What's this about the forest industry shifting to the South?

Con Schallau1/

The Southern forest products industry's (FPI) labor and transportation cost advantage over the West Coast is substantial (Bingham 1980). In 1980, for example, the South's FPI labor and transportation costs to the Chicago lumber markets was $57 per thousand board feet less than the West Coast's (fig. 1). Changing markets for lumber produced in the Pacific Northwest (PNW) reflect this advantage. In 1960, for example, mills in the Douglas-fir region shipped nearly 60 percent of their output to destinations east of the Mississippi River, compared to only 20 percent in 1980 (Bingham 1980).

Figure 1.—A comparison of transportation and labor costs to the Chicago market.

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In 1980, the South accounted for 38 percent of the Nation's FPI employment, while the Pacific Northwest accounted for only 9 percent (fig. 2). Lumber and wood products (LWP) manufacturing is the largest employer in the Pacific Northwest. Employment in the South is more evenly divided between LWP, paper and allied products (PAP) and wood furniture (WF). Nationwide, PAP accounts for a significantly higher percent of earnings than employment. This relationship, of course, reflects the higher PAP wage scales.

Figure 2.-- Composition of the Nation's FPI, 1980.

Average annual earnings for FPI employees in the PNW were much greater than those in the South (fig. 3). The difference in LWP earnings was particularly noticeable. Between 1970 and 1980, the change in LWP earnings was nearly the same for both regions. For the WF and PAP industries, however, the change was much greater in the PNW.
Figure 3.—Comparison of annual FPI earnings in the South and PNW, 1980.

CHANGING SHARES OF FOREST PRODUCTS INDUSTRY EMPLOYMENT

Because its FPI employment grew faster than the average for the industry, the South's relative share of the Nation's FPI employment increased between 1970 and 1980 (fig. 4). This shift came at the expense of both the PNW and the rest of the nation (RON). Both the PNW and the South increased their relative shares of FPI earnings (fig. 5).

Figure 4.—Shift in relative shares of the Nation's FPI employment, 1970-1980.

Figure 5.—Shift in relative shares of the Nation's FPI earnings, 1970-80.
The change in shares of employment and earnings was not uniform throughout the South. For this reason, the Region was sub-divided into four geographical areas (fig. 6): West South Central (WSC), Mid-Souths (MSO), East South Central (ESC) and South Atlantic (SAT).

**Figure 6.**--States comprising the Pacific Northwest and sub-regions of South.

**THE RESEMBLANCE BETWEEN THE MID-SOUTH AND PACIFIC NORTHWEST**

Not all of the Southern States increased their relative shares of the Nation's FPI. In fact, between 1970 and 1980, the shift in FPI employment in the MSO resembled that in the PNW (fig. 7). The decreasing share of employment in both regions, however, was accompanied by increasing shares of earnings (fig. 8).

**Figure 7.**--Shift in relative shares of the Nation's FPI employment, by sub-regions of the South and the Pacific Northwest, 1980.
The resemblance between the MSO and the PNW is also apparent at the individual industry level. For both areas, LWP accounted for most of the decline in their respective shares of FPI employment (fig. 9). Furthermore, none of the other areas experienced a declining share of PAP employment.

Figure 9.--Shift in relative shares of the Nation's FPI employment by industry and region, 1980.
DISCUSSION

For most of the post-WW II period, abundant and relatively inexpensive stumpage assured the PNW ready markets in the East. By the end of the 1960's, however, diminishing private timber supplies provoked an escalation of bid prices for public stumpage. Increasing raw material costs, aging processing facilities, and relatively high transportation and labor costs made it increasingly difficult for the PNW to compete with Canadian and Southern softwood lumber and plywood producers. By the mid-1970's, the PNW's share of the Nation's FPI employment began to decrease.

In general, the resurgence of the Southern FPI resulted from increasing size and amounts of timber, investment in new plants and equipment, and close proximity to growing markets for timber products.

This resurgence first became evident in the Mid-South. Here, large blocks of fee-ownership timber lands fostered the beginning of a new industry (Cleaves and O'Laughlin 1985). A state-of-the-art Southern Pine plywood mill was constructed in the Mid-South in 1964. Subsequently, numerous plywood mills were constructed throughout the South, from East Texas to North Carolina.

Like the PNW, the Mid-South's declining share of FPI employment is associated with several changes in the FPI. Existing sawmills had to compete with new plywood mills for sawtimber. The sawmills were more labor-intensive, and found it difficult to compete with the newer plywood mills. Price and employment data suggest that the competition for sawtimber during the 1970's was most intense in the Mid-South. For example, during the 1977-1979 upswing in the Nation's economy, the change and level of delivered prices for Southern Pine sawtimber were generally higher in the Mid-South than elsewhere in the South (fig. 10). Furthermore, the rate of decline in the number of sawmill employees (and number of mills) was greater in the Mid-South than elsewhere in the South.

Figure 10.—Index of average delivered prices of Southern Pine Sawtimber in 1979, and their annual rate of change between 1977 and 1979.
Another factor contributing to the difference in employment shares is the fact that most of the Southern Pine plywood mills constructed during the 1970's were located outside the Mid-South (Cleaves and O'Laughlin 1985). In fact, by the end of the 1970's, some plywood mills in the Mid-South had closed.

CONCLUSION

The Nation's forest products industry migrated from New England to the Lake States, then to the South, and finally to the Pacific Northwest. Although the latter region dominated softwood lumber and wood products markets during most of the post-World War II period, the South has regained the dominant position. The development of a new softwood plywood industry in the Mid-South in the 1960's led the resurgence.

Although the South increased its share of the Nation's FPI employment during the 1970's, the Mid-South's share, like the Pacific Northwest's, declined. The South's FPI as a whole is expected to expand its position as the Nation's leading producer of softwood roundwood (Forest Service 1982). Short of achieving some sort of "silvicultural nirvana," however, the South's industry will eventually mature and decline. In fact, the findings of this study suggest that the maturing process has already begun in the Mid-South.

REFERENCES CITED

