



Economic Trends for Timber

Every two years the USDA Forest Service publishes a report on the current and historical status of timber production, trade and prices in the United States. The last one was for 1965 to 2007 and is "Research Paper FPL-RP-637," authored by James L. Howard. It can be accessed on the web at www.treesearch.fs.fed.us/pubs/28972. The report has 60 tables containing the economic data one would need to develop economic trends for timber. This article features a selection of interesting figures developed from the data.

Logging and harvesting trends

Figure 1 shows average employment in logging, sawmills and planing mills, and lumber and building materials from 1972 to 2005.

Continued on page 16

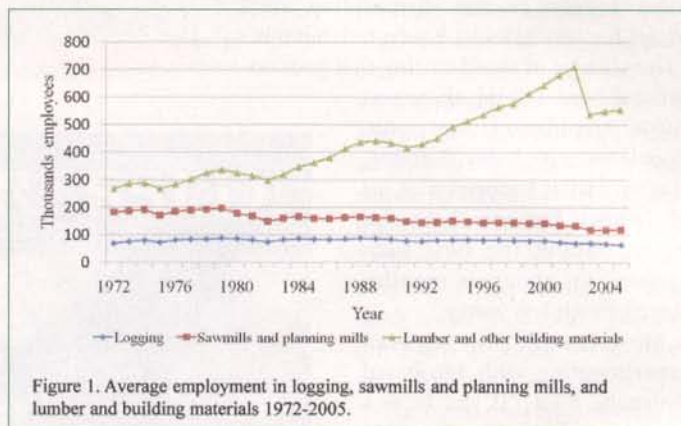


Figure 1. Average employment in logging, sawmills and planing mills, and lumber and building materials 1972-2005.

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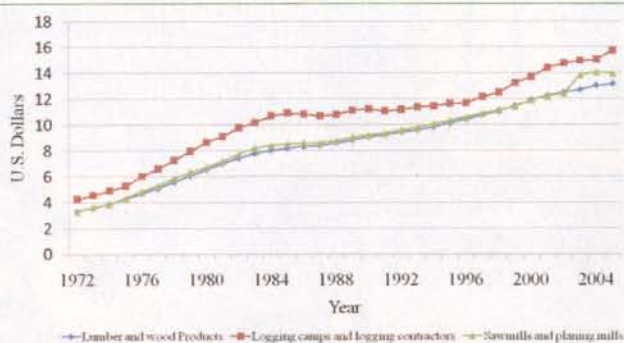


Figure 2. Average hourly earning in logging, sawmills and planing mills, and lumber and wood products, 1972-2005.

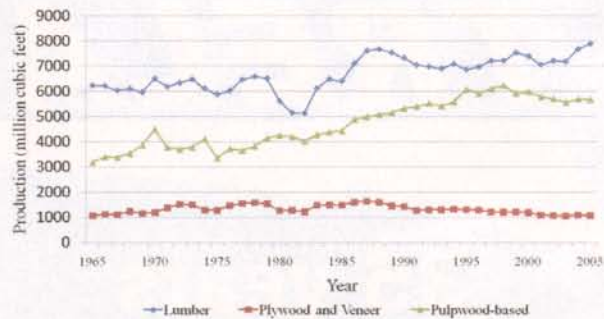


Figure 3. Lumber, plywood, and pulpwood based production (million cubic feet) 1965-2005.

Economic Timber Trends

Continued from page 14

It shouldn't surprise anyone that logging employment was down over 20 percent in the decade ending in 2005. Sawmills and planing mills also decreased significantly, while lumber and building materials actually increased in employment over the same decade. Figure 2 shows hourly earning trends over the same period. For the last decade, logging earnings increased by nearly 3 percent annually, earnings for sawmills and planing mills increased slightly less, and earnings for lumber and wood products increased by 2.3 percent annually.

Figure 3 shows lumber, plywood and pulpwood-based production for 1965 to 2005. This is just a subset of the valuable data. Consumption, imports and exports were also included in the report. Plus, the tables were presented in different measurement units and by softwood and hardwood. Lumber production increased over the period, but leveled off the last decade. Plywood ended the period almost where it started and pulpwood showed significant increases. The detailed tables provide interesting insights for the reader willing to go to the full report. For example, Figure 3 shows pulpwood production increased 79 percent, but the detailed tables show softwood pulpwood production increased 58 percent, while hardwood pulpwood production increased by 136 percent.

Continued on page 18

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Table 1. Imports and exports of logs, lumber, and pulpwood (million dollars), 2005.

Product	Imports (million dollars)	Exports (million dollars)	Trade Balance (million dollars)
Logs			
Softwoods	233.6	847.9	614.3
Hardwoods	47.2	591.4	544.2
Total	280.8	1439.3	1158.5
Lumber			
Softwoods	8401.8	516.3	(7885.5)
Hardwoods	1118.0	1624.0	506.0
Railroad ties	16.8	62.4	45.6
Total	9536.6	2202.7	(7333.9)
Pulpwood			
Round	9.0	70.8	61.8
Chips	35.5	191.8	156.3
Total	44.5	262.6	218.2

Table 2. Pulpwood and lumber production selected years, 1965-2005, and regional proportions.

Year	Pulpwood Production (million cords)	Pulpwood Production %			Lumber Production (Billion B.F.)	Lumber Production %		
		North	South	West		North	South	West
1965	52.9	17.0	59.0	24.0	38.7	11.4	32.8	55.8
1970	67.6	16.7	60.8	22.5	35.9	12.3	33.5	54.2
1975	65.8	15.8	61.8	22.4	34.1	12.1	32.6	55.3
1980	84.0	17.0	60.4	22.6	35.4	19.2	43.5	37.3
1985	86.6	16.9	64.9	18.2	40.9	11.2	38.9	49.9
1990	94.0	14.9	69.6	15.5	48.1	8.1	46.8	45.1
1995	95.0	15.8	76.4	7.8	44.9	18.1	47.1	34.8
2000	90.0	15.7	78.0	6.3	48.6	19.2	43.5	37.3
2005	87.1	16.2	78.2	5.6	52.3	17.4	43.6	39.0

Economic Timber Trends

Continued from page 16

Export and import data are available by year, species and nations. Current imports and exports are reported in Table 1 for logs, lumber and pulpwood. The only negative trade balance in Table 1 is softwood lumber. Veneer, plywood, particleboard, fiberboard, waferboard, hardboard and paper and board all show negative trade balances also (go to the full report for additional background). Canada has always been the principal source of lumber imported into the United States. In 2005, nearly 87 percent of all softwood lumber and 44 percent of hardwood lumber imported into the United States came from Canada. Overall, the United States imported nearly 83 percent of Canadian lumber production in 2005.

Regional production and timber prices

Table 2 shows interesting trends in lumber and pulpwood production over time and by regions. This table was developed from several tables in the report. Pulpwood production has been increasing a little over 1 percent annually over the 40 years, and lumber production has been increasing a little less than 1 percent annually for the same period. On a regional basis, pulpwood production in the

Continued on page 20

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Table 3. Average stumpage prices for sawtimber sold from national forest, selected species, 1965-2005 (Dollar per MBF)

year	Douglas-fir		Southern Pine		Eastern Hardwoods	
	Current dollars	1997 dollars	Current dollars	1997 dollars	Current dollars	1997 dollars
1965	42.6	168.3	31.7	125.2	25.0	98.8
1970	41.9	144.9	44.1	152.5	26.9	93.0
1975	169.5	370.3	57.0	124.5	33.9	74.1
1980	432.2	614.1	155.4	220.8	52.4	74.5
1985	126.2	156.0	90.7	112.1	65.4	80.9
1990	466.4	511.7	126.7	139.0	146.1	160.3
1995	453.5	464.1	248.5	254.3	313.9	312.2
2000	433.4	416.7	258.1	248.2	368.6	354.4
2005	320.5	259.8	192.8	156.3	415.1	336.5

Economic Timber Trends

Continued from page 18

North has been relatively constant, but the South has experienced major increases and the West significant reductions. Lumber production increased in both the North and South, but the West has seen reductions. These statistics can be traced to factors like mill closings, changes in National Forest harvesting levels, changes in pulpwood technology, and types of products produced at mills.

Table 3 shows price trends for several important regional tree species. Timber prices are in current dollars (dollar prices in the year given) and in 1997 dollars (dollars with constant 1997 purchasing power with inflation removed). If a price doubled in constant 1997 dollars, the amount of actual purchasing power would have doubled. Timber prices have been increasing, but when current dollars are compared to 1997 dollars the increase is not nearly as large. For example, Douglas-fir stumpage prices increased from \$42.6 to \$320.5, but in terms of purchasing power it only increased a little over 50 percent. The same can be said for southern pine, but the increase in purchasing power is much smaller. Eastern hardwoods stumpage prices more than tripled in actual purchasing power.

Conclusion

The USDA Forest Service provides many useful publications and data series that are the source of information that can provide practical insights into forest trends. These same trends impact forest industry, forest owners, timber harvesting companies and the forest products equipment industry. Anyone who uses forest products feels the impact at the cash register. **FPE**

The author is a professor in the department of forestry and natural resources at Clemson University in South Carolina.



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Features



Buying into Bio

One operation experiments with nontoxic oils
by Patrick White

9



Forest Products Finances

Economic Trends for Timber
by Tom Straka

14



Forest Products Equipment's All Industry Directory

26



Year-Round Profits

Making the cut-to-length switch
by Tony Kryzanowski

44

Departments

Calendar

22

News

56

Pallet Update

54

What's New

6

Business Opportunities

Guide to Advertisers

55

The Marketplace

58

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