Project Report No. 65, Stumpage Price Trends of Sawtimber and Pulpwood in East Texas and Louisiana

Dean W. Coble

Arthur Temple College of Forestry and Agriculture, Stephen F. Austin State University, dcoble@sfasu.edu

Shiaolin Cheng

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STUMPAGE PRICE TRENDS OF SAWTIMBER AND PULPWOOD IN EAST TEXAS AND LOUISIANA

UPDATE: 1987-2003

BY

SHIAOLIN CHENG
AND
DEAN W. COBLE

REPORT NUMBER 65

TO
PARTICIPATING COMPANIES

IN THE
EAST TEXAS PINE PLANTATION RESEARCH PROJECT

CENTER FOR APPLIED STUDIES
ARTHUR TEMPLE COLLEGE OF FORESTRY
STEPHEN F. AUSTIN STATE UNIVERSITY
NACOGDOCHES, TEXAS 75962

November, 2004
This report is the sixty-fifth continuing series of East Texas Pine Plantation Research Project.

Subject and content of each ETPPRP report is regional in scope and of particular interest to loblolly and slash pine plantation owners in East Texas.

Any suggestions, ideas or comments will always be welcomed.

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Support from the participating companies:

    International Paper Company
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is gratefully appreciated.

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This report is an update to ETPPRP #20. Stumpage prices data for this report were collected by Dr. J. David Lenhart from two sources during January – December each year, 2003 is included in this report.
STUMPAGE PRICE TRENDS OF SAWTIMBER AND PULPWOOD IN EAST TEXAS AND LOUISIANA

UPDATE: 1987-2003

by

Shiaolin Cheng
Graduate assistant, Arthur Temple College of Forestry, SFASU
and
Dean W. Coble
Assistant Professor, Arthur Temple College of Forestry, SFASU

ABSTRACT. A fifteen-year stumpage price update and analysis for pine and hardwood in East Texas are reported. The prices of sawtimber and pulpwood are presented for both pine and hardwood plantations by using 1988 to 2003 stumpage prices from the Texas Forest Service and Louisiana Department of Agriculture. Timber prices increased steadily from 1988 to the late 1990's, peaked, then declined into 2003 for both Louisiana and Texas. Louisiana prices, though, have remained higher than those for Texas.
INTRODUCTION

The main objective of this report is to assist and provide the landowners of East Texas and Louisiana commercial forests an understanding of timber stumpage price trends. Landowners are eager to know the price of timber, and knowing the price trend and current market performances can help landowners to anticipate the future market behavior and increase their profitability. Southern forests are among the most productive in the United States. In Louisiana and Texas, the average forest tract size is 85 and 57 acres, respectively (Wear 1996). These are two of the largest average tract sizes in the South, so it is important to track the timber price changes in this timber market.

In this report, prices were recorded from two main resources. Texas Timber Price Trends is a market report published every two months by the Texas Forest Service (TFS), College Station, Texas. TFS has provided this market report of East Texas timber sales since 1983. Prices are presented in summaries of timber sales by different species and products. The other source is a market news service published quarterly by the Office of Marketing, Louisiana Department of Agriculture (LDA) which reports timber sales in Louisiana. They report timber sales of different species and products as well. Both resources use Doyle Log Scale for board foot measurement. TFS defines a cord as 81 cubic feet of wood.
THE PRICE TREND

Pine and hardwood stumpage price trends are examined in this report. Figures are made with double Y-axes, and are scaled identically. The left axis indicates the value per MBF of sawtimber ($0-$500), and the right axis indicates the value per cord of pulpwood ($0-$100). The range of the scales between two axes enlarge the distance of the two data trends, sawtimber (above) and pulpwood (below). The X-axis represents the year from 1988 to 2003.

In Texas, sawtimber price tripled from $145.41 per MBF to $479.14 per MBF during the period 1988 to 1997 (Figure 1). The second highest price occurred in 1995 with a price of $471.6 per MBF. The low price between 1995 and 1997 was about $355 per MBF. After 1997, sawtimber stumpage prices stayed above $300 per MBF until 2003, when prices decreased below $300 per MBF. The most current price was $282 per MBF. In Texas, pine pulpwood prices peaked 3 times during the 16-year period (Figure 1). The first occurred in 1992 at $32.32 per cord, then $36.75 per cord in 1996, and $4,039 per cord in 1998. Since 1998, prices have declined by 75%. The lowest price is reported as $10.33 per cord in 2002.

Louisiana Department of Agriculture (LDA) stumpage price trends are shown in Figure 2. Sawtimber prices have dramatically increased from $145.41 per MBF in year 1988 to $497.14 in year 1997. During this ten-year period, sawtimber prices generally kept increasing and hit a peak. After reaching the highest price, sawtimber prices started to decline to $281.92 by the end of 2003 which is lower than the fifteen year average price of $20.60 (sum of fifteen year price/number of years). During the fifteen-year period, pulpwood prices were relatively stable: $17.34 per cord at the beginning of the trend and $18.94 per cord by the end of year 2003.

Hardwood price trends from TFS and LDA are also analyzed in this report. Texas hardwood sawtimber prices increased annually to peak at $212.28 in 2002 (Figure 3). Louisiana sawtimber prices also increased annually to a higher peak of $311 in 2002. Pulpwood prices in both states mostly varied between $10 and $20 during the fifteen-year period, with two exceptions (Figures...
3 and 4). In Texas, the pulpwood price trend peaked twice at $35.02 and $30.22 in 1995 and 1997, respectively. A low of $7.49 occurred between the two major peaks in 1996. Overall, hardwood prices have increased over the reporting period.

Additional figures are included to show the price trends of pine and hardwood sawtimber (Figure 5) and pulpwood (Figure 6) in East Texas. For Louisiana, figures are also included to show the price trends of pine and hardwood sawtimber (Figure 7) and pulpwood (Figure 8).

Discussion

Sawtimber and pulpwood price trends fluctuated in East Texas during the reporting period, though hardwood prices in 2003 generally increased while pine prices fell. It was estimated that the softwood timber harvest rate has expanded since the mid-1960's. Adams and Haynes (1991) projected that if the higher rates of plantation establishment during the 1980s continued through the 1990s, the growth in harvest will resume and prices will be stable before 2015. The data have shown a price decline after the 1997 peak, followed by stable prices, which supports their claim. Hardwood harvests are following a similar trend of expanding harvest rates, but little is being done to reestablish these forests. We expect hardwood prices to continue to increase as the supply becomes limited. However, many other factors beyond supply and demand have impacted price trends; eg, weather conditions, international trading policies and governmental regulations. For example, a severe ice storm in 2000 severely damaged many pine plantations, and timber prices subsequently increased. Even though uncertainty from these varied events causes uncertainty in the market, historical price trends can still help landowners better understand timber price trends which in turn helps with future investments and management strategies.
2003-2004 Pine and Hardwood stumpage price trends

In general, sawtimber and pulpwood stumpage prices went downward in Texas and Louisiana (price reported by TFS and LDA) in first half of year 2003, except the sawtimber stumpage price increased from $308 per MBF in the second quarter to $316 per MBF in the third quarter in Louisiana (Table 1). East Texas sawtimber stumpage prices decreased 10 percent from the first quarter to the third quarter, and pulpwood stumpage prices declined almost one third to $12 per cord. In Louisiana, both sawtimber and pulpwood stumpage prices were relatively stable. Sawtimber price range from $308 per MBF to $320 per MBF. Pulpwood price has a small range between $18 per cord and $20 per cord.

In latter half of year 2003, both stumpage prices of sawtimber and pulpwood for two states went upward. Especially, pulpwood price in Texas increased from $12 per cord to $18 per cord. From the trend reports, there is less fluctuation on sawtimber price in both states and pulpwood price of Louisiana.

During year 2004 (up to August), average stumpage price of sawtimber is around $303 per MBF. Large log markets strengthened both in Texas and Louisiana while pulpwood price stayed around the same price. Comparing to the price of year 2003, sawtimber price went upward a little bit (Texas: $291 per MBF in December 2003 and $304 per MBF in August 2004; Louisiana: $328 per MBF in December 2003 and $336 per MBF in June 2004), possibly because wetter weather tended to decrease available supply.

Hardwood logs were sold for much higher price in Louisiana than Texas (Table 1 and 2). The average price of hardwood sawtimber in Louisiana was about double as in Texas for both years. Pine sawtimber stumpage price was higher than hardwood (mixed) sawtimber price in Texas. Price of pine and hardwood sawtimber in Louisiana did not have as big a price gap as in Texas. For example, in first quarter of 2004, the price of sawtimber is $328 for pine and $368 for hardwood in Louisiana (Table 2) compared to $305 for pine and $118 for hardwood in Texas. Pulpwood price was higher in Texas, though the prices of pulpwood did not change much through 2003 and 2004 in each state.
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Table 2. 2004 Average stumpage price of pine and hardwood in east Texas (TFS) and Lousiana (LDA)

<table>
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<th>Pulpwood - $/cord (Pine/Hardwood)</th>
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Figure 1. PINE STUMPAGE PRICE TRENDS BASED ON TEXAS FOREST SERVICE DATA 1988 TO 2003
Figure 2. PINE STUMPAGE PRICE TRENDS BASED ON LOUISIANA DEPT OF AGRICULTURE DATA 1988 TO 2003
Figure 4. HARDWOOD STUMPAGE PRICE TRENDS BASED ON LOUISIANA DEPT OF AGRICULTURE DATA 1988 TO 2003
Figure 5. PINE AND HARDWOOD SAWTIMBER STUMPAGE PRICE TREND BASED ON TEXAS FOREST SERVICE DATA 1988 TO 2003
Figure 6. PINE AND HARDWOOD PULPWOOD STUMPAGE PRICE TREND BASED ON TEXAS FOREST SERVICE DATA
Figure 7. PINE AND HARDWOOD SAWTIMBER STUMPAGE PRICE TREND BASED ON LOUISIANA DEPT OF AGRICULTURE DATA 1988 TO 2003
Figure 8. PINE AND HARDWOOD PULPWOOD STUMPAGE PRICE TREND BASED ON LOUISIANA DEPT OF AGRICULTURE DATA 1988 TO 2003