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The Location Decision of Hardwood Manufacturing in the Northern and Central Appalachian States

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This study's objective is to identify and understand the factors important to hardwood processors' location decisions in the northern and central Appalachian region. Concepts from neoclassical and behavioral location theories were integrated to develop a general framework for analyzing these decisions. Logit regression analysis was used to determine those establishment characteristics related to the likelihood of location search. To a great extent, establishments locate based on personal ties and do not conduct searches. Most variables found to influence the likelihood of search are not controllable by state or local governments. The implications are that existing establishments should be targeted for retention and expansion, rather than focusing on recruitment.

The northern and central Appalachian region[1] of the United States has seen a revival of federal, state, and local interest in hardwood-based economic development (Bodenman, Jones, and Stanturf). In several states and communities, this interest has been stimulated by severe employment cutbacks in traditional manufacturing and extractive industries. In others it has emerged from the realization that regional timber resources are becoming more valuable and that there must be ways to use them to foster economic development, particularly rural economic development. Forests are a rural resource, and any potential for forest-based economic development is a rural opportunity.

The forests of the northern and central Appalachian region contain the largest storehouse of quality hardwood timber of any region in the country—29% of the United States' total hardwood growing stock (Waddle, Oswald, and Powell). The most recently completed state forest surveys indicate that the region's net annual growth of hardwood growing stock on commercial forest land greatly exceeds timber removals.[2] Endowed with this abundant wood supply, the region can sustain a timber harvest and support a hardwood industry of at least twice the present size (Strauss and Lord; Michaels, Stone, and Sendak).

The U.S. Forest Service also recognized the opportunity, having submitted in 1989, and updated in 1991, a proposed five-year Rural Development Initiative to Congress (U.S. Department of Agriculture 1989, 1991). The plan states that renewable natural resources represent the single most significant opportunity for strengthening the economy and improving the quality of life in many rural communities. The goals of the plan are to combine the resources of federal, state, and local governments into an effective partnership, with the primary objectives being to create jobs, attract value-added manufacturing, and improve the economic well-being of rural communities.

Evaluation of state and interstate programs to encourage forest-based economic development (Jones and Koester) indicates that the majority of industrialization programs currently in place, particularly those involving grants, loans, and tax concessions, implicitly assume that wood-products manufacturers conduct location searches. Likewise, the assumption of perfect information made

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The authors thank the *Journal*'s anonymous reviewers for their helpful comments. Support for this project was provided by the United States Forest Service, Northeastern Forest Experiment Station Cooperative Agreement no. 23-445, and The Pennsylvania State University Agricultural Experiment Station.

[1] States in the region are Connecticut, Maryland, Massachusetts, New Hampshire, New York, Ohio, Pennsylvania, Vermont, Virginia, and West Virginia.

[2] Aggregated forest-inventory information was provided by the USDA Forest Service, Northeastern and Southeastern Forest Experiment Stations.

in location theory implies that firms conduct a location search, taking into account all available data in the process of making a profit-maximizing location decision. Behavioral theorists maintain, however, that firms may not conduct location searches to the extent implied by classical theory and previous research (Cyert and March), suggesting that most location and expansion decisions may be outside the influence of state and local economic-development policy.

The overall goal of this study is to identify factors and important relationships among factors that influence the likelihood of a hardwood manufacturing firm conducting a location search. Proper understanding of these factors and relationships is key to successful implementation of forest-based economic development programs and will help government and development organizations foster growth of the hardwood industry in their respective states and communities.

Conceptual Framework

Despite the high level of interest in forest-based economic development, little analysis of investment decisions in the wood-processing industry has been done. To provide a basis for capturing the potential economic benefits of the hardwood resource, research is needed to identify and understand the factors important to hardwood manufacturers' location and expansion decisions. That is, an answer is needed to the question of why wood-processing firms invest in a given state or community, and why they do *not* invest there. The search for the answer must be focused on three levels: (1) the creation of a new company, either by local, state, or out-of-state entrepreneurs; (2) the establishment of a branch plant by an existing firm, with headquarters either in the state, neighboring states, or out of the region; and (3) the on-site expansion of a plant already operating in the state. Such a focus is necessary because the different physical, technological, and organizational structures of each type of firm cause them to view market opportunities differently. Thus, the criteria upon which they base investment and location decisions may also differ.

Neoclassical location theory provides a conceptual framework for analyzing the investment decision of the hardwood manufacturing firm (Smith; Greenhut; Losch; Weber). The theory holds that a firm's investment decision is directly related to expected profits, which depend on factors influencing cost and revenues. General factors that influence this decision may be separated into four types: (1) those that affect the demand for output; (2) those that affect cost of production at a particular location; (3) nonmarket factors, such as quality of life, the natural environment, and personal considerations, that may affect the attractiveness of a particular location as a place to live and do business; and (4) organizational aspects of the firm, such as whether ownership is local or nonlocal and whether the plant is a single unit, branch, or headquarters operation. The weight of these general factors and the specific factors within each will determine whether a plant locates near the raw-material resource, the market, or elsewhere.

Since obtaining both current and future information about prices, markets, and costs is expensive, the process of acquiring information will directly affect location decisions. If the costs associated with search (time, effort, financial) increase, but at a decreasing rate as project size increases, firms undertaking larger projects could be expected to search more than those undertaking smaller projects (Schmenner; Browning). Similarly, since information obtained in a search for new locations by a multiunit firm can be used by units other than the prospective venture, such firms, controlled for size, would be expected to seach more widely than single-unit firms. This type of behavior has been confirmed in survey research (Oster; Wise; Stevens and Brackett). It implies that many firms will not necessarily locate at the least-cost production site, excluding search costs. Further, the existence of search costs helps to explain the tendency for a great majority of firms to relocate close to the prior location (Schmenner; Wolman).

A project with net revenues that are less certain at one location than another (but with the same expected level) is likely to have a higher cost of capital at the less certain location. It is likely that most firms feel more confident (i.e., have more information at a lower level of search costs) at present locations than at distant alternative locations that may be less costly. This aspect of uncertain futures, when added to the cost of search for present information, leads to a potentially large bias in favor of expansion at present sites for existing firms and for new firms to be started in areas familiar to the entrepreneur (Moriarity; Malinowsky and Kinnard). Willingness to search and choose new locations over existing ones should increase with company and project size as returns to scale are realized (Schmenner; Oster).

One method used by firms to reduce search costs is to make location decisions in several stages. Surveys and interviews with business decision makers indicate that most large firms tend to select a location in at least two stages (Moriarity;

Vaughn; McMillian; Stevens and Brackett). First, a region (perhaps a state or larger) is selected on the basis of such factors as the size of the potential market, the general level of factor costs, or the existence of a reliable supply of natural resources. Then within that region a number of communities are examined in much greater detail, considering such information as the cost and availability of different types of labor, land, transportation, taxes, and other spatially varying factors (Schmenner; Browning). This two-stage process clearly reduces the amount of costly information that would be required if all sites were investigated.

Behavioral location theorists hold that firms do not try to maximize or minimize any single variable or overall objective in a location decision; they try to obtain satisfactory rather than optimal results—"profit satisficing," for example, rather than profit maximizing (Cyert and March; Baumol). The actual location search is strongly influenced by the firm's projected production needs based on the goals of the firm, that is, entry into new markets, maintenance of market share, product diversification, or a new production process (Cyert). Profit satisficing may provide much of the explanation for firms' willingness to search for only an acceptable location. Broadly speaking, firms will tend to choose sites where an acceptable level of sales is essentially guaranteed (Richardson; Webber).

In the case of a relocation decision, the tendency of the firm under uncertainty will be to replicate previous behavior either by remaining at the original location or moving only a short distance so as to avoid disrupting contacts with existing suppliers and customers. Unsure about competitive reactions, strict profit maximization becomes tempered with a desire for secure profits and will lead to locational choices that are less risky and more defensive (Rees and Stafford).

Collins and Walker found that few firms either perceive the location problem (whether initial location of a new plant or any other kind of location decision) as important enough or have the financial and staff resources to conduct an in-depth, or even any, location survey prior to making a decision. Small firms in particular rarely do so because for them the choice of a new location is, in effect, a once-and-for-all decision usually not premeditated unless later "stress" conditions necessitate it. In general, the problem is assigned to a manager, experience is lacking as to what variables to investigate beyond a narrow set, and the pressure of time prevents an orderly and thorough approach to information collection and processing.

While each approach contributes to understanding the location decision, incorporating behavioral concepts into the neoclassical approach to investment greatly enhances the development of a general framework. Recognizing that profits depend in part on the location of future sellers and consumers, firms must try to secure a location that will be reasonably good (at least allow them to stay in business) regardless of what other firms decide. By relaxing the assumption of perfect information and placing emphasis on the actual decision-making environment, the costs associated with location search, and the relationship between organizational aspects of the firm and likelihood of location search, behavioral theory provides a broader perspective to the location decision of the modern firm.

Data and Methodology

Two general industry groups were selected for study, lumber and wood products (SIC—Standard Industrial Classification—24) and furniture and fixtures (SIC 25). In both of these groups, logs and cut lumber are primary inputs in manufacturing, as opposed to pulp, which is the primary input for paper and allied products (SIC 26). The paper industry was excluded from the study because the current industry structure, technology and related size economies, and environmental regulatory requirements limit its potential for growth in the region. The types of hardwood processors examined were those that produced lumber (SIC 2421), hardwood dimension and flooring (SIC 2426), millwork (SIC 2431), wood kitchen cabinets (SIC 2434), hardwood veneer and plywood (SIC 2435), structural wood members (SIC 2439), nailed wood boxes (SIC 2441), pallets (SIC 2448), containers (SIC 2449), and furniture and fixtures (SIC 2511, 2521, 2531, and 2541).

The data are from a mail survey of 2,002 wood manufacturing establishments in the ten-state region. The sample was drawn from the 1990 Harris Industrial Manufacturing Directory, which lists virtually every firm operating in a state through 1989. A random sample of the 5,336 companies was drawn, stratified by size, state, and SIC category. Half of the sample was from Ohio and Pennsylvania, and half from the remaining eight states.

The survey method followed Dillman and consisted of four contacts during February and March, 1990: an initial mailing with questionnaire, a follow-up post-card reminder, and two other mailings with questionnaires. The original sample was reduced to 1,818 after deleting undeliverables and firms that were out of business. The total usable

response rate was 56%. The sample was further reduced by excluding establishments that did not use hardwood, leaving a final sample of 642 establishments. For further detail on the sample and returns, see Bodenman.

The model examined is of the following form:

$$(1) \qquad Y = f(S_1, \ldots, S_n; T_1, \ldots, T_n; W_1, \ldots, W_n; X_1, \ldots, X_n; Z_1, \ldots, Z_n),$$

where Y is a dichotomous variable equal to 1 if the firm conducted a multiple-site search, and equal to zero if not. Firms were classified into these categories based on their answer to the question, "Did your company go through a location-search process during which you considered several different locations before you decided upon this site?" Searches within a community were not counted. S's are organizational aspects related to size of the establishment; T's are establishment characteristics related to ownership; W's are establishment profile variables related to resource orientation; X's are establishment profile variables related to market orientation; and Z's are general location factors drawn from location theory and previous manufacturing location research.

A dichotomous dependent-variable logit model is used to empirically examine the hypothesized relationship. This model was chosen over ordinary least squares (OLS) regression because the response variable is not continuous, thus violating a basic assumption of OLS regression (Gujarati). If a dichotomous dependent variable is used in OLS regression, the expected value of Y is a weighted average of the two possible values of Y. Given the dichotomous nature of the dependent variable, parameters (probabilities) must lie between zero and 1. Parameter predictions generated using OLS, however, may take values from negative to positive infinity—not meaningful given the interpretation of the parameters of probabilities. Aldrich and Nelson, and Maddala, therefore, suggest the dichotomous dependent-variable logit model as an alternative to OLS models for qualitative dependent variables. The logit model is

$$(2) \qquad P(Y = 1|X) = \exp(\Sigma b_k X_k)/[1 + \exp(\Sigma b_k X_k)],$$

where X denotes the set of K independent variables, and b denotes the set of K unknown parameters. Maximum-likelihood estimation is used to estimate logit parameters that imply the highest probability or likelihood of having obtained the observed sample Y.

Variables hypothesized to be negatively related to likelihood of a multiple-site location search were degree of local ownership, percent of sales made in-state, percent of wood-raw-materials purchases made in-state, percentage of wood raw material that is hardwood, wood raw materials as a percent of total cost, degree of value added (primary processor, or not), nonmetropolitan county status (nonmetropolitan county location, or not), individual ownership, and location in Pennsylvania. Establishment size, previous location, and establishment type (branch, headquarters, or single unit) were hypothesized as being positively related to location search. Two additional dummy variables were included, establishment size and firm type. Descriptive findings indicated establishments with 50 or more employees were more likely to conduct a location search than establishments with fewer than 50 employees. If the establishment had 50 or more employees when production began, the dummy variable for establishment size equals 1; otherwise the variable equals zero. Earlier analysis also indicated that establishment type—headquarters, branch, or single unit—could be defined as a dummy variable. Cross-tabulation of location search by establishment type revealed no significant difference between headquarters and single-unit operations. Thus, if the establishment is a branch plant, the dummy variable for establishment type equals 1; otherwise the variable equals zero. The list of independent variables, their means, and expected relationship to location search are in Table 1.

Results

One of the most significant findings of this study is that few hardwood manufacturing establishments conducted location searches in which data on multiple sites was considered. The study found that 74% of the hardwood manufacturing establishments surveyed did not conduct a multiple-site search, and that only 18% considered relocating or expanding their operations in another state or community. Of those establishments that did conduct a location search, 42% previously had been located elsewhere, and 87% of those were relocations within the same state.

For the 26% of the establishments that conducted a location search, the search process was as follows: (1) less than 1% of the establishments that conducted a location search considered a location outside of the United States; (2) 15% (4% of all respondents) first selected a region or section of the nation larger than the state in which to locate; (3) 29% (8% of all respondents) considered another state(s) besides the state in which they located; and (4) 93% (24% of all respondents) considered other communities besides the one in

Table 1. Independent Variables: Description, Mean or Percent, Standard Deviation, and Expected Sign

Description	Mean/%	Standard Deviation	Expected Sign of Coefficient
Employment when production began	14.562	25.621	+
Current (1990) employment	34.694	59.934	+
Percent owned by county residents	72.657	43.064	−
Percent of sales made in-state	59.473	36.872	−
Percent of wood raw materials purchased in-state	59.570	38.712	−
Percent of wood raw material that is hardwood	69.740	34.630	−
Percent expenditures for wood raw materials as a percent of total operating costs	46.872	24.878	−
Previously located elsewhere, or not	27.7%	0.448	+
Primary processor, or not	15.5%	0.362	−
Branch-plant operation, or not	7.9%	0.269	+
Individually owned, or not	42.6%	0.495	−
Nonmetropolitan county location, or not	41.3%	0.493	−
Located in state of Pennsylvania, or not	24.2%	0.429	−
50 or more employees when production began	17.2%	0.388	+

which they located. Further detail on location search by type of plant is shown in Table 2.

The large majority (72%) of hardwood manufacturing establishments examined had fewer than 50 employees in 1990, and 84% were single-unit, individually owned establishments. About 60% were located in metropolitan counties. However, two industries—saw and planing mills, and hardwood dimension and flooring—had a majority of establishments located in nonmetropolitan counties. These two industries also were the lowest value-added industries examined.

Table 3 presents the results of the logit analysis. Three models are presented. The first model includes all variables hypothesized to influence location search. Models 2 and 3 exclude different sets of statistically insignificant variables to examine effects on coefficients and significance of the remaining variables. The chi-square statistics indicate that all models were significant at greater than the .01 level. Thus, the independent variables, taken together, strongly influence location search.

Table 2. Profile of Sampled Hardwood Manufacturing Establishments, by Location Search

	Percent Conducting Search
Metro location	30.0%
Nonmetro location	21.2
Single-unit plant	24.0
Headquarters plant	26.3
Branch plant	53.3
<50 employees	24.3
≥50 employees	35.9

The pseudo R^2 for each of the models implies that 31% of the variation in the dependent variable is explained by the logit model. Overall, regression coefficients in each of the models had signs as expected. Only the variable "employment when production began'" had a sign that contradicted expectations. However, the variable was statistically insignificant and dropped from subsequent models.

The first variable examined is previous location, coded 1 if the establishment was previously located elsewhere and zero if not. Establishments previously located elsewhere are expected to be more likely to conduct a location search than establishments that were not. The coefficient sign is positive and significant at the .01 level in all three models. The variable's chi-square values in each of the three models indicate that previous location is one of the most influential variables related to location search.

Three employment-related variables were examined—employment when production began, current (1990) employment, and the dummy variable for establishment size when production began. Results for Model 1 indicate that none of the three variables are significant. Both employment when production began and current (1990) employment were dropped in Model 2 to examine possible effects of the dummy variable for establishment size. The dummy variable's level of significance did not improve, however. Different size categories were tried in successive runs of the same model (i.e., fewer than 10 employees; greater than 25 employees), but parameter estimates were even less significant. Previous research does indicate that "firm" size determines the extent of location search (Schmenner; Browning) but does not exam-

Table 3. Logit Models of Hardwood Manufacturing Establishment Location Search

Variable Name	Model 1	Model 2	Model 3
Intercept	0.4583	0.2385	−0.0944
	(0.94)[a]	(0.44)	(0.14)
Previously located elsewhere, or not	0.9449	0.9686	0.9233
	(14.48)****[b]	(17.41)****	(18.08)****
Employment when production began	−0.0016	—	—
	(0.09)		
Current (1990) employment	0.0002	—	—
	(0.00)		
50 or more employees when production began	0.3436	0.2336	—
	(0.71)	(0.73)	
Percent owned by county residents	−0.0107	−0.0096	−0.0089
	(16.52)****	(15.41)****	(14.61)****
Percent of sales made in-state	−0.0070	−0.0053	−0.0056
	(4.11)***	(2.76)**	(3.85)***
Percent of wood raw materials purchased in-state	−0.0042	−0.0030	—
	(1.78)	(1.06)	
Percent of wood raw material that is hardwood	−0.0004	—	—
	(0.00)		
Percent expenditures for wood raw materials as a percent of total operating costs	−0.0058	−0.0058	—
	(1.23)	(1.63)	
Primary processor, or not	0.1365	—	—
	(0.19)		
Branch-plant operation, or not	0.3733	0.5484	0.6082
	(0.80)	(2.14)*	(2.80)**
Individually owned, or not	−0.6335	−0.5261	−0.6872
	(6.63)***	(5.16)***	(9.72)***
Nonmetropolitan county location, or not	−0.4290	−0.3225	−0.3705
	(2.78)**	(1.82)	(2.85)**
Located in state of Pennsylvania, or not	−0.0778	—	—
	(0.08)		
Pseudo R^2	.315	.312	.311
Chi-square	86.17****	77.50****	76.97****

[a]Figures in parentheses are chi-square values.
[b]Significance levels: **** = .01; *** = .05; ** = .10; * = .15.

ine "establishment" size. Firm size, however, is picked up to a certain extent by the dummy variable for ownership (individually owned, or not). Firms with branch plant operations are generally larger firms with specialized production processes and/or production for several markets. In Model 1, the dummy variable for establishment type (branch plant operation, or not) is not significant at the .15 level. However, the variable is significant at the .10 level in Model 3 when the insignificant employment variables and in-state purchases of wood raw material are dropped from the model.

Two of the most consistently influential variables in all three models are the percentage of the establishment owned by county residents and the establishment's ownership structure—individually owned versus owned by multiple interests (corporations or partnerships). The higher the percentage of local ownership, the less likely the establishment is to conduct a location search. Also, individually owned and operated establishments are less likely to conduct multiple-site location searches than are multiple-interest establishments structured as corporations and/or partnerships.

Six of the variables examined were proxies for resource orientation: in-state purchases of wood raw material, percent of wood raw material that is hardwood, expenditures for wood raw material as a percent of total operating costs, level of value added (primary processor, or not), state where establishment is located (located in Pennsylvania, or not), and nonmetropolitan county location, or not. In general, resource-oriented establishments were hypothesized to be less likely to conduct multiple-site location searches than establishments that are not resource-oriented.

Model 1 shows that three of the resource orientation proxies—in-state purchases of wood raw material, percent of expenditures for wood raw material, and percent of wood raw material that is hardwood—were negatively related to location search, as expected, but not statistically sig-

nificant at the .15 level. The variables remained insignificant even when other insignificant variables were dropped in Model 2. Apparently, these variables do not strongly influence likelihood of location search in the study region.

The dummy variable for state(s) where located was introduced to examine whether establishments located in certain states or combinations of states were more likely to conduct a location search. The variable was coded 1 if the establishment was located in Pennsylvania and zero if otherwise. Pennsylvania was chosen for three reasons. First, Pennsylvania had the greatest number of hardwood manufacturing establishments in the study region. Second, establishments from Pennsylvania, on average, purchased the largest percentage of their wood raw material in-state (over 66%). And third, nearly 74% (the highest in all the states) of the wood raw material processed by Pennsylvania establishments was hardwood. As expected, location in Pennsylvania reduced the likelihood of search. The relationship itself, however, was not statistically significant at the .15 level.

Primary processors (saw and planing mill operations) are hypothesized to be resource-oriented and, therefore, less likely to conduct a multiple-site location search. Coded 1 if the establishment was a saw and planing mill operation and zero if otherwise, the estimated coefficient was negative (as expected) but statistically insignificant at the .15 level. Other industries and combinations of industries were examined, including higher value-added industries such as kitchen cabinets, and furniture and fixtures, but none of the other industries or combinations of industries were found to be significantly related to location search. Thus, likelihood of location search does not appear to vary significantly by industry.

The last proxy for resource orientation is nonmetropolitan county location. Nonmetropolitan county location is hypothesized to be negatively related to location search, assuming that establishments located in nonmetropolitan counties are located close to their wood raw materials. The results indicate that nonmetropolitan county location is both negatively and statistically significantly related to location search. Thus, nonmetropolitan location significantly reduces the likelihood of location search.

Percentage of final product sales made in-state is a proxy for local market orientation. As the percentage of sales made in-state increases, likelihood of a multiple-site search is hypothesized to decrease. This relationship is confirmed, as the estimated coefficient is both negative and significant. Local market orientation, as measured by a higher level of sales in-state, therefore, significantly reduces the likelihood of location search.

Summary and Policy Implications

States in the northern and central Appalachian region are increasingly recognizing the employment and economic potential of their hardwood forest resources. Programs have been established to foster the growth of hardwood manufacturing. Most are based on the traditional assumption, in both theory and practice, that new firms will move into a state or branch plants will be established. This approach implies that a location search will be conducted. The goal of this study was to examine the location decision of a sample of hardwood manufacturing firms in the region and to identify the factors that influenced whether or not a search was conducted.

Logit regression analysis was used to determine establishment characteristics related to likelihood of location search. Two establishment characteristics were positively related to likelihood of search and were statistically significant—a previous location elsewhere and a branch plant operation. If the establishment was a branch plant operation or had previously been located elsewhere, establishment decision makers were more likely to conduct a multiple-site location search.

Statistically significant variables found to be negatively related to the likelihood of location search were percentage of final product sales made in-state, a proxy for local market orientation; percentage of the business owned by county residents; individual ownership; and a nonmetropolitan county location, a proxy for resource orientation. In general, if an establishment sold a relatively high percentage of its final product in-state, was locally owned, was individually owned, and was located in a nonmetropolitan county, the establishment was not likely to conduct a multiple-site location search. All these relationships were as hypothesized.

Likelihood of location search was not found to vary by state, by hardwood manufacturing industry type, or by relative percentage of hardwood used in an establishment's manufacturing process. Likewise, establishment size, as measured by employment, did not significantly influence the likelihood of location search, either in the form of a continuous variable or a dummy variable. Firm size, however, did seem to be expressed by firm type (branch plant operation, or not) and ownership structure (individually owned, or not). Firms with branch plant operations were generally larger.

Similarly, firms structured as corporations and controlled by multiple interests also were larger.

Those concerned with development and expansion of the hardwood manufacturing industry must first recognize that, although location theory and economic development strategies based on theory implicitly assume otherwise, the large majority (74%) of the hardwood manufacturing establishments surveyed did *not* conduct location searches. Second, they must also realize that the majority of variables found in this study to influence the likelihood of search are not controllable by state or local governments.

Operating under the assumption that locating a large plant is the best way to create the most jobs, development efforts often tend to focus on attracting large single-unit or branch plant operations. However, while the findings of this study did indicate that firms locating branch plant operations are more likely to search, likelihood of search did *not* vary by establishment size. Given that few large establishments exist—only 112 establishments with greater than 250 employees were listed in the study region—the likelihood of attracting a large branch plant operation is very low and, therefore, should not be the focus of development efforts.

Because it is highly unlikely that the typical hardwood manufacturing establishment will conduct a location search, particularly outside of the state in which the owner-operator is from, recruitment of new industry to the state should not be the chief objective of economic development efforts. Instead, the implication is that existing establishments should be targeted for retention or expansion. The ties of existing industries to the state or to the local community can and should be strengthened. Establishments that develop deep roots in the state and community will not need the costly tax concessions and other incentives often emphasized in recruitment programs. Development resources, thus, can be redirected to efforts focused on expanding existing industries, particularly those industries determined to have a competitive advantage.

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