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Subject line: Forisk News: Timber Price Forecast - Log Trucking - Profiling Timber Market Growth Potential - Continuing Education

Timber Price Forecast
Recently, we posted analysis related to forecasting U.S. timber prices and forest industry activities:
- Forisk Forecast: U.S. Housing Starts Outlook, Q1 2017 Update
- How Have Sawmill and Plywood Capacities Changes in the South?
- Forisk Forecast Scorecard: 2016 Projections versus Year-End Actuals
- Timberland Investment Returns and the Performance of Timber REITs Over Time

The Q1 2017 Forisk Research Quarterly (FRQ) includes industry analysis and market forecasts through 2026 for timber prices, logging costs, lumber and structural panels production, paper and paperboard, forest supplies, and wood bioenergy. The first feature article examines truck driver compensation and implications for increasing trucking capacity in logging. The second feature tests factors driving timber price models, and details how Forisk profiles markets to estimate the timing and magnitude of timber price changes. “Forisk Facts & Figures” – Forisk’s quarterly “story in three slides” – illustrates pine grade (sawtimber and chip-n-saw) mill capacity changes by sub-region in the South and highlights available pine grade supplies. Select FRQ findings include:
- **Macro:** Overall, economic growth continues albeit at a slower pace. Real GDP for 2016 grew 1.6%, versus 2.6% in 2015. Forisk’s Score of 3.7 for the U.S. economy in Q4 2016 remained above the stagnant “no growth” score of 2.0.
- **Lumber:** At Forisk’s Base Case of 1.25 million housing starts, we forecast softwood lumber consumption to increase 3.8% to 48.7 BBFT, while production is forecasted to increase 5.1% to 33.9 BBFT. U.S. softwood lumber production capacity rose 1.4% in 2016 to 38.9 BBFT.
- **Structural Panels (OSB & plywood):** Forisk projects U.S. structural panel consumption to increase 6.4% in 2017 in the Base Case. The production of both OSB and Plywood increased in 2016, rising 4.8% and 0.7%, respectively.
- **Pulp & Paper:** In the past year, U.S. paper and paperboard production fell 0.8%. Increases in packaging and tissue (household products) offset declines in newsprint and printing/writing. Demand for wood used to make pulp is forecast to decline by 5.2% in the next five years.
- **Wood Bioenergy:** Forisk is tracking 439 operating and announced bioenergy projects across the U.S., of which 298 pass Forisk’s basic viability screening. The “viable” projects represent potential wood use of 77.4million tons per year, down 2.5% from the October 2016 estimate. Through November 2016, exports of U.S. wood pellets were up 2.4% relative to 2015 volumes.
  - To download the free Wood Bioenergy US Summary, click here.
- **Timberland Investments:** Public timber REITs returned 5% as a group in 2016 and 6% since the U.S. Elections in November 2016. For 2016 and thru January 2017, there have been 9.3
million acres of announced, completed U.S. timberland transactions and another 2.3 million acres of pending transactions.

- **Forest Operations:** Lower diesel prices provided relief in operating costs for trucking, but higher wages and insurance have offset the savings. Lake States (4%) and Mid-Atlantic (3%) logging forces are increasing with employment in each region up 10% over two years; the Inland West (-4%) and Northeast (-7%) continue to decline year-over-year.

- **Timber Prices, U.S. South:** Over the next five years, pine sawtimber stumpage increases at an average annual growth rate of 5.7% nominal; pulpwood increases at an annualized rate of 3.2% nominal. Hardwood grade prices project an average annualized growth of 2.4% nominal. Major changes in hardwood pulpwood prices in local markets are associated with wood bioenergy demand and shifting species mixes at pulp and paper plants.

- **Log Prices & Logging Costs, Pacific Northwest:** Regional average logging and hauling costs grow at 1.0% per year over the next decade. The Northwest still leads the country in log exports. Log exports in Washington track 6.1% above 2015 levels; Oregon log exports are up 31% relative to 2015. Starting domestic delivered log prices in the forecast increased 1-2% since Q4 2016, except for hemlock in Oregon, which increased 2.3%. Nominal prices forecast to increase at average annual rates of less than 1% in the next five years.

- **Hardwood Stumpage Prices, U.S. North:** Log exports are tracking below 2015 levels. Total average logging and hauling costs project to grow slightly higher than 1% per year over the next decade driven by slow diesel cost growth. Hard and soft maple log prices are expected to grow the most in the region. Hard maple nominal stumpage prices increase 3% annually across New England, the Middle Atlantic and the Lake States, while soft maple prices are expected to grow 2% annually.

To learn more about the Forisk Research Quarterly (FRQ), click here or contact Brooks Mendell at bmendell@forisk.com, 770.725.8447.

**How Does Limited Trucking Capacity Affect Driver Compensation and Wood Costs**

As part of a Wood Supply Research Institute (WSRI) funded study, Forisk investigated truck driver compensation in logging compared to occupations competing for the same employee pools. A national shortage in qualified truck drivers has pressured salaries higher over the last two years. We found that log truck driver salaries in the South and West are competitive with other rural trucking industries and long-haul freight companies. Where the forest industry has less presence, in the Lake States and Northeast, salaries lag behind the competition. Long-haul transportation companies still lead with stronger non-wage benefit packages, such as retirement plans and health insurance. As a result, total compensation for log truck drivers is not as competitive as for general freight transportation. Recruiting drivers into logging faces additional challenges when compared to other industries, which in part explains why salary increases in logging over the past two years have outpaced competing industries. The FRQ research article includes analysis of implied compensation and productivity changes on delivered wood costs.

**How Drivers of Timber Prices Differ Across Markets and Over Time**

This research evaluates the relationships between state-level prices, wood demand, harvest levels, and forest inventories, along with regional (South and West) softwood lumber production.
The results detail how Forisk profiles markets along two dimensions to estimate the timing and magnitude of changes in timber prices. First, the responsiveness of current prices to changes in demand varies across states, with higher responsiveness associated with balanced supply/demand relationships and deep industrial markets. Second, the potential for growth also varies across states, with high potential associated with high levels of surplus supplies or idled capacity relative to demand in states well suited for manufacturing capacity. Overall, Western softwood logs prices increase 4 to 6% for each 10% change in regional lumber production, subject to adjustments for log export demand. Pine sawtimber stumpage prices in the South increase from 4% to 9.5% for each 10% change in wood demand, subject to state-specific adjustments for pine grade supplies, which can dampen or accelerate these rates over time. These relationships vary over time and can be estimated at the local market and regional levels. The research includes a framework for comparing timber markets across these dimensions.

**Upcoming Continuing Education Opportunities**
On March 30th, Forisk will teach "Applied Forest Finance" in Atlanta, Georgia. This one-day class is ideal for forestry consultants and investment analysts, timberland owners and investors, and anyone else who needs to understand the identification, valuation, and ranking of timber-dependent and forest-related investments. It details the step-by-step financial analysis required to answer key investment and forest management questions. All FRQ subscribers receive a 10% discount. [Click here to learn more and to register.](#)

Details about these classes, as well as customized private classes, can be found on the [Education & Speaking](#) page on the Forisk website.

**News & Upcoming Events:**
- In January, [Justin Tyson](#) joined the Forisk team as a Senior Analyst. Prior to Forisk, Justin worked with Rayonier, Weyerhaeuser and Bartlett Tree Experts. Justin is a Certified Forester and conducted graduate forestry research in Brazil. Welcome, Justin!
- On February 11, 2017, Shawn Baker will present “Competitiveness of Logging Industry Compensation” at the South Carolina Timber Producer’s Annual Meeting in Myrtle Beach, SC.
- On March 29, 2017, Amanda Lang will present “Wood Demand and Market Trends” at the Georgia SAF Annual Meeting in Athens, Georgia.
- On April 11th, 2017, Amanda Lang will present “Bioenergy Markets and the Bioeconomy” at the University of Georgia.
- On May 1, 2017, Shawn Baker will present “Compensation Indices for Logging and Trucking Occupations” at the Wood Supply Research Institute Annual Meeting in Charleston, SC.
- On June 21st, 2017, Brooks Mendell will present “Implications of Forest Industry Technologies on Regional Timber Markets” at the Chattahoochee SAF Meeting in Atlanta, Georgia.

*Forisk provides research and educational services to executives and analysts making decisions related to timber REITs, timberlands, and wood-using energy and manufacturing facilities.*