



Was That a Good Deal?

\$/Acre (or \$/hectare) tells only a part of the story

Every week or so someone puts out a press release announcing that they have completed a timberland transaction—they either bought a property or they sold one. (Sometimes the people on both sides of a transaction make an announcement.)

The announcement usually includes the number of acres and the total price paid and the state in which the property is located. Sometimes the counties in which the property is located will be stated and sometimes they will do the math for us and tell us the \$/acre value of the transaction.

So, someone announces that they just bought some timberland in Oregon or Alabama and paid \$X/acre for it. Was that a good deal? Or not?

There is no way to tell from the information provided. Even if we know that the price paid was \$200/acre more than someone else paid for timberland in the same State last week, we don't have enough information to know if the price was a good one or not.

The situation is similar to knowing the sale price of a house—and nothing more. Suppose a house sold for \$500,000. Is that a good price?

It makes a big difference where it is. That would be a *very* nice house in Bangor, Maine. It would be a fairly average house in Boston. In Southern California, it *might* have a roof, but the floor might be collapsing and it may or may not have working plumbing.

Once we know where it is, we can then start asking about the house itself. How many bedrooms? How many baths? Slab or basement foundation? How old is it?

Similar questions need to be asked about timberland. Where is it? What does the standing timber look like? What species? What does the age class distribution look like?

A Western Example

A few years ago there were two large transactions in the Pacific Northwest that occurred within a couple of weeks of each other. One sold for almost \$4,000/acre and the other sold for a little over \$2,000/acre. We got a call from an investment banker who asked some questions about those sales. He was assuming that the buyer who paid just over \$2,000/acre got a much better deal than the buyer who paid nearly \$4,000/acre.

But that is difficult to say for certain without having any more information about either timberland property. It is possible that the higher-priced property was a better deal than the lower-priced property at the announced prices.

First, we would need to know more about their locations than simply that they are in Washington or Oregon. There are two very distinctive subregions in the Pacific Northwest: the Westside and the Eastside. The line is the crest of the Cascades mountain range. The Cascades cause moisture-laden air from the Pacific Ocean to rise, which cools it and creates rain which falls on the west side

of the mountains.¹ By the time that Pacific Ocean air gets over the Cascade summits, it has very little moisture left in it, which makes the east side of the mountains—and eastern Washington and Oregon—much dryer than the Westside. Timber growth rates on the Westside are higher than those on the Eastside because the Westside has more moisture.

So we might expect Westside timber properties to have higher values than timber properties on the Eastside. If the higher-priced property was on the Westside and the lower-priced property was on the Eastside, the apparent difference in per-acre values is less pronounced.

Second, we don't know anything about the timber on the two properties. Westside forests tend to have sites that grow Douglas-fir well and other sites that grow western hemlock well. Properties often contain more of one type than the other. Douglas-fir properties tend to be worth more than hemlock properties. So if the higher-priced property was on the Westside and mostly Douglas-fir, we might expect it to be worth more than either a Westside hemlock property or an Eastside property.

We also don't know how much timber (of whatever species) is on either property. A property that is heavily stocked with mostly mature, ready-to-harvest timber will usually carry a higher price than a property with little or younger timber on it.

Finally, there are a number of non-timber attributes that affect the value. These include the distance to mills, the quality of the road system on the property, and logging conditions (e.g., steepness of the terrain).

Of course, if the high-priced property was poorly stocked and on the Eastside, it does seem to be a very high price.

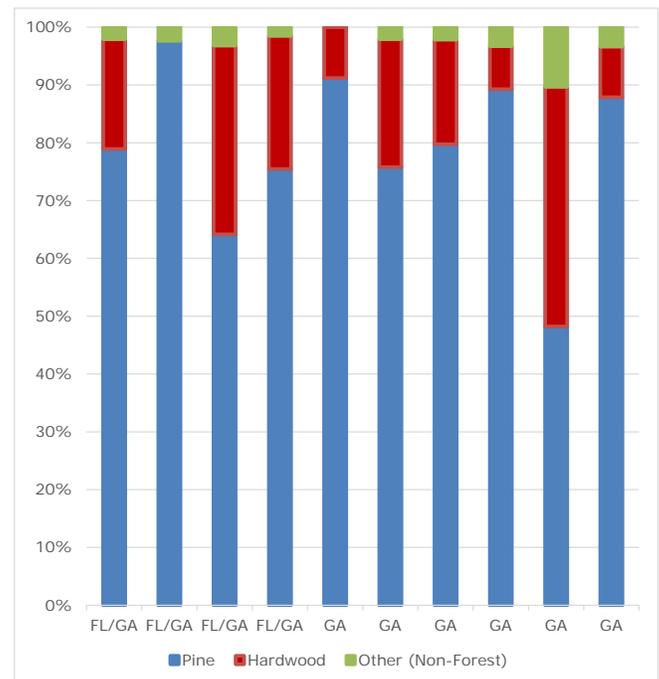
¹ This is why it rains in Seattle and Portland all the time (or seems to).

Variability in Southern Timberland

There are less extreme differences in climate and species in the South, but there are still differences great enough to support a range of prices for southern timberland.

Most investors are looking for southern pine investments, but large properties are not 100 percent southern pine. Figure 1 is part of a chart first shown in Volume 10 Number 4, *Non-Pine Land in Pine Investments*. It shows that the land available or appropriate for growing pine timberland in Georgia and Florida can vary from *nearly* 100 percent to less than 50 percent.

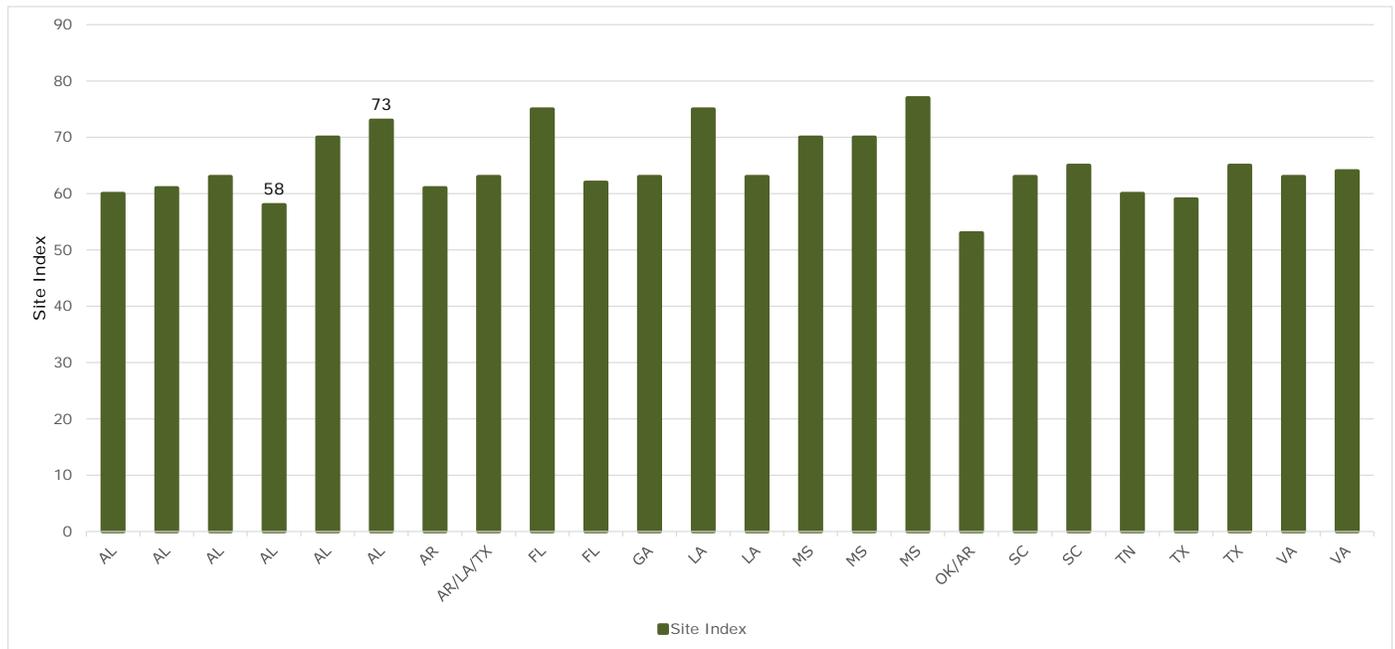
Figure 1. Land Types in Southern Pine Investments



Source: Forest Research Group files

Figure 2 compares site indexes for a number of timberland properties across the South. Note the variation within Alabama. The trees on the highest site (73) property on will average be 25 percent taller than the trees on the lowest site (58) property. The difference in *volume* will be even greater. Properties with higher average site indexes are likely to be worth more than properties with lower site indexes.

Figure 2. Variability in Site Index

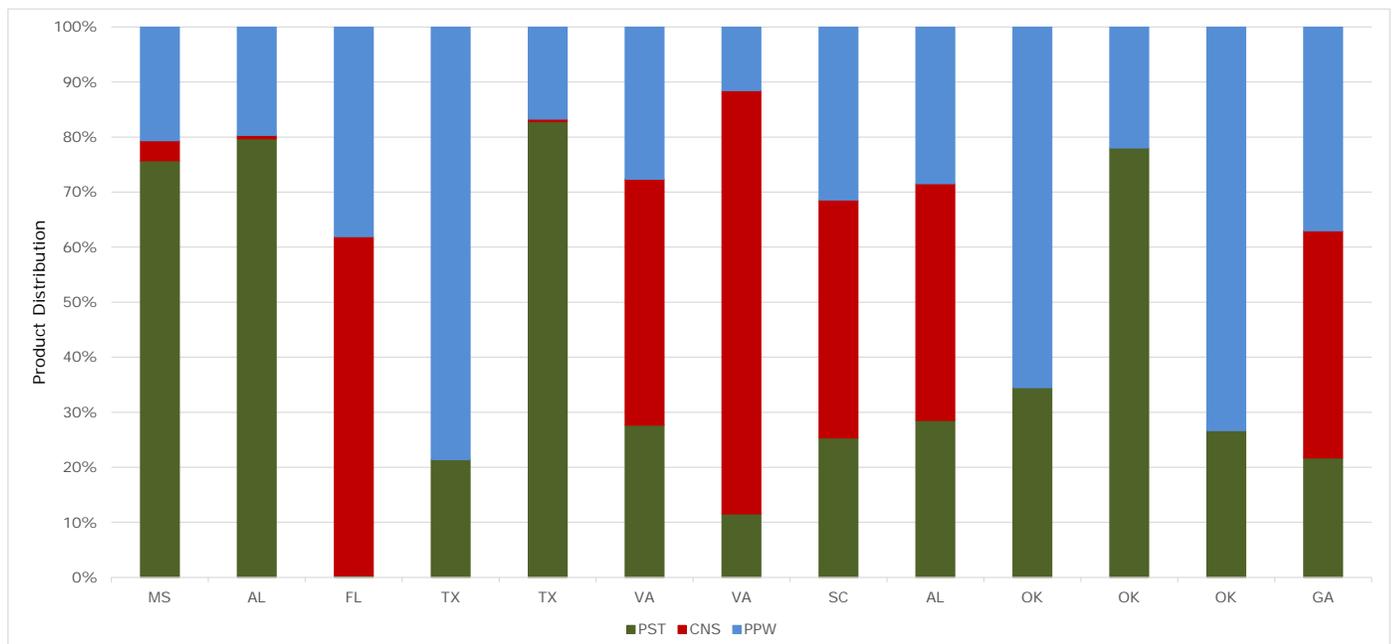


Source: Forest Research Group files

Figure 3 shows the variability in the size of trees at harvest age for stands across the South (see Volume 10 Number 3, *Harvest Volumes and Product Yields*). Sawtimber makes up as little as 10 percent of one property and over 80 percent of another. Chip-n-saw accounts for over 75 percent of the volume on

one of the properties in Virginia. The lack of chip-n-saw on the Oklahoma properties indicates that there were no chip-n-saw mills near these properties at the time. This example shows that tree size alone does not determine a product or grade—there must be mills that take that size.

Figure 3. Variability in Timber Product Distribution at Harvest Age



Source: Forest Research Group files

It is also important to know what the rest of the age classes look like. Are they fairly evenly distributed? Is there a fairly steady volume of timber that can be expected each year? Or are there gaps in the age classes, with no stands between the ages of, say, ten and fifteen years old?

Where is the Information?

The information that is typically published in a press release about a timberland transaction is insufficient for us to determine if the price paid was a good one. So how can we tell if it was?

It may be easier to get more information before the sale occurs. Timberland brokers often send out fliers that provide at least high-level summaries of the tract location, timber inventory, site index, etc. More detailed information on inventory data (provided by the seller) can often be obtained by signing a non-disclosure agreement with the broker.

Institutional buyers of a large timberland properties are also likely to conduct their own timber inventory of the property. They may use different product specifications than the seller did or other bidders do in their inventories, which could allow them to outbid everyone else.

The property location, timber inventory and site index will go a long way towards determining the value of the property (or why the buyer paid what they did). But there are other factors that the buyer would have considered or had to estimate in developing their price. These would have included:

- blocking—is the property in a large contiguous block or is it scattered across two states?
- growth rates—these are suggested by the site index data, but they are also influenced by tree genetics, planting spacing and silviculture
- local timber prices—now and in the future

- discount rate—a buyer who has cash burning a hole in their pocket may use a lower discount rate to increase their chances of winning a bid
- market changes—a buyer who is more optimistic about improvements in markets can pay more for a property

The buyer of a timberland property would have been more optimistic in their estimates than other bidders. Sometimes this optimism leads to high prices. But the winner in the bidding war for a low-priced property must also have been more optimistic than the other bidders.

Summary

Knowing the price paid for a timberland property does not tell us whether it was a good price or not. Just as with a house, we need to know where it is and what its physical attributes are.

A good timber inventory is most important. A full inventory report will provide information on land types, timber volumes and sizes, site indexes and age class distributions.

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