

Outlook for Sawlog, Pulplog and Wood Chip Prices in Western US and Western Canada

**Mapping the Course - The 6th Annual
Forest Industry Conference
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Vancouver, Washington**

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Wood Resources International LLC



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International Market Reports - Subscription Services

Wood Resource Quarterly: a quarterly market report established in 1988, with subscribers in over 30 countries. The WRQ tracks global wood markets including prices of pulpwood, wood chips and sawlogs in 23 regions worldwide.

North American Wood Fiber Review: a quarterly report established in 1983 which follows sawlog, pulpwood, lumber and biomass markets in all major regions in Canada and the US.

Forest Industry Consulting Services

WRI, established 1987, specializes in supply/demand analysis of forest resources, forest products trade trends, forest industry developments and wood price forecasts. The company has conducted consulting work in over 25 countries on five continents. Clients include international forest companies, energy companies, pension funds, TIMO's, the World Bank, FAO, EU, WWF, ITTO and IIED.

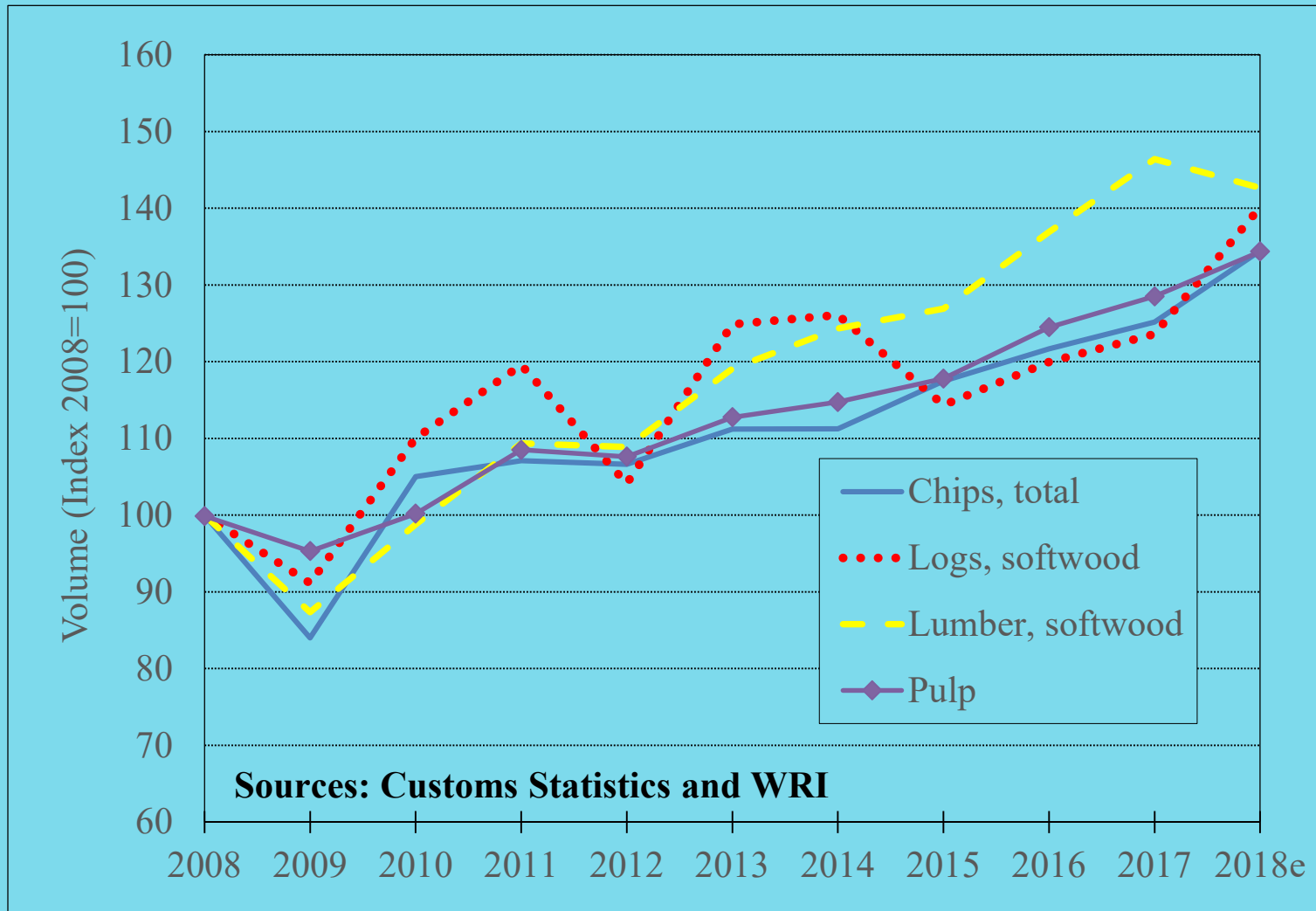


Outline

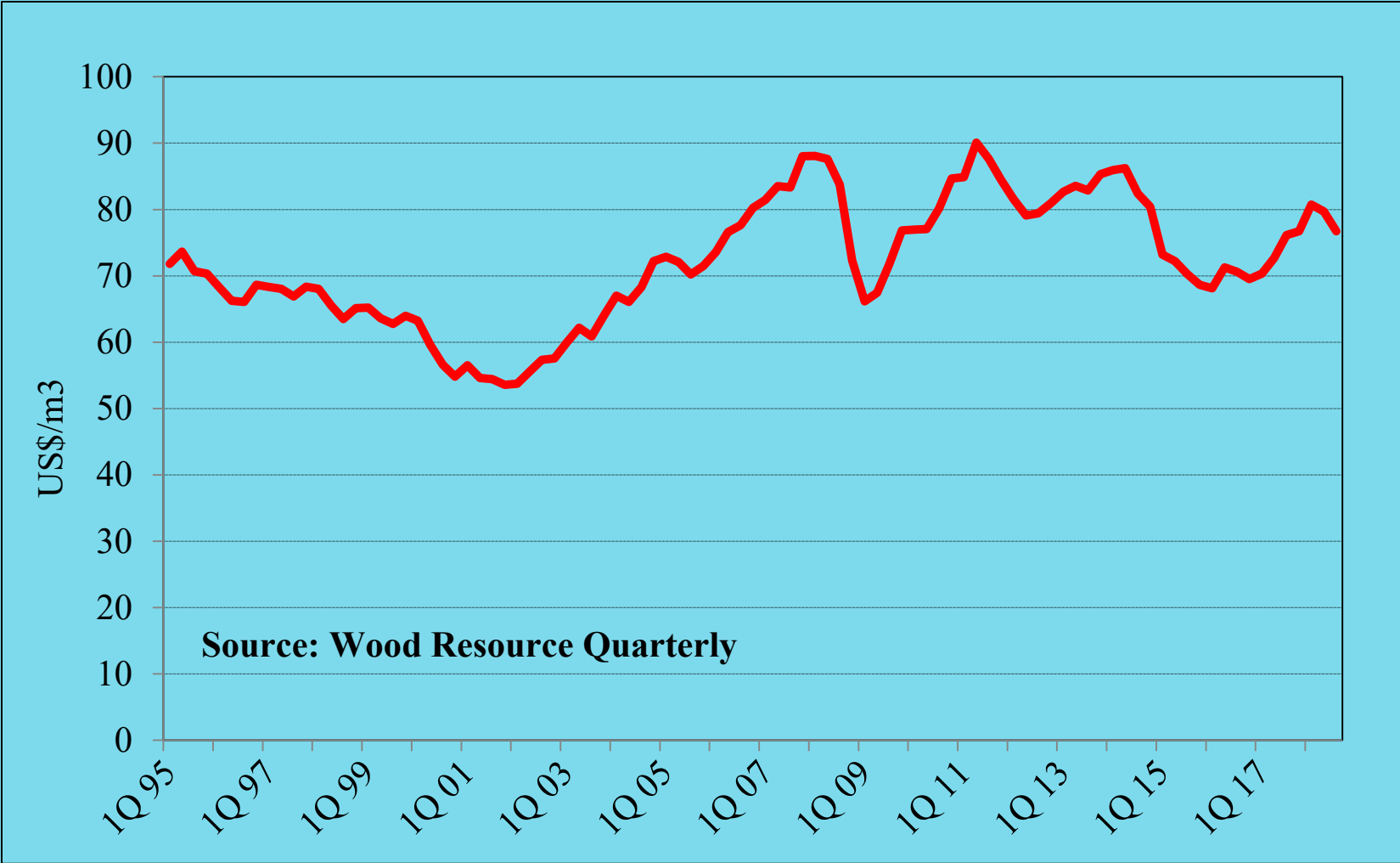
- Global Overview. Trade and Wood Raw-Material Pricing
- Log Supply and Log Trade in Western North America
- Lumber and Log Imports to China
- Sawlog Price Trends in North America
- Wood Fiber Prices in US PNW and BC
- Wood Costs and Lumber Prices
- The Pellet Fiber Price Index (PFPI)



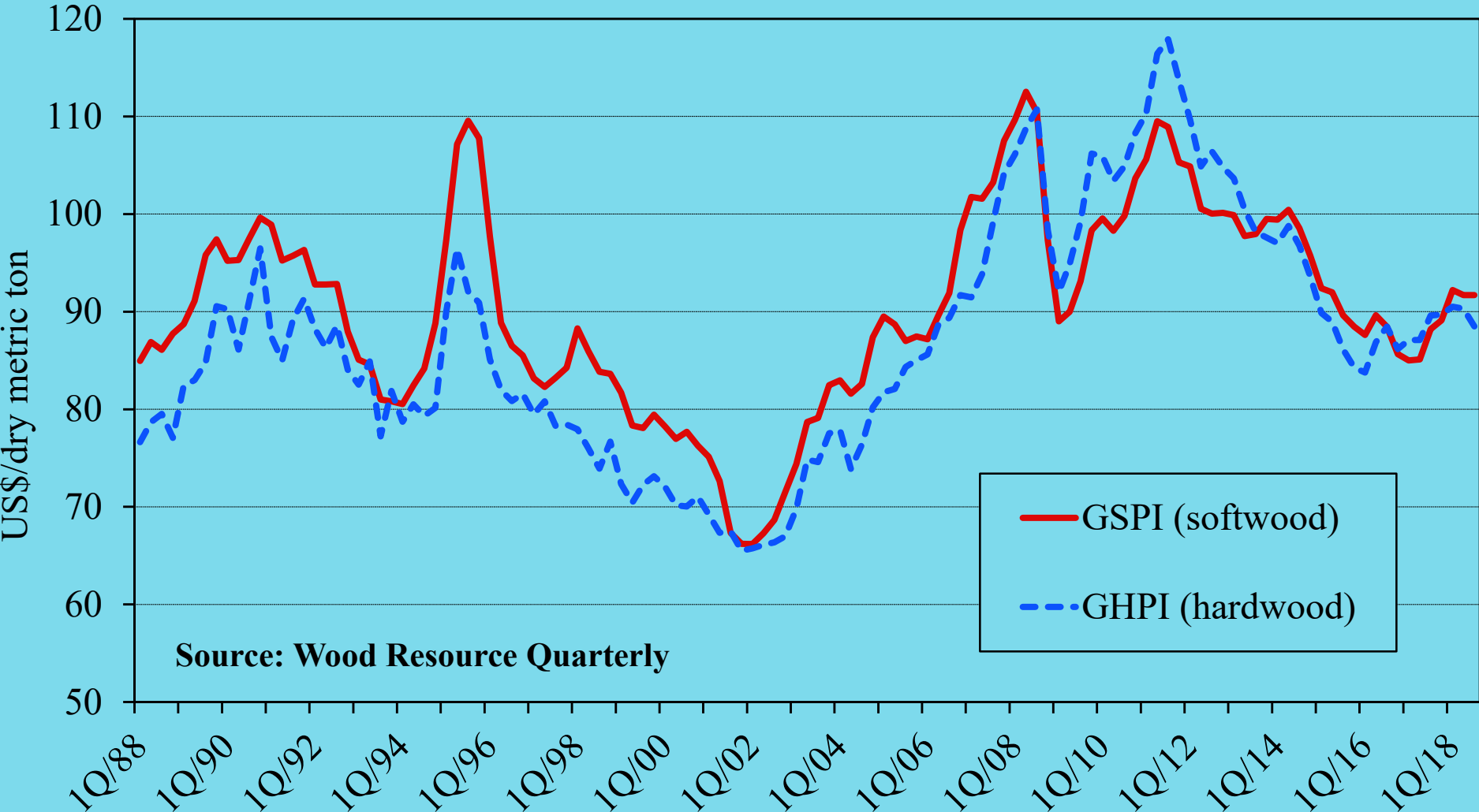
Global Trade of Forest Products 2008-2018



Global Sawlog Price Index 1Q/95 – 3Q/18



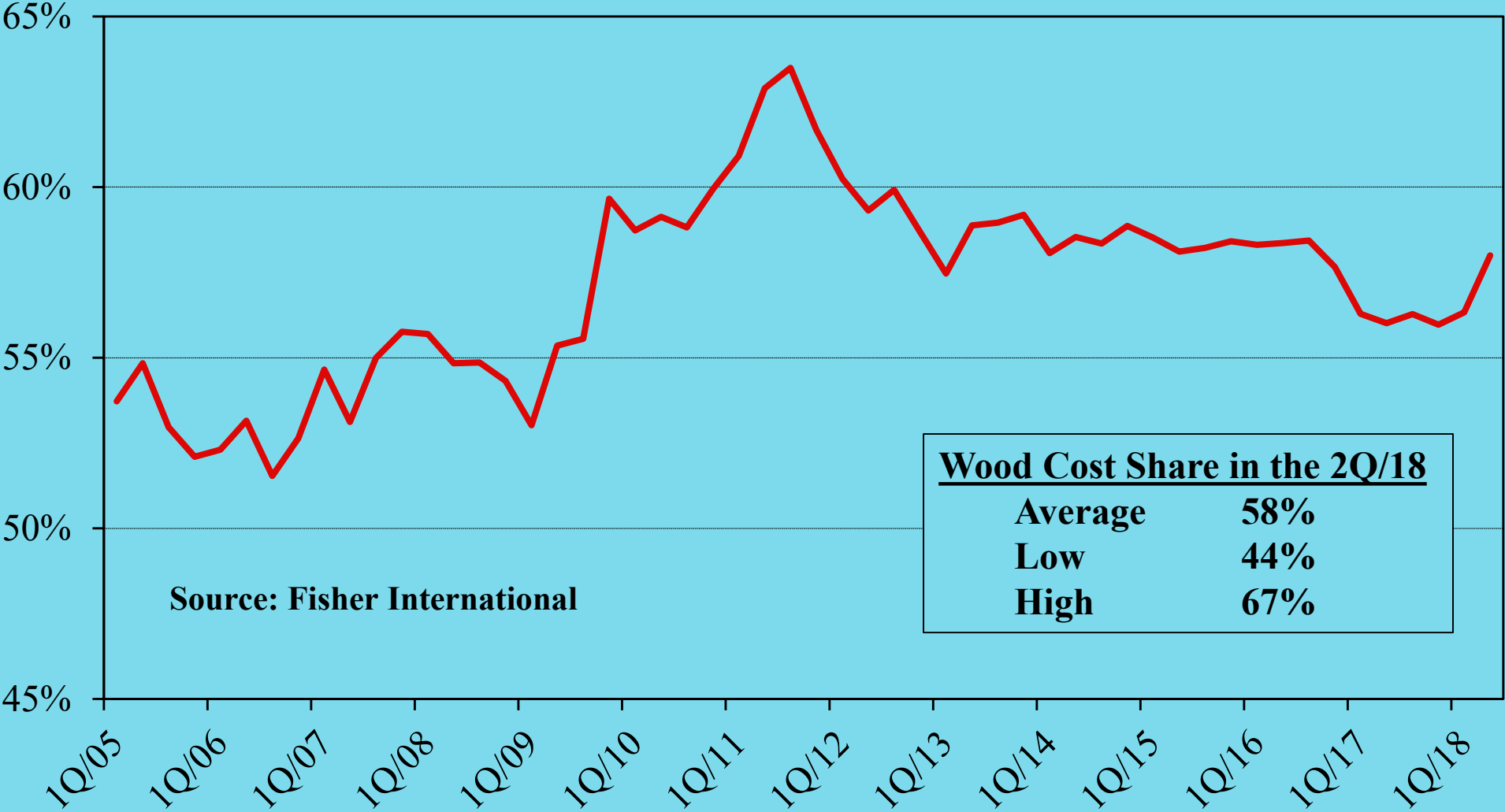
Global Wood Fiber Price Indices 1Q/88 – 3Q/18



Source: Wood Resource Quarterly



Wood Fiber Cost Share of Cash Costs (Total Pulp)



Source: Fisher International

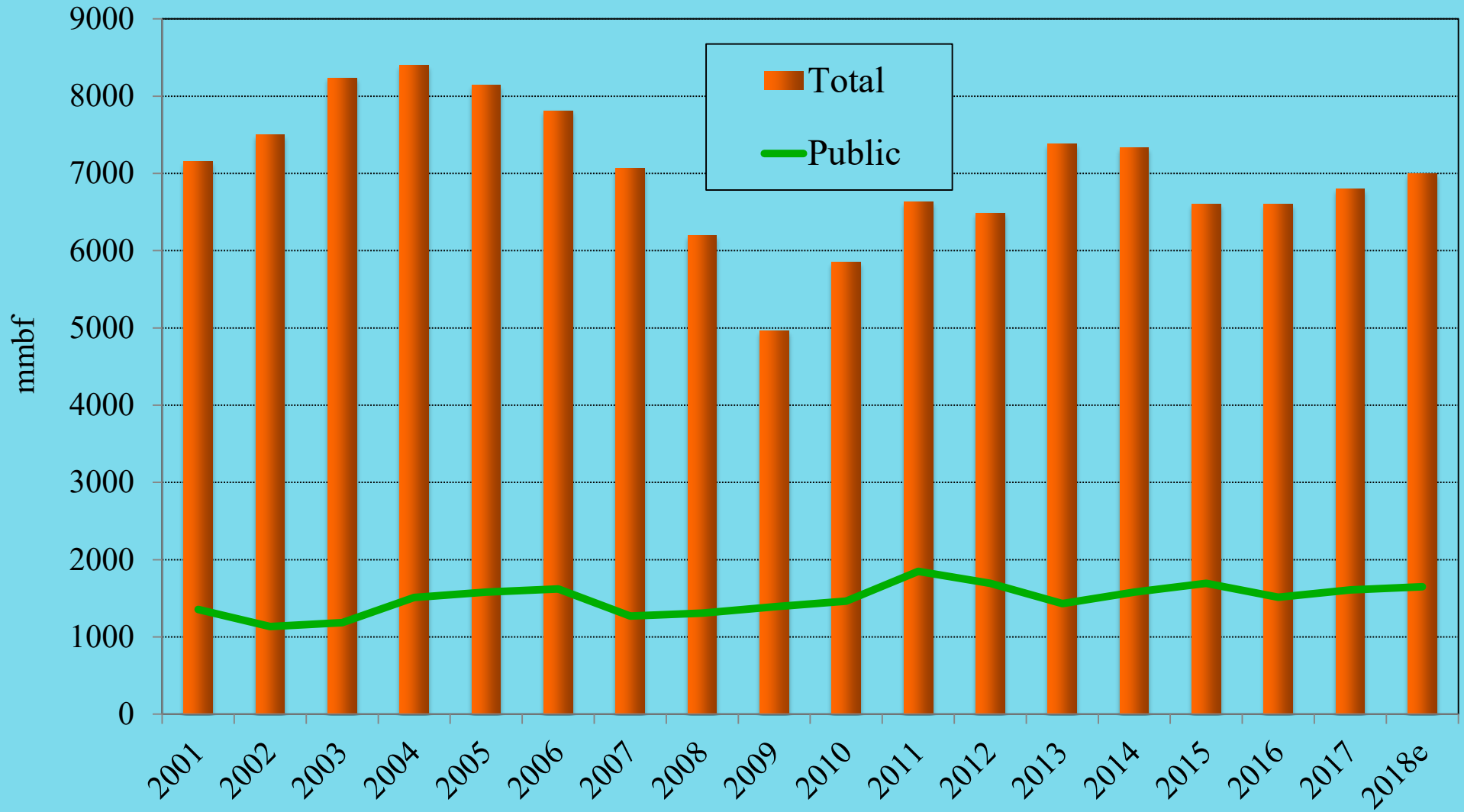
Wood Cost Share in the 2Q/18	
Average	58%
Low	44%
High	67%

Timber Harvests and Log Exports in the US Northwest and British Columbia



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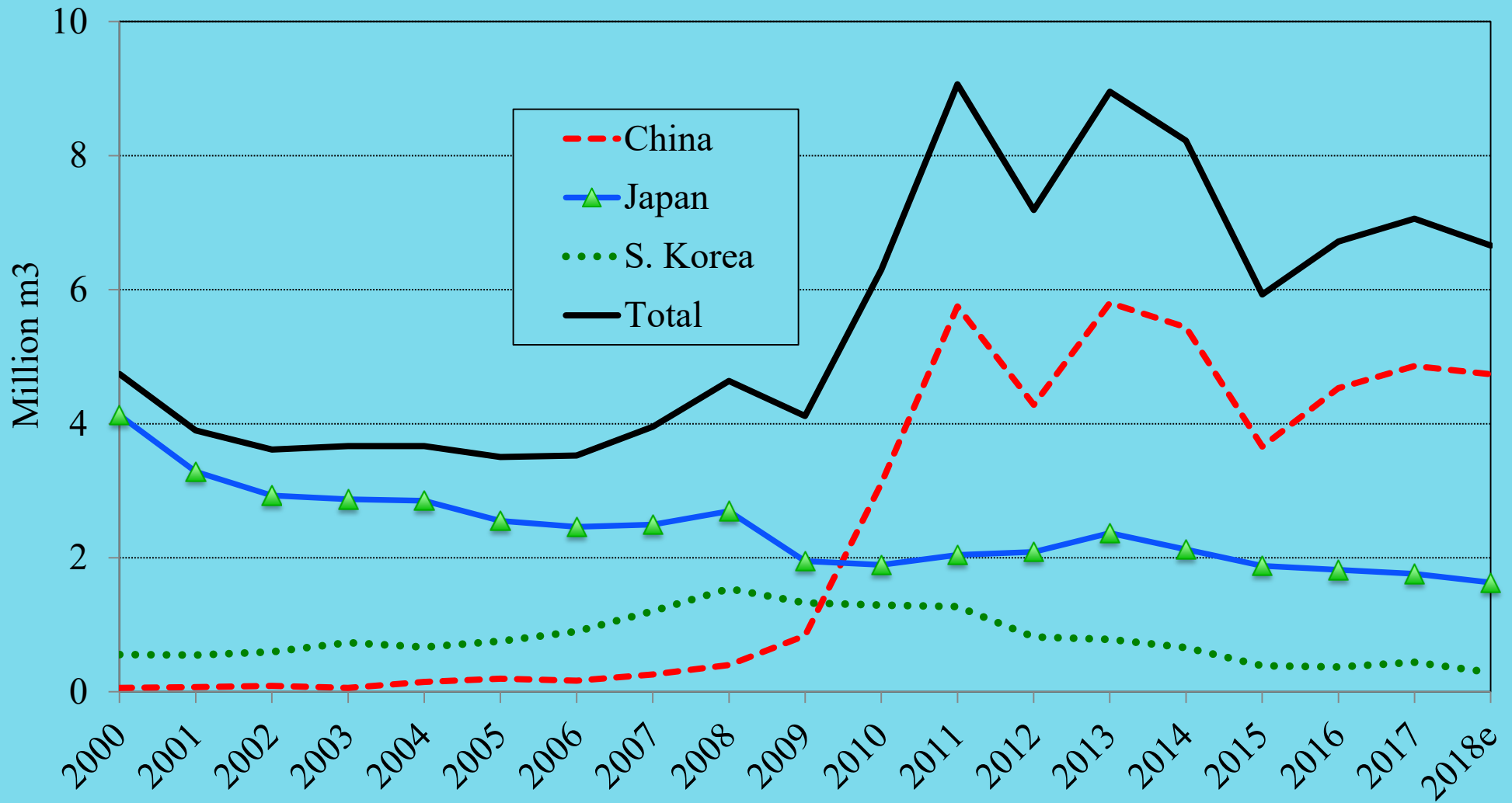
Timber Harvests in the US Northwest



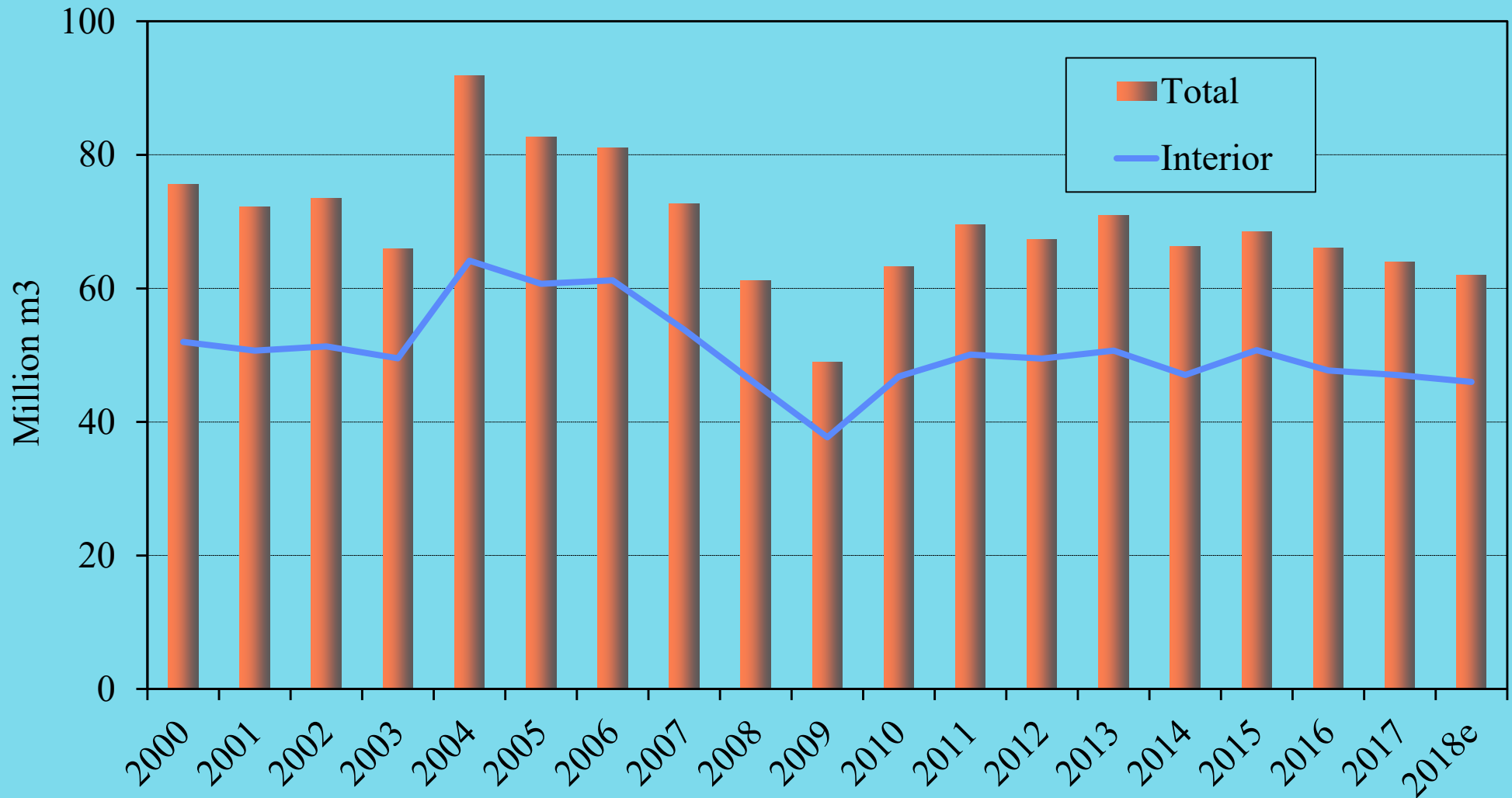
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Sources: DNR and WRI estimates

Log Exports From Western US to Asia



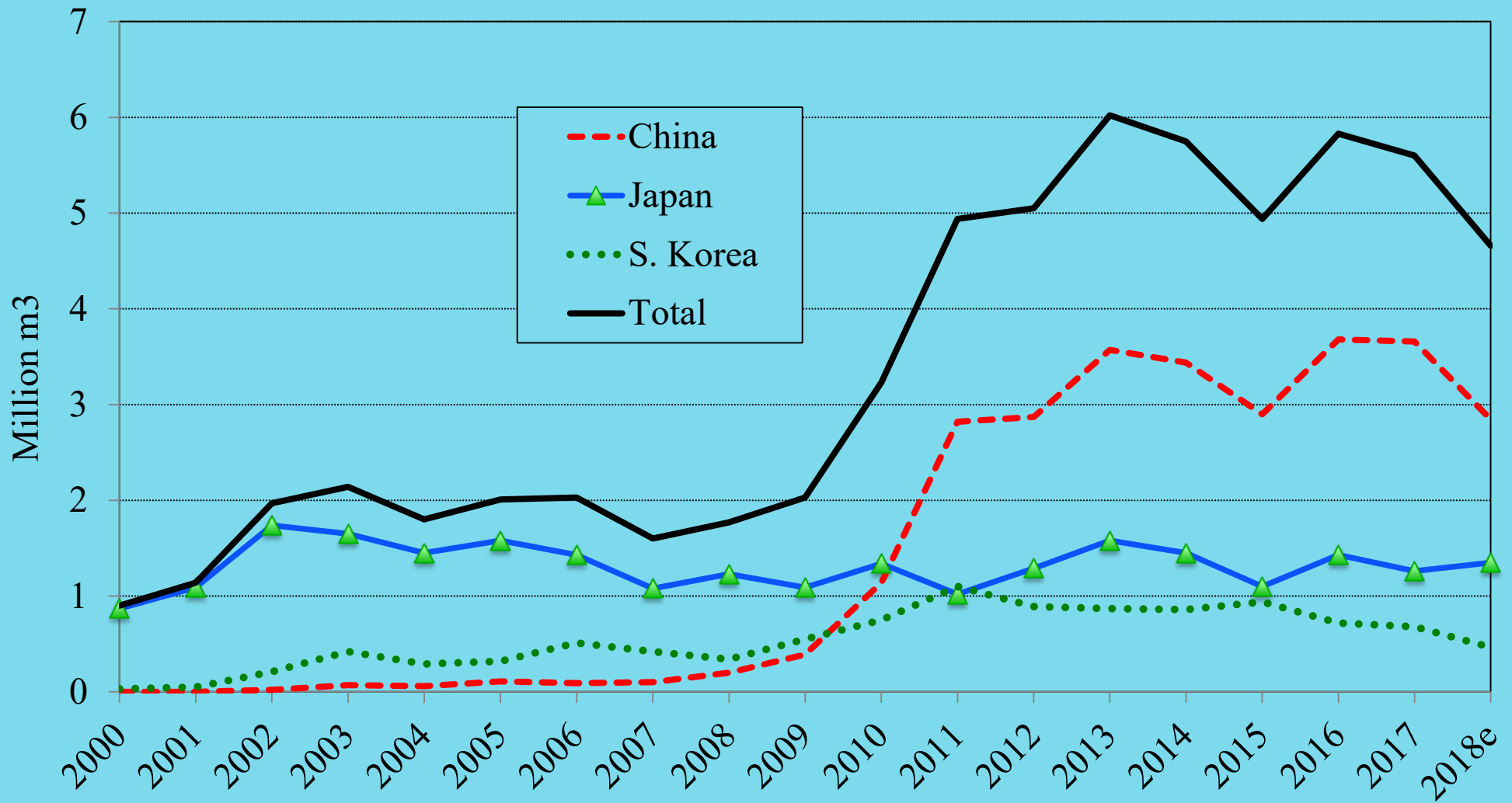
Timber Harvests in British Columbia



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Sources: MFLNR and WRI estimates

Log Exports From British Columbia to Asia

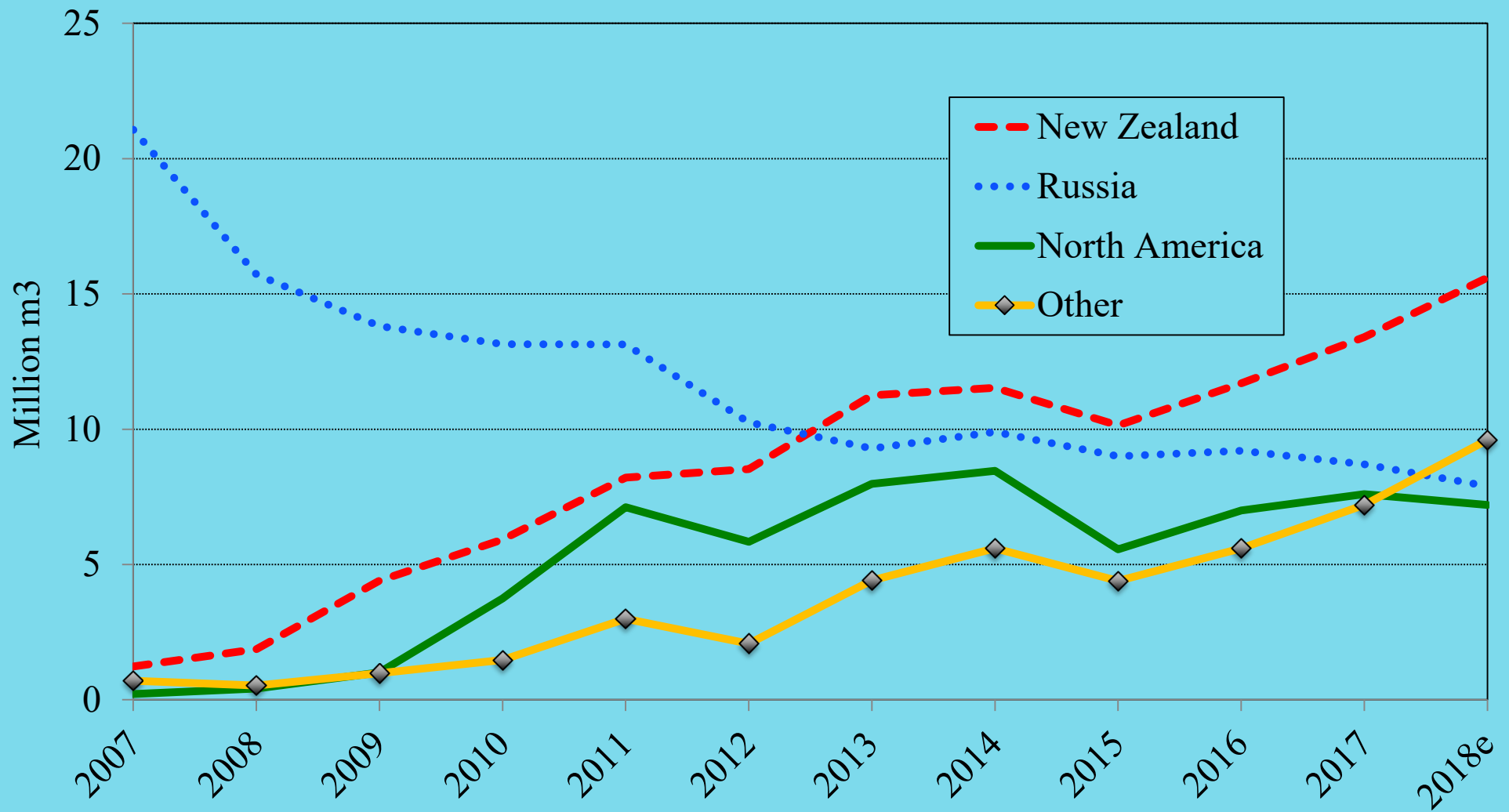


Log and Lumber Imports to China

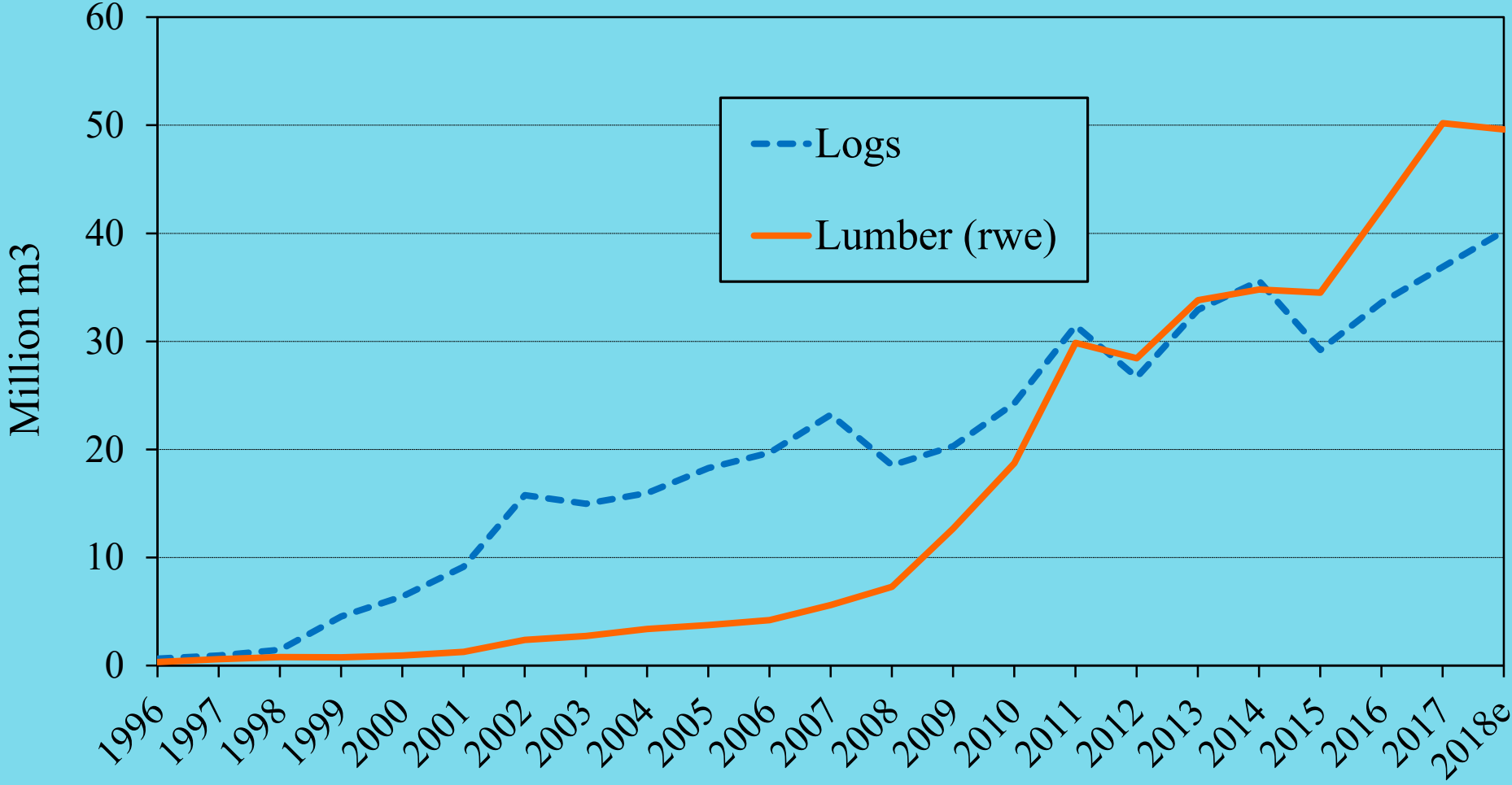


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Softwood Log Imports to China



Imports of Softwood Logs and Lumber to China

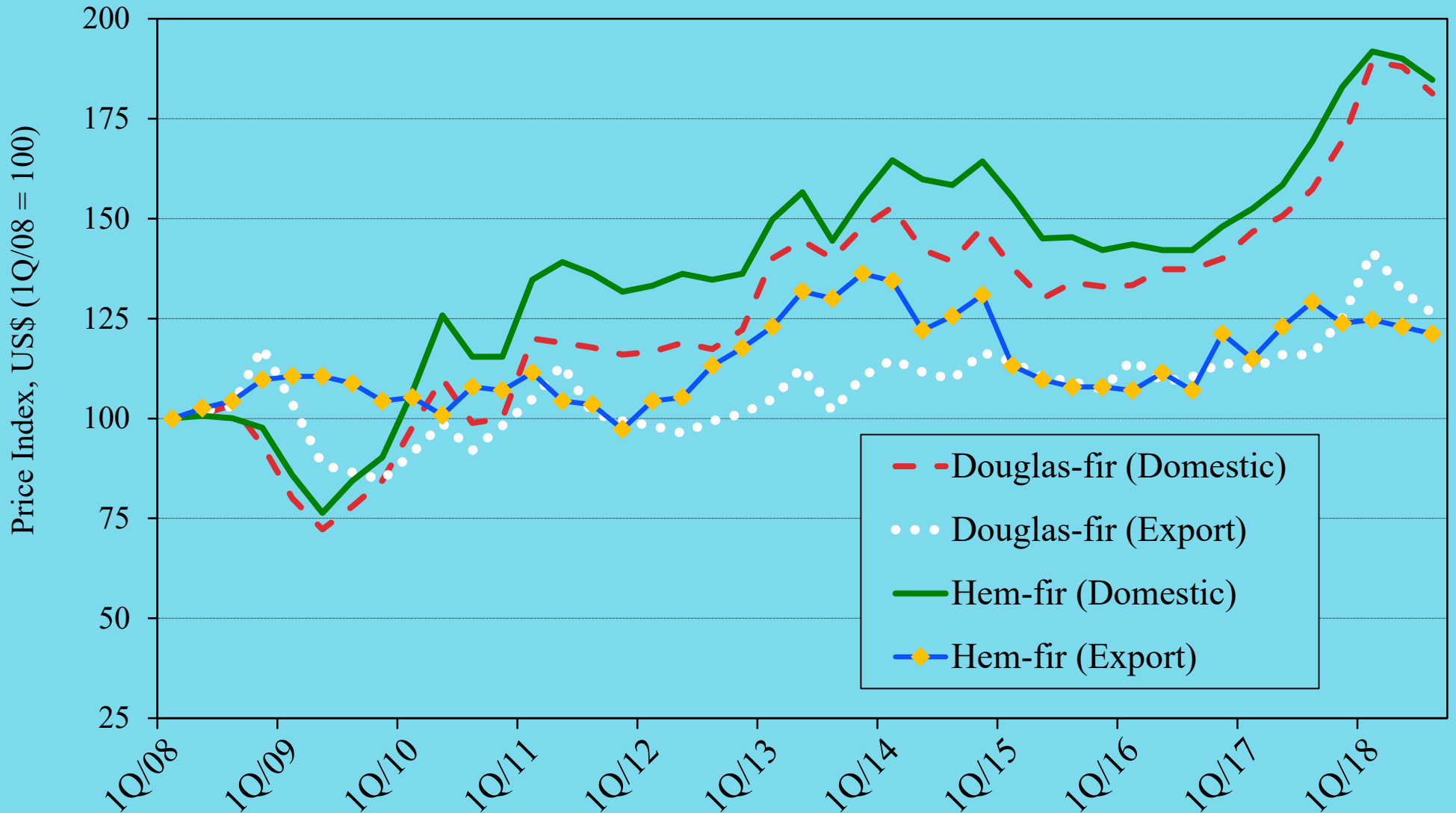


Sawlog Prices in North America and Competing Regions Worldwide

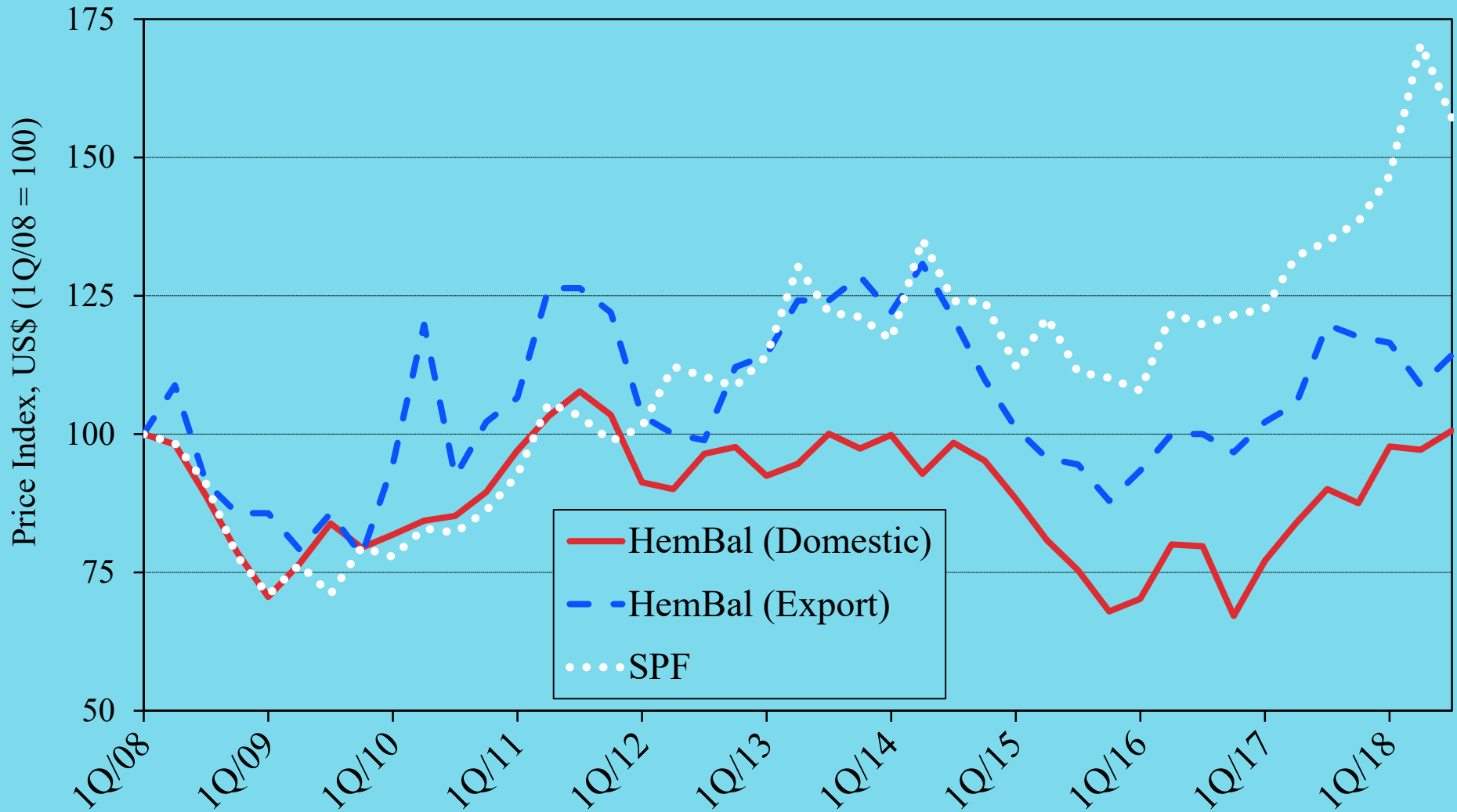


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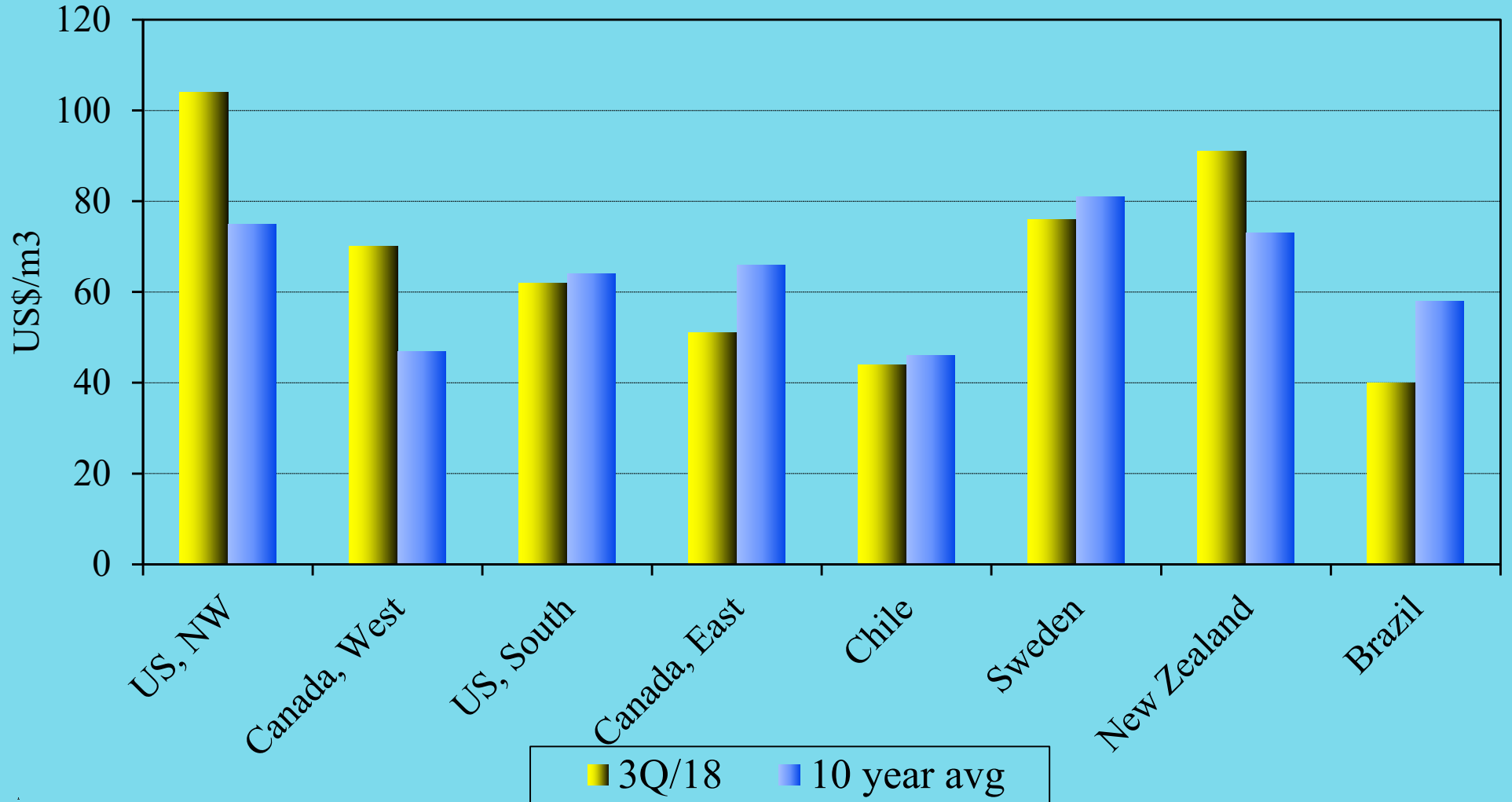
Sawlog Prices – US Northwest



Sawlog Prices – British Columbia



Log Prices for Key Lumber Producers 3Q/18

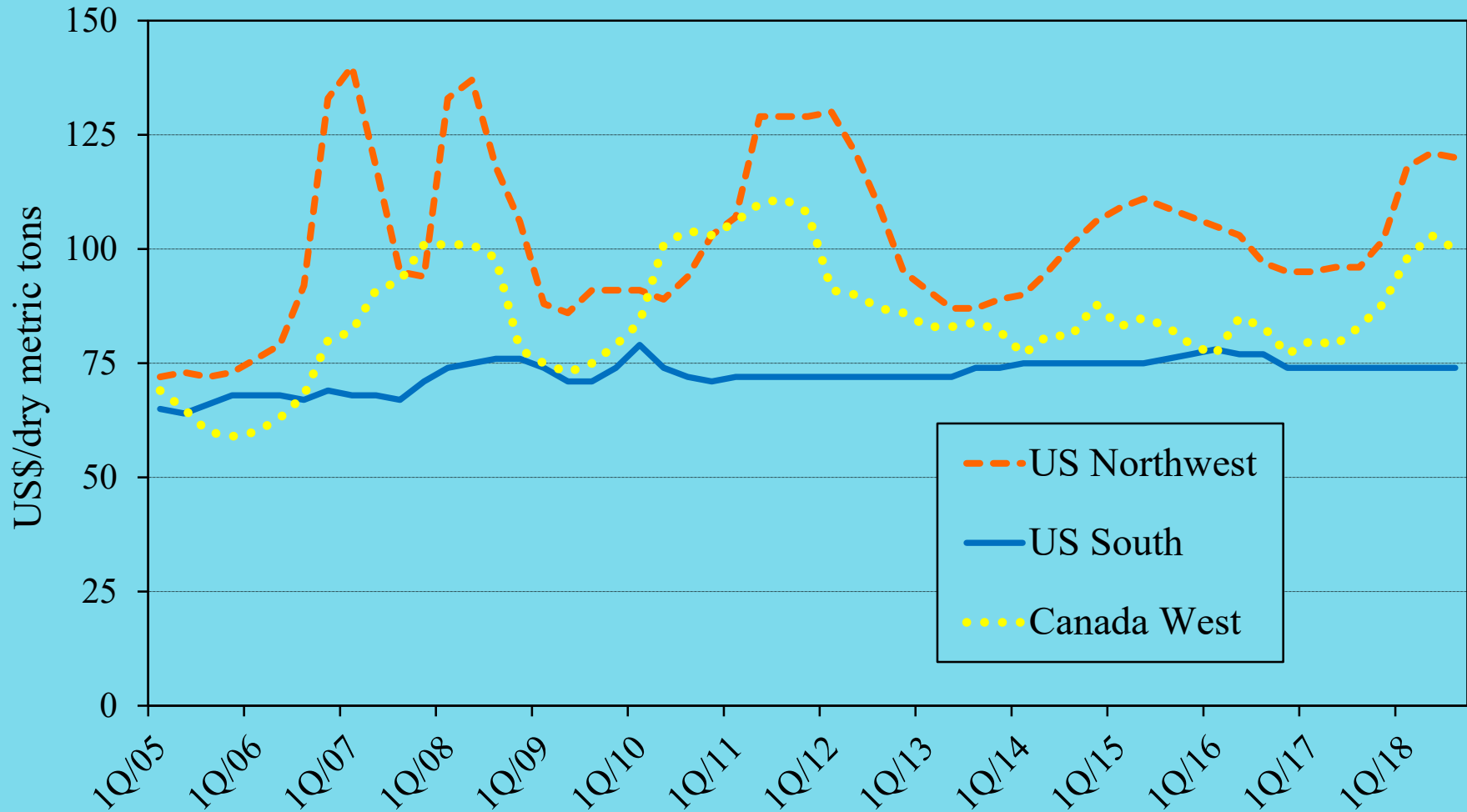


Wood Fiber Costs in BC and the US PNW

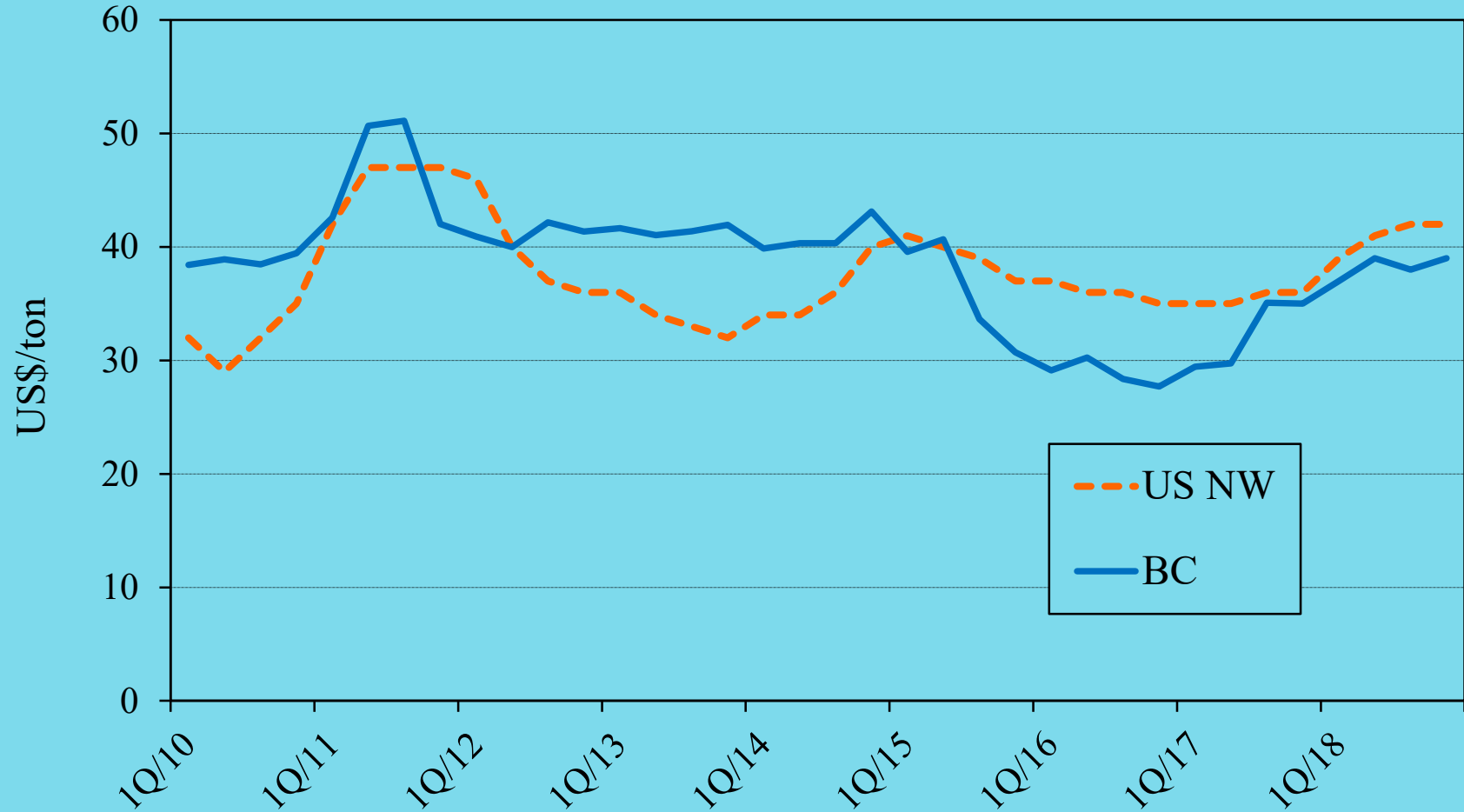


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Residual Chip Prices in North America 2005 - 2018



Pulplog Prices in BC and US PNW 2010 - 2018



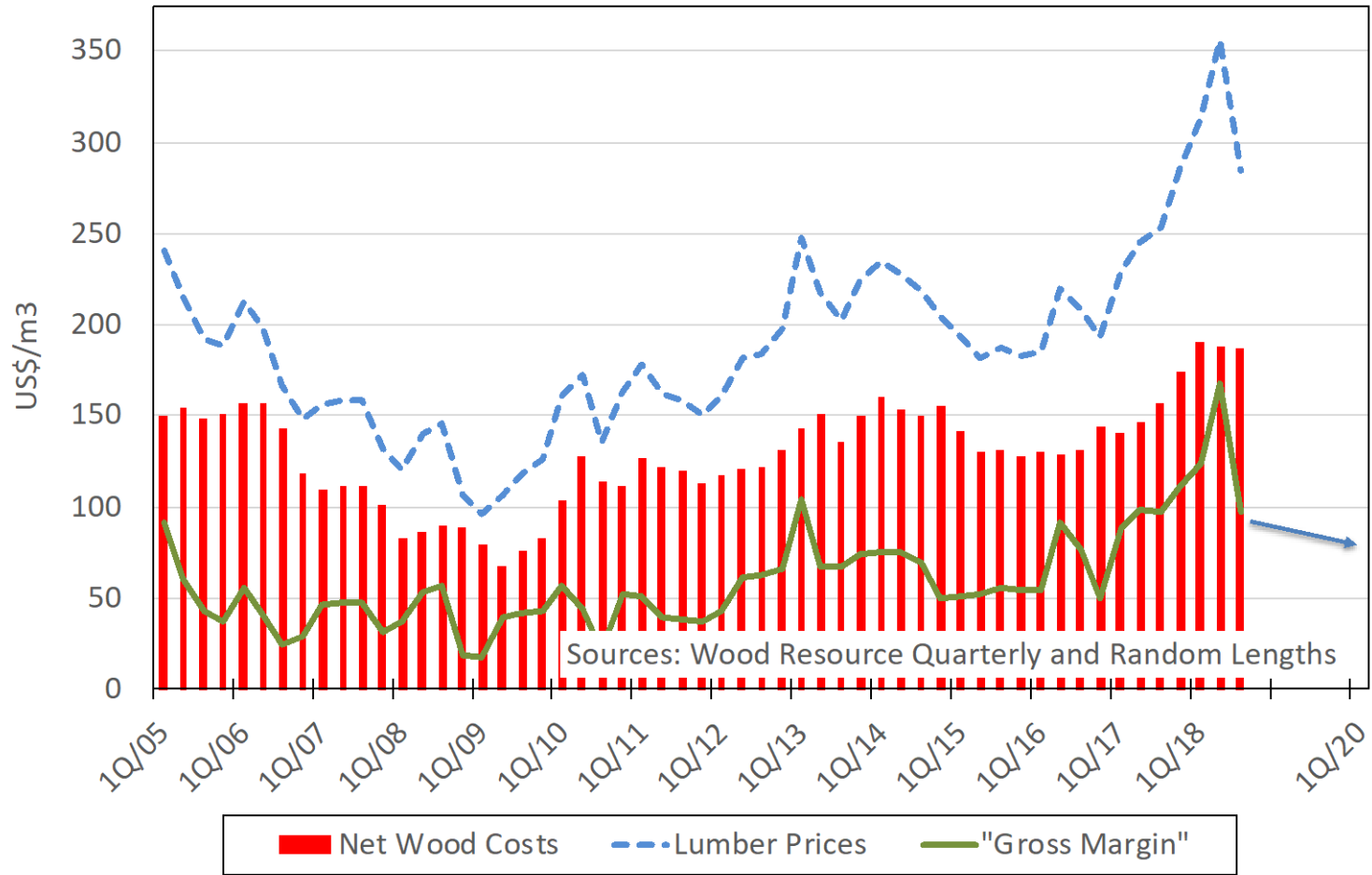
Net Wood Costs and Lumber Prices

- Margins for Sawmills in the West

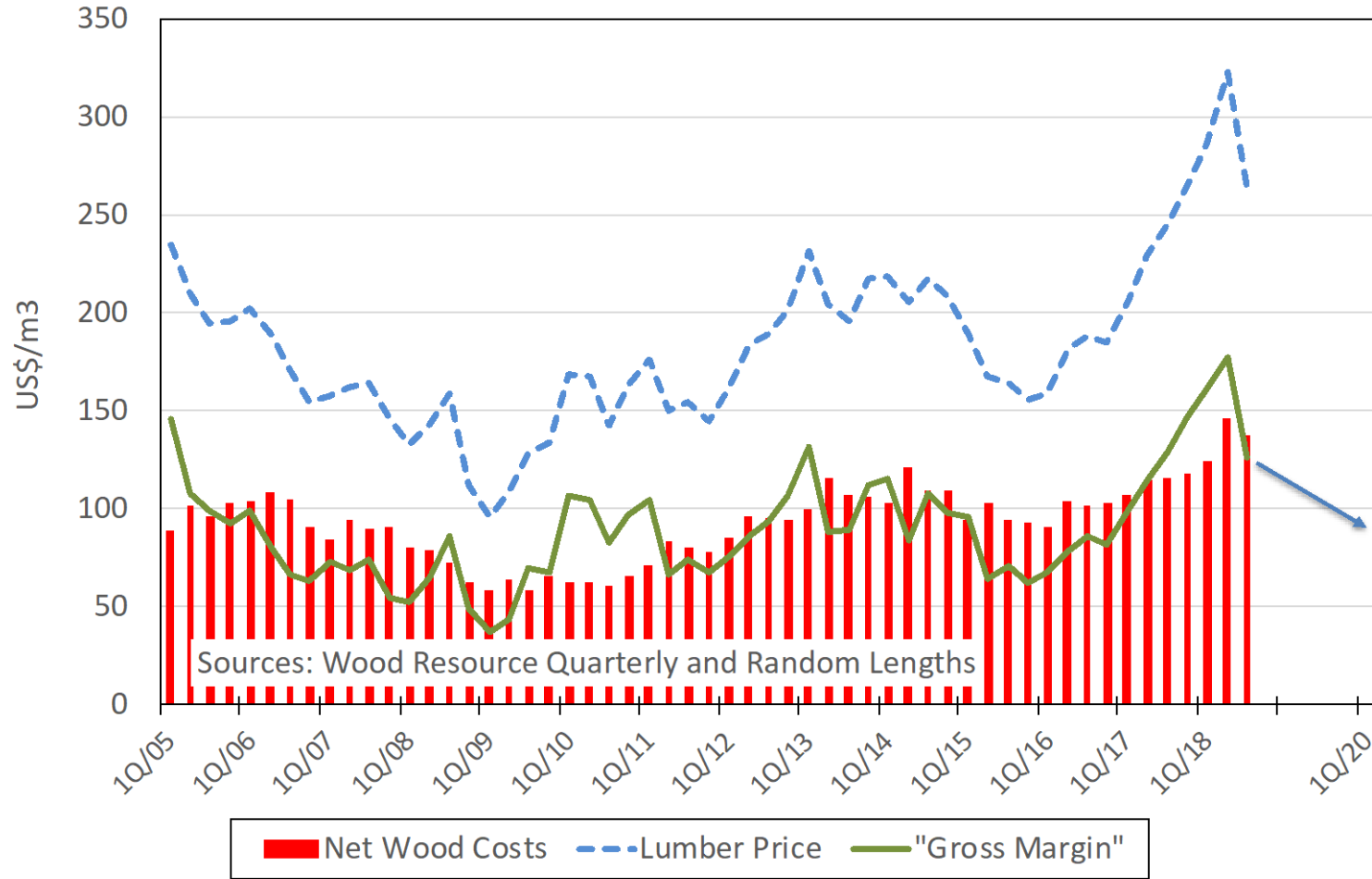


Wood Costs, Lumber Prices and Gross Margins

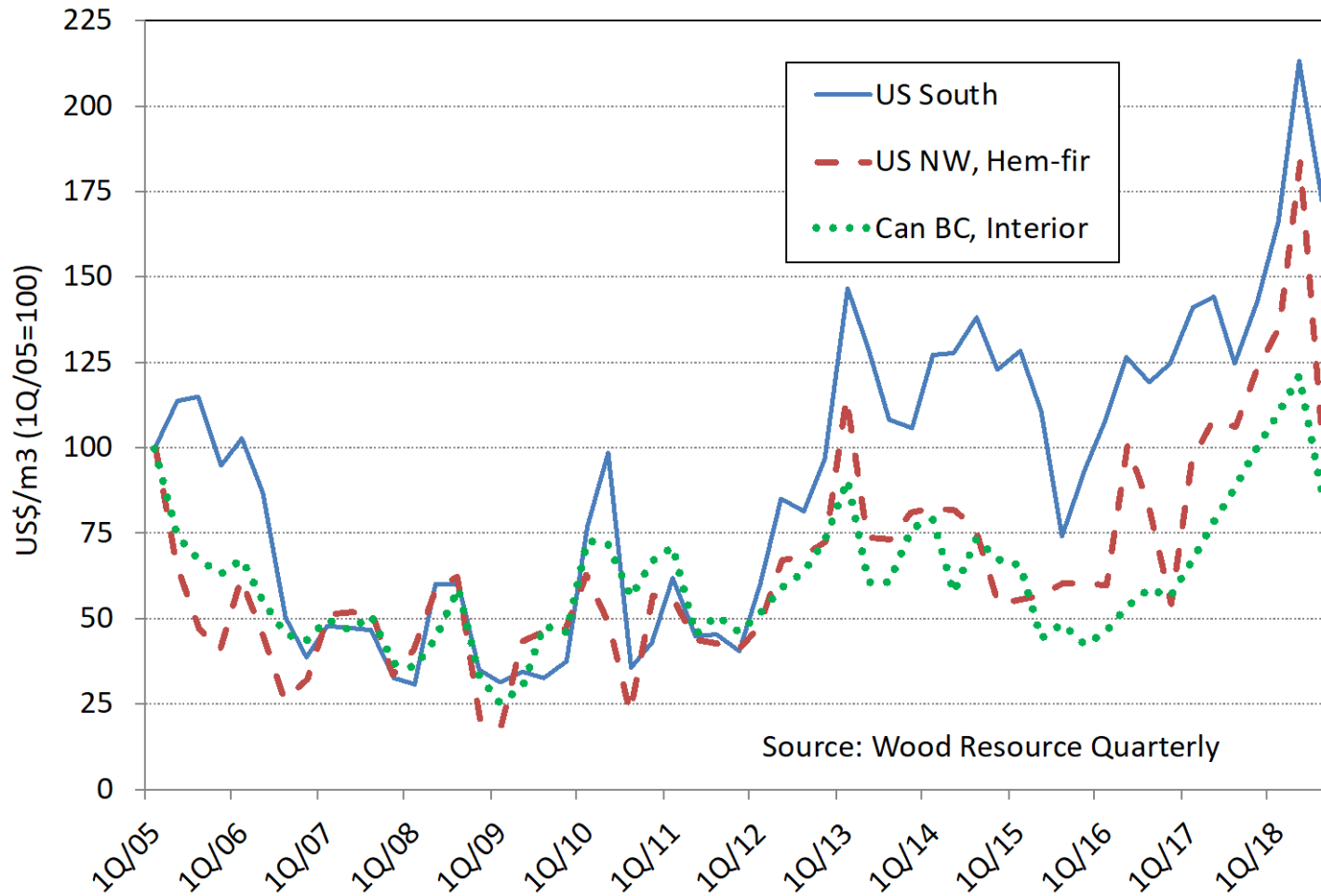
US NW - Hemlock/fir



Wood Costs, Lumber Prices and Gross Margins BC Interior



Relative Gross Margins for the Sawmilling Sector

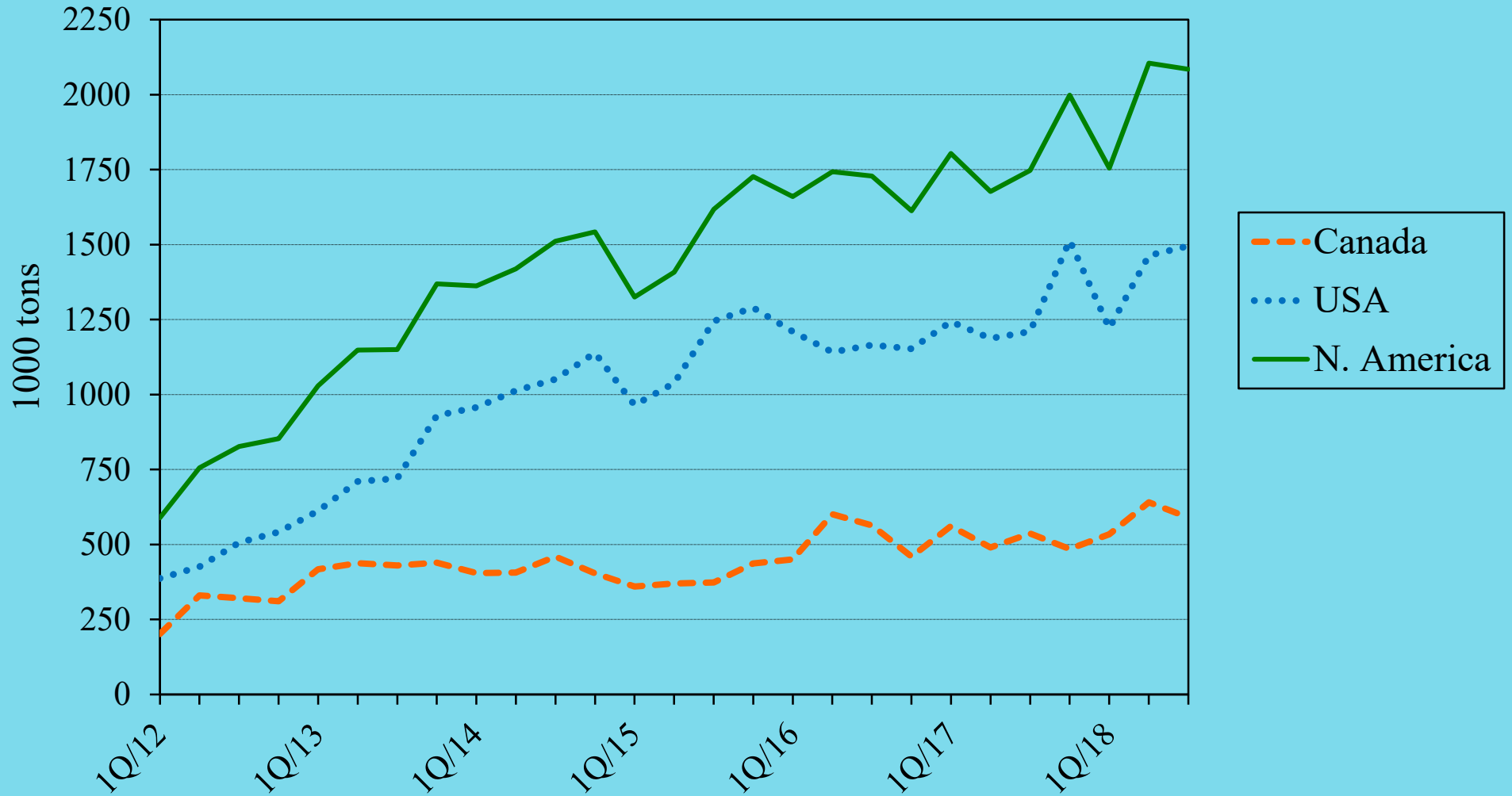


Feedstock for Wood Pellets in North America

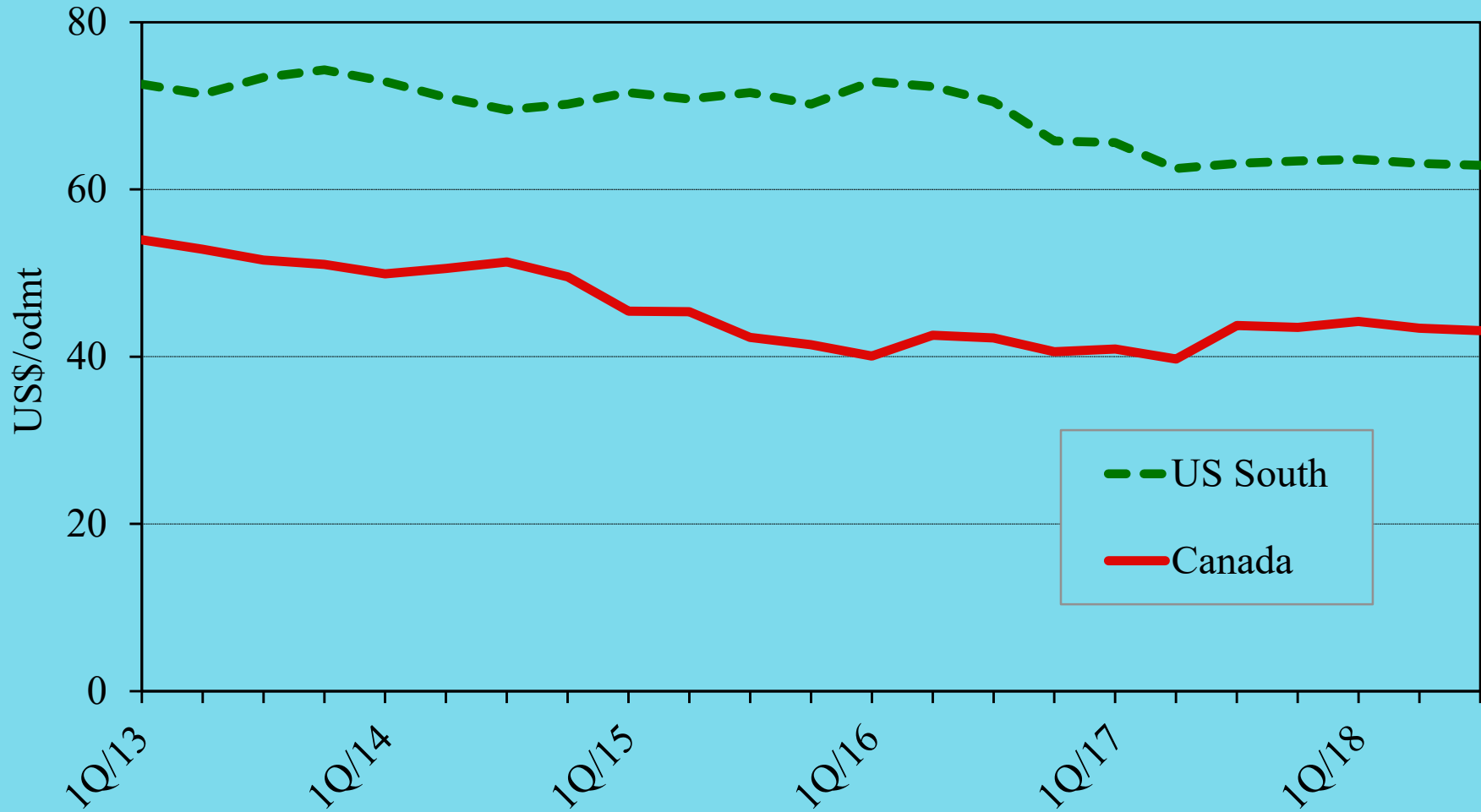
- Fiber Sources and Prices



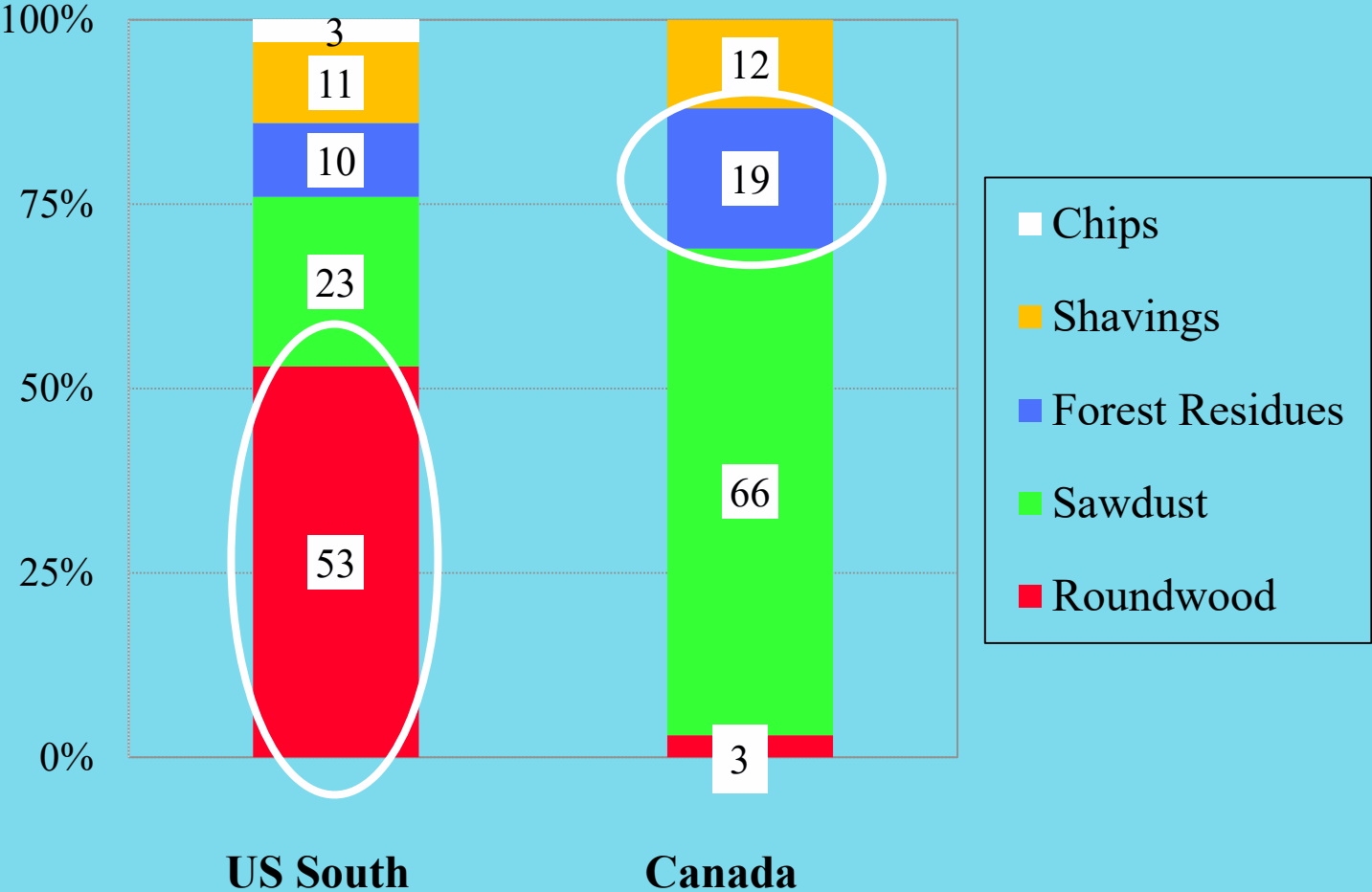
Wood Pellet Exports from North America



Pellet Feedstock Price Indices (PFPI) US and Canada



Feedstock for Pellet Plants in the US South and Canada in the 4Q/18



What's ahead in 2019 and 2020?

Lumber – Sawlogs

Wood Pulp – Pulplogs/Chips

Wood Pellets – Wood Fiber



Questions?

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**Publisher of the *Wood Resource Quarterly* and
*North American Wood Fiber Review***

WoodPrices.com



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