

Timberland Investing: Risk

Thomas J. Straka, Professor of Forestry

Timberland investing has its financial opportunities and, also, its risks. The risks impact how forest owners, from large corporations to small family forests, manage their properties and, sometimes even whether or not they continue to own them. Risk has to be managed as part of any forestry investment. Risk was even a factor in the recent forest industry divestiture of timberland.

As of December 2013, only one large integrated forest products company still owned significant timberland in the United States. Weyerhaeuser owns nearly seven million acres in the United States. The rest of the industrial acreage is now owned by timberland investment management organizations (TIMOs), real estate investment trusts (REITs), or other investors, unless it has moved into various sorts of urban developments (higher and better uses). What factors contributed to this shift?

First, forest industry needed to increase shareholder return. REITs are a better means to accomplish this. Plus, forest industry was required to account for timber and timberland using historical costs that did not reflect appreciated timber and land values. Second, forest industry needed to reduce debt and selling timber assets accomplished this. Third, more efficient tax entity structures like REITs provided improved tax efficiency. Fourth, tax strategies developed that minimized the impact of large capital gains. Finally, forest industry realized that raw material markets were sufficient to supply existing mills.

As a consequence of these factors, timber markets have been altered. The change in forest ownership, along with changes in domestic consumption patterns and shifts in international trade of timber, contributed to a shift in timber demand. Timber supply is expanding due to intensive forest management that expands wood yield and changing technology that allows for increased efficiency in wood use. Timber owned independently of the forest products industry loses some of the volatility that resulted from being a direct component of a commodity-based cyclical industry.

Timberland Investing has risk

Timberland investment is not without risk. The risk that usually first comes to mind is the physical risk. Fire, insects, diseases and weather events can impact timberland. Any investor that maintains an inadequately diversified portfolio must worry about stand-alone

risk. For timberland this risk is diversifiable. Diversification must be geographic across large regions and timber stand types. Large diversified industrial timber holdings experience less than 1% timber mortality annually. One large TIMO reported long-term annual losses due to fire of less than 0.01%; annual losses due to wind of less than 0.01%; and annual losses due to insects of less than 0.03%. Another TIMO reported long-term timber losses due to all natural causes that averaged about 0.04% annually.



There are other factors that can influence timberland return volatility: political and regulatory changes, timber demand changes, changing technology, and the weather. Timber is strongly impacted by federal tax policy. It has preferential capital gains treatment, expensing and amortization treatments. Congress can take away as well as give. Any change in tax policy relative to timber would have a huge impact on its attractiveness as an investment. Trees are part of the environment and environmental groups are usually also politically-active. Political pressure has greatly reduced the harvest on national forests. The northern spotted owl issue resulted in federal courts limiting timber harvests in the western United States. Regulatory pressure on forests is increasing and tends to limit timber harvests; however, there is uncertainty as to the impact. Investors may not have this risk fully incorporated into their models.

Timber is a derived demand. There is no real demand for lumber or pulp. The real demand is for housing or paper. These demands can be volatile. Housing is a good example in the past few years. It is very sensitive to interest rates and availability of mortgage money. Housing starts certainly impact lumber and plywood demand. Environmental pressure can also affect pulpwood demand. As more and more paper is recycled, less pulpwood is needed.

Changes in technology and competing non-wood products have great impacts on timber demand. Engineered wood products and reinforced concrete are now used in housing construction, greatly reducing lumber demand. Wood use technology is constantly reducing the amount of wood needed for specific uses.

Weather affects timber. Weather-related conditions help control timber growth. A long-term drought, besides affecting growth, makes a timber stand more susceptible to wildfires. Air pollution has been shown to slow timber growth.

International trade is a major factor affecting U.S. timber prices. Much of the lumber used in the U.S. is imported, mainly from Canada. All forest products have significant export/import relationships and obviously this affects domestic prices and timberland investment returns. Trade relationships, especially with Canada, have been less than harmonious with regard to timber trade. Shifts in trade policy have devastated some timber markets at times. This goes back to earlier risks discussed; timber is part of a climate where political, regulatory, environmental, and international trade factors can quickly impact supply and demand conditions. Timber prices will always have this built-in volatility.

Lastly, there is a risk investors shouldn't overlook. Timber has grown into a "hot" market. Almost all the major integrated forest products companies have transferred their timberland to investor groups of some kind. Timberland has quickly transferred and the markets have been very accommodating. Has it been oversold as an investment? Only one major forest products company retains significant timberland. This could mean timberland will become "tight", or it could mean a process has played itself out. It does seem to mean some sort of change will occur as large acreages will be more limited to spur timberland transactions.