



Non-Pine Land in Pine Investments

Most timberland investment management organizations (TIMOs) and, therefore, most institutional investors, focus on softwood plantations—especially when investing in the US South.

But, just as not all the volume harvested from a mature pine stand is sawtimber (see Volume 10 Number 3, *Harvest Volumes and Product Yields*), not all the land in a southern pine plantation investment is actually growing southern pine.

Any large property will contain lands that are simply not suitable for growing pine. Southern pines don't like to get their feet (roots) wet, so they don't grow well in the low lands along rivers that flood frequently (bottomlands). These bottomlands can grow various species of hardwoods very well.

Still other land in an investment may not grow trees at all either because the soils are poor or because they are encumbered by other uses. These non-forest land types may include:

- Rights-of-way across the property used to access abutting properties
- Rights-of-way for power lines and gas pipelines
- Lakes, ponds, rivers
- Marshes/swamps
- Hunting or fishing camps
- Gravel pits (used in building roads)
- Grassland
- Roads

Figure 1 shows pine, hardwood and non-forest lands for 57 properties of from across the South

Figure 1. Pine, Hardwood and Non-Forest Lands on Southern Timberland Properties

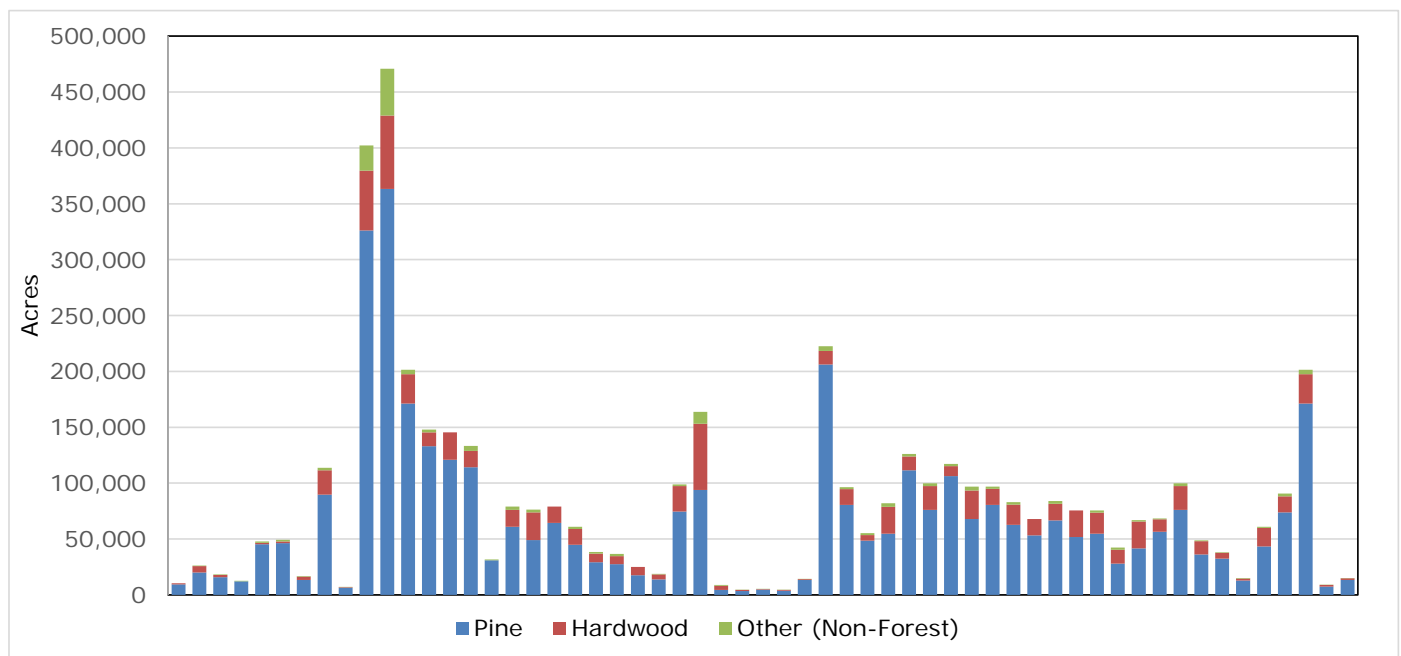
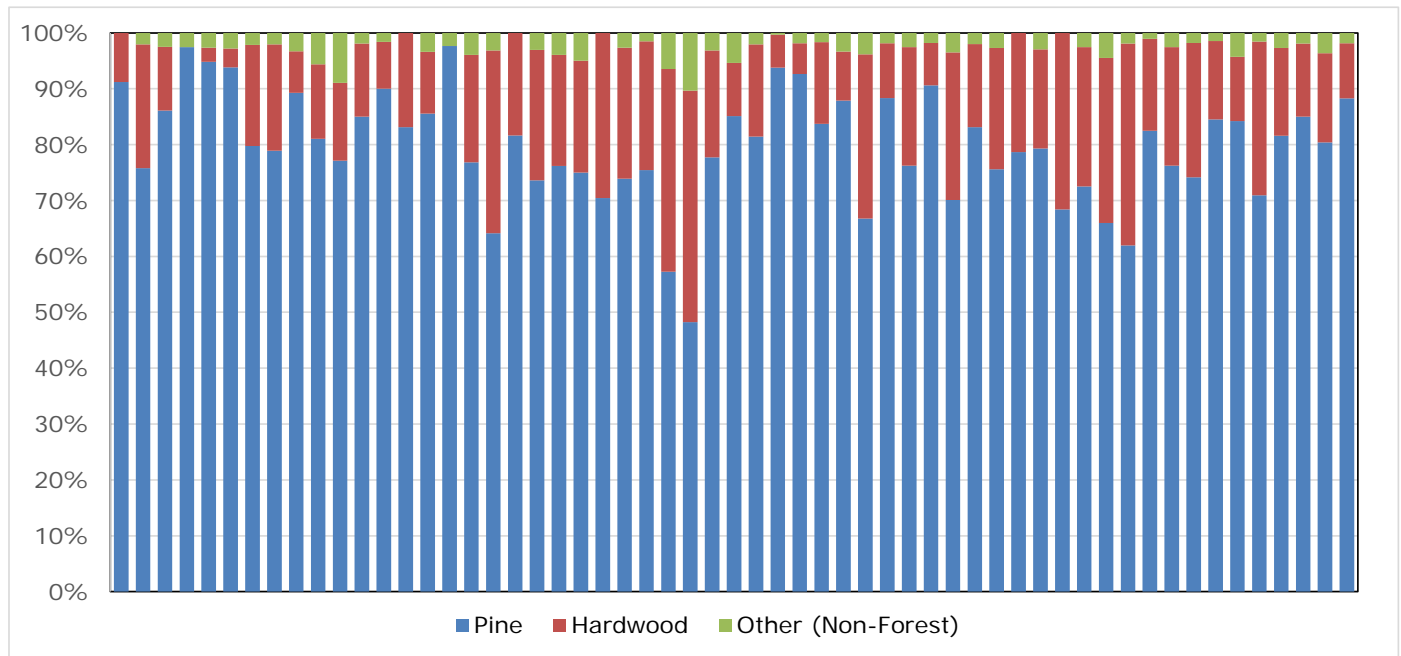


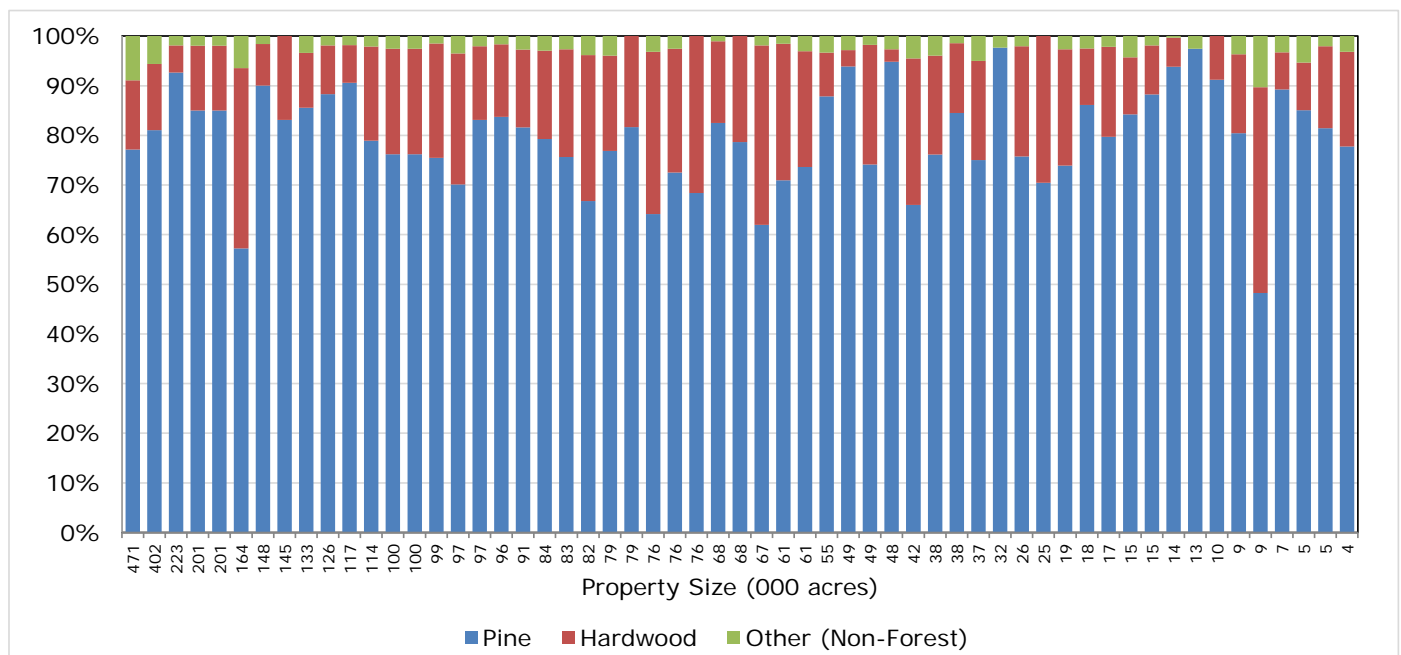
Figure 2. Land Types in Southern Pine Investments



The data for Figure 1 come from appraisals, comparable sales information and acquisition analyses in our files going back into the early 1990s. The two largest properties contain the largest number of hardwood and non-forest acres.

Figure 2 shows the acres by type as a percent of the total acres of the property. A comparison of Figure 1 and Figure 2 does not appear to show a strong relationship between property size and the proportion of land that is hardwood or non-forest.

Figure 3. Land Types in Southern Pine Investments, Sorted by Property Size



This lack of relationship between property size and percentage of land in pine is supported by Figure 3. It sorts the data in Figure 2 by property size. Note that the two properties with the lowest percentage of pine lands are near opposite ends of the chart—one property of 164,000 acres and the other of 9,000 acres. And the third lowest percentage occurs right in the middle on a property of 67,000 acres.

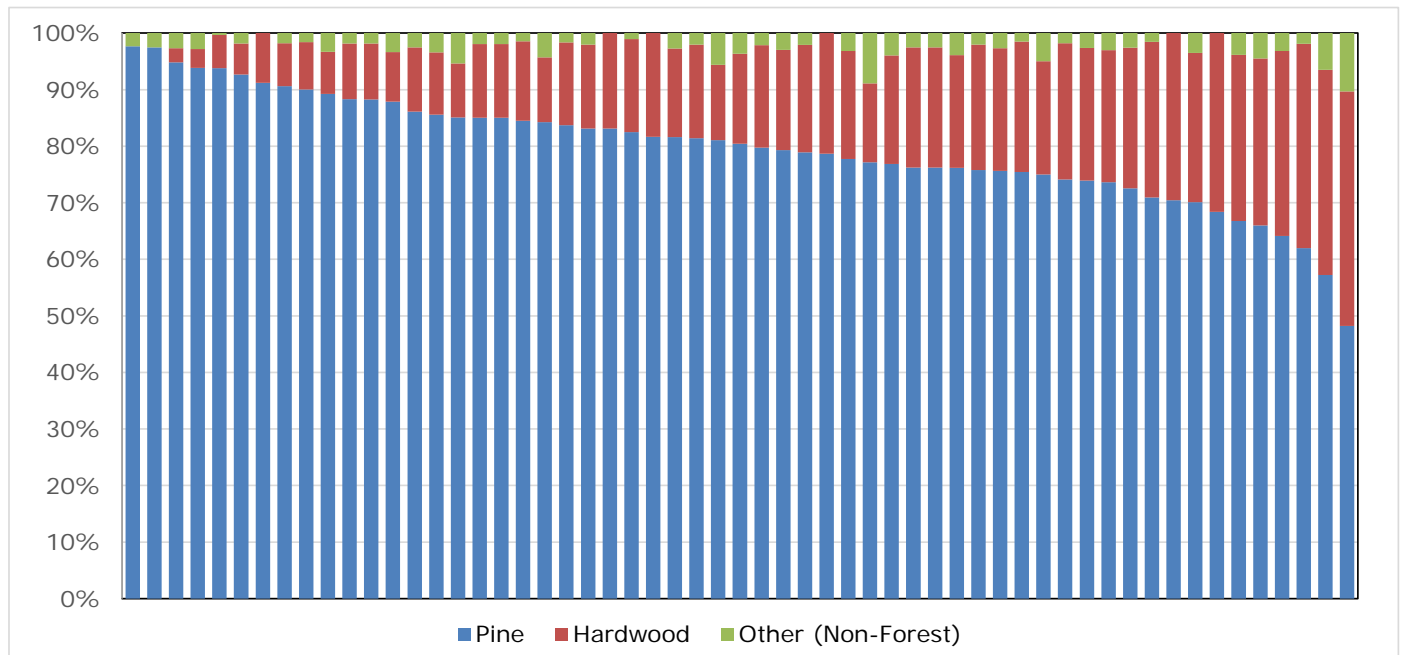
So what is “normal” for a southern pine property? Figure 4 sorts the properties according to the percentage of pine lands on the property. These

range from nearly 98 percent pine to just over 48 percent pine. The average across the 57 properties is nearly 80 percent, with 17 percent hardwood and 3 percent non-forest.

We also checked to see if location (the state in which to property was located) made a difference, but it didn’t.

Are these non-pine lands of any value to the investment?

Figure 4. Land Types in Southern Pine Investments, Sorted by Percent Pine Land



Hardwood Sawtimber and Pulpwood Prices

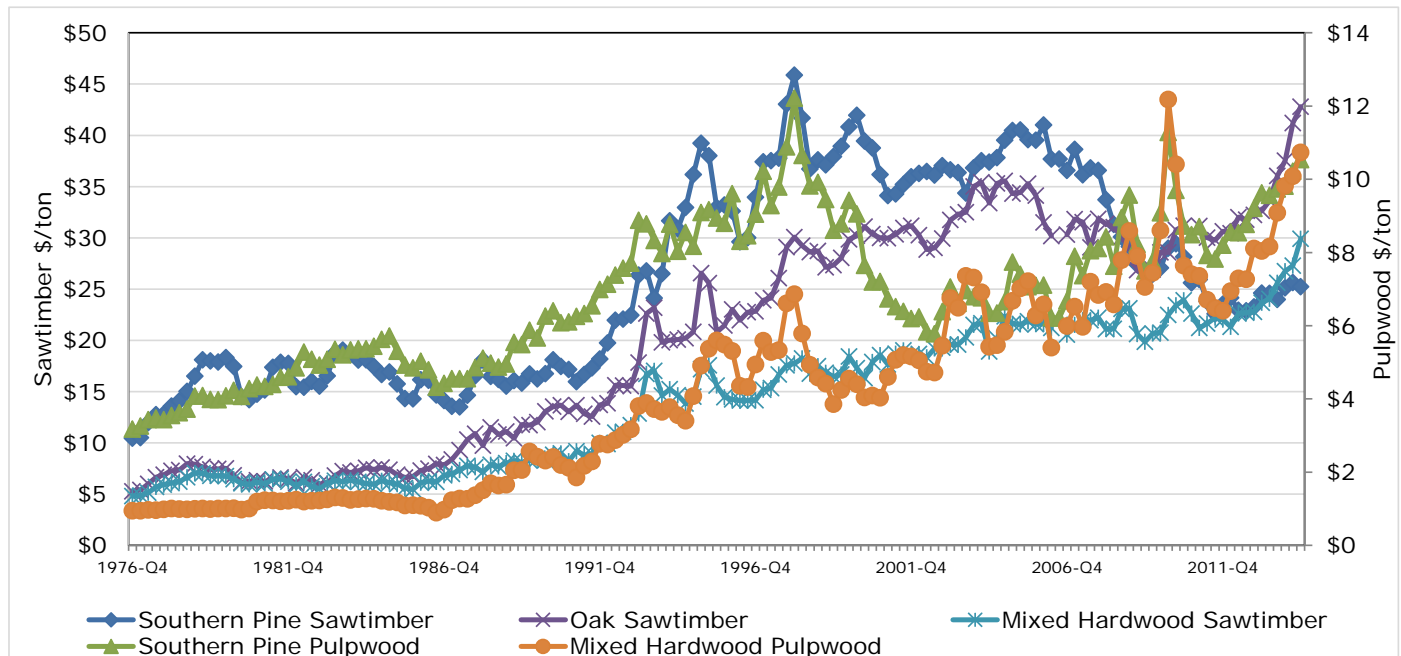
While hardwood lands are normally a small portion of a southern pine property, they add some diversification to the investment. Hardwood markets behave differently than softwood markets because hardwoods are used in different products than are softwoods.

flat until the mid-1980s. Hardwood pulpwood prices have been rising more or less since then and caught up with pine pulpwood prices early in the 21st century. Oak sawtimber prices passed pine sawtimber in 2009, while mixed hardwood sawtimber caught up with pine in 2013.

Figure 5 shows stumpage prices for pine and hardwood sawtimber and pulpwood over the past 40 years. Prices for pine products were historically higher and rose steadily through the late 1990s. Hardwood (including oak sawtimber) prices were

Again, hardwoods only make up a small portion of a typical pine investment, but their contribution to returns has been increasing over the past 30 years.

Figure 5. Southwide Pine and Hardwood Stumpage Prices (nominal \$)



Source: *Timber Mart-South*

Non-Forest Lands

As the name implies, non-forest lands don't grow trees. While they do not produce investment returns directly, some of them are very important to any investment of significant size. For example, a good road system allow access to stands for harvesting and thinning operations. Roads allow fire crews to quickly reach small fires before they become big fires and they allow foresters to regularly patrol the property to deal with any issues that arise.

- Non-forests lands make up a very small part of most pine investments.
- While non-forest lands don't usually contribute to the investment return, some of them—like roads—are an important component of the investment.

Summary

To summarize what we have shown:

- Not all the land in a southern pine investment will grow southern pine.
- On average, pine lands make up about 80 percent of a pine investment—but this ranges from 50 to nearly 100 percent.
- Of the lands that don't grow pine, most of them are suitable for growing hardwoods and hardwoods add some diversification to the investment.

Forest Research Notes, Vol. 10, No. 4
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Jack Lutz, PhD
Forest Economist
Forest Research Group
385 Central Street
Rowley, MA 01969
978-432-1794

jlutz@forestresearchgroup.com
www.forestresearchgroup.com