



# 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.



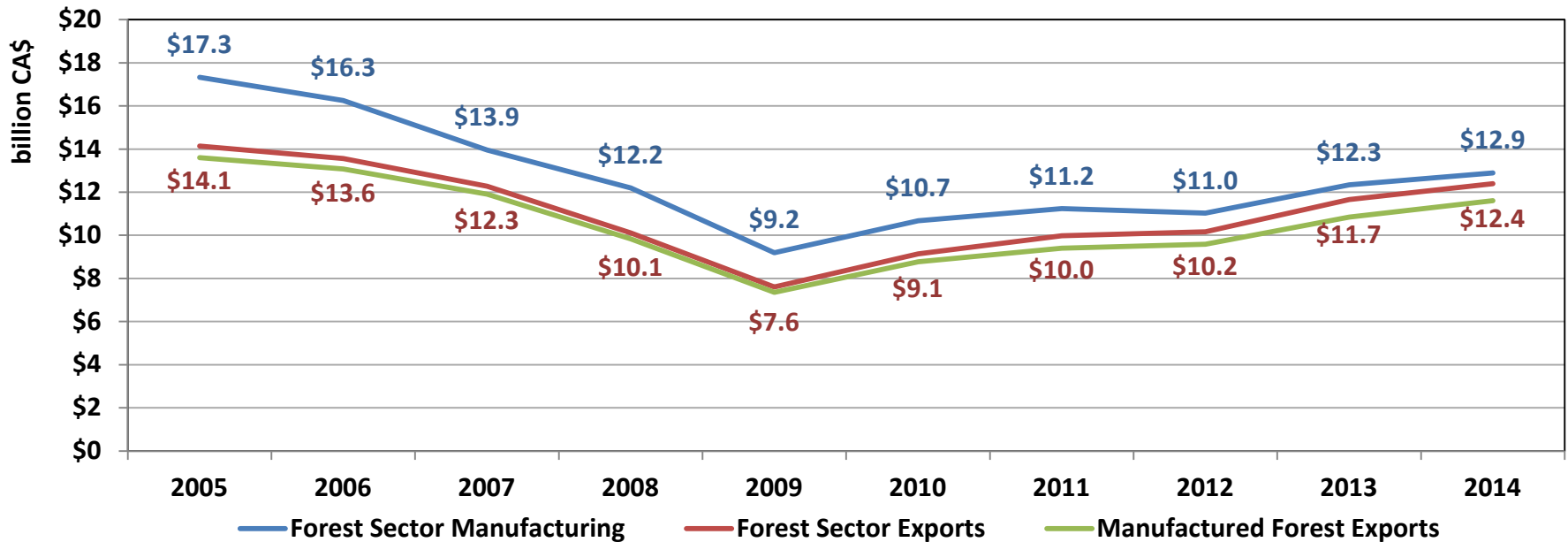
## Overview of 2014

- ❖ **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.

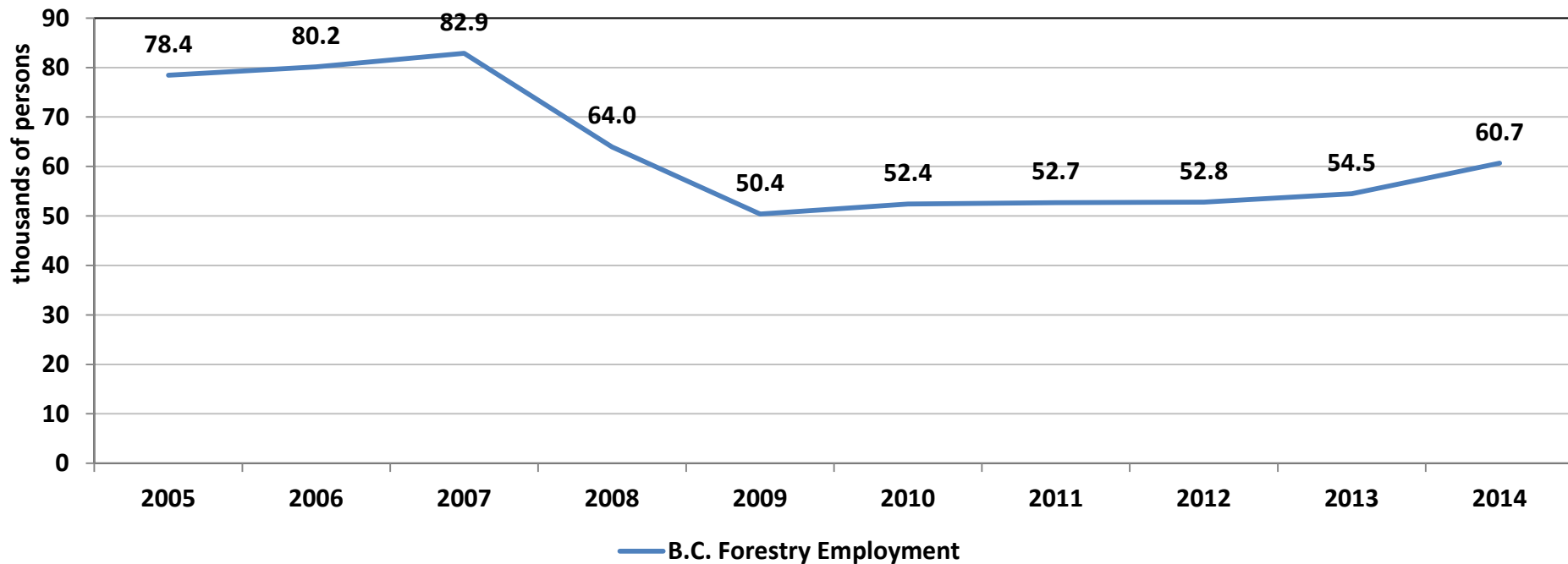
## B.C. Manufactured Forest Product Sales and Forest Exports



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

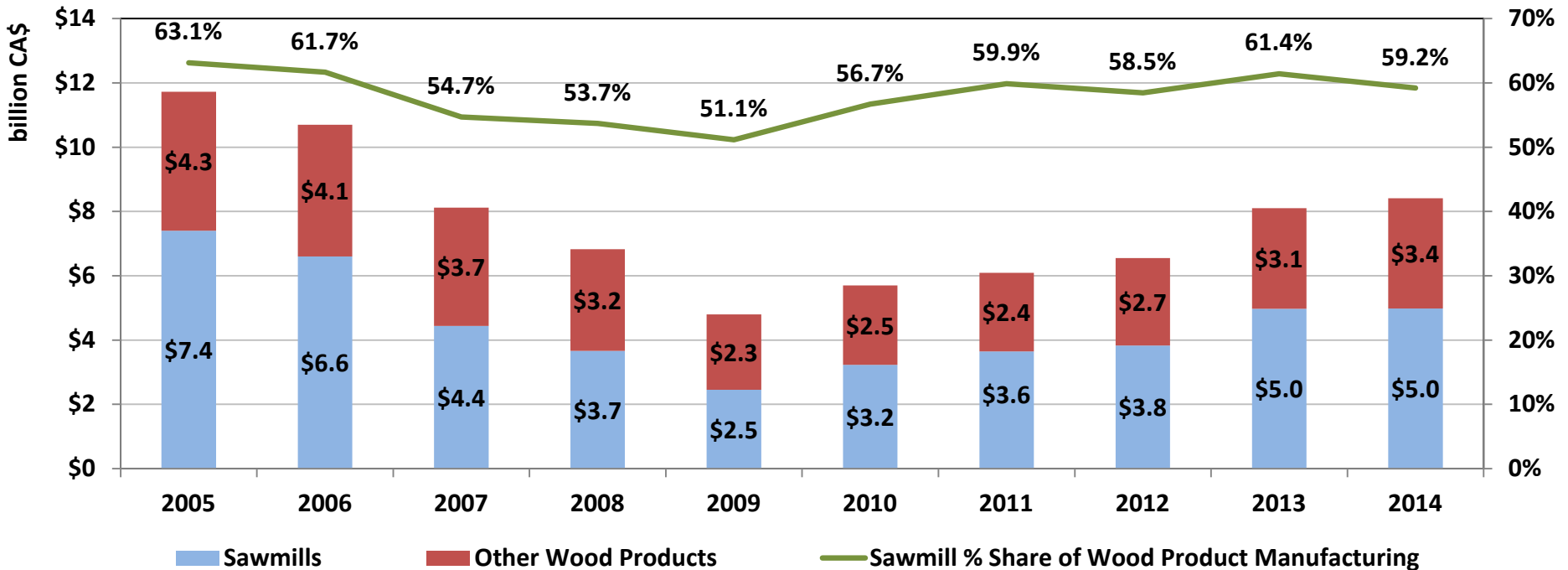
- ❖ **Wood Products, especially Lumber:** In 2014, B.C. produced 29.8 million cubic metres of lumber, or 51% of Canada's total softwood lumber production. B.C. sawmill\* sales (primarily lumber) were CA\$5.0 billion in 2014, or 59% of total Wood Product Manufacturing sales in B.C.
- ❖ **Pulp and Paper 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.



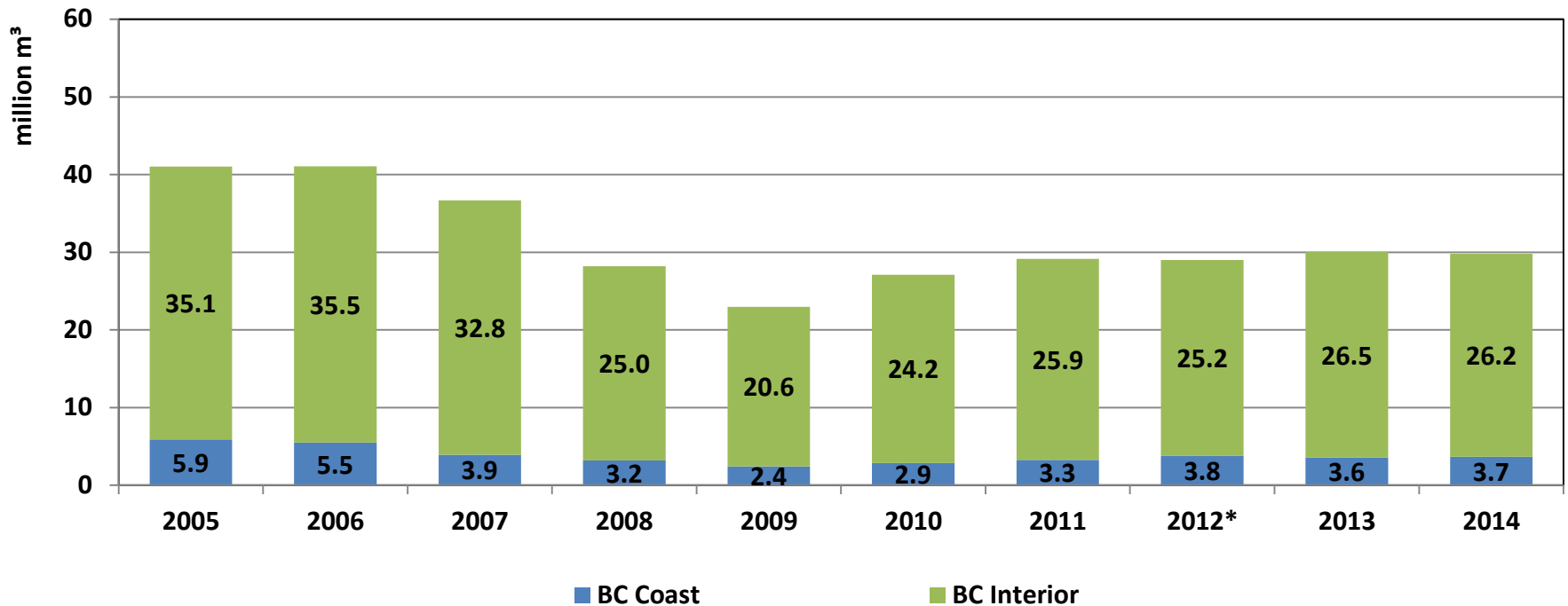
## B.C. Wood Product Manufacturing Sales



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

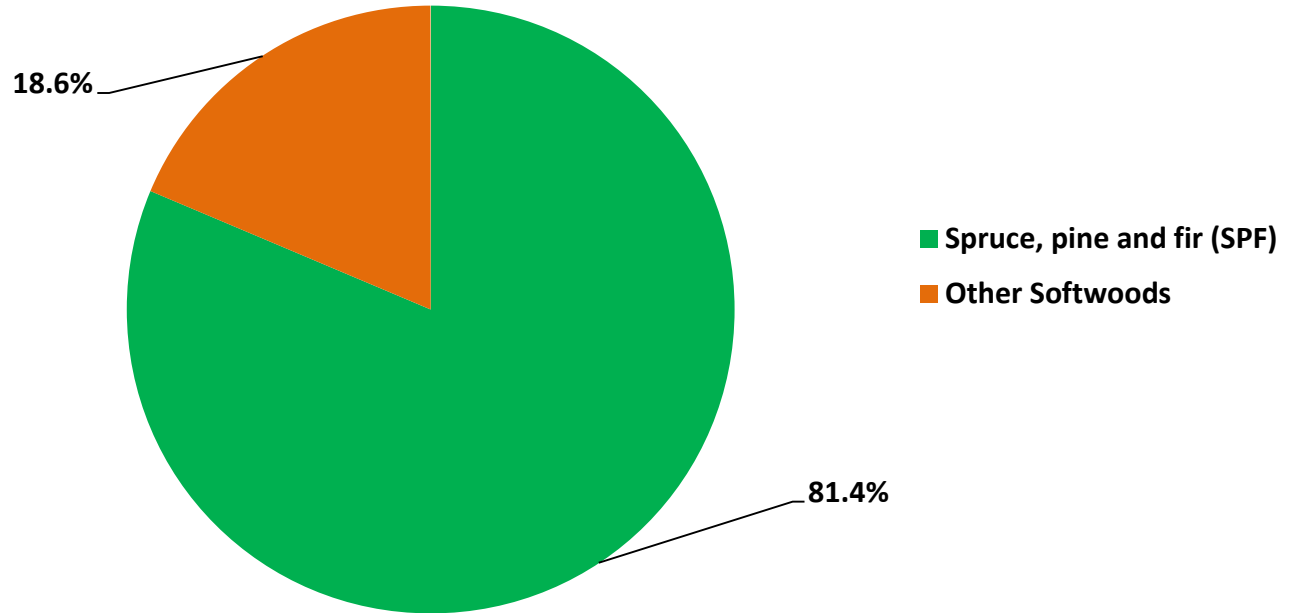


\*Interior and Coast Share are Estimates. In all years the Interior includes production from Yukon, Northwest Territories, and Nunavut.

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.**

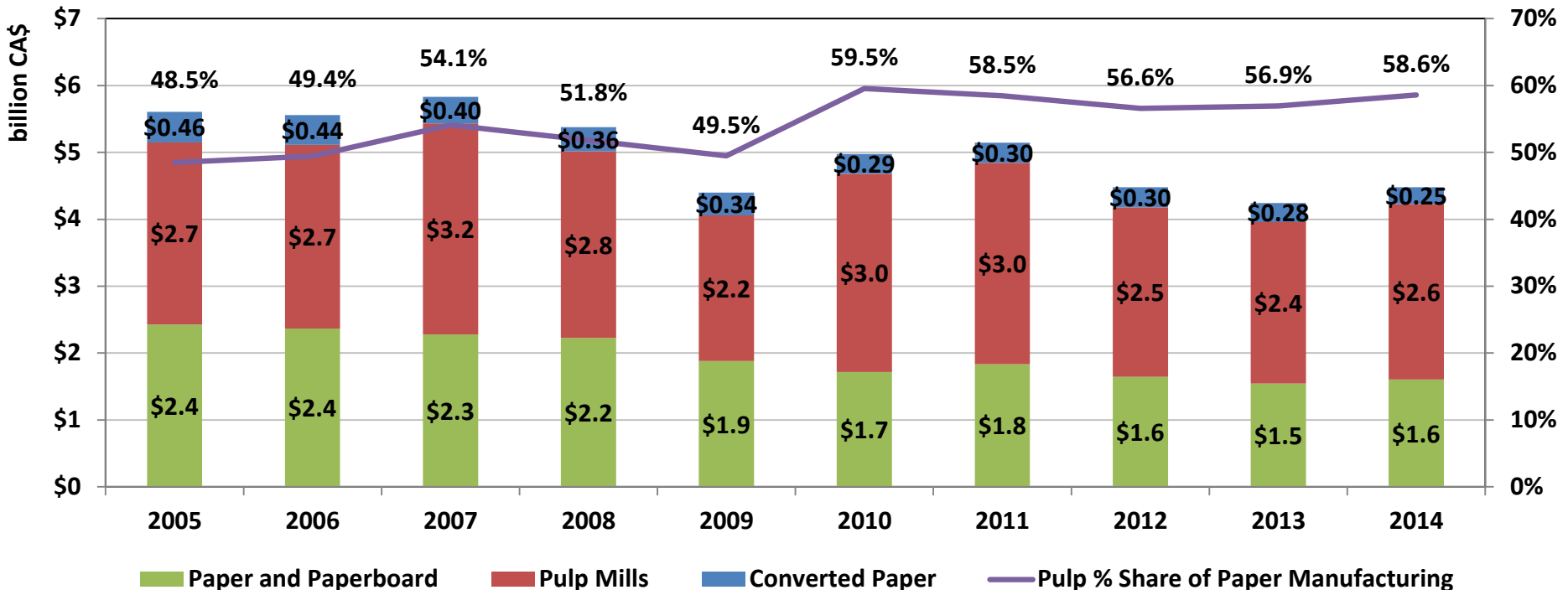
## B.C. Softwood Lumber Production (29.8 million m<sup>3</sup>) Share by Species, 2014



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

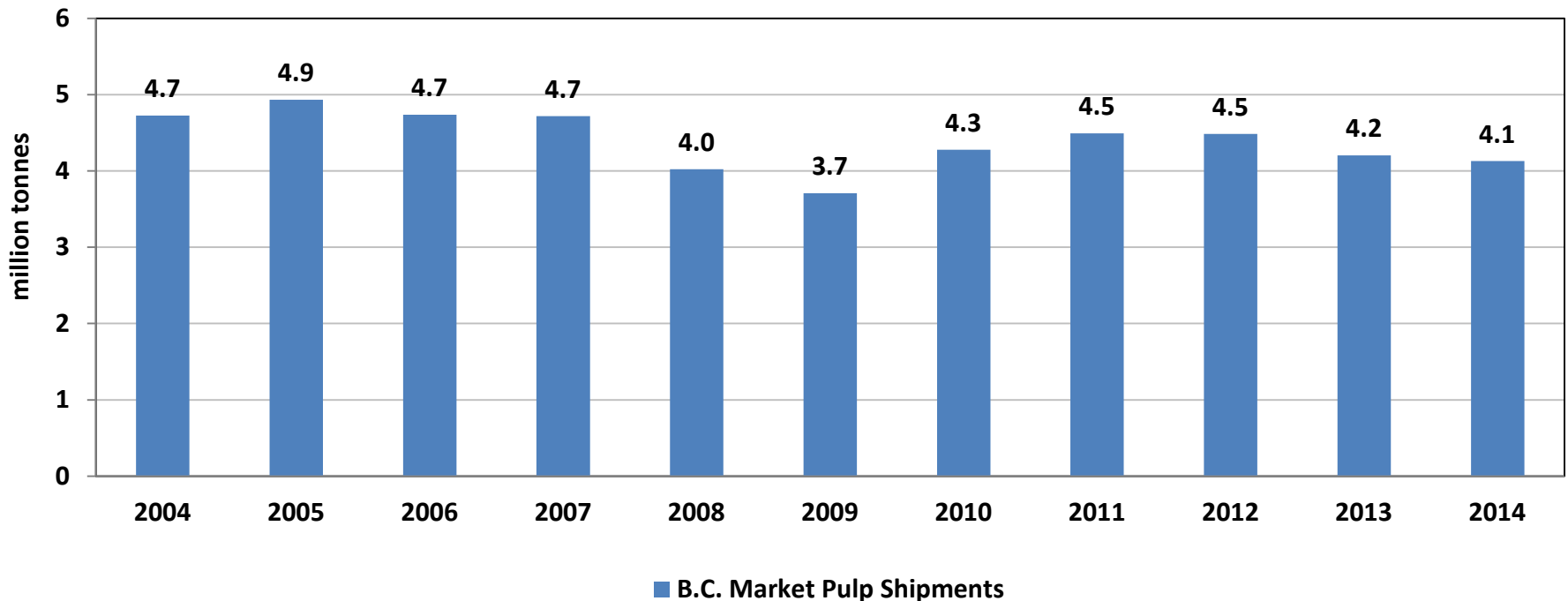


Data source: Statistics Canada; CANSIM 304-0015.

**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%.



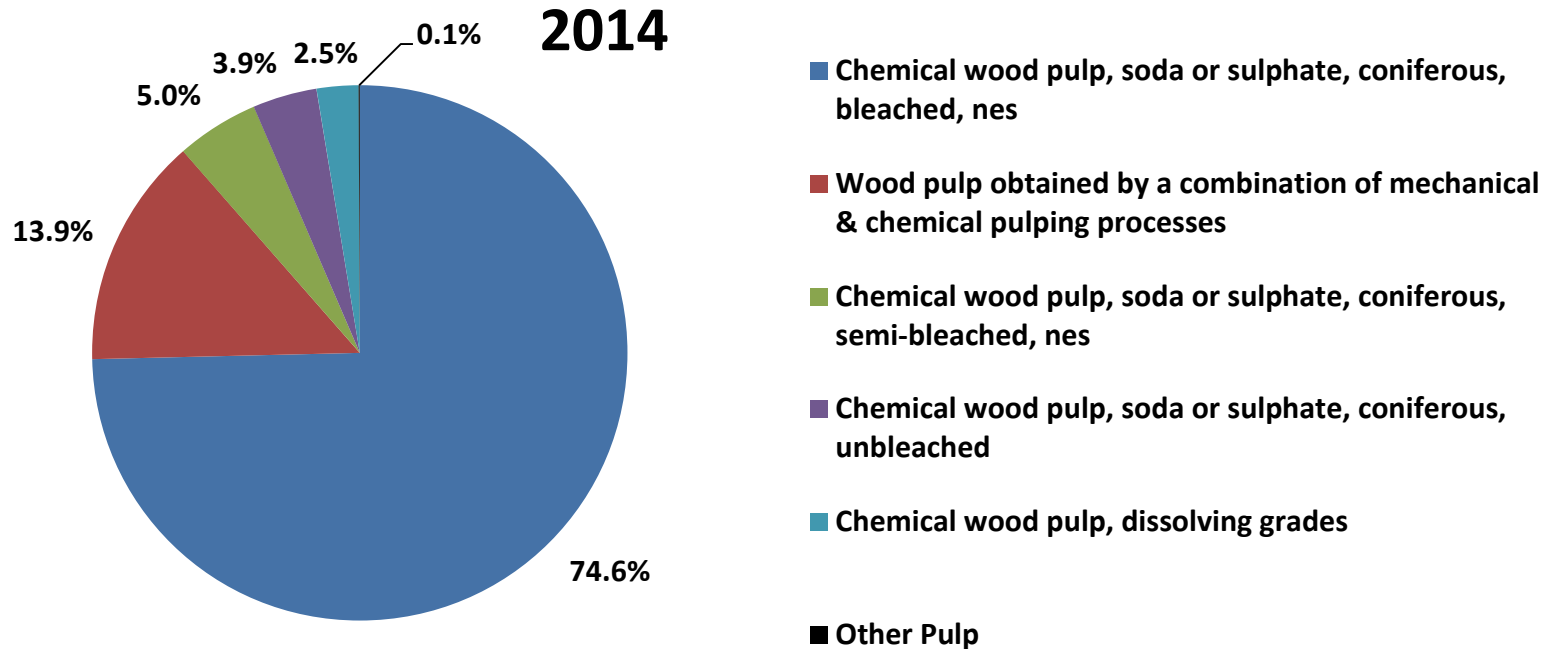
## B.C. Market Pulp Shipments



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.

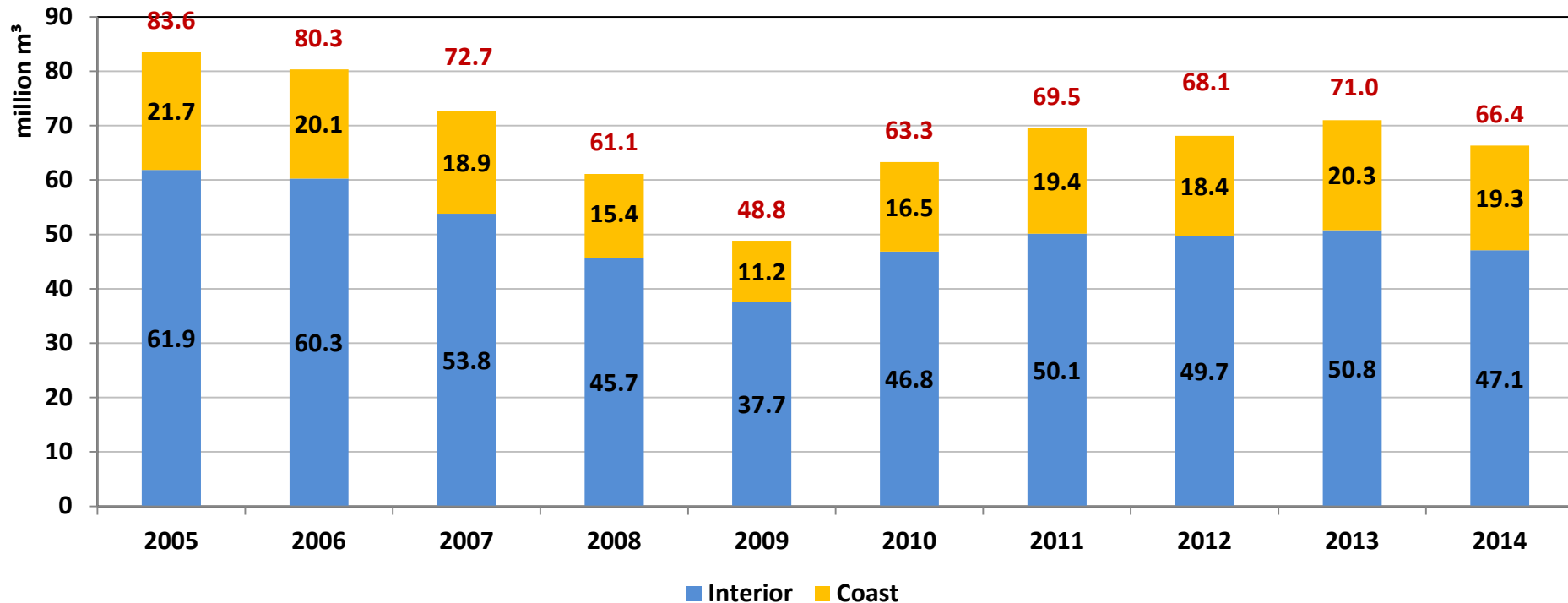
## B.C. Pulp Export Share (4.1 million tonnes) by Product, 2014



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%.**

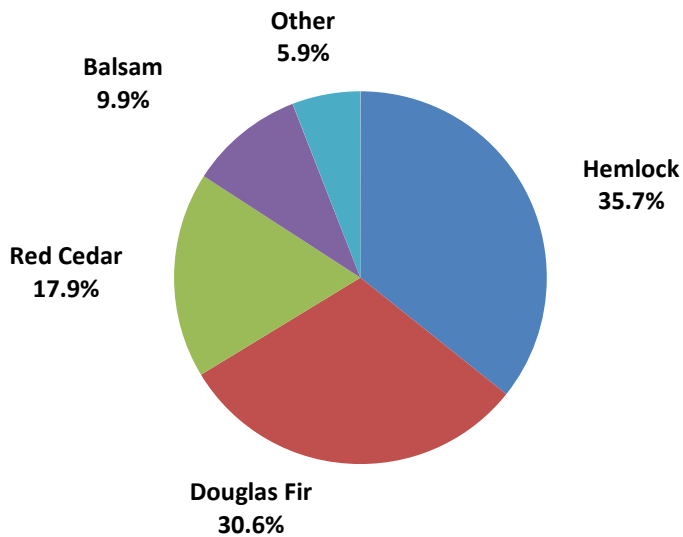
## B.C. Timber Harvest Volume



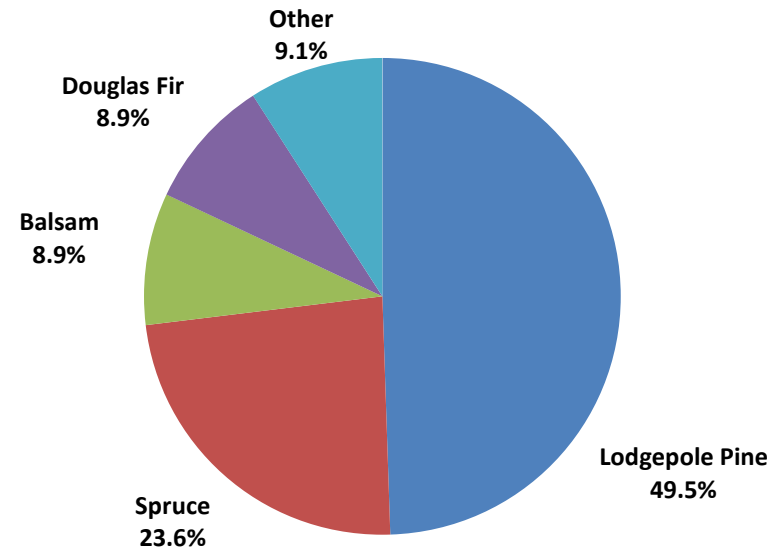
Data source: B.C. Ministry of Forests, Lands, and Natural Resource Operations (FLNR) [Harvest Billing System](#). All logs, special forest products, species and grades billed excluding waste, reject and Christmas trees, data run on June 1, 2015. Includes both Crown and Private lands.

**Products – Logs – Total harvest volume (66.4 million m<sup>3</sup>) 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. m<sup>3</sup>)



## Species Mix for 2014 B.C. Interior Harvest (47.1 mil. m<sup>3</sup>)



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

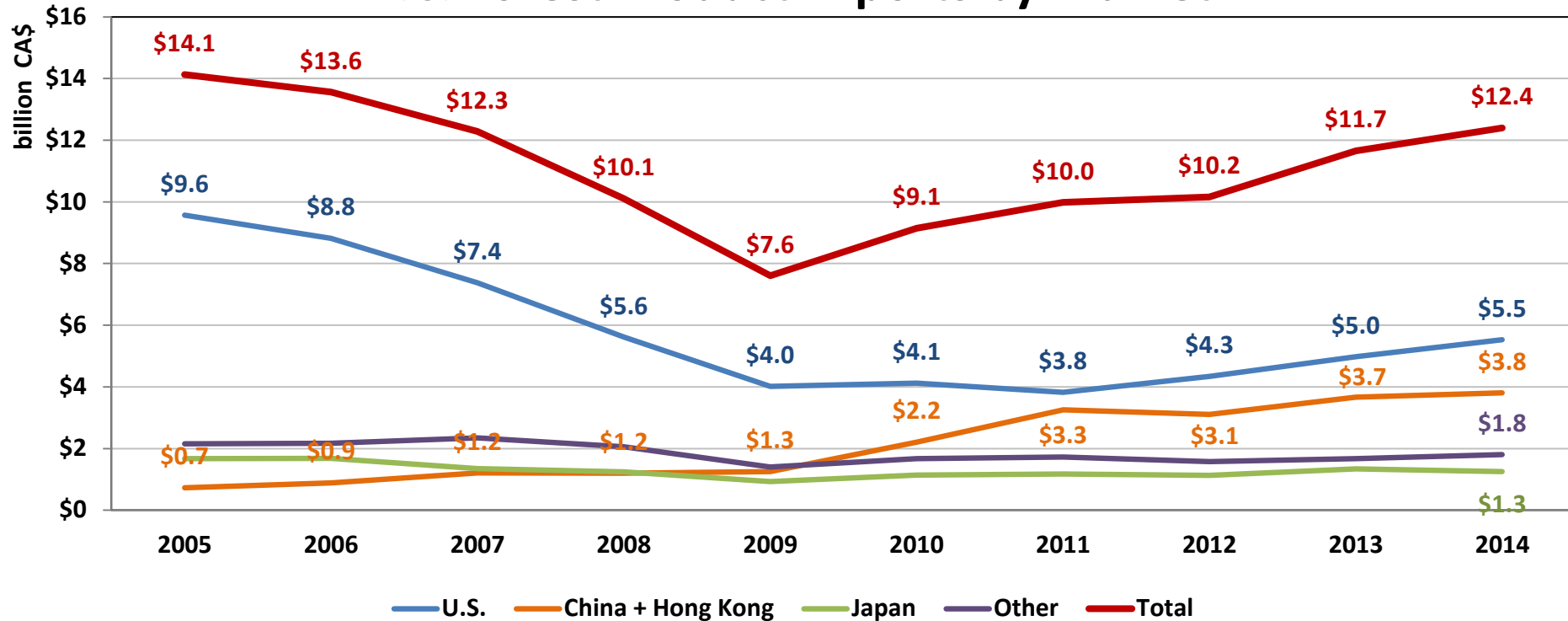
**Products – Logs – Hemlock and Douglas fir make up roughly 2/3 of the harvest on the Coast. In the Interior the main species is lodgepole pine, followed by spruce.**



## 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 3<sup>rd</sup> 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.

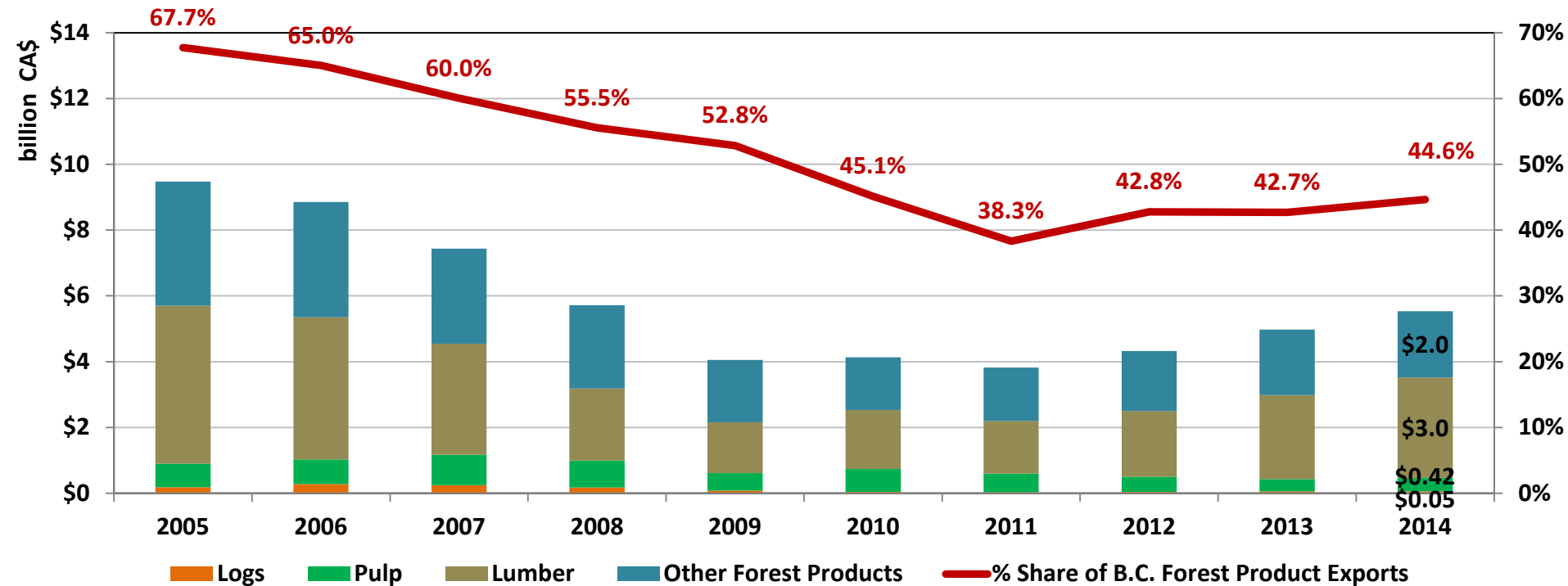
## B.C. Forest Product Exports by Market



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.

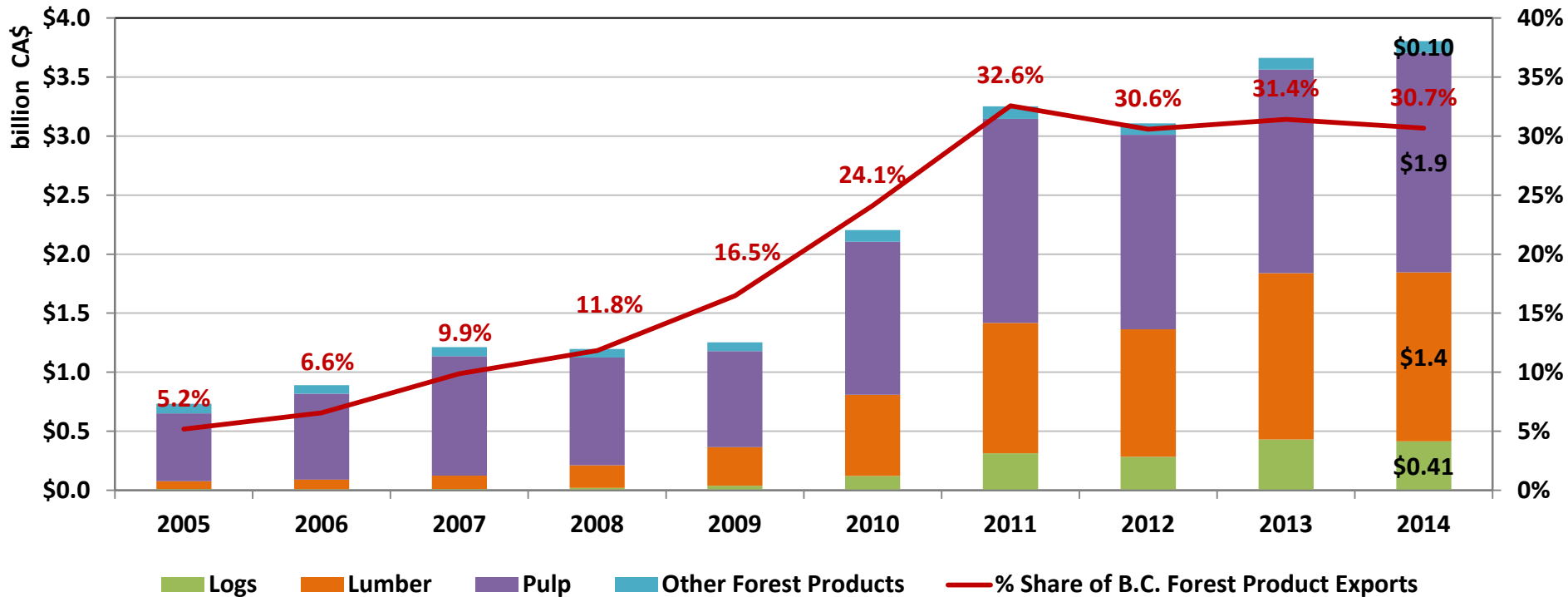
## B.C. Forest Product Exports to the United States



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

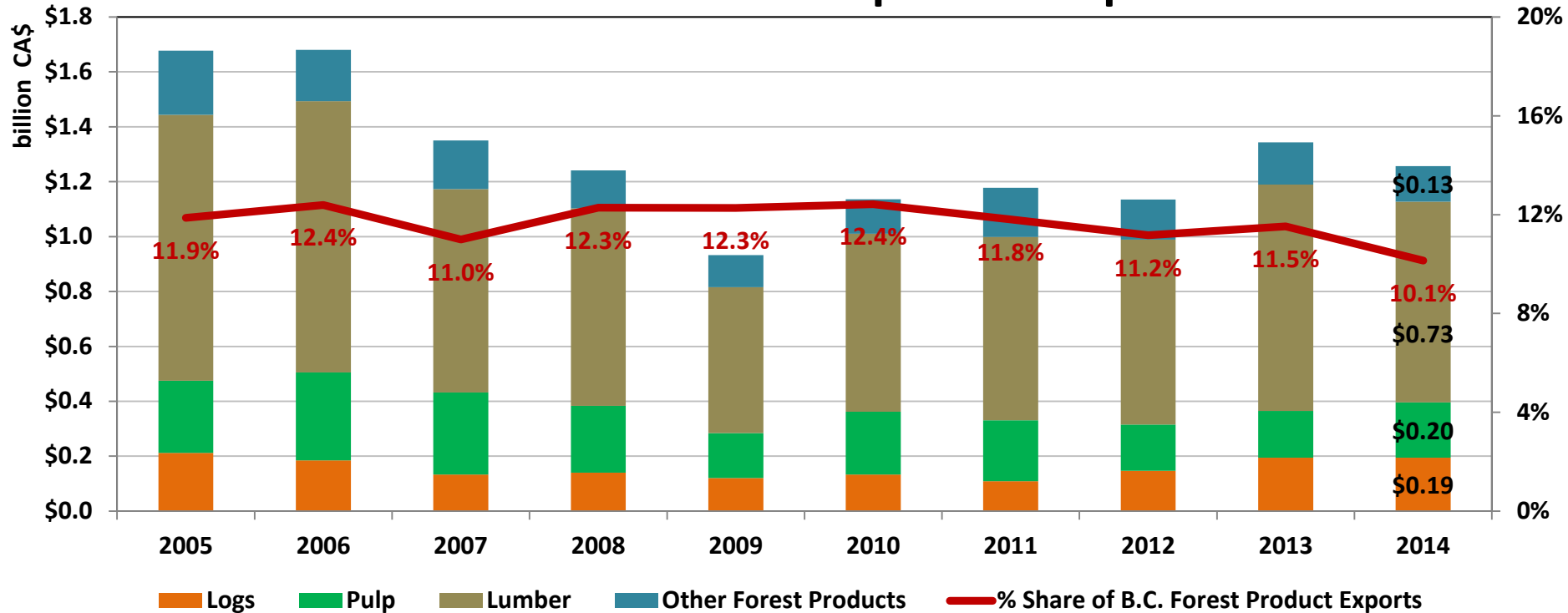


Data source: B.C. Stats extract from Statistics Canada data. Also available from Statistics Canada CIMTD.

**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.



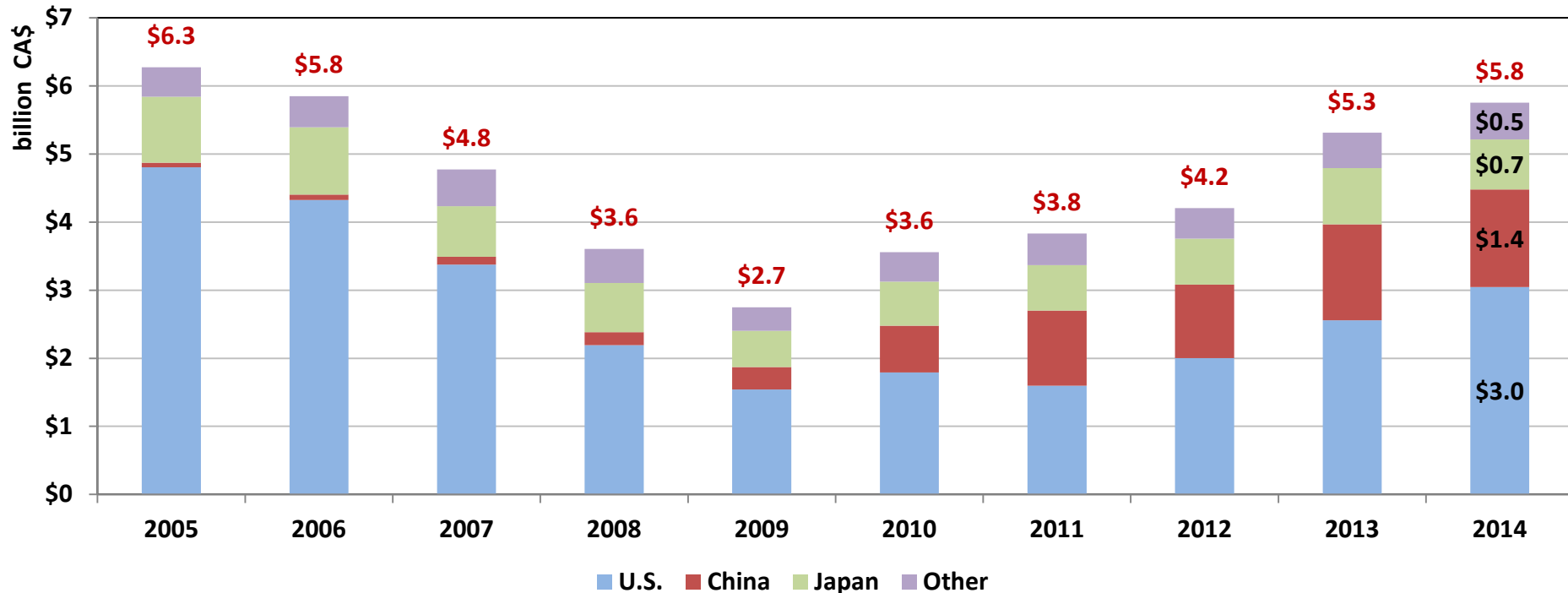
## B.C. Forest Product Exports to Japan



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.

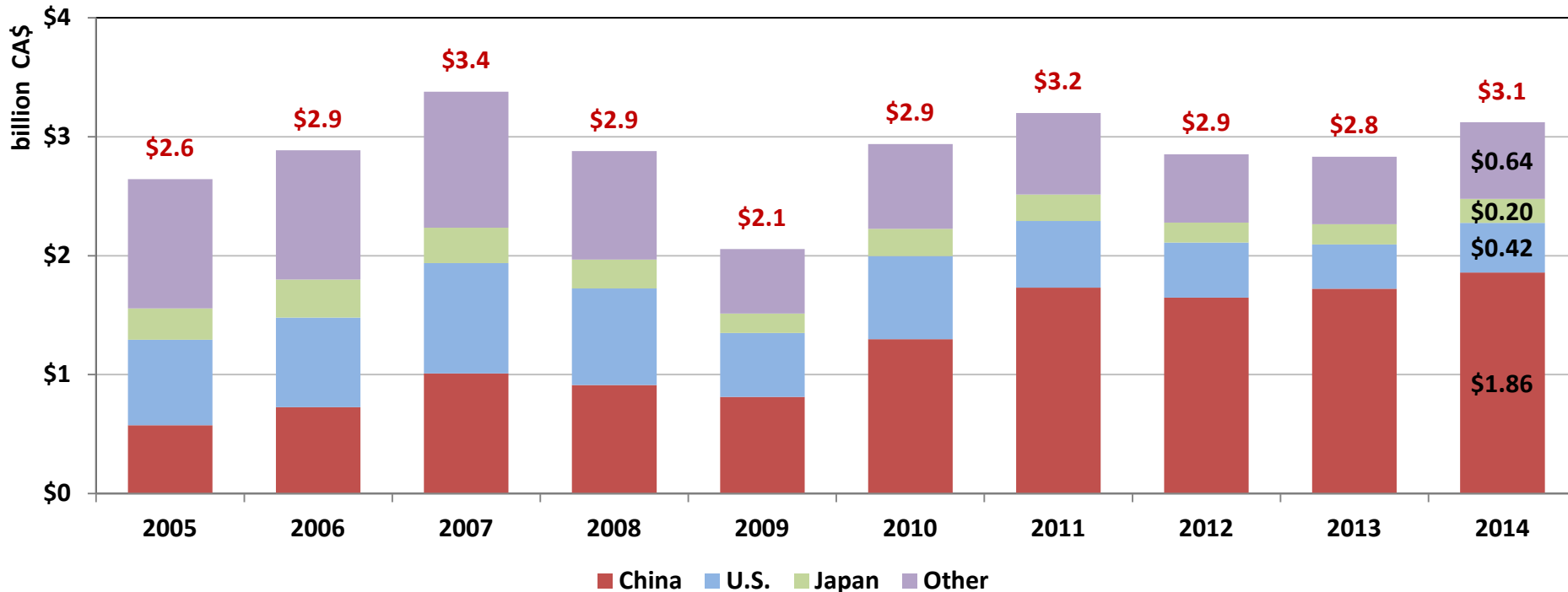
## B.C. Softwood Lumber Exports by Market



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.

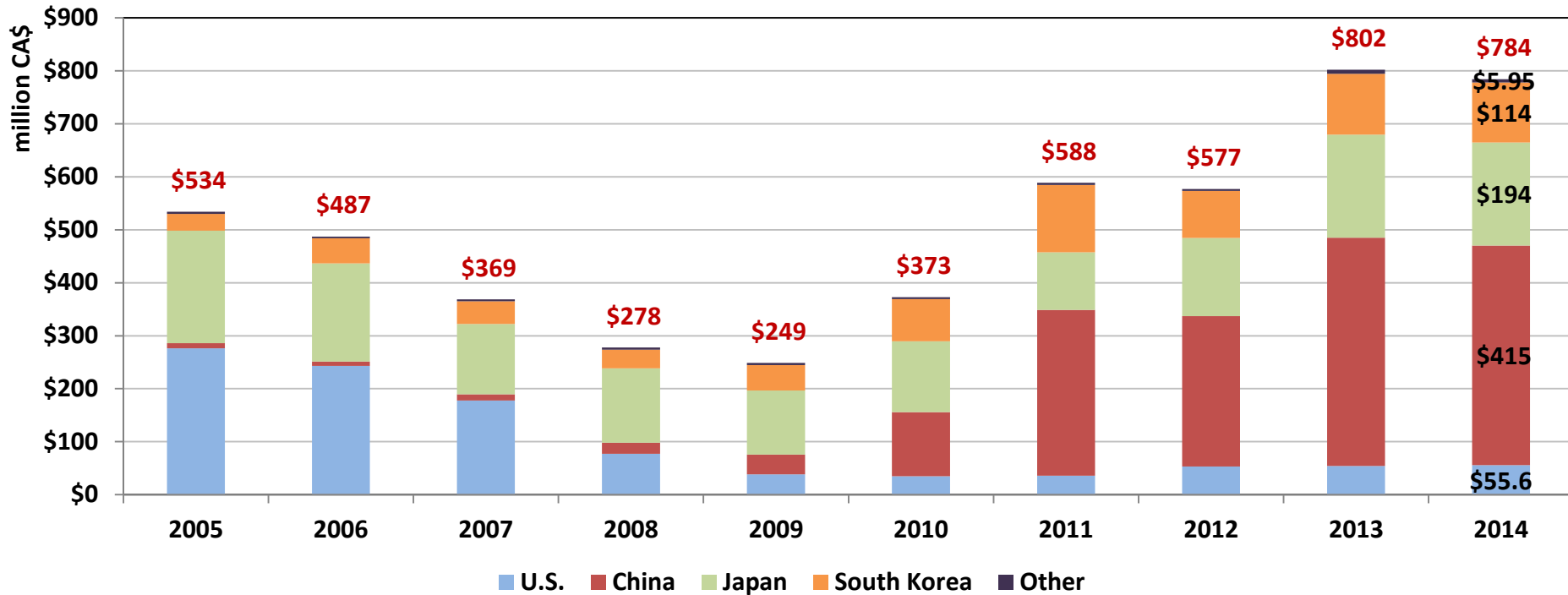
## B.C. Pulp Exports by Market



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.

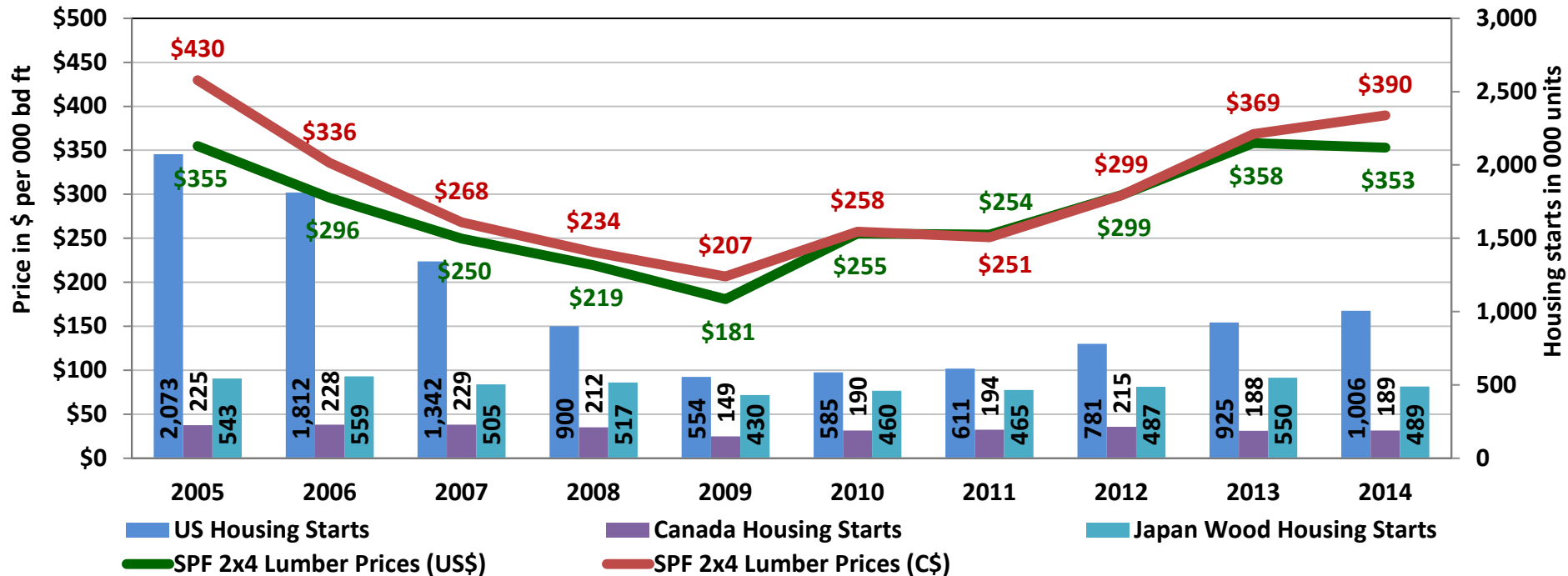
**Markets – Logs –** The value of log exports decreased by 2.2% in 2014. China (53%) remained the largest destination, and accounted for the majority of growth. South Korea (14%) fell slightly, while the U.S. (7%) and Japan (25%) had higher values in 2014 over 2013. Over the past decade China replaced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

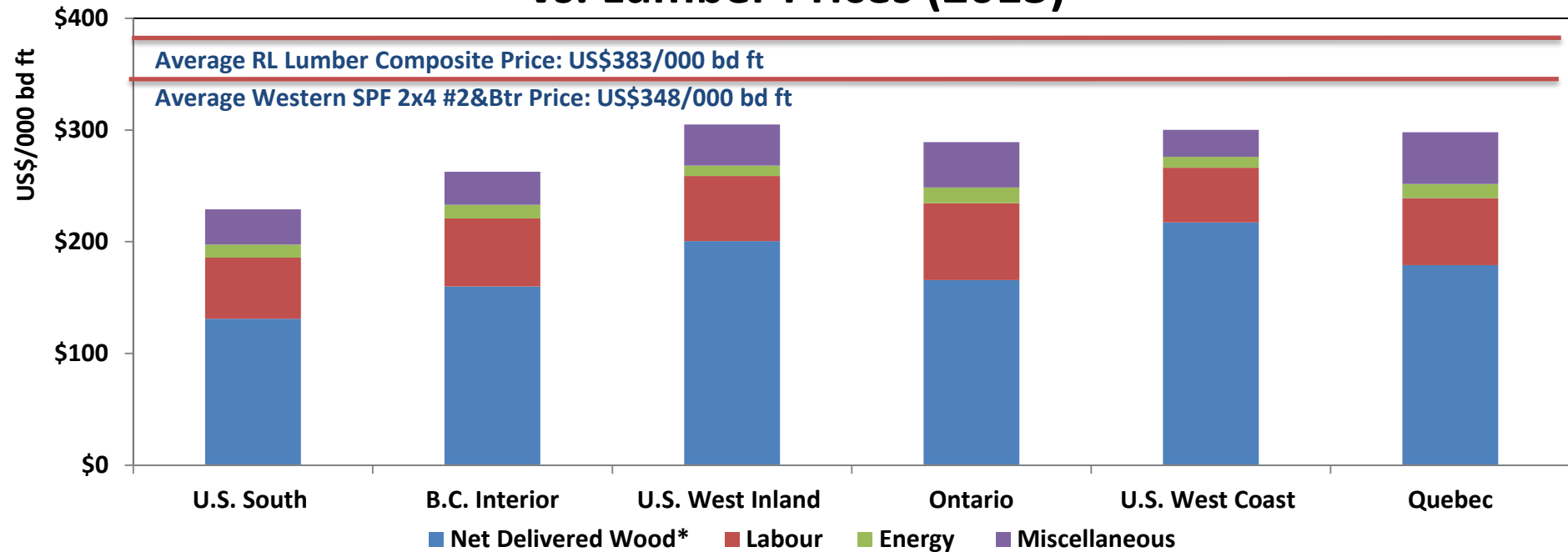
## SPF 2x4 Lumber Prices and Housing Starts



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)

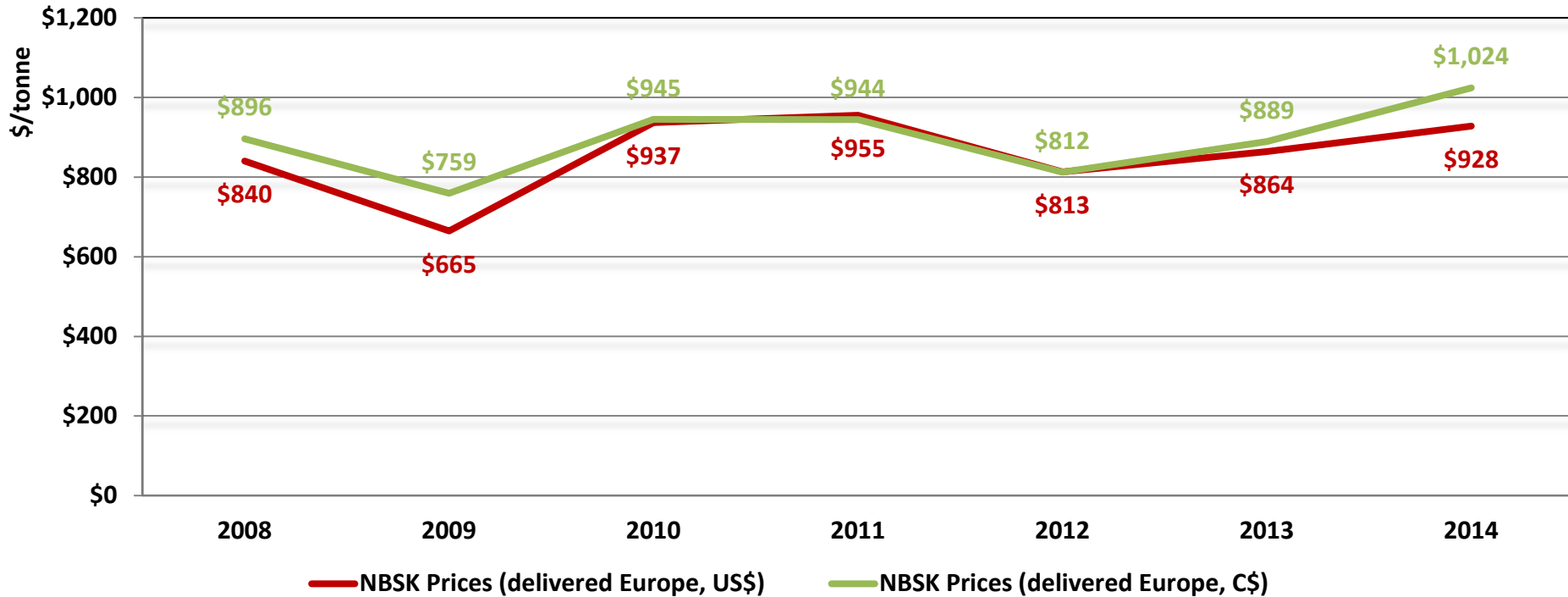


\* = Delivered Wood - Residual Income

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\$

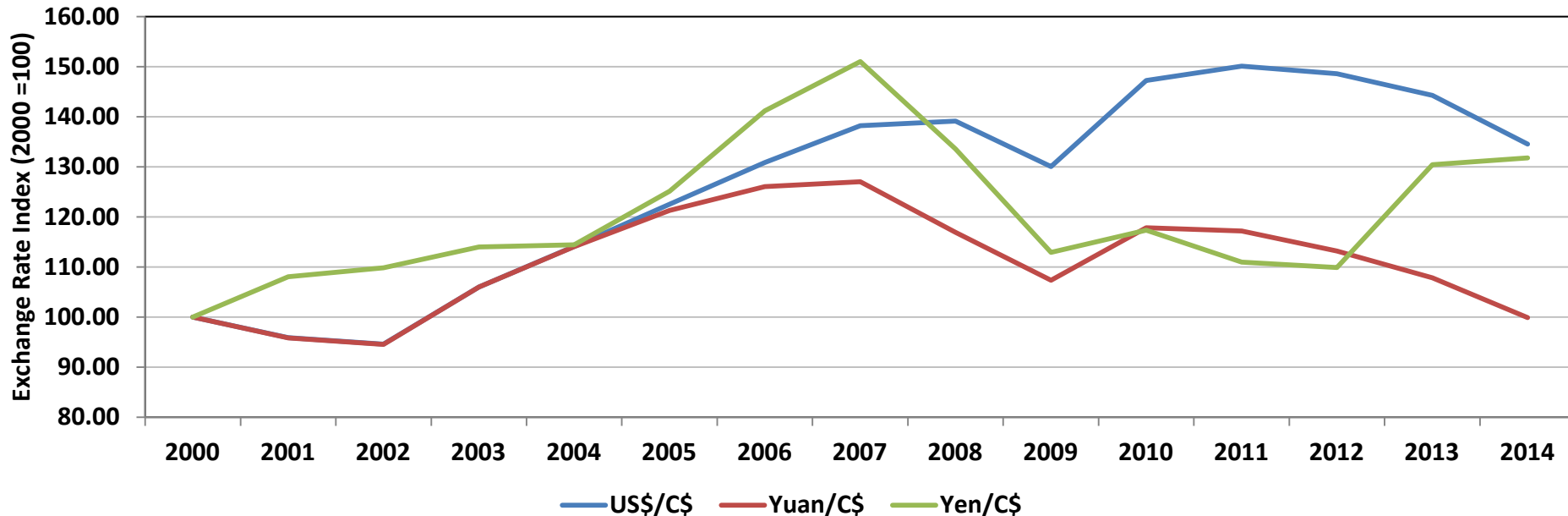
72.62 Yen/CA\$

## 2014 Exchange Rates

0.91 US\$/CA\$

5.57 Yuan/CA\$

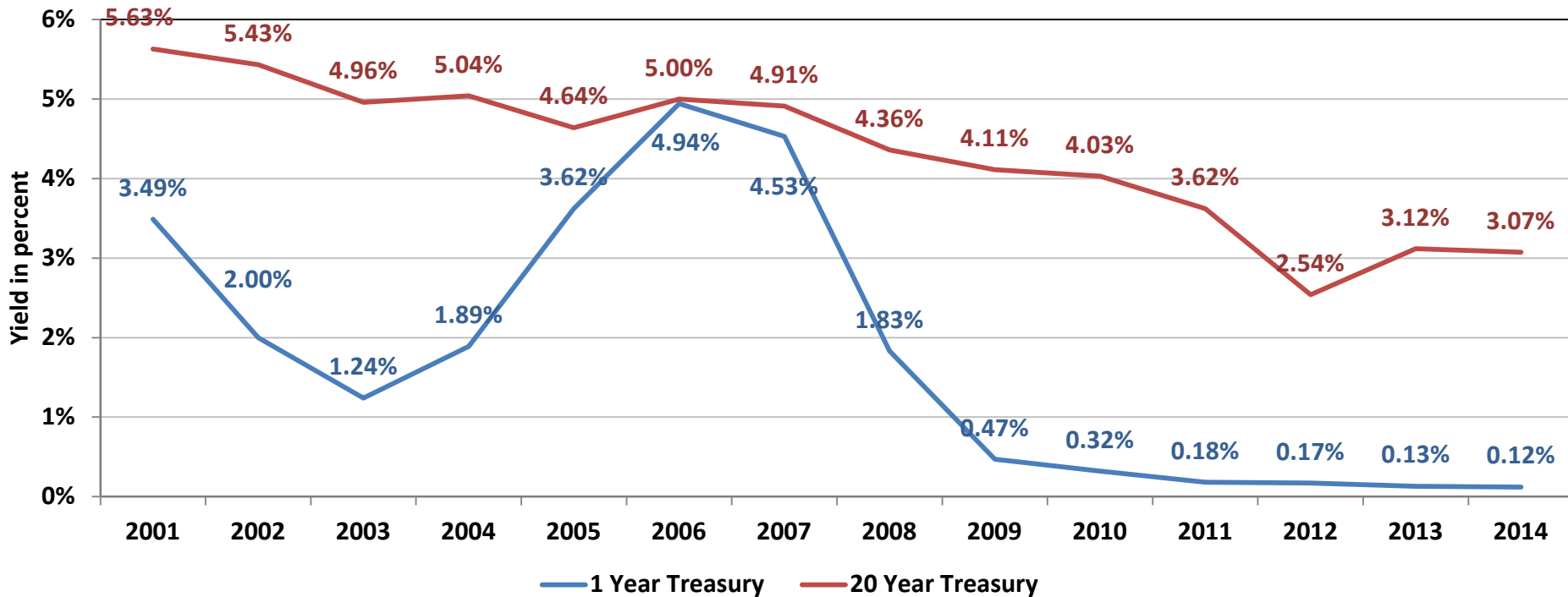
95.71 Yen/CA\$



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.

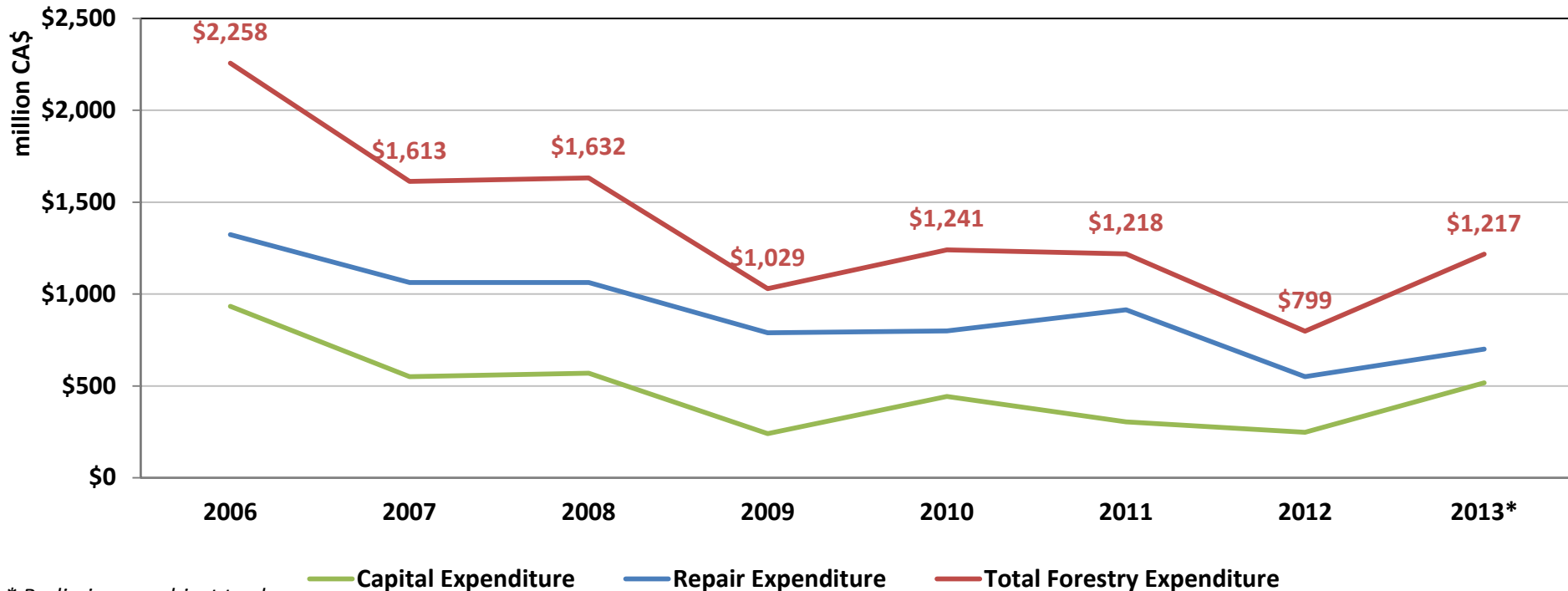
## U.S. Treasury Bill Yields



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.

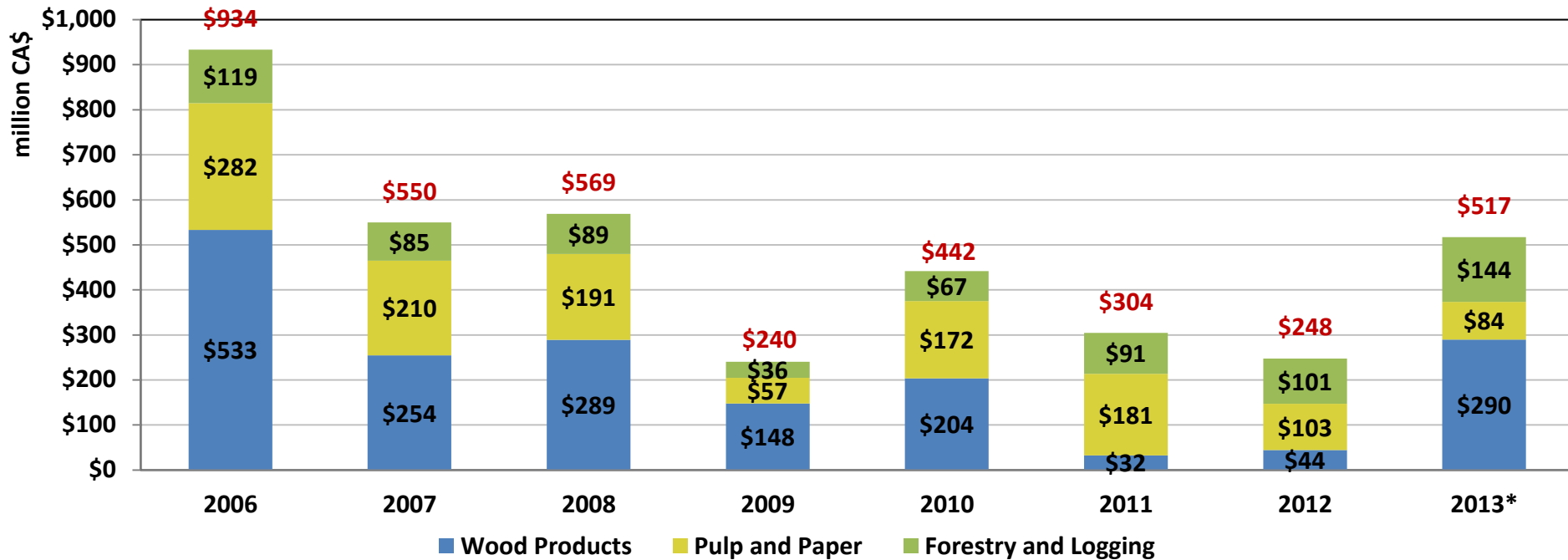
## B.C. Forest Sector Capital and Repair Expenditures



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



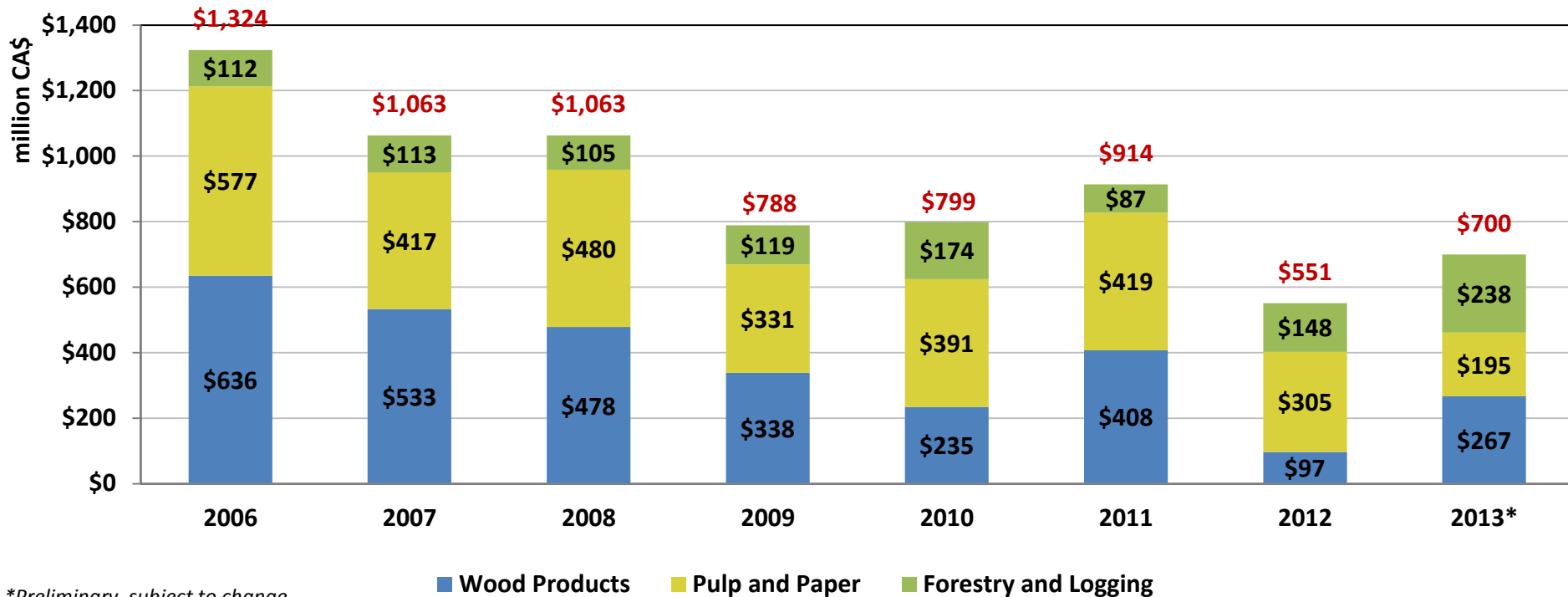
\*Preliminary, subject to change.

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

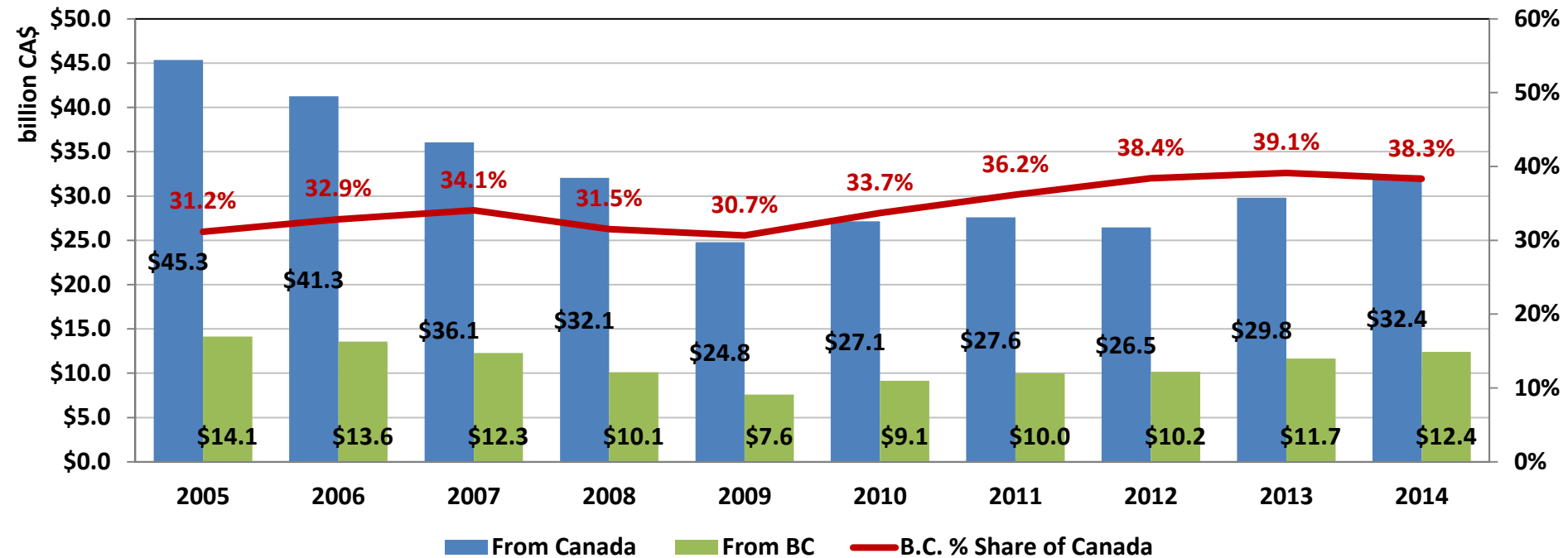


\*Preliminary, subject to change.

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.

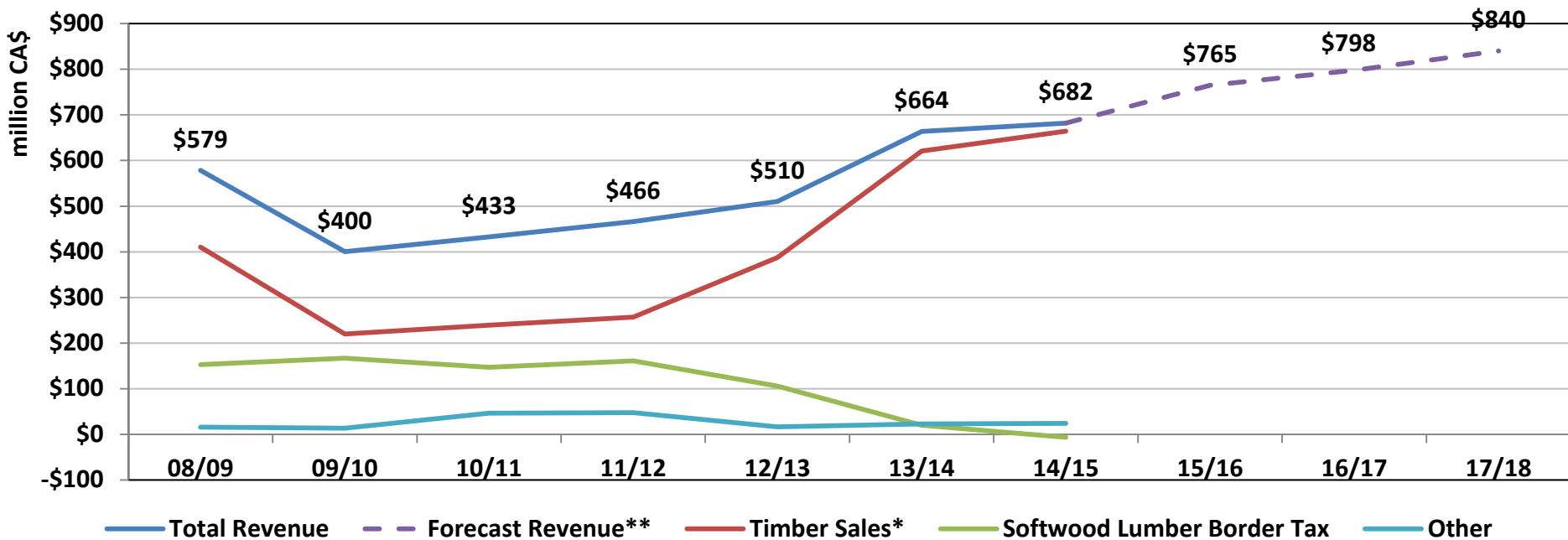
## Forest Product Exports: B.C. and Canada



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.**



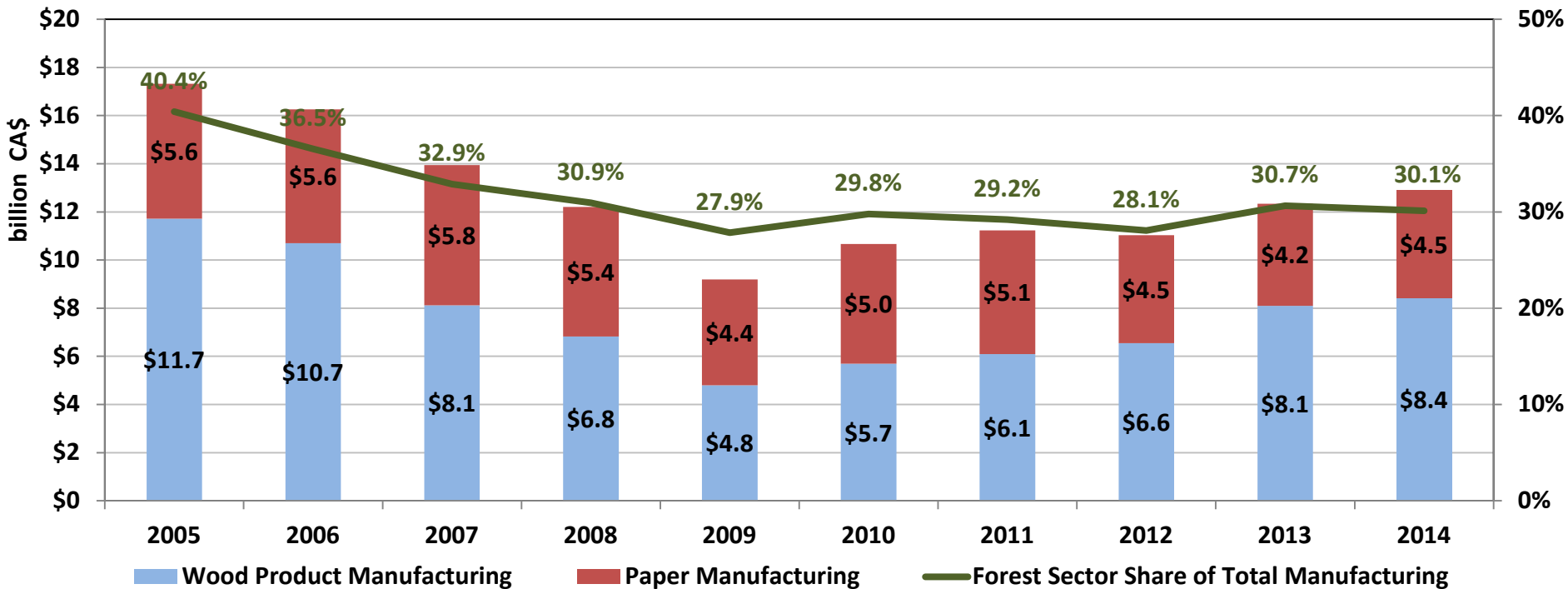
## Outlook

- ❖ 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.

# Appendix

- ❖ Overview
- ❖ Products
- ❖ Markets
- ❖ Competitiveness

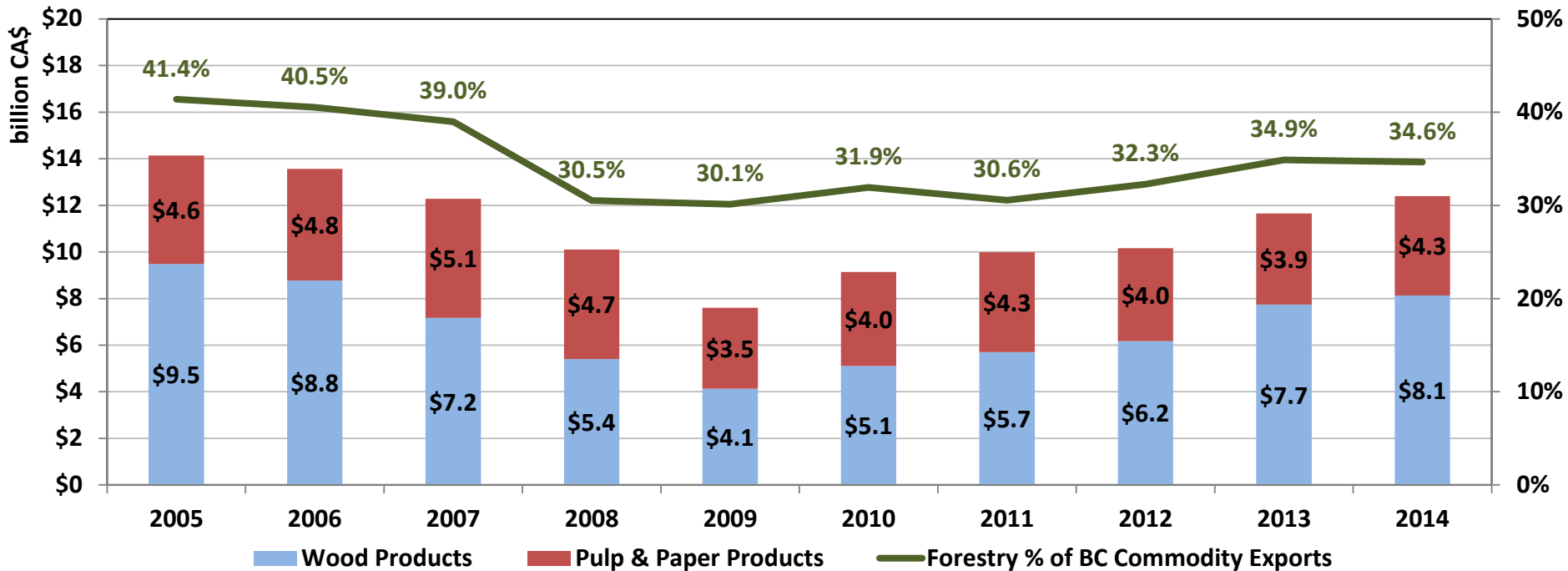
## B.C. Forest Sector Manufacturing Sales



Data source: Statistics Canada; CANSIM 304-0015.

**Overview Indicator 1a – B.C. forest sector manufacturing sales (CA\$12.9 billion) increased 4.4% from 2013, and 40% from 2009. The forest sector accounted for 30% of B.C. manufacturing sales.**

## B.C. Forest Sector Exports

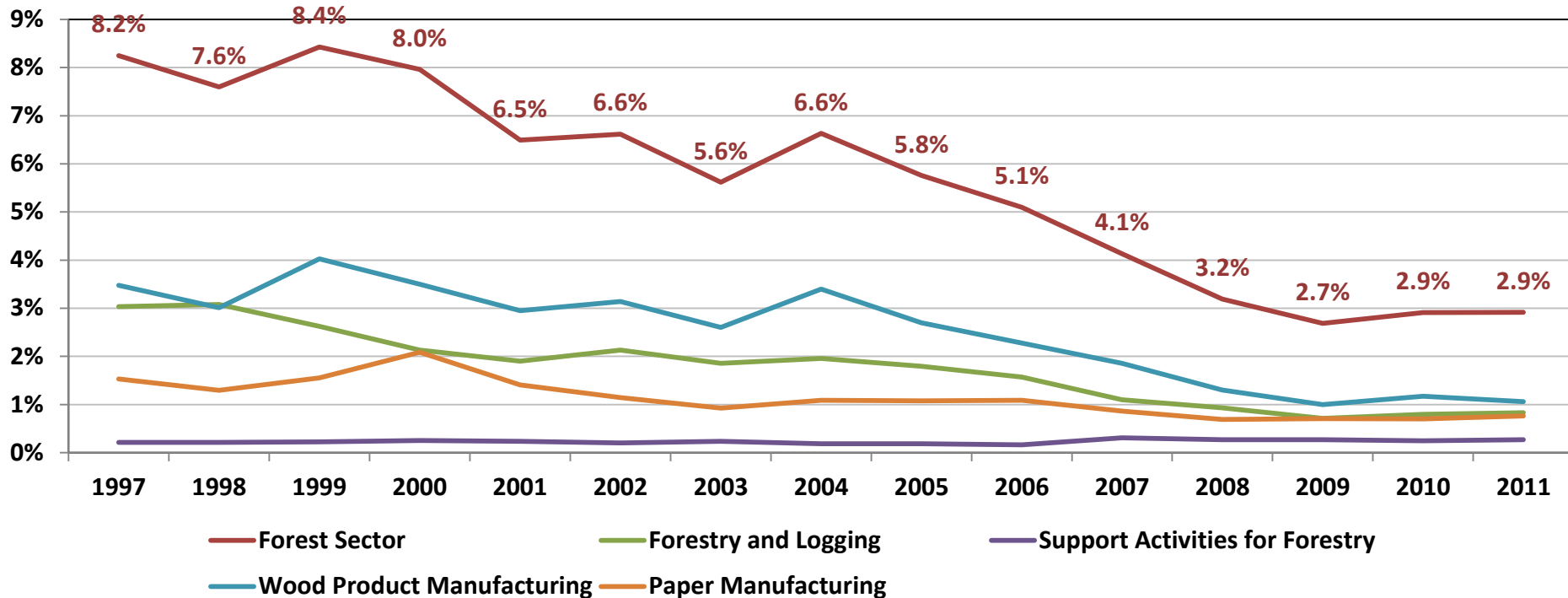


Data source: B.C. Stats extract from Statistics Canada data. Does not include products shipped to other regions of Canada. Also available from Statistics Canada CIMTD.

**Overview Indicator 1b – B.C. forest product exports (CA\$12.4 billion) increased 6.4% from 2013, and 63% from 2009. The forest sector’s share of total B.C. export value trended down from 2000 to 2008, was relatively constant from 2008 to 2011, and has since increased about 4 percentage points.**



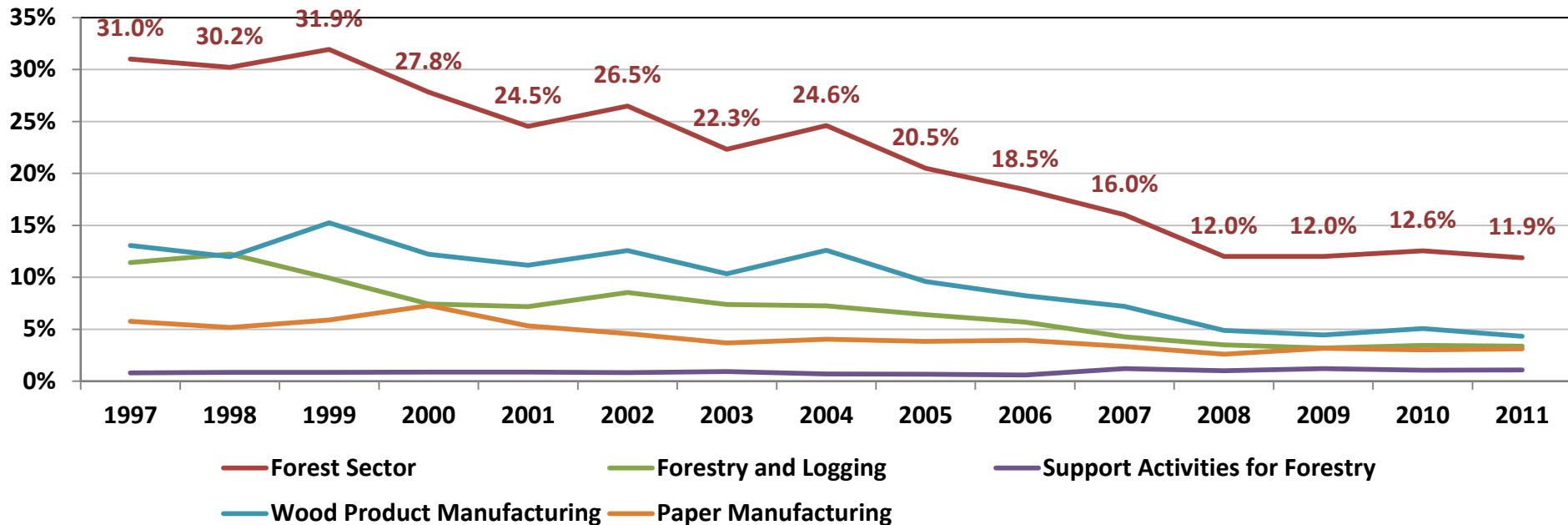
## Forest Sector's Share of B.C. GDP, in Current Dollars



Data source: Statistics Canada; CANSIM 379-0030. Based on current dollar data with 2011 being the latest available data.

**Overview Indicator 2a – GDP in current dollars allows comparisons between sectors, industries (subsectors) and the provincial economy as a whole. It does not adjust for inflation. The decline in share is partially due to a decline in forest sector GDP, but largely due to the GDP growth of the economy as a whole.**

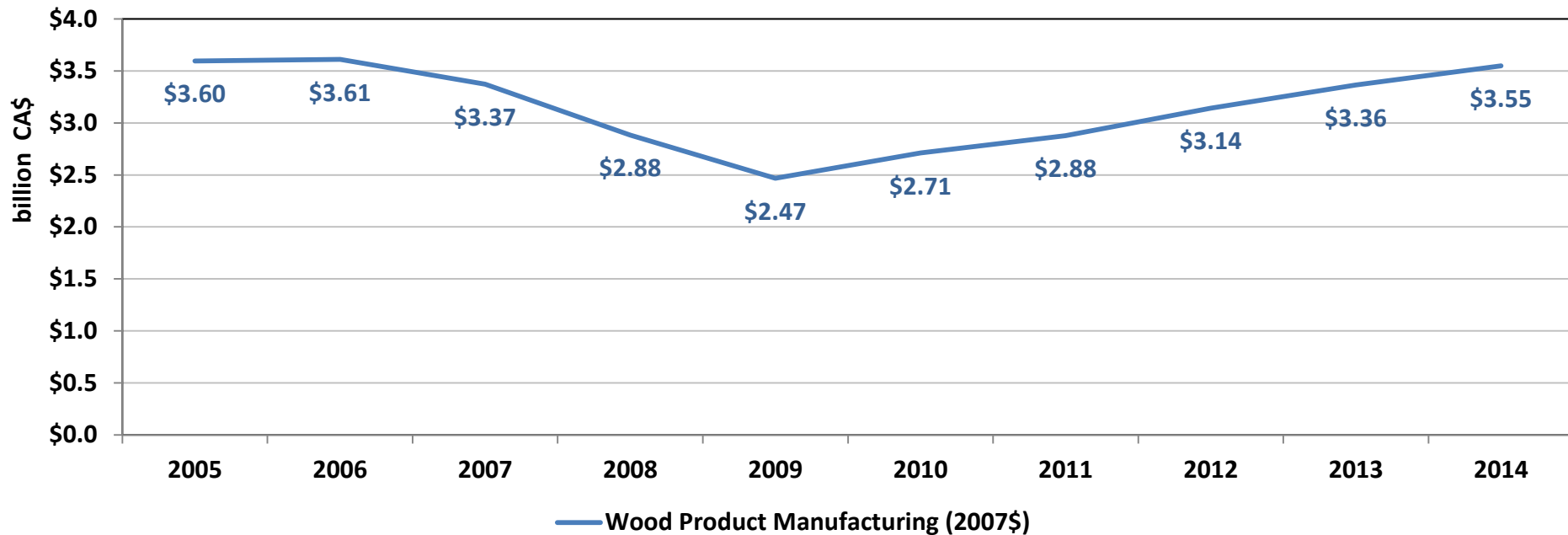
## Forest Sector's Share of B.C. Goods Manufacturing GDP, in Current Dollars



Data source: Statistics Canada; CANSIM 379-0030. Based on current dollar data with 2011 being the latest available data.

**Overview Indicator 2b – GDP in current dollars allows comparisons between sectors, industries (subsectors) and other sectors such as the Goods Manufacturing sector. It does not adjust for inflation.**

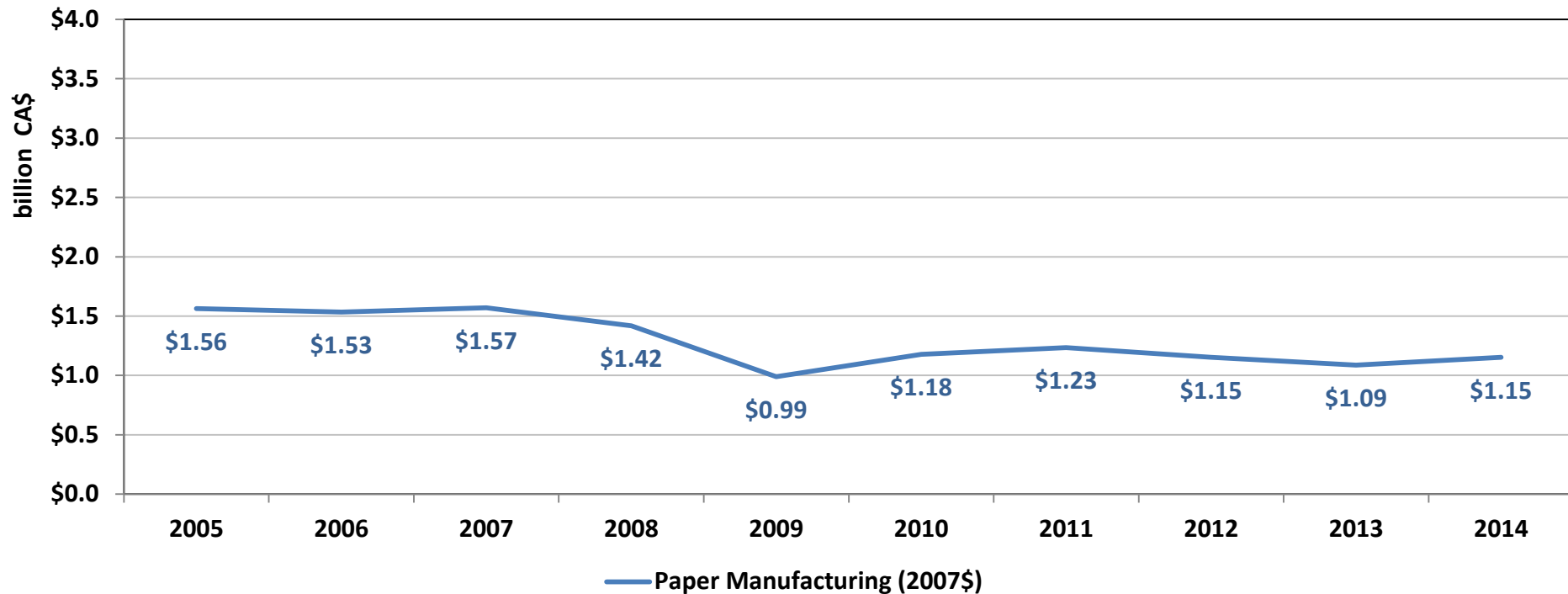
## B.C. Wood Products Manufacturing GDP, in Chained Dollars



Data source: Statistics Canada; CANSIM 379-0030.

**Overview Indicator 2c – Wood Product Manufacturing GDP has been climbing steadily since the low of 2009. Chained dollar GDP adjusts for changes in prices and quantities, and shouldn't be compared across sectors, nor added across sectors.**

## B.C. Paper Manufacturing GDP, in Chained Dollars

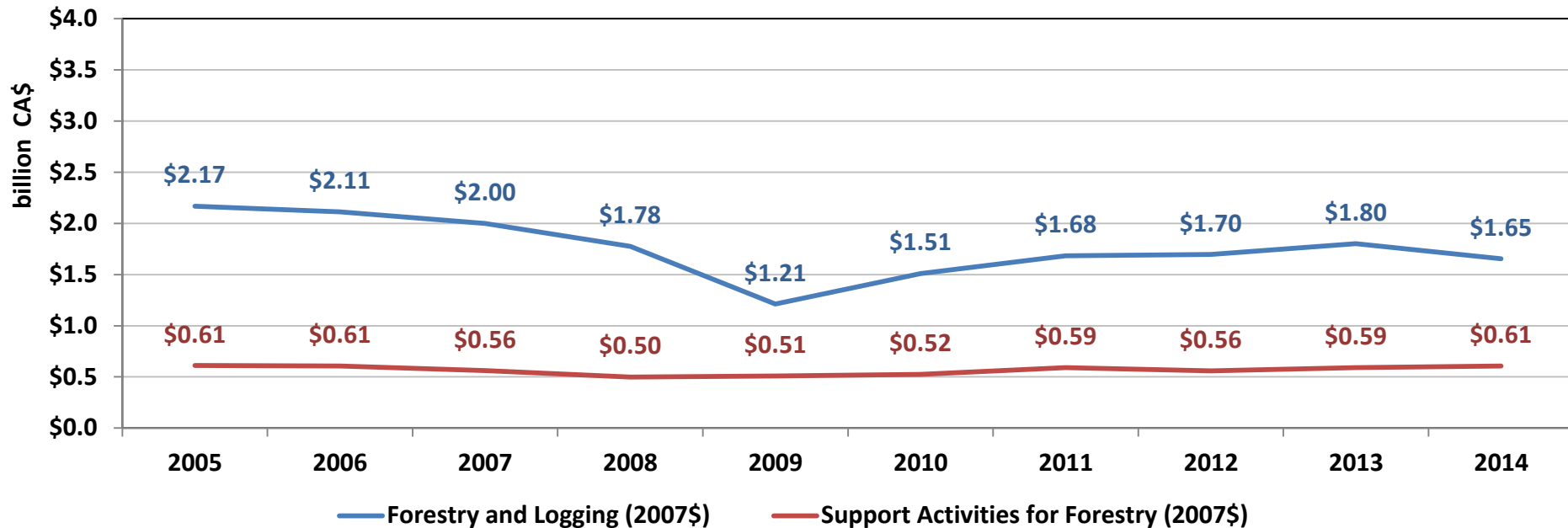


Data source: Statistics Canada; CANSIM 379-0030.

**Overview Indicator 2d** – This chart shows that the value added by the Paper Manufacturing industry decreased since 2007, and the initial recovery in 2010 has levelled. Chained dollar GDP adjusts for changes in prices and quantities, and shouldn't be compared across sectors, nor added across sectors.



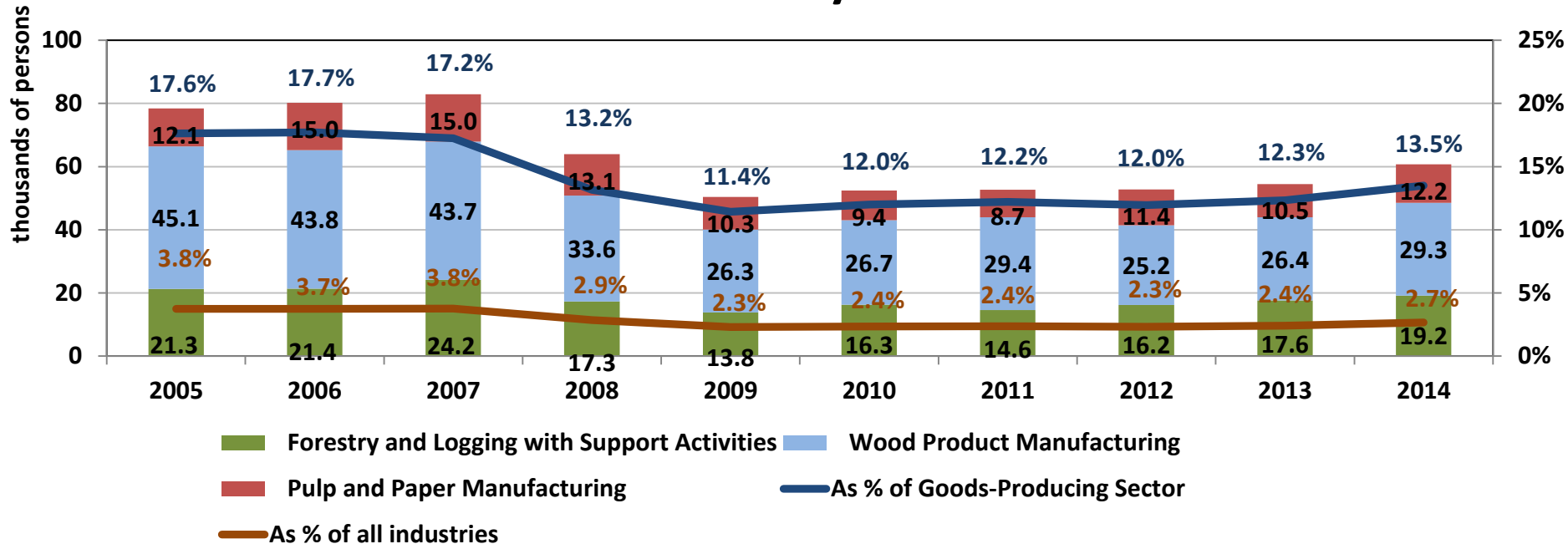
## B.C. Forestry and Logging and Support Activities GDP, in Chained Dollars



Data source: Statistics Canada; CANSIM 379-0030. Examples of Support Activities are cruising timber, hauling, pest control, firefighting, and reforestation.

**Overview Indicator 2e** – The past few years GDP from Support Activities for Forestry has been relatively steady, and so has GDP from Forestry and Logging. Both have increased from their levels in 2009. Chained dollar GDP adjusts for changes in prices and quantities, and shouldn't be compared across sectors, nor added across sectors.

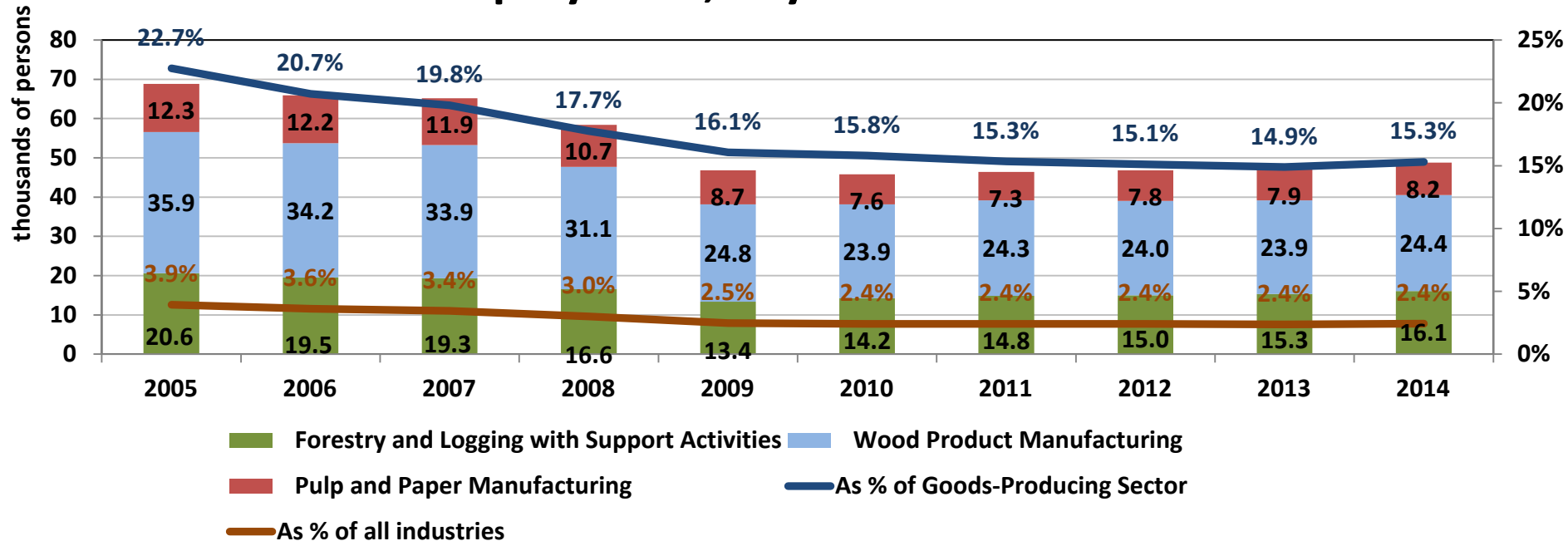
## B.C. Forest Sector Direct Employment: Labour Force Survey



Data source: Statistics Canada Labour Force Survey (LFS) data via B.C. Stats (British Columbia Employment by Detailed NAICS Industry).

**Overview Indicator 3a – B.C. forest sector direct employment increased to 60,700 in 2014, an 11% increase over 2013. All industries have expanded employment since 2009, especially Forestry and Logging with Support Activities.**

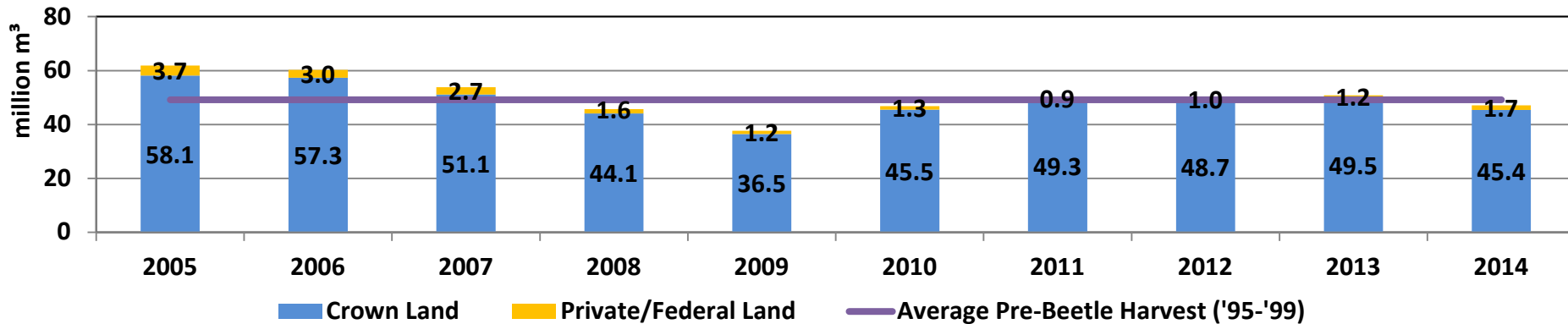
## B.C. Forest Sector Direct Employment: Survey of Employment, Payrolls and Hours



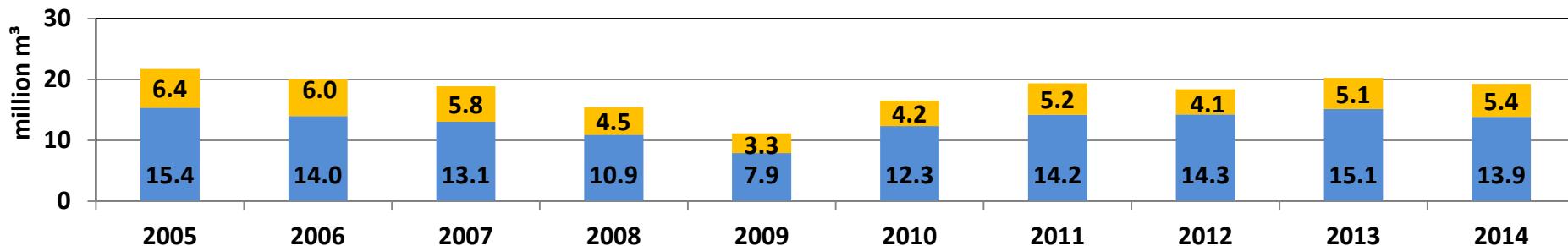
Data source: Statistics Canada Survey of Employment, Payrolls and Hours (SEPH): CANSIM 281-0024.

**Overview Indicator 3a – The Survey of Employment, Payrolls and Hours (SEPH) offers another estimate of employment. According to this survey B.C. forest sector direct employment increased to 48,767 in 2014. All industries have expanded employment, but to a lesser degree compared to the LFS estimates. 47 The SEPH survey only covers employees on payrolls, and so omits self-employed people.**

### B.C. Interior Harvest Volume



### B.C. Coast Harvest Volume

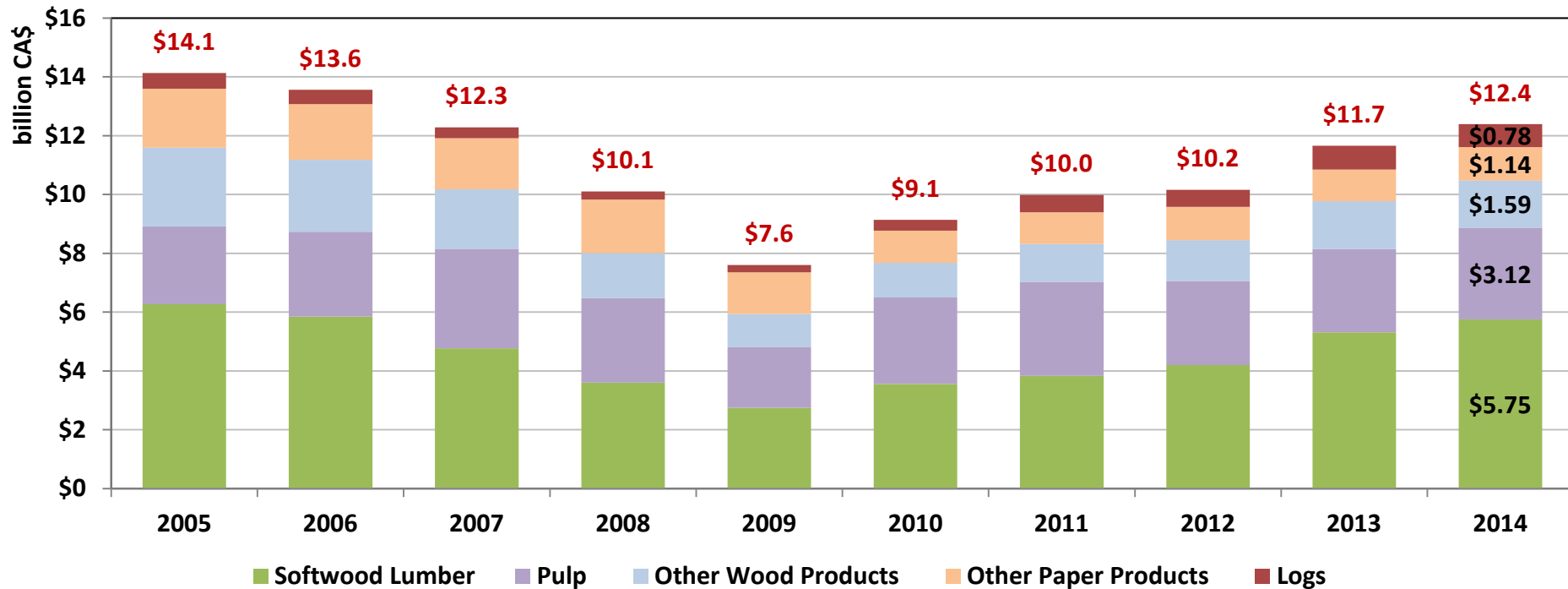


Data source: B.C. FLNR. All logs, special forest products, species and grades billed, excluding waste, reject and Christmas trees. Data extracted June 1, 2015. Volumes may not add to total harvest (slide 14) due to rounding.

**Products – Logs – Total harvest volume (66.4 million m<sup>3</sup>) was down 6.6% from 2013. The Interior accounted for 71% of the harvest, and the Coast for 29%. Most of the harvest from private and federal lands comes from the Coast. Recent harvest is near pre-beetle, pre-housing boom levels.**



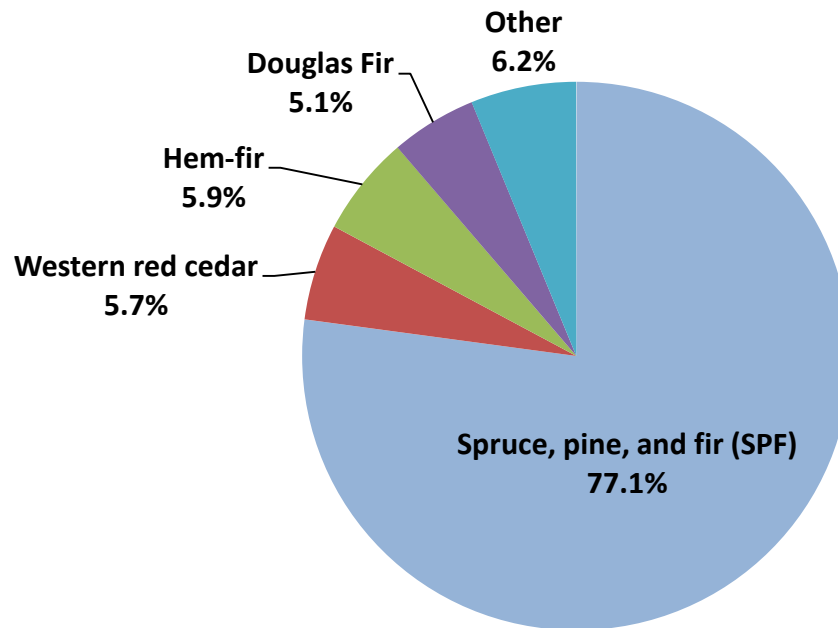
## B.C. Forest Product Exports by Main Product



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

**Products – Exports** – Share of B.C. forest product export value by main product in 2014: Logs (6.3%), Softwood Lumber (46%), Other Wood Products (12.9%), Pulp (25%) and Other Paper Products (9.2%).

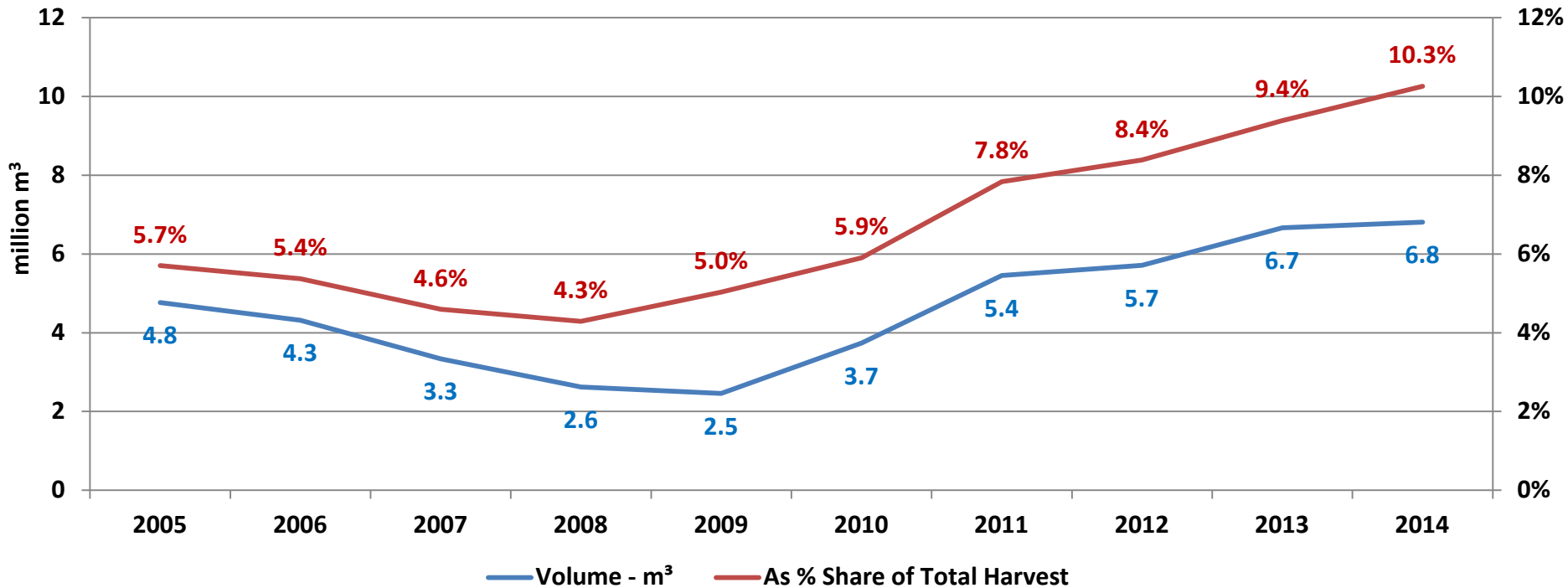
## B.C. Softwood Lumber Export Volume (25.9 million m<sup>3</sup>) Share by Species, 2014



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

**Products – Exports – Softwood Lumber – Spruce-Pine-Fir (SPF) lumber is by far the highest-volume lumber product exported from B.C., followed by Western red cedar, hemlock-fir (balsam), and Douglas fir.**

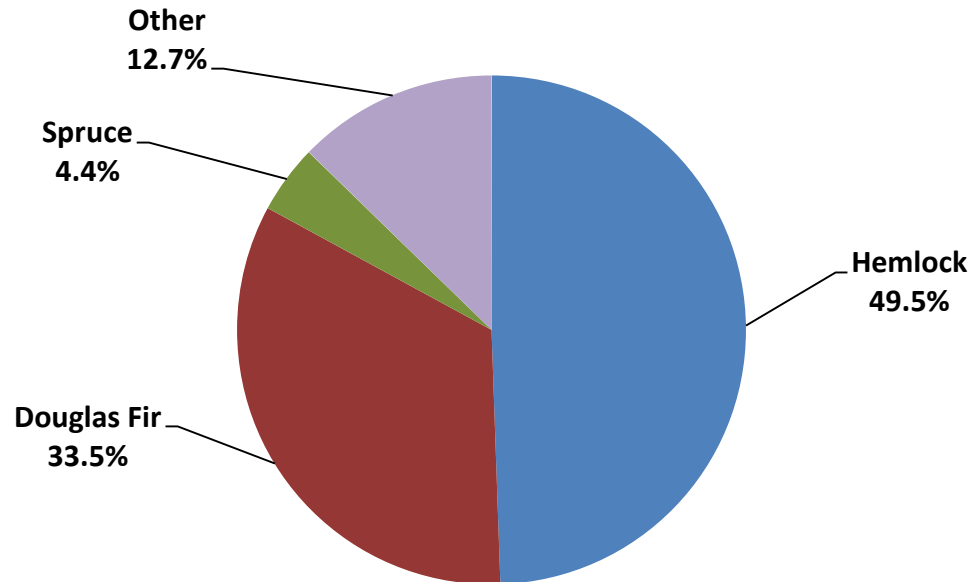
## B.C. Log Export Volume and Share of Harvest



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

**Products – Exports – Logs – Log export volume increased by 2.1% in 2014. The vast majority of log exports came from the Coast, rather than the Interior.**

## B.C. Log Export Volume (6.8 million m<sup>3</sup>) Share by Species, 2014



Data source: B.C. Stats extract from Statistics Canada data. Also available from Statistics Canada CIMTD. Other includes pulp logs of all species, plus saw logs of other softwoods and hardwoods.

**Products – Exports – Logs – Hemlock sawlogs accounted for around 50% of log exports in 2014, followed by Douglas Fir with 34%. Most of the hemlock went to China which is one of the few markets where the species is in strong demand.**



## B.C. Exports of Wood Waste and Scrap, and Pellets

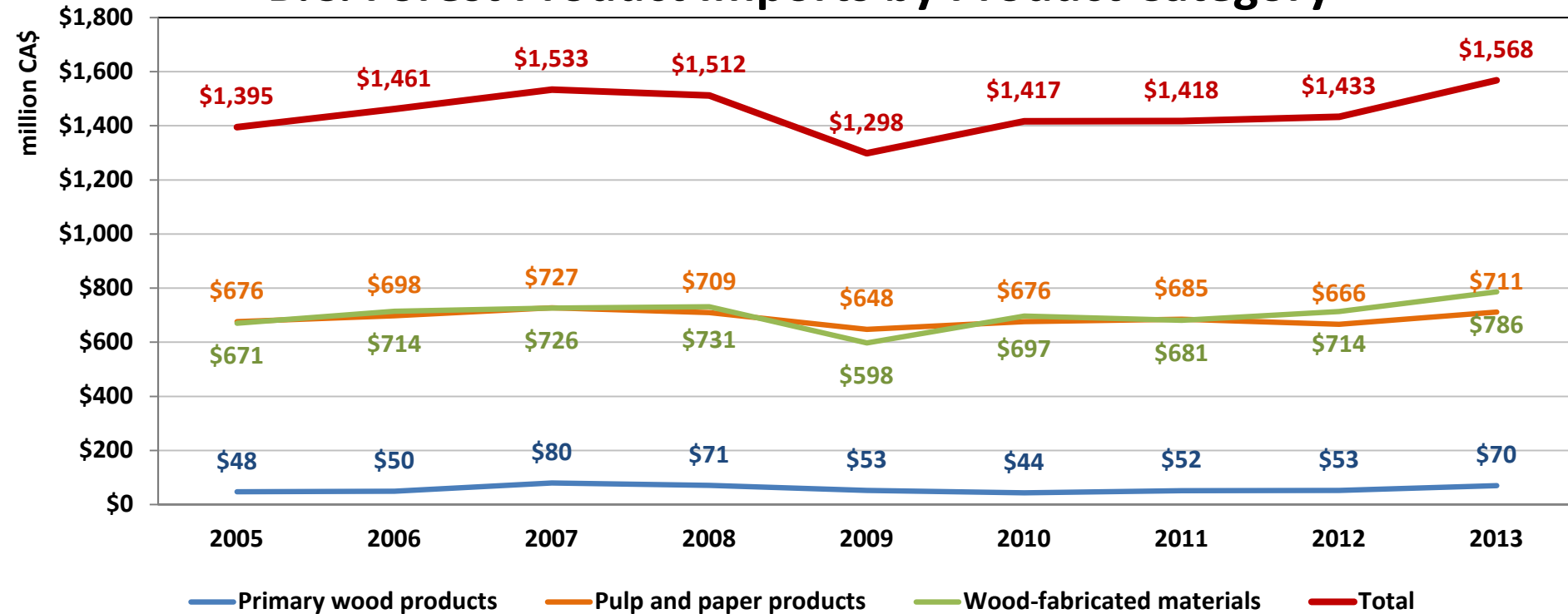


\*Pellets were included in Wood Waste and Scrap until 2012. Now pellets are separate.

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

**Products – Exports – Logs – Exports of Wood Waste and Scrap grew rapidly since 2005, probably almost entirely due to growth in Pellet exports. Exports of Pellets increased by 4.1% from 2013 to 2014, with 2012 being the first year pellets were given their own product category in the export data.**

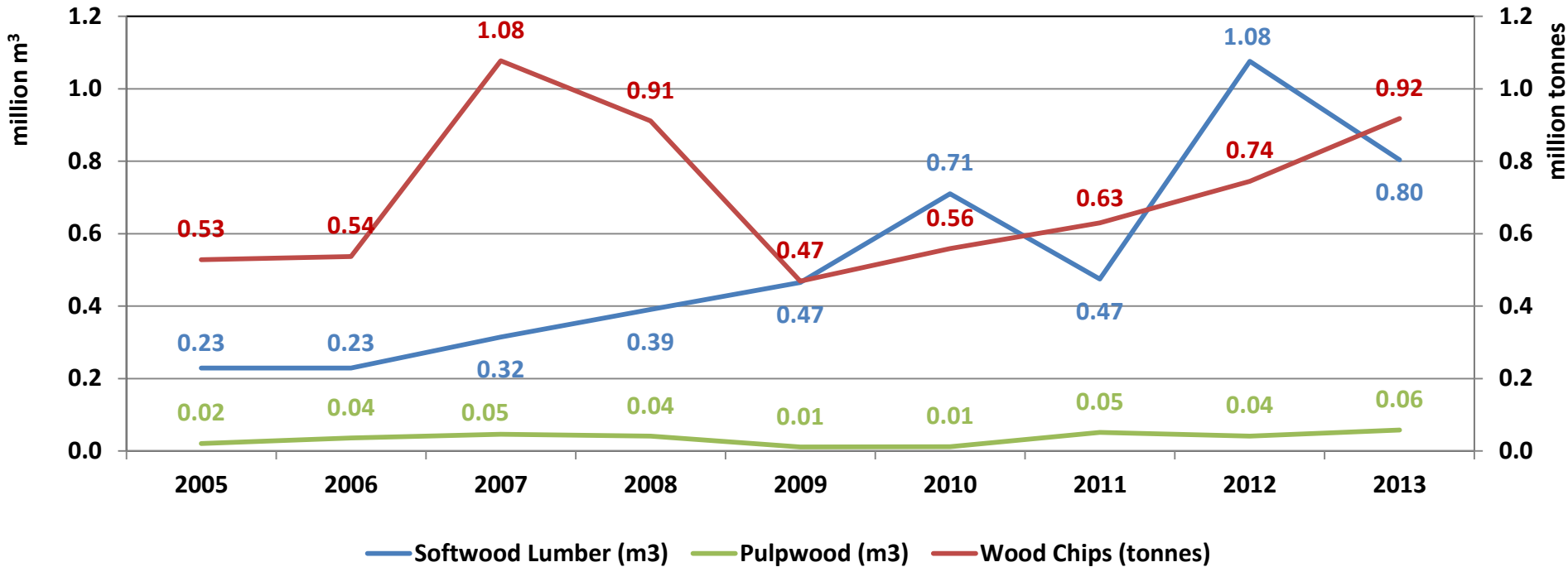
## B.C. Forest Product Imports by Product Category



Data source: Natural Resources Canada; Canadian Forest Service Statistics.

**Products – Imports – Value – Total value of imported forest products increased for the first time in several years. Primary wood products includes logs, pulpwood and wood chips, and other (such as Christmas trees).**

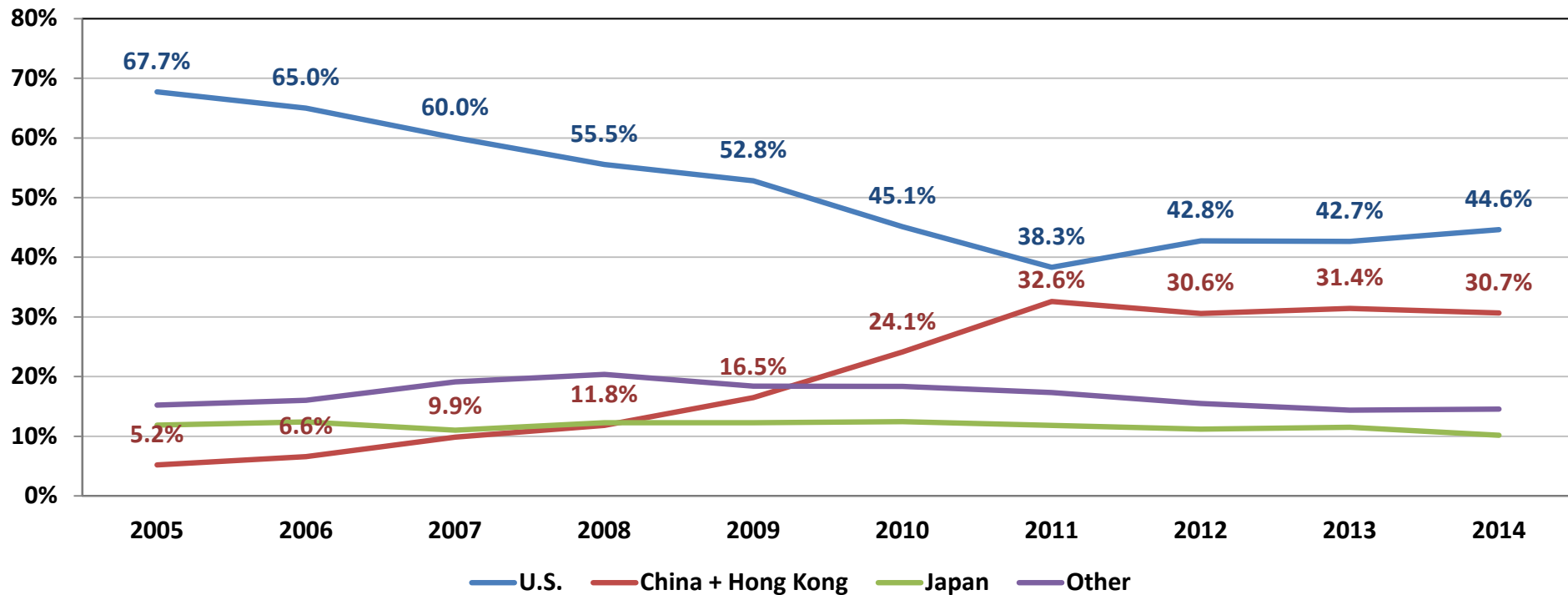
## Select B.C. Forest Product Imports by Quantity



Data source: Natural Resources Canada; Canadian Forest Service statistics.

**Products – Imports – Quantity** – Imports of softwood lumber have been on the rise since 2009, but has been volatile the last few years, though comparing import volume to B.C. production it is only about 2.7%. Wood chips and pulpwood, both used in producing pulp and paper products, have increased substantially from their 2009 low.

## B.C. Forest Product Export Value Share by Market

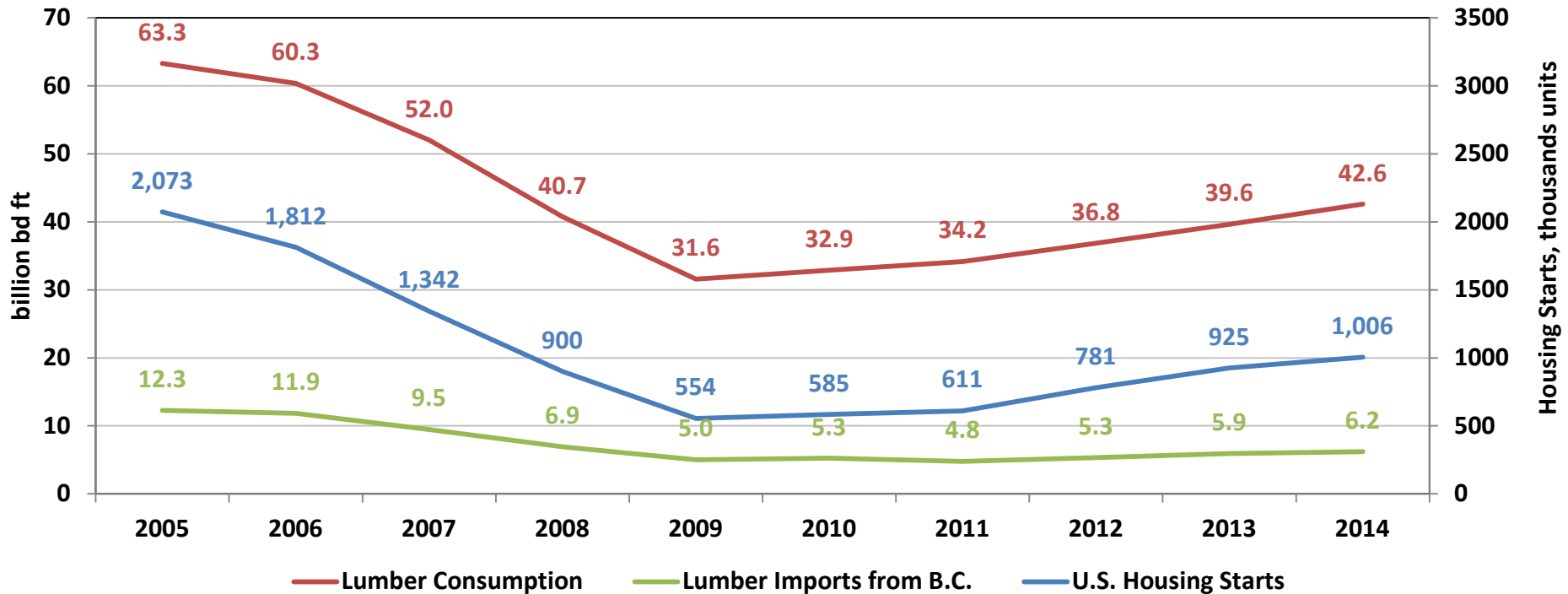


Data source: B.C. Stats extract from Statistics Canada data. Also available from Statistics Canada CIMTD.

**Markets** – From 2005-2011, the U.S. share of export value fell dramatically and China’s share grew rapidly. This trend ended in 2012 and their shares remained relatively steady in 2014.



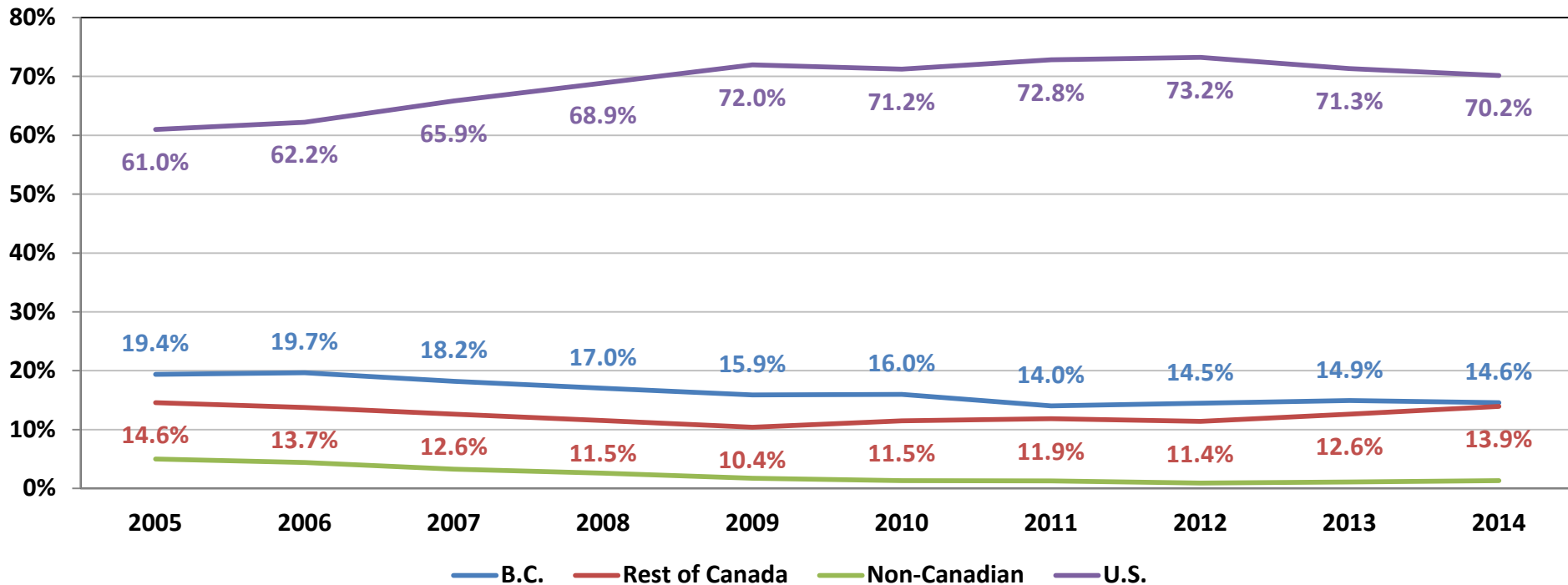
## U.S. Softwood Lumber Consumption vs. Housing Starts



Data source: [Western Wood Products Association](#) and U.S. Census Bureau.

**Markets – U.S. – U.S. softwood lumber consumption and U.S. single family housing starts have increased steadily from the low in 2009, but both are still far from the peak level in 2005.**

## Supplier Share of U.S. Softwood Lumber Consumption



Data source: [Western Wood Products Association](#).

**Markets – U.S.** – U.S. softwood lumber consumption relies primarily on U.S. domestic supply, with the foreign share decreasing after 2006. The U.S. is still supplying a higher level of their consumption than during the housing boom, largely due to lower lumber demand resulting in less need for imports. 58  
Canada provided 28% of total U.S. consumption in 2014.

## US\$ Exchange Rates Indexed to 2000

2014 Exchange Rates

1.10 CA\$/US\$

6.15 Yuan/US\$

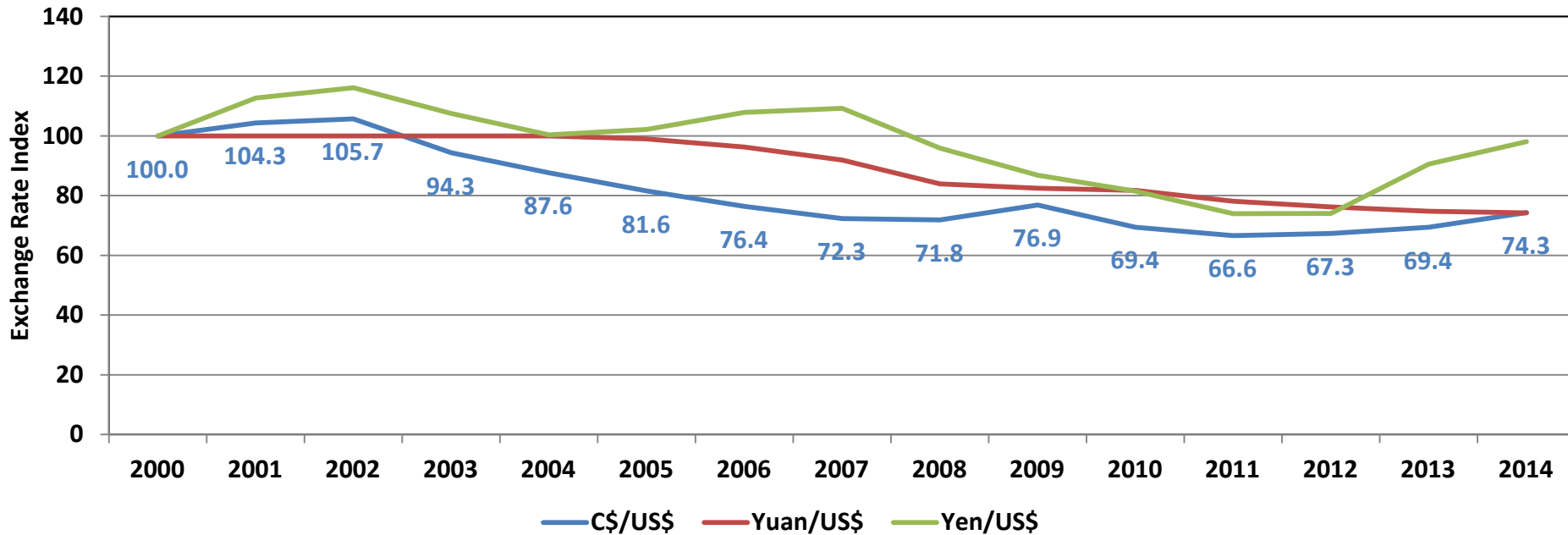
105.74 Yen/US\$

2000 Exchange Rates

1.48 CA\$/US\$

8.28 Yuan/US\$

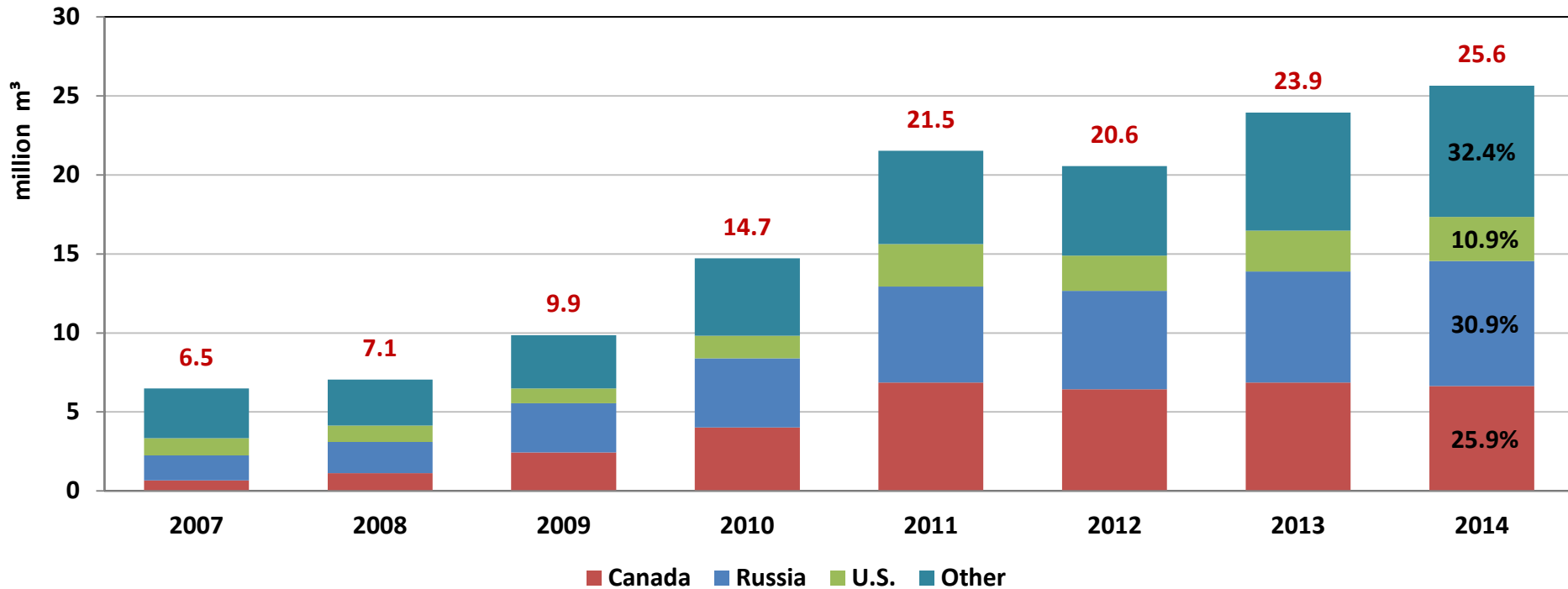
107.82 Yen/US\$



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

**Prices and Costs** – From 2002 to 2011 the US\$ depreciated about 33% relative to the Canadian dollar. Since 2011 the US\$ has appreciated against the CA\$, and this has continued in 2015. The exchange rate impacts product prices and mill revenue.

## China Lumber Imports by Supply Country

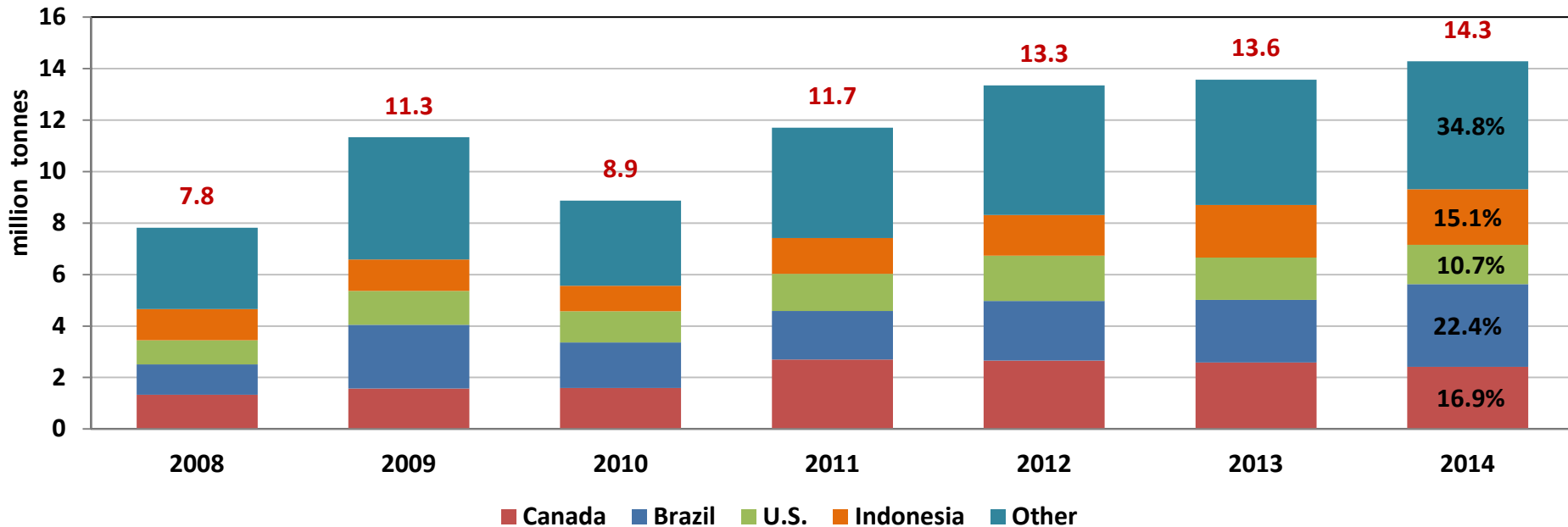


Data source: [Wood Markets China Bulletin](#). All species, including hardwoods.

**Markets – China** – In 2014, the gap between Russia’s share (30.9%) and Canada’s (25.9%) widened. These two countries were followed by the U.S. (10.9%), and other countries (32.4%).



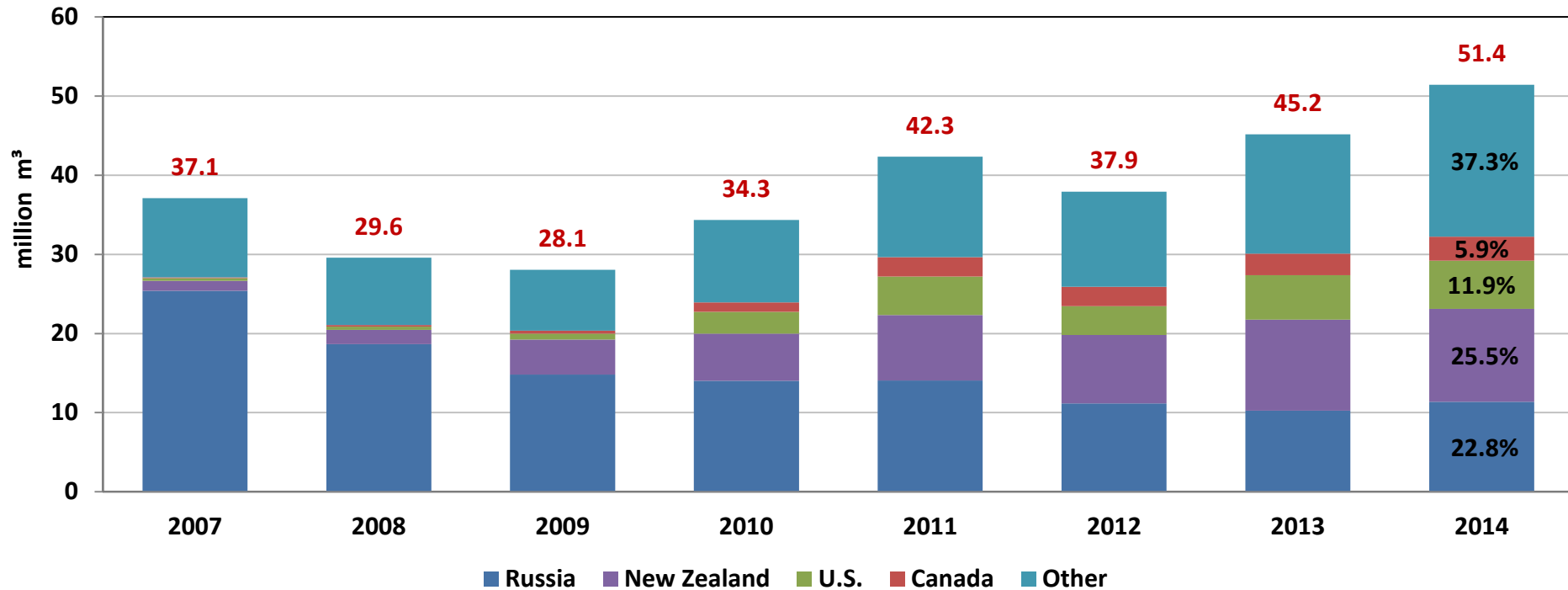
## China Sulfate (Kraft) Wood Pulp Imports by Supply Country



Data source: [Wood Markets China Bulletin](#).

**Markets – China** – In 2014, Canada (16.9%) fell further behind Brazil (22.4%) as the leading supplier of China’s kraft market pulp imports. They were followed by Indonesia (15.1%), the U.S. (10.7%), and other countries (34.8%).

## China Log Imports by Supply Country



Data source: [Wood Markets China Bulletin](#). All species, including hardwoods.

**Markets – China** – In 2014 New Zealand continues as China’s largest log supplier (25.5%). They were followed by Russia (22.8%), the U.S. (11.9%), Canada (5.9%) and other countries (37.3%).



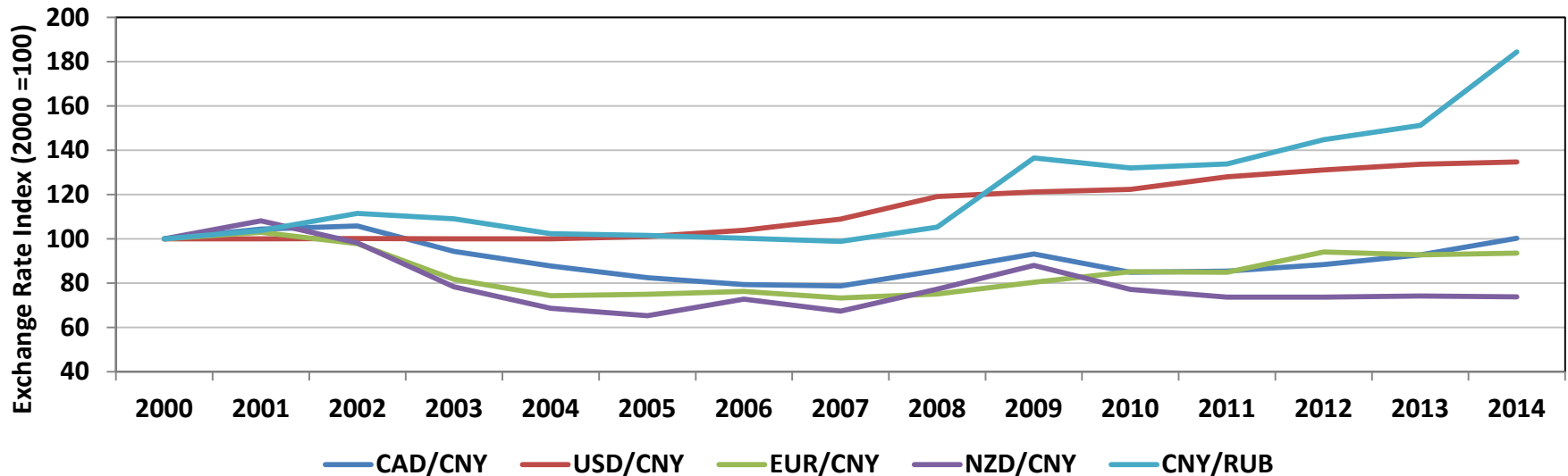
2000 Exchange Rates

0.131 EUR\$/CNY  
0.121 USD/CNY  
0.179 CAD/CNY  
0.266 NZD/CNY  
3.401 RUB/CNY

2014 Exchange Rates

0.123 EUR/CNY  
0.163 USD/CNY  
0.180 CAD/CNY  
0.196 NZD/CNY  
6.271 RUB/CNY

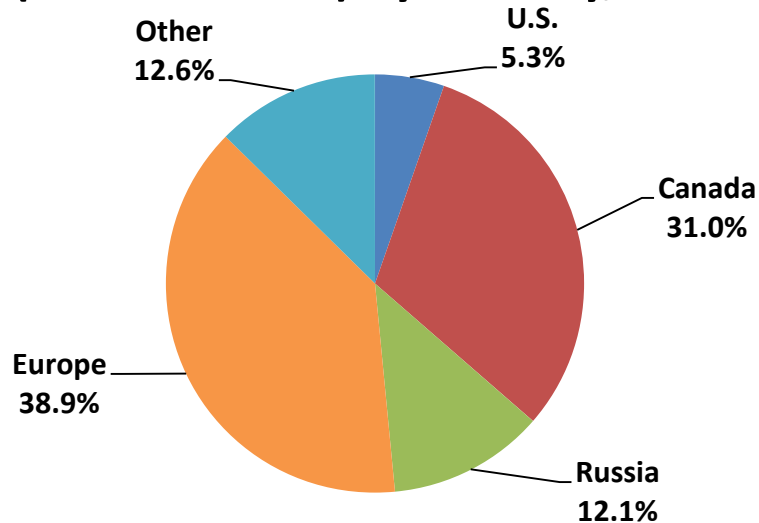
# Indexed Foreign Exchange Rates Relative to Chinese Yuan (CNY)



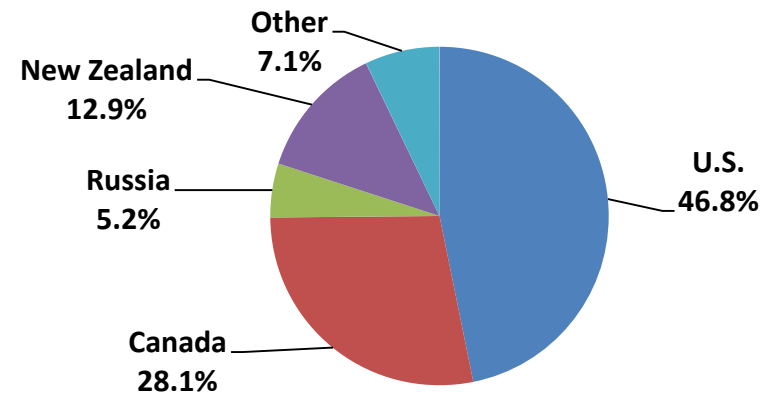
Data source: [OANDA](http://OANDA.com).

**Prices and Costs** – This chart presents the currencies of some of BC’s competitors in China. The Yuan has appreciated massively against the Rouble, making Russian goods cheaper in China (which has only increased further in 2015). This gives Russia a competitive advantage over Canada. The Yuan has appreciated against the US\$ considerably, and more recently against the NZ\$ and CA\$.

### Japan Lumber Imports (6.5 million m<sup>3</sup>) by Country, 2014



### Japan Log Imports (4.2 million m<sup>3</sup>) by Country, 2014

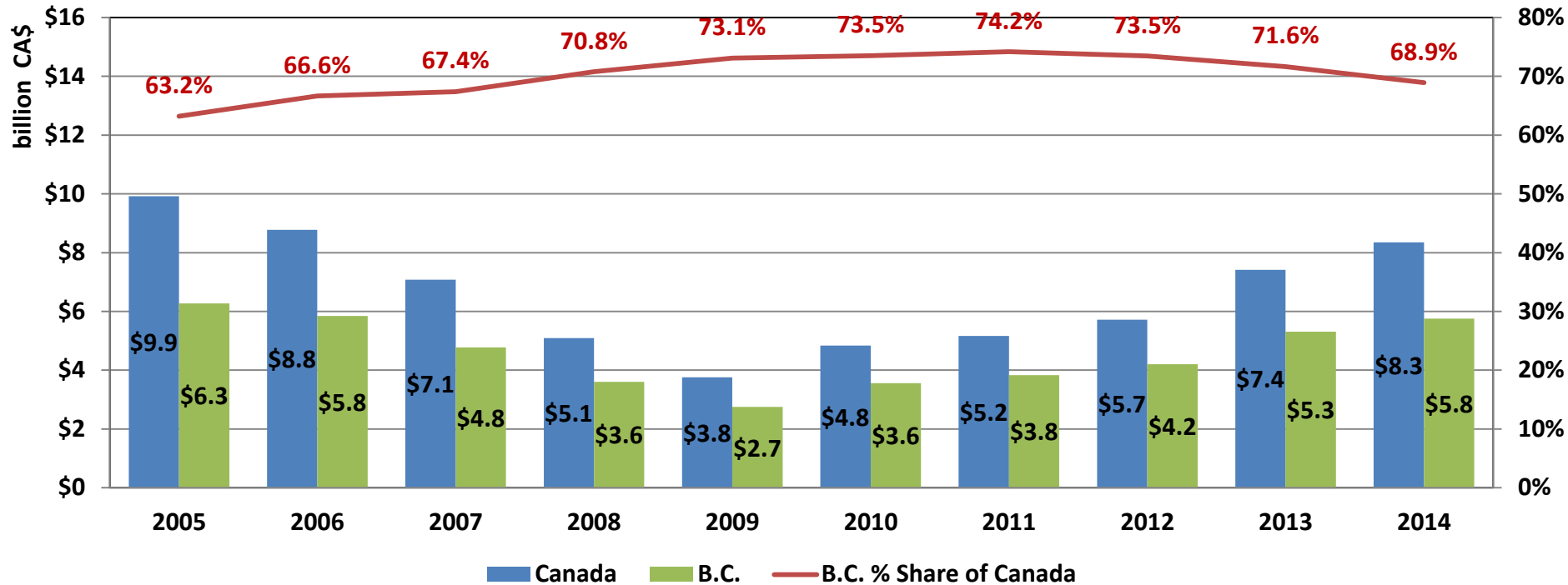


Data source: [Japan Wood-Products Information & Research Center \(JAWIC\)](#).

**Markets – Japan – Canada accounted for 31.0% of Japan’s total lumber import volume and 28.1% of Japan’s total log import volume in 2014.**



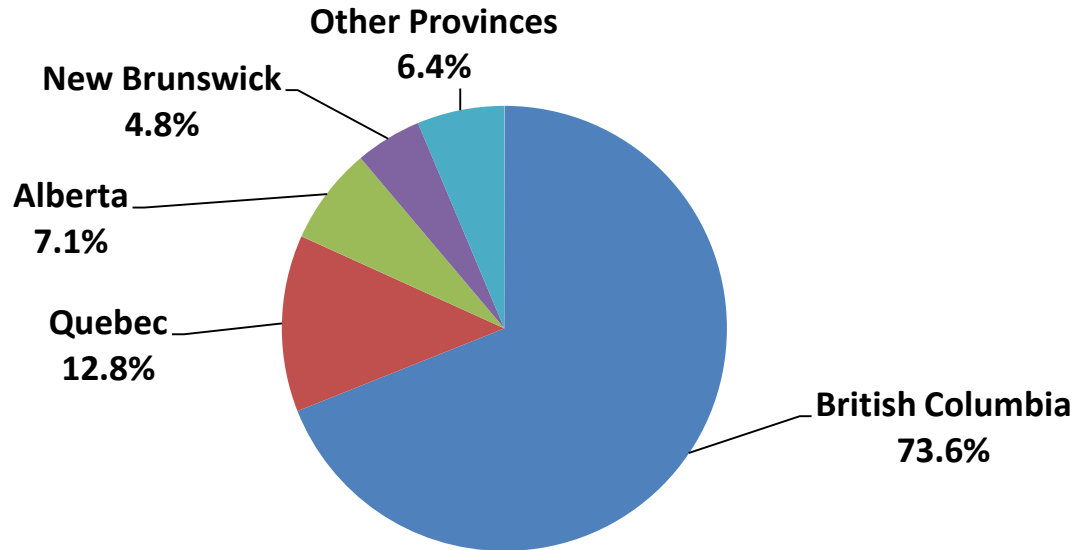
## Softwood Lumber Exports: B.C. and Canada



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

**Competitiveness – B.C.’s Share – B.C.’s share of Canada’s total softwood lumber export value was 68.9% in 2014, declining slightly compared to 2013.**

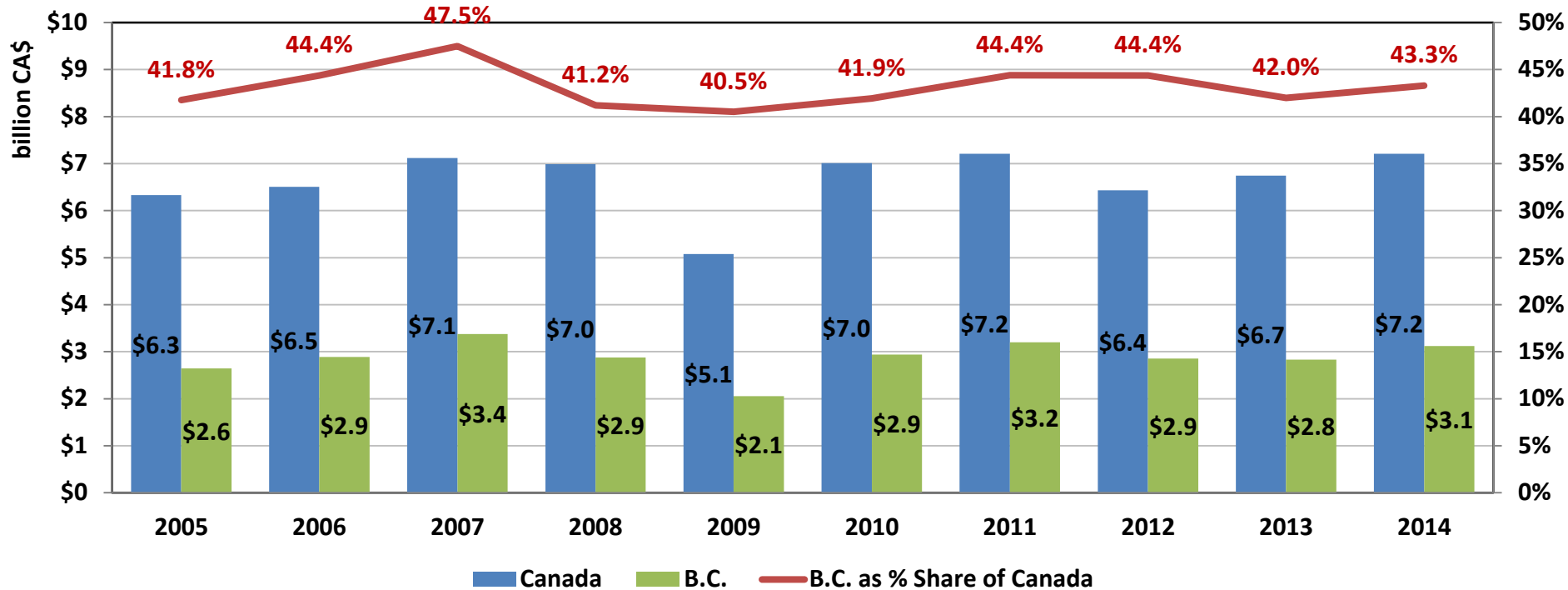
## Canada Softwood Lumber Export Value (CA\$8.3 billion) by Province, 2014



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

**Competitiveness – B.C.’s Share – In terms of value B.C. is the dominant supplier of Canada’s softwood lumber exports, followed by Quebec, Alberta, New Brunswick and other provinces.**

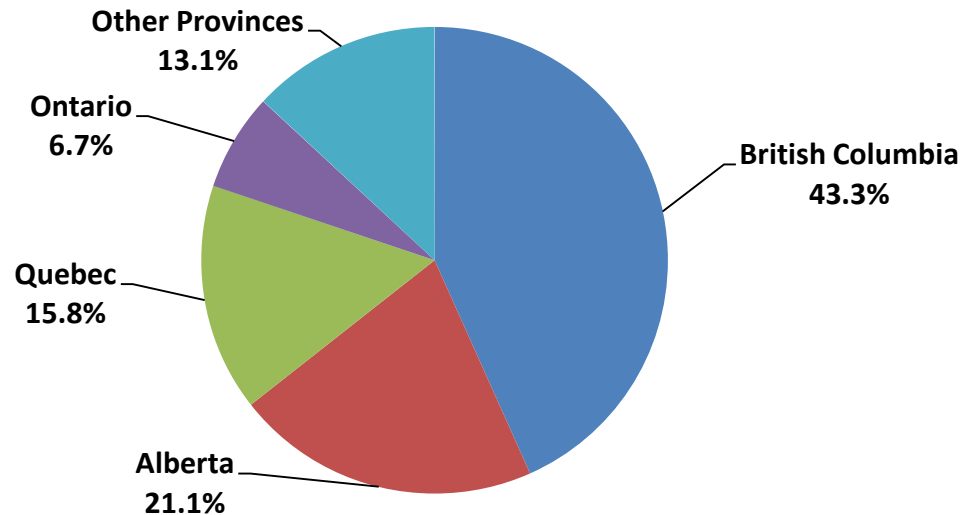
## Pulp Exports: B.C. and Canada



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

**Competitiveness – B.C.’s Share – B.C. accounted for 43.3% of Canada’s total pulp export value in 2014.**

## Canada Pulp Export Value (CA\$7.2 bil.) by Province, 2014

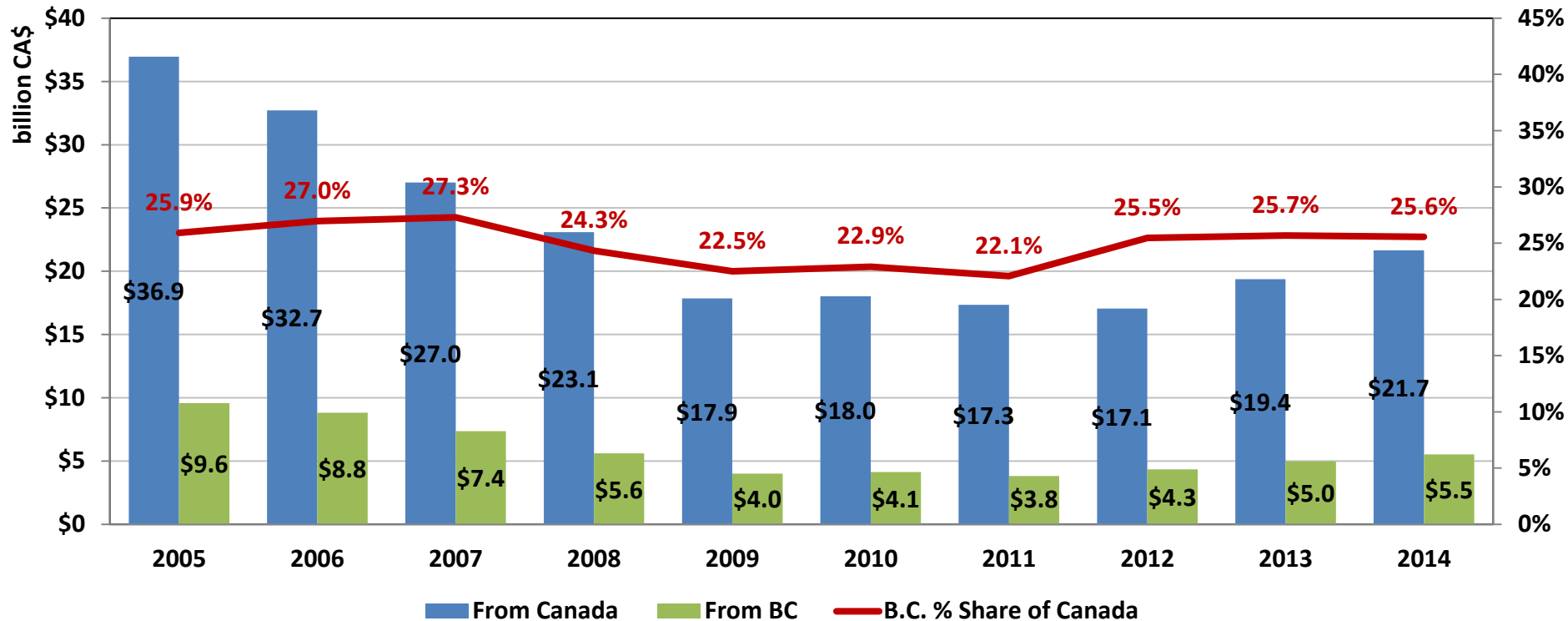


Data source: B.C. Stats extract from Statistics Canada data. Also available from Statistics Canada CIMTD.

**Competitiveness – B.C.’s Share – B.C. is the largest supplier of Canada’s pulp exports, followed by Alberta, Quebec, Ontario and other provinces.**



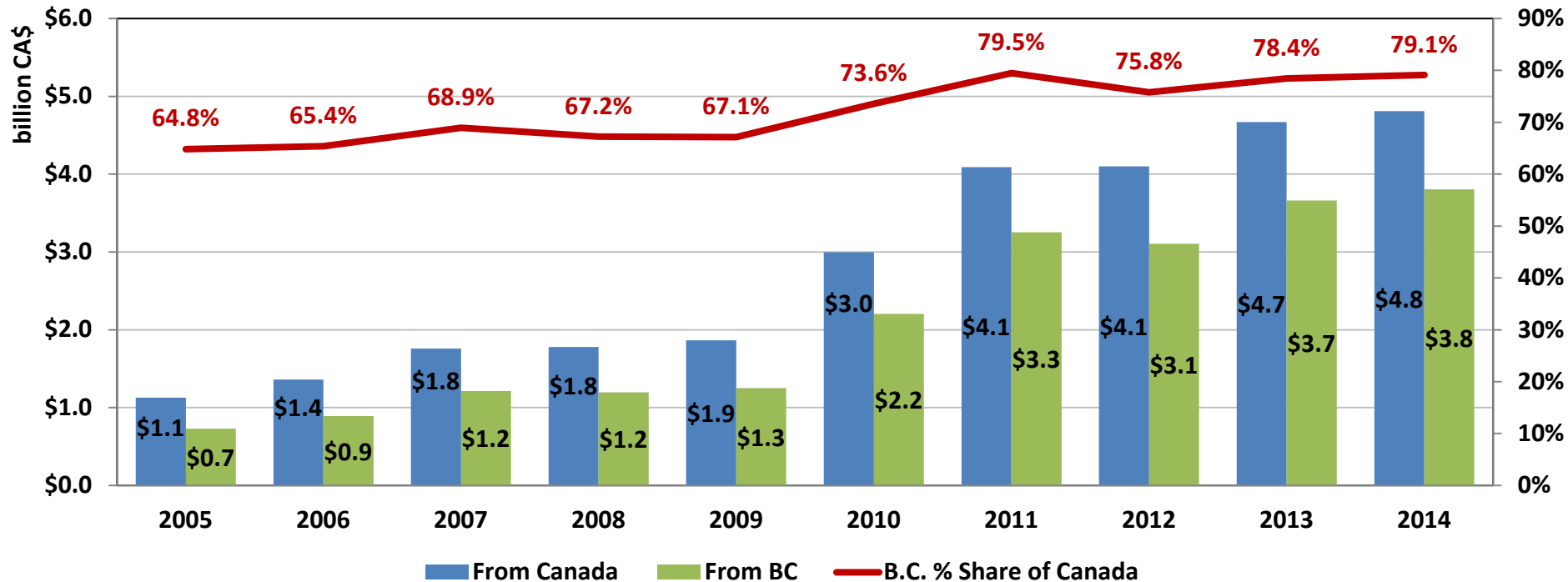
## Total Forest Product Exports to U.S.: B.C. and Canada



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

**Competitiveness – B.C.’s Share – B.C. accounted for 25.6% of the value of Canada’s total forest product exports to the U.S. in 2014. B.C. exports increased by CA\$0.5 billion and exports from Canada as a whole rose CA\$2.3 billion.**

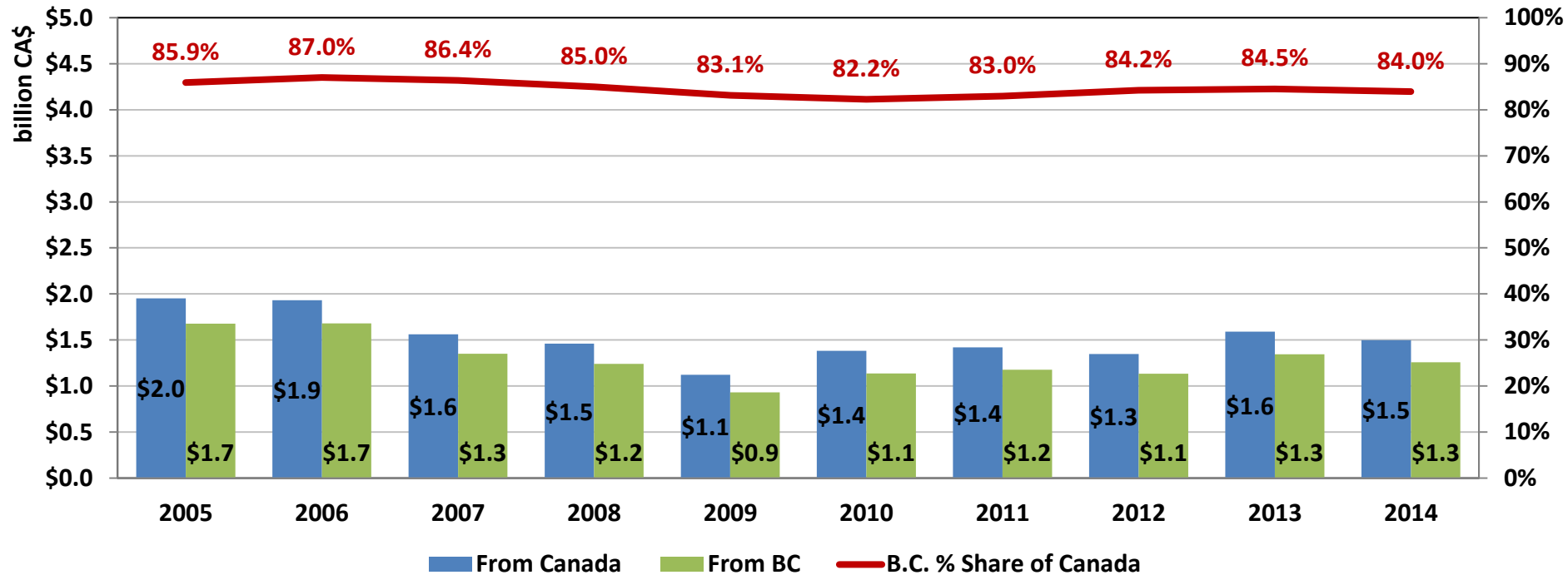
## Forest Product Exports to China: B.C. and Canada



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

**Competitiveness – B.C.’s Share – B.C. accounted for 79.1% of Canada’s total forest product exports to China in 2014.**

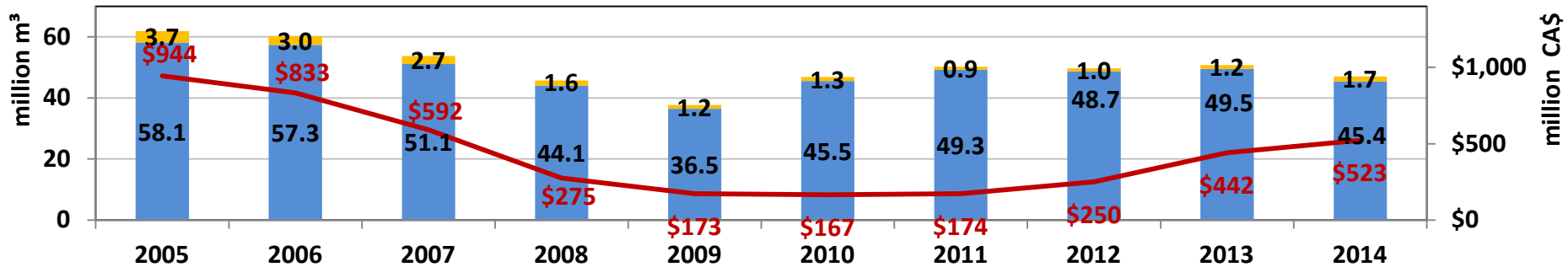
## Forest Product Exports to Japan: B.C. and Canada



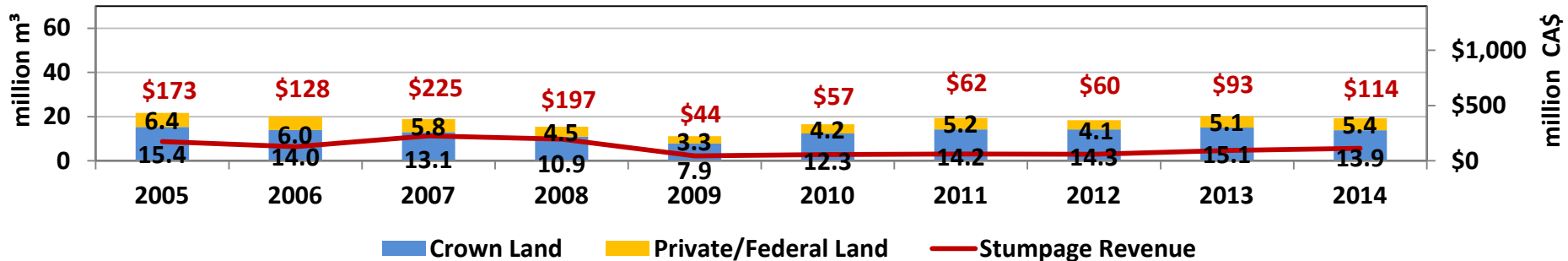
Data source: B.C. Stats extract from Statistics Canada data. Also available from Statistics Canada CIMTD.

**Competitiveness – B.C.’s Share – B.C. accounted for 84.0% of Canada’s total forest product exports to Japan in 2014.**

### B.C. Interior Harvest Volume and Total Stumpage Revenue



### B.C. Coast Harvest Volume and Total Stumpage Revenue



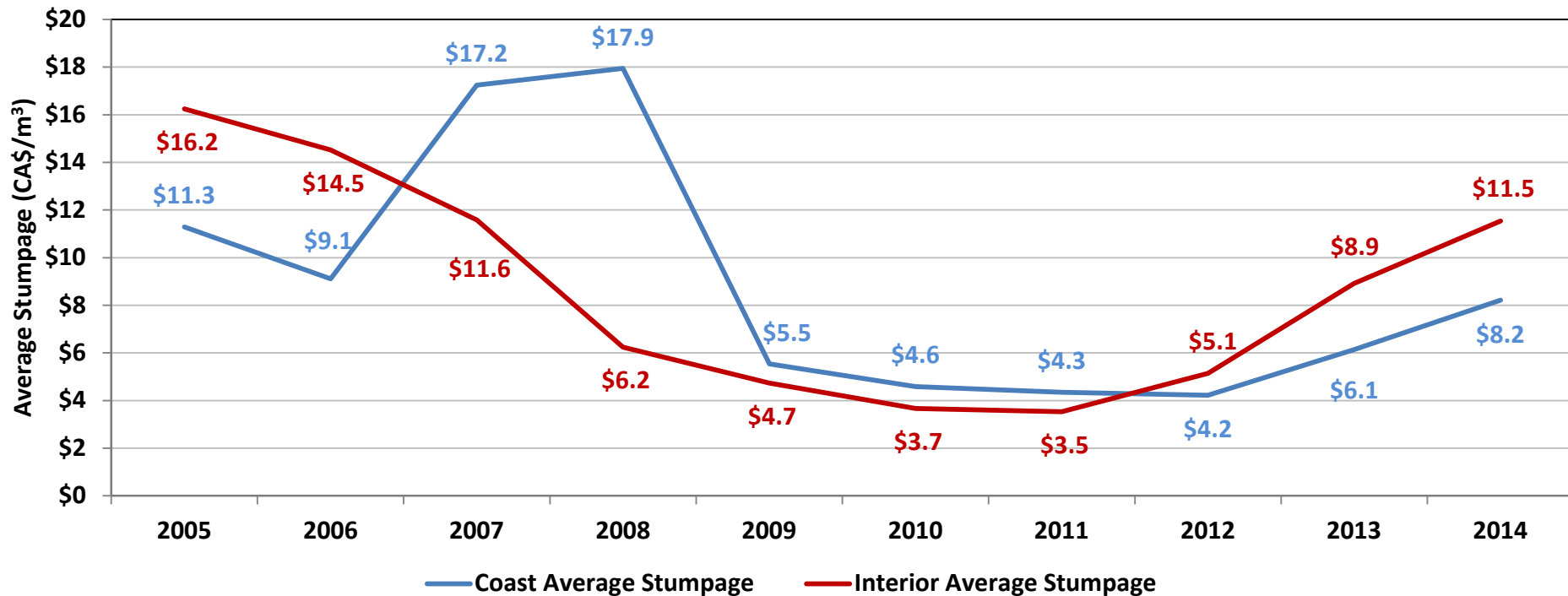
Legend: Crown Land (blue), Private/Federal Land (yellow), Stumpage Revenue (red line)

Data source: FLNR. All logs, special forest products, species and grades billed, excluding waste, reject and Christmas trees. Data run on May 1, 2014.

**Competitiveness – Government Revenues – Government stumpage revenue increased 23% on the Coast with an 8% decrease in Crown harvest, and stumpage revenue was up 18% in the Interior with an 8% decrease in Crown harvest.**



## Average Stumpage Rates (CA\$/m<sup>3</sup>)



Data source: FLNR. Data run on June 1, 2015. Includes BCTS. Excludes waste and reject.

**Competitiveness – Government Revenues – In 2014, Interior average stumpage increased CA\$2.6/m<sup>3</sup> (40%) and Coast average stumpage increased CA\$2.1/m<sup>3</sup> (34%).**