**C I N T R A F O R**

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**An Assessment of the PNW Hardwood Lumber Industry**

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**Executive Summary**

Currently, less than one percent of the private and industrial timberlands in the Pacific Northwest (PNW) are managed for hardwood production. In order to provide an incentive to manage the hardwood resource actively, hardwood stumpage prices must be consistently competitive with conifer stumpage prices, although this has generally not been the case in the PNW. A variety of factors could contribute to hardwoods being more actively promoted in the timberland manager’s portfolio. For example, species diversity provides stability in a cyclical market, improves soil fertility, and promotes biodiversity in forest stands.

The hardwood industry in the PNW, largely red alder, has experienced surprising success over the past decade in both domestic and international markets. This success is of interest considering that commercial hardwood species in the PNW have traditionally been considered a low value by-product of the softwood inventory. While PNW hardwoods have enjoyed increased market acceptance, little market research has been done to characterize the hardwood industry or identify the factors that have contributed to its success. The objectives of this research were to: 1) explore the competitive conditions of the hardwood industry, 2) identify the range of products currently manufactured from hardwoods, 3) analyze current hardwood markets (domestic and international), 4) identify the factors that are perceived to restrict the growth of the hardwood industry in the PNW, and 5) assess future market and product opportunities for PNW hardwood products.

Since the number of firms involved in hardwood lumber production in the PNW is relatively small (less than 15), a census of the hardwood industry was conducted. The PNW region, for the purpose of this research, consists of western Washington, western Oregon, and northern California. The survey was administered via fax to each firm in the sample frame. Thirteen hardwood manufacturers were contacted. Of the firms contacted, 10 completed and returned the survey, an effective response rate of 76.9%.

## Results

The PNW hardwood lumber industry directly employs approximately 2,000 workers. Collectively, the hardwood lumber manufacturers surveyed in this study produced approximately 450 mmbf of lumber, with exports totaling approximately 126 mmbf or 28% of total production. The range of products manufactured included kiln dried and green lumber, pallet stock, veneer, plywood, agricultural boxes and crates, and chips. Hardwood chips represent the primary by-product and all of the chips produced are sold to pulp and paper manufacturers. Approximately half of the slabs and sawdust generated are sold (as chips and mulch, respectively) with the remainder being burned as hog fuel. Similarly, approximately one-third of the planer shavings and bark are sold for livestock bedding and landscaping bark, respectively, with the remainder being burned as hog fuel.

While both large and small hardwood lumber manufacturers sell a substantial percentage of their production direct to the end-user, large manufacturers tend to rely on wholesalers to the exclusion of brokers. In the case of small manufacturers, the opposite is true and they tend to favor brokers while minimizing their use of wholesalers.

***Problems and Threats to the Hardwood Industry:*** The problems confronting manufacturers in the hardwood industry were categorized into three areas: domestic regulatory issues, domestic resource issues, and international regulatory issues. Survey respondents were asked to indicate the impact of each factor on

the competitiveness of their firm. Respondents utilized a seven-point scale ranging from a value of 1 (Strong Negative Impact) to 7 (Strong Positive Impact).

*Domestic Regulatory Factors:* The range of domestic regulatory factors identified in the survey included: federal harvest regulations, state forest practice regulations, and state taxes. Survey respondents indicated that all three domestic regulatory factors had a negative impact on the competitiveness of their firms. The mean scores for the three factors (state taxes, federal regulations, and state forest practice regulations) were 2.6, 2.8, and 2.9, respectively.

*Domestic Resource Factors:* The specific hardwood resource factors examined in the survey included rising raw material prices, rapid price fluctuations (i.e., price volatility), labor quality, resource availability, and resource quality. Rapid price fluctuations and increasing raw material prices were perceived as having the most negative impact on competitiveness, receiving an average score of 2.8 and 3.1 respectively.

Quality of labor (4.1) and resource quality (4.3) were each generally perceived to have relatively little impact on the overall competitiveness of the respondents’ firms. It is interesting to note that resource availability, with a mean score of 4.6, had a slightly positive impact on overall competitiveness.

*International Regulatory Factors:* The international regulatory factors included in the survey were: regional trade agreements, tariff barriers, non-tariff barriers, and sustainable forest certification. The survey results suggest that environmental certification of wood products (3.4) and tariff barriers (3.4) were perceived to have a more negative impact on the competitiveness of hardwood manufacturers than were non-tariff barriers (3.6) and regional trade agreements (3.7), although the difference in score was small.

Further analysis of the survey data showed that hardwood firms exporting to Europe perceived environmental certification as having a more adverse effect on their competitiveness than did firms exporting to Asia and North America.

***Marketing Variables:*** Survey respondents were asked to evaluate the importance of each variable to the competitiveness of their firm using a seven-point scale ranging from 1 (Not Important) to 7 (Very Important). The importance ratings for the individual marketing variables indicate that a firm’s reputation within the hardwood industry was identified as the single most important marketing variable, receiving a mean score of 6.7. Communicating regularly with customers, product quality control, and providing on time delivery all received relatively high mean scores of 6.3, suggesting that these variables are also very important. Efficient operation of production facilities, with a mean score of 6.1, and procuring raw material, with a mean score of 5.7, were also perceived to be highly important.

It is interesting to note that virtually all of the marketing variables associated with innovation received relatively low importance ratings from survey respondents: developing new products (3.9), manufacturing specialty products (3.9), utilizing new marketing techniques (3.8), conducting market research (3.0), and performing promotional and advertising activities (2.5). Only a single marketing variable associated with innovation, product branding (5.2), was viewed as being relatively important. However, given the low level of importance attached to promotional activities, it remains problematic on how a company might successfully brand its products.

## Conclusions

The hardwood industry has experienced substantial and solid growth over the past ten years despite the timber regulations that have restricted the harvest levels from federal and state forests. This growth has occurred in both the domestic US market as well as in foreign markets which now account for almost 28% of red alder production. While survey respondents did not feel that harvest restrictions had adversely impacted their industry, riparian zone regulations related to endangered salmon populations could have a severe impact on the hardwood resource, particularly if those regulations are vigorously applied to private forests.

Respondents indicated that virtually none of the regulatory factors evaluated in the survey were viewed in a positive light, although few were perceived to have a strongly negative impact on the industry. Despite this, a variety of factors were perceived by respondents to have had a moderately negative impact on the hardwood industry. These factors included: state taxes, federal harvest restrictions, state forest practice regulations, hardwood log price volatility, and hardwood log price increases. It is interesting to note that

while federal and state harvest restrictions were perceived to have a moderately negative impact on the industry, respondents indicated that resource availability has not yet had an adverse impact on the hardwood industry.

Respondents indicated that those marketing variables that influenced a firm’s reputation and production efficiency were the most important in terms of positively impacting the firm’s performance. In contrast, virtually all of the marketing variables associated with acquiring market information and promoting innovation were perceived to have a negative impact on the firm’s performance. In general, these results seem to suggest that hardwood companies in the PNW are conservative and tend to place a low value on the marketing activities associated with innovation and product differentiation.