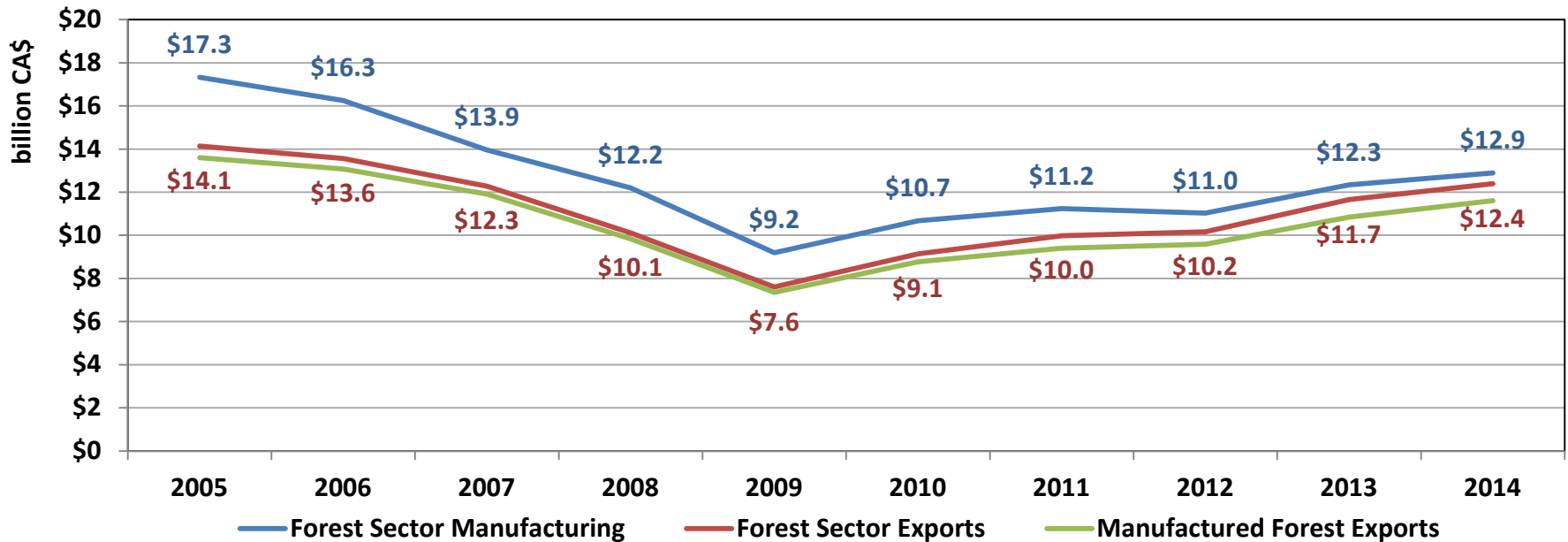
Overview of 2014

- ❖ **B.C.'s forest sector manufacturing sales increased** in 2014, with many product prices seeing relative stability or making slight gains on average.
- ❖ **The U.S. economy** continued to gradually improve, as seen in the employment status and housing market, and this was reflected in higher forest sector exports to the U.S.
- ❖ **China*** continued as the second largest export market for B.C.'s forest sector, growing slightly in 2014 thanks to pulp exports.
- ❖ **Employment increased** for all three industries in the B.C. forest sector.
- ❖ **The B.C. forest sector continues to recover** from 2009, the sector's worst year of the recession, and one of the worst years for B.C. forestry in recent history.

*All references to China include Hong Kong.

Note: Numbers may not add properly to totals, or always be the exact same on each slide due to rounding.

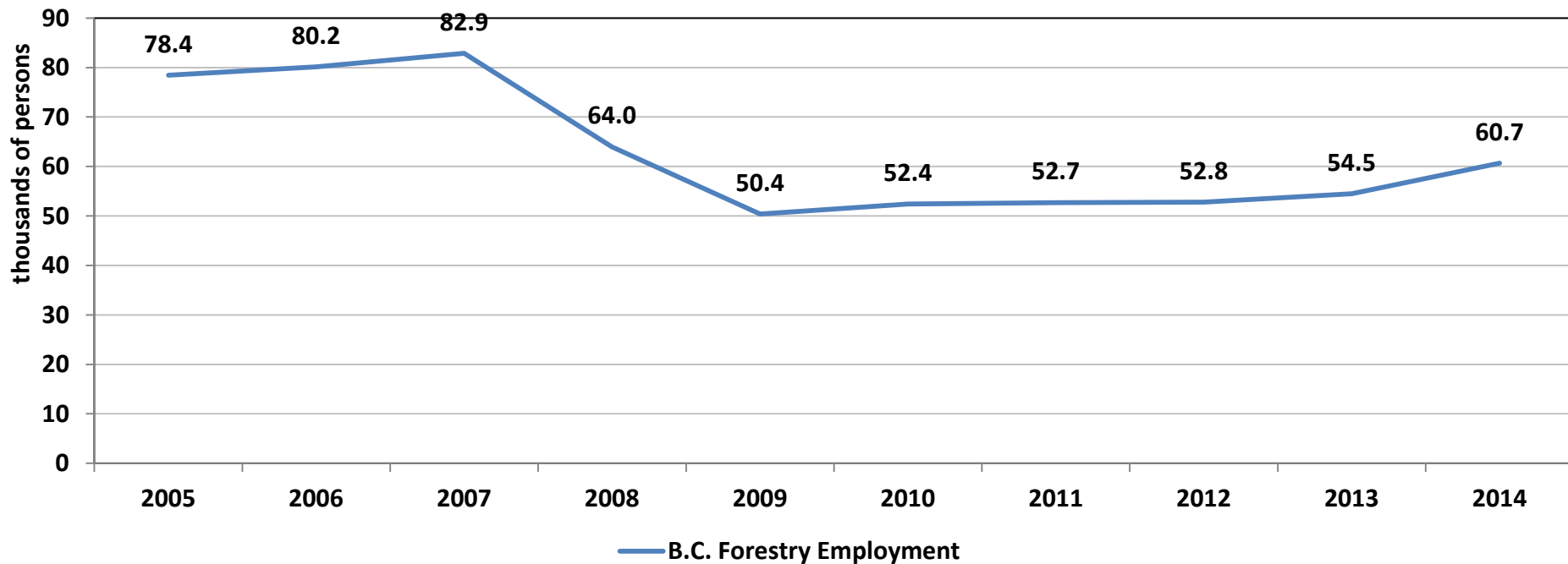
B.C. Manufactured Forest Product Sales and Forest Exports



Data source: Statistics Canada; CANSIM 304-0015, and Canadian International Merchandise Trade Database (CIMTD). Log exports included in the red line (Forest Sector exports), but aren't part of manufacturing sales (blue line) nor manufactured exports.

Overview Indicator 1 – B.C. forest sector manufacturing sales in 2014 were up 4.4% from 2013 and accounted for 30% of B.C. total manufacturing sales. Exports were up 63% from 2009, and were up 6.0% from 2013, accounting for 35% of B.C. total merchandise exports. During the U.S. Housing boom 2004 was the peak in forest sector manufacturing sales and exports.

B.C. Forest Sector Direct Employment



Data source: Statistics Canada; Labour Force Survey. Includes Wood Product Manufacturing, Paper Manufacturing, and Forestry and Logging with Support Activities.

Overview Indicator 3 – B.C. forest sector direct employment was 60,700 in 2014, up 11% from 2013 and 20% from 2009, and accounted for 2.7% of B.C. employment. The Labour Force Survey (LFS) estimation method was updated to use 2014 census results, and this resulted in a downward revision of roughly 2,000 jobs in both 2012 and 2013.

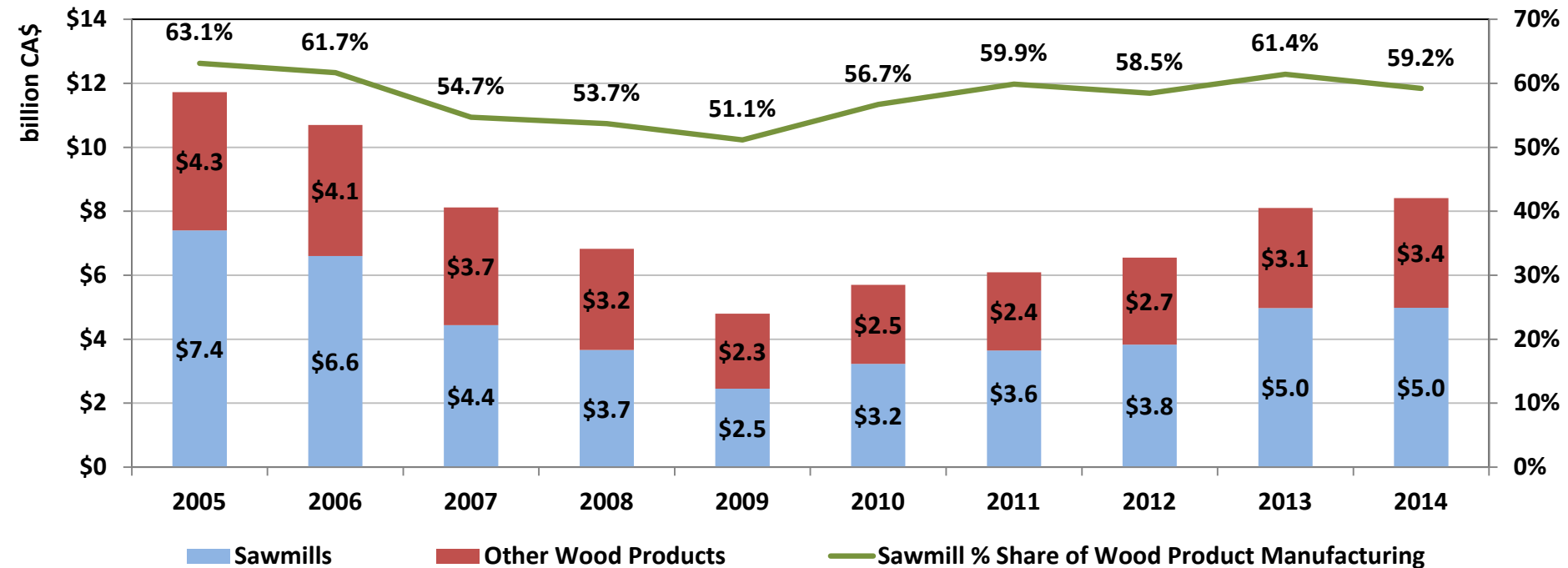
Products Overview

- ❖ **Wood Products, especially Lumber:** In 2014, B.C. produced 29.8 million cubic metres of lumber, or 51% of Canada's total softwood lumber production. B.C. sawmill* sales (primarily lumber) were CA\$5.0 billion in 2014, or 59% of total Wood Product Manufacturing sales in B.C.
- ❖ **Pulp and Paper Products, especially Market Pulp:** B.C. pulp mills** sold 4.1 million tonnes of market pulp for CA\$2.6 billion in 2014, or 59% of total Paper Manufacturing sales in B.C.
- ❖ **Logs:** In 2014, 66.4 million cubic metres of logs were harvested. Exports of 6.8 million cubic metres (10.3% of harvest), mostly from coastal areas, were worth CA\$784 million.
- ❖ **Energy Products:** B.C. exported 1.3 million tonnes of wood pellets worth CA\$203 million. The UK was the primary destination (70%), followed by Italy, South Korea, and Japan.

*Excludes shake and shingle mill sales. Sawmills are a subcategory of Wood Product Manufacturing.

**Pulp is a subcategory of the Paper Manufacturing NAICS code.

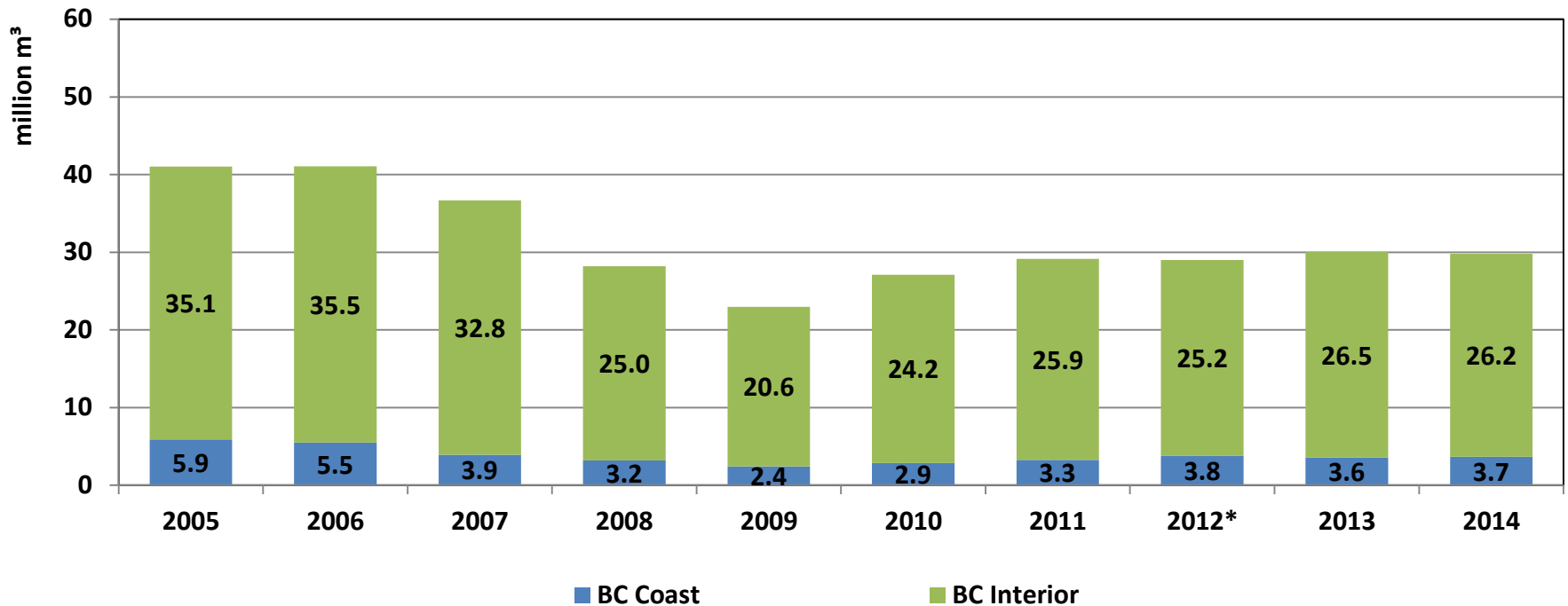
B.C. Wood Product Manufacturing Sales



Data source: Statistics Canada; CANSIM 304-0015. Sawmill sales are primarily lumber, and include chip and sawdust sales. Other wood products include veneer, plywood, oriented strand board, shake and shingles, wood pellets, and many other products.

Products – Wood Products – Wood Product Manufacturing sales totaled CA\$8.4 billion in 2014. Sawmill sales accounted for 59% of Wood Product Manufacturing sales. From 2013 to 2014, Sawmill sales were constant, and Other Wood Products increased 9.8%.

B.C. Softwood Lumber Production

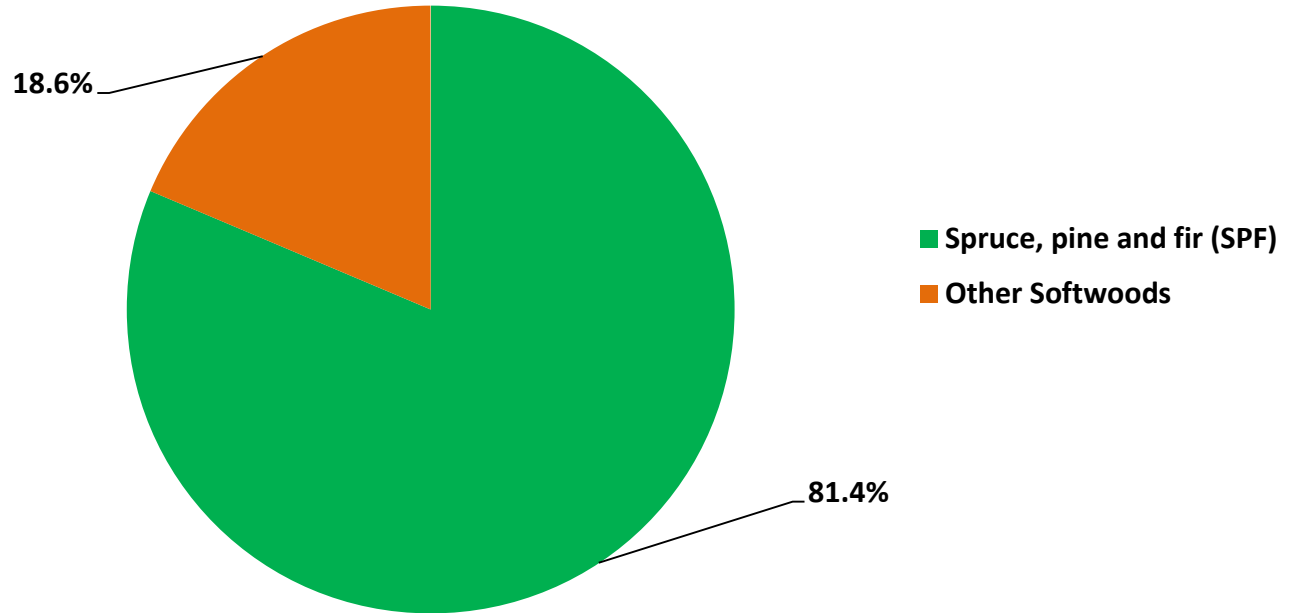


*Interior and Coast Share are Estimates. In all years the Interior includes production from Yukon, Northwest Territories, and Nunavut.

Data source: Statistics Canada; CANSIM 303-0064.

Products – Softwood Lumber – Softwood lumber production volume held relatively steady in 2014. The Coast accounted for 12% of B.C. production. Volumes were roughly unchanged from 2013 to 2014, and up 30% from 2009. Lumber production with current markets in the past several years is comparable to the production in '95-'99 when U.S. housing starts averaged around 1.5 million.

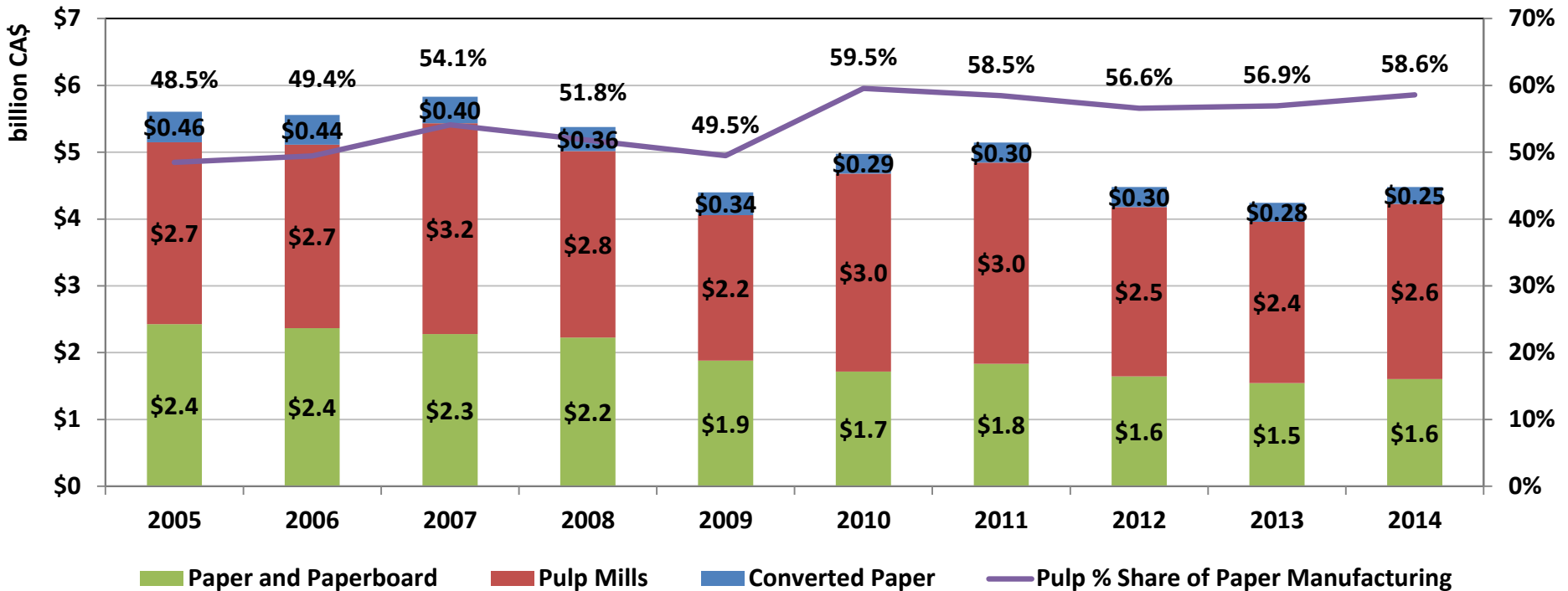
B.C. Softwood Lumber Production (29.8 million m³) Share by Species, 2014



Data source: Statistics Canada; CANSIM 303-0064. Based on volume in cubic metres.

Products – Softwood Lumber – In 2014, 81% of softwood lumber production volume was spruce, pine or fir (SPF), and 19% was from other species such as cedar, Douglas fir, and hemlock.

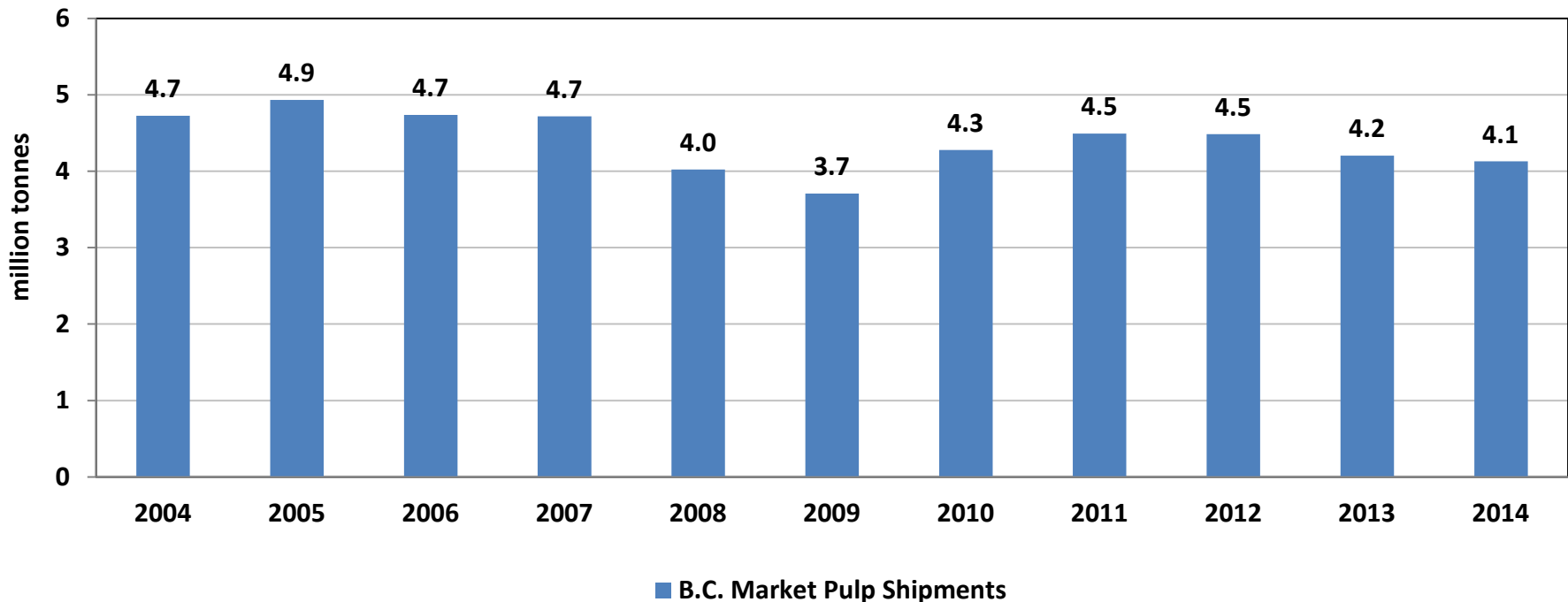
B.C. Paper Manufacturing Sales



Data source: Statistics Canada; CANSIM 304-0015.

Products – Pulp and Paper – Paper Manufacturing sales totaled about CA\$4.5 billion in 2014, increasing by 5.6%. Pulp increased 8.6% from 2013 to 2014, accounting for 59% of Paper Manufacturing sales. Paper and Paperboard sales were up 4.0%, and Converted Paper was down 11.8%.

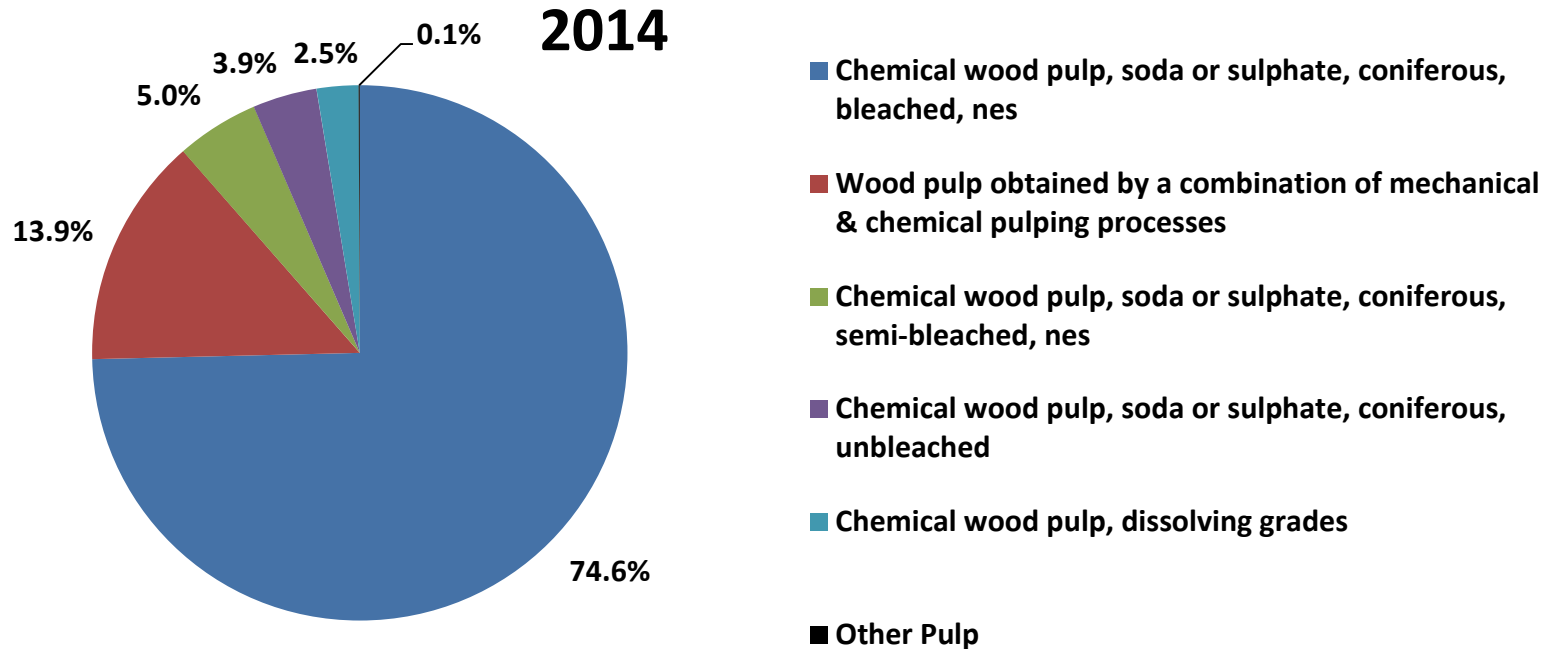
B.C. Market Pulp Shipments



Data source: B.C. Stats.

Products – Pulp – B.C.’s market pulp shipments fell 1.8% from 2013 to 2014. Compared with lumber production, market pulp shipments were fairly stable over the past decade. Pulp used for onsite paper production is not included in market pulp shipments.

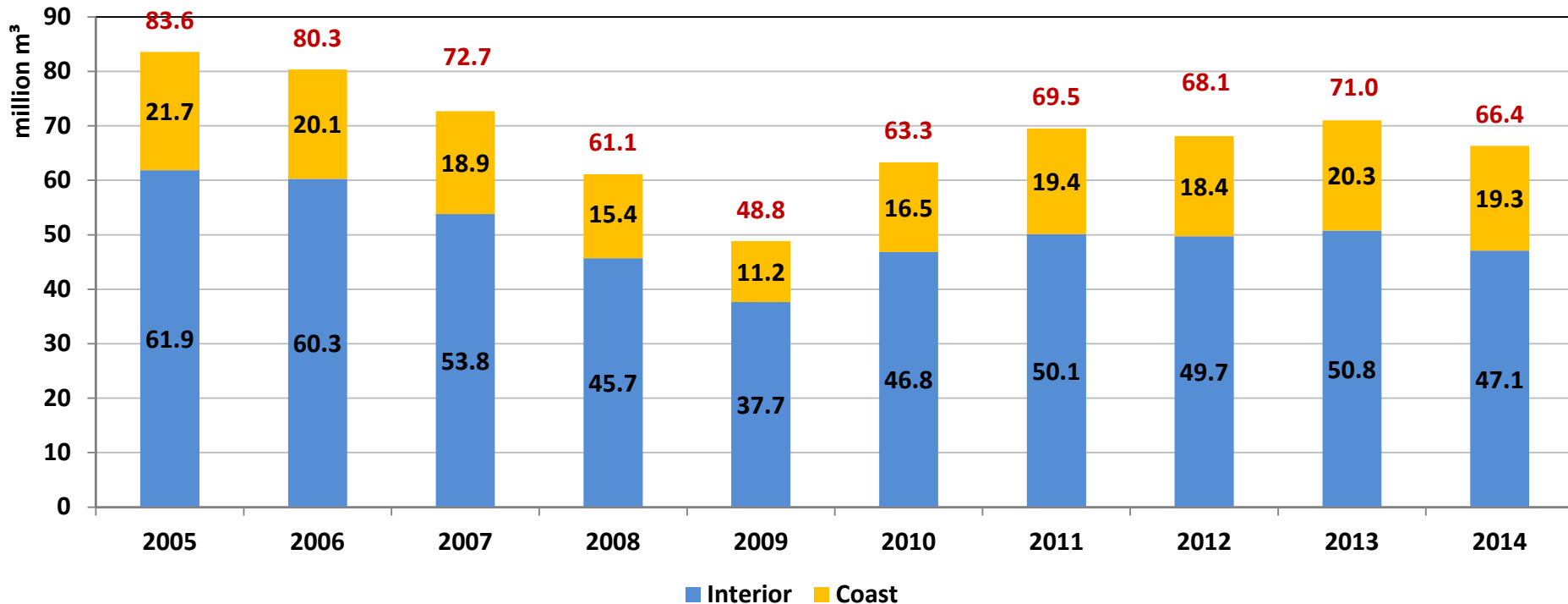
B.C. Pulp Export Share (4.1 million tonnes) by Product, 2014



Data source: Statistics Canada; CIMTD. Based on air dry tonnes. NES stands for "not elsewhere specified".

Products – Pulp – Bleached sulphate (kraft) pulp dominates B.C.'s pulp exports. Dissolving pulp accounted for 2.5% of the export volume, and Other Pulp less than 0.1%.

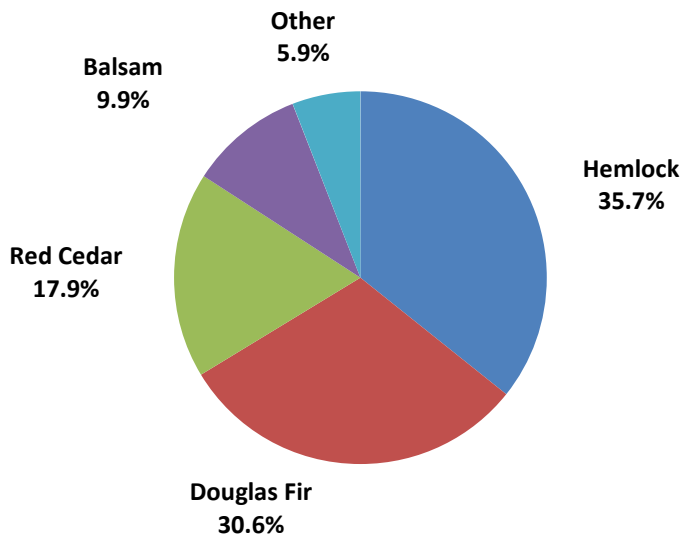
B.C. Timber Harvest Volume



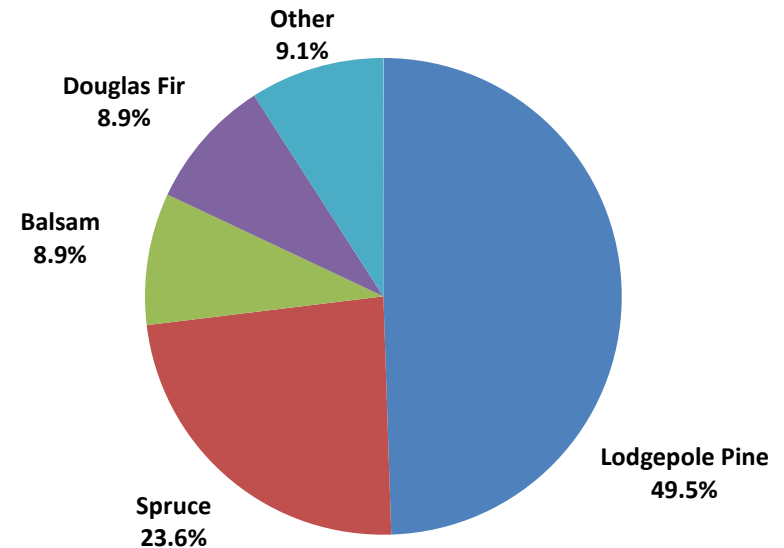
Data source: B.C. Ministry of Forests, Lands, and Natural Resource Operations (FLNR) [Harvest Billing System](#). All logs, special forest products, species and grades billed excluding waste, reject and Christmas trees, data run on June 1, 2015. Includes both Crown and Private lands.

Products – Logs – Total harvest volume (66.4 million m³) was down 6.6% from 2013, and up 36% from 2009. The Interior accounted for 71% of the harvest, and the Coast for 29%. The last few years of harvest are close to pre-beetle harvest uplift, pre-housing boom harvest levels.

Species Mix for 2014 B.C. Coast Harvest (19.3 mil. m³)



Species Mix for 2014 B.C. Interior Harvest (47.1 mil. m³)



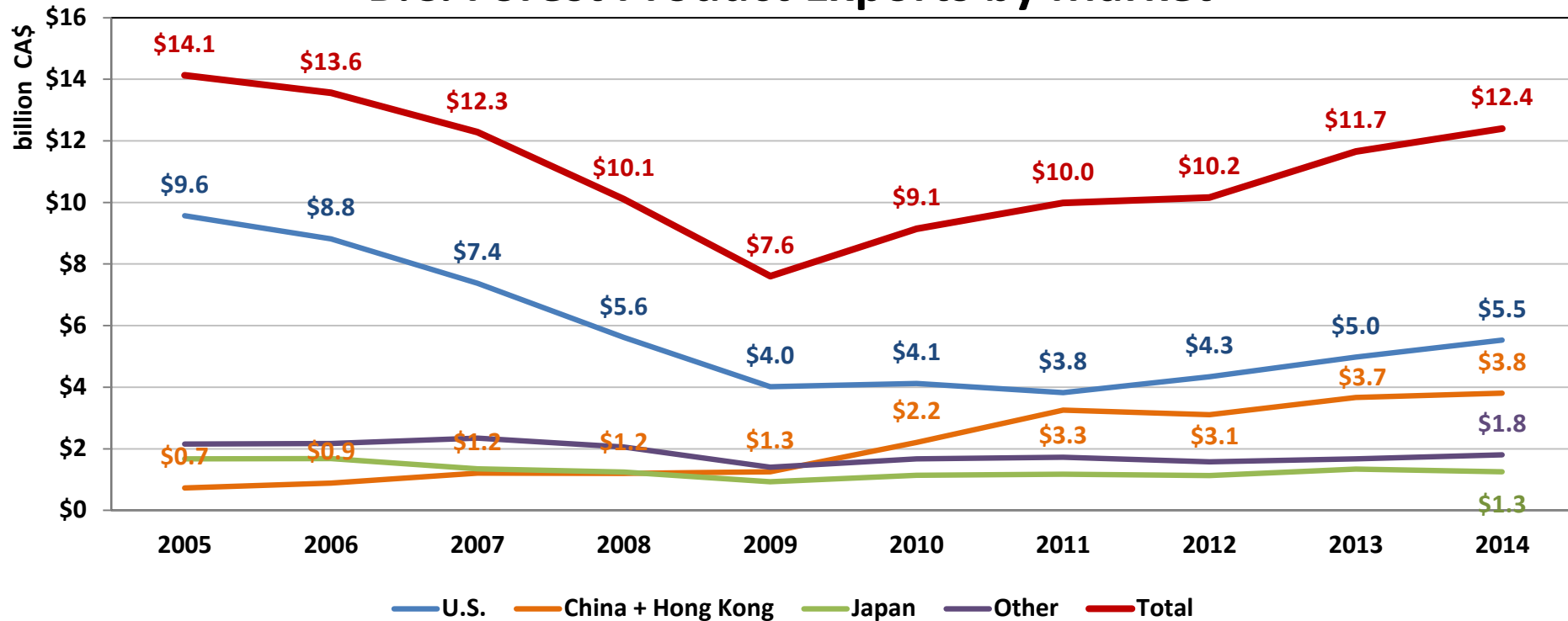
Data source: B.C. FLNR. Includes harvest of all species from all land types. Does not include waste, reject, or Christmas trees.

Products – Logs – Hemlock and Douglas fir make up roughly 2/3 of the harvest on the Coast. In the Interior the main species is lodgepole pine, followed by spruce.

Markets Overview

- ❖ **The U.S., China, and Japan** are the top three export markets for the B.C. forest sector.
- ❖ **The U.S. is the largest market** and has improved substantially since 2009, but it still has significantly less share of B.C. forest exports compared to pre-2009.
- ❖ **China has increased** substantially over the last decade and is now in a strong second place. China's share has remained around 30% since 2011.
- ❖ **Japan has decreased** since the late 1990s, but has been steady lately, and remains in 3rd place since 2009.
- ❖ **Other export markets** made up 15% of total forest sector exports in 2014, with notable destinations being South Korea, Taiwan, the U.K., and Indonesia.

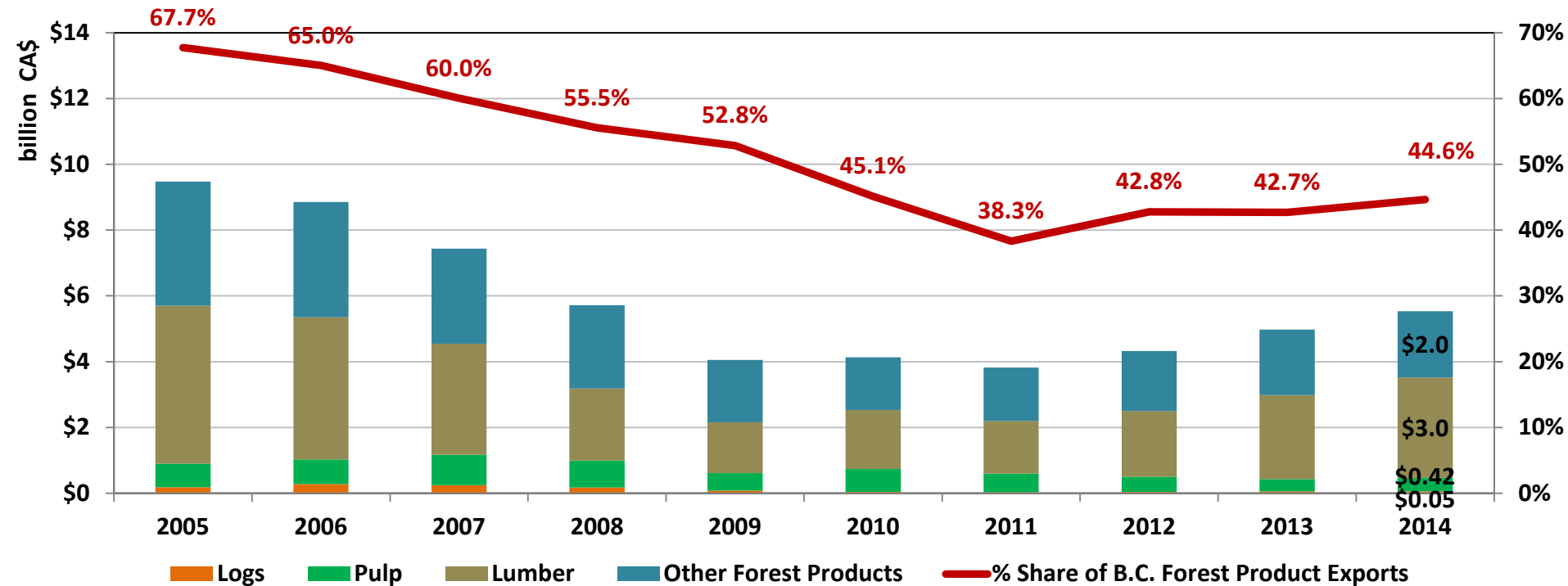
B.C. Forest Product Exports by Market



Data source: B.C. Stats extract from Statistics Canada data. Also available from Statistics Canada CIMTD.

Markets – The U.S. was the #1 export market by value, even after the U.S. housing market crashed. China became the #2 market in 2009 and has been a key driver of the forest sector’s recovery since 2009. Japan was #2 for many years until 2009 and is now #3.

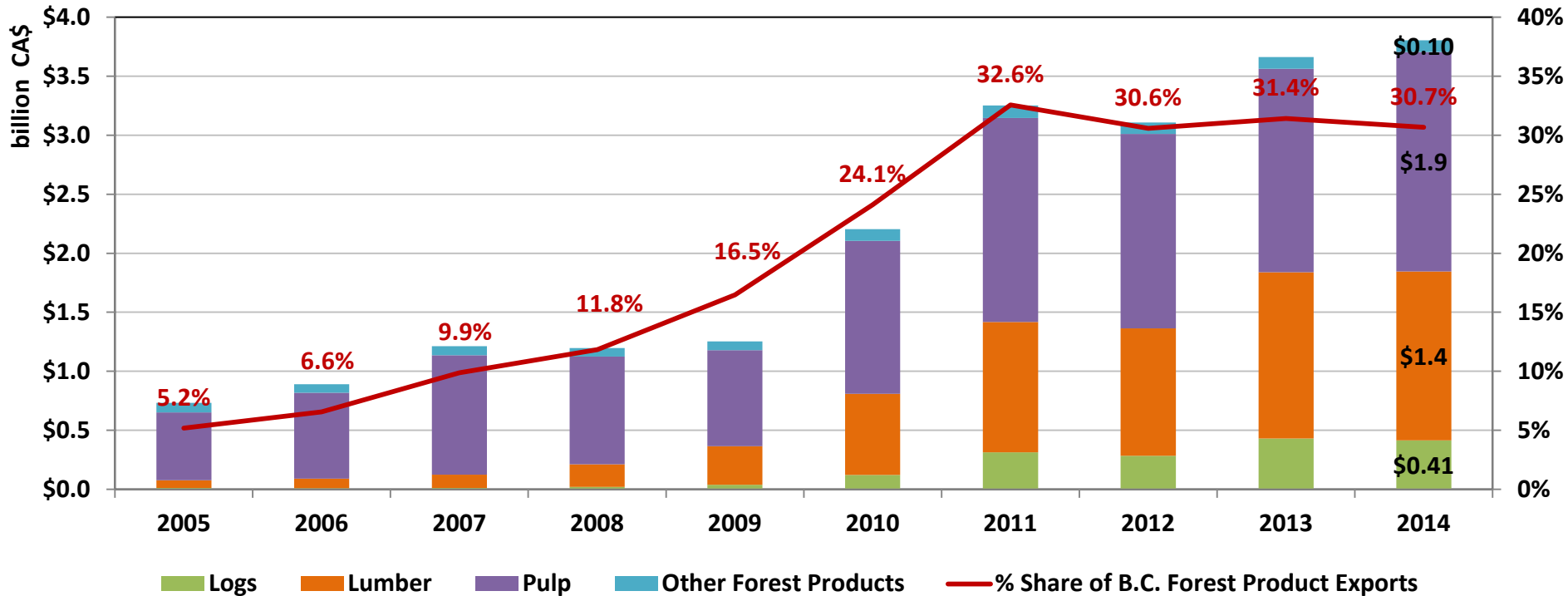
B.C. Forest Product Exports to the United States



Data source: B.C. Stats extract from Statistics Canada data. Also available from Statistics Canada CIMTD.

Markets – U.S. – The U.S. was B.C.’s largest market in 2014 at CA\$5.5 billion, an increase of 11.2% over 2013. The U.S.’s share of B.C.’s forest product exports decreased from a high of 67.7% in 2005 to 38.3% in 2011, and has since risen to 44.6%.

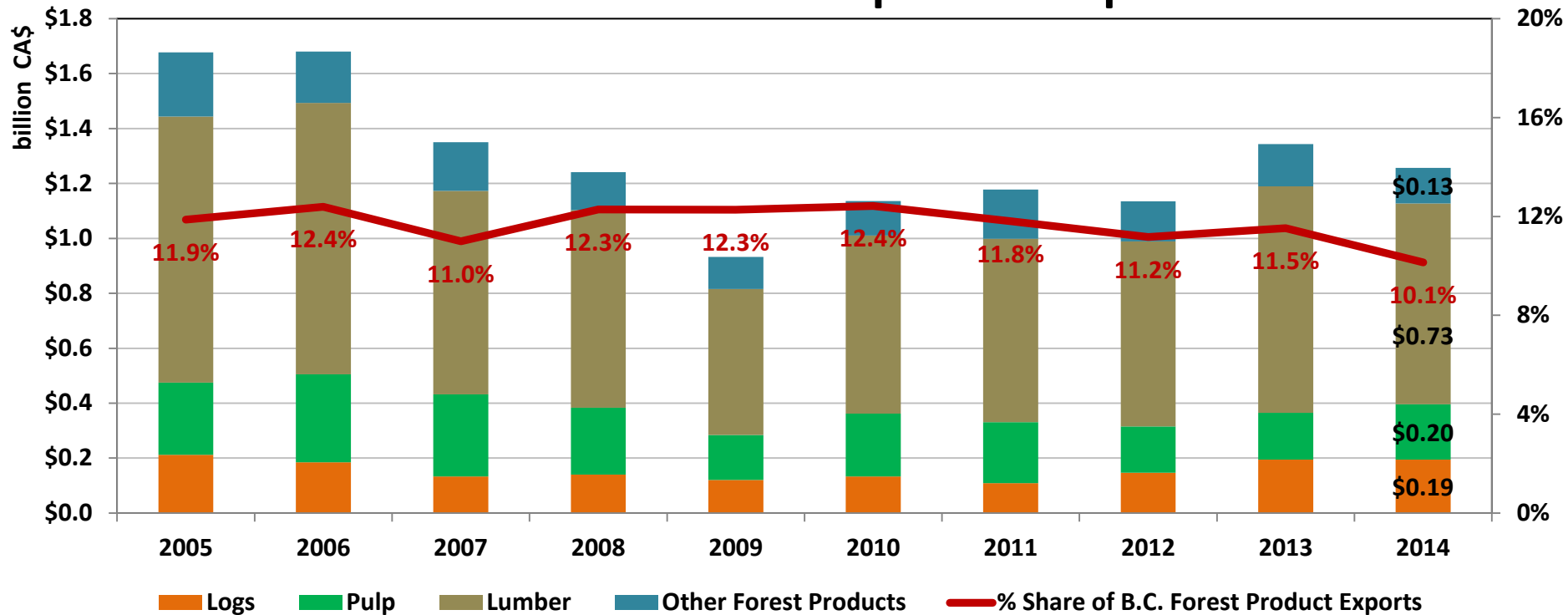
B.C. Forest Product Exports to China



Data source: B.C. Stats extract from Statistics Canada data. Also available from Statistics Canada CIMTD.

Markets – China – B.C. forest product exports to China have hovered around 30% of total forest exports since 2011. The value in 2014 was CA\$3.8 billion, an increase of 3.9% over 2013. Lumber and log exports grew the fastest in recent years, partially in response to Russia restricting log exports, but pulp still dominates with 49% of export value.

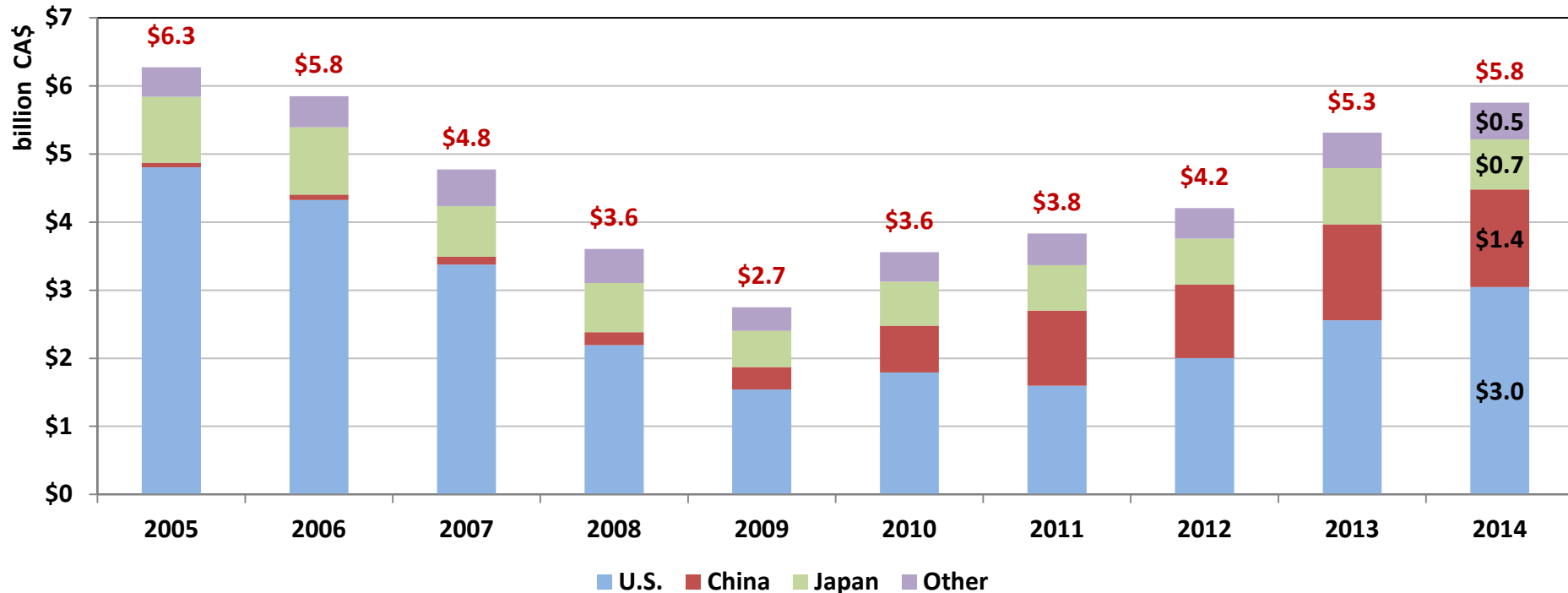
B.C. Forest Product Exports to Japan



Data source: B.C. Stats extract from Statistics Canada data. Also available from Statistics Canada CIMTD.

Markets – Japan – B.C.'s exports to Japan have decreased about 75% from peak years in the mid-1990s, but exports have been relatively steady in recent years. Exports were valued at CA\$1.26 billion in 2014, a decrease of 6.4% from 2013. Lumber had the highest share of value with 58% in 2014.

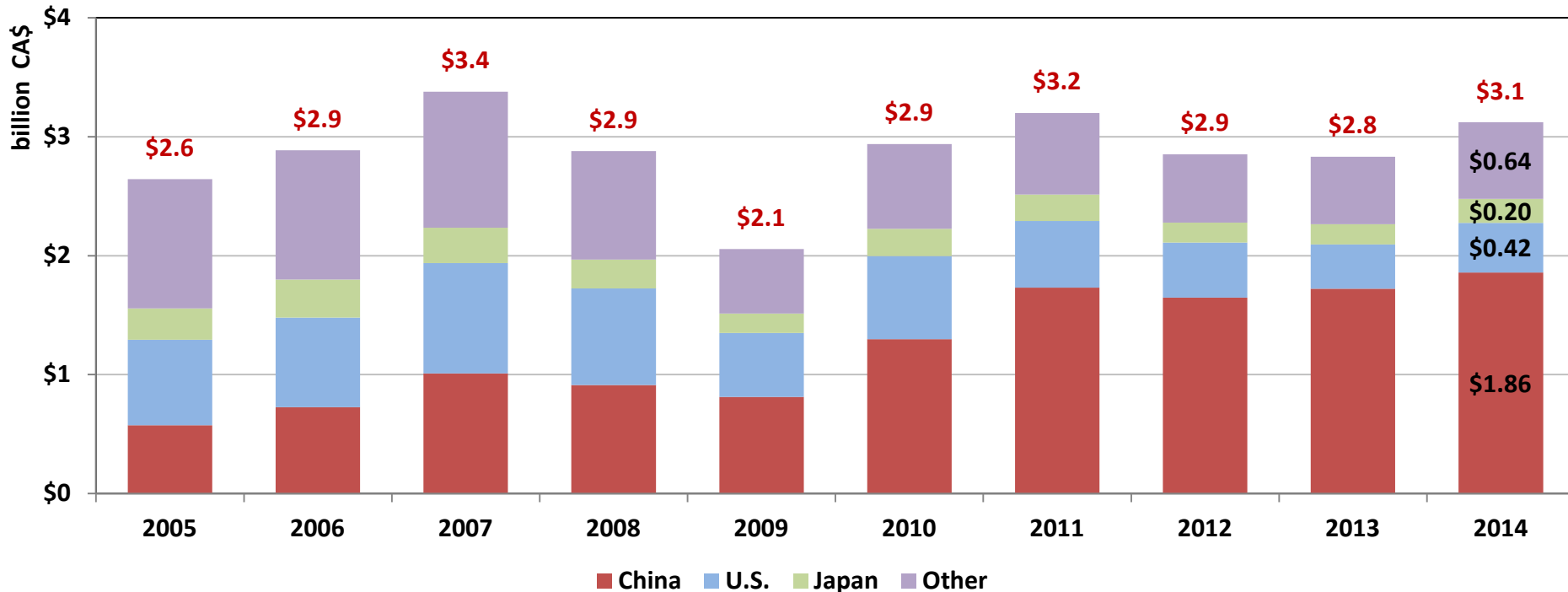
B.C. Softwood Lumber Exports by Market



Data source: B.C. Stats extract from Statistics Canada data. Also available from Statistics Canada CIMTD.

Markets – Softwood Lumber – Over the past decade, B.C.’s lumber export market was heavily reliant on the U.S. Now other destinations, primarily China, have reduced the share of the U.S., though the U.S. is making a comeback.

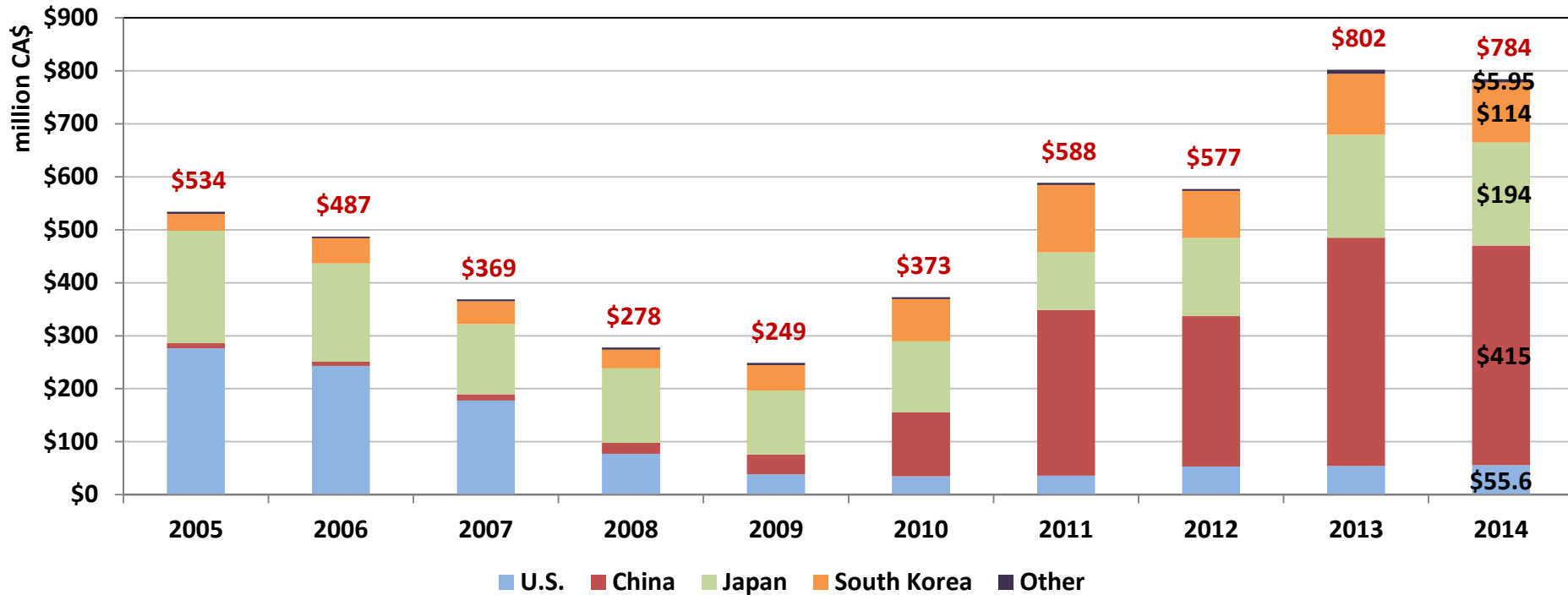
B.C. Pulp Exports by Market



Data source: B.C. Stats extract from Statistics Canada data. Also available from Statistics Canada CIMTD.

Markets – Pulp – China had a dominant 60% share of B.C. pulp exports in 2014, followed by the U.S. (13%), Japan (6%) and other destinations (21%). Over the past decade, exports to China have tripled while exports to other destinations have shrunk.

B.C. Log Exports by Market



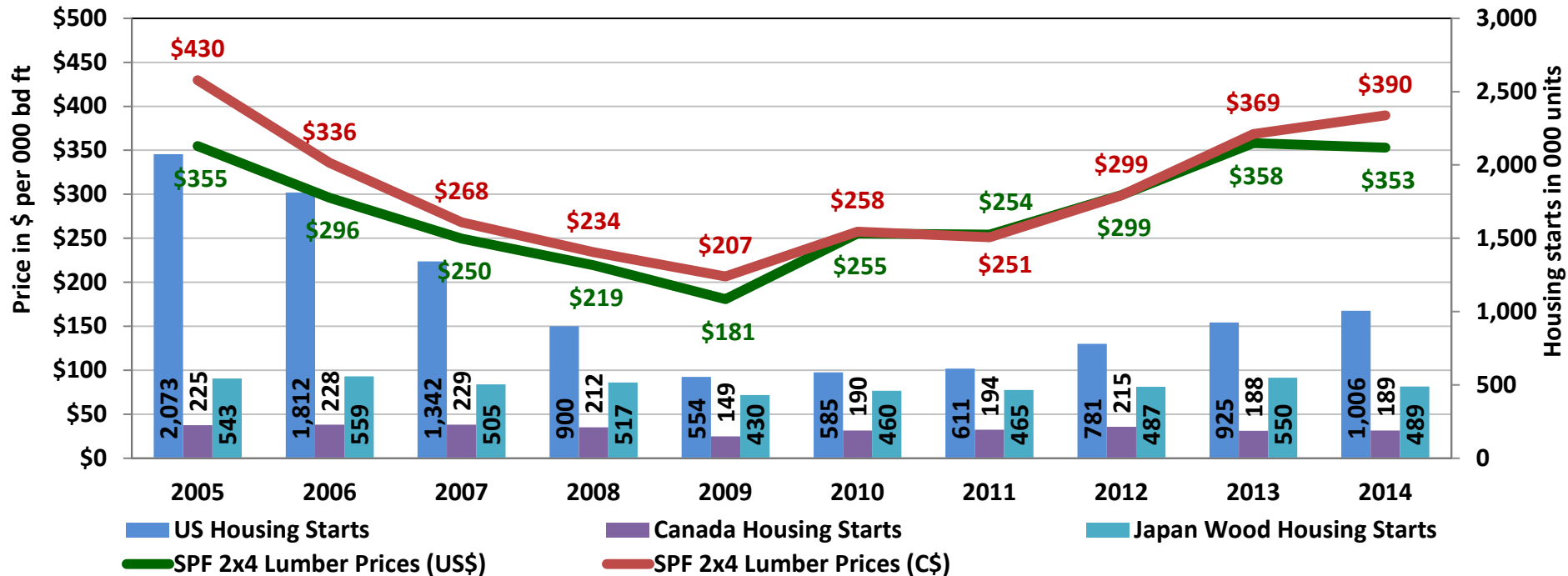
Data source: B.C. Stats extract from Statistics Canada data. Also available from Statistics Canada CIMTD.

Markets – Logs – The value of log exports decreased by 2.2% in 2014. China (53%) remained the largest destination, and accounted for the majority of growth. South Korea (14%) fell slightly, while the U.S. (7%) and Japan (25%) had higher values in 2014 over 2013. Over the past decade China replaced the U.S. as the main log export market.

Overview of Sector Indicators

- ❖ **Prices and Costs:** Over the past decade, B.C. forest sector companies faced fluctuating product prices and an appreciating Canadian dollar and major recession, which created a challenging business environment in B.C. However, the Canadian dollar began depreciating in 2013, and this continued in 2014 which helps alleviate pressure.
- ❖ **Investment:** Preliminary results indicate forest sector capital expenditure rose from 2012 to 2013, and repair expenditures also rose from 2012 to 2013.
- ❖ **B.C.'s Share of Canadian Forest Exports:** B.C.'s share decreased slightly from 2013 to 2014.
- ❖ **Government Revenues:** Government revenues increased in fiscal year 2013/14, but were still well below years prior to the recession. As of January 2015, revenues are projected to increase in 2014/15 compared to 2013/14.

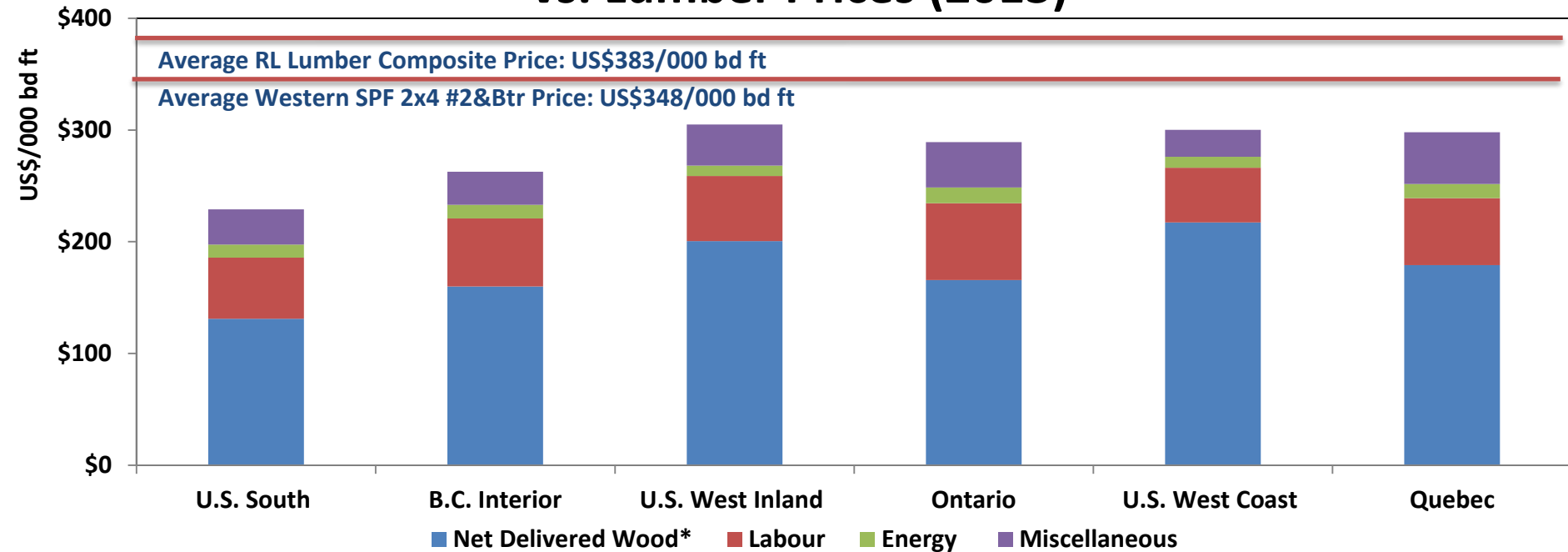
SPF 2x4 Lumber Prices and Housing Starts



Data sources: [Madison's Lumber Reporter](#) (SPF), U.S. Census Bureau, [JAWIC](#) and Statistics Canada.

Prices and Costs – North America’s housing market improved in 2014, but housing starts were still low compared to the early/mid 2000’s. Average SPF 2x4 lumber prices fell slightly in 2014.

Softwood Lumber Mills' Variable Costs vs. Lumber Prices (2013)

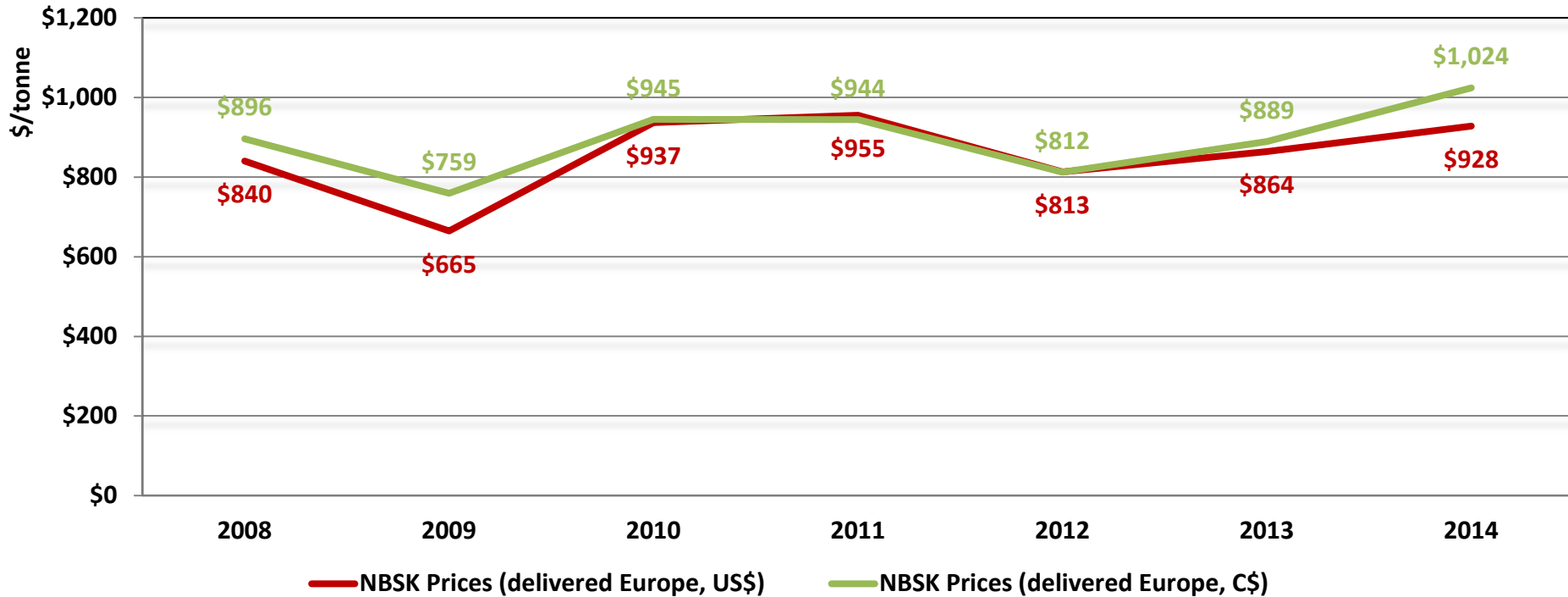


* = Delivered Wood - Residual Income

Data source: Costs are from [Forest Economic Advisors \(FEA\)](#), composite from [Random Lengths](#), and SPF from [Madison's Lumber Reporter](#).

Prices and Costs – In 2013, B.C. Interior softwood lumber mills had the second lowest variable costs in the U.S. and Canada, but the South's 2012 lead increased further. In 2011, the B.C. Interior was the lowest cost region, but in 2012 it moved to second due to increased delivered wood cost.

Market Pulp Prices



Data source: [Equity Research Associates \(ERA\)](#).

Prices and Costs – Pulp prices improved in 2014. Pricing of pulp in U.S. dollars provided B.C. producers with an improved foreign exchange profit that had disappeared in recent years, which should help cover costs of production.



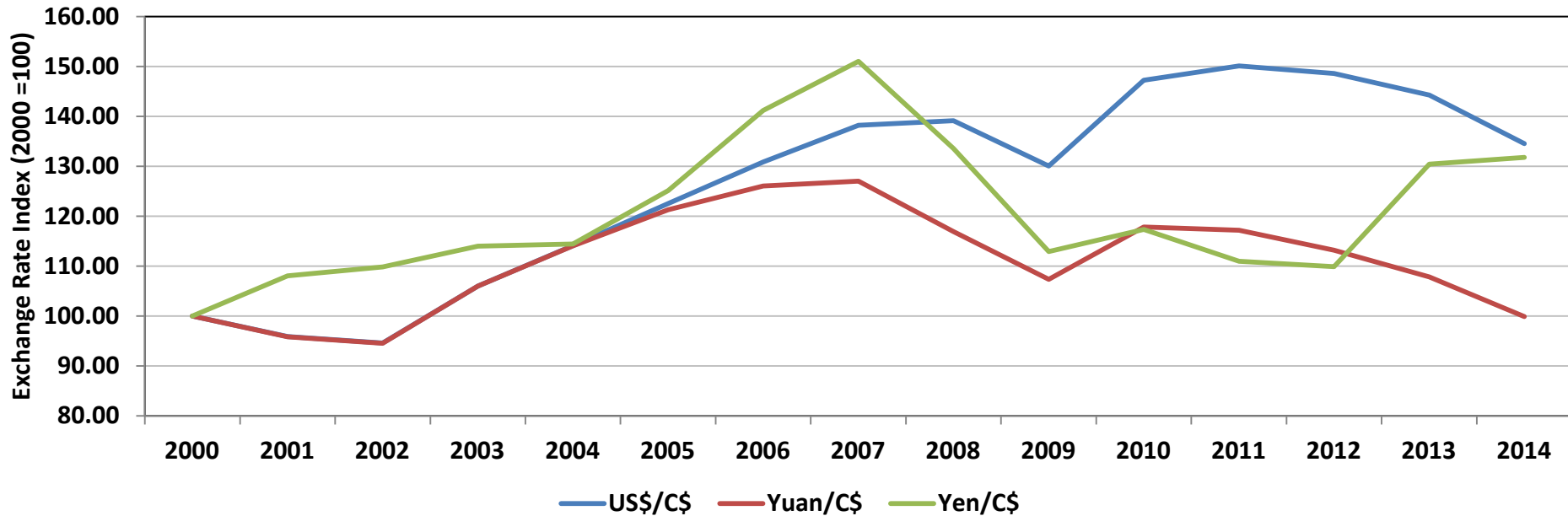
C\$ Exchange Rates Indexed to 2000

2000 Exchange Rates

0.67 US\$/CA\$
5.58 Yuan/CA\$
72.62 Yen/CA\$

2014 Exchange Rates

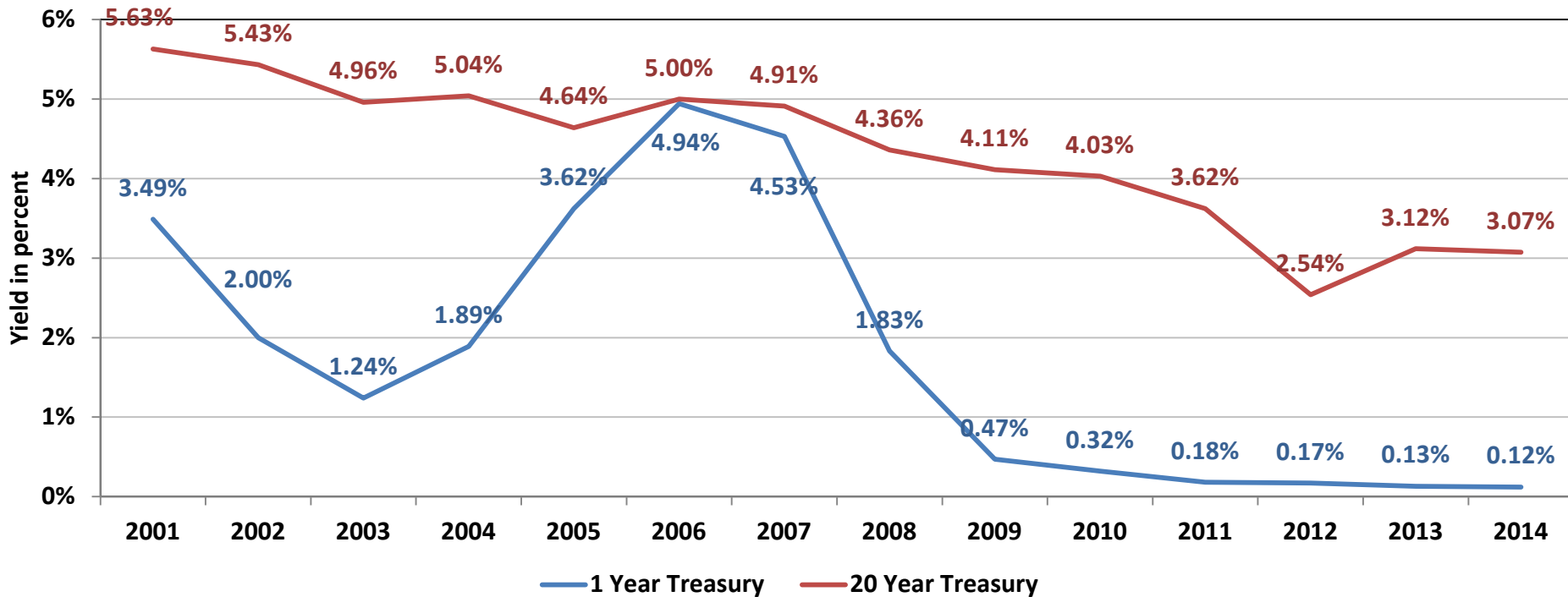
0.91 US\$/CA\$
5.57 Yuan/CA\$
95.71 Yen/CA\$



Data source: [OANDA](http://OANDA.com).

Prices and Costs – This shows the percent change in CA\$ exchange rates compared to 2000. Increases indicate appreciation of the \$CA and make Canadian exports less competitive. By the end of 2014 the CA\$ remained markedly appreciated against the US\$ and Yen compared to 2000. The Yuan was almost identical. These rates have depreciated in 2015.

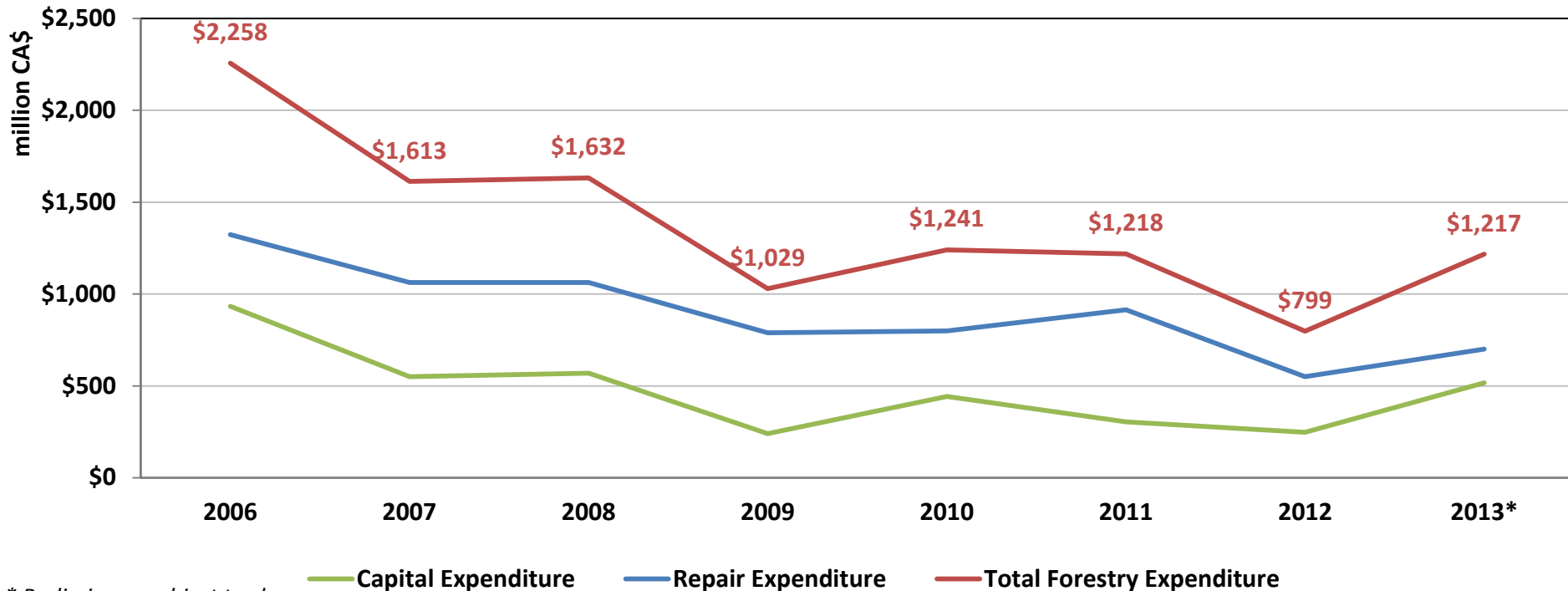
U.S. Treasury Bill Yields



Data source: U.S. Department of the Treasury.

Prices and Costs – The cost of short term borrowing decreased slightly in 2014, as did long term borrowing rates. After the financial crisis of 2008, short and long-term rates were lowered to stimulate the economy.

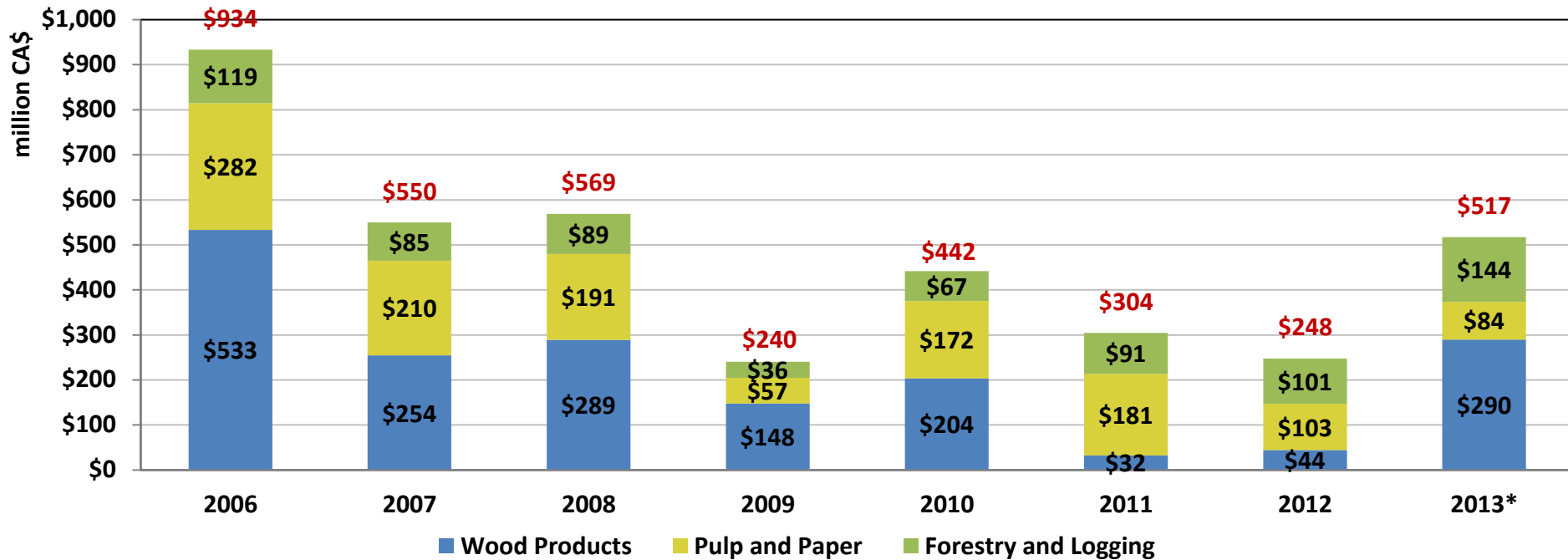
B.C. Forest Sector Capital and Repair Expenditures



Data source: Statistics Canada; CANSIM 029-0045.

Investment – B.C. forest sector investment (CA\$1,217 million) increased 52% from 2012 to 2013. Expenditure includes investment in construction (e.g. buildings and land improvements) and in machinery and equipment.

B.C. Forest Sector Capital Expenditure

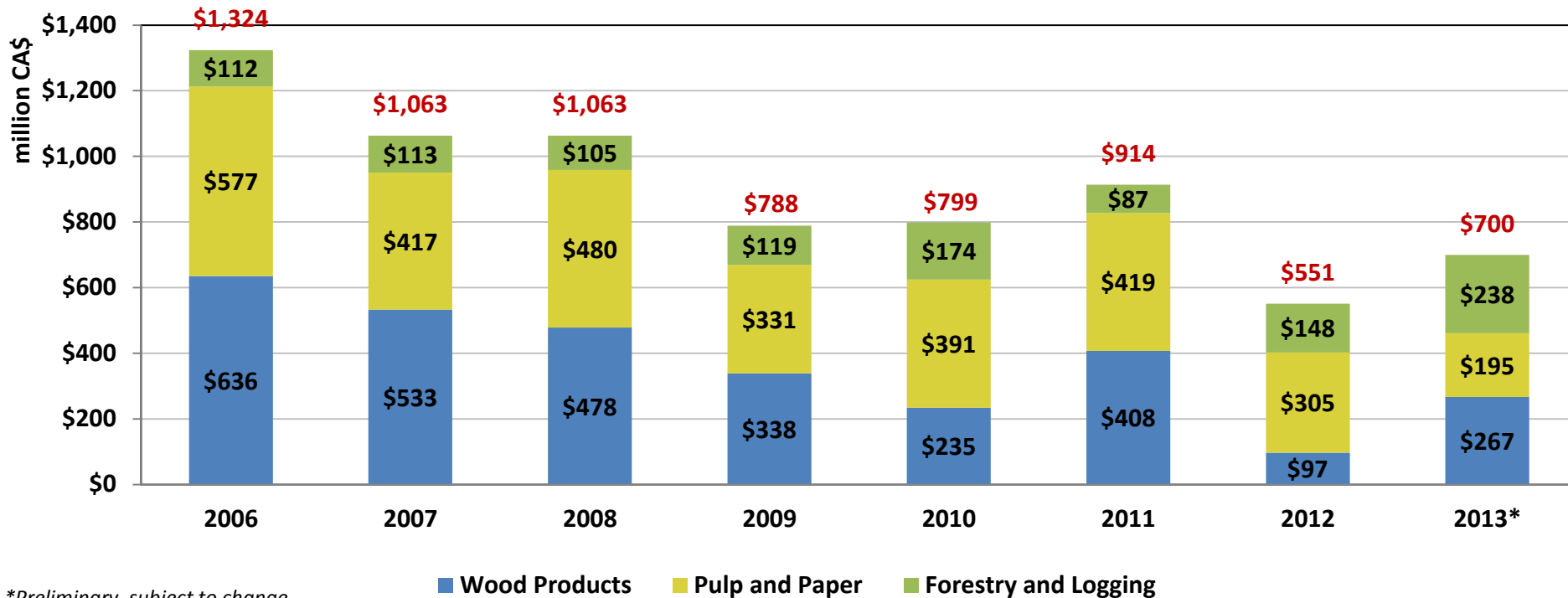


*Preliminary, subject to change.

Data source: Statistics Canada; CANSIM 029-0045.

Investment – 2013’s preliminary results indicate B.C. forest sector capital expenditures increased 109% from 2012. Wood Product Manufacturing had the highest investment (56%), followed by Forestry & Logging (28%) and Paper Manufacturing (16%). Capital expenditure includes investment in construction (e.g. buildings and land improvements) and in machinery and equipment.

B.C. Forest Sector Repair Expenditure

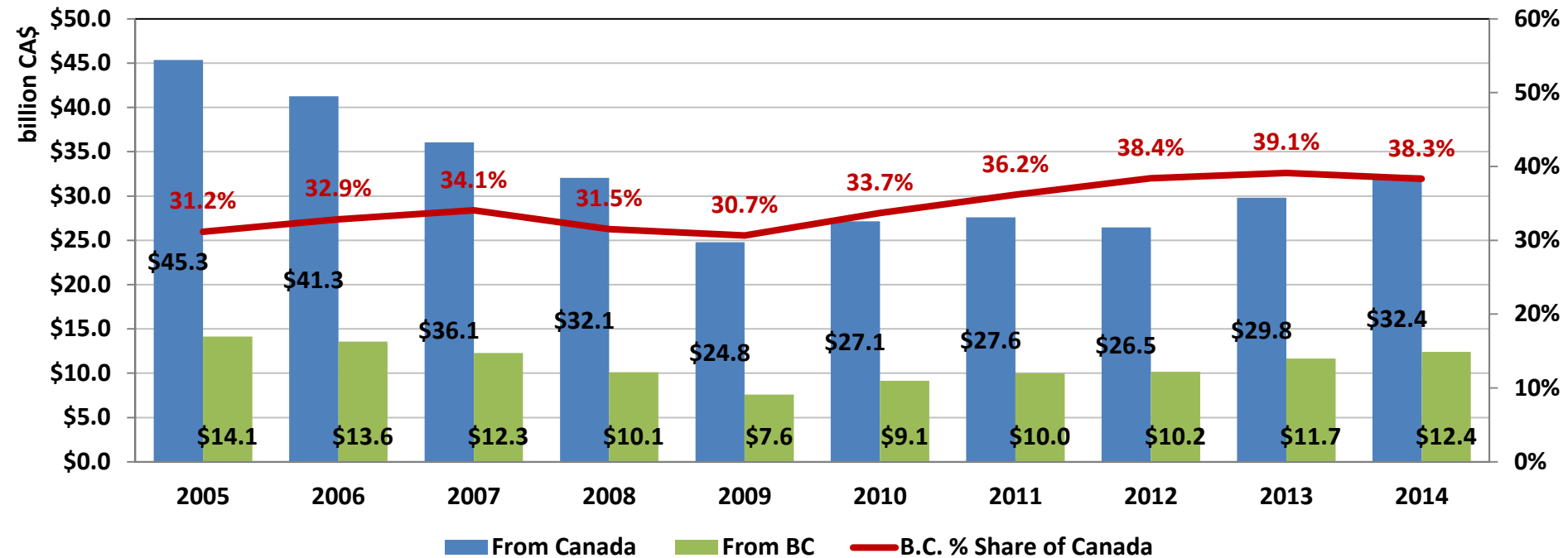


*Preliminary, subject to change.

Data source: Statistics Canada; CANSIM 029-0045

Investment – 2013's preliminary results indicate B.C. forest sector repair expenditures increased 27% from 2012. Wood Product Manufacturing had the highest investment (38%), followed by Forestry & Logging (34%) and Paper Manufacturing (28%). Repair expenditure includes investment in construction (e.g. buildings and land improvements) and in machinery and equipment.

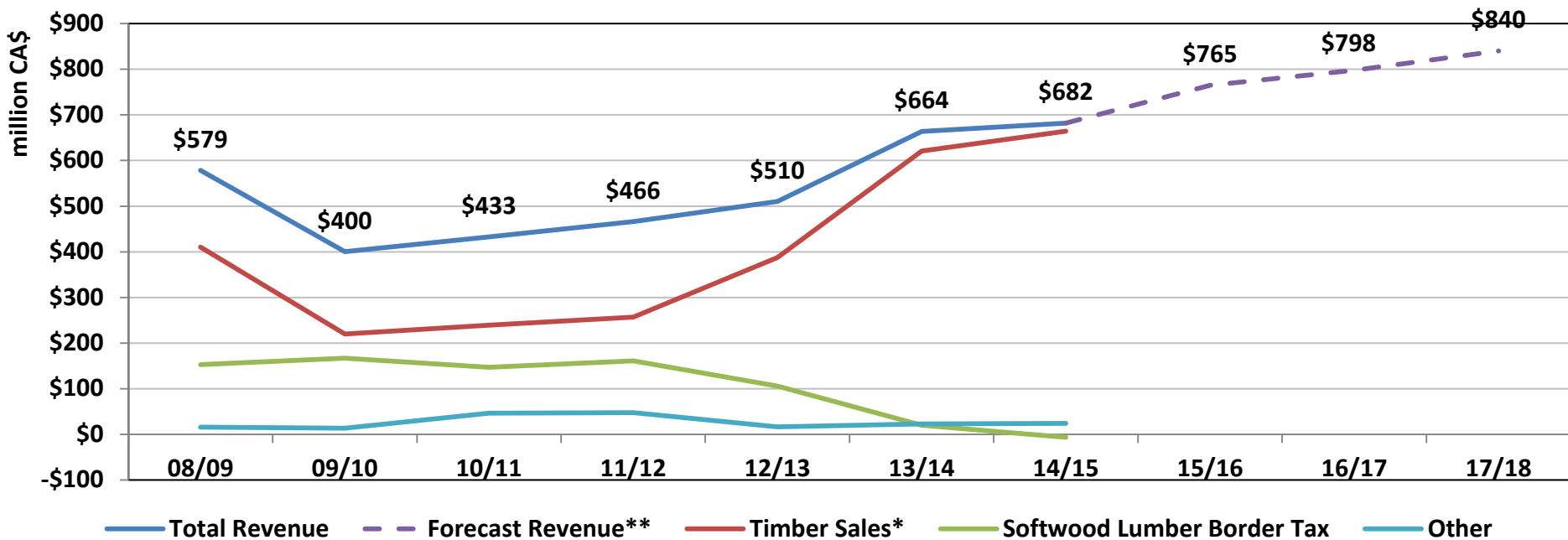
Forest Product Exports: B.C. and Canada



Data source: B.C. Stats extract from Statistics Canada data. Also available from Statistics Canada CIMTD.

B.C.'s Share – B.C.'s share of Canadian forest exports decreased slightly in 2014. Both B.C. and Canada saw the total value of forest exports rise in 2014.

B.C. Government Forest Sector Revenue, by Fiscal Year



*Timber Sales includes BCTS sales. **Excludes Other CRF Revenue, Recoveries, and Logging Tax.

Data source: B.C. FLNR. Corporate and personal income taxes are not included in these figures. While not identical, similar numbers can be viewed in the B.C. Ministry of Finance [Budget and Fiscal Plan](#), page 118. Forecasts are from the 2015/16 Budget and Fiscal Plan.

Government Revenues – In 2014/15, the B.C. government received direct forest revenues of CA\$682 million. Revenue from timber sales increased by CA\$43 million in 2014/15. Lumber prices were above the price cut-off for the Softwood Lumber Border Tax for all of 2014/15, and so the revenue is listed as negative due to administration holdbacks (-CA\$6.3 million). Revenue is forecast to increase for 2015/16.

Conclusions

- ❖ **B.C.'s forest sector showed improvement in sales value and investment in 2014, even though lumber and pulp volumes changed little and harvest declined. This suggests the increase in sales is due to changes in the exchange rate and product prices.**
- ❖ **Chinese demand for logs, lumber, and pulp continued to play a key role in the B.C. forest sector. Russia and Europe are beginning to take market share from Canada though.**
- ❖ **Compared to pre-recession B.C.'s forest sector is better diversified. China now has a major share, and the U.S. and Japan continue as major markets.**
- ❖ **More robust and diversified global demand would support further improvement in the B.C. forest sector.**
- ❖ **Innovations and investments in markets, products & technologies will make the sector more competitive.**

Outlook

- ❖ Lumber prices are expected to increase over the next several years with stronger demand (mainly from China and a recovering U.S. market) and weaker timber supply (Mountain Pine Beetle impacts and other harvesting constraints). That said, prices and housing starts have continued to be weak in 2015.
- ❖ Pulp prices increased from 2013 to 2014, though the future is less certain due to the decline in printed media, with prices declining so far in 2015.
- ❖ Foreign market demand for wood pellets and logs is expected to continue to be strong.
- ❖ Further increases in the U.S. housing market are expected over the next few years, but it should be noted recovery has been far more sluggish than anticipated.
- ❖ China continued as the world's largest importer of logs and lumber in 2014, and China is projected to continue as a major importer, though uncertainty in 2015 has raised questions about the strength of their demand.