



Timberland Report

JAMES W. SEWALL COMPANY
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How have Recent Market Conditions Affected the Midwest Forest Sector?

The Midwestern United States represents an important, but smaller region for timber-related activities relative to the Pacific Northwest and the South. We refer to the Midwest timber market as a seven-state region led by Michigan, Wisconsin, and Minnesota, that also includes Illinois, Indiana, Iowa, and Ohio. While the entire country has been impacted by declining economic conditions, the forestry sector has been directly and significantly affected by declining housing markets. According to the Western Wood Products Association, lumber demand is expected to drop 15 percent this year to 44.3 billion board feet. Production in the West has dropped 28 percent and production in the South has dropped eight percent since 2005. How has the Midwest fared?

TIMBERLAND TRANSACTIONS

Timberland sales appear to be slowing down and decreasing in size in the Midwest. Timberland sales over the past two years show TIMO and REIT transactions have not exceeded 100,000 acres each (Table 1). Plum Creek sold 99,000 acres in Wisconsin to The Forestland Group in 2007. The Forestland Group then sold 68,000 acres in Michigan's Upper Peninsula to Molpus the following year, bringing the Forestland Group's total ownership in the Lake States to 531,000 acres. The purchase aligns with Molpus's stated strategy of extending their timberland investments and ownership beyond the US South. Also in 2007, a private investor sold nearly 5,000 acres of former MeadWestvaco land to the state of Ohio for conservation purposes and Potlatch sold nearly 5,000 acres in eastern Minnesota, north of Minneapolis, to a real estate developer. Plum Creek sold 28,000 more acres in Wisconsin to RMK in 2008. This was part of a larger Plum Creek package including less attractive assets in the Upper Peninsula that Plum Creek placed back on the market after initial interest from bidders proved disappointing. The UP assets were finally sold in December 2008. Potlatch sold over 42,000 acres to a private investor in 2008 in Minnesota.

Compared to transactions in 2005-2006 in the region, recent sales are smaller in size. MeadWestvaco sold over 800,000 acres in the region to Cerberus Capital Management in 2005 as part of the divestiture of its paper business. International Paper Company (IP) sold 440,000 acres in Michigan to GMO Renewable Resources in 2006 and sold 82,000 acres in Wisconsin to FIA and the State of Wisconsin in 2006. This trend of large vertically-integrated companies selling their timberland in the Midwest is wholly consistent with the trend nation-wide.

Like the South, West, and Northeast, the Lake States forest industry has largely liquidated its timberland holdings and smaller deals will be the rule going forward. There remain a couple of large industrial owners in the Lake States that could follow suit by offering lands to pure timber investors in the near future.

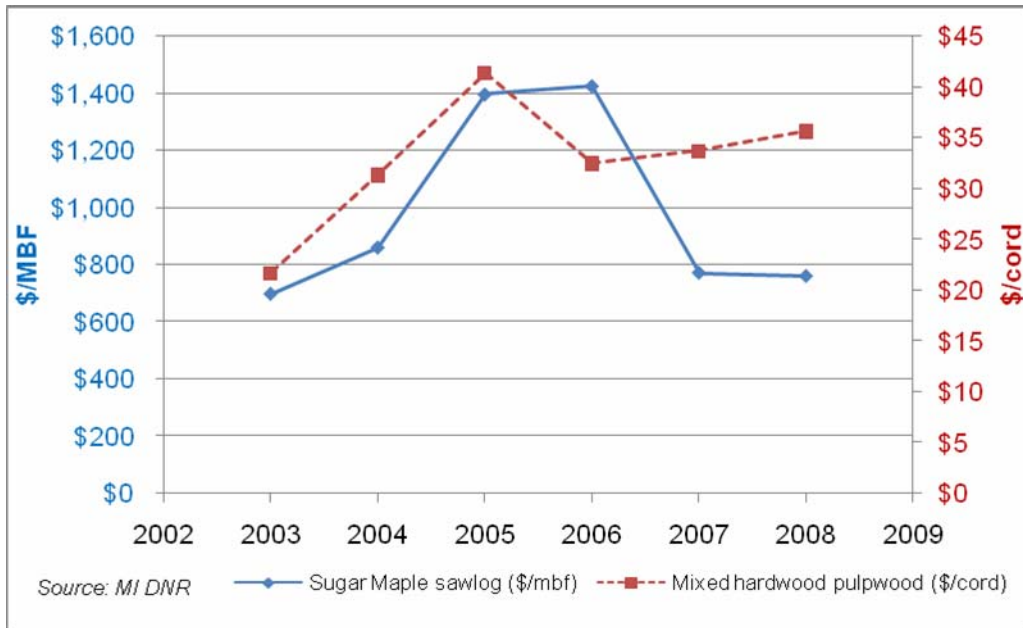
Table 1. Recent timberland transactions in the Midwest. Source: JW Sewall Company, Timber Mart-South.

Year	Seller	State(s)	Acres	Buyer
2007	Private	Ohio	4,879	State of Ohio
2007	Plum Creek	Wisconsin	99,400	Forestland Group
2007	Tomahawk Timberlands	Wisconsin	76,000	Potlatch
2007	Wisconsin Energy	Wisconsin	7,425	Wild Rivers, LLC
2007	Potlatch	Minnesota	4,750	Land and Cabins, LLC
2008	The Forestland Group	Michigan	68,400	Molpus Timberlands
2008	Plum Creek	Wisconsin	28,000	RMK Timberland Group
2008	Potlatch	Minnesota	42,800	Roy Marlow
2008	Plum Creek	Michigan	33,159	The Forestland Group

HARDWOOD MARKETS

Midwestern markets, in addition to local markets in New York state and Pennsylvania, are leading producers in the US of hardwood products, especially sugar (hard) maple sawtimber and hardwood pulpwood. Unfortunately, these markets, though not directly correlated with lumber and pine roundwood prices, have not been immune to recent pricing trends. Publicly available hardwood stumpage prices in Michigan show a peak in average hard maple stumpage prices in 2005-2006 at \$1,425 per MBF and a sharp decline to \$774 per MBF in 2007 (Figure 1). Average hardwood pulpwood prices peaked in 2005 at \$41 per cord and also dropped in 2006. Unlike maple sawlog prices, hardwood pulpwood prices have been recovering the past two years. While prices in Wisconsin and Michigan have seen a resurgence, those in Minnesota remain depressed, where Ainsworth has stopped production at its three OSB mills, one permanently.

Figure 1. Average hard maple sawlog and hardwood pulpwood prices, Michigan, 2003-2008



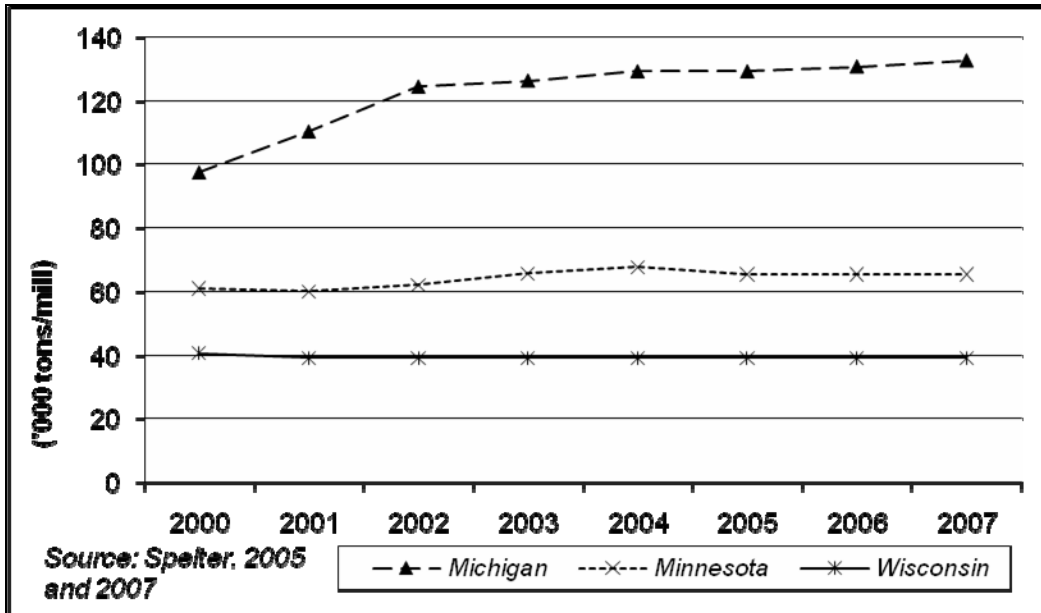
SOFTWOOD MARKETS

As of 2007, the three states of Michigan, Minnesota, and Wisconsin had a total of 28 softwood lumber mills with an average capacity of 88,000 tons each (Figure 2).¹ Lumber mills in the Midwest on average consume 207,000 tons of wood per year, about 100,000 tons less than an average sawmill in the South.² The average consumption in 2007 was up by 12,000 tons per mill per year as compared to 2005 numbers for the Midwest. Although capacity-per-mill is slightly up since 2005, the increasing trend in the region appears to have leveled off. In fact, Michigan was the only state to see a capacity increase since 2005, and it only had a 3 percent increase in capacity in the past two years. Productive sawmill capacity in Minnesota and Wisconsin has remained steady since 2005.

¹ Spelter, H., McKeever, D., and Alderman, M. 2007. Profile 2007: Softwood Sawmills in the US and Canada. Available online in pdf from the USFS.

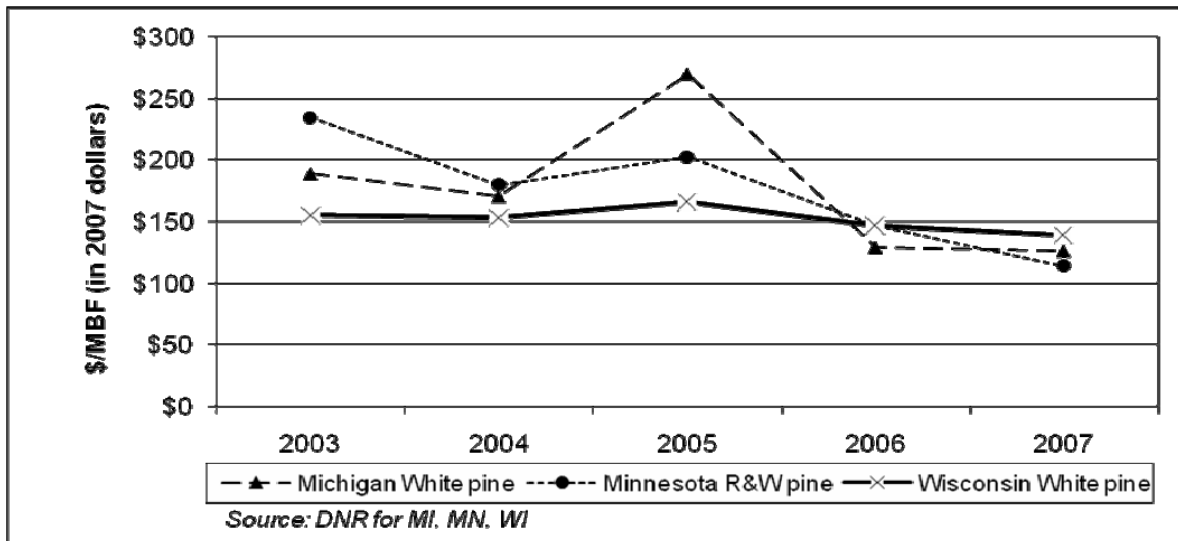
² Forisk Consulting Wood Demand Report product recovery conversions.

Figure 2. Average capacity per Midwest softwood lumber mill, 2000-2007 ('000 tons)



As two-thirds of softwood lumber production in the United States goes into residential housing construction, the housing market decline has also impacted the Midwest. Publicly-available softwood sawtimber stumpage prices for the past seven years show a peak in 2005 for all three states, resulting in a declining trend from 2005 to 2007 (Figure 3). Prices declined by 53 percent in Michigan, 44 percent in Minnesota, and by only 16 percent in the more stable Wisconsin market. This trend matches the trend in the South where sawtimber stumpage prices were down more than 25 percent from the peak in 2005.³

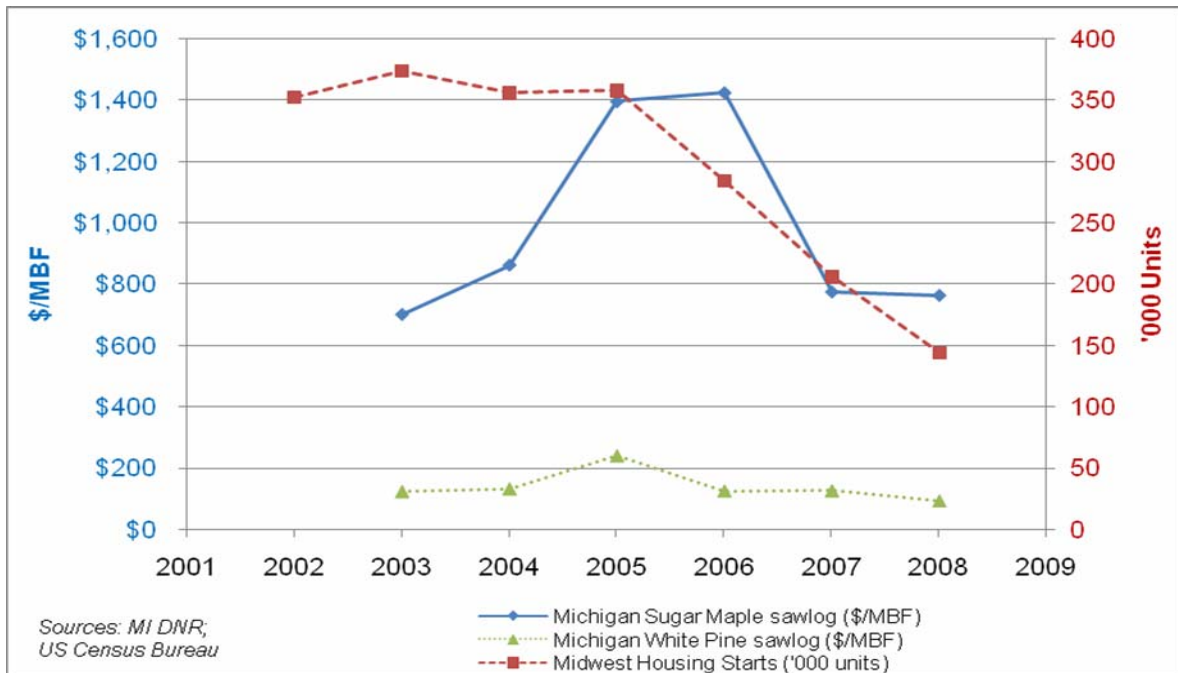
Figure 3. Average softwood sawlog stumpage prices, 2000-2007 (\$/MBF, 2007 dollars)



³ Timber Mart-South Market News Quarterly, 3rd Quarter 2008.

Using stumpage prices for Michigan as a proxy for the Midwestern region, we can compare price trends to housing starts in the region. When compared to housing starts in the Midwest, softwood sawlog prices show a peak in 2005 before housing starts began to fall in 2006 (Figure 4). Hardwood sawlog prices show a delayed peak in 2006 and then fall dramatically in 2007. As expected, it appears that softwood sawlog prices responded more directly to changes in the housing market than did hardwood sawlog prices in the region. Reported white pine prices declined nearly 48 percent between 2005 and 2007; reported sugar maple prices declined 45 percent during the same period.

Figure 4. Sawlog prices and housing starts in the Midwest, 2002-2008



While hardwood sawlog prices do respond to housing market changes, the response, as it appears in the stumpage price data, was delayed by one year. A key explanation of the differing market responses is the differences in end use for hardwood lumber relative to pine lumber. Hard maple sawtimber flows into the manufacturing of flooring, furniture and cabinets, three products that are linked to the housing market but are also associated with remodeling activity, which often provides a substitute for homeowners and contractors relative to new home construction. Nevertheless, the correlation between high-value hardwood sawtimber prices and housing starts has been fairly strong, even though there may be some time lag. A proprietary study by Sewall showed a 0.62 correlation coefficient between hard maple-black cherry sawtimber prices and housing starts in the Northeast from 1995 to 2008.

BIO-ENERGY ACTIVITY

Bio-energy markets will provide additional, supplementary markets for wood grown by timberland owners in the Midwest. The region values renewable fuels as all states in the region except Illinois have adopted renewable portfolio standards (RPS), which require some portion of energy provided in the state to come from “renewable” sources. In fact, renewable

sources provide four percent of Michigan's electricity needs; six wood burning plants produce one percent of the state's electricity. For mills planning to use mill waste, including pulp mills, raw material costs have increased with the downturn in the housing market. Curtailments at sawmills has reduced availability of mill waste, increasing the cost of available waste and forcing some mills to purchase more roundwood – such as pulpwood and in-woods chips – material. Despite current raw material challenges, several bio-energy projects have been announced in the region. Sewall and other consultants have been preparing wood resource studies for biomass developers prospecting in the Lake States.

Several wood-to-electricity or combined heat and power plants exist in the region, and others are in the planning stage. Minnesota Power has three electricity facilities powered by wood fuel that use pulp mill wood waste or purchase roundwood directly to produce a total of 101 MW of energy annually. St. Paul Cogeneration has a 25 MW combined heat and power plant in St. Paul, Minnesota that has been operating since 2003. The plant uses urban wood waste from the Twin Cities area to fuel the plant. Xcel Energy announced plans to upgrade its Bay Front Power Plant in Ashland, Wisconsin to run solely on wood waste. If approved, the plant would consume an additional 200,000 tons per year of wood on top of the 200,000 tons per year that it currently consumes and would be operational in 2012.

The Midwest has 90 ethanol plants operating and 11 under construction.⁴ All of these plants will use corn as the feedstock, except for one plant in Minnesota that is using cheese whey as its feedstock. Although none of the existing ethanol plants, or those under construction, in the Midwest use woody biomass as feedstock, Mascoma Corporation has announced plans to build a 40 million gallon per year ethanol plant to use wood chips in Michigan. The plant is expected to hit full production in 2012. The US Department of Energy has given Flambeau River Bio-fuels a grant to construct a bio-refinery at an existing pulp and paper mill in Park Falls, Wisconsin. The bio-refinery would make six million gallons of diesel from agricultural and forest residues and would produce one trillion BTUs of energy per year to sell to Flambeau River Papers. The plant should be operational in 2010.

The region has eighteen wood pellet mills currently in operation, concentrated largely in Wisconsin and Michigan.⁵ The downturn in the housing market has decreased raw material availability for pellet mills and increased raw material costs. Despite struggles with raw material cost, Indeck Energy Services has started construction on a 90,000 ton per year wood pellet plant in Ladysmith, Wisconsin. The plant should be operational in July 2009 and will take mill wood waste.

CONCLUSION

The housing market downturn has impacted the Midwest as it has the balance of the United States: sawlog stumpage prices in the region have fallen significantly, although average softwood lumber mill capacity has remained steady. Timberland investors remain interested in the region, but transaction frequency and size have both fallen relative to activities three and four years ago.

⁴ Renewable Fuels Association, 2008. www.ethanolrfa.org

⁵ Pellet Fuels Institute, 2008. www.pelletheat.org

Still, the region continues to offer diversification benefits and strengthening alternative markets. Both softwood and hardwood sawtimber markets are associated with housing starts, and investors do not expect prices to rebound short of a housing recovery. In addition, the Midwest continues to be a leader in developing biomass markets, especially wood-to-electricity projects.

Based on Sewall's interactions with forestland investors, the national market may be showing signs of softening. The current timberland market has become somewhat "opaque" in the sense that the pace of deals has waned dramatically, leaving scant evidence of market behavior. Several recent large offerings have not received as much interest as sellers hoped. More than one large offering has been pulled from the market because of lackluster response.

There is a general sense of uncertainty around how weak the market really is, and that this may not be a good time to sell. Several formerly active TIMOs report that they are "out of the market" on the buy side, waiting for tangible evidence that market prices will correct to levels where reasonable investment returns can be realized. A dearth of transaction evidence is often a sign of sellers being unwilling to "bury the dead", so it can take some time for weaknesses to show up in market pricing.

The recent economic meltdown has wreaked havoc on Wall Street. There is less capital available for timberland deals than prior to the meltdown. However, just as in the aftermath of 9-1-1, timberlands have come out looking relatively resilient compared to financial assets. Moreover, there is still far more capital than available deals in the timberland sector. And, as noted above, Sewall's annual investor survey, which was conducted post-meltdown, found most respondents with the general impression that discount rates were still at all-time lows.

To be sure, transaction evidence across timberland markets over the next year will be telling.

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