

FORESTRY INVESTMENTS: Major Changes in the U.S. South

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New developments are altering the context of timberland investment in the U.S. South. This paper uses bullet points and short discussion to highlight trends that affect southeastern timber markets. Charts and graphs illustrate some of the key dynamics.

Major Changes in the U. S. South: New items worthy of note

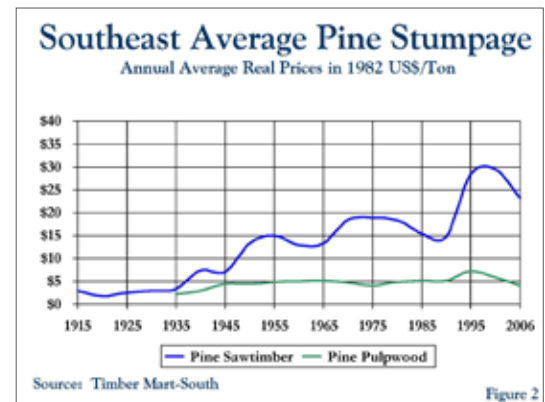
- » A decade of timber price declines
- » Retirement of the vertically integrated model for forest products
- » Improved competitive position
- » Maturing forestry investment industry

Southern Timber Trends: Key, Overarching Issues

- » Globalization
 - Increased Global Trade in Forest Products
 - Shift in Manufacturing
 - Role of Paper in Communications
 - Energy and Bioenergy
- » Abundant Timber Supplies
 - Planting Rates down
 - New emphasis on thinnings
- » Consolidation and Dis-integration
 - More concentrated products markets.
 - Dis-integration essentially complete
- » Forestland Ownership Shifts
 - New owner objectives and investment horizons unclear.
 - HBU based values assuming new importance.

A long-term history shows nominal increases in stumpage prices, with dramatic rises around 1945 to 1950, from 1967 to 1980 and again from 1991 to 1998. Even when adjusted for inflation, the most recent surge remains historically significant.

Pine pulpwood prices, in contrast with pine sawtimber, have been relatively stable in real terms throughout the historical period, 1935 to the present.



Hardwood sawtimber prices, 1957 through the present, show a consistent rise over time, and fewer periods of dramatic increase than pine sawtimber.

A chart of pulpwood price history over the same period shows that pine and hardwood pulpwood prices tracked each other well from about 1987 through 1997 but have converged in recent years.



Southern Forests—The World’s Pre-eminent Producer

- » The U.S. South is the single largest producer of industrial roundwood.
- » The U.S. South produces approximately 25 percent of the world’s wood pulp, 15 percent of solid wood products.
- » The South currently produces 57 percent of the total U.S. harvest.
- » 60 percent of the total U.S. forest industry capital spending is dedicated to the South.

The U.S. South’s Competitive Advantage:

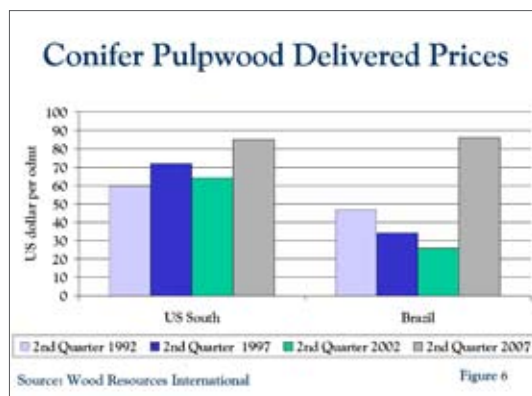
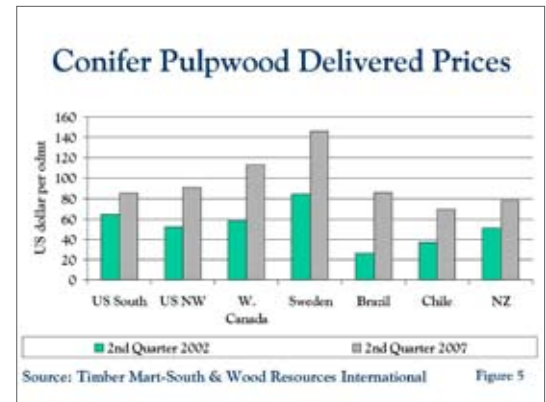
A Favorable combination of:

- » Location
- » Terrain
- » Species
- » Infrastructure
- » Government
- » Investment opportunities
- » Market Access
- » Climate
- » Wood Quality
- » Management
- » Private land ownership

Major Changes, US South: A falling US\$ improves the competitive position of the U.S. South

Increased globalization has meant that more forest products are trading internationally. Price comparisons illustrate the effect of these changes on competitiveness.

Pine/Conifer pulpwood prices have increased internationally from mid-2002 through mid-2007. The U.S. South is no longer the second highest cost producer next to Sweden, and the difference between U.S. South prices in US dollars compared to prices of the South’s competitors has narrowed.



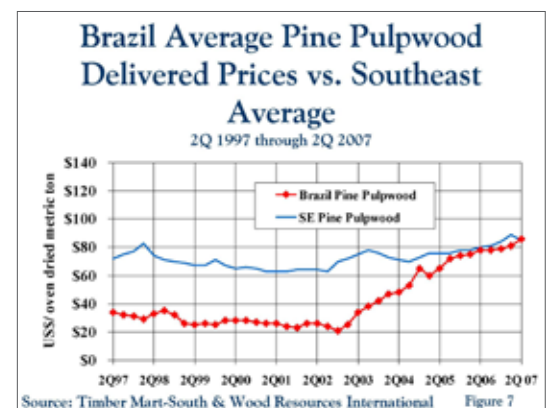
The situation has changed from ten years ago. For example, in 2007 Brazil’s pulpwood cost rivals the U.S. South mostly due to adjustment in foreign exchange.

After trading at a more than 50 percent discount to the U.S. South for over five years, pine/conifer pulpwood prices have gradually closed the gap.

Major Changes, US South: Forestland ownership shifts

The majority of timberland in the U.S. South is privately owned. Industrial timberland

owners have been important in maintaining the timberland base in the region as well as scaling up management practices to increase productivity on timberland. Non-industrial private timberland owners have also held important roles in supplying the timber industry. Gradually new ownership structures have emerged, from Real Estate Investment Trusts (REITs) to Timberland Investment Management Organizations (TIMOs.)



Top Ten Industrial Timberland Owners

2000 and 2007 mid-year in Million Acres

Company		2000	Company		2007
1	International Paper	12.1	1	Plum Creek Timber Co.	8.2
2	Weyerhaeuser	5.7	2	Weyerhaeuser	5.7
3	*Georgia-Pacific (The Timber Company - Plum Creek Pending)	4.7	3	Rayonier	2.2
4	Plum Creek	3.2	4	Sierra Pacific	1.7
5	*Boise Cascade	2.3	5	Potlatch	1.6
6	Rayonier	2.2	6	Green Diamond	0.8
7	Mead	2.1	7	MeadWestvaco	0.8
8	Willamette	1.7	8	Roseburg Forest Products	0.7
9	Temple-Inland	1.7	9	Roy O Martin	0.6
10	Potlatch	1.5	10	International Paper	0.5
Total		37.2	Total		22.6

Source: Company reports and press releases through Aug. 2007
(*no longer own timberland.)

Figure 8

Since 2000, a shift has occurred from industrial ownership to non-industrial and TIMO ownership. The Top Ten industrial owners in 2000 controlled more than 37 million acres in the United States, but in 2007, a transformed Top Ten controls less than 23 million.

After the transaction with the Campbell Group announced in August, Temple-Inland moves off the Top Ten with under half-million acres remaining. St. Joe Company still owns over three quarters of a million acres but no longer classifies them as timberland.

By mid-year in 2007, the TIMOs and similar organizations manage over 20 million acres in the United States.

About 40 million acres of U.S. timberland have changed hands in the last ten years in large transactions. The U.S. forest industry was the seller in about 75 percent of these transactions.

Identifiable, large timberland transactions in the U.S. South totaled more than 20 million acres from 1996 through 2006.

Timberland prices can be skewed by both sale size and intended use. For example, in 1996, there were six sales all over 100,000 acres averaging \$781 per acre. However, in 1997 there were four sales all less than 100,000 acres with a weighted average of \$1,285 per acre.

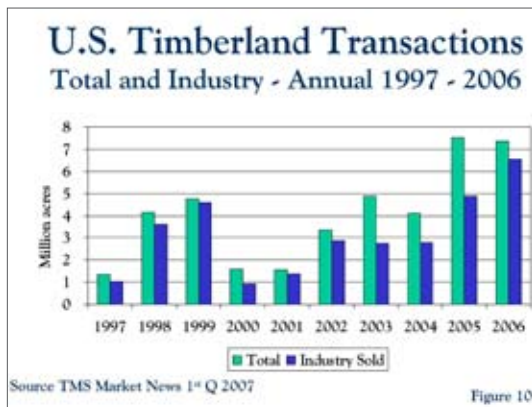


Figure 10

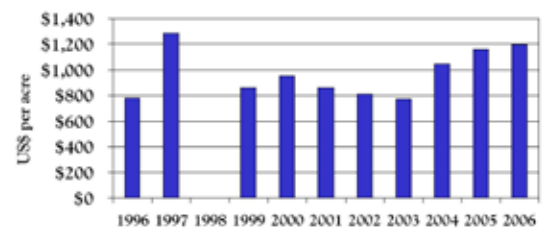
Caveats: The TMS database excludes sales where number-of-acres were reported without price. This could have significantly affected average prices in both 1997 and 2005. The table also excludes The Timber Company sale/merger to Plum Creek in 2001; however, that sale reinforced the average: about 4.7 million acres for \$4 billion or about \$851 per acre.

Rank	Company	Acres (Million)
1	Resource Management Service	2.6
2	The Campbell Group	2.5
3	Hancock Timber Resources Group	2.4
4	GMO Renewable Resources	2.2
5	Forestland Group	2.1
6	Forest Capital Partners, LLC.	2.1
7	Wagner Forest Management	2.0
8	Forest Investment Associates	1.9
9	Regions Morgan Keegan Timberland Group	1.4
10	TimberStar*	1.2
Total		20.5

Source: Timber Mart-South & Timberland Market Report, through Aug. 2007 * Not traditional TIMO

Figure 9

U.S. South Transaction Prices Weighted Average 1996 through 2006



* Few sales, all less than 100,000 acres, prices more indicative of HBU

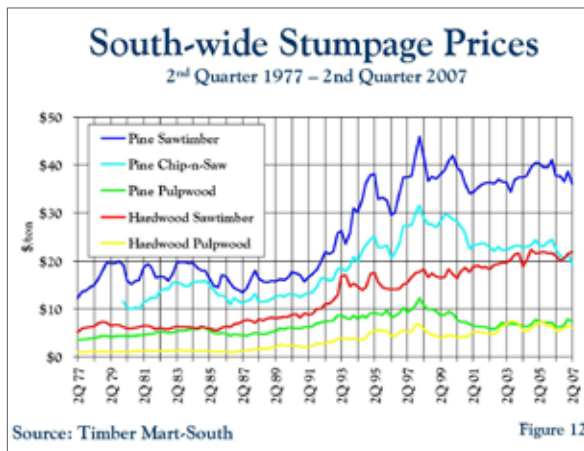
Source TMS Market News 1st Q 2007

Figure 11

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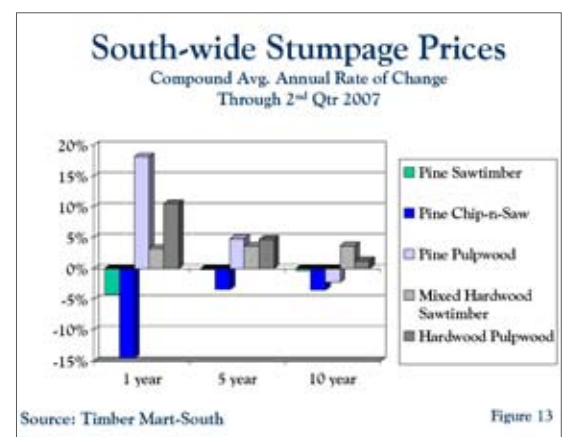
Major Changes, US South: Timber prices



Quarterly price changes illustrate in more detail points made earlier. The south-wide average stumpage prices for the five major timber products show pine products rising dramatically between 1991 and reaching a peak in early 1998 and less volatile hardwood products rising, more generally, over the past thirty year period.

When we compare one, five and ten year average rate of change, pine sawtimber has remained mostly flat over most of the past ten years, with a drop in the last four quarters.

Pine chip-n-saw prices have been declining for all three intervals, but suffering a double-digit decline in the past four quarters. Both pulpwood product prices have strengthened slightly over the past year and past five years. Hardwood sawtimber has maintained a steady rate of growth over the entire ten year period.



Southern Timber Trends: Conclusion

The U.S. South remains the principal wood producing area of the world. Changes in the forest products industry, as well as ownership of the resource base, have significantly restructured the region's wood economy. The forests of the U.S. South remain well managed, sustainable and investable. The region continues to offer excellent investment opportunities. **FW**

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