Employment Transitions in Oregon’s Wood Products Sector During the 1990’s

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Abstract

New data indicate that only 51% of workers displaced from the Oregon wood products sector during the 1990’s remained in Oregon covered employment by 1998. Of these, 45% found employment in the service and wholesale–retail trade sectors. The median wage of separated workers in 1998 was below their wage when employed in the wood products sector and below the median of all Oregon workers. Nearly \( \frac{1}{3} \) of those separated from the wood products sector in the less populous southwestern and eastern portions of the State found new employment in the more urban northwestern region at wages 29% higher than their counterparts who did not move.

Introduction

During the early 1990’s, recession in the U.S. economy, decline in the Asian export log market, and falling harvest from public timberlands combined to produce a major reduction in employment in Oregon’s wood products sector (SIC 24). Despite the subsequent economic recovery in the U.S. and historically high levels of national wood products demand, Oregon’s harvest and employment in wood products continued to decline through the 1990’s (see Figure 1). At the same time other sectors, particularly the so-called “high-tech” segment associated with an array of computer and information technology industries, were propelling Oregon’s economy toward record levels of income and total employment.

But what happened to the workers who lost their jobs in the wood products sector during the 1990’s? Did they find jobs in other sectors? Were they forced to move from rural areas to find jobs? Did their earnings decline? Analysis of these questions during
the period was caught up in the rancorous debate over the wisdom of reductions in federal timber harvest. Some analysts (Freudenburg, Wilson and O’Leary 1998; Niemi et al 1999) argued that many of these jobs would have been lost in any event due to labor-saving technical improvements and that those who lost jobs were likely to have been quickly absorbed in the growing State economy. Others were concerned about the inability of workers to find jobs at comparable wages despite the economy’s growth and about the possible emergence of pockets of chronic underemployment in rural areas previously dependent on the forest sector (Carroll et al 1999). To date, however, there has been little firm evidence to document the disposition of these displaced workers.

This paper reports a new analysis of an overlooked employment database that sheds some light on these important issues. By tracking the employment and wage history of individual workers over the 1990-1998 period we have been able to establish a somewhat clearer picture of the employment and wage transitions of workers separated from the wood products sector during the early 1990’s. The analysis also allows some inferences on the geographic movements of workers as they changed jobs.

Data and Analysis

Data from the Oregon Employment Department, Quarterly Wage Files, collected as part of the worker unemployment insurance program, provides information on the wages, hours worked and industry for every worker covered by Oregon unemployment insurance. As the name indicates, these files are updated on a three-month basis, and include every “covered” employee/employer relationship during that three-month period. That is, there is a record for every covered employer for which an individual worked
during the quarter. Although the wage file is a remarkably detailed database, it provides information only for those individuals covered by unemployment insurance. It excludes the wages of the self-employed, family members working in a family business, and the wages of selected other groups that are not required to be covered by unemployment insurance. Still, the vast majority of workers in Oregon are covered by unemployment insurance. According to Oregon Employment Department data, 88 percent of Oregon workers were covered by unemployment insurance in 1990. By 1998 that number had grown to 93 percent.

The purpose of the Quarterly Wage Files is purely administrative and normally files ten or more quarters old would have been destroyed. We were fortunate, however, that the Research Group at the Oregon Employment Department began archiving these files in the early 1990’s for potential future research use.

Since workers may hold multiple jobs and shift in and out of employment in various industry sectors over time, a critical initial step in our analysis was defining the population of workers that would be considered “employed” in the wood products industry. To the best of our knowledge, however, there is no standard definition of industry attachment. For our analysis, workers were considered “employed” in the wood products sector (SIC 24) if they worked at least half-time in, and earned at least half of their total wage income during from, SIC 24.

During our base period, the eight quarters from 89:IV to 91:III, roughly 107,000 persons worked at least one quarter in a covered position in SIC 24. Of these, some 60,000 persons met our definition for employment in the sector. We track these 60,000
workers over the period 89:IV-91:III to 98:IV, tallying any changes in sector of employment, earnings and location of employment.

Throughout the following comparisons the group labeled “all Oregonians” comprises just those covered employees who were in the Oregon labor force during the base period and still in covered employment in 1998. We are comparing, in effect, the same worker cohort through time. Over the decade of the 1990’s much of the growth in high wage, high-tech employment occurred through in-migration of workers from other states. Inclusion of these workers in the comparator base would have markedly increased the level of wages for the “all Oregonian” group in 1998.

Despite the detail of our database, we cannot differentiate between those who lost or left jobs in the industry because of changes in federal timberland management policy and associated harvest reductions, labor-saving technical change, the domestic recession or depressed export log markets of the early 1990’s, personal choice or any other reason. Thus we cannot answer some of the most contentious and stylized questions such as, what happened to workers who lost their jobs because of the spotted owl? This is a limitation, but from a broader policy perspective, we are concerned about the disposition of any worker separated from their primary employment in the wood products sector for whatever reason.

Results

In what industries did they work in 1998? Of the 60,000 workers employed in SIC 24 in the base period, some 25,000 or 42% were still employed in SIC 24 in 1998, 18,000 or 30% were employed in some other “covered” Oregon industry and 17,000 or 28% were not found in the Quarterly Wage File. As illustrated in Figure 2, those who
found employment in other covered industries were heavily concentrated in the service and wholesale-retail trade sectors (roughly 45%), other manufacturing industries and construction (nearly 33%) and transportation (9%).

The status of the 17,000 former SIC24 workers not in the 1998 Wage File presents a significant uncertainty. Workers can drop out of covered employment in Oregon for a number of reasons, including retirement, finding employment in a non-covered business (e.g., self-employment), not seeking or finding employment, and moving to another state (covered and non-covered employment is discussed at http://olmis.emp.state.or.us/olmisj/ArticleReader?itemid=00001367). Analysis of the entire 1990 Oregon covered workforce found that by 1998 (roughly the same interval as our study) nearly 40% were no longer in Oregon covered employment. The pattern of gradual loss of original-year workers over time was the same using 1991 and 1992 as starting years. This suggests that the percentage of a given year’s workers that leaves the workforce over time may be similar regardless of the initial year of analysis (Oregon Employment Department, 2002). In our sample from SIC24 alone, the loss was only 28%.

Although some might speculate, it seems unlikely that large numbers of these workers stayed in the wood products industry but in a non-covered position. According to Oregon Employment Department data, non-covered employment in Oregon decreased by 59,000 persons (34 percent) between 1990 and 1998. Further, data from the U.S. Census Bureau for 1997 indicate that there were only 703 and 2,543 non-employer businesses (businesses with no employees other than the owner) in Wood
Products Manufacturing and Forestry and Logging, respectively (see U.S. Census Bureau at [http://www.census.gov/epcd/nonemployer/1997/or/OR000.htm](http://www.census.gov/epcd/nonemployer/1997/or/OR000.htm)).

Although we are confident that no more than a few of the 17,000 “missing” SIC24 employees stayed in the wood product industry as a non-covered worker, we have no way of tracking the actual locations, form of employment or earnings of these 17,000 workers. Our accounting is, therefore, incomplete.

**What did they earn in the base period and 1998?** The median annual wages of workers employed in SIC 24 are shown in Table 1 by group and for both the base period and 1998. Both groups that left SIC 24 were paid a lower median wage in the base period than those who remained in the industry. Between 1990 and 1998, workers who remained in covered employment but not in SIC 24 realized about a 1% loss in nominal earnings, while those who remained in SIC 24 saw a 6% earnings gain. In both cases, however, earnings growth lagged behind the all covered industry growth of nearly 24%.

The 1998 median annual wages of the 18,000 workers who left SIC 24 but remained in Oregon covered employment are shown in Figure 3 by sector. The median wage of workers who moved to high-tech exceeded the median for any of the other sectors. However, this accounted for only 450 workers (2.5% of the 18,000 population in 1998). In contrast, the lowest wage was earned in the service sector that accounted for 4,200 workers (23% of the original 18,000 population) in 1998. The income differential may be larger for service sector and trade employees than suggested by earnings alone, to the extent that jobs in these sectors often provide fewer or less generous
additional benefits such as health insurance (Employee Benefit Research Institute, 1997).

Since averages alone can often hide as much as they reveal, we also examined the distribution of average hourly earnings, comparing those who remained in SIC 24 and those who left but were still in covered employment. As illustrated in Figure 4, the wage distribution of the non-SIC 24 workers was less symmetric about the mean than for SIC 24 workers, with a heavier concentration near $6/hour, Oregon’s minimum wage in 1998.

Did workers find new employment in a different part of the state? Between 1988 and 1998 the number of lumber and plywood mills operating in Oregon declined by nearly half (252 to 127) (Howard and Ward 1991; and Ward, Lettman and Hiserote 2000). Most of this attrition involved smaller mills, with a greater than proportional decline in eastern Oregon. In terms of product output, the largest losses occurred in eastern and southwestern Oregon. By 1998 northwestern Oregon accounted for more than 67% of Oregon lumber production (up from 57% in 1988), while the southwest share fell from 24% to 18% between 1988 and 1998 and eastern Oregon dropped from 20% to 14%. With disproportionate reductions in output and limited non-SIC 24 employment in the southwest and east, it is natural to wonder if workers leaving the wood products sector in these regions were more likely to change locations to find new employment. In our data we can only tell if a person changed employment locations between 89:IV-91:III and 1998. As with the initial cause of separation from SIC 24, we can not tell if a person moved in order to find a new job or
for some other reason. Nonetheless, change in residence can represent a significant cost both financially and psychologically whatever the underlying cause.

More than 60% of workers that left SIC 24 in the less populous southwest and east regions of Oregon but stayed in covered employment remained in their home regions. The remainder of these workers did change regions, with at least 30% in both cases moving to rapidly urbanizing northwest Oregon. More than 90% of those separated from SIC 24 in the northwest, in contrast, remained in that region by 1998. Those who stayed in the southwest or east, however, did not enjoy the same rate of earnings in their new jobs as those that moved. The 1998 median wage of those who stayed in the southwest and east was $18,967 in nominal dollars compared to $24,413 – 29% higher – for those who moved. Some of the earnings increment for those who moved may have been offset by higher costs of living, particularly for housing, in the northwest. For example, typical cost of living calculations suggest that costs are on average some 8% higher in Portland than in Coos Bay (in the southwest region) or Klamath Falls (east region), with larger differences in housing.

Discussion

In some respects these data confirm some popular suspicions about the nature and disposition of workers separated from the wood products industry during the 1990's. Those who were separated had a lower annual wage in the base period (89:IV-91:II) than those who stayed: attrition was concentrated in the lower paid workers. For the group that remained in Oregon covered employment, the largest part found jobs in the service and trade sectors at earnings well below the median level of workers who remained in wood products and below their own median wage in SIC 24 during the base
period. The wage distribution of these separated workers was also skewed toward lower hourly rates, near the minimum wage. Nearly a third of the separated workers in the southwest and east regions moved to new employment in northwest Oregon by 1998 and the average 1998 earnings of those who moved was 29% higher than the earnings of those who remained in the southwest and east.

The fate of the 28% of our initial sample that disappeared from the covered employment roles in Oregon is uncertain. Although this fraction is lower than statewide experience for all sectors, it remains a concern. We are left with a fairly positive prospect if the bulk of this group found covered employment in another state or became self-employed in Oregon at a “reasonable” wage. This group might also form the basis for a cadre of chronically underemployed rural residents, to the extent that they remained in their original employment locations and adopted a subsistence lifestyle. Tracking these workers, and filling this gap in our knowledge, promises to be a daunting task, however, given the lack of public data on non-covered workers in Oregon and the procedural problems in working with other states to locate the missing workers.
Literature Cited


Figure 1. Oregon timber harvest and employment in the wood products sector (SIC 24) 1980-1998.
Figure 2. Employment by industry in 1998 of workers who left SIC 24 after 89:IV-91:III but remained in covered employment.
Figure 3. Median 1998 annual wage of workers who moved to non-SIC 24 industries and their median wage in the base (89:IV-91:III) period.
Figure 4. Distribution of earnings by hourly wage class in 1998 of workers who remained in the wood products (SIC 24) and workers who had shifted to non-wood products (non-SIC 24) sectors.
Table 1. Median annual wage and changes for all Oregon workers and workers employed in SIC 24 in the base period and in 1998, by disposition of group in 1998.

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