



December 2018

# Hancock Timberland Investor

## U.S. Hardwood Markets React to Tariffs on Exports to China

The escalating trade dispute between the U.S. and China has been a headline issue for most of 2018. Until the latest round of tariffs released in July, timber and wood products were not directly affected, but the most recent round of tariffs issued by both the U.S. and China specifically included forest products. Given the limited role of export markets relative to total production for most segments of the U.S. timber and forest products sector, we think the overall negative impacts of China's tariffs on timber values will be minor, but U.S. hardwood producers will be one market segment with a particularly high vulnerability to reduced access to the China market. The U.S. hardwood industry has become the world's largest single source of solid hardwood exports, and China has been the top destination<sup>1</sup>. In the short time since the imposition of China's tariff on U.S. wood products, U.S. hardwood markets have registered signs of disruption.

On July 6th, 2018, the first of several rounds of tariffs and retaliatory tariffs were announced by the U.S. and China on billions of dollars worth of imported goods between the two countries. The initial tariff announcements excluded wood products. On July 10, the U.S. released a new list of Chinese products representing \$200 billion in import value, on which a 10% - 25% tariff would apply, including many wood products. A retaliatory tariff on \$60 billion worth of U.S. goods was announced by China on August 3rd, which also included a variety of wood products (softwood and hardwood logs, lumber, veneer and pulp and paper). China started enforcing the August 3rd announced tariffs as of September 24th.<sup>2</sup>

**Chinese tariffs are disrupting market segments, such as higher-grade, export-quality hardwood logs, lumber, and veneer.**

Demand for most U.S. forest products is overwhelmingly focused on domestic markets, with exports comprising only a small percentage of total production.<sup>3</sup> Exports of American forest products are concentrated in a few key product categories and are produced in particular regions of the country. Consequently, the negative impacts of

China's new trade barriers directed at U.S. forest products should not represent a major threat to the overall industry (See *Hancock Timber Research Note: Chinese Tariffs and Their Impact on U.S. forest Products Trade, October 2018*). Yet, Chinese tariffs on hardwood products are already resulting in market disruptions in particular market segments, such as higher-grade, export-quality hardwood logs, lumber, and veneer.

Hardwood products are more vulnerable to Chinese tariffs than softwoods because of the larger proportion of production directed to exports, China's dominant role in global hardwood log and lumber imports, and the generally higher tariff levels announced for hardwoods compared to softwood products (See *Table 1, page 2*). Hardwood lumber exports take almost half of the brunt of the tariffs on solid wood products, at a 47% share of the estimated value of the applied tariff, and hardwood logs with a 17% share.

Uncertainty and speculation concerning which wood products would be impacted, and at what level the final tariff would be applied, almost immediately impacted U.S. shipments of hardwood logs, lumber, and veneer to China. Hardwood exports to China turned lower this summer shortly after trade tariffs were announced (See *Chart 1, page 2*).

(Continued on page 2)

<sup>1</sup>ITC Trade Map, December 2018. Includes all hardwood HS Codes listed in 4403 and 4407  
<sup>2</sup>Wood Markets Ltd, September 2018, USDA Gain September 2018, FEA September 2018, RISI August 2018

<sup>3</sup>RISI September 2018

## Chinese Tariffs Impact U.S. Hardwood Exports More than Softwood

Table 1: Value of U.S. Wood Product Exports and China Tariffs

	U.S. Export Value	Tariff	Potential Tariff	Share of Applied Tariff
	(million USD)	(%)	(million USD)	(%)
Softwood lumber	\$111.6	20%	\$170	27%
Hardwood lumber	\$1,564	5% - 25%	\$298	47%
Softwood logs	\$552	5% - 20%	\$50	8%
Hardwood logs	\$502	20% - 25%	\$107	17%
Other products	\$82	5% - 25%	\$14	2%
<b>Total</b>	<b>\$2,811.6</b>		<b>\$639.2</b>	

Sources: HNRG Research, RISI as of November, 2018

Note: Export values based on 2017.

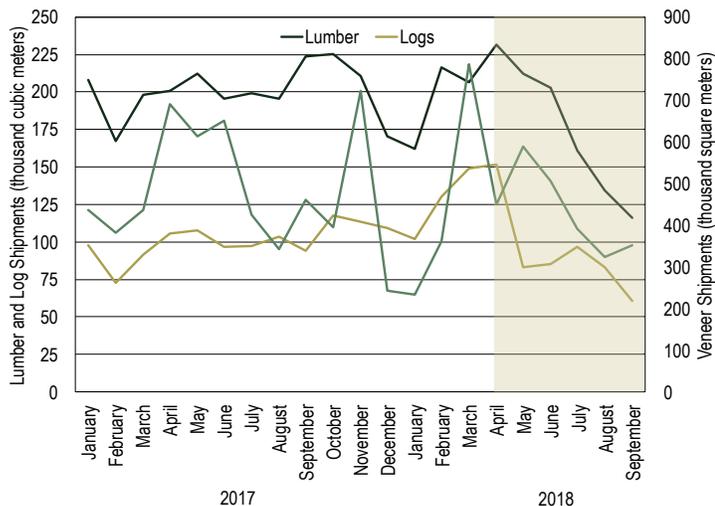
Tariffs on hardwood logs includes oak, cherry, maple and walnut and excludes treated wood.

Hardwood lumber includes oak, cherry, maple and walnut.

Hardwood lumber and log shipments to China peaked in April of this year, with lumber shipments reaching 232 thousand m<sup>3</sup> and log shipments topping at 152 thousand m<sup>3</sup>. Over the next five months, shipments to China of hardwood lumber fell 45%, hardwood logs dropped 60% and hardwood veneer shipments slipped 28%, as markets responded to tariff announcements.

## Uncertainty of Tariff Schedules is Affecting U.S. Export Volumes to China

Chart 1: U.S. Shipments of Hardwood Lumber, Logs and Veneer to China



Sources: Foreign Agriculture Service, November 2018

<sup>4</sup>Luppold, William G.; Bumgardner, Matthew S. 2016. Domestic hardwood lumber consumption and exports, yesterday and today. National Hardwood Magazine. Christmas: 30-33.

<sup>5</sup>ITC Trade Map, December 2018. Includes all hardwood HS Codes listed in 4403 and 4407

## Exports are an important market for U.S. hardwoods

Over the past several decades, the U.S. furniture and flooring industries, which are key domestic end-use markets for U.S. hardwood logs, lumber, and veneer, have faced stiff competition from off-shore producers in China, Vietnam, and other lower-cost manufacturing regions. Consequently, the composition of demand for U.S. hardwood logs has become more focused on industrial uses and exports. Between 1999 and 2015, furniture's share of U.S. hardwood lumber production slipped from 20% to 6%. Part of this decline was offset by an increase in hardwood lumber exports, which was fueled by rising demand for U.S. hardwood lumber and veneer from off-shore furniture manufacturers.<sup>4</sup>

China has taken a growing share of U.S. hardwood lumber production. In 2000, the U.S. produced 33 million m<sup>3</sup> of hardwood lumber and China consumed less than 1% of the total production. In 2017, the U.S. produced 22 million m<sup>3</sup> of hardwood lumber of which, 2.4 million m<sup>3</sup> were exports to China, or 11% of total U.S. hardwood lumber production (See Chart 2 U.S. Hardwood Lumber Production and Lumber Exports to China, page 3).

In 2017, China imported 11% of the hardwood lumber produced in the U.S.<sup>5</sup>

In 2017, the U.S. accounted for 21% of total world hardwood lumber and log trade, by value, and over the past 15 years, the U.S. has been the largest, single-source of hardwood lumber and logs by value to world markets (See Chart 3. World Exports of Hardwood Lumber and Logs and U.S. Share of the Total, page 3).<sup>5</sup>

## China's increasing preference for U.S. hardwoods

China imported 47% of all hardwood lumber and 76% of all hardwood logs exported around the world in 2017.<sup>6</sup> The growth of Chinese hardwood imports continues to outpace overall growth in global imports. As China's imports of hardwood products have increased over the years, the nature of this demand has evolved.<sup>7</sup> In recent years, most hardwood imported to China has been destined for domestic furniture production, including wood of higher quality for interior designs, such as high-end flooring, cabinetry and trim. Benefiting from this

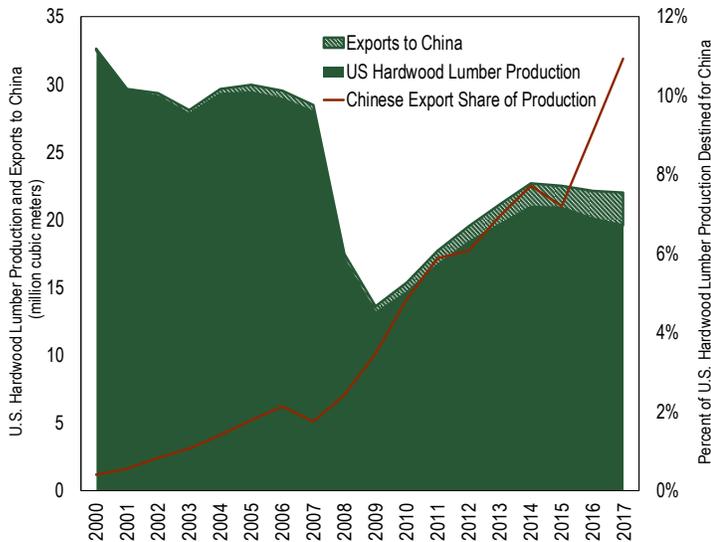
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<sup>6</sup>ITC Trade Map, December 2018. Includes all hardwood HS Codes listed in 4403 and 4407

<sup>7</sup>USDA FAS, GAIN Report, August 2018

## Increasing Share of U.S. Hardwood Lumber Production is Exported to China

Chart 2: U.S. Hardwood Lumber Production and Lumber Exports to China (million m<sup>3</sup>)



Sources: ITC Trade Map, November 2018, RISI October 2018

trend, many American hardwood species have become increasingly popular among Chinese designers and consumers, leading to significant growth in imports of oak (*Quercus spp.*), ash (*Fraxinus spp.*), cherry (*Prunus spp.*) and maple (*Acer spp.*).<sup>8</sup> In 2017, over 60% of U.S. exports of lumber and logs of these four species were shipped to China.<sup>9</sup>

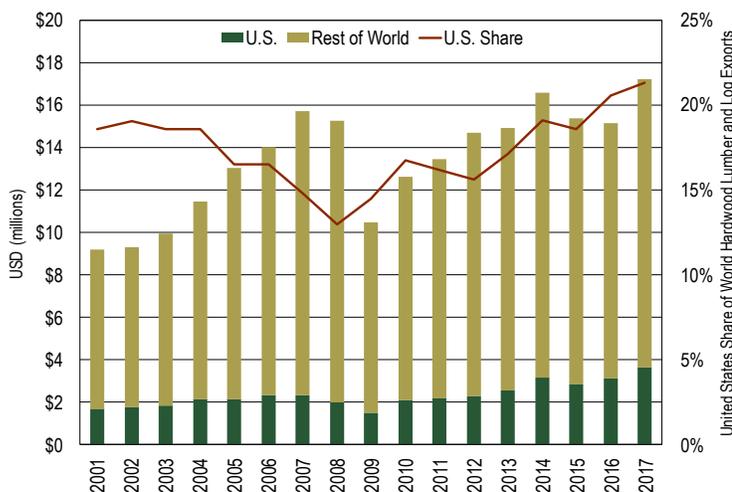
### U.S. hardwood producers are already redirecting shipments

Responding to the tariff barriers in China, U.S. hardwood producers are in the process of redirecting export volumes to other markets. Trade flow data show hardwood log exports to Canada from the U.S. have picked up since April. Canada's share of total U.S. hardwood log exports moved from 30% in April to 53% in September (See Chart 4. *U.S. Hardwood Log Exports to Canada and China*, page 4).

**Tariffs on U.S. hardwood logs and lumber imports to China will potentially increase competition for American hardwoods in China.**

## The U.S. is the Largest Single Source Supplier of Hardwood Lumber and Logs in the World (by value)

Chart 3: World Exports of Hardwood Lumber and Logs (million USD) and U.S. Share of the Total



Source: ITC Trade Map, December 2018

In the case of hardwood lumber, U.S. exporters have also shifted focus away from China, and have been successful in boosting shipments to destinations beyond China. In particular, shipments have increased significantly to Vietnam since June of this year. U.S. hardwood lumber shipments to Vietnam in September increased 30% from September of last year, boosting Vietnam's share of U.S. hardwood lumber exports from 12% to 22% (See Chart 5 *U.S. Hardwood Lumber Exports to China, Vietnam, Europe and Latin America*, page 5).

China will most likely explore expanding imports of solid hardwood products from alternative supply regions, such as Europe, Africa, and Russia - partners with an established market presence in China for high-grade hardwood products. Market adjustments triggered by the tariffs on U.S. hardwood logs and lumber imports most likely will encourage some changes in species and material use by Chinese furniture, flooring, and cabinetry producers and potentially increase competition for American hardwoods in China.

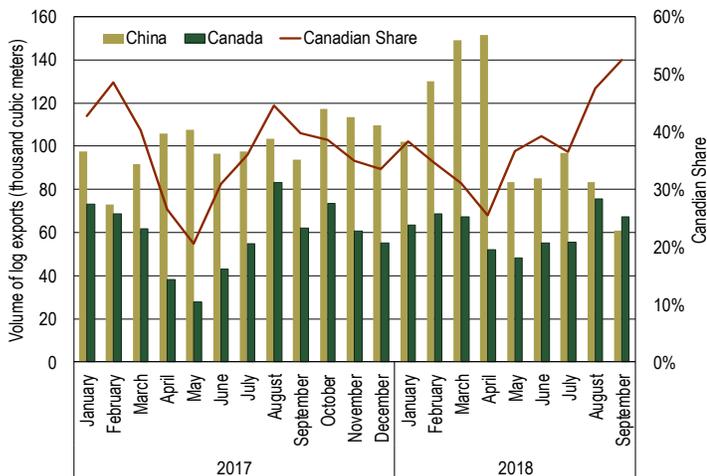
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<sup>8</sup>Random Lengths International, September 2018, Vol. 51, Issue 18

<sup>9</sup>U.S. International Trade Commission, September 2018

## Canada Picks Up Share of U.S. Hardwood Log Exports as Tariffs Affect Chinese Imports

Chart 4: U.S. hardwood log export shipments to China and Canada



Sources: U.S. Foreign Agriculture Service, November 2018

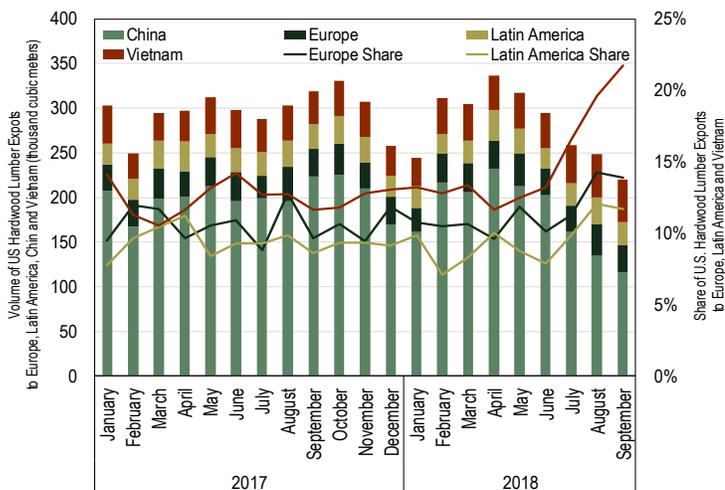
Yet, acceptance of other species and products by Chinese designers and consumers may be a problem, particularly in the short-term. Additionally, there are limits to alternative supplies of solid wood hardwood set by various countries' government policy on restrictions to harvesting native forests and/or bans on the export of unprocessed logs.<sup>10</sup>

Even if the tariffs persist in the medium-to-long run, Chinese manufactures could potentially absorb some of the upward material costs associated with buying U.S. hardwood products with tariffs. The costs associated with the wood product raw material cost in the production of higher valued cabinetry, flooring and furniture finished hardwood products is relatively small.

The tariffs applied to U.S. forest product exports to China are not expected to deliver sector-wide disruptions as the bulk of demand for U.S. timber products is from within its borders. Yet, for high-value U.S. hardwood logs, lumber and veneer products, the generally higher applied tariffs and a greater dependence on export markets compared to softwood products – is disrupting export shipments. This short-term impact may or may not translate into medium-to-long term changes. The U.S. hardwood resource has been a long-established and recognized global supply of high quality products, which we believe should be resilient to tariffs on exports to China. 🌲

## U.S. Hardwood Lumber Exports Increase into Vietnam, Europe, and Latin America - Offsetting Declines to China

Chart 5: U.S. hardwood lumber export shipments to China, Vietnam, Europe, and Latin America

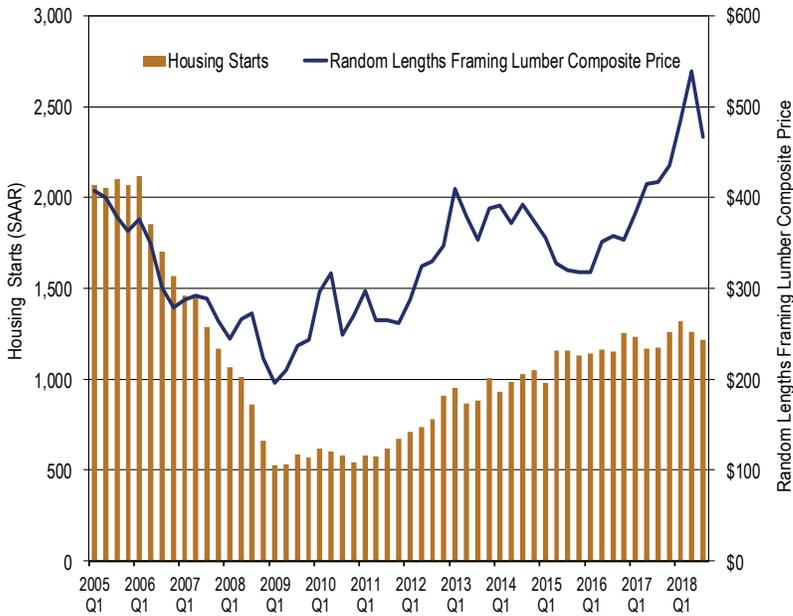


Source: U.S. Foreign Agriculture Service, November 2018

<sup>10</sup>China's Forest Product Imports and Exports 2006 – 2016: Trade Charts and Brief Analysis, Forest Trends July 2017

### Lumber Prices Move Off Record Highs

Figure 1: Quarterly U.S. Housing Starts (1,000 units) and U.S. Softwood Lumber Composite Price (USD per MBF)

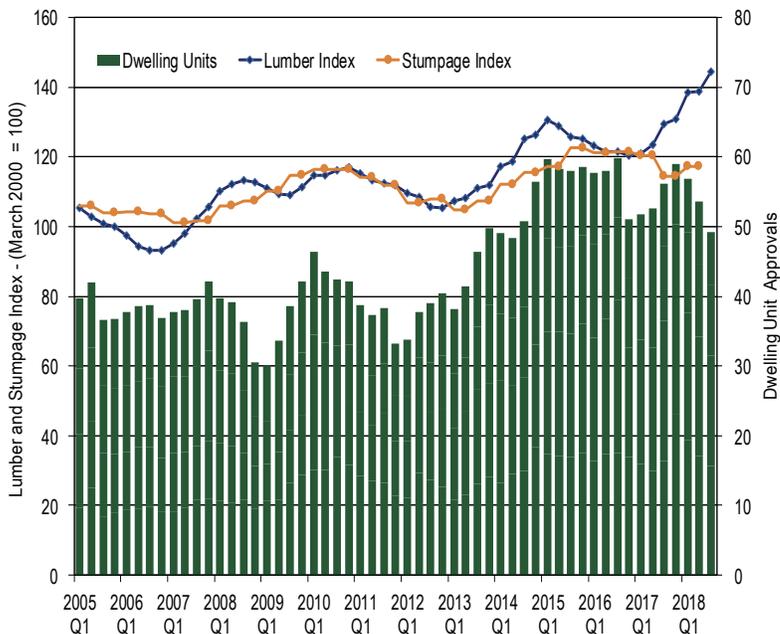


Sources: Random Lengths Lumber Report September 2018, U.S. Census Bureau September 2018

U.S. housing starts continued to trend lower in the second quarter of 2018, with total starts slipping 3.4 percent from the previous quarter to 1.22 million units, although still 3.9 percent higher than the same period a year earlier. The weakness in third quarter home construction remained more focused on multi-family starts, which were down 4.8 percent from the second quarter, while single family starts posted a more moderate decline of 2.8 percent. Wood products prices moved sharply lower in the third quarter, with the Random Lengths Composite Index losing 13.5 percent over the previous quarter, but still averaging 11.8 percent above the third quarter of 2017. The marked retreat of lumber prices from their mid-year peaks, reflected lower demand due to weaker housing markets coupled with expanded domestic production and increased imports responding to the very strong wood products prices in the first-half of 2018.

### Australia Dwelling Approvals Slip Again

Figure 2: Australian Softwood Lumber Prices, Timber Prices, and Dwelling Unit Approvals

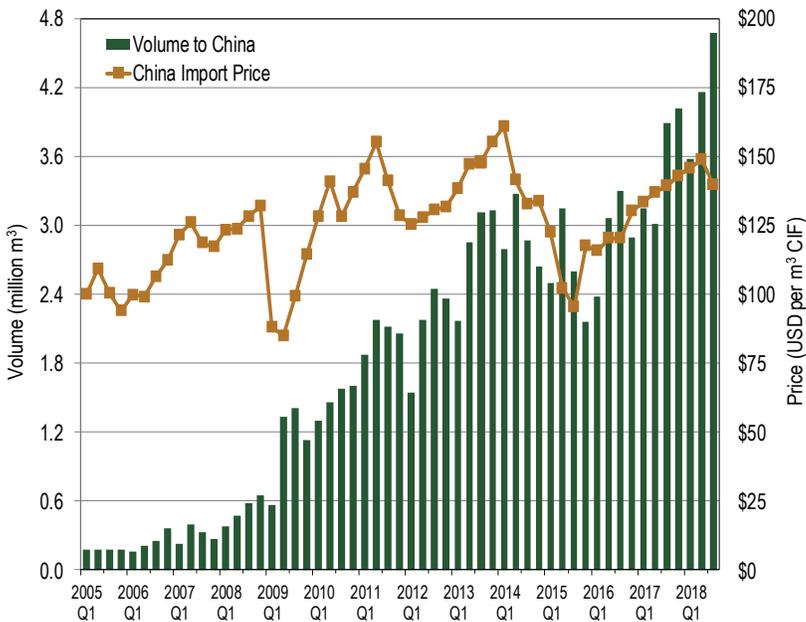


Sources: Australia Bureau of Statistics September 2018, KPMG June 2018, and Indufor Timber Market Survey September 2018

In the third quarter of 2018, Australian dwelling approvals (a key indicator of residential construction activity) continued to lose ground slipping 8.0 percent from the previous quarter and down 16.4 percent from the cyclical peak set in the final quarter of 2017. This slow-down in Australia’s housing activity reflects an easing in the forward momentum in the overall Australian economy, as well as a reaction to the elevated price levels for Australian housing. Australian structural lumber prices moved higher in the third quarter, up 4.3 percent. Australian lumber prices at their current elevated level could be vulnerable to a downward price correction if housing activity continues to languish. Australian sawlog stumpage prices, are reported biannually, and the release for June 2018 showed the stumpage log index for softwood sawlogs prices holding flat.

## New Zealand Imports Surge, Log Prices Move Lower

Figure 3: Quarterly New Zealand Softwood Log Export Volume to China (million m<sup>3</sup>) and Price in China (USD per m<sup>3</sup> CIF)

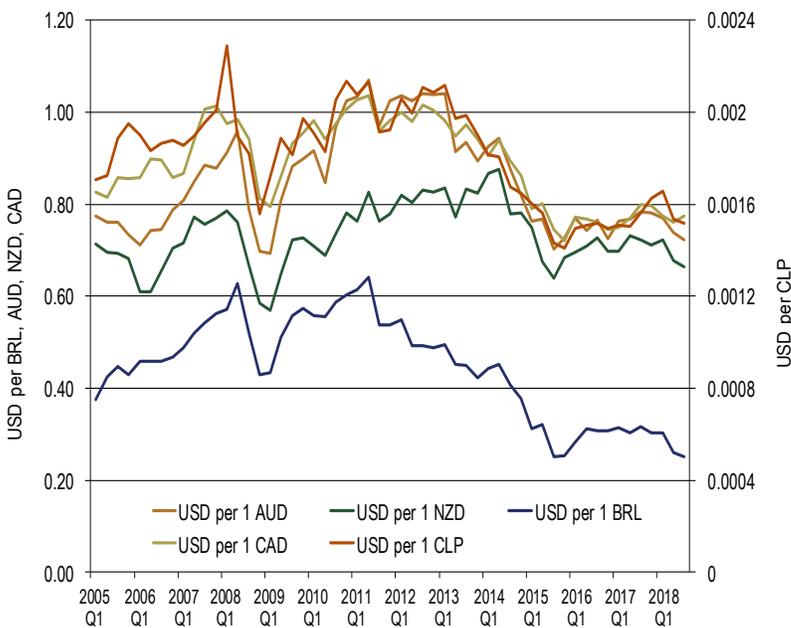


Source: Wood Markets International Inc. September 2018

Third quarter New Zealand log export volumes to China surged to a new high, and were 13 percent higher than in the second quarter, which was 20 percent above the volume shipped to China from New Zealand in the third quarter of last year. Despite the expanded demand for New Zealand logs from China, the price of New Zealand sawlogs delivered to China, denominated in USD, eased in the third quarter, dropping 6.2 percent from the previous quarter. The softer prices for New Zealand export sawlogs suggest that inventories in China may be growing as a result of the slow-down in China's economy and construction sector.

## U.S. Dollar Gains

Figure 4: Quarterly Exchange Rates Between USD and Commodity Currencies

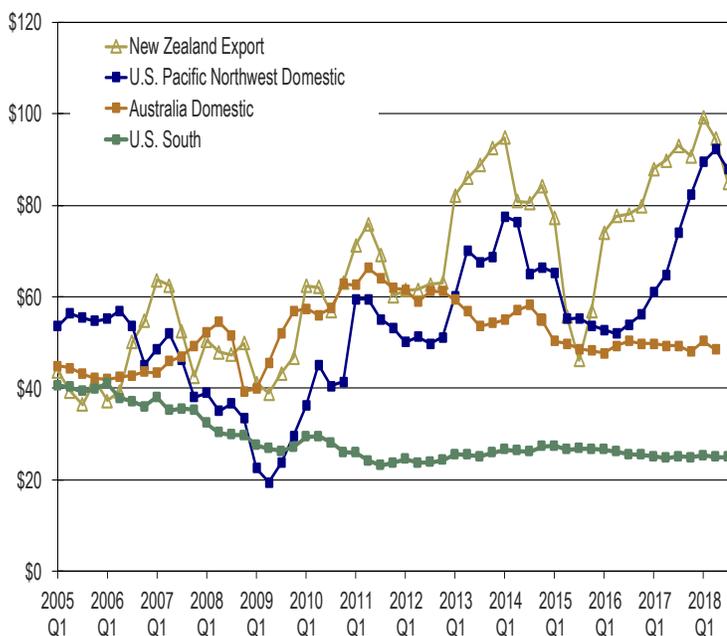


Source: Macrobond September 2018

The U.S. dollar continued to gain ground in the third quarter against most currencies, benefitting from strong growth in the economy and anticipated further tightening in monetary policy. Compared to the prior quarter, the U.S. dollar gained 2 percent against the New Zealand dollar, 1 percent vs the Chilean peso and 4 percent vs the Brazilian real. The Canadian dollar was an exception in the third quarter, increasing modestly 2 percent against the U.S. dollar. The currencies of New Zealand, Chile and Brazil were all impacted by more signs of a slowdown in China (a key market for their exports) and concerns about increasing restrictions on global trade. The Brazilian real also felt downward pressure from the political uncertainty leading up to October national elections. Canada currency received support in the third quarter from strong oil prices, which trended higher in August and September, before losing forward momentum in early October.

## U.S. Softwood Sawtimber Prices Move Lower

Figure 5: Regional Softwood Sawtimber Stumpage Prices (USD per m<sup>3</sup>)

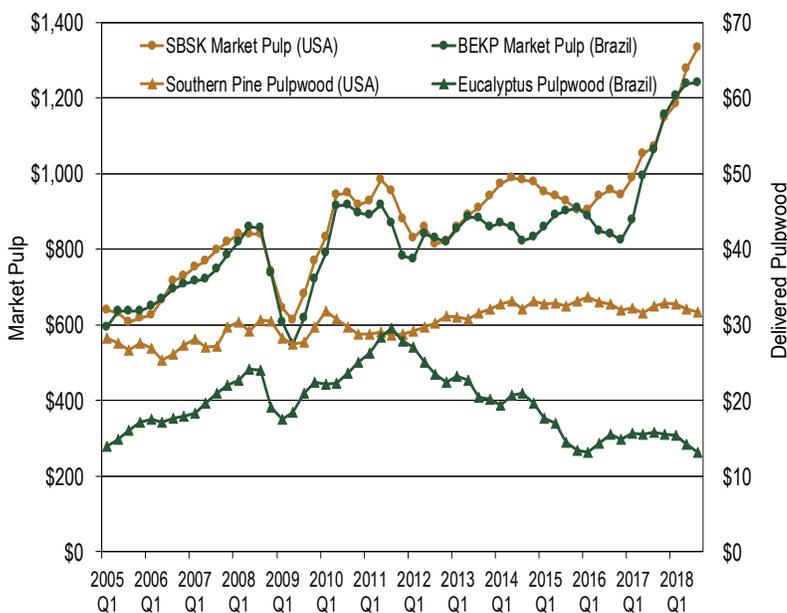


Sources: Log Lines September 2018, Timber Mart-South September 2018, NZMPI and Agrifax September 2018 and KPMG June 2018

Softwood sawtimber stumpage prices on a USD denominated basis moved lower across regions in the third quarter of 2018, retracing gains achieved earlier in the year. New Zealand softwood sawtimber prices (in USD) slipped 10 percent from the previous quarter and were down 14 percent from the peak levels in the first quarter. The on-going correction in New Zealand sawtimber prices reflected softer market conditions and increased competition with Russian lumber in China. U.S. Pacific Northwest prices dropped 5 percent from the previous quarter in response to declining prices in North American lumber and plywood markets. In the U.S. South, southern pine stumpage prices were nearly flat in the third quarter and have shown limited movement over the past two years, despite rising demand and highly volatile pricing for lumber and plywood. Australian pine stumpage prices, reported as of June 2018, show a 4 percent decline from the first quarter.

## Market Pulp Prices Gain Momentum While Pulpwood Prices Languish

Figure 6: Quarterly Prices for Market Pulp and Delivered Pulpwood (USD per metric ton)

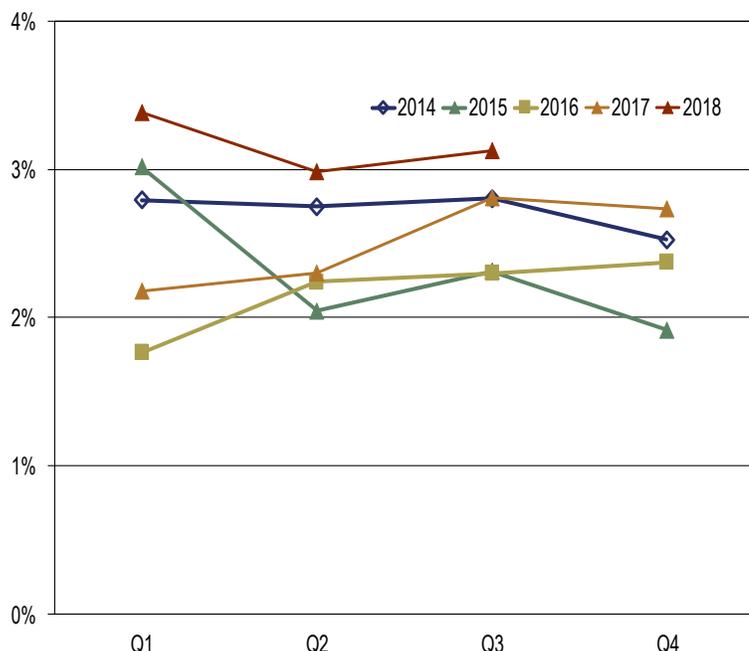


Sources: Hawkins Wright September 2018, Timber Mart-South September 2018 and STCP September 2018

Prices for Bleached Eucalyptus Kraft Pulp (BEKP) and Southern Bleached Softwood Kraft (SBSK) remained near record highs in the third quarter of 2018, with BEKP up 4.3 percent compared to the previous quarter and SBSK up incrementally. The expanding restrictions in China on recovered paper imports has boosted global demand for market pulp and is supporting record price levels, but slower growth in China's overall economy is beginning to undercut the potential for further increases. Pine pulpwood delivered prices in the U.S. South have eased since the beginning of the year as southern pulp mills tap into the growing supplies of manufacturing residuals made available from expanding production at the region's lumber mills. Southern Pine pulpwood prices in the third quarter were 3.2 percent below the first quarter. As was the case for pine pulpwood in the U.S. South, Eucalyptus delivered pulpwood prices in Brazil moved lower by 7.0 percent from the previous quarter on a USD basis, largely due to the downward movement in the Brazilian real relative to the U.S. dollar.

## Cash Yields Continue to Hit Highest Levels in Five Years

Figure 7: U.S. Timberland Annualized Operating Cash Yields (percent per year)

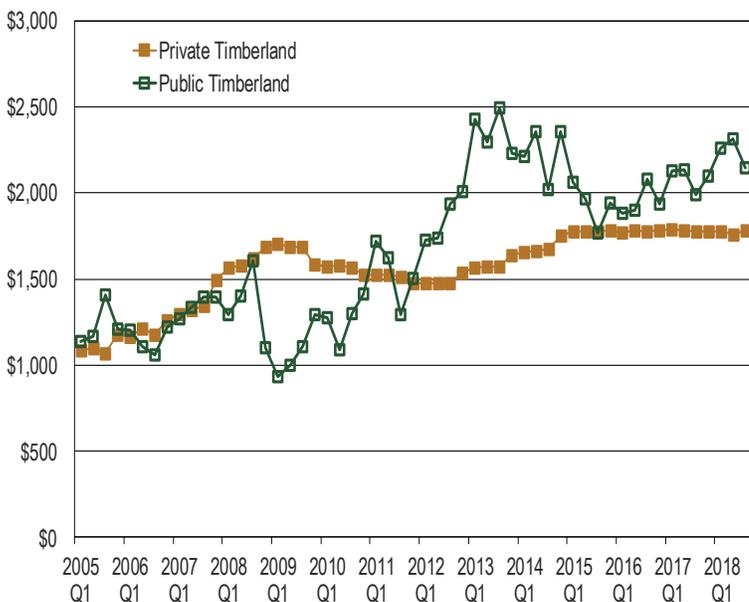


Sources: NCREIF September 2018, HNRG September 2018

2018 is proving to be an exceptional year for timberland cash yields with quarterly yields in 2018 registering the best performance in the past 5 years. In the third quarter, cash yields from timberland operations remained strong at a 3.1 percent annualized rate, which compares to an average over the past five years of 2.7 percent. The strong cash yields in 2018 are directly related to the increased consumption of softwood sawlogs at U.S. lumber and plywood mills in 2018 and the improved financial performance of the North American solid wood products sector.

## Public Company Timberland Values Fall

Figure 8: Quarterly U.S. South Timberland Values (USD per acre)



Sources: NCREIF September 2018, HNRG September 2018

Note: Hancock Timber Resource Group is a participating member in the NCREIF Timberland Property Index. The Index requires participating managers to report all eligible properties to the Index. Usage of this data is not an offer to buy or sell properties.

In the third quarter of 2018, the value of privately-held timberland in the U.S. South increased 1.5 percent from last quarter, averaging \$1,785 per acre, which is 0.5 percent above southern private average timberland values in the third quarter of last year. Public timberland values, measured by the Timberland Enterprise Value per Southern Equivalent Acre (TEV/SEA), decreased 7.3 percent from the second quarter, to average \$2,155 per acre. Year-over-year, the TEV/SEA rose 7.9 percent. The primary driver for third quarter public timberland value declines stems from an 11.5% fall in Weyerhaeuser's stock (NYSE: WY) on the backs of the large, third quarter lumber price correction. Another notable event during the third quarter was the rise in long-term debt from Catchmark Timber, an 82 percent increase from their previous quarter's long-term debt, which follows the announcement of their recent acquisition of Campbell Global's large East Texas property.

## Notes Timberland Market Indicators

**Figure 1:** The source for the U.S. Housing Starts is U.S. Bureau of Census. The Housing Starts data includes Single-family and Multi-family starts. Random Lengths Lumber Report is used for lumber prices.

**Figure 2:** Quarterly Australian Dwelling Unit Approvals is published by the Australian Bureau of Statistics. The Lumber Index is published by Indufor Timber Market Survey using Softwood Structural lumber prices (Blended Price - 60 percent MGP 10 90x35x4800, 40 percent MGP 10 70x35x4800). Log Price Index is calculated using the (APLPI) Radiata Pine Domestic Stumpage prices. The log price is an average of Intermediate and Medium sawlog prices

**Figure 3:** Quarterly New Zealand softwood log export volume to China and China Import prices are published by International Wood Markets Group Inc.

**Figure 4:** Monthly average Exchange Rates are from Macrobond.

**Figure 5:** Quarterly Softwood Sawtimber Stumpage Prices for the U.S. Pacific Northwest is reported in Loglines published by RISI. The weighted index is made up of 50 percent Domestic Douglas-fir (47 percent #2 and 53 percent #3 Sawmill sorts) and 50 percent Whitewoods (47 percent #2 and 53 percent #3 Sawmill sorts). U.S. South prices are published by Timber Mart-South (60 percent Southern Pine Sawtimber and 40 percent Chip-n-Saw). Australian domestic prices are calculated using the KPMG Australian Pine Log Price Index (APLPI) Radiata Pine Domestic Stumpage prices. The log price is an average of Intermediate and Medium sawlog prices converted to USD/m<sup>3</sup>. New Zealand radiata pine export log prices are a blend of Agri-Fax A and K log sort prices and A,K and J log prices published by New Zealand Ministry of Primary Industries converted to USD.

**Figure 6:** Quarterly Market Pulp prices are published by Hawkins Wright. U.S. Southern Pine Pulpwood prices are published by Timber Mart-South. Brazil Eucalyptus Pulpwood prices are published by STCP Engenharia de Projetos Ltda.

**Figure 7:** Annualized Operating Cash Yields are published by National Council of Real Estate Investment Fiduciaries (NCREIF). Yields are calculated using 60 percent U.S. South and 40 percent U.S. West.

**Figure 8:** Public equity values are derived from our Timberland Enterprise Value per Southern Equivalent Acre (TEV/SEA) calculation for five timber-intensive publicly traded companies as compared to southern timberland values per acre calculated from the NCREIF database. TEV is a quarterly estimate based on total enterprise value (total market equity + book value debt) less estimated value of processing facilities, other non-timber assets and non-enterprise working capital. SEA uses regional NCREIF \$/acre values to translate a company's timberland holdings in various regions to the area of southern timberland that would have an equivalent market value.

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## HNRG Research Team

**Court Washburn**  
Managing Director and  
Chief Investment Officer  
[cwashburn@hnrq.com](mailto:cwashburn@hnrq.com)

**Keith Balter**  
Director of Economic Research  
[kbalter@hnrq.com](mailto:kbalter@hnrq.com)

**Mary Ellen Aronow**  
Associate Director, Forest Economics  
[maronow@hnrq.com](mailto:maronow@hnrq.com)

**Daniel V. Serna**  
Senior Agricultural Economist  
[dserna@hnrq.com](mailto:dserna@hnrq.com)

**Elizabeth Shestakova**  
Economic Research Analyst  
[eshestakova@hnrq.com](mailto:eshestakova@hnrq.com)

**Weiye Zhang**  
Natural Resource Economist  
[wzhang@hnrq.com](mailto:wzhang@hnrq.com)