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Higher prices and shorter rotations: Good news for pine plantation investors, but . . .

Steven H. Bullard
Stephen F. Austin State University, Arthur Temple College of Forestry and Agriculture,
bullardsh@sfasu.edu

Bob Daniels

Higher Prices and Shorter Rotations

Good News for Pine Plantation Investors, But...

by Steve Bullard, Forest and Wildlife Research Center and Bob Daniels, Extension Service - Mississippi State University

Southern pine markets have changed dramatically in recent years. Our focus here is the changing forest economy, new price expectations, and new technologies for growing and utilizing pines. The major changes in southern pine markets are good news for forest landowners concerned with timber production—higher prices are increasing pine plantation returns, rotation lengths are decreasing, and the value of land in pine production is increasing.

Why Such Expectations? The "Macro" Economy Has Changed

Since the founding of the United States, Americans have used our nation's forests for enterprise and industrial growth. As the nation developed and populations grew, industries and individuals moved from region to region, harvesting natural timber resources for needed raw materials. Hence, at various times during the last two centuries different regions have dominated the nation's timber production. The South was dominant from 1880 to 1930, for example, and the Pacific Northwest from 1940 to 1990.

Today we are in a new economic environment. Large undeveloped reserves of timber are no longer available to which forest industries can migrate. We are in an era when one region of the nation no longer dominates wood production, but all areas Northwest, South, Lake States, etc. contribute major portions of the national timber supply. This fundamental, "macroeconomic" reality has changed regional markets for timber and the way forest industry and others view long-term forestry investments.

When harvesting on federal lands in the West declined in the late 1980s, pine stumpage values in the South rose markedly as competition increased. Forest industry development in less competitive areas like the "upper South," Appalachian states, and Lake States has also been spurred. Forest industry firms have begun to re-evaluate strategies of timberland ownership, and non-traditional owners such as foreign and institutional investors have begun purchasing increasingly valuable forest properties.

In this environment, landowners in the South have an excellent economic opportunity to enhance the value of their forest properties. As stumpage values rise and demands for wood products grow, landowners face new options in forest management and timberland ownership. One important change is higher potential returns from pine plantation investments. These returns are directly impacted by expectations of sustained higher prices, and by new technologies for growing and utilizing southern pine timber.

Relatively High Timber Prices for Pine Should Be Sustained

In the past three decades, stumpage prices increased for pine pulpwood and pine sawtimber, but higher prices were not sustained in all product categories after adjusting for inflation. The price of pine sawtimber in the South decreased about 25% in the 1980s, for example, after subtracting inflation. More recently, sawtimber prices have increased at very high rates, and pulpwood prices have increased consistently above inflation in most areas of the South.

Will the relatively high prices for pine stumpage of the 1990s be sustained? Recent changes in some very important, underlying factors make it reasonable to assume that pine timber prices of the 1990s will be sustained:

Demand has increased significantly for all sizes of southern pine timber. Per capita demand for wood has increased, and in the early 1990s harvest restrictions in the Pacific Northwest shifted an unexpected portion of U.S. demand for softwoods to the South.

Softwood timber supply is more constrained today than in the past. Urbanization, fragmentation of ownership, government regulations, environmental attitudes, and other factors constrain the total inventory of pine timber available for commercial use in most areas of the South.

Timberland ownership patterns are shifting in ways that may influence long-term timber prices. Increasing acreage is in control of institutional timberland investors, and this may reduce the wide fluctuations in prices typically seen from year to year. In the past, some forest products companies have tried to meet short-term cash-flow objectives by increasing their level of harvest in periods of economic downturns; this will not occur with institutional investor ownership.

New Technologies for Growing and Utilizing Pines Will Shorten Rotations

Genetic improvements, fertilization and competition control practices, and new information on the benefits and costs of site preparation and other cultural practices are increasing the physical and financial yields obtained from southern pine plantations. For most intensive forest management practices, production costs have been relatively stable due to technical advances, and because of relatively low inflation. However, stumpage markets are changing due to new technologies of pine utilization.

In recent years, reconstituted panel products like oriented strand board (OSB) have had a dramatic impact on softwood plywood use. These products have taken a major share of the plywood market, and have therefore decreased the demand for larger logs for pine veneer. Similar technologies may soon be available and widely used in lumber markets. Products like oriented strand lumber, laminated strand lumber, and laminated veneer lumber

may dramatically change southern pine lumber markets, and the demand for southern pine sawtimber. Technical problems exist in using fast-grown timber because it has a high proportion of juvenile wood. If these problems are solved and new lumber technologies become as widely adopted as OSB technologies have been in panel markets, forest landowners will have a major new source of demand for relatively small southern pine trees.

With faster growing trees and good markets for relatively small timber, forest landowners in the South will be able to produce commercially valuable pine products with shorter rotations. Some experts believe that 15-year rotations will soon be standard for pine plantations on private lands in the region. We can safely say that rotations will be reduced by new technologies for growing and utilizing pines; this is good news for forest landowners who wish to shorten the cycle of cash flows from timber investments.

What does the "good news" of higher prices and shorter rotations mean for the forest landowners?

An expectation of sustained higher prices is a "financial fertilizer" that acts in a manner similar to a chemical fertilizer. Southern pine plantations and timber markets have been invigorated by increased investment activity produced by higher prices. Together with new technologies of pine production and utilization, lower interest rates, capital gains tax provisions, and other important changes, expected financial returns for plantations are significantly improved.

The "good news" of higher returns for pine plantations generates three choices for forest landowners in the South:

Invest. Landowners who retain their pine plantation properties are investors, and with expectations of sustained higher prices and shorter rotations, financial returns projected for their pine plantation investments are higher than ever. Landowners may consider increasing the level of their management intensity. For those who do not invest actively, opportunity costs have increased; as one forester said recently, "The cost of doing nothing has gone up dramatically."

Lease. Landowners may choose to lease their land to others who will invest in intensive management of pine plantations. Opportunities to lease timberland to investors have increased greatly in most areas of the South in recent years. With this choice, forest landowners obtain some financial benefits of pine plantation management while avoiding the relatively high front-end investment of their own funds.

Sell. Landowners may choose to sell their properties with pine plantations, or with potential for plantation management. Prices for bare land have increased significantly in the South in recent years, reflecting the expectation of higher returns from timber.

While the outlook is bright for pine plantation investments in the South in the foreseeable future, there are some pending long-term limitations. At some point there are limits on potential price increases for pine stumpage, for example. Laws of economics dictate that the market will find a price equilibrium. Imports of wood from other countries, increased efficiency, recycling, and substitutes of other materials will combine to help the market "find" the equilibrium price level. The potential of a sudden increase in softwood timber harvesting on federal lands also remains a market factor. Nearly 48% of all softwood sawtimber volume in the U.S. (excluding Alaska) is on National Forests and other public lands in the West (Powell et al. 1992). Significant changes in timber harvesting on these lands would greatly change softwood supply and timber prices nationwide. This, along with likely continued activism by environmental groups keeps the political dimension in play on public forest lands for the long-term future.

Despite the inevitable settling of pine timber prices to a market equilibrium, the future equilibrium price will clearly be higher than in the past; sustained levels of higher prices are a reasonable expectation. This should give landowners confidence to embark on forest management plans for their properties if they have not yet, and it should stimulate greater investment in forest management for today's active forest managers. The new economic environment for southern forestry promises great potential for forest owners and new developments in forest management that many would not have anticipated 20 years ago.

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