Research Update

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Fostering Relationships Among Central American and Appalachian Forest Products Companies

By

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Introduction

Exporting wood products offers many advantages for firms entering the global market, such as increased profits and credit, market growth, and economic strength (Parhizkar 2008; McMahon and Gottko 1989). In the past few years, parts of the U.S., such as the Appalachian region, have suffered from the economic crisis resulting in forest products mill closures and loss of employment due to an increase in competition. An increase in global competition has caused the decrease of domestic markets for U.S. furniture. This increase in competition has taken a toll on the Appalachian hardwood lumber industry (Bowe et al. 2001). Forest products companies in the Appalachian region must be innovative in their marketing strategies to find potential markets for their products (Naka et al. 2009). Therefore, Appalachian wood products companies may need to increase product competiveness by expanding export markets and improving product promotion (Wang et al. 2010). International marketing of wood products is essential for the Appalachian region to strengthen its economy (Hammett 1996).

Studies in the forest products industry have found several factors that affect successful product export. The research of Ifju and Bush (1993) suggests that small, domestic companies view themselves as non-exporters, but they still have potential to export. Non-exporting companies attempting to enter a global market state that the primary reason they have not done so is lack of market information regarding product specifications and distribution channels (Ifju and Bush 1993). A study of Appalachian hardwood lumber exports showed that production limitations and a small number of employees did not significantly affect exporting, but the need for marketing information was a major hurdle for companies (Parsons 2002). Overall, the lack of market information is believed to be the main barrier for potential exports of forest products overseas (Ifju and Bush 1993; Naka et al 2009). Wood products companies in the Appalachian region must gain a better understanding of the trade barriers in an overlooked market, such as in Central America in order to market products and trade successfully (Salamone 2000; Figure 1).

The objective of this study was to identify market drivers and barriers for the sale of Appalachian wood products to the Central American market through a survey of wood products firms.

Figure 1. Map of Central America
(Adapted from Free World Maps 2011)

Methodology

Surveys were conducted by a contracted company from Costa Rica from January through April 2011 of a sample of 300 representatives from forest product retailers and manufacturers in six Central American countries. Retailers and manufacturers were chosen as the target population for the survey because they rely on end-consumer behavior when promoting products (Urbany et al. 1990). Distributors were also included in order to identify similarities and differences in usage and interests in wood products in Central America. Employees at the contract survey company (PHI Strategy, S.A.) located owners, managers, sales representatives, purchasers, or primary decision makers from selected retailers and manufacturers and conducted the survey with them via phone, email, or in person. The six countries of interest were Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica, and Panama.

The questionnaire was constructed with information from literature and the results of interviews of forest product importers and government officers in Central America (Lyon et al. 2010; Lyon 2011). Question topics included demographics, supplier attributes, products, product attributes, supplier promotional strategy, pricing, and barriers. Rating questions used a balanced 5-point Likert response format (e.g., strongly agree to strongly disagree) to indicate the respondent's level of agreement.

Descriptive statistics were used to describe marketing factors (e.g., supplier attributes, promotional strategy). Analysis of Variance (ANOVA) was used to test for significant differences in responses among Central American countries. Because response distributions were found to be non-normal, non-parametric statistics (i.e., Kruskal-Wallis one-way analysis of variance) were also used to identify differences between countries. Data were categorized into multiple respondent groupings by country (n=5; questionnaires from Nicaragua were removed from the analysis because of invalid data).

Results and Discussion

A total of 298 questionnaires were returned from the contracting company. Fifty-one surveys from Nicaragua were removed from analysis due to insufficient information; therefore, 248 questionnaires were valid for data analysis. Seventy-nine questionnaires were from Costa Rica, 49 from Panama, and 40 each from Honduras, El Salvador, and Guatemala.

The majority of respondents (43%) were manufacturers, followed by retailers (37%) and distributors (19%). Some respondents indicated that their company can be classified as more than one business type (e.g., manufacturer and/or retailer). Furniture manufacturers (29%) were the largest category of manufacturer type, followed by door (15%) and cabinet (14%) manufacturers. Some respondents indicated that their company may be classified as more than one manufacturer type (e.g., window and/or door).

Products and Product Attributes

Respondents were asked about the wood products their company imported at the time of the survey. Respondents stated the most frequently imported panels were plywood (12%), medium density fiberboard (10%), particleboard (9%), and oriented strand board (8%). Ten percent of respondents imported softwood lumber and 7% imported hardwood lumber. The least imported wood products were softwood flooring (2.5%), softwood boards (1.9%), hardwood (2%) and softwood moulding (1.6%), and hardwood (1.3%) and softwood furniture (0.9%).

Companies used the raw materials they purchased (i.e., panels, hardwood lumber, softwood lumber, logs, veneer) to produce doors, furniture, cabinets, flooring, moulding, and plywood. Some respondents reported that their company sold a variety of products in their mix. The wood products most frequently sold by respondents are doors (12%), cabinets (9.4%), hardwood furniture (8.4%), and plywood (8.2%).

Respondents were asked to rate on a five-point Likert scale product attributes desired when purchasing wood products (Figure 2). Respondents thought most product attributes were considered important when purchasing wood products. Responses from all of the Central American countries surveyed were consistent regarding product quality, price, volume discounts, and warranties on products. When purchasing wood products, respondents from Panama and Costa Rica believed that environmentally certified products were more important than did the respondents from Guatemala, Honduras and El Salvador. The highest rated product attributes were product quality, price, on-time delivery, volume discounts, and product warranty.

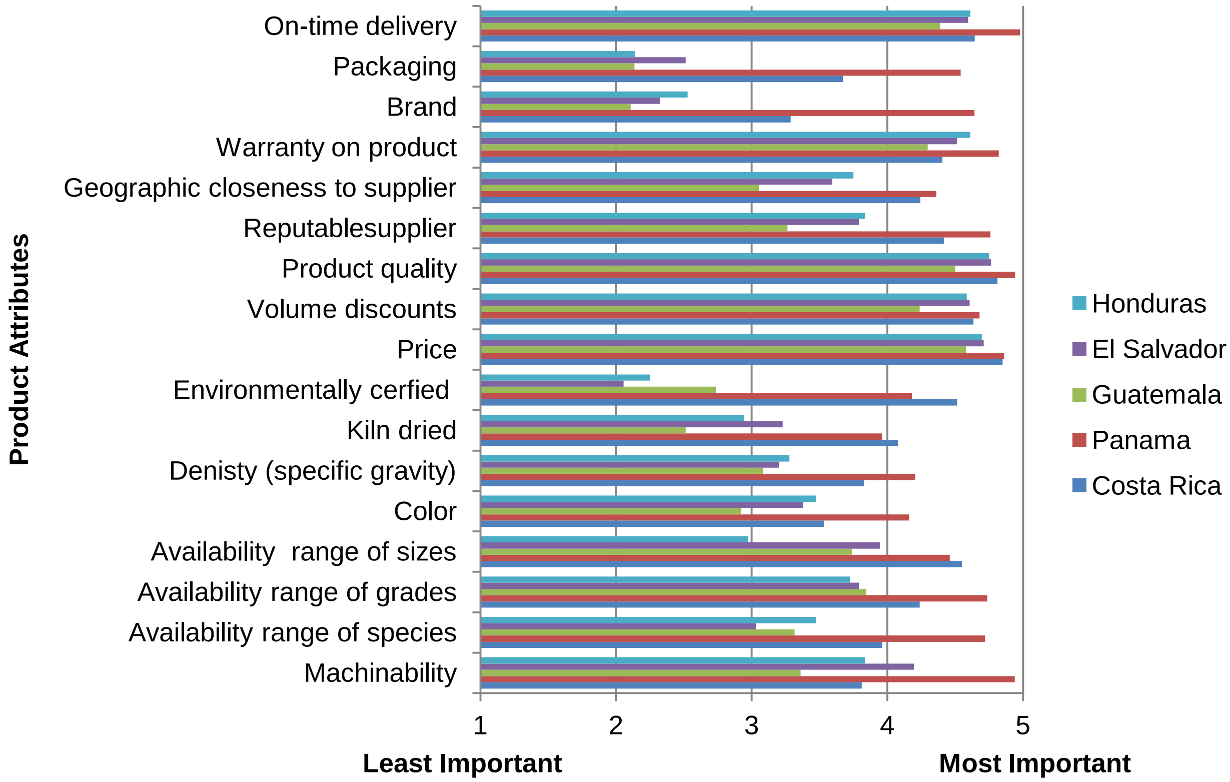

Figure 2. Importance of wood/wood product attributes (n=195)

Suppliers Attributes

Respondents were asked to rate on a five-point Likert Scale the supplier attributes desired when purchasing wood products (Figure 3). Respondents believed that most supplier attributes were important when purchasing wood products. Responses from all of the Central American countries surveyed were consistent regarding offering quality products,

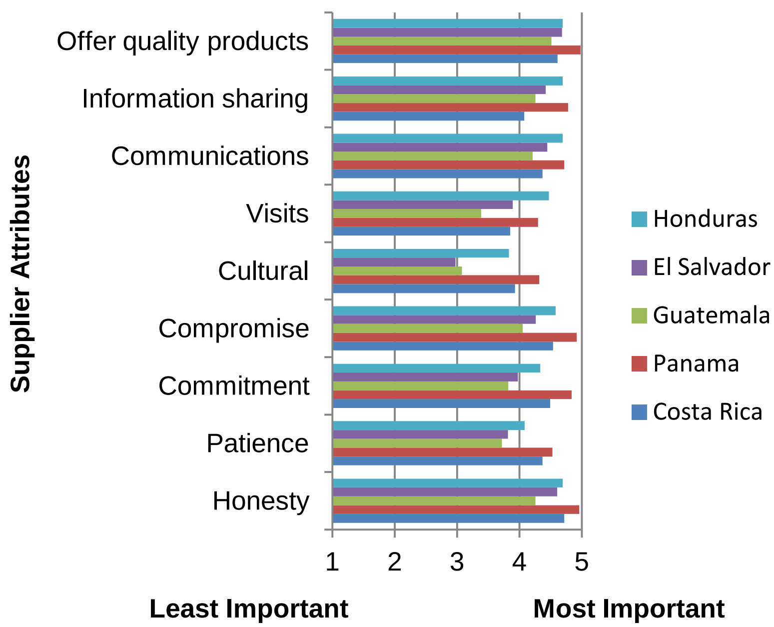

Figure 3. Importance of supplier attributes by respondents (n=226)

information sharing, and visits. Panamanian and Costa Rican respondents indicated that culture sensitivity was more important to them than did respondents from El Salvador and Guatemala. Although all supplier attributes were believed to be important, the attribute rated the least important was culture sensitivity.

Supplier Promotion Strategy

Respondents were asked to rate on a five-point Likert scale the importance of promotion strategies of suppliers when companies are purchasing wood products (Figure 4). Respondents believed that personal selling was important for suppliers to use when selling wood products to retailer and manufacturers. Personal selling allows the salesperson to develop and maintain a relationship with the customer. The promotion strategies of lowest importance to suppliers were advertisements in local newspapers and participation in trade shows. Promoting products at trade shows was found to be more important for respondents from Costa Rica than those from other countries possibly because the other countries have few trade shows to promote products. Newspapers may be considered a poor promotion strategy because their readership continues to decline with the increasing reliance on use of the Internet and newspaper websites (Perez-Pena 2008).

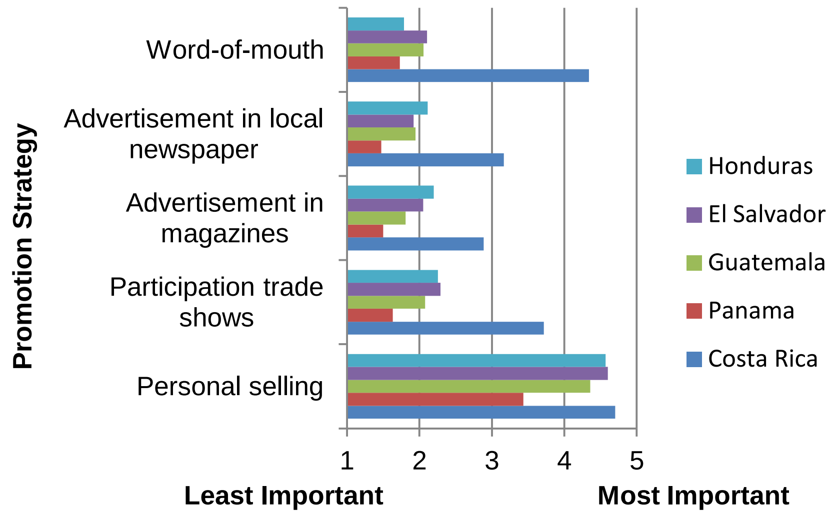

Figure 4. Importance of supplier promotion strategies (n=192)

Barriers

Respondents were asked to rate on a five-point Likert scale the importance of potential barriers to importing Appalachian forest products (Figure 5). Companies believed that most potential barriers were important when importing wood products. Responses from all of the Central American countries surveyed were consistent regarding transportation and logistics, price, delivery time, language, quality of Appalachian wood products, and U.S. government and international policies. Respondents from Panama indicated that past experience purchasing from the Appalachian region was more important to them than respondents from the other countries. The most important potential barriers to importing from the Appalachian region were price, on-time delivery, payment methods, and transportation and logistics. Lyon (2011) supports the finding that Appalachian companies need to be priced competitively compared with Chilean companies when marketing wood products to Central America. The barrier of lowest importance was language barrier. Most large Central American wood products companies have employees who can speak English, and translator services are available for companies expanding globally, so this barrier may seem less important to Central American companies.

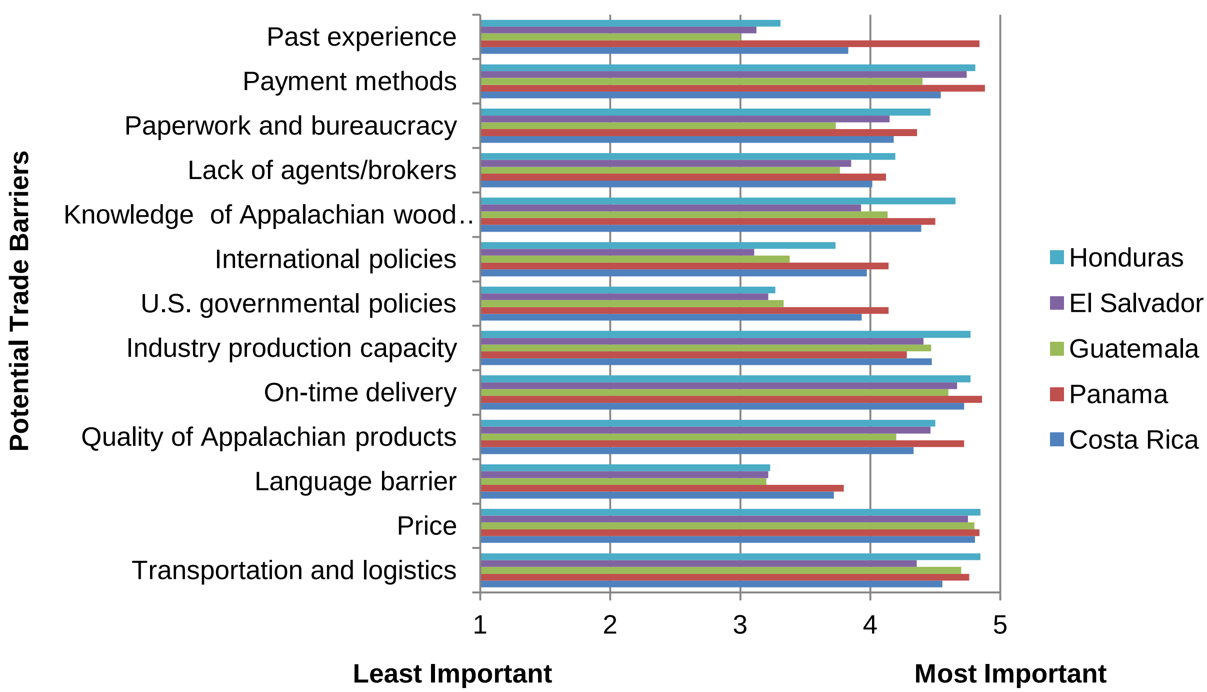

Figure 5. Importance of potential barriers for Appalachian forest products (n=168)

Parhizkar (2008) found that one of the largest barriers for U.S. forest products companies exporting to Mexico is the lack of knowledge Mexican customers had of U.S.

wood products. U.S. companies may feel that, due to their geographic closeness to Mexico, they do not have to be as aggressive in marketing and strengthening their relationships with Mexican companies. However, companies countries such as Chile, Brazil, and China have penetrated the market and are successful in marketing wood products to Mexican consumers from a further distance. This situation may also be occurring with U.S. wood products companies; they may not be exerting enough marketing effort to successfully enter the Central American market.

Conclusions

In order to market products to Central American companies, the most successful promotional strategy identified by respondents was personal selling (Table 1). Appalachian wood products companies need to personally visit potential customers in Central America to promote their products. Personal visits would give buyers in Central America a better understanding of Appalachian wood products and their applications.

Appalachian wood products firms may need to partner with local distributors in order to successfully market products to Central American customers (Table 1). Appalachian wood products exporters can be competitive by offering products that are similarly priced to products currently purchased and by partnering with local wholesalers. So that small wood products firms in Central America may be able to purchase smaller amounts of wood products from the Appalachian region to suit their needs.

Quality of products was important; products need to meet the required dimensions, colors, and grades. In Costa Rica and Panama, buyers reported that they prefer to purchase kiln dried lumber. Appalachian companies may benefit from educating other Central American countries about the benefits and advantages of using kiln dried lumber in order to penetrate additional markets. Respondents from Costa Rica and Panama rated certified wood products more important, while respondents from other countries did not find them to be as important. To be successful in Central America, Appalachian companies may attempt to promote certified forest products to Costa Rica and Panama.

Table 1. Recommended market strategy by country for Appalachian wood products companies

<table>
<tr><th></th><th>Costa Rica</th><th>Panama</th><th>Guatemala</th><th>El Salvador</th><th>Honduras</th></tr>
<tr><td rowspan="7">Product</td><td colspan="5">Quality</td></tr>
<tr><td colspan="2">Brand</td><td></td><td></td><td></td></tr>
<tr><td colspan="2">Environmental certified</td><td></td><td></td><td></td></tr>
<tr><td colspan="2">Kiln dried</td><td></td><td></td><td></td></tr>
<tr><td colspan="4">Availability of sizes</td><td></td></tr>
<tr><td colspan="5">Availability of grades</td></tr>
<tr><td colspan="3">Availability of species</td><td></td><td></td></tr>
<tr><td rowspan="7">Promotion</td><td colspan="5">Personal selling</td></tr>
<tr><td colspan="5">Point of purchase product information</td></tr>
<tr><td colspan="5">Warranty on products</td></tr>
<tr><td colspan="2">Attractive in store display racks</td><td></td><td></td><td></td></tr>
<tr><td colspan="2">Sales and products discounts</td><td></td><td></td><td></td></tr>
<tr><td>Trade shows</td><td></td><td></td><td></td><td></td></tr>
<tr><td>Word-of-mouth</td><td></td><td></td><td></td><td></td></tr>
<tr><td rowspan="2">Place</td><td colspan="5">Wholesalers</td></tr>
<tr><td colspan="5">Direct to manufacturer</td></tr>
<tr><td>Price</td><td colspan="5">Competitive with current imports</td></tr>
</table>

The best strategy for Appalachian wood products companies to make initial contact with potential customers is through the U.S. Commercial Service in their state, as well as in the country to which they are interested in selling. The U.S. Commercial Service offers the Gold Key Matching Service, which provides companies a chance to meet with potential buyers to promote products. States within the Appalachian region may also have an international marketing service that can provide trade leads and market information regarding targeted buyers. Appalachian manufacturers of hardwood products may contact the American Hardwood Export Council (AHEC) for additional assistance in exporting and promoting products overseas.

Because the forest products companies in the Appalachian region offers products that are similar to those currently used in Guatemala, El Salvador, Nicaragua, Honduras, Costa Rica, and Panama, they have a unique opportunity to expand their markets into Central America. The survey results indicate that Appalachian wood products may be suitable alternatives for wood products currently used in Central America. Appalachian companies may need to market quality wood products at prices competitive with other countries that selling to Central American companies.

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