



Fourth Quarter 2017

# Hancock Timberland Investor

## 2017 U.S. Timberland Investment Performance

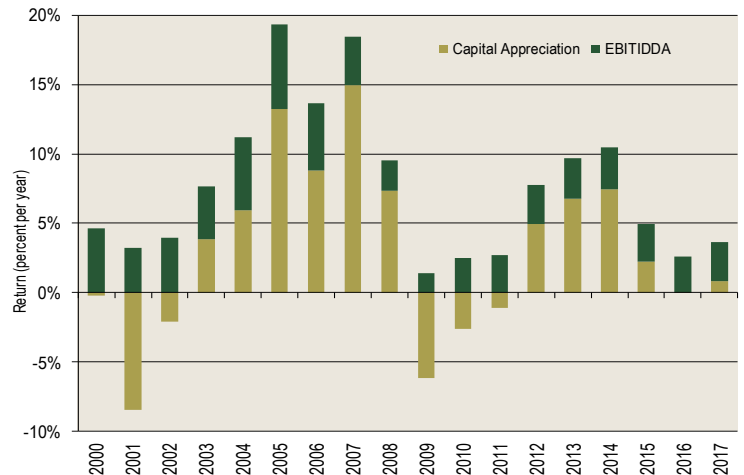
U.S. private timberland investment total returns rose to 3.63 percent in 2017, a 103 basis point increase from 2016 with moderate gains in both operating income and capital appreciation. Timberland performance differed across regions. Strong prices paid for logs in the West bumped up cash yields, and expectations for continued strength pushed western capital appreciation up over 300 basis points from 2016. Timberland investments in the South returned below average income in 2017 which resulted in stagnant valuations despite growing capital investment in the South’s forest product sector.

As in prior years, we devote our fourth quarter issue of the Hancock Timberland Investor to a review of investment performance of U.S. private timberland properties. The highest profile measure of timberland performance in the U.S. is the NCREIF (National Council of Real Estate Investment Fiduciaries) Timberland Property Index<sup>1</sup> (TPI), which reports returns for institutional investment in timberland in the United States. The TPI posted a total return of 3.63 percent for calendar year 2017. The performance of 464 timberland properties were included in the Index, scattered across over 14 million acres of the U.S., with a combined market value of \$25.5 billion. (Chart 1. U.S. Private Timberland Performance, 2000–2017).

Total returns for 2017 reflect a 2.77 percent income (EBITDDA) return, a rate ahead of last year’s income return, and slightly above the average over the past ten years (2008—2017). (Chart 2. U.S. Private Timberland Income, on page 2)

## 2017 U.S. Timberland Returns Up from 2016

Chart 1: U.S. Private Timberland Performance, 2000-2017 (Calendar Year Returns)



Source: NCREIF Q4 2017

U.S. timberland valuations driven by strong product pricing in the West combined with moderated expectations in the South.

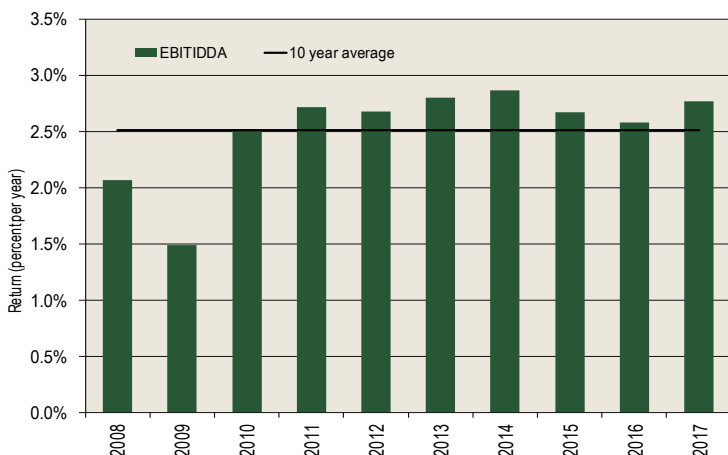
Timberland properties included within the NCREIF Timberland Index are third-party appraised on an annual basis. In 2017, based on the appraisals, the capital appreciation component of the NCREIF Timberland Index was 0.84% for the year, and reflects offsetting regional drivers impacting property level valuations.

<sup>1</sup>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.

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## 2017 U.S. Timberland Income Ahead of Ten Year Average

Chart 2: U.S. Private Timberland Operating Income, 2008—2017 (Calendar Year Returns)

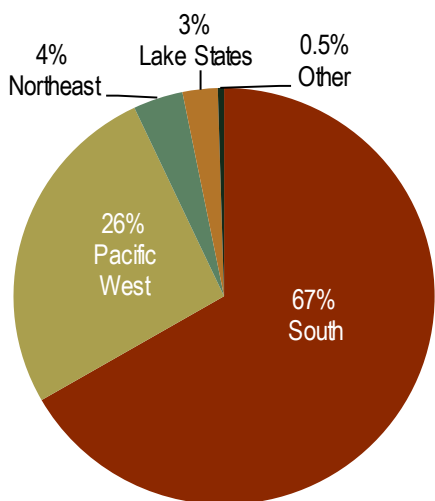


Source: NCREIF Q4 2017, HTRG

Timberland properties in the Index are grouped into four regions and reported separately, with the TPI heavily weighted toward pine and mixed hardwood plantations in the U.S. South (representing 67 percent of the Index market value). Twenty-six percent of the Index by value is from timberland properties in the western U.S., and the

## Timberland Properties in the Southern U.S. Comprise Two-Thirds of the Timberland Property Index

Chart 3: Regional Share of the Timberland Property Index by Value



Sources: NCREIF Q4 2017, HTRG

remaining 7 percent of the Index value is split between high-value hardwoods and mixed softwood/hardwood timberlands in the Northeast (4 percent), the Lake States (3 percent), with less than one percent of the Index reflecting timberland outside of the four main regions (Chart 3. Regional Share of the Timberland Property Index by Value).

The dominance by market value of southern timberland in the Index, combined with the South’s relatively weak returns compared to the West, pulled down the overall return performance in 2017. Western timberland in 2017 delivered a 7.0 total return, split evenly between income and capital appreciation. Southern timberland returned a 2.7 percent total return, made up almost entirely of income, with appreciation at just 0.15 percent for the year. Western timberland total return increased 450 basis points compared to last year, whereas the South lost 19 basis points of total return this year compared to last year (Table 1. Regional U.S. Timberland Performance in 2017).

## Regional Timberland Performance Mixed

Table 1: Regional U.S. Timberland Performance in 2017

|                             | South        | West         | Northeast    | Lake States   | USA          |
|-----------------------------|--------------|--------------|--------------|---------------|--------------|
| EBITDDA                     | 2.59%        | 3.45%        | 2.17%        | 2.11%         | 2.77%        |
| <b>bps change from 2016</b> | <b>0</b>     | <b>86</b>    | <b>27</b>    | <b>-72</b>    | <b>19</b>    |
| Capital                     | 0.15%        | 3.47%        | -0.38%       | -3.55%        | 0.84%        |
| <b>bps change from 2016</b> | <b>-19</b>   | <b>355</b>   | <b>638</b>   | <b>-700</b>   | <b>83</b>    |
| <b>Total</b>                | <b>2.74%</b> | <b>7.00%</b> | <b>1.78%</b> | <b>-1.50%</b> | <b>3.63%</b> |
| <b>bps change from 2016</b> | <b>-19</b>   | <b>450</b>   | <b>674</b>   | <b>-786</b>   | <b>103</b>   |

Sources: NCREIF Q4 2017, HTRG

Timberland total returns in the Lakes States fell 786 basis points, with both a fall in operating income and capital appreciation. Timberland total returns in the Northeast in 2017 improved 673 bps from 2016, rising to 1.78 percent.

**The dominance of southern timberland in the Timberland Property Index pulled down overall performance in 2017.**

(Continued on page 3)

U.S. timberland valuations in 2017 were also influenced by a variety of offsetting regional factors. The number of timberland transactions in 2017 was moderate, which offered only a few large deals for comparable sales evidence for appraisals, yet several smaller sized offerings closed in each timbered region of the U.S.

Timber pricing was mixed, with log prices in the West reaching near record highs, while timber prices in the South dipped lower. In the South, some appraisers downgraded their valuations of timberland despite indications of improvements in key underlying market conditions. Over the next two years, the South is expected to experience an almost 2 billion board feet per year increase in timber demand. In addition, tighter timber supply in Canada should also support southern timber demand in the South over the next few years<sup>2</sup>. The lack of any substantial southern timber price appreciation since the Global Financial Crisis despite solid gains in U.S. housing starts and large gains in prices for southern pine lumber and wood panels, has some appraisers and investors mystified and impatient.

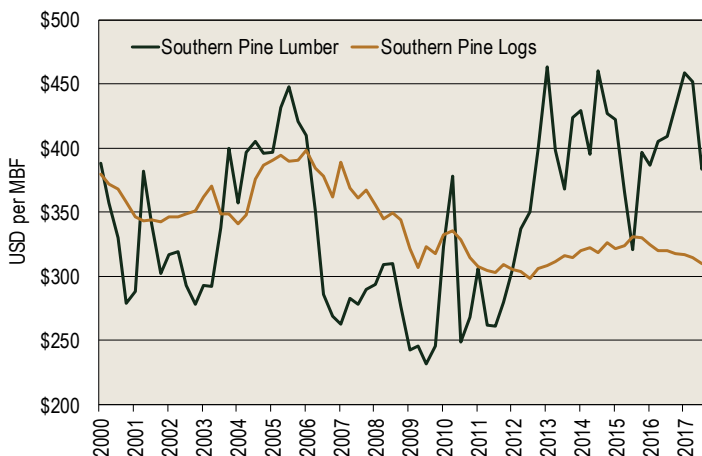
In the West, timberland performance gains in 2017 were supported by near record high log prices fueled by rising U.S. residential construction demand and robust construction demand in China. Western timber markets also contended with a regional tightening of commercially ready timber, logging capacity and transportation shortages, and a constrained supply of lumber coming over the border from Canada.

Looking forward, timberland performance in the West is expected to continue to benefit from increasing U.S. demand for residential construction and the ramping up of new timber processing capacity. Construction activity in China is expected to stay close to recent levels, although concerns of debt and deterioration in loan quality persist in the sector (See *Hancock Timberland Investor: China's Softwood Log Markets—Impeding Change, third quarter 2017*).

We hold tight to our expectations of rising timber prices in the South, supported by significant investments in expanded lumber and wood panel capacity at existing and greenfield mills that are currently in process throughout the South<sup>3</sup>; expanded offshore exports of logs and lumber from the South<sup>4</sup>; and a continuing upward trend in U.S. residential construction activity<sup>5</sup>. For now though, timberland investors require patience, while watching

## Southern Pine Lumber Prices Near Historic Highs While Southern Pine Log Prices Languish

Chart 4: Prices for Southern Pine Logs and Lumber



Sources: Random Lengths December 2017, Timber Mart-South 4Q 2017

southern sawmill profits soar – with a combination of higher lumber prices and log costs stuck at cyclical bottoms (Chart 4. Prices for Southern Pine Logs and Lumber)

Overall, U.S. timberland performance in 2018 is expected to reflect a boost in demand from increased investment in wood processing capacity throughout the U.S., while U.S. residential construction demand continues to rise. The additional benefit of a constrained supply of timber in Canada and a 20 percent duty on Canadian softwood lumber imports should work to push up U.S. wood product producers' market share in the U.S., and increase demand on local sources of timber to feed rising production demands.

**A constrained supply of timber in Canada and a 20 percent duty on Canadian softwood lumber imports should push up U.S. wood product producers' market share in the U.S.**

<sup>2</sup>BMO Capital, *Timber & Wood Products*, February 12, 2018

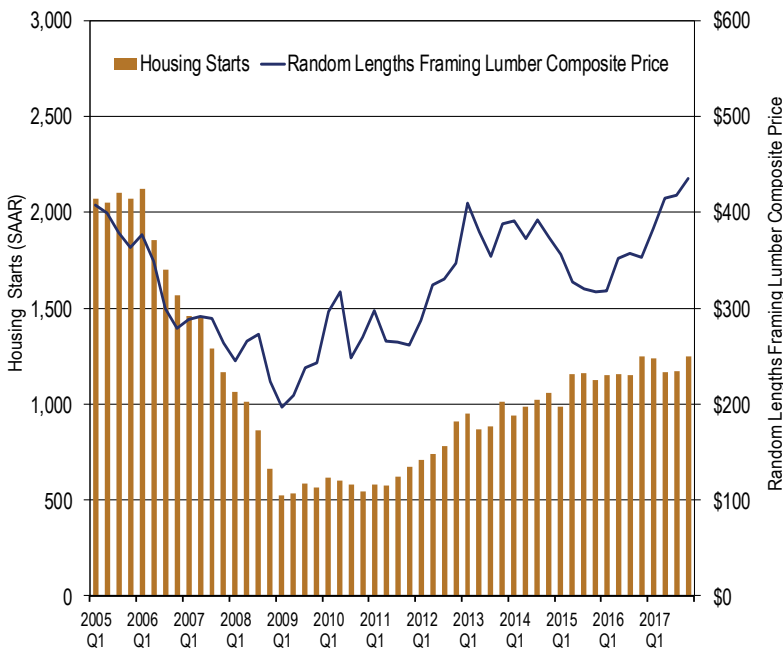
<sup>3</sup>Forisk, *Research Quarterly*, 4Q 2017

<sup>4</sup>Foreign Agriculture Services, December 2017

<sup>5</sup>FRED, <https://fred.stlouisfed.org/series/HOUST>

## Lumber Prices Rise and Housing Starts Gain

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

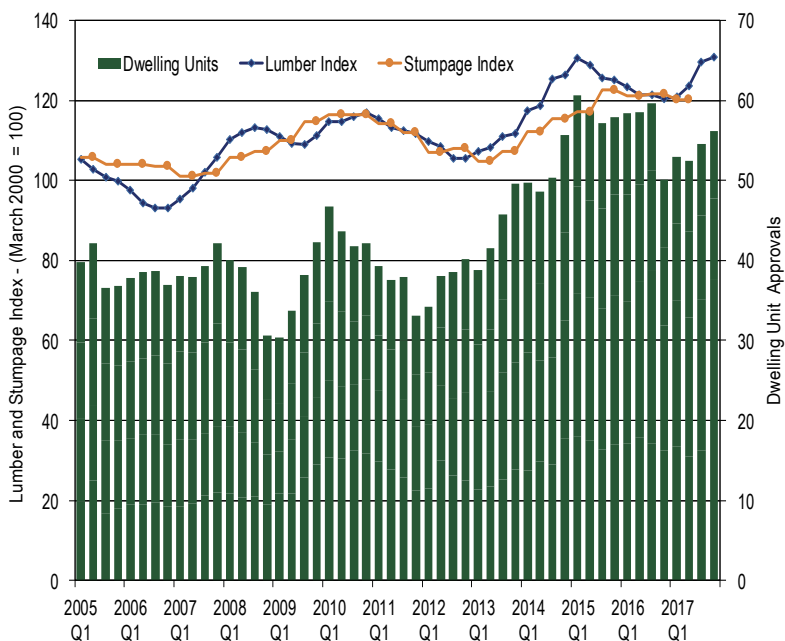


Sources: Random Lengths Lumber Report December 2017, U.S. Census Bureau December 2017

U.S. total housing starts in the fourth quarter of 2017 increased 7 percent over the previous quarter, rising to an average of 1.25 million units (SAAR), which was nearly equal with the same period a year earlier. For the year as a whole, total housing starts were up a modest 2 percent compared with 2016, with a strong performance for single-family home construction (up 8 percent) being offset by a decline (-9 percent) in multi-family starts. Softwood lumber prices in the fourth quarter remained at elevated levels, supported by healthy single-family construction activity; reduced production at sawmills in both the Pacific Northwest due to severe fires, and in the U.S. South due to hurricanes; and the uncertainty regarding duties on shipments of Canadian softwood lumber to the U.S. The Random Length's Framing Lumber Composite was up 23 percent year-over year.

## Australia Housing Continues Upward, Lumber Prices Follow

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



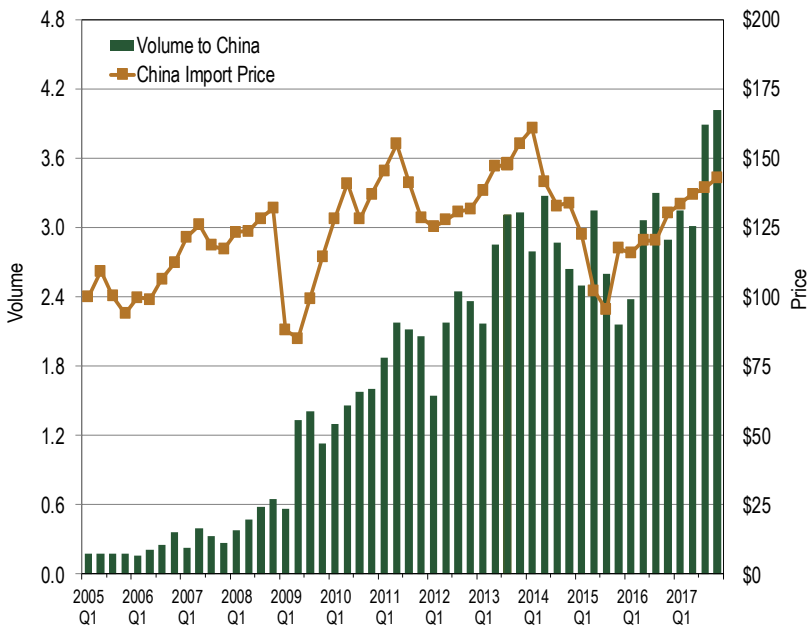
Sources: Australia Bureau of Statistics Q4 2017, KPMG September 2017 and Indufor Timber Market Survey Q4 2017

In the final quarter of 2017, Australian dwelling approvals (a key indicator of residential construction activity) gained 3 percent over the third quarter, and were 12 percent above the same period last year. Structural lumber prices moved slightly higher on the improvement in housing activity, increasing 1 percent over the previous quarter and 5 percent from a year earlier. When Australian sawlog stumpage prices are reported biannually for the second half of 2017, they are expected to show upward movement following lumber prices higher.



## Strong Exports Push New Zealand Log Prices Higher

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)

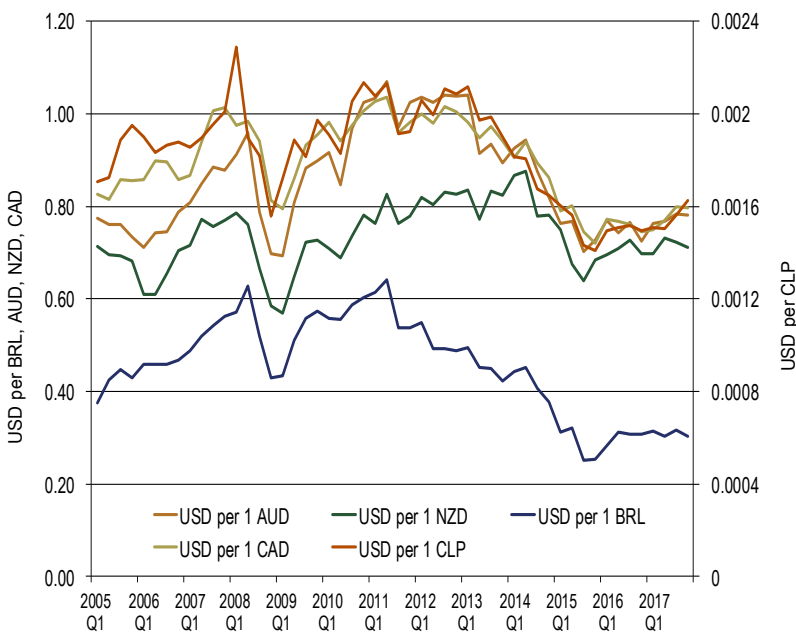


Source: International Wood Markets Inc. December 2017

New Zealand log export volumes to China increased 3 percent in the fourth quarter, a continued rise after the third quarter's surge. The strong gains in New Zealand shipments to China reflected healthy construction activity in China and constrained sawlog supplies in some competing regions (Canada and U.S). The strong demand conditions supported a 3 percent increase in the China import price over the previous quarter, marking the sixth consecutive quarter of rising prices.

## U.S. Dollar Strong

Figure 4: Quarterly Exchange Rates Between USD and Commodity Currencies

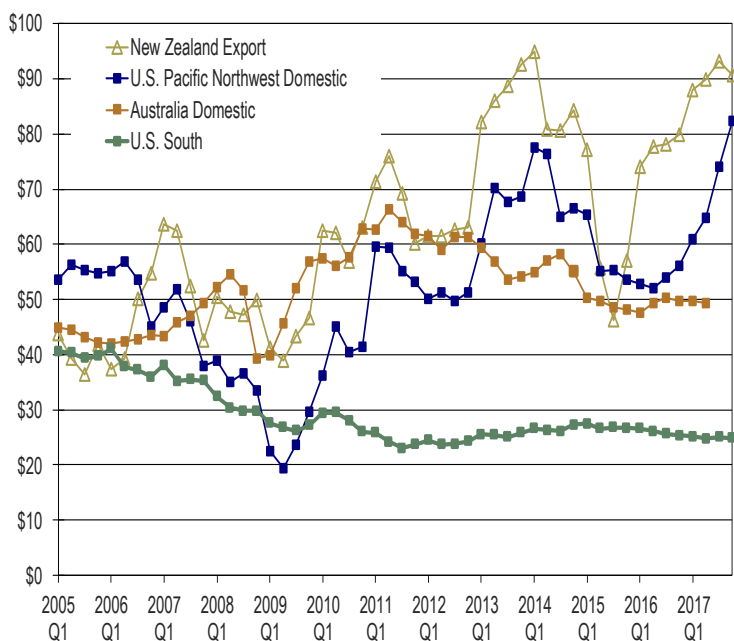


Source: Macrobond December 2017

In the fourth quarter, the USD made modest gains relative to the currencies of Canada (0.2 percent), Australia (0.3 percent) and New Zealand (1.7 percent), reflecting growing confidence in the U.S. economy and associated rising interest rates. The USD made more significant gains relative to the Brazilian real (4.5 percent), supported by the ongoing downward correction in Brazilian interest rates. The Chilean peso made significant gain of 3.9 percent in the final quarter of 2017, boosted by an improving economy, rising copper prices, and the election of the conservative candidate, Sebastian Piñera, for President.

## U.S. Pacific Northwest Sawlog Prices Move Higher

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

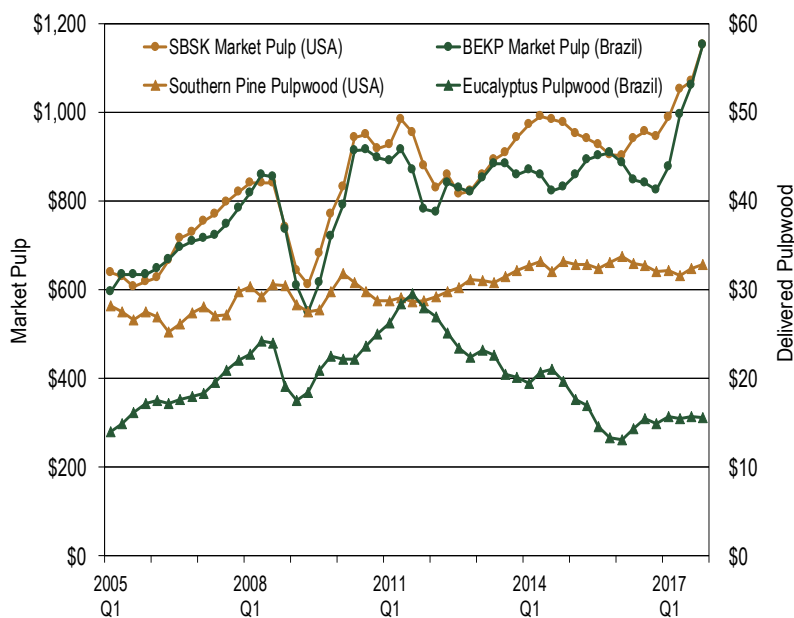


Sources: Log Lines December 2017, Timber Mart-South Q4 2017, NZMPI and Agrifax December 2017 and KPMG June 2017

In the fourth quarter, softwood sawtimber prices in the U.S. Pacific Northwest increased 11 percent over the previous quarter, narrowing the gap with New Zealand Radiata Pine, which (in USD) slipped 3 percent over the same period. Pacific Northwest sawlog prices were supported by strong domestic demand at the region’s lumber and plywood mills and healthy export log demand. The price of Southern pine sawtimber stumpage inched lower (-1 percent), trading in the tight range that has prevailed over the past several years. Australian sawlog stumpage prices, reported biannually, for the six months ending June, decreased by 1 percent from the prior six months, but are expected to show some improvement when prices for the second half of 2017 are reported (supported by improved lumber prices).

## Market Pulp Prices Gain Momentum While Pulpwood Prices Languish

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

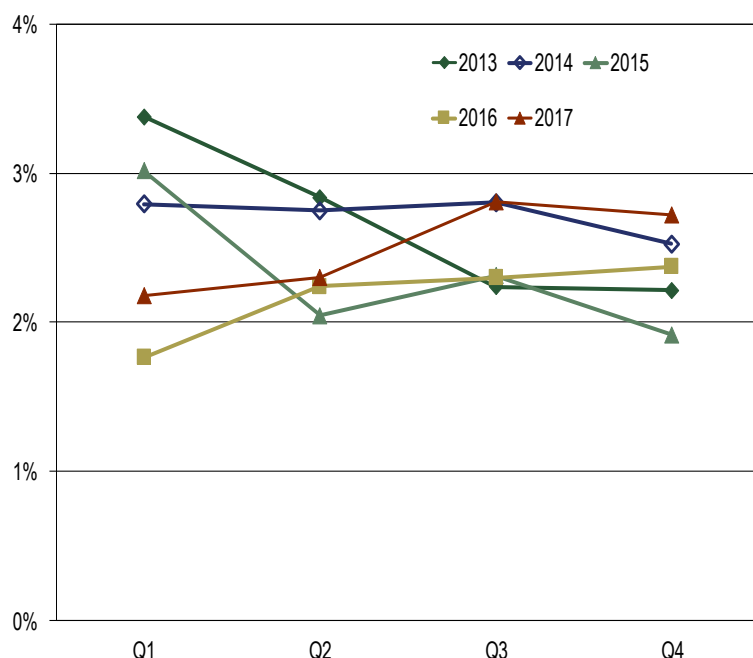


Sources: Hawkins Wright December 2017, Timber Mart-South Q4 2017 and STCP December 2017

Prices for Bleached Eucalyptus Kraft Pulp (BEKP) and Southern Bleached Softwood Kraft (SBSK) continued their upward climb in the fourth quarter, with both BEKP and SBSK converging at a new peak of \$1,153 per tonne. BEKP was up 40 percent from the final quarter of 2016 and SBSK was 22 percent higher year-over-year. Pulp prices have been supported by strong global production of packaging grades of paper and paperboard and the upward surge in the price of recovered paper. The strong upward movement in market pulp prices over the past year have still not impacted pulpwood markets. In the final quarter of 2017, delivered pine pulpwood prices in the U.S. South barely increased (1 percent) compared to the prior quarter, while Eucalyptus delivered pulpwood prices in Brazil inched lower by 1 percent.

## Cash Yields Hit Highest Fourth Quarter Level in Five Years

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

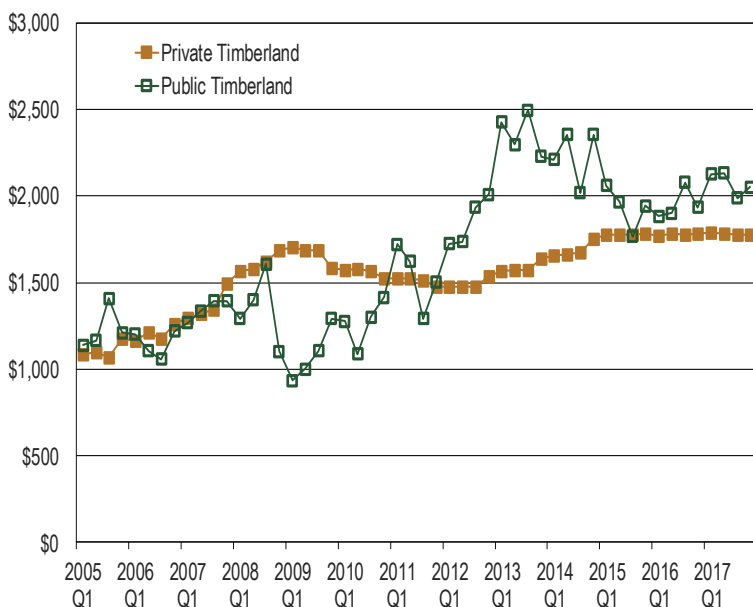


Sources: NCREIF Q4 2017, HTRG

U.S. cash yields from timberland operations in the fourth quarter of 2017 were 2.7 percent annualized, which is on the high end of the fourth quarter cash yields generated over the past five years (2.3 percent on average). Strong cash yields reflected strong demand for sawlogs at U.S. sawmills and wood panel mills, and the higher prices for sawtimber in the western U.S.

## Private Timberland Values Hold Steady

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



Sources: NCREIF Q4 2017, HTRG

Over the fourth quarter of 2017, privately-held timberland in the U.S. South average \$1,775 per acre, which represents a \$2 decrease from last quarter, and a \$7 decrease from the year prior. Public timberland values, measured by the Timberland Enterprise per Southern Equivalent Acre (TEV/SEA), increased 3.3 percent over the quarter, from \$1,987 to \$2,052 per acre. Year over year, the TEV/SEA increased 6.1 percent. On October 23<sup>rd</sup>, Potlatch announced its intention to acquire Deltic Timber in an all-stock transaction. Since market close on October 23<sup>rd</sup> through end of year, however, Potlatch and Deltic have depreciated, by 5 percent and 1 percent, respectively. Potlatch's offer of 1.8 shares of its own stock for each Deltic share represents a modest 7 percent premium over the past 12 months trading price to Deltic owners.

## 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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