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LOCATION QUOTIENTS, EXCESS EMPLOYMENT AND SHORT RUN ECONOMIC BASE MULTIPLIERS FOR IDAHO'S FOREST PRODUCTS INDUSTRY

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Location Quotients, Excess Employment
and
Short Run Economic Base Multipliers
for
Idaho's Forest Products Industry¹

by
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and
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Forest resources managers and wildland planners alike are often confronted with the problem of evaluating impacts of management activities with specific regard to timber oriented opportunities. Evaluation criteria from the fields of economics and regional science are often very useful. The set of criteria and techniques that could be used to aid the decision process is very large. This paper focuses on three measures commonly used in the evaluation of alternatives: a) location quotients, b) excess employment, and c) short run economic base multipliers.

As with other criteria and techniques, the measures discussed in this paper may be used in either a descriptive or analytical manner. Both uses have proper roles. Location quotients and excess employment would seem to be primarily useful in a descriptive sense. Location quotients could be used to describe the degree to which a geographical area is experiencing industrial concentration and specialization.

¹The research reported here is result of work jointly sponsored by the Intermountain Forest and Range Experiment Station, U.S. Forest Service, and the Forestry, Wildlife and Range Experiment Station, University of Idaho.

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Excess employment can help a decision-maker understand the dependency on, or importance of, a specific industry relative to overall industrial specialization in an area. Finally, economic base multipliers can help the decision-maker analyze the impact that, for example, a changed level of employment in the forest products industry would have on total employment in an area.³

Each measure can be approached from any of several levels of theoretical sophistication. In general, the more sophisticated approaches require greater amounts of input data. A trade-off typically exists between analytical sophistication and analytical detail. This paper sacrifices analytical sophistication in the name of geographical and industrial classification detail.

The paper is organized in two major sections. The first discusses each evaluation measure in a general context and then illustrates each concept with a table that emphasizes the forest product industry within the six official state planning regions in Idaho. Figure 1 shows these planning regions. The second section consists of three tables with formats similar to the tables in the first section but with Idaho counties, rather than planning regions, as the geographical reference point. Employment in 1973 is used as the data basis throughout this paper; similarity, all calculations made used the 3-digit detail of industrial

³For a more thorough discussion of these concepts, refer to: Hoover, E.M. An introduction to regional economics. Knopf Inc., New York, N.Y. 1971; or Nourse, H.O. Regional economics. McGraw-Hill, New York, N.Y. 1968.

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classification found in the Standard Industrial Code.⁴



Figure 1. Official state planning regions in Idaho.

⁴This paper uses the employment categories found in the Standard Industrial Code. The following characterizations will be used: SIC 081: Timber Tracts; 082: Forest Nurseries; 084: Misc. Forest Products; 085: Forestry Services; 241: Logging; 242: Sawmills; 243: Plywood and Veneer; 244: Wood Containers; 249 Misc. Wood Products; 251: Household Furniture; 252: Office Furniture; 253: Public Furniture; 254: partitions and Shelving; 259: Misc. Furniture; 261: Pulp Mills; 262: Paper Mills; 263: Paperboard Mills; 264: Converted Paper; 265: Containers and Boxes; and 266: Building Paper. A complete description of these classes may be found in: Office of Management and Budget. Standard Industrial Classification Manual. U.S. Government Printing Office. 1972.

LOCATION QUOTIENTS

The analytical measure, location quotient, is also known by the term "coefficient of localization". It is a measure of relative industrial concentration. A characteristic of a specific industry, in a state, region or county, is compared or related to the same characteristic in some larger base system. In our case, the industrial pattern shown in the subsystems of Idaho planning regions, and later counties, is contrasted with a base system, the United States industrial pattern. Specifically, this measure compares the regional or county percentage distribution of some economic indicator in the base system. While this paper uses employment, other indicators such as income and value-added can also be successfully used. Calculations are simple: for example, if 40% of a region's employment is found in Industry A, while 5% of the U.S. (the base system) employment is in Industry A, the location quotient is 800 -- $(0.400/0.050) \times 100$. A reasonable interpretation of this location quotient is that Industry A is 800% more concentrated in the region than the national average.

Industrial concentration is one measure of industrial importance to a region. Additionally, the magnitude of the location quotient indicates the degree to which an industry is an importer or exporter. A location quotient of 100% is just self-sufficient, providing only for local needs; a larger location quotient indicates an export industry while a smaller one indicates an importing industry. Two major drawbacks to location quotients are: a) magnitudes vary with the economic indicator (e.g. wages

or value-added) used, and b) it gives a measure of industrial concentration, but does not explain such concentration.

Location quotients for the forest products industry in the six planning regions of Idaho are shown in Table 1.⁵ Quotients for Idaho's forest products industry range from 0.0 in many cases to 6,314.2 in Region II's Forestry Services industry. This value should be interpreted as indicating an employment concentration of roughly 6,300 percent of the U.S. average concentration for that industry. It might be noted that employment in the pulp and paper or furniture industries is either grossly underrepresented or nonexistent in Idaho. Major employment concentrations are found to exist in the Forestry Nurseries, Forestry Services, Logging, and Sawmills sectors of Regions I and II as well as Idaho in total.

EXCESS EMPLOYMENT

Given any particular pattern of industrial concentration, the concept of excess employment speaks to the question: how important is particular industry to a region's, or county's, pattern of industrial concentration? The rationale behind this measure is that employment in an industry that, on a percentage basis, exceeds the national average is in excess of average national requirements -- excess employment. Industrial specialization is said to increase with the size of total excess employment. If aggregate excess employment is a measure of overall regional specialization, then the ratio of excess in a specific industry to the aggregate not only reflects the degree to which that industry accounts for specialization but is also a measure of regional dependency on that industry.

⁵In this table, a geographical unit called "multi-county" is found. This heading will include those firms that could not be associated with a specific county. While this heading is required for completeness, it has no geographical meaning and, therefore, will not be discussed.

Table 1. Location quotients for Idaho's forest products industry, by region and industry class; basis: 1973 employment.

Industry Class	Multi-County Firms	Idaho State Planning Regions			State of Idaho
		Region I	Region II	Region III	
Timber Tracts	0.0	22.0	0.0	0.0	
Forest Nurseries	0.0	1,453.5	0.0	0.0	
Misc. Forest Products	0.0	0.0	0.0	0.0	
Forestry Services	7,195.3	354.5	6,314.2	625.3	
Logging	377.2	3,301.4	4,235.6	424.3	
Sawmills	0.0	4,158.2	3,933.7	806.2	
Plywood & Veneer	8.7	845.4	415.4	678.3	
Wood Containers	0.0	156.6	0.0	24.6	
Misc. Wood Products	486.5	796.1	266.9	69.3	
Household Furniture	0.0	24.9	1.9	68.1	
Office Furniture	0.0	0.0	0.0	1.5	
Public Furniture	0.0	0.0	0.0	86.0	
Partitions & Shelving	202.7	0.0	0.0	16.4	
Misc. Furniture	0.0	0.0	0.0	4.3	
Pulp Mills	0.0	0.0	0.0	0.0	
Paper Mills	0.0	0.0	244.1	0.0	
Paperboard Mills	0.0	0.0	2,939.0	0.0	
Converted Paper	0.0	0.0	0.0	3.7	
Containers & Boxes	0.0	0.0	0.0	21.8	
Building Paper	0.0	0.0	0.0	0.0	
Idaho Planning Regions					
Industry Class	Region IV	Region V	Region VI	State of Idaho	
Timber Tracts	0.0	0.0	0.0	2.3	
Forest Nurseries	0.0	0.0	0.0	154.1	
Misc. Forest Products	0.0	0.0	0.0	0.0	
Forestry Services	0.0	827.1	145.2	1,244.3	
Logging	14.7	18.4	620.0	1,085.6	
Sawmills	63.4	33.5	313.2	1,244.2	
Plywood & Veneer	19.2	163.3	75.6	420.2	
Wood Containers	0.0	0.0	0.0	25.6	
Misc. Wood Products	28.3	47.0	0.0	158.9	
Household Furniture	15.3	16.8	0.0	32.1	
Office Furniture	0.0	0.0	0.0	0.6	
Public Furniture	0.0	0.0	0.0	31.6	
Partitions & Shelving	8.5	16.8	55.9	20.0	
Misc. Furniture	64.9	39.2	0.0	15.5	
Pulp Mills	0.0	0.0	0.0	0.0	
Paper Mills	0.0	0.0	0.0	28.2	
Paperboard Mills	0.0	0.0	0.0	339.2	
Converted Paper	0.0	0.0	0.0	1.4	
Containers & Boxes	210.9	0.0	0.0	36.7	
Building Paper	0.0	0.0	0.0	0.0	

Source: Idaho Department of Employment. Unpublished Records. 1973.
 U.S. Department of Commerce. Bureau of Economic Analyses. Unpublished Records. 1973.

Computationally, two steps are usually taken. First the percentage distribution of industrial employment for each industry in the United States system is subtracted from a subsystem's (a region or county) percentage employment for each industry. Employment associated with industries showing positive differences is termed "excess". The second computational step is to determine the importance of each "excess employment" industry relative to the total of all excess employment found in industries of the region; this can be done on a percent of total excess basis. Continuing our earlier example, excess employment in Industry A is +0.350 -- $(0.400 - 0.050)$; if total excess employment for all industries were +0.525, Industry A would be said to account for 66.7% -- $(+0.350/+0.525)$ -- of the total excess. The interpretation is that the region is very dependent on Industry A which accounts for two-thirds of all industrial concentration in the region.

Data in Table 2 indicate both excess employment and percent of total excess for the forest products industry located in the six regions of Idaho. The size of total excess employment (for all industries) is an indication of a region's degree of industrial specialization. Relative to other regions in Idaho, Region I is the most specialized, with total excess of 51.36%, and Region III, with 39.80%, is least specialized. The importance of the forest products industry, reflected in percent of total excess, in regional specialization is quite variable. Table 2 also shows that about half of all excess employment can be attributed to the forest products industry in Regions I and II. But this industry plays a relatively minor role in the specialization of other regions. For instance, other data from this study, not included here, indicate that the Canned and

Industry, by region and industry class; basis: 1973 employment.

Industry Class	Idaho State Planning Regions							
	Multi-County Firms		Region I		Region II		Region III	
	Exc. %	% Exc.	Exc. %	% Exc.	Exc. %	% Exc.	Exc. %	% Exc.
Timber Tracts	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Forest Nurseries	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00
Misc. Forest Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Forestry Services	0.40	0.65	0.01	0.03	0.35	0.77	0.03	0.94
Logging	0.34	0.56	3.98	7.75	5.14	11.23	0.40	1.27
Sawmills	0.00	0.00	13.67	26.62	12.92	28.19	2.38	7.50
Plywood & Veneer	0.00	0.00	2.36	4.59	1.00	2.18	1.83	5.77
Wood Containers	0.00	0.00	0.02	0.04	0.00	0.00	0.00	0.00
Misc. Wood Products	0.58	0.94	1.05	2.04	0.25	0.55	0.00	0.00
Household Furniture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Office Furniture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Public Furniture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Partitions & Shelving	0.08	0.14	0.00	0.00	0.00	0.00	0.00	0.00
Misc. Furniture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pulp Mills	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paper Mills	0.00	0.00	0.00	0.00	0.38	0.83	0.00	0.00
Paperboard Mills	0.00	0.00	0.00	0.00	2.87	6.27	0.00	0.00
Containers & Boxes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FOREST INDUSTRY TOTAL	1.41	2.28	21.11	41.09	22.92	50.01	4.64	14.63
TOTAL AREA	61.93%	100.00%	51.36%	100.00%	45.83%	100.00%	31.72%	100.00%

Industry Class	Idaho State Planning Regions						State of Idaho	
	Region IV		Region V		Region VI		Exc. %	% Exc.
	Exc. %	% Exc.	Exc. %	% Exc.	Exc. %	% Exc.		
Timber Tracts	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Forest Nurseries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Misc. Forest Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Forestry Services	0.00	0.00	0.04	0.10	0.00	0.01	0.06	0.20
Logging	0.00	0.00	0.00	0.00	0.65	1.63	1.23	3.76
Sawmills	0.00	0.00	0.00	0.00	0.72	1.81	3.86	11.81
Plywood & Veneer	0.00	0.00	0.20	0.47	0.00	0.00	1.01	3.10
Wood Containers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Misc. Wood Products	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.27
Household Furniture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Office Furniture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Public Furniture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Partitions & Shelving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Misc. Furniture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pulp Mills	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paper Mills	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paperboard Mills	0.00	0.00	0.00	0.00	0.00	0.00	0.24	0.74
Containers & Boxes	0.37	0.84	0.00	0.00	0.00	0.00	0.00	0.00
Building Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FOREST INDUSTRY TOTAL	0.37	0.84	0.24	0.57	1.37	3.44	6.49	19.88
TOTAL AREA	44.09%	100.00%	42.69%	100.00%	39.80%	100.00%	32.65%	100.00%

Source: Idaho Department of Employment. Unpublished Records, 1973.

U.S. Department of Commerce. Bureau of Economic Analysis. Unpublished Records, 1973.

Preserved Fruits and Vegetables industry is the most important single source of specialization in the state of Idaho, Region IV, and in Region V.

SHORT RUN ECONOMIC BASE MULTIPLIERS

Regional scientists have attempted to explain growth of a region in terms of its "economic base". The essential idea is each region has certain industrial activities that are "basic" to growth and development of the region. These constitute the economic base and are often termed "export" industries because they serve markets outside the region. Other activities (non-basic) are merely the result of growth and development of the region -- they serve regional markets. Short run economic base multipliers are used to help understand and evaluate overall regional impacts of changes in the economic base. As before, economic indicators, such as employment, wages, or value-added, could be used.

Calculations of short run economic base multipliers are deceptively simple. Consider the case of employment multipliers. The underlying premise is that total employment is determined by employment in economic base industries. Furthermore, the most simplified version of this multiplier states that an employment change in a region's base industries will give rise to a proportionate change in total regional employment. This proportionate change, some multiple, is the multiplier. A multiplier is calculated: $\text{total employment} \div \text{basic industry employment}$. For example, total 1972 employment in Idaho is set at 211,606 persons. If 165,211 persons were employed in basic industries, the multiplier calculated would be 1.281 ($211,606 \div 165,211$). This is a relatively

expedient but unsophisticated method of multiplier calculation. As such they should be viewed as reasonable approximations and not absolutes.

What constitutes economic base industries of a region or county? One method commonly used is to simply define certain industries as "basic". Other methods include a detailed investigation of industrial records. This paper adopts the idea that a region's economic base consists of those industries characterized by excess employment. The excess employment criterion was selected because of its simplicity and it is compatible with other data developed in this study.

Table 3 shows a series of short run economic base multipliers ranging between about 1.2 and 2.2 for the several regions of Idaho. Three sets of multipliers are made available to the reader: a) multipliers that include any industries with excess employment; b) multipliers including industries that account for at least 0.1% of total excess employment; and c) multipliers including industries that account for at least 1.0% of total excess employment. Use of several multipliers seem appropriate. Because all calculations were made by computer, industries are very easily identified as "excess" if they were greater than the national norm, even if the amount was an insignificantly small value (say, 0.00001); since all associated employment is counted in multiplier calculations, the multiplier is artificially, we think, deflated if large industries have extremely small excess employment. As more stringent conditions of accounting for excess employment are used, the number of firms and employment levels progressively decline. For instance, the number of employees associated with basic industries under the "Any Excess"

Table 3. Short run economic base multipliers for Idaho by region;
basis: 1973 employment

Geographical Area	Multiplier Criterion		
	Any Excess	0.1% Excess	1.0% Excess
Region I	1.273	1.306	1.620
Region II	1.307	1.340	1.764
Region III	1.218	1.285	2.051
Region IV	1.252	1.334	1.763
Region V	1.305	1.358	1.760
Region VI	1.272	1.315	2.204
Multi-County Firms	1.064	1.093	1.382
Total Idaho	1.281	1.384	1.992

Source: Idaho Department of Employment. Unpublished Records. 1973.
U.S. Department of Commerce. Bureau of Economic Analysis.
Unpublished Records. 1973.

criterion is 165,211; under "0.1 Excess", it is 152,882; while only 106,247 employees are considered under the "1.0% Excess" criterion.

Table 3 shows the dependence of multiplier size on the criterion. Note that multipliers within a geographical area increase with the more stringent conditions. In essence, the most liberal criterion for basic industries, "Any Excess", will give rise to the most conservative multiplier; the most conservative, "1.0% Excess", criterion is associated with the largest multipliers. Region II has the largest short run economic base multiplier under the "Any Excess" criterion, Region V for "0.1 Excess", and Region VI for the "1.0% Excess" criterion. Turn attention to the "1.0% Excess" multiplier in Region II, 1.764. A reasonable interpretation of this multiplier is: if 100 employees were added an economic base industry (the Sawmills industry, for example), total

employment in the short run would increase by approximately 176 employees (including the 100 sawmill employees).

The reader should be cautioned however: certain sectors of the forest products industry may not, in reality, be a "basic" industry in specific areas because of small excess employment -- Regions IV and V for instance. Economic base multipliers would have inappropriate relevancy when applied to the forest products industry in these areas. How does one know if a specific sector of the forest products industry is part of the economic base? The reader should refer to Table 2 (and later to Table 5). If an industry sector accounts, in Table 2, for at least the percent excess employment specified in the multiplier criterion, it is part of the economic base; otherwise, it is not. Consider the case of Forestry Services in Region I. This sector accounts for 0.03% of all excess employment in Region I. As such, it should be considered part of the economic base under the "Any Excess" criterion. But accounting for only 0.03% of total excess, it is not part of the economic base for the "0.1% Excess" or the "1.0% Excess" criterion. This point of caution should be overtly considered when applying multipliers to the counties to which we shall now devote attention.

COUNTY DATA

Concepts and procedures associated with location quotients, excess employment, and short run economic base multipliers have been previously presented. This section presents tabular materials identical to earlier regional tables, but the focus of emphasis now shifts to counties in Idaho. Table 4 shows location quotients; Table 5 shows excess employment; and short run economic base multipliers for each county are shown in Table 6. All previous comments and cautions are applicable to these data.

Table 4. Location quotients for Idaho's forest products industry, by county and industry class; basis: 1973 employment.

Industry Class	Ada	Adams	Bannock	Bear Lake	Benewah
Timber Tracts	0.0	0.0	0.0	0.0	334.3
Forest Nurseries	0.0	0.0	0.0	0.0	0.0
Misc. Forest Products	0.0	0.0	0.0	0.0	0.0
Forestry Services	36.6	22,160.2	1,506.5	0.0	0.0
Logging	11.2	17,596.1	0.0	145.7	15,159.1
Sawmills	508.9	7,528.6	4.5	312.1	3,840.3
Plywood & Veneer	388.0	0.0	297.4	0.0	5,441.6
Wood Containers	0.0	0.0	0.0	0.0	0.0
Misc. Wood Products	73.0	714.9	11.1	0.0	1,147.4
Household Furniture	17.3	0.0	30.7	0.0	0.0
Office Furniture	2.5	0.0	0.0	0.0	0.0
Public Furniture	0.0	0.0	0.0	0.0	0.0
Partitions & Shelving	17.7	0.0	0.0	0.0	0.0
Misc. Furniture	0.0	0.0	17.4	0.0	0.0
Pulp Mills	0.0	0.0	0.0	0.0	0.0
Paper Mills	0.0	0.0	0.0	0.0	0.0
Paperboard Mills	0.0	0.0	0.0	0.0	0.0
Converted Paper	6.0	0.0	0.0	0.0	0.0
Containers & Boxes	0.0	0.0	0.0	0.0	0.0
Building Paper	0.0	0.0	0.0	0.0	0.0

Industry Class	Bingham	Blaine	Boise	Bonner	Bonneville
Timber Tracts	0.0	0.0	0.0	0.0	0.0
Forest Nurseries	0.0	0.0	0.0	0.0	0.0
Misc. Forest Products	0.0	0.0	0.0	0.0	0.0
Forestry Services	0.0	0.0	4,073.3	354.5	0.0
Logging	3.4	151.3	14,543.9	4,406.9	150.0
Sawmills	0.0	0.0	10,808.8	7,092.2	1.6
Plywood & Veneer	0.0	8.5	8,122.1	76.1	98.9
Wood Containers	0.0	0.0	0.0	0.0	0.0
Misc. Wood Products	189.1	0.0	0.0	2,783.7	0.0
Household Furniture	0.0	0.0	0.0	7.0	0.0
Office Furniture	0.0	0.0	0.0	0.0	0.0
Public Furniture	0.0	0.0	0.0	0.0	0.0
Partitions & Shelving	77.9	0.0	0.0	0.0	0.0
Misc. Furniture	0.0	0.0	0.0	0.0	0.0
Pulp Mills	0.0	0.0	0.0	0.0	0.0
Paper Mills	0.0	0.0	0.0	0.0	0.0
Paperboard Mills	0.0	0.0	0.0	0.0	0.0
Converted Paper	0.0	0.0	0.0	0.0	0.0
Containers & Boxes	0.0	0.0	0.0	0.0	0.0
Building Paper	0.0	0.0	0.0	0.0	0.0

Source: Idaho Department of Employment. Unpublished Records. 1973.

U.S. Department of Commerce. Bureau of Economic Analysis. Unpublished Records. 1973.

Table 4. Continued

Industry Class	Boundary	Butte	Camas	Canyon	Caribou
Timber Tracts	0.0	0.0	0.0	0.0	0.0
Forest Nurseries	0.0	0.0	0.0	0.0	0.0
Misc. Forest Products		0.0	0.0	0.0	0.0
Forestry Services	0.0	.0	0.0	0.0	0.0
Logging	5,637.5	0.0	0.0	0.0	0.0
Sawmills	7,836.5	2,566.3	8,754.7	0.0	0.0
Plywood & Veneer	105.6	0.0	0.0	926.6	0.0
Wood Containers	0.0	0.0	0.0	104.6	0.0
Misc. Wood Products	2,168.9	0.0	0.0	11.8	0.0
Household Furniture	0.0	0.0	0.0	243.9	0.0
Office Furniture	0.0	0.0	0.0	0.0	0.0
Public Furniture	0.0	0.0	0.0	0.0	0.0
Partitions & Shelving	0.0	0.0	0.0	21.8	0.0
Misc. Furniture	0.0	0.0	0.0	0.0	0.0
Pulp Mills	0.0	0.0	0.0	0.0	0.0
Paper Mills	0.0	0.0	0.0	0.0	0.0
Paperboard Mills	0.0	0.0	0.0	0.0	0.0
Converted Paper	0.0	0.0	0.0	0.0	0.0
Building Paper	0.0	0.0	0.0	0.0	0.0

Industry Class	Cassia	Clark	Clearwater	Custer	Elmore
Timber Tracts	0.0	0.0	0.0	0.0	0.0
Forest Nurseries	0.0	0.0	0.0	0.0	0.0
Misc. Forest Products	0.0	0.0	0.0	0.0	0.0
Forestry Services	0.0	0.0	47,366.3	0.0	0.0
Logging	0.0	1,632.0	19,316.6	1,076.0	24.3
Sawmills	7.3	0.0	2,569.4	0.0	949.5
Plywood & Veneer	1.5	0.0	3,348.8	0.0	6.4
Wood Containers	0.0	0.0	0.0	0.0	0.0
Misc. Wood Products	0.0	0.0	1,168.1	0.0	0.0
Household Furniture	0.0	0.0	13.0	0.0	0.0
Office Furniture	0.0	0.0	0.0	0.0	0.0
Public Furniture	0.0	0.0	0.0	0.0	0.0
Partitions & Shelving	0.0	0.0	0.0	0.0	0.0
Misc. Furniture	0.0	0.0	0.0	0.0	0.0
Pulp Mills	0.0	0.0	0.0	0.0	0.0
Paper Mills	0.0	0.0	0.0	0.0	0.0
Paperboard Mills	0.0	0.0	0.0	0.0	0.0
Converted Paper	0.0	0.0	0.0	0.0	0.0
Containers & Boxes	648.6	0.0	0.0	0.0	0.0
Building Paper	0.0	0.0	0.0	0.0	0.0

Table 4. Continued

Industry Class	Franklin	Fremont	Gem	Gooding	Idaho
Timber Tracts	0.0	0.0	0.0	0.0	0.0
Forest Nurseries	0.0	0.0	0.0	0.0	0.0
Misc. Forest Products	0.0	0.0	0.0	0.0	0.0
Forestry Services	0.0	2,189.1	0.0	0.0	0.0
Logging	0.0	3,009.3	2,326.3	0.0	6,271.8
Sawmills	599.6	1,846.5	8,839.3	49.1	8,444.9
Plywood & Veneer	0.0	0.0	2,048.2	0.0	0.0
Wood Containers	0.0	0.0	0.0	0.0	0.0
Misc. Wood Products	0.0	0.0	0.0	539.4	888.5
Household Furniture	0.0	0.0	0.0	0.0	0.0
Office Furniture	0.0	0.0	0.0	0.0	0.0
Public Furniture	0.0	0.0	0.0	0.0	0.0
Partitions & Shelving	0.0	0.0	0.0	162.0	0.0
Misc. Furniture	0.0	0.0	0.0	0.0	0.0
Pulp Mills	0.0	0.0	0.0	0.0	0.0
Paper Mills	0.0	0.0	0.0	0.0	0.0
Paperboard Mills	0.0	0.0	0.0	0.0	0.0
Converted Paper	0.0	0.0	0.0	0.0	0.0
Containers & Boxes	0.0	0.0	0.0	0.0	0.0
Building Paper	0.0	0.0	0.0	0.0	0.0

Industry Class	Jefferson	Jerome	Kootenai	Latah	Lemhi
Timber Tracts	0.0	0.0	0.0	0.0	0.0
Forest Nurseries	0.0	0.0	3,302.8	0.0	0.0
Misc. Forest Products	0.0	0.0	0.0	0.0	0.0
Forestry Services	0.0	0.0	671.4	0.0	0.0
Logging	0.0	0.0	1,955.3	2,699.1	6,172.5
Sawmills	0.0	0.0	4,607.2	1,955.3	1,687.6
Plywood & Veneer	17.8	0.0	1,063.8	0.0	0.0
Wood Containers	0.0	0.0	355.9	0.0	0.0
Misc. Wood Products	0.0	0.0	121.3	52.6	0.0
Household Furniture	0.0	6.3	54.0	0.0	0.0
Office Furniture	0.0	0.0	0.0	0.0	0.0
Public Furniture	0.0	0.0	0.0	0.0	0.0
Partitions & Shelving	863.0	0.0	0.0	0.0	0.0
Misc. Furniture	0.0	0.0	0.0	0.0	0.0
Pulp Mills	0.0	0.0	0.0	0.0	0.0
Paper Mills	0.0	0.0	0.0	0.0	0.0
Paperboard Mills	0.0	0.0	0.0	0.0	0.0
Converted Paper	0.0	0.0	0.0	0.0	0.0
Containers & Boxes	0.0	0.0	0.0	0.0	0.0
Building Paper	0.0	0.0	0.0	0.0	0.0

Table 4. Continued.

Industry Class	Lewis	Lincoln	Madison	Minidoka	Nez Perce
Timber Tracts	0.0	0.0	0.0	0.0	0.0
Forest Nurseries	0.0	0.0	0.0	0.0	0.0
Misc. Forest Products	0.0	0.0	0.0	0.0	0.0
Forestry Services	6,637.8	0.0	0.0	0.0	0.0
Logging	9,795.6	0.0	229.3	0.0	284.3
Sawmills	3,406.3	0.0	674.6	0.0	4,316.2
Plywood & Veneer	0.0	0.0	70.4	0.0	7.7
Wood Containers	0.0	0.0	0.0	0.0	0.0
Misc. Wood Products	0.0	0.0	0.0	0.0	4.4
Household Furniture	0.0	0.0	0.0	0.0	0.0
Office Furniture	0.0	0.0	0.0	0.0	0.0
Public Furniture	0.0	0.0	0.0	0.0	0.0
Partitions & Shelving	0.0	0.0	0.0	0.0	0.0
Misc. Furniture	0.0	0.0	0.0	0.0	0.0
Pulp Mills	0.0	0.0	0.0	0.0	0.0
Paper Mills	0.0	0.0	0.0	0.0	530.4
Paperboard Mills	0.0	0.0	0.0	0.0	6,386.4
Converted Paper	0.0	0.0	0.0	0.0	0.0
Containers & Boxes	0.0	0.0	0.0	0.0	0.0
Building Paper	0.0	0.0	0.0	0.0	0.0

Industry Class	Oneida	Owyhee	Payette	Power	Shoshone
Timber Tracts	0.0	0.0	0.0	0.0	0.0
Forest Nurseries	0.0	0.0	0.0	0.0	0.0
Misc. Forest Products	0.0	0.0	0.0	0.0	0.0
Forestry Services	0.0	0.0	0.0	0.0	0.0
Logging	0.0	0.0	0.0	150.3	1,489.9
Sawmills	0.0	0.0	0.0	0.0	926.7
Plywood & Veneer	0.0	4,382.9	1,342.4	0.0	0.0
Wood Containers	0.0	0.0	0.0	0.0	0.0
Misc. Wood Products	0.0	0.0	624.8	0.0	295.9
Household Furniture	0.0	0.0	0.0	0.0	0.0
Office Furniture	0.0	0.0	0.0	0.0	0.0
Public Furniture	0.0	0.0	3,639.7	0.0	0.0
Partitions & Shelving	0.0	0.0	0.0	0.0	0.0
Misc. Furniture	0.0	0.0	181.7	0.0	0.0
Pulp Mill	0.0	0.0	0.0	0.0	0.0
Paper Mills	0.0	0.0	0.0	0.0	0.0
Paperboard Mills	0.0	0.0	0.0	0.0	0.0
Converted Paper	0.0	0.0	0.0	0.0	0.0
Building Paper	0.0	0.0	0.0	0.0	0.0

Table 4. Continued.

<u>Industry Class</u>	<u>Teton</u>	<u>Twin Falls</u>	<u>Valley</u>	<u>Washington</u>	<u>Multi-County</u>
Timber Tracts	0.0	0.0	0.0	0.0	0.0
Forest Nurseries	0.0	0.0	0.0	0.0	0.0
Misc. Forest Products	0.0	0.0	0.0	0.0	0.0
Forestry Services	0.0	0.0	21,602.9	0.0	7,195.3
Logging	99.9	0.0	3,507.2	881.4	377.2
Sawmills	1,585.3	74.3	3,695.2	449.4	0.0
Plywood & Veneer	0.0	39.8	0.0	1,463.2	8.7
Wood Containers	0.0	0.0	0.0	0.0	0.0
Misc. Wood Products	0.0	0.0	0.0	0.0	486.5
Household Furniture	0.0	32.7	0.0	0.0	0.0
Office Furniture	0.0	0.0	0.0	0.0	0.0
Public Furniture	0.0	0.0	0.0	0.0	0.0
Partitions & Shelving	0.0	0.0	0.0	0.0	202.7
Misc. Furniture	0.0	142.7	0.0	0.0	0.0
Pulp Mills	0.0	0.0	0.0	0.0	0.0
Paper Mills	0.0	0.0	0.0	0.0	0.0
Paperboard Mills	0.0	0.0	0.0	0.0	0.0
Converted Paper	0.0	0.0	0.0	0.0	0.0
Containers & Boxes	0.0	210.3	0.0	0.0	0.0
Building Paper	0.0	0.0	0.0	0.0	0.0
<u>Industry Class</u>	<u>State of Idaho</u>				
Timber Tracts	2.3				
Forest Nurseries	154.1				
Misc. Forest Products	0.0				
Forestry Services	1,244.3				
Logging	1,085.6				
Sawmills	1,244.2				
Plywood & Veneer	420.2				
Wood Containers	25.6				
Misc. Wood Products	158.9				
Household Furniture	32.1				
Office Furniture	0.6				
Public Furniture	31.6				
Partitions & Shelving	20.0				
Misc. Furniture	15.5				
Pulp Mills	0.0				
Paper Mills	28.2				
Paperboard Mills	339.2				
Converted Paper	1.4				
Containers & Boxes	36.7				
Building Paper	0.0				

Table 5. Excess employment and percent of total excess employment in Idaho's forest products industry, by county and industry class; basis: 1973 employment.

Industry Class	Ada		Adams		Bannock		Bear Lake	
	Exc. %	% Exc.	Exc. %	% Exc.	Exc. %	% Exc.	Exc. %	% Exc.
Timber Tracts	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Forest Nurseries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Misc. Forest Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Forestry Services	0.00	0.00	1.25	1.57	0.08	0.21	0.00	0.00
Logging	0.00	0.00	21.77	27.41	0.00	0.00	0.06	0.09
Sawmills	1.38	4.29	25.03	31.52	0.00	0.00	0.71	1.16
Plywood & Veneer	0.91	2.84	0.00	0.00	0.62	1.65	0.00	0.00
Wood Containers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Misc. Wood Products	0.00	0.00	0.92	1.16	0.00	0.00	0.00	0.00
Household Furniture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Office Furniture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Public Furniture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Partitions & Shelving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Misc. Furniture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pulp Mills	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paper Mills	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paperboard Mills	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Converted Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Containers & Boxes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FOREST INDUSTRY TOTAL	2.29	7.13	48.97	61.66	0.70	1.86	0.77	1.25
TOTAL AREA	32.11%	100.00%	79.42%	100.00%	33.79%	100.00%	61.62%	100.00%
Industry Class	Benewah		Bingham		Blaine		Boise	
	Exc. %	% Exc.	Exc. %	% Exc.	Exc. %	% Exc.	Exc. %	% Exc.
Timber Tracts	0.01%	0.02%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Forest Nurseries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Misc. Forest Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Forestry Services	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.25
Logging	18.74	27.40	0.00	0.00	0.06	0.10	17.97	20.23
Sawmills	12.60	18.43	0.00	0.00	0.00	0.00	36.08	40.62
Plywood & Veneer	16.90	24.72	0.00	0.00	0.00	0.00	25.38	28.58
Wood Containers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Misc. Wood Products	1.56	2.30	0.13	0.23	0.00	0.00	0.00	0.00
Household Furniture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Office Furniture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Public Furniture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Partitions & Shelving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Misc. Furniture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pulp Mills	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paper Mills	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paperboard Mills	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Converted Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Containers & Boxes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FOREST INDUSTRY TOTAL	49.83	72.86	0.13	0.23	0.06	0.10	79.70	89.70
TOTAL AREA	68.39%	100.00%	58.20%	100.00%	67.31%	100.00%	88.83%	100.00%

Source: Idaho Department of Employment. Unpublished Records. 1973.

U.S. Department of Commerce. Bureau of Economic Analysis. Unpublished Records. 1973.

Table 5. Continued

Industry Class	Bonner		Bonneville		Boundary		Butte	
	Exc. %	% Exc.	Exc. %	% Exc.	Exc. %	% Exc.	Exc. %	% Exc.
Timber Tracts	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Forest Nurseries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Misc. Forest Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Forestry Services	0.01	0.03	0.00	0.00	0.00	0.00	0.00	0.00
Logging	5.36	9.53	0.06	0.15	6.89	10.67	0.00	0.00
Sawmills	23.56	41.92	0.00	0.00	26.07	40.37	8.31	12.09
Plywood & Veneer	0.00	0.00	0.00	0.00	0.02	0.02	0.00	0.00
Wood Containers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Misc. Wood Products	4.04	7.18	0.00	0.00	3.11	4.81	0.00	0.00
Household Furniture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Office Furniture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Public Furniture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Partitions & Shelving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Misc. Furniture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pulp Mills	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
paper Mills	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paperboard Mills	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Converted Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Containers & Boxes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FOREST INDUSTRY TOTAL	32.97	58.66	0.07	0.15	36.09	55.89	8.31	12.09
TOTAL AREA	56.20%	100.00%	42.45%	100.00%	64.57%	100.00%	68.73%	100.00%

Industry Class	Camas		Canyon		Caribou		Cassia	
	Exc. %	% Exc.	Exc. %	% Exc.	Exc. %	% Exc.	Exc. %	% Exc.
Timber Tracts	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Forest Nurseries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Misc. Forest Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Forestry Services	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Logging	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sawmills	29.16	35.90	0.00	0.00	0.00	0.00	0.00	0.00
Plywood & Veneer	0.00	0.00	2.62	5.65	0.00	0.00	0.00	0.00
Wood Containers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Misc. Wood Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Household Furniture	0.00	0.00	0.83	1.79	0.00	0.00	0.00	0.00
Office Furniture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Public Furniture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Partitions & Shelving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Misc. Furniture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pulp Mills	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
paper Mill	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paperboard Mills	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Converted Paper	0.00	0.00	0.00	0.00	0.00	0.00	1.84	3.41
Containers & Boxes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FOREST INDUSTRY TOTAL	29.16	35.90	3.44	7.46	0.00	0.00	1.84	3.41
TOTAL AREA	81.22%	100.00%	46.23%	100.00%	69.27%	100.00%	53.93%	100.00%

Table 5. Continued.

Industry Class	Clark		Clearwater		Custer		Elmore	
	Exc. %	% Exc.	Exc. %	% Exc.	Exc. %	% Exc.	Exc. %	% Exc.
Timber Tracts	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Forest Nurseries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Misc. Forest Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Forestry Services	0.00	0.00	2.67	4.03	0.00	0.00	0.00	0.00
Logging	1.91	2.29	23.91	36.06	1.21	1.74	0.00	0.00
Sawmills	0.00	0.00	8.32	12.55	0.00	0.00	2.86	4.97
Plywood & Veneer	0.00	0.00	10.28	15.51	0.00	0.00	0.00	0.00
Wood Containers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Misc. Wood Products	0.00	0.00	1.61	2.42	0.00	0.00	0.00	0.00
Household Furniture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Office Furniture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Public Furniture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Partitions & Shelving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Misc. Furniture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pulp Mills	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paper Mills	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paperboard Mills	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Converted Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Containers & Boxes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FOREST INDUSTRY TOTAL	1.91	2.28	46.79	70.56	1.21	1.74	2.86	4.97
TOTAL AREA	83.34%	100.00%	66.29%	100.00%	69.81%	100.00%	57.57%	100.00%

Industry Class	Franklin		Fremont		Gem		Gooding	
	Exc. %	% Exc.	Exc. %	% Exc.	Exc. %	% Exc.	Exc. %	% Exc.
Timber Tracts	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Forest Nurseries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Misc. Forest Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Forestry Services	0.00	0.00	0.11	0.19	0.00	0.00	0.00	0.00
Logging	0.00	0.00	3.62	5.87	2.77	4.05	0.00	0.00
Sawmills	1.68	2.56	5.88	9.55	29.45	43.11	0.00	0.00
Plywood & Veneer	0.00	0.00	0.00	0.00	6.16	9.02	0.00	0.00
Wood Containers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Misc. Wood Products	0.00	0.00	0.00	0.00	0.00	0.00	0.66	1.11
Household Furniture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Office Furniture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Public Furniture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Partitions & Shelving	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.08
Misc. Furniture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pulp Mills	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paper Mills	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paperboard Mills	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Converted Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Containers & Boxes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FOREST INDUSTRY TOTAL	1.68	2.56	9.62	15.62	38.38	56.19	0.71	1.20
TOTAL AREA	65.77%	100.00%	61.60%	100.00%	68.30%	100.00%	59.31%	100.00%

Table 5. Continued

Industry Class	Idaho		Jefferson		Jerome		Kootenai	
	Exc. %	% Exc.	Exc. %	% Exc.	Exc. %	% Exc.	Exc. %	% Exc.
Timber Tracts	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Forest Nurseries	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.03
Misc. Forest Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Forestry Services	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.06
Logging	7.68	11.95	0.00	0.00	0.00	0.00	2.26	4.71
Sawmills	28.11	43.77	0.00	0.00	0.00	0.00	15.19	31.61
Plywood & Veneer	0.00	0.00	0.00	0.00	0.00	0.00	3.05	6.34
Wood Containers	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.21
Misc. Wood Products	1.19	1.84	0.00	0.00	0.00	0.00	0.03	0.06
Household Furniture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Office Furniture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Public Furniture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Partitions & Shelving	0.00	0.00	0.62	0.98	0.00	0.00	0.00	0.00
Misc. Furniture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pulp Mills	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paper Mills	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paperboard Mills	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Converted Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Containers & Boxes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FOREST INDUSTRY TOTAL	36.98	57.56	0.62	0.98	0.00	0.00	20.68	43.05
TOTAL AREA	64.24%	100.00%	63.27%	100.00%	59.71%	100.00%	48.04%	100.00%

Industry Class	Latah		Lemhi		Lewis		Lincoln	
	Exc. %	% Exc.	Exc. %	% Exc.	Exc. %	% Exc.	Exc. %	% Exc.
Timber Tracts	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Forest Nurseries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Misc. Forest Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Forestry Services	0.00	0.00	0.00	0.00	0.37	0.54	0.00	0.00
Logging	3.23	5.85	7.55	12.47	12.06	17.46	0.00	0.00
Sawmills	6.25	11.31	5.34	8.83	11.14	16.13	0.00	0.00
Plywood & Veneer	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood Containers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Misc. Wood Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Household Furniture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Office Furniture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Public Furniture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Partitions & Shelving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Misc. Furniture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pulp Mills	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paper Mills	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paperboard Mills	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Converted Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Containers & Boxes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FOREST INDUSTRY TOTAL	9.48	17.17	12.90	21.31	23.57	34.13	0.00	0.00
TOTAL AREA	55.23%	100.00%	60.54%	100.00%	69.06%	100.00%	72.18%	100.00%

Table 5. Continued.

Industry Class	Madison		Minidoka		Nez Perce		Oneida	
	Exc. %	% Exc.	Exc. %	% Exc.	Exc. %	% Exc.	Exc. %	% Exc.
Timber Tracts	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Forest Nurseries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Misc. Forest Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Forestry Services	0.00	0.00	0.00	0.00	0.03	0.07	0.00	0.00
Logging	0.16	0.27	0.00	0.00	0.22	0.50	0.00	0.00
Sawmills	1.93	3.25	0.00	0.00	14.20	30.90	0.00	0.00
Plywood & Veneer	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood Containers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Misc. Wood Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Household Furniture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Office Furniture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Public Furniture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Partitions & Shelving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Misc. Furniture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pulp Mills	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paper Mills	0.00	0.00	0.00	0.00	1.14	2.48	0.00	0.00
Paperboard Mills	0.00	0.00	0.00	0.00	6.36	13.84	0.00	0.00
Converted Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Containers & Boxes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FOREST INDUSTRY TOTAL	2.10	3.52	0.00	0.00	21.98	47.81	0.00	0.00
TOTAL AREA	59.55%	100.00%	63.91%	100.00%	46.00%	100.00%	71.11%	100.00%

Industry Class	Owyhee		Payette		Power		Shoshone	
	Exc. %	% Exc.	Exc. %	% Exc.	Exc. %	% Exc.	Exc. %	% Exc.
Timber Tracts	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Forest Nurseries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Misc. Forest Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Forestry Services	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Logging	0.00	0.00	0.00	0.00	0.06	0.08	1.73	2.49
Sawmills	0.00	0.00	0.00	0.00	0.00	0.00	2.79	4.07
Plywood & Veneer	13.55	20.26	3.93	6.39	0.00	0.00	0.00	0.00
Wood Containers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Misc. Wood Products	0.00	0.00	0.78	1.28	0.00	0.00	0.29	0.42
Household Furniture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Office Furniture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Public Furniture	0.00	0.00	1.43	2.33	0.00	0.00	0.00	0.00
Partitions & Shelving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Misc. Furniture	0.00	0.00	0.03	0.05	0.00	0.00	0.00	0.00
Pulp Mills	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paper Mills	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paperboard Mills	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Converted Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Containers & Boxes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FOREST INDUSTRY TOTAL	13.55	20.26	6.18	10.06	0.06	0.08	4.81	6.92
TOTAL AREA	66.88%	100.00%	64.46%	100.00%	80.51%	100.00%	69.52%	100.00%

Table 5. Continued.

Industry Class	Teton		Twin Falls		Valley		Washington	
	Exc. %	% Exc.	Exc. %	% Exc.	Exc. %	% Exc.	Exc. %	% Exc.
Timber Tracts	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Forest Nurseries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Misc. Forest Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Forestry Services	0.00	0.00	0.00	0.00	1.22	1.81	0.00	0.00
Logging	0.00	0.00	0.00	0.00	4.24	6.31	0.97	1.57
Sawmills	5.00	6.98	0.00	0.00	12.11	18.02	1.18	1.90
Plywood & Veneer	0.00	0.00	0.00	0.00	0.00	0.00	4.31	6.97
Wood Containers	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Misc. Wood Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Household Furniture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Office Furniture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Public Furniture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Partitions & Shelving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Misc. Furniture	0.00	0.00	0.02	0.04	0.00	0.00	0.00	0.00
Pulp Mills	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paper Mills	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paperboard Mills	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Converted Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Containers & Boxes	0.00	0.00	0.37	0.85	0.00	0.00	0.00	0.00
Building Paper	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FOREST INDUSTRY TOTAL	5.00	6.98	0.39	0.89	17.57	25.14	6.46	10.44
TOTAL AREA	71.71%	100.00%	43.51%	100.00%	67.22%	100.00%	61.89%	100.00%

Industry Class	Multi-County		State of Idaho	
	Exc. %	% Exc.	Exc. %	% Exc.
Timber Tracts	0.00%	0.00%	0.00%	0.00%
Forestry Nurseries	0.00	0.00	0.00	0.00
Misc. Forest Products	0.00	0.00	0.00	0.00
Forestry Services	0.40	0.65	0.06	0.20
Logging	0.34	0.56	1.23	3.76
Sawmills	0.00	0.00	3.86	11.81
Plywood & Veneer	0.00	0.00	1.01	3.10
Wood Containers	0.00	0.00	0.00	0.00
Misc. Wood Products	0.58	0.94	0.09	0.27
Household Furniture	0.00	0.00	0.00	0.00
Office Furniture	0.00	0.00	0.00	0.00
Public Furniture	0.00	0.00	0.00	0.00
Partitions & Shelving	0.08	0.14	0.00	0.00
Misc. Furniture	0.00	0.00	0.00	0.00
Pulp Mills	0.00	0.00	0.00	0.00
Paper Mills	0.00	0.00	0.00	0.00
Paperboard Mills	0.00	0.00	0.24	0.74
Converted Paper	0.00	0.00	0.00	0.00
Containers & Boxes	0.00	0.00	0.00	0.00
Building Paper	0.00	0.00	0.00	0.00
FOREST INDUSTRY TOTAL	1.41	2.28	6.49	19.88
TOTAL AREA	61.93%	100.00%	32.65%	100.00%

Table 6. Short run economic base multipliers for Idaho, by county; basis: 1973 employment.

Counties in Idaho	Multiplier Criterion		
	Any Excess	0.1% Excess	1.0% Excess
Ada	1.183	1.215	2.077
Adams	1.096	1.099	1.166
Bannock	1.224	1.268	2.022
Bear Lake	1.104	1.122	1.286
Benewah	1.101	1.140	1.326
Bingham	1.252	1.317	1.508
Blaine	1.175	1.196	1.381
Boise	1.013	1.013	1.030
Bonner	1.228	1.276	1.491
Bonneville	1.264	1.381	1.979
Boundary	1.109	1.119	1.246
Butte	1.053	1.056	1.124
Camas	1.046	1.046	1.063
Canyon	1.345	1.399	1.680
Caribou	1.108	1.133	1.446
Cassia	1.169	1.224	1.495
Clark	1.037	1.037	1.042
Clearwater	1.158	1.192	1.414
Custer	1.066	1.066	1.181
Elmore	1.163	1.176	1.460
Franklin	1.162	1.169	1.358
Fremont	1.144	1.181	1.325
Gem	1.213	1.225	1.413
Gooding	1.087	1.104	1.286
Idaho	1.246	1.266	1.474
Jefferson	1.190	1.203	1.348
Jerome	1.166	1.204	1.439
Kootenai	1.239	1.268	1.626
Latah	1.281	1.318	1.505
Lemhi	1.110	1.126	1.352
Lewis	1.047	1.052	1.200
Lincoln	1.071	1.090	1.235
Madison	1.132	1.159	1.662
Minidoka	1.300	1.314	1.552
Nez Perce	1.264	1.315	1.771
Oneida	1.041	1.047	1.163
Owyhee	1.048	1.059	1.199
Payette	1.183	1.198	1.500
Power	1.164	1.199	1.268
Shoshone	1.240	1.275	4.419
Teton	1.043	1.052	1.091
Twin Falls	1.181	1.208	1.690
Valley	1.091	1.105	1.203
Washington	1.092	1.111	1.345
Multi-County Firms	1.064	1.093	1.382
Total Idaho	1.281	1.384	1.992

Source: Idaho Department of Employment. Unpublished Records, 1973.
U.S. Department of Commerce. Bureau of Economic Analysis.
Unpublished records, 1973.

-- Other Publications --

on

Idaho's Forest Products Industry

The sawmilling industry of northern Idaho, 1964	Ag. Exp. Stat. Bul. 430
The consumer of cut-up lumber, 1966	FWR Stat. Pap. 1
Destination of lumber produced in Idaho, 1967	FWR Stat. Note 8
The sawmilling industry of southern Idaho, 1967	Ag. Exp. Stat. Bul. 491
List of bark utilization and marketing publications, 1970 . .	unnumbered
Kiln drying publications.	unnumbered
The production of bark in Idaho's forest industries, 1973 . .	FWR Stat. Note 20
Employment and wages in Idaho's forest products industry 1974	FWR Inf. Ser. 5

-- Forthcoming Publications --

from the

Idaho Forest Industry Study

concern

- . . . Directory -- Idaho's Forest Products Industry.
- . . . Origin and destination of Idaho's timber, 1967 and 1972.
- . . . Future availability of timber in Idaho, 1978 and 1983.
- . . . Timber cut and employment in Idaho, 1972.

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