Staff Report # 2018-51

STUMPAGE SPEAK

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Louisiana Timber Market Report[1]
Third Quarter (Jul-Sep) 2018
LSU AgCenter

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Louisiana Stumpage Prices ($/ton)	3rd Quarter 2018	Change from Prior Quarter
Product Class	**Price per ton**	**% Change**
Pine Sawtimber	**24**	**-4%**
Pine Chip-n-Saw	**18**	**-2%**
Pine Pulpwood	**8**	**-19%**
Oak Hardwood	**44**	**8%**
Hardwood Sawtimber –Mixed Grade	**32**	**1%**
Hardwood Pulpwood	**10**	**-2%**

[1] The following document is intended for use by forest stakeholders in Louisiana. The source of these prices is proprietary in nature and rounded per agreements to disseminate to the public. Therefore, I add percentages so the reader will know if prices are up/down/flat. The prices I report are also state averages. I recommend using this document and those produced by Louisiana Department of Ag and Forestry to aid Table 1. in decisions about purchases, sales, and determining harvesting schedules. As always, communicate with a **consultant forester** on prices before executing contracted agreements with wood buyers.

****Price Conversions: Pine Sawtimber/ MBF= Tons * 8; Hardwood Sawtimber/ MBF = Tons * 9.5; CNS and Pine Pulpwood Cords = Tons * 2.7; Hardwood Pulpwood Cords = Tons * 2.85********

Small Diameter Pine Markets are here to stay

Introduction

I noticed a strange thing when I received the price reports for the 3rd quarter of this year. The high price for CNS in Louisiana is $21.01 a ton and the low price for sawtimber is $20.73. This is driven by southeast markets in Louisiana which are a much smaller volume of harvest than the the Central/West/and NW part of the state but while those two products prices have not crisscrossed yet (they may not) they are converging rapidly, with only a two dollar difference per ton.

Further in southeast markets the high for sawtimber is only $23 dollars while in the other regions it's approximately $30. This tells me two things: 1. The convergence in the north is simply driven by similar diameter trees (small sawtimber and large CNS are similar in dbh so the prices should be close. 2. The southeast is under a different market structure than its northern neighbor.

Initially, I was surprised but upon further reflection it's an unfortunate but inevitable outcome of the changes in forest mill operations and lumber consumption patterns we've seen for a number of years now. Let's start at the final demand and work our way backwards and then discuss the implications for forest management.

Here's a quote from Random Lengths, which is a publication that tracks forest products markets, products after they are manufactured at the primary wood using mill.

"Southern Pine #2&Btr 2x6 on the eastside, meanwhile, has infrequently traded above 2x4 for brief periods. The current 2x4 premium tops $100, and it has not trailed 2x6 since 2009. Southern Pine traders cite the multiple uses of 2x4 compared to the other widths in explaining the consistent 2x4 premium."

So this then provides an incentive to wood using mills (to take smaller logs) as can be summarized in the below quote from a paper Dr. Rajan Parajuli and I wrote, earlier this year.

"...since the late 1990s and early 2000s, southern plywood plant closures have removed one of the largest end uses for sawtimber class trees. Further, manufacturing technology in the lumber and building products sector has moved toward using smaller d.b.h trees. Recent reports from Forest2Market's Mill2Market Lumber Pricing Service showed that 2 × 4 s sold for more than 2 × 12 s. So, sawmills are getting paid a higher $/mbf to cut 2 × 4 s than they are for 2 × 12 s. In addition, since 2 × 4 s can be cut from the smaller CNS logs, sawmills have less incentive to buy or pay a premium for large logs" (see Table 1 & 2). This is made more salient by the spread or difference in the prices of lumber products (specifically 2 × 4 s) and the delivered price of sawtimber stumpage.

The findings from that study suggest that CNS quantity demanded and sawtimber price are inversely related at the state level. This suggests that mills are engaging in substitution with respect to the two products. Not surprising, when sawtimber prices rises, mills prefer CNS, all other things constant.

Therefore, since the prices for 2 × 4 s are higher and rising faster than the larger-diameter lumber products (and CNS is cheaper than sawtimber), there is end-use price pressure to switch to the cheaper input in the sawmilling process. While delivered prices have remained flat (and stumpage prices have declined), lumber prices have risen greatly.

This increase in profitability is exacerbated by using CNS stumpage as a substitute for sawtimber. Consequently, understanding the determinants of supply and demand of CNS stumpage products is more relevant to stumpage markets than in the past, and if the trends continue toward smaller stumpage products, this will only become more relevant in the future.

I have conducted extension presentations where clientele groups requested comparisons of harvesting rotations with chip-n-saw as the terminal stumpage product class and comparing land expectation values with traditional rotations of 30–35 years (with sawtimber as the terminal stumpage product). While the returns are greater for sawtimber (if a nearby sawmill takes larger diameter logs), the Internal Rate of Return was still over 10%, before taxes for the CNS scenario.

Lastly, two points from my extension work to drive home the point. First, I do a lot of work for Louisiana Economic Development. When a Timber company comes to the table and is thinking of setting up shop, I'll conduct a cursory inventory analysis. Call it a "what's out there" analysis to determine if there will be enough volume to feed their mill should they choose Louisiana and a specific location in Louisiana. Most of the sawmill prospects are requesting 13-16 dbh for their feedstock.

Second, Dr. Mike Blazier and I conduct the Timber Product Output Report. This report is used by the forest service to determine where wood is going and what products are being created and how mills are utilizing wood to create those products. While we have only been doing the survey for two years, it is obvious that many of the sawmills prefer this smaller diameter wood due to the first quote I introduced and the mills ability to get more lumber products out of same size tree they may have gotten 20 years ago.

The take home message is do your due diligence on your particular market. Does the nearby mill prefer a certain dbh, is your stand approaching that dbh? Is it already past it? If so there are still some options, but you need to act quickly. Also, keep in mind that timber harvests can take as long as 18 months to 2 years in these depressed markets so keep a keen eye on the growth of the stand.

I still think there is a place for the small landowner in this changing paradigm. Timber mills prefer trees that are more slowly grown for grade lumber, but this simply means more slowly grown than the TIMO's, REIT's and other Industrial owners. All these groups, including NIPF (non-industrial private forests, specifically small tree farmers) are going to be moving to shorter rotations in the future, with the caveat that they are not filling niche markets (e.g. plylogs and poles). **There is no one size fits all strategy, its market specific, so know your markets. Hire a consultant and stay ahead of the curve.**

For clarification or other questions, feel free to shoot me an e-mail at stanger@agcenter.lsu.edu

References

Stewart, P. How Big Will Trees Grow? Landowner Questions. Forest2Market Blog. 2011. Available online: https://blog.forest2market.com/landowners-and-tree-owners-get-answers-sawtimber-vs-chip-n-saw (accessed on 30 June 2017).

Tanger, S., and R. Parajuli. 2018. Toward an elasticity of chip-n-saw: Demand and supply models of chip-n-saw stumpage in Louisiana. Forests, 9, 211. (Available free at: www.mdpi.com/1999-4907/9/4/211/pdf).

Table 1. Quarterly Harvesting Data for Louisiana Pine Stumpage Products

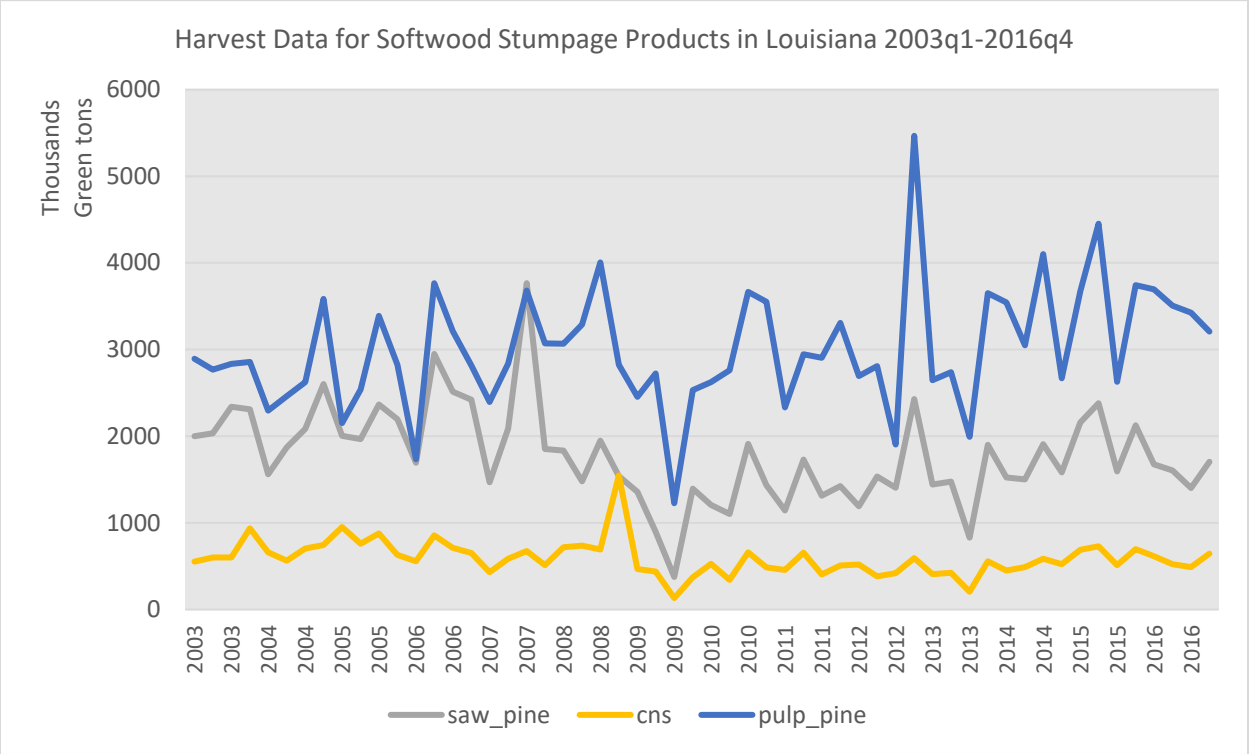

Table 2. Quarterly Price Data for Louisiana Pine Stumpage Products