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Hancock Timberland Investor

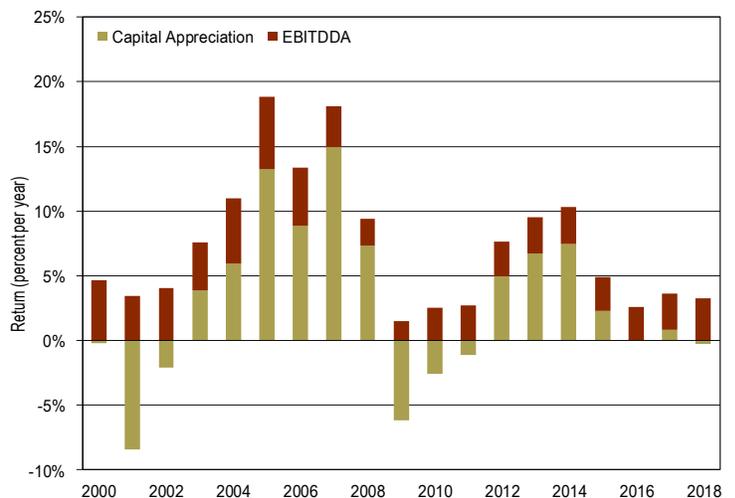
2018 U.S. Timberland Investment Performance*

U.S. private timberland investments returned 3.2 percent in 2018, a decrease of 42 bps in total return from 2017. Strong returns in the West offset lackluster return performance in the South and Lake States. Record high delivered log prices in the West supported healthy gains in both timberland income and capital appreciation. Timberland investments in the South generated average income, yet capital appreciation registered a modest decline as expectations scaled back regarding prospects for southern timber markets. The moderating assessment of southern timber markets occurred in the face of growing capital investment in the region’s lumber industry, which should add substantial new demand for pine sawtimber.

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 Index¹ (TPI), which reports returns for institutional investment in timberland in the United States. The TPI posted a total return of 3.2 percent for calendar year 2018. The performance of 453 timberland properties were included in the Index, scattered across 12.5 million acres within the U.S., with a combined market value of \$23.1 billion. Net operating income (EBITDDA) returns of 3.2

Operating Income Drives U.S. Timberland Returns in 2018

Chart 1: U.S. Private Timberland Performance, 2000 – 2018 (Calendar Year Returns)



Source: NCREIF as of December 31, 2018

U.S. private timberland valuations driven by strong log pricing in the West, and muted by lackluster performance in the South

percent for U.S. timberland in 2018 were an improvement from last year (2.8 percent) and the highest annual income return reported for U.S. timberland since 2006 (4.6 percent). Timberland properties included within the NCREIF Timberland Index are third-party appraised on an annual basis to

determine market value. In 2018, the market value of U.S. timberland fell slightly by 3 bps from the 2017 value (See Chart 1. U.S. Private Timberland Performance, 2000 – 2018). The nearly flat U.S. timberland appreciation rates in 2018 masked

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¹Hancock 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.

*All cover story data is from NCREIF Timberland Property Index as of Q4 2018

significant regional differences, with strong performance in the West and actual declines in the South and Lake States.

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 63 percent of the Index by market value). Western timberland properties represent 29 percent of the Index by value and the remaining 8 percent of the Index value is split between high-value hardwoods and mixed softwood/hardwood timberlands in the Northeast (5 percent), the Lake States (3 percent) and less than 1 percent reflecting timberland performance outside of the four main regions (See Chart 2. Regional Share of the Timberland Property Index by Value).

The dominance of southern timberland in the Timberland Property Index pulled down overall performance in 2018

The dominant position of southern timberland in the Index, combined with the South’s relatively weak returns, pulled down the overall U.S. return performance in 2018. Western timberland delivered a solid 9.2 percent total return, split fairly evenly between income and capital appreciation. Southern timberland returned a 0.8 percent total return, with income at 2.6 percent and a capital return

Western Timberland Outperforms Other U.S. Regions

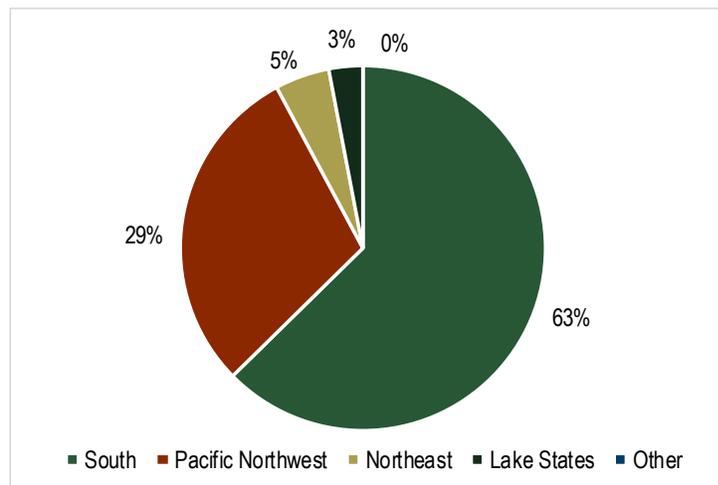
Table 1: Regional U.S. Timberland Performance in 2018

	South	West	Northeast	Lake States	USA
EBITDDA	2.57%	4.89%	4.92%	1.83%	3.24%
bps change from 2017	-2	144	275	-27	47
Capital	-1.69%	4.15%	1.03%	-3.09%	-0.03%
bps change from 2017	-184	65	141	28	-87
Total	0.84%	9.19%	5.99%	-1.31%	3.21%
bps change from 2017	-190	216	421	1	-42

Sources: NCREIF as of December 31, 2018, HNRG

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

Chart 2: Regional Share of the Timberland Property Index by Value



Source: NCREIF as of December 31, 2018

of -1.7 percent for the year, reflecting lower appraised values. Western timberland total returns increased 216 bps compared to last year, whereas southern timberland total returns ratcheted down by 190 bps from last year’s performance due to a combination of both lower income and capital appreciation. (See Table 1. Regional U.S. Timberland Performance in 2018).

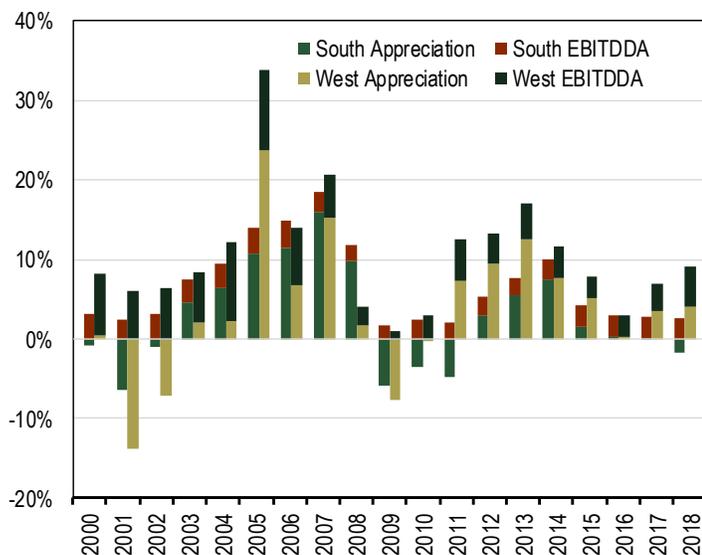
The varied performance of private timberland investments in the U.S. over the past two decades showcase the benefits to investors of holding a diversified timberland portfolio (See Chart 3, Regional Calendar Year Timberland Performance, on page 3).

For investors holding timberland in the U.S. West, 2018 is a memorable year. Western timberland markets were extremely strong early in the year, and timber prices reached record levels (on a nominal basis) topping over \$1,000/MBF (delivered) for Douglas-fir logs. Operating income in the West in 2018 reached levels not seen since 2011.

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The Benefits of a Diversified Timberland Portfolio Reflected in Southern vs Western Performance

Chart 3: Regional Calendar Year Timberland Performance



Source: NCREIF as of December 31, 2018

In contrast, in the U.S. South, southern pine sawtimber prices remained at lackluster levels again in 2018 at about \$25/ton. Southern pine sawtimber prices have been stuck near current levels since 2011, as an ample supply of mature timber in the region weighs heavily on prices, holding operating income close to historical averages (See Figure 5, Softwood Sawtimber Prices, on page 7).

Appraisers were mixed in their expectations for future performance. For southern timberland, some appraisers used evidence from recent transactions to push land values upward, while others moderated expectations for future performance based on a growing awareness of the depth of the region’s timber supply. In the West, appraisers looked to recent strong comparable sales evidence in the region and strong log prices in 2018. Together, this

provided support for an increase in market values in the West in 2018 compared to 2017.

Historically, western timberland performance, as measured by NCREIF, has been about twice as volatile as southern timberland performance, a trade off to the relative higher returns achieved in the U.S. West.

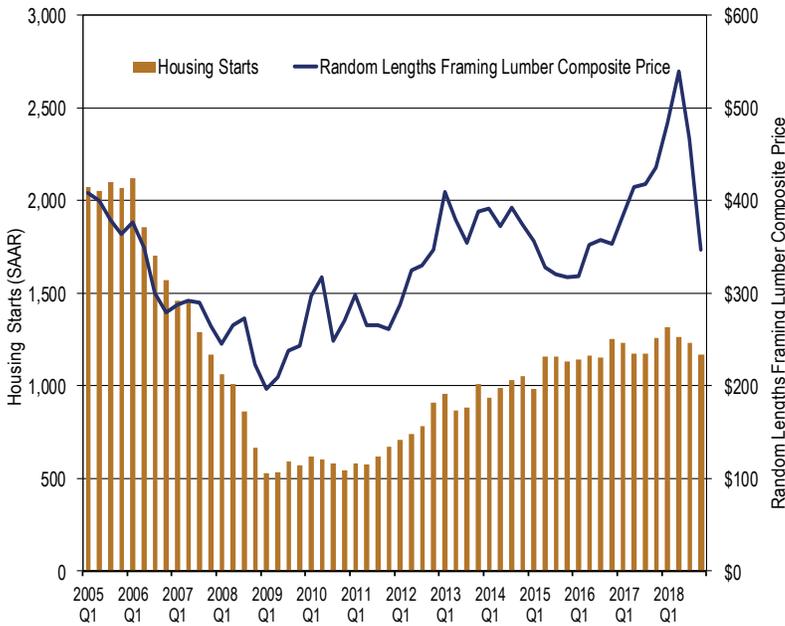
Timberland performance varies across regions of the U.S. adding portfolio diversification

Lake States and Northeast Performance Mixed

Timberland total returns in the Lakes States slipped by 1.3 percent in 2018, after a similar fall in 2017. Operating income in the Lake States in 2018 was off slightly from 2017, while the 2018 decline in capital appreciation was a bit more moderate than the previous year. Northeast timberland performance in 2018 at 6.0 percent is 421 bps above 2017, with both income (4.9 percent) and appreciation (1.0 percent) showing solid improvements over 2017. 🌲

Lumber Prices Move Off Record Highs, Housing Slips

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

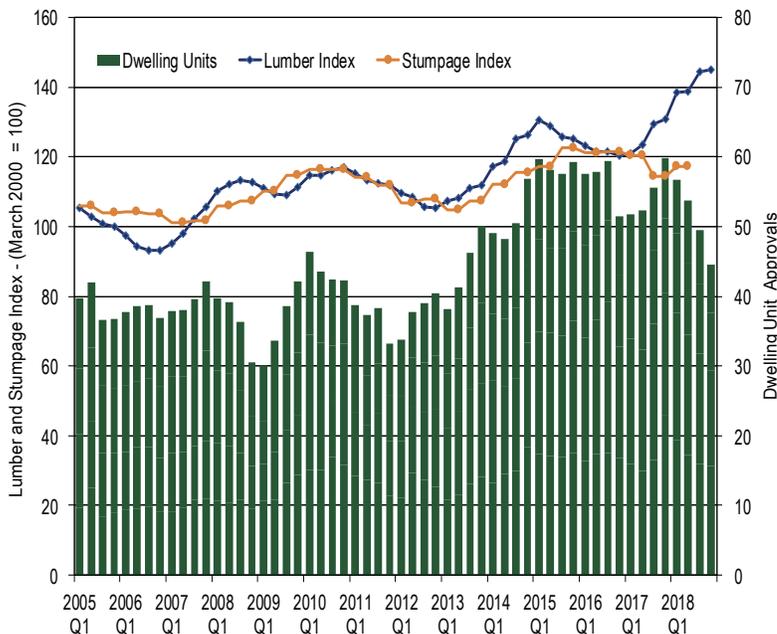


Sources: Random Lengths Lumber Report December 2018, U.S. Census Bureau December 2018

U.S. housing starts slipped in the fourth quarter of 2018, with total starts at 1.2 million units, a 5.4 percent decrease from the previous quarter and 7.3 percent below the same period a year earlier. The lackluster residential construction activity in the second half of 2018 reflected the negative impacts of higher home prices, rising mortgage rates and a deterioration in consumer confidence. Wood products prices continued their correction in the fourth quarter, with the Random Lengths Composite Index losing 26 percent over the previous quarter, and down 20 percent below the fourth quarter of 2018. The marked retreat of lumber prices from their mid-year peaks reflected reduced expectations for the housing markets coupled with expanded supply of lumber from increases in domestic production and non-Canadian imports.

Australia Dwelling Approvals Move Lower

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

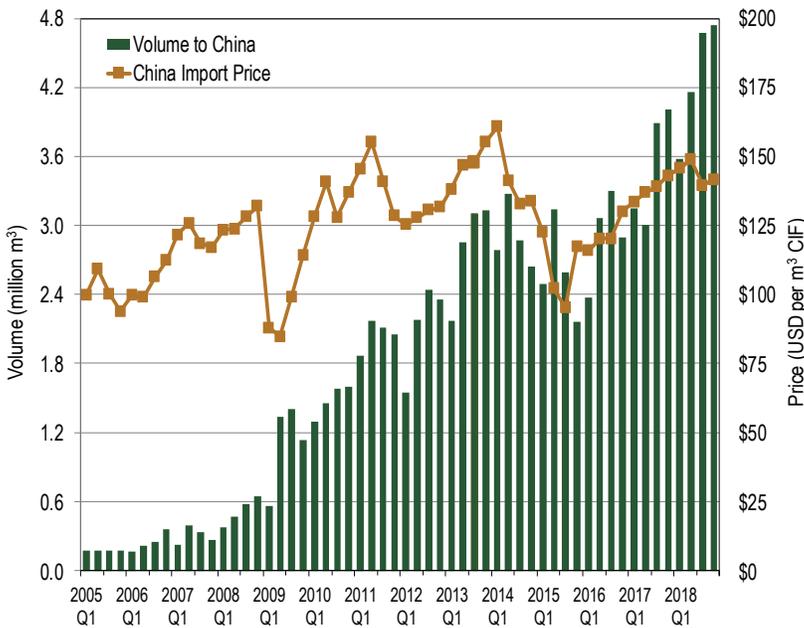


Sources: Australia Bureau of Statistics December 2018, KPMG June 2018, Indufor Timber Market Survey December 2018

In the fourth quarter of 2018, Australian dwelling approvals (a key indicator of residential construction activity) continued to lose ground slipping 10 percent from the previous quarter and down 26 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 slightly higher in the fourth quarter, up 0.2 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 latest release in June 2018, showed the stumpage log index for softwood sawlogs prices holding flat.

New Zealand Imports Strong, Log Prices Move Up

Figure 3: Quarterly New Zealand Softwood Log Export Volume to China (million m³) and Price in China (USD per m³ CIF)

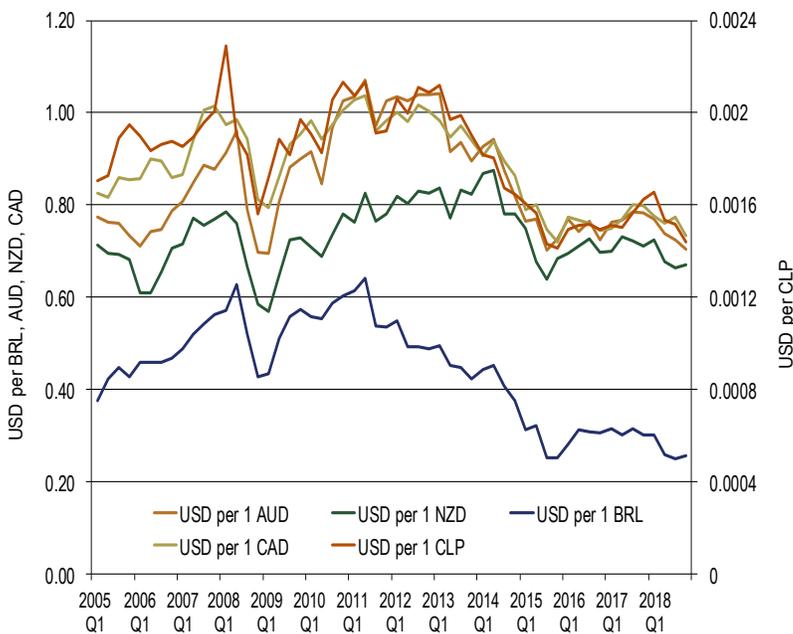


Source: Wood Markets International Inc. December 2018

Fourth quarter New Zealand log export volumes edged higher to a new record of 4.7 million cubic meters, and were 18.1 percent above the volume shipped to China from New Zealand in the final quarter of 2017. Supported by the continuing strong demand for New Zealand logs from China, the price of New Zealand sawlogs delivered to China, denominated in USD, edged up in the fourth quarter, remaining strong despite the continuing slow-down in China’s economy and construction sector.

U.S. Dollar Mixed

Figure 4: Quarterly Exchange Rates Between USD and Commodity Currencies

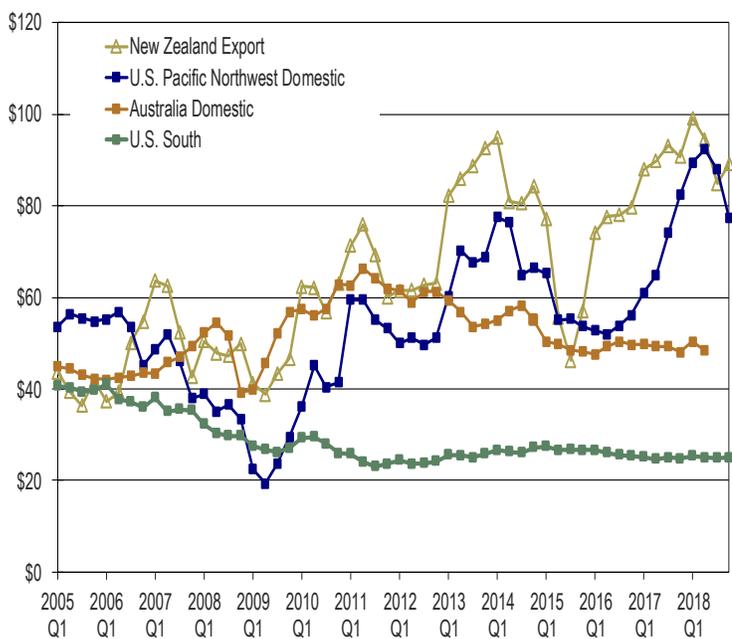


Source: Macrobond December 2018

The U.S. dollar was mixed in the fourth quarter, with different currencies reacting to a variety of factors. Compared to the prior quarter, the U.S. dollar gained 5 percent relative to the Canadian dollar, reflecting weaker oil prices. The U.S. dollar was also up 5 percent compared to the Chilean peso, which moved lower on softening copper prices and a further slowing in the Chinese economy. The Australian dollar also lost 3 percent relative to the U.S. dollar, responding to the weaker outlook for China and energy/mineral prices. The U.S. dollar made modest downward adjustments relative to the New Zealand dollar (1 percent) and the Brazilian real (3 percent). The Brazilian real found support in the election of a more conservative government and hopes of improvement in the country’s business environment.

U.S. Softwood Sawtimber Prices Mixed

Figure 5: Regional Softwood Sawtimber Stumpage Prices (USD per m³)

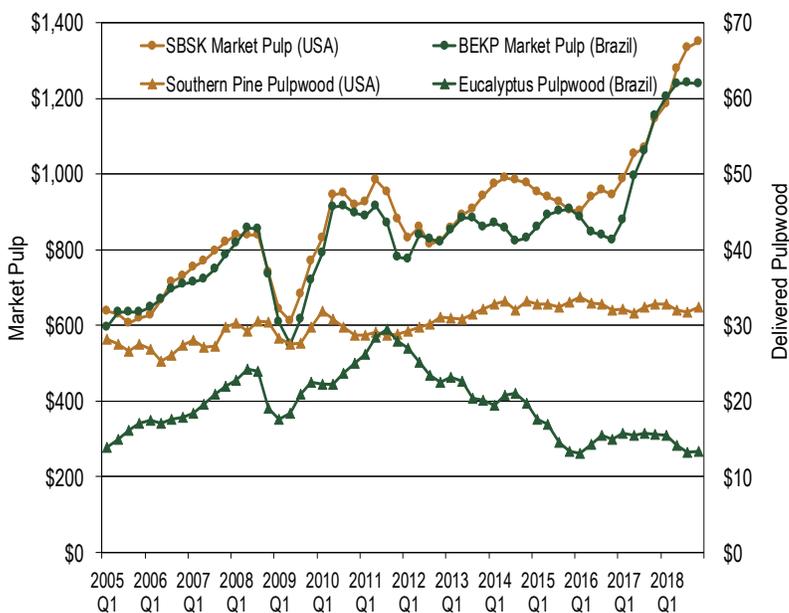


Sources: Log Lines December 2018, Timber Mart-South December 2018, NZMPI and Agrifax December 2018, KPMG June 2018

Softwood sawtimber stumpage prices on a USD denominated basis moved in different directions across regions in the final quarter of 2018. New Zealand softwood sawtimber prices (in USD) increased 5 percent from the previous quarter supported by record export volumes, but were still down 10 percent from the peak levels reached in the first quarter. U.S. Pacific Northwest prices dropped 12 percent from the previous quarter in response to depressed prices in North American lumber and plywood markets. In the U.S. South, southern pine stumpage prices were nearly flat in the fourth quarter and have shown limited movement over the past two years, despite rising demand and highly volatile pricing for lumber and plywood. The most recent release of Australian pine stumpage prices was for June 2018, which showed a 4 percent decline from the first quarter.

Market Pulp Prices Lose Momentum While Pulpwood Prices Languish

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

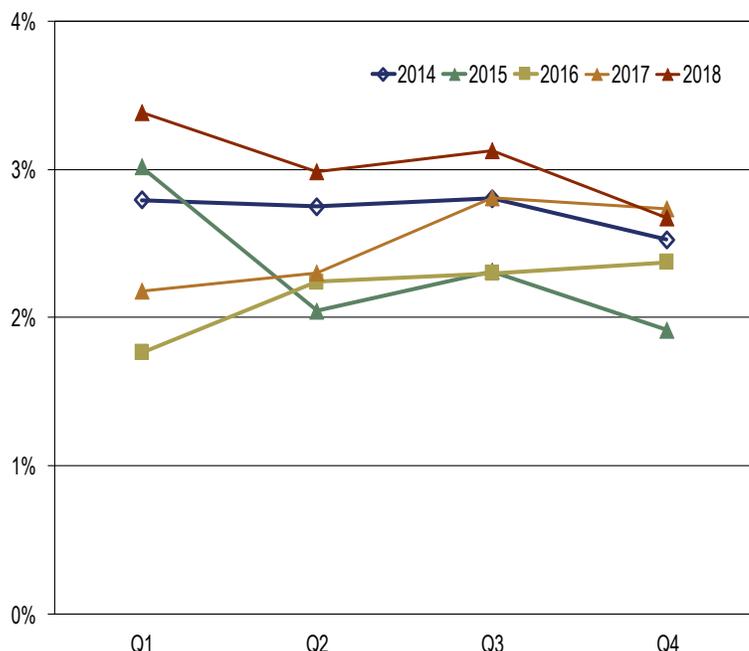


Sources: Hawkins Wright September 2018, Timber Mart-South December 2018, STCP December 2018

Prices for Bleached Eucalyptus Kraft Pulp (BEKP) and Southern Bleached Softwood Kraft (SBSK) remained near record highs in the final quarter of 2018, with BEKP nearly flat compared to the previous quarter and SBSK up a modest 1 percent. Slower growth in China's overall economy is beginning to undercut demand for market pulp and is restricting further upward movement in pulp prices. In the fourth quarter, pine pulpwood delivered prices in the U.S. South made a modest 2.2 percent gain over the previous quarter resulting from wet weather impeding harvesting operations. As was the case for pine pulpwood in the U.S. South, eucalyptus delivered pulpwood prices in Brazil moved ahead by 1.6 percent from the previous quarter on a U.S. dollar basis, due to the recovery in the Brazilian real relative to the U.S. dollar.

Cash Yields Ease

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

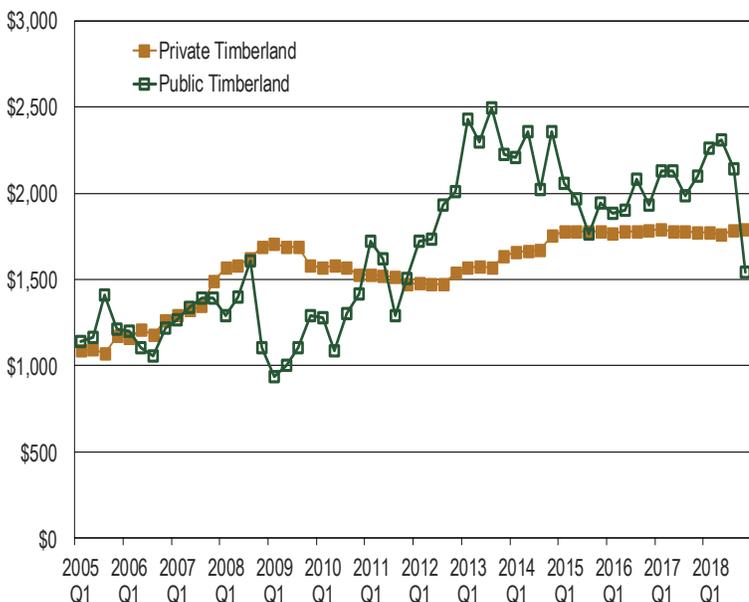


Sources: NCREIF December 2018, HNRG December 2018

Timberland cash yields eased in the fourth quarter of 2018, reflecting a downward correction in timber prices in the U.S. West in the second half of the year. In the fourth quarter, cash yields from timberland operations were at a 2.7 percent annualized rate. Although this was the weakest of the year, it still compared favorably to the past 4 four years. Fourth quarter cash returns for the period 2014-2018 averaged 2.4 percent. The stronger cash yields in 2018 are directly related to the increased consumption of softwood sawlogs at U.S. lumber and plywood mills and the improved financial performance of the North American solid wood product sector.

Public Company Timberland Values Crash

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



Sources: NCREIF December 2018, HNRG December 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.

Public timberland values, measured by the Timberland Enterprise Value per Southern Equivalent Acre (TEV/SEA), fell sharply during the fourth quarter, dropping 28 percent from third quarter values. Year over year, public timberland values fell by 27 percent. The primary driver for the decline in values stems from a 32 percent fall in Weyerhaeuser's stock (NYSE: WY) on the backs of the continuing fall in lumber prices. Other public timber REITs in the TEV/SEA Index averaged losses of 15 percent. This quarter's public timberland value decline is the largest since the 2008 Q3 to Q4 decline. Private timberland values in the South, as measured by the NCREIF Timberland Index, increased slightly from last quarter, averaging \$1,791 per acre, a 1 percent increase over fourth quarter values last year.

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/m³. 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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