Forest2Market®

North America: *Housing, the Economy and Timber Harvest*

Silva 2015

"The Value of Forests"

Wood and wood products markets

November 3, 2015

Engelberg, Switzerland

©2015 Forest2Market®, Inc.

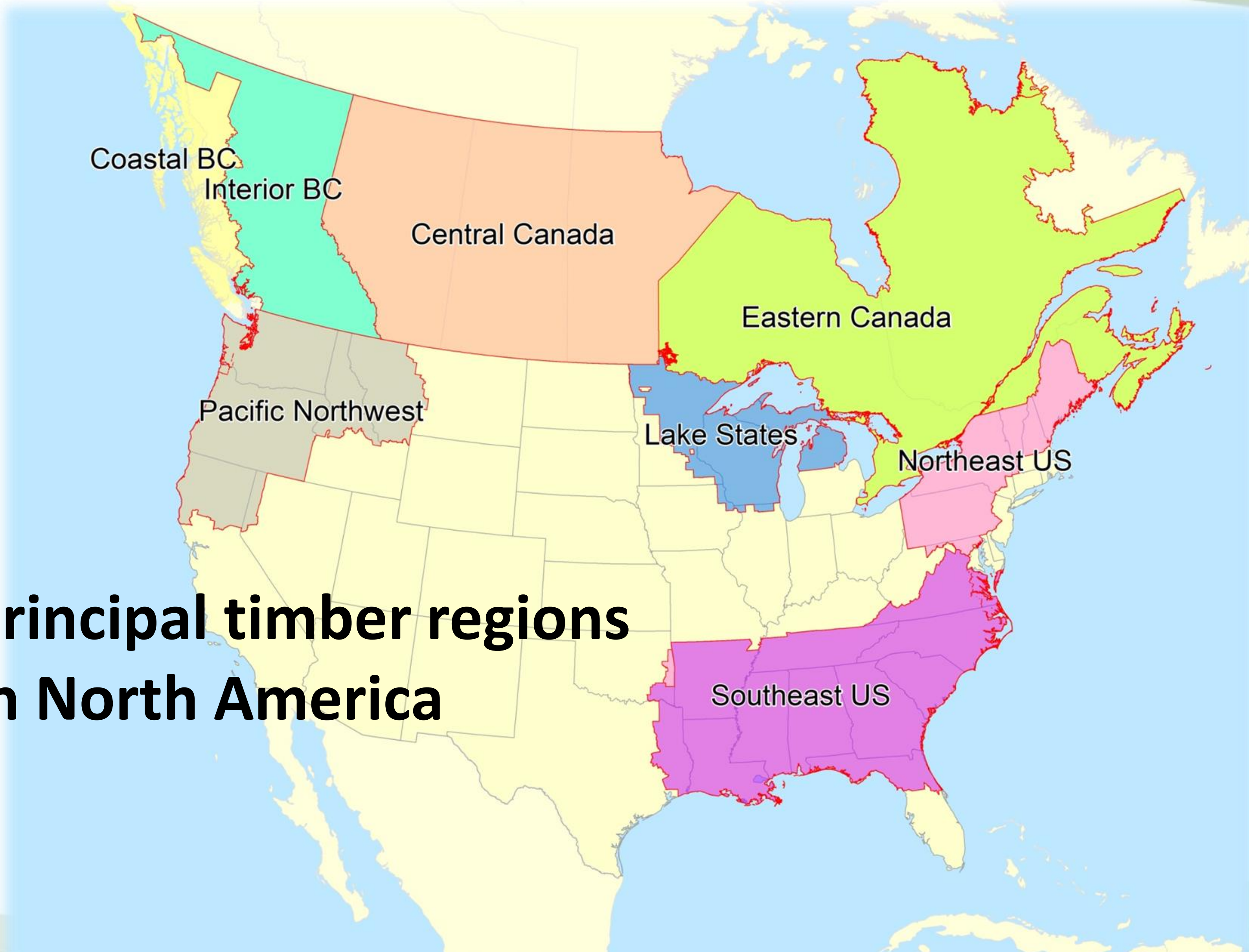
Forest2Market®

Today's Agenda

- US housing and the forest industry
- The future for building with wood
- Canadian lumber production
- US regional production trends
- "Softwood Lumber Agreement"
- Pulp and paper outlook
- North American forest product exports

Forest2Market®

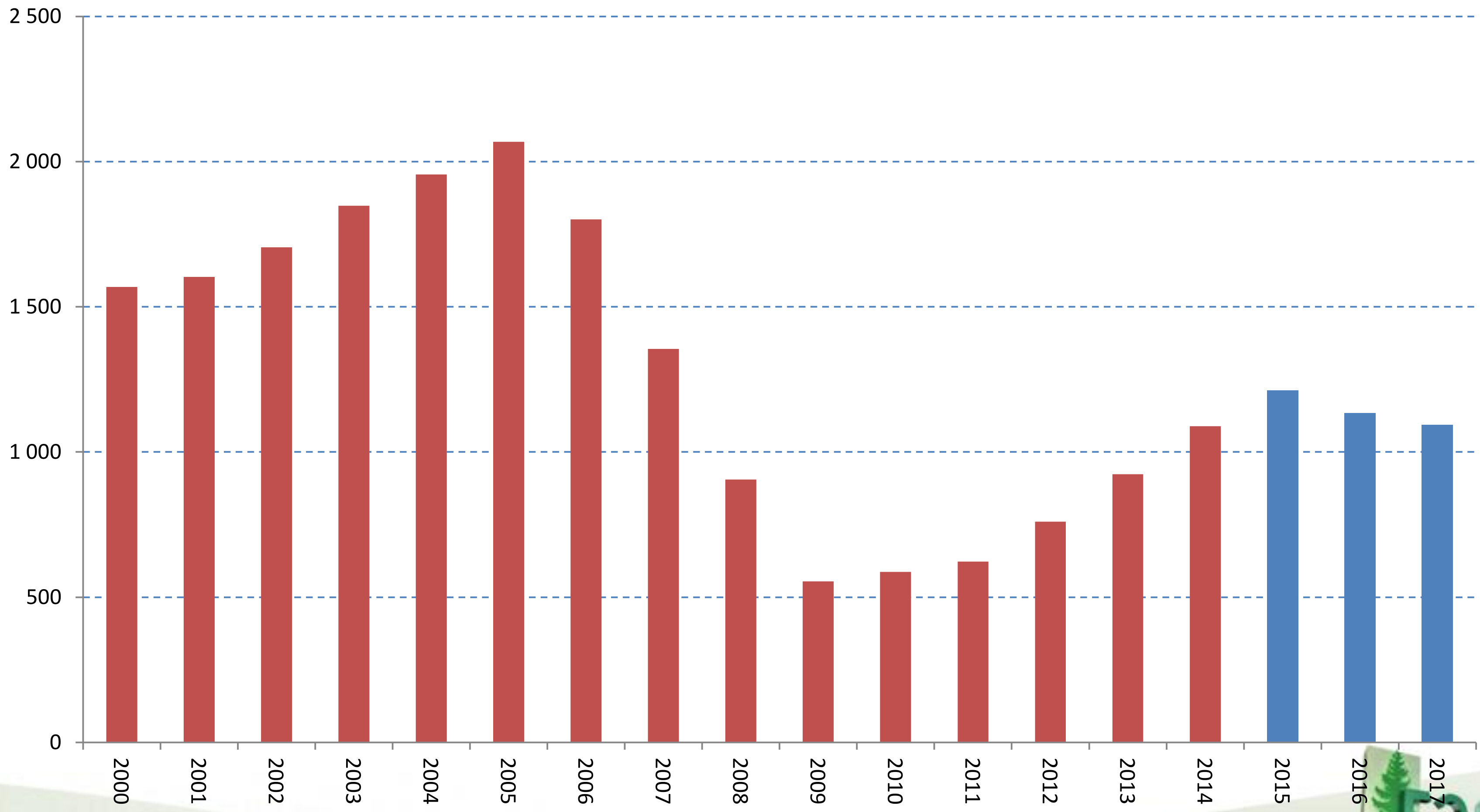
Principal timber regions In North America



Forest2Market

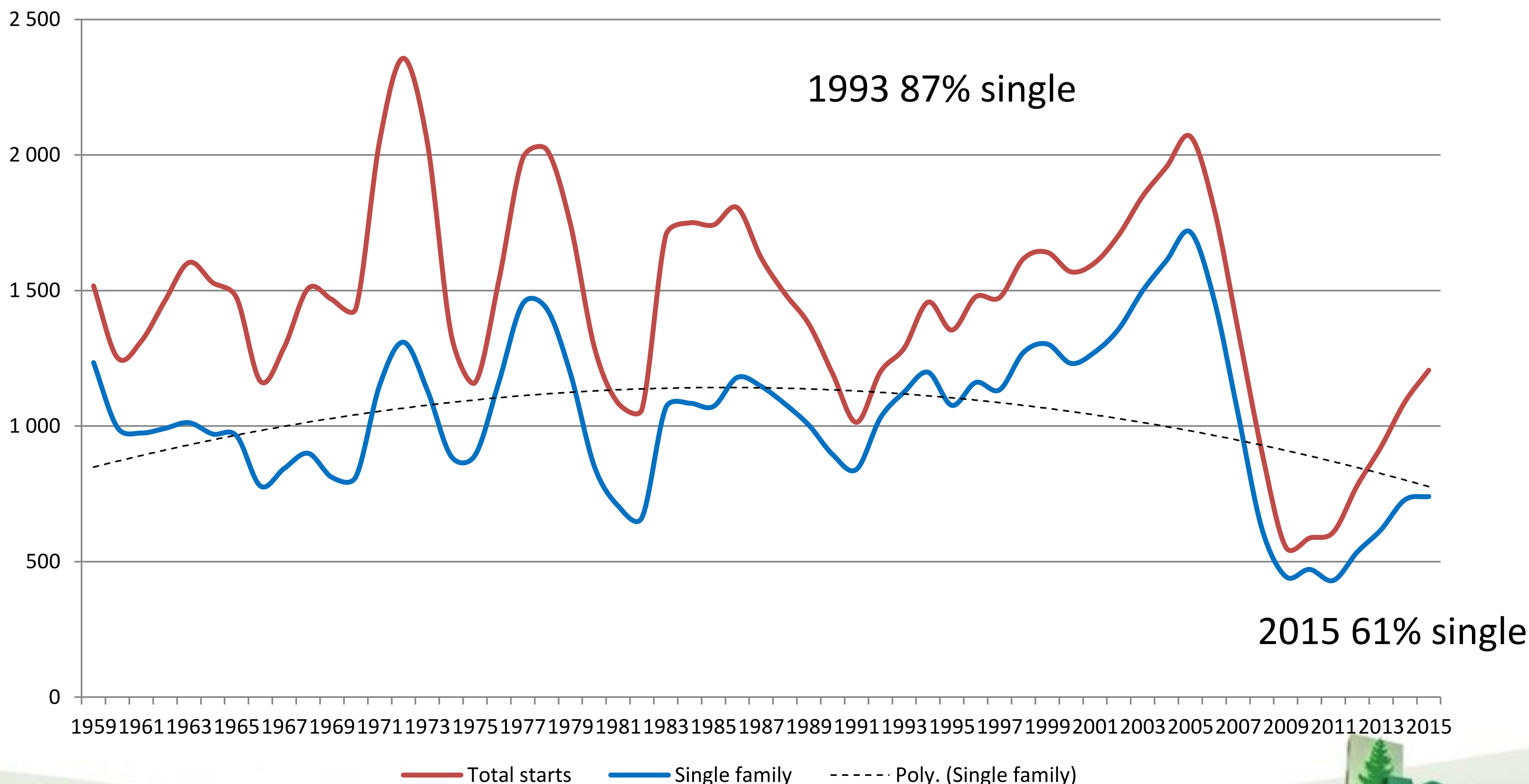
Building with wood

US housing drives NA production



Source: US Census & Forest2Market

Changing demographics of housing



Source: US Census

©2015 Forest2Market®, Inc.

Forest2Market

New horizons building with wood

Framework, a twelve story retail, office and housing project using cross-laminated timber and other engineered wood products to be constructed in Portland, Oregon

Courtesy of Edelman Public Relations

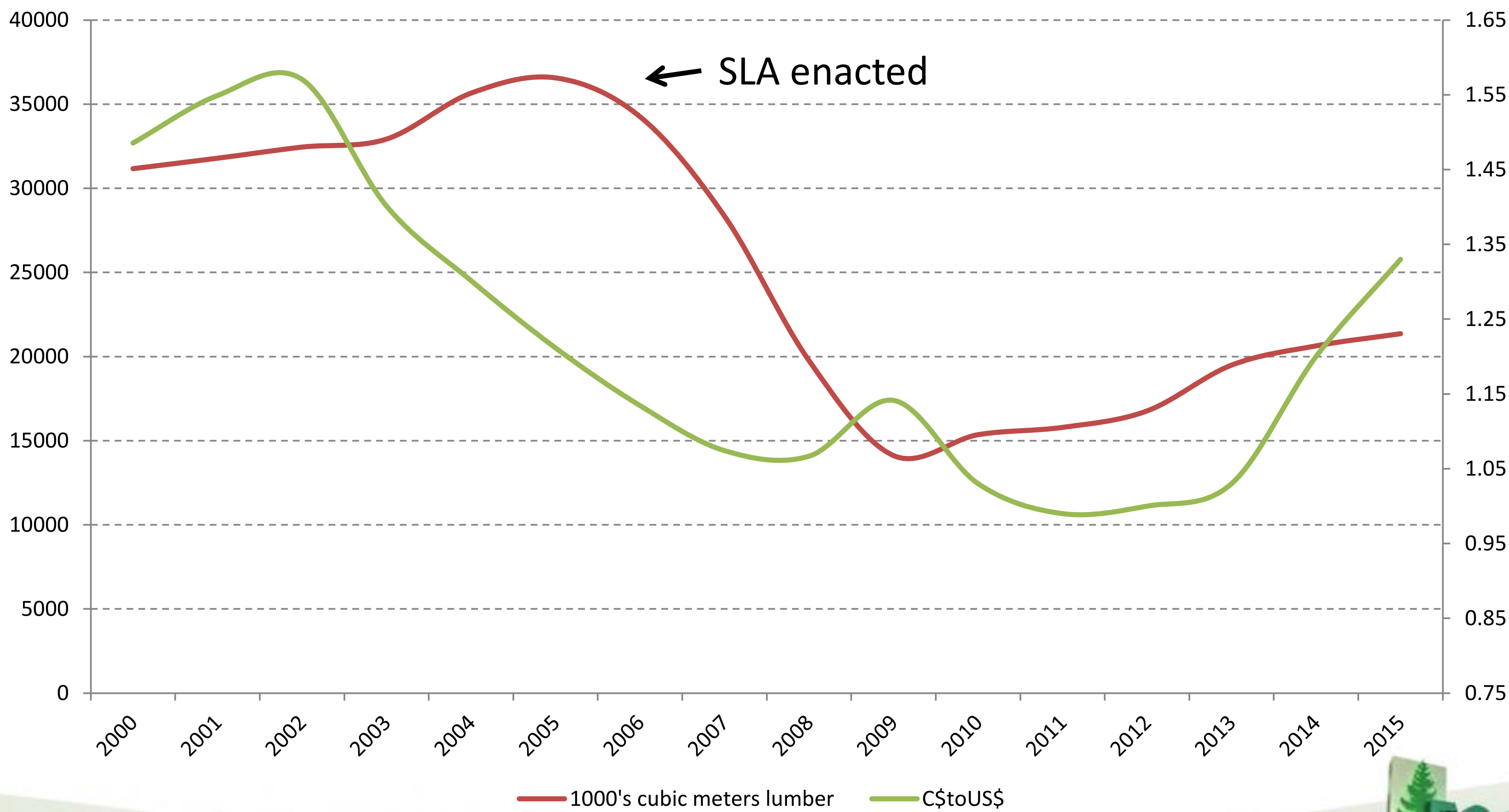
Framework, a 12-story Portland project, shared a $3 million USDA tall wooden building design prize. It will be built using cross-laminated timbers.

Wooden high-rise in Portland shares $3 million USDA design prize

Forest2Market

Canadian forest industry

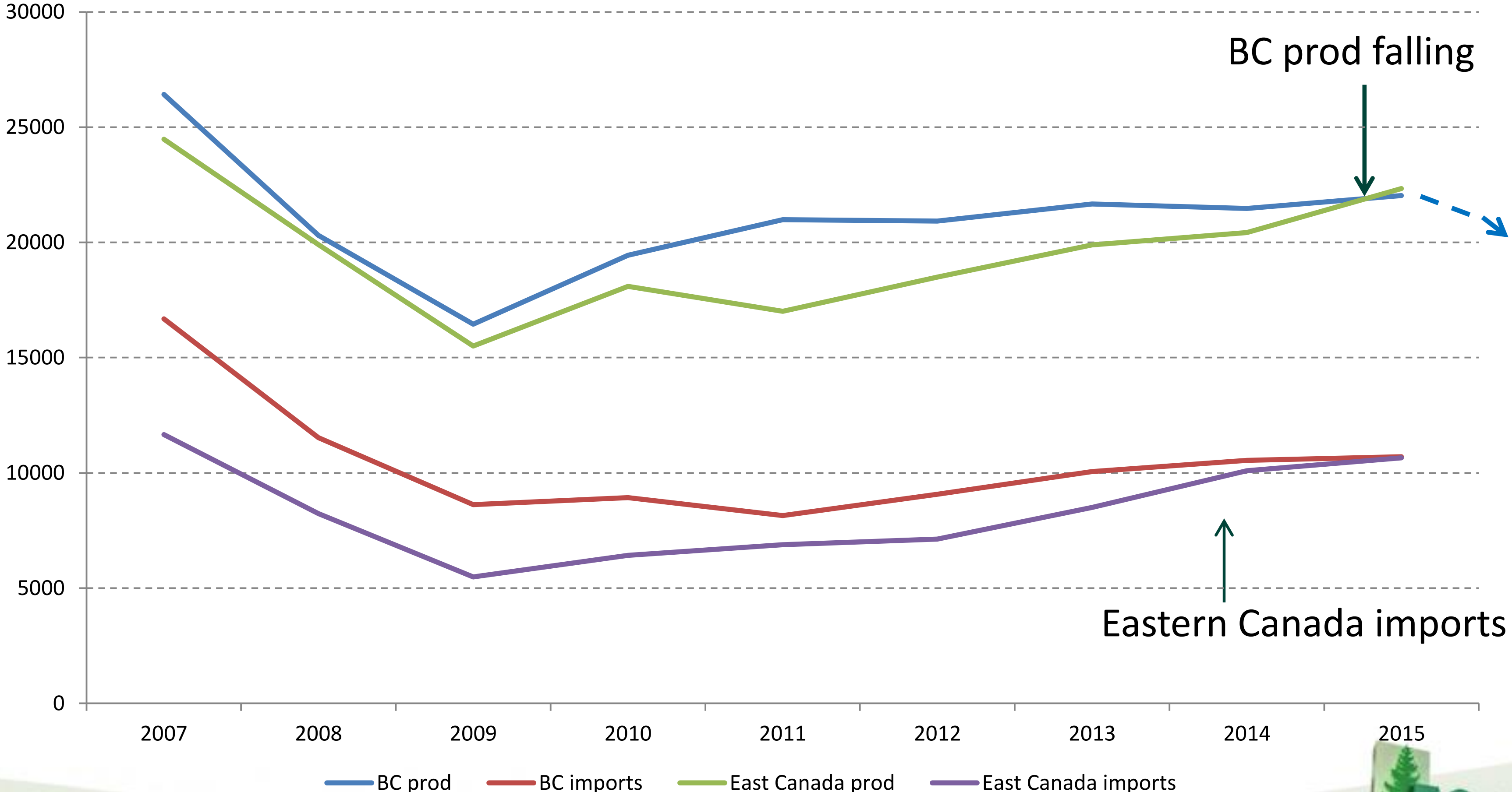
Canadian softwood lumber imports to US



Source: WWPA & Bank of Canada

Forest2Market

MPB leads to Canadian lumber decline



Source: WWPA

©2015 Forest2Market®, Inc.

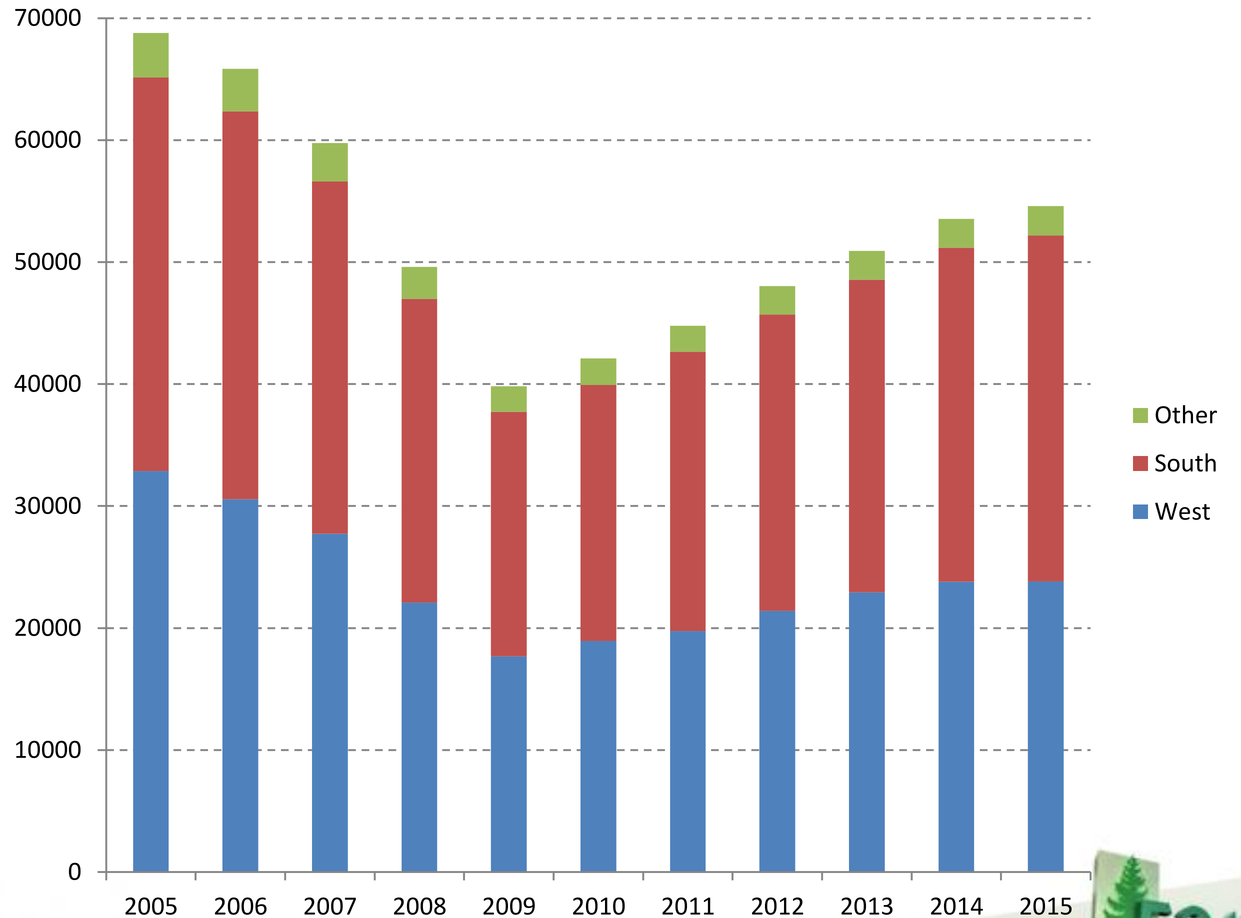
Softwood lumber agreement

- Adopted in 2006; resulting from a disagreement over whether Canadian stumpage pricing process constituted an unfair subsidy that disadvantaged the US lumber industry
- SLA expired in October 2015
- What has changed? Mountain pine beetle infestation in BC, Canadian producers supply China's demand for wood products, Canadian industry now owns a large stake in US lumber production
- Strong US $ makes Canadian lumber imports attractive
- As demand from China falls, US producers are concerned about a "wall of wood" from across the border
- Canadian producers see new trade restrictions as an unnecessary intrusion on free trade, an effort to prop up values of US private forests and fear further duties could be retro-active
- A "sticky wicket" as they say!

US industry outlook

US softwood lumber production

- Western share of national softwood lumber production is declining
- Major western sawmill closures in 2015
- West Coast timber supply constrained
- Southern pine share of lumber production (52%)is growing due to abundant low cost logs
- Canadian forest products companies investing heavily in southern sawmills
- New southern sawmill construction
- Consolidation of production capacity in all regions

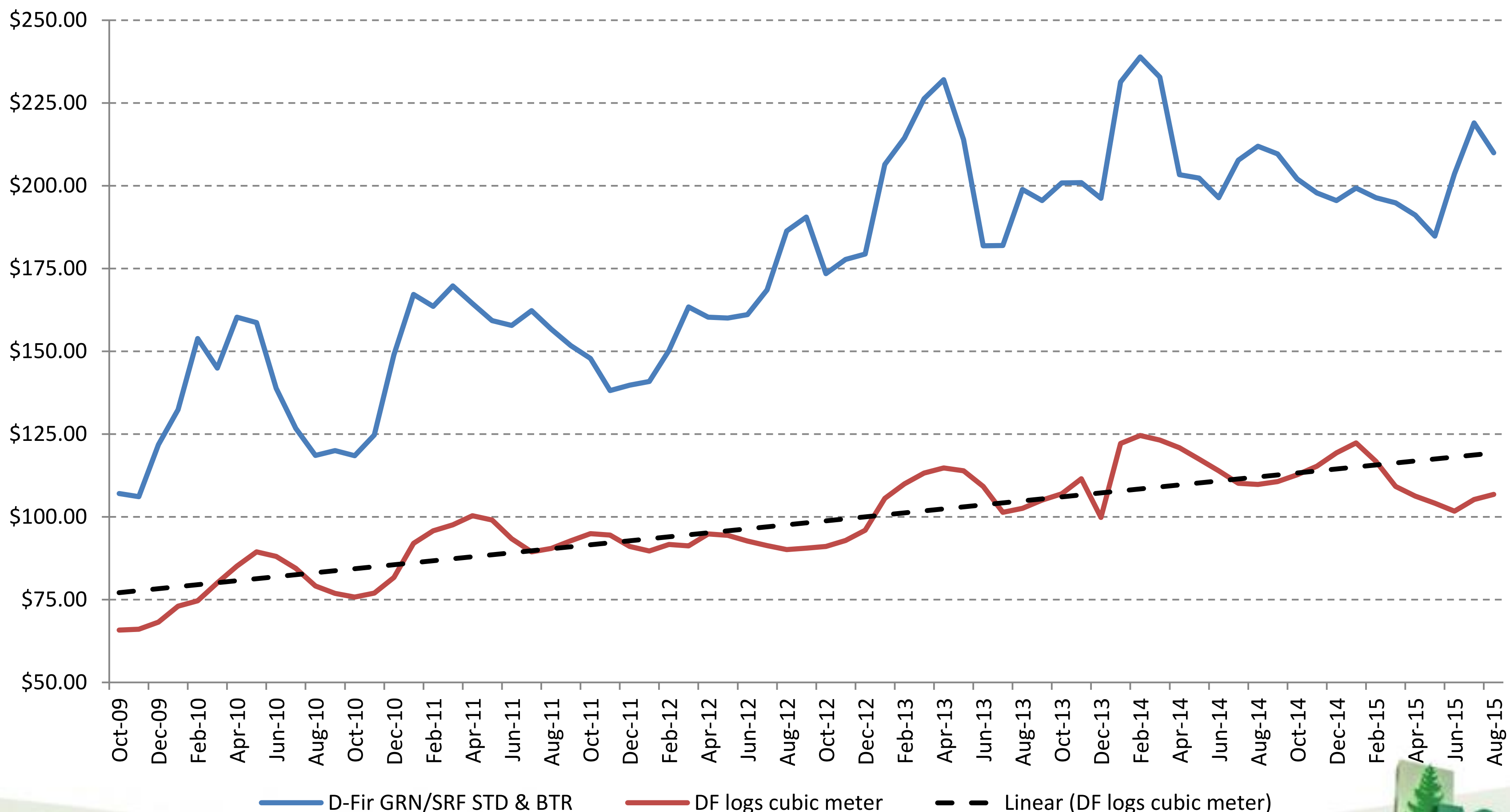


Source: WWPA

©2015 Forest2Market®, Inc.

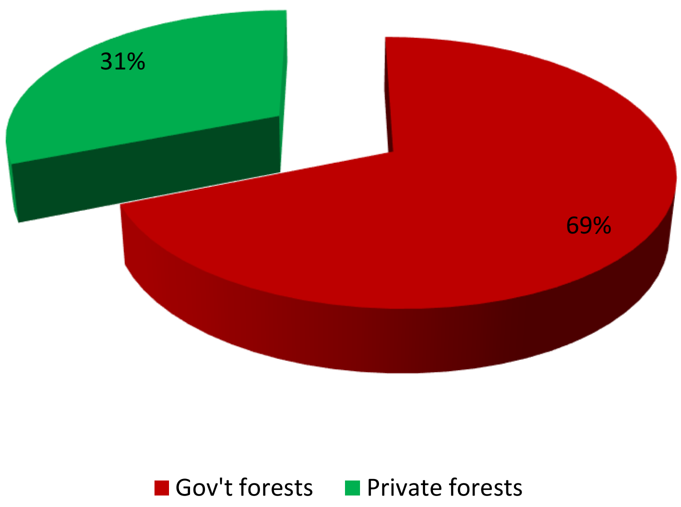
US Pacific Northwest

Pacific Northwest industry margin

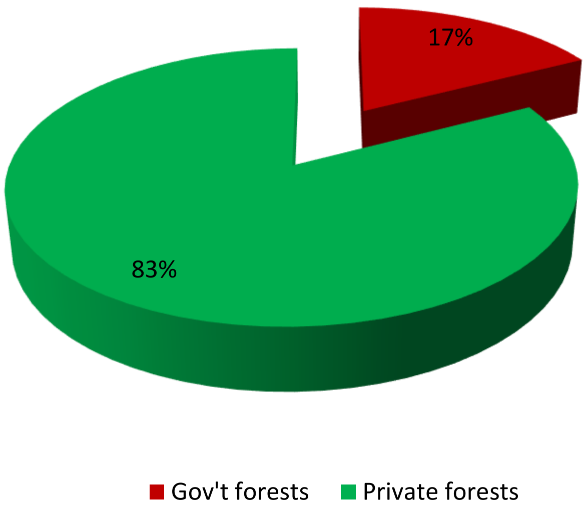


Western Federal forests are highly regulated : harvest is only a fraction of sustainable growth

Western US forests: 147 million hectares



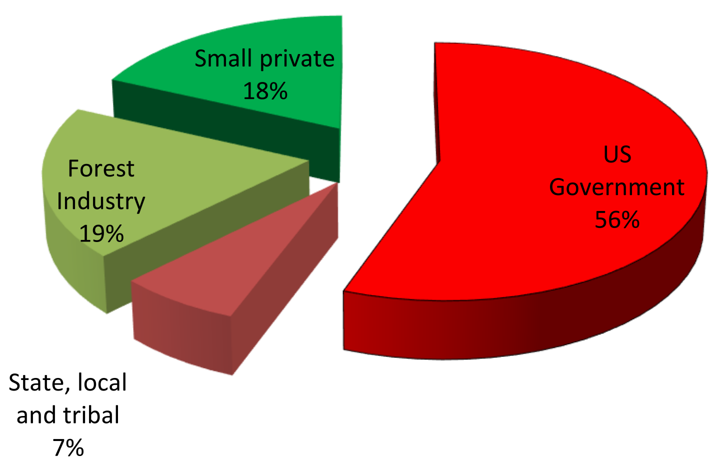
Eastern US forests: 156 million hectares



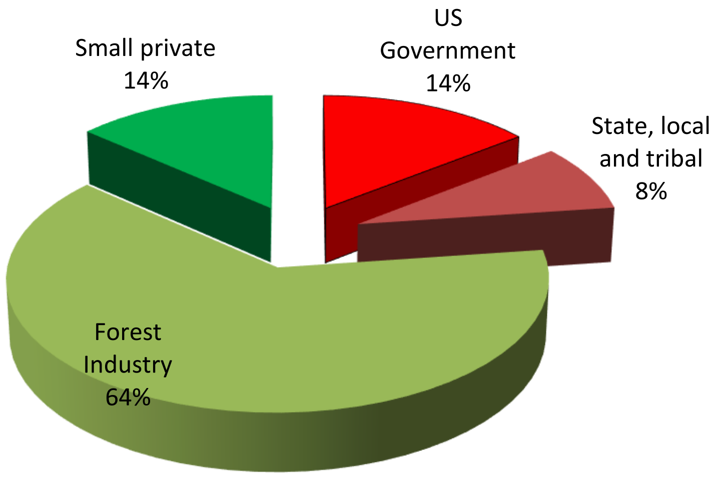
©2015 Forest2Market®, Inc.

Oregon forest owners area and harvest

Oregon Forest Ownership

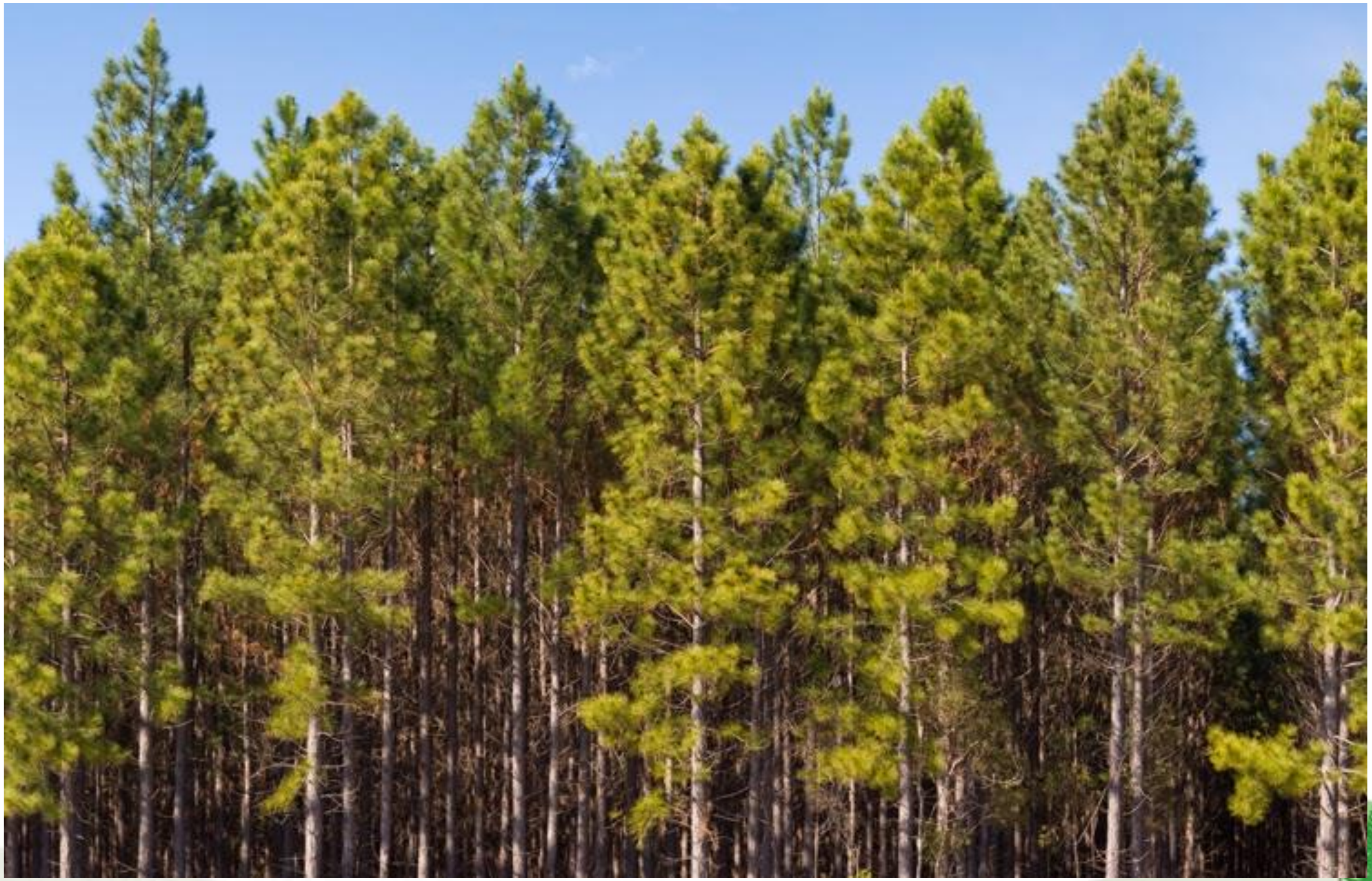


Oregon 2014 Timber Harvest



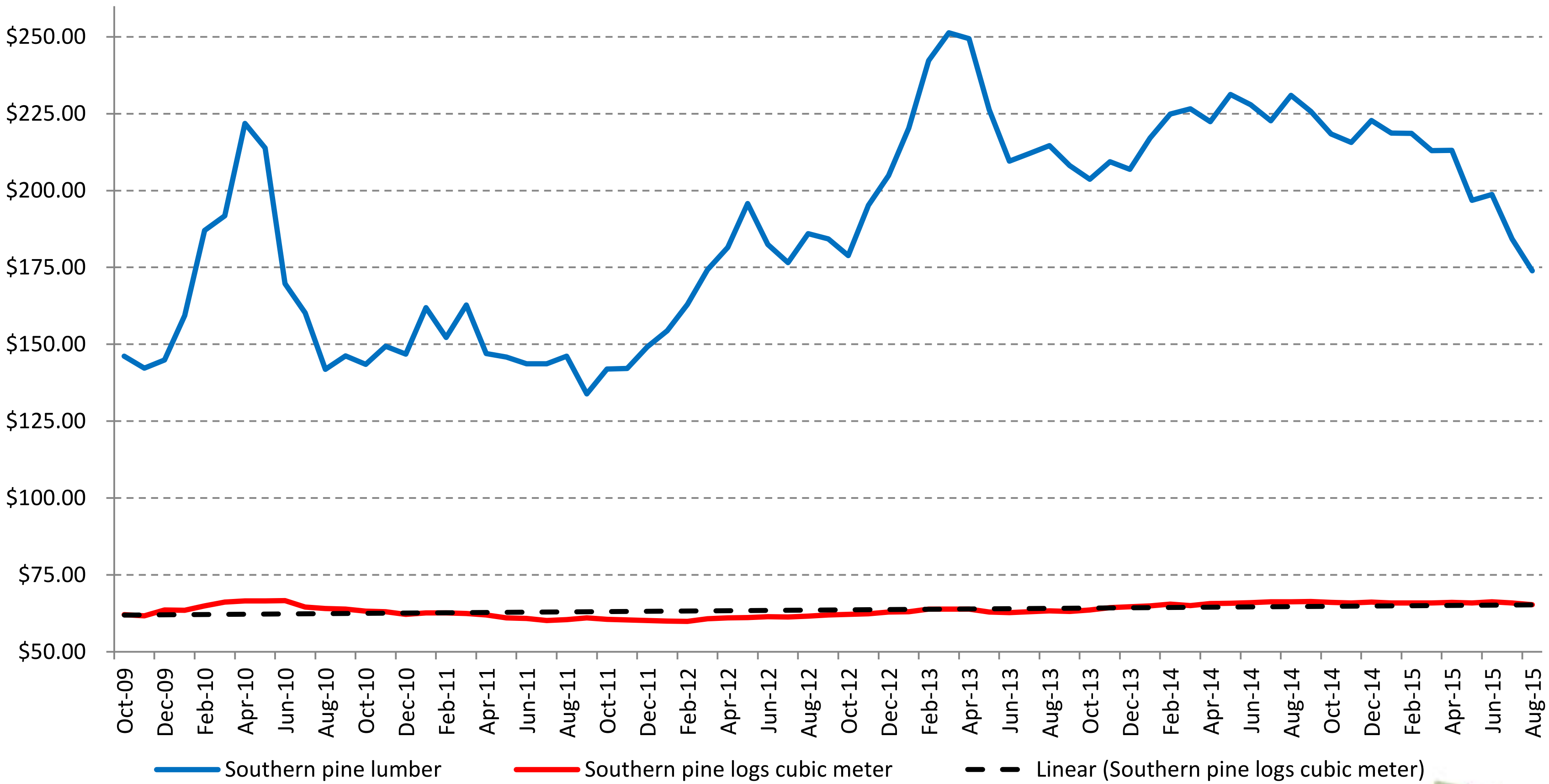
Source: Oregon Forestry Department

US Southern pine



©2015 Forest2Market®, Inc.

Southern pine industry margin



Forest2Market

Canadian forest industry moves south

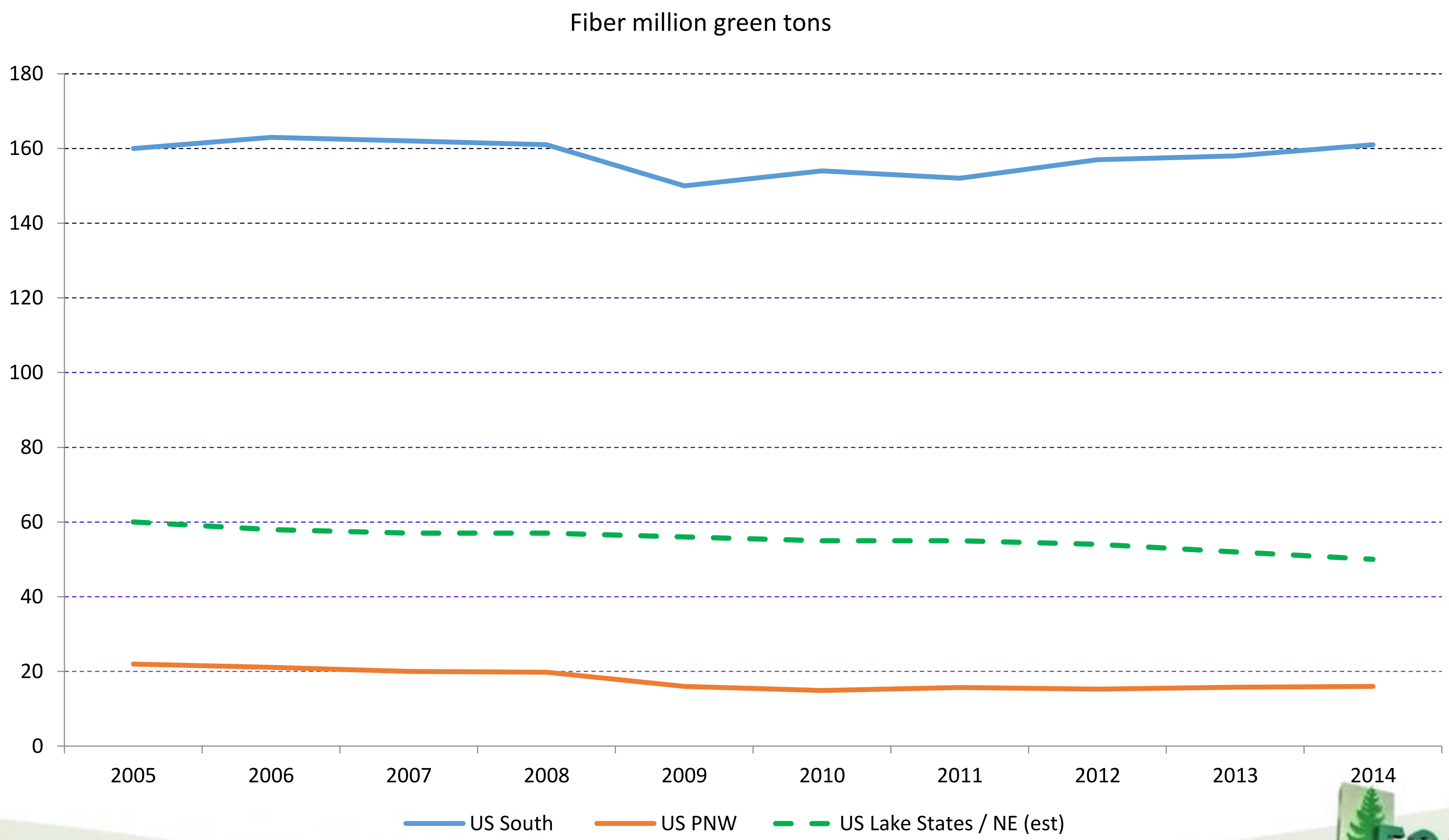
- The Southern US pine region has abundant, low cost timber from productive, well managed private forests
- Canfor, West Fraser and Interfor; leading Canadian forest products companies hedge their bets
- 35 pine sawmills in Texas, Arkansas, Louisiana, Mississippi, Alabama, Georgia, South Carolina, North Carolina and Florida are now owned by these three companies
- 11,000,000 cubic meters of production capacity
- 30 % of Southern pine framing construction lumber production

©2015 Forest2Market®, Inc.

Forest2Market

US pulp and paper industry

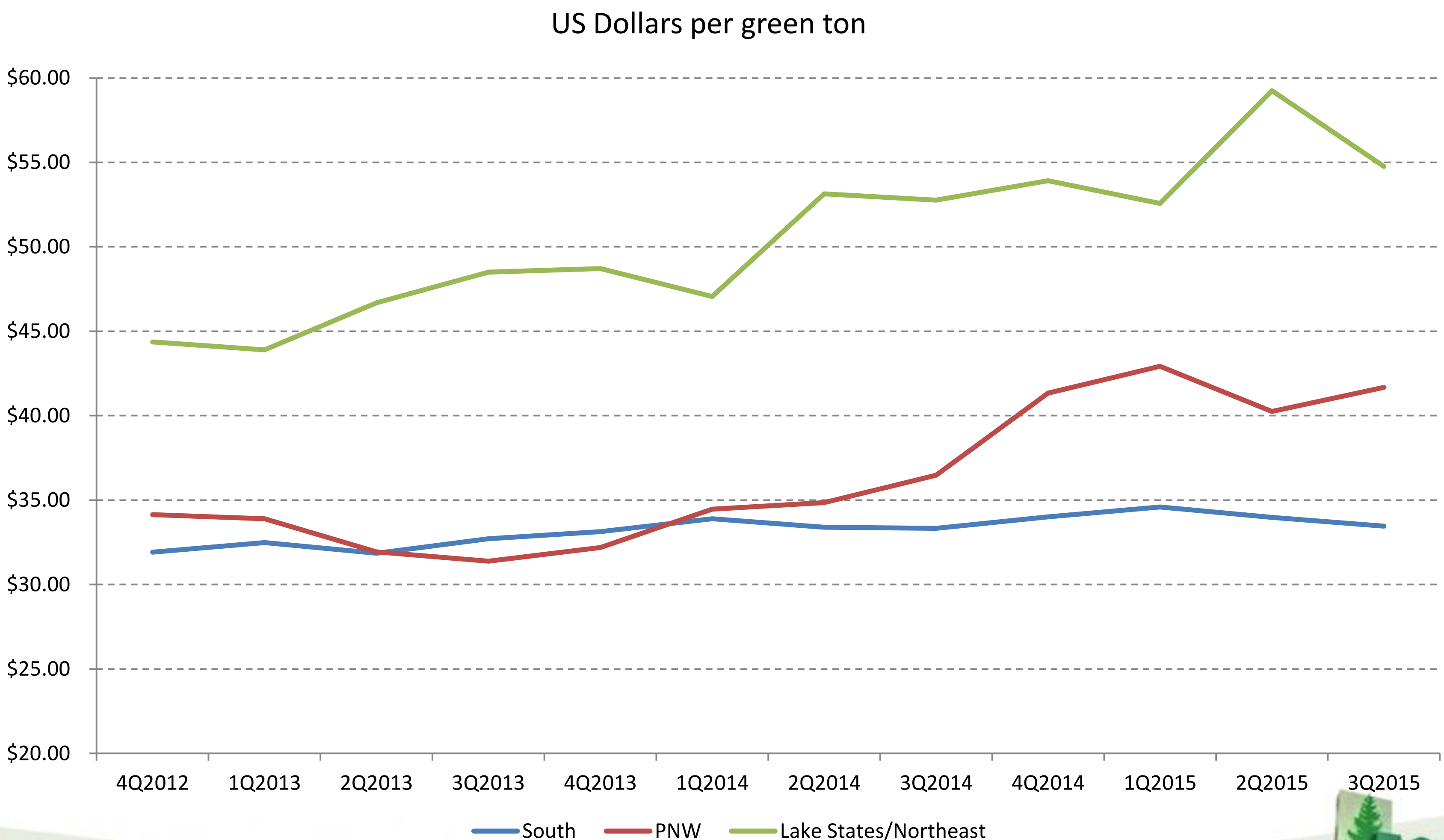
US regional chip & pulpwood fiber usage



©2015 Forest2Market®, Inc.

Forest2Market

Regional US pulpwood pricing



Forest2Market

NA woodchip, fiber and paper outlook

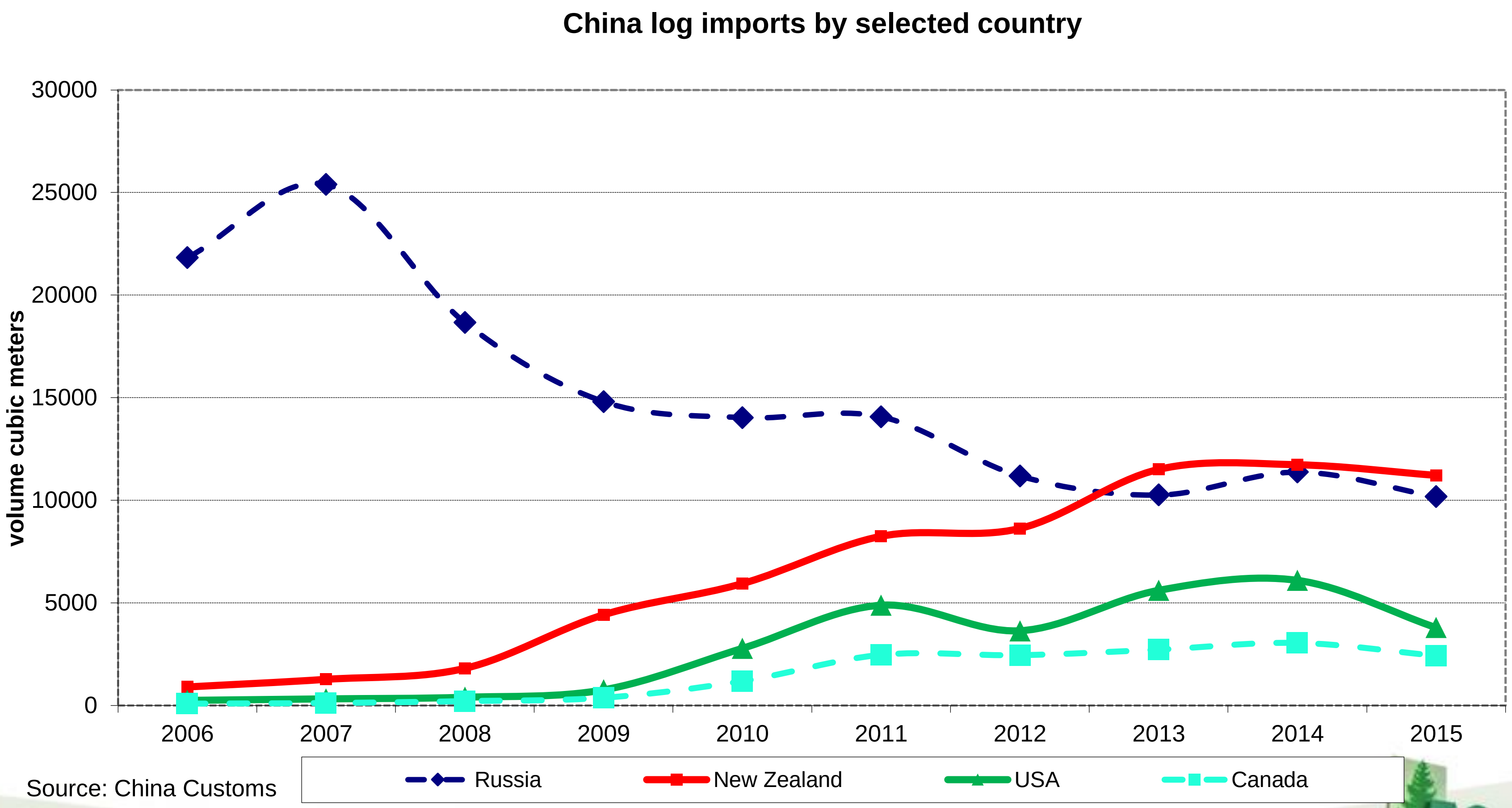
- Linerboard and packaging industry healthy
- Newsprint, coated free sheet printing and writing paper segment is suffering
- Southern operators benefit from low cost fiber and efficient mills
- Fuel pellet producers have increased capacity and competition for fiber in the South and Northeast
- Revived interest in Northwest pulp & paper operations
- Northwest faces tighter chip supply and increasing fiber cost – less available pulpwood and residual chips
- Lake States and Northeast - very expensive fiber; older, less efficient mills with declining product line at risk
- Declining harvest and lumber production due to MPB will negatively influence British Columbia wood chip supply

©2015 Forest2Market®, Inc.

Forest product exports to Asia

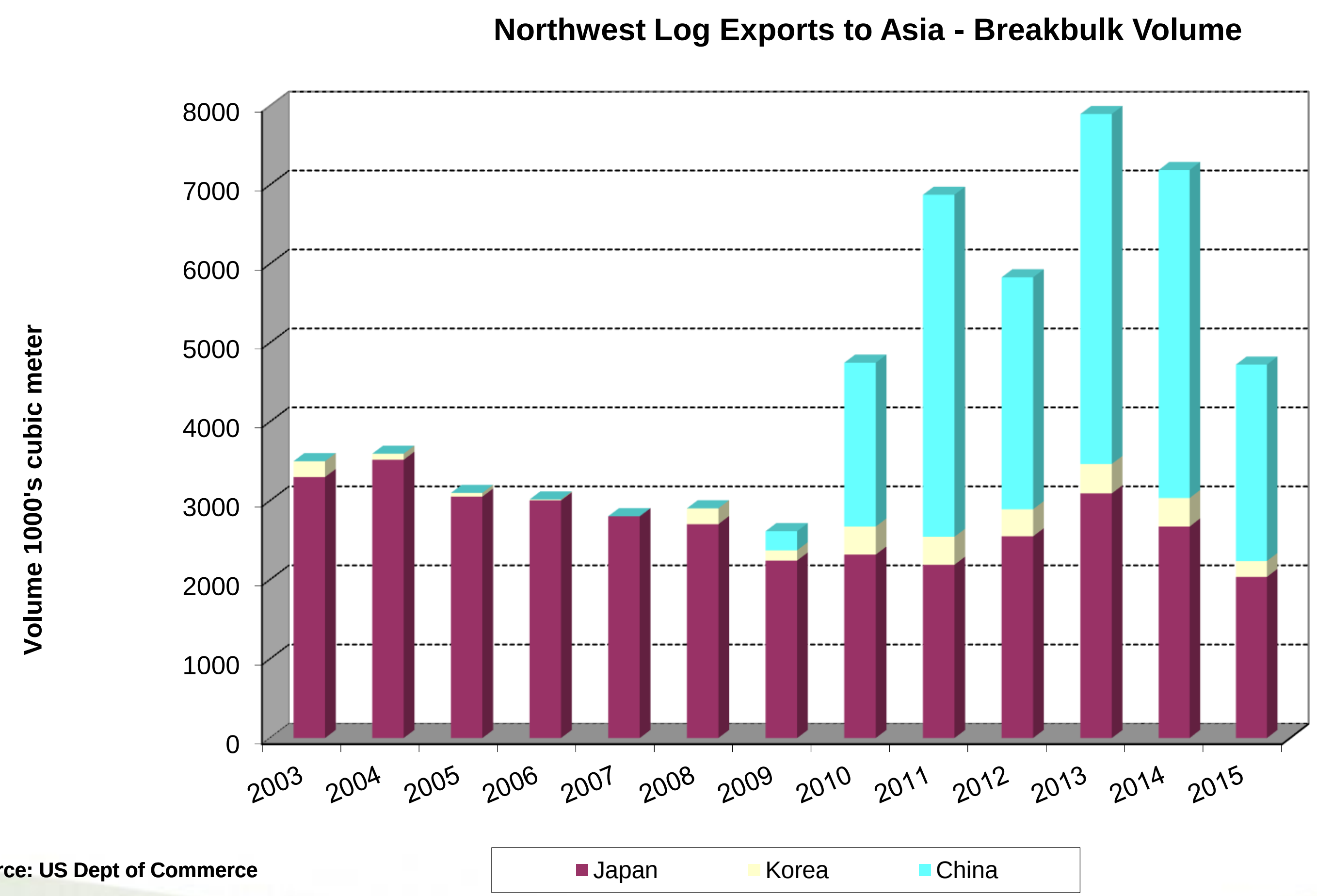
Forest2Market

Strong $ benefits New Zealand loggers



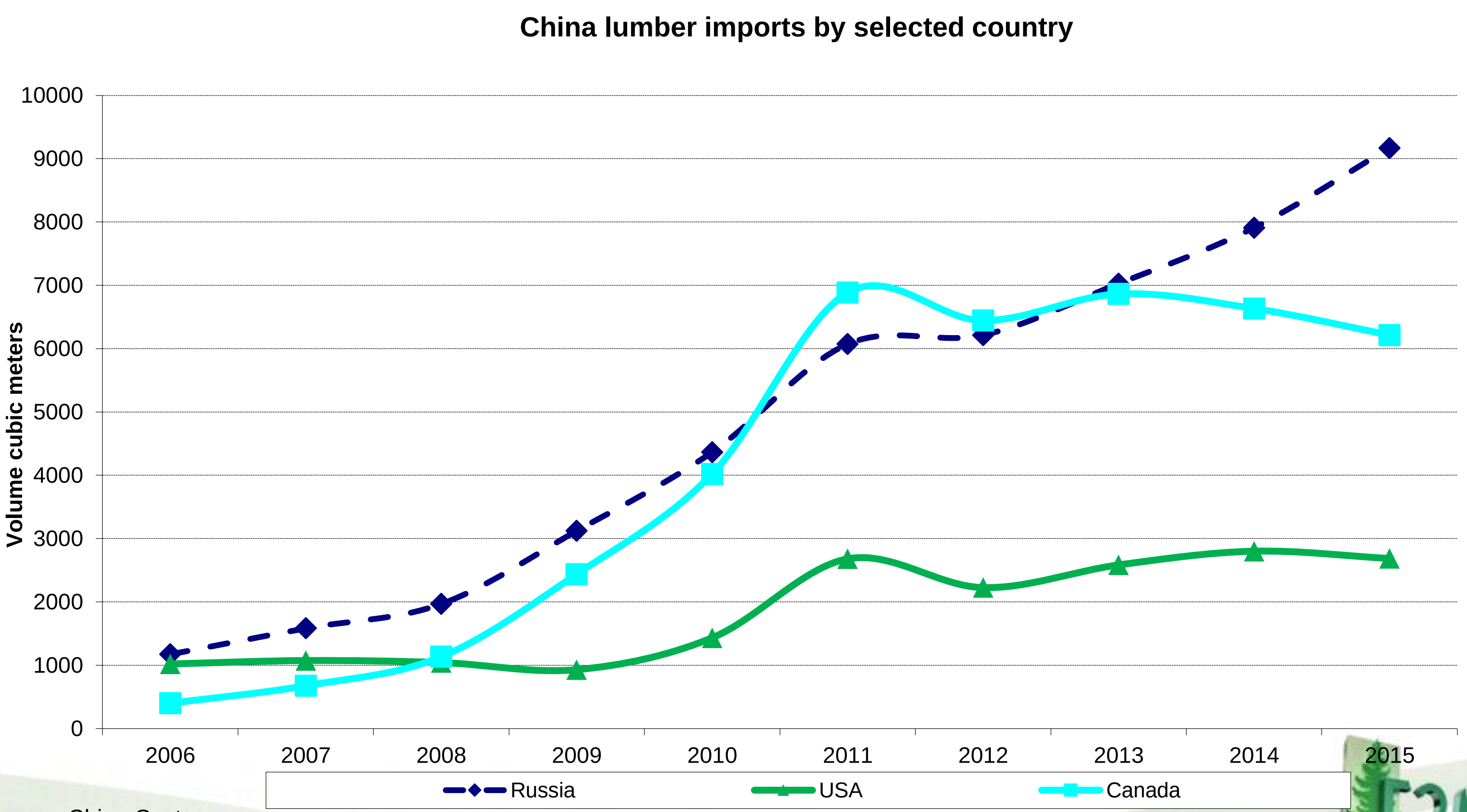
Source: China Customs

Asian demand for US logs slowing



Source: US Dept of Commerce

Canada no longer leading Chinese supplier



Source: China Customs

©2015 Forest2Market®, Inc.

Concluding thoughts

- Soft recovery for US housing market
- Multi-level building with wood
- British Columbia production declining
- Growth for Southern US pine industry
- US linerboard, packaging business is strong
- Strong US $ influence on wood imports & exports
- China's demand for wood products is slowing
- South American imports: productive plantations, modern pulp and panel mills, Asia and US $?

©2015 Forest2Market®, Inc.

Forest2Market

Forest2Market: The highest quality wood raw material analysis available

Gordon Culbertson
Director-International Business Development

(541) 285 3288
Gordon.culbertson@forest2market.com

Forest2Market®
15720 Brixham Hill Avenue, Suite 550
Charlotte, NC 28277

www.forest2market.com

©2015 Forest2Market®, Inc.

Merci vielmal!