

**Implications of Internationalization on
Export Assistance in the Eastern Hardwood Lumber Industry**

by

Paul A. Ifju

**Thesis submitted to the Faculty of the
Virginia Polytechnic Institute and State University
in partial fulfillment of the requirements for the degree of**

MASTER OF SCIENCE

in

Wood Science and Forest Products

APPROVED:

R.J. Bush, Chairman

T.G. Ponzurick

R.L. Youngs

**December, 1991
Blacksburg, Virginia**

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Committee Chairman: Robert J. Bush
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(ABSTRACT)

A questionnaire was sent to 1,149 small eastern hardwood lumber firms to determine export assistance needs. Data from 354 producers and distributors were analyzed using the concept of internationalization. Internationalization is the gradual process by which firms increase involvement in foreign markets. While the process is gradual, distinct stages can be identified by involvement in and commitment to international markets. Firms were placed into one of five distinct stages of international involvement based on their desire to export, method of export, and percentage of total lumber sales from hardwood lumber exports.

Firms in each stage were compared based on demographic characteristics. Firms in the latter stages had larger internal marketing/management staffs, larger production staffs, greater average annual hardwood lumber output, and higher average annual lumber sales. Characteristics that differentiate firms from each other suggest different export initiation and export assistance needs.

Firms in each stage were compared based on awareness, use, potential use, and perceived benefit of twenty-two export promotion programs. Awareness and use of the programs was found to be low. Firms existing in the various stages of international

involvement desired different export-related information and assistance. The large proportions of firms indicating potential use and perceiving benefit from the programs suggests that barriers exist which prevent their use.

Many firms are either unaware of export opportunities or perceive barriers and risks that inhibit their entry into exporting. Companies were compared based on perceived barriers to exporting and the importance of twenty-one export stimuli. Domestic oriented firms perceived themselves as too small to export and were satisfied with the domestic market. Potential exporters indicated that their lack of knowledge about foreign markets kept them from exporting. The potential for increased profits and communication with export distributors were ranked as the most important export incentives, while the chance to travel overseas and communications with chambers of commerce were ranked as the least important.

ACKNOWLEDGEMENTS

I would like to extend my sincere thanks to the many people who contributed to this research project. I would like to express special thanks to those individuals who had a direct hand in this undertaking:

- * Dr. R.J. Bush, for his advice and leadership throughout the process. May I be only the first of many.
- * Dr. T.G. Ponzurick and Dr. R.L. Youngs for serving on my committee and providing helpful comments.
- * The following for the sponsorship of this study: Appalachian Export Center for Hardwoods, Virginia Tech Department of Wood Science and Forest Products.
- * Fellow graduate students, who created diversions and entertainment when such activities were needed and desired.
- * My family, for their faith in me and my abilities and for their support in times when even I had given up.
- * , for whom mere words fail to describe, for her understanding, support and constant companionship.

PREFACE

This thesis is divided into three distinct manuscripts, each addressing a specific research objective. Each section was written separately and intended to stand alone as an article for publication. To reduce repetition to the reader, the background sections from each chapter were used to form the **Literature Review**. However, the reader may still find a certain amount of duplication in the **Methods** section of each chapter, as well as with the tables describing demographic results. The author hopes this does not cause confusion or inconvenience.

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EXECUTIVE SUMMARY

Research was conducted to determine the export assistance needs of small eastern hardwood lumber firms. Small firms were of particular interest because of their low participation rate in international markets and their dominance, in terms of number, in the hardwood lumber industry. Although many small companies manufacture products demanded by foreign markets, few take advantage of the opportunities provided them.

To understand the attitudes that firms have toward exporting and their associations with export promotion programs, one must first understand the process by which companies enter into and increase involvement in foreign markets. This process, commonly referred to as internationalization, describes involvement in international markets as a gradual movement from nonexporting to high involvement. Although gradual, distinct stages can be distinguished according to involvement in and commitment to exporting. Data were collected from 354 small producers and distributors. Five distinct stages of internationalization were identified.

Two nonexporting and three exporting stages were characterized based on desire to export, method of export, and percentage of total annual lumber sales from hardwood lumber exports. Domestic Oriented Firms were nonexporters with no desire to export. Potential Exporters were nonexporters interested in exporting. Indirect Exporters were firms that exported through export brokers or export companies. Low-Intensity Direct Exporters dealt directly with foreign customers and hardwood lumber exports were ten percent or less of total annual lumber sales. High-Intensity Direct Exporters also traded directly in overseas markets but hardwood lumber sales accounted for more than ten percent of total annual lumber sales.

Although all firms were small (thirty-five or fewer employees), forty percent exported and nearly fourteen percent were High-Intensity Direct Exporters. Exporting is relatively new to the eastern hardwood lumber industry with most firms exporting ten years or less. Attributes that differentiated firms from each other and better positioned them against their competitors were identified.

The typical company structure of small eastern hardwood lumber firms was different in each stage of internationalization. Production staffs were generally larger in latter stages. Indirect Exporters had larger export staffs than Low- and High-Intensity Direct Exporters. Domestic Oriented firms had significantly smaller annual lumber output than Indirect and Low-Intensity Direct Exporters. Domestic Oriented firms also had significantly lower sales than the exporting stages while Potential Exporters had significantly lower sales than Indirect and Low-Intensity Direct Exporters.

Misunderstanding about the process of internationalization may contribute to inaccurate targeting and ineffective use of export assistance. Firms in each stage were compared on awareness, use, potential use, and the perceived benefit of twenty-two export promotion programs. Based on their unwillingness to export, Domestic Oriented firms require motivational material. Potential Exporters need information about direct and indirect exporting. Indirect Exporters desire information concerning direct exporting. Low- and High-Intensity Direct Exporters were interested in locating new foreign customers and need help financing their operations. In addition, High-Intensity Direct Exporters require information about locating customers in new countries.

Some firms recognize the potential offered by exporting but decline to enter export markets because of perceived barriers. It is believed that once these barriers are

identified, export promotion programs can help overcome them. Domestic Oriented firms attributed their nonexporting status to their small size and satisfaction with the domestic market. Potential Exporters lack information on foreign markets.

Companies were compared based on the importance of twenty-one export stimuli. The potential for increased profits and communications with export brokers were considered the most important export incentives. The chance to travel overseas and communications with chambers of commerce were considered as the least important export stimuli.

OBJECTIVES

The primary objective of this study is to provide information useful to public export promotion and assistance programs in serving the needs of eastern hardwood lumber producers and distributors. Specific objectives include:

1. Characterize the eastern hardwood lumber industry in terms of the internationalization process.
2. Determine the information and assistance requirements of eastern hardwood lumber producers and distributors and the perceived benefit of existing export promotion programs.
3. Determine the various factors (stimuli) which initiate export activity in the eastern hardwood lumber industry.

LITERATURE REVIEW

Approximately one third of the United states is forested with the majority of forestland concentrated in the east (Mannix 1991). Seventy-two percent of the forestland found in the U.S. is owned privately by firms, individuals, corporations, and farmers. The remaining portion is owned by federal, state, municipal, and other public organizations. Over 830 billion cubic feet of timber exist on approximately 480 million acres. In 1986, 17.6 billion cubic feet were harvested providing employment for about 1.6 million people (6 percent of the total work force) (Mannix 1991). In the South, the Pacific Northwest and Alaska, timber is considered the most valuable crop. The welfare of these regions depends in part on the strength of the forest products industry.

Traditionally, U.S. forest products firms have not seriously considered the international market as a viable outlet for their production (Evans 1990). During the 1980's, however, many firms began to view foreign markets as long-term ventures for wood products, partly because of the U.S. recession of 1981-1982. Although the export value of wood products exceeds \$50 billion annually (Sedjo 1985), exporting still remains a minor part of U.S. annual wood production (Evans 1990).

Forest products account for only part of the nation's international trade. The policies which affect wood products in the export market are a result of a larger set of policies created to influence a broad collection of traded goods (Sedjo 1985). Like other products, wood products are regulated and controlled, by both tariff and nontariff measures, to limit the flow of goods.

Tariffs are taxes levied by the importing country on specific imported products. They are generally small or nonexistent on raw materials such as woodchips, logs, and rough lumber (Sedjo 1985). As the level of processing increases, as with wood panels, furniture, and fine writing papers, so typically does the tariff placed on the product.

Nontariff barriers which purposefully restrict trade include quotas, boycotts, and voluntary trade restrictions by exporters. Some nontariff measures which may not be designed to restrict trade (but have the same effect), include health and sanitary regulations, packaging regulations, grading, and standards (Cateora 1987, Sedjo 1985).

World trade plays a major role in economic development and a number of policies have been designed to promote exports (Sedjo 1985). Several broad incentives can be identified in the forest products industry. These include exchange rate fluctuations, forest management policies, establishment of commercial plantations, lower domestic stumpage prices, and promotion of the wood processing industry.

The profit of international trade extends beyond the economic welfare of the exporting company and the exporting country. World trade also benefits the consumer by maintaining a competitive impact on domestic prices, production efficiency, innovation, and the supply of merchandise not locally available (Cateora 1987).

Importance of Exporting to the U.S. Economy

The U.S. can no longer claim title as the world's industrial leader. We are suffering due to a shrinking share of the world's manufacturing market and a recurrent balance of payment deficits. Export activity is an important factor in this decline. Ronkainen (1984 p.137) states that "U.S. exports are responsible for creating and maintaining one out of

every nine U.S. manufacturing jobs and for generating one out of every seven dollars to total U.S. goods produced." Each \$1 billion of exports accounts for approximately 22,000 jobs (Anonymous 1990), which means the 1989 U.S. trade deficit of \$109 billion cost nearly 5 million American job opportunities (Ronkajnen 1984).

Only eight percent of all U.S. manufacturers export, each expanding and employing more workers (Kean 1989). Initiating the other ninety-two percent to export and boosting the sales of those already exporting benefits not only the individual company but the economy as well. Although exporting is not appropriate for all firms because of product limitations or conflicting company objectives, encouraging those interested in and capable of long-term exporting to enter the foreign market contributes to balancing the current trade deficit. Export promotion, although not the complete answer, is an important part of enhancing and strengthening U.S. exports (Cavusgil 1983).

The Process of Internationalization

To understand a company's export behavior and its relationship with assistance programs, one must first understand the process by which the firm enters into and increases involvement in foreign markets (Piercy 1982, Czinkota and Johnston 1981). The process is commonly referred to as internationalization. Cavusgil (1982) and Bilkey and Tesar (1977) explain internationalization as a sequence of learning stages by which firms increase their involvement in the international marketplace. Although the process is gradual, distinct stages can be identified.

Previous studies have used different criteria to identify stages of internationalization. Bilkey and Tesar (1977) identified six stages according to interest in

exporting, willingness to fill unsolicited orders, exploration of the feasibility to export, and whether firms export to psychologically close or distant countries. Diamantopoulos and Inglis (1988) employed export intensity (export sales contribution to total sales) to distinguish Low- and High-Involvement stages. ,Ortiz-Buonafina (1991) characterized stages ranging from Unsolicited Exporting to Extensive Marketing based on characteristics of the firm's export marketing procedures and strategies. Cavusgil (1982) used export intensity and interest in gathering export-related information to distinguish stages ranging from Pre-Involvement to Active Involvement.

Debate over which variables best characterize internationalization stages is well documented in the literature. Czinkota and Johnston (1981) argue that differentiating firms according to size requires the least amount of information and may be the best approach to use for identifying internationalization stages. However, Diamantopoulos and Inglis (1988) determined that company size bears no relationship to the degree of export involvement. Cavusgil (1984) found annual sales differed significantly among exporters. Committed exporters had the highest annual sales, experimental exporters had the lowest. However, Czinkota and Johnston (1983) concluded that annual sales is not as useful a segmentation tool as expected. Diamantopoulos and Inglis (1988) point out that percent of export sales describes the extent to which a company is dependent upon export activity. Cavusgil (1984) did not find that percentage of export sales was a perfect indicator of internationalization and, therefore, advised against characterizing firms based upon any single dimension, such as export intensity.

Diamantopoulos and Inglis (1988) conclude that personnel is the single most influential determinant of export success. Firms with larger export staffs traded with more

diverse export markets and used fewer outside sources of export assistance. In fact, Cavusgil (1984) found that manufacturing firms with greater international involvement are more likely to have a special export division. Diamantopoulos and Inglis (1988) found, in the Scottish food and beverage products industry, that High-Involvement Exporters employed over four times as many export staff members and traded with three times more overseas markets than did Low-Involvement Exporters.

Research has found a progressive creation and use of internal export marketing forces. In the Swedish pulp and paper industry, for example, firms began exporting through an agent, later established sales subsidiaries, and finally set up local production in foreign markets (Forsgren 1989). Each progressive step required a larger, more experienced export marketing staff. Johanson and Vahlne (1977) found this trend to exist beyond the Swedish pulp and paper industry to Swedish pharmaceutical, engineering, and special steel industries. Furthermore, Knickerbocker (1972) found this phenomenon to exist in various U.S. industries.

Cavusgil (1984) found that committed exporters did not have more years of export experience than did experimental exporters. He attributes this to the possibility that firms in an early or middle stage may choose not to progress. Diamantopoulos and Inglis (1988) agree that neither age nor export experience bear any relationship to the degree of export involvement.

Regardless of which variables are used, it is agreed that firms exist at different stages of internationalization. Based on their position, firms possess characteristics that differentiate them from each other and better position them against their competitors. As a result, unique information and assistance needs exist.

Based on the results of earlier studies, five internationalization stages can be defined. The five distinct stages serve as a model for this study and are outlined according to company characteristics as follows:

Domestic Oriented:

Some firms in this stage may not be capable of exporting because of product or market limitations (Cavusgil 1980). Others, which may be capable, are uninterested or unwilling to experiment with exporting (Czinkota and Johnston 1981). Firms in this stage do not explore the feasibility of committed exporting (Vozikis and Mescon 1985). Considerable preoccupation with day-to-day activities, unfavorable attitudes toward exporting, and a lack of awareness about export opportunities add to the disinterest in exporting.

Potential Exporters:

External and/or internal factors motivate Potential Exporters to initiate export activity (Ortiz-Buonafina 1991). Firms in this stage lack pertinent export information and investigate the feasibility of committed exporting (Cavusgil 1980). Management probably has no prior export experience and decision making is based upon the attraction to export opportunities.

Indirect Exporters¹:

Indirect Exporters transfer some of the marketing responsibilities to middlemen. Firms in this stage need to locate export assistance. They must find the most promising buyers and distributors, and where the best markets are located (Cavusgil 1980).

Low-Intensity Direct Exporters:

Firms in this stage export directly to foreign customers. They perceive greater risks and lower profits from exports than do Indirect Exporters because of new activities and unexpected barriers (Cavusgil 1984). Low-Intensity Direct Exporters have greater management expertise in financing and marketing compared to management operating firms in earlier stages. Firms become more active in obtaining information and are concerned with searching, locating and evaluating potential markets, and gaining experience that increase the demands on firm resources (Cavusgil 1980).

High-Intensity Direct Exporters:

High-Intensity Direct Exporters are more optimistic about exporting than are Low-Intensity Direct Exporters (Cavusgil 1984). Firms in this stage rely less on outside sources of assistance and more upon internal marketing management (Diamantopoulos and Inglis 1988). Product and

¹ Little information exists about Indirect Exporters because most studies either ignore them or classify them with either exporters or nonexporters.

packaging design and quality for foreign markets, development of distribution channels, competitive pricing, and extension of credit become especially critical in international operations (Cavusgil 1980).

Specific demographic information is lacking from the internationalization stages described above. Such data is considerably industry-specific and previous studies have not dealt with the eastern hardwood lumber industry. Although Hammett et al. (1991) described southern Appalachian lumber manufacturers, the work was limited to comparisons of exporters and nonexporters. Incorporation of more descriptive internationalization stages is also lacking in research evaluating export promotion programs.

Export Promotion

Previous studies have attempted to evaluate the awareness, use, potential use, and perceived benefit of existing export promotion programs. However, these studies have primarily been limited to exporting and nonexporting firms. Few studies have investigated the assistance needs of firms existing at different stages of internationalization.

Ogram (1982), while studying small manufacturing firms in Georgia, found exporters used programs more than nonexporters. All the exporters were aware of each program though not all exporters used them. On the other hand, Kedia and Chhokar (1986) examined machinery manufacturers and food processors and found less than fifty percent of the exporters were aware on any one program. Only twenty percent of the

nonexporters were aware of any particular program. Approximately sixty to seventy percent of the firms in the study that were aware of the programs also used them. The poor awareness of export promotion programs was thought to explain low levels of use.

In an attempt to evaluate potential use of export promotion programs, Kedia and Chhokar (1986) asked respondents who were not aware of the programs if they would use them. They discovered fifty to eighty percent of the firms indicated they would use the export programs. Nonexporters generally indicated greater potential use and expected greater benefit from programs than did exporters.

By examining the use, potential use, and perceived benefit of various programs, researchers have been able to determine the most beneficial services for particular industries. Table 1 summarizes the results from previous studies. Firms exporting different products face unique environments and require different information to direct their export activity (Wood and Goolsby 1987). Therefore, conflicting results are thought to result from differences in the industries studied.

In addition to the most beneficial programs, two studies determined the least beneficial. Kedia and Chhokar (1986) found that both exporters and nonexporters perceived programs that publicize new U.S. products overseas, arrange trips to meet with potential importers, and those which provide information on doing business in particular foreign countries as least beneficial. Gottko and McMahon (1989) found that both exporters and nonexporters of Oregon lumber products considered programs that provided advertising and warehousing as the least important.

Export Barriers

Previous research has examined firms in various industries to determine the barriers that inhibit them from exporting. Kedia and Chhokar (1986) investigated both exporting and nonexporting Louisiana machinery, manufacturers and food processors, Kaynak and Kothari (1984) studied U.S. and Canadian exporting and nonexporting manufacturers, and Rabino (1980) examined small Massachusetts manufacturing firms that exported. It is believed that once the barriers are identified export promotion programs will be able to counteract them and encourage small firms to enter international markets (Kedia and Chhokar 1986).

Kedia and Chhokar (1986) investigated the importance of marketing, procedural, international business knowledge, financial, and technical and adaptation barriers, as well as, the difficulty in overcoming them. The most important obstacles perceived by both exporters and nonexporters were foreign marketing knowhow, acquiring information about potential markets, foreign business practices, export procedures, pricing for international markets, competition, and a strong U.S. dollar. Nonexporters considered overseas marketing skills, export procedures, foreign business practices, and acquiring information about potential markets as the most difficult barriers to overcome.

Kaynak and Kothari (1984) determined why firms did not export. Nonexporting Canadian firms tended to be domestic oriented and did not explore export opportunities. Both Canadian and U.S. firms were satisfied with remaining in the domestic market. Company managers believed that their product was demanded on a local level only and that the domestic market consumed their entire production output. The main reasons that Canadian firms avoided international marketing were foreign competition, lack of

information about foreign markets, large domestic markets, difficulty in acquiring foreign distribution, collection of money, and the lack of staff time. Export barriers perceived important by U.S. manufacturers were sufficient domestic opportunity, lack of knowledge about foreign markets, complexities of foreign operations, government restrictions and requirements, high cost, and lack of reliable distributors.

Rabino (1980) asked exporters their opinions about why firms of similar size and in the same industry did not export. The most important barriers perceived were lack of exposure to foreign cultures, large domestic market, lack of management time, paperwork necessary for export operations, and different safety and quality standards.

Export Initiation

Bilkey (1978) integrated the literature on the export behavior of firms and concluded that researchers concerned with export initiation tended to concentrate on both internal and external change agents. External influences came from chambers of commerce, industrial associations, banks, government agencies, other firms, foreign importers, and export agents. Fifty-four to sixty-four percent of all stimuli are external to the company (Cavusgil 1980). Bilkey (1978) found that internal catalysts tended to originate from members of the firm's management team. Internal export initiation is based on the manager's perceptions of the contribution exporting can give to the company, their degree of international orientation, their confidence in the company's competitive advantage, and domestic market conditions motivating them to seek alternate means for survival.

Ogram (1982) investigated internal and external export stimuli that were perceived to be important by small manufacturing firms in Georgia. He expanded the list of internal stimuli developed by Bilkey (1978) to include excess domestic capacity, competition, productive efficiency, and seasonal products. External factors investigated were insurance against domestic recession, orders from foreign buyers, trade missions, foreign and domestic trade fairs, U.S. Department of Commerce export activity, and the general state of the domestic economy. Ogram (1982) discovered that the potential for profit was the major factor for entering world markets.

Kaynak and Kothari (1984) questioned exporters to determine which factors they considered important export incentives. Better opportunities for product(s) in foreign markets, receipt of an unsolicited order, excess production capacity, and a saturated domestic market were considered important by Canadian exporters. U.S. exporters differed in their responses by indicating unique skills, knowledge, and products, excess production capacity, better utilization of resources, high profits, and saturated domestic market as the most import factors that stimulated the entry into exporting.

Gottko and McMahon (1989) studied potential motives for exporting and found that small Oregon lumber producers perceived the potential for profit as the most important incentive. In addition, exporters considered inquiries from overseas companies important, while nonexporters thought the loss of substantial domestic market share was a significant incentive to begin exporting. Both exporters and nonexporters thought that some firms lacked sufficient knowledge about exporting to begin. Chambers of commerce, domestic competitors, and domestic distributors were not perceived to be helpful by most exporters who had not communicated with such sources. Both exporters and nonexporters

considered the opportunity to travel overseas and improving the firm's status as the least important export stimuli.

Sullivan and Bauerschmidt (1988) examined export stimuli in the European forest products industry. They determined the most important stimuli were economies of scale, decreasing domestic growth potential, proximity to export markets, favorable exchange rates, improved transportation efficiency, market diversification, downturns in the domestic economy, and saturated domestic markets.

Hardwood Lumber Industry

Samiee and Walters (1990) suggest that exporting be actively promoted to those firms which manufacture products suitable for international markets. As Williams (1990) points out, timber products rank within the top ten fastest-growing U.S. exports. Hardwood lumber, in particular, is the most successful hardwood product traded in the international market (U.S. Dept. of Agriculture 1990). Luppold and Dempsey's (1989) revised estimates indicate that hardwood lumber production was approximately ten billion board feet in 1986 and accounted for thirty-three percent of the total value of domestically produced lumber.

Strong U.S. solid wood exports gave the industry a positive trade balance for the first quarter of 1990, with exports exceeding imports by \$412 million (U.S. Department of Agriculture 1990). The hardwood industry contributed a significant \$402 million to the total value (\$1.68 billion) of solid wood exports. Hardwood lumber, in particular, accounted for over \$208 million, up thirty-nine percent from the same period in 1989. Red oak and

white oak were the dominant export species. The top three markets for U.S. hardwood lumber were Canada, Japan, and Germany.

Firm Size

Small firms produce products desired by foreign markets, yet they may hesitate to export due to their inability to gather market information and maintain smooth continuous communications with their foreign customers (Ali and Swiercz 1991). Managers, more involved with day-to-day operations, may lack the capacity for internal marketing/management and, therefore, have little time to research the feasibility of exporting. The smaller firms also possess fewer monetary resources required to explore potential overseas markets (Kedia and Chhokar 1986, Bauerschmidt et al. 1985).

Eighty-five percent of exporting by U.S. manufacturers is performed by one percent of the firms, mainly large multinational corporations (Kean 1989). Smaller companies, however, represent a larger share of exports than once thought. Eighty-eight percent of direct exporting was by small businesses that may export about the same proportion of output as do larger businesses (Kaikati 1990). Twelve percent of the value of direct U.S. manufacturer exports were by companies with 500² or fewer employees. An additional nine percent of the value of exports was accomplished indirectly through wholesalers or brokers, bringing the contribution of small firms to twenty-one percent.

Little is known about the attitudes and export practices of small firms (Gottko and McMahon 1989). The data concerning firm size and the ability to export have shown

² The Small Business Administration defines small manufacturing firms as those with 1500 to 500 or fewer employees, depending on the nature of the manufacturer (U.S. Small Business Administration 1984).

mixed conclusions. It is agreed, however, that small- and medium-sized firms can benefit from export promotion programs (Bilkey and Tesar 1977). Larger firms, it is believed, are able to afford private assistance or have the internal capabilities to conduct export marketing (Cavusgil 1983, Czinkota and Johnston 1983). Nearly half of all small- and medium-sized firms do not export although they may be able to (Rabino 1980). This is of particular importance to the hardwood lumber industry, where small firms outnumber large firms.

Foreign trade gives small companies the potential to reap great benefits, largely in part to the vast size of the foreign market and the low participation rate (Ali and Swiercz 1991). Even with the possibility of increased costs and uncertainty, exporting offers increased profits, prolonged product life cycles, and new distribution channels. In addition, the ability for small firms to quickly adjust prices tends to make them less sensitive to currency fluctuations. Nations with competitive positions in international markets (e.g., Japan and Germany) tend to have small companies actively involved in international trade. This feature, however, is generally lacking within the U.S. foreign trade structure.

Studies Specific to the Forest Products Industry

There exist only a few studies that specifically address the forest products industry concerning export behavior (e.g., Gottko and McMahon 1989, Sullivan and Bauerschmidt 1988, Bauerschmidt et. al. 1985, Wood and Goolsby 1987). These studies conclude there are differences between exporters and nonexporters of wood-based products and that the industry requires different kinds of information to guide export decisions than do other industries. Gottko and McMahon (1989) and Sullivan and Bauerschmidt (1988) identify

incentives to export in the Oregon lumber and European paper industries, respectively. Bauerschmidt et. al. (1985) identify barriers to export in the U.S. paper industry. Wood and Goolsby (1987) examine the information preferences of established exporters in agriculture, forestry, and mining, consumer manufacturing and processed goods, industrial manufacturing goods, business services, and other industries. Each study provides information necessary to understanding export behavior in forest product industries, however, none specifically addresses the eastern hardwood lumber industry. As Wood and Goolsby (1987) point out, there are differences between industries concerning their information preferences. This difference in preference may also exist among various wood-based industries.

Summary

A number of studies have investigated the barriers that inhibit exporting and the factors that stimulate export activity. Other studies determined that few firms are aware of export promotion programs and, although many firms express an interest in using them, some barriers exist to their use. Although results from previous studies exhibit similarities, *industry-specific factors can result in differences.*

The review of secondary information provided much insight into export behavior and export promotion. The importance of internationalization as a segmentation tool is especially evident. However, previous studies either fail to incorporate the concept or they examine only particular stages instead of fully characterizing an industry. Few studies were found which addressed the forest products industry in terms of export promotion.

No study was found which characterized and analyzed the eastern hardwood lumber industry in terms of the internationalization process.

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Table 1 - Summary of Previous Research

Study/Population Sampled	Most Beneficial Programs
<p>Kedia and Chhokar (1986)</p> <p>Machinery Manufacturers and Food Processors</p>	<p><u>Nonexporters</u></p> <ul style="list-style-type: none"> * Banking Services Guaranteeing Payment * Banking Services Handling All Financial Aspects of Sales * Export Services Which Buy Products for Resale Overseas * General Information on Foreign Firms <p><u>Exporters</u></p> <ul style="list-style-type: none"> * Banking Services Guaranteeing Payment * Banking Services Handling All Financial Aspects of Sales * Export Services Which Buy Products for Resale Overseas * Freight Forwarders Who Handle All the Paperwork * Toll-Free Government Phone Number For Export-Related Assistance
<p>Czinkota and Ricks (1981)</p> <p>Materials Handling Equipment, Avionics and Aviation Support, and Industrial Instruments Industries</p>	<p><u>Exporters</u></p> <ul style="list-style-type: none"> * General Marketing Information * Information on Foreign Business Practices * Financial Information * Communication Programs
<p>Wood and Goolsby (1987)</p> <p>Business Services, Industrial Manufactured Goods, Consumer Manufactured and Processed Goods, and Agricultural, Forestry, and Mining Products</p>	<p><u>Exporters</u></p> <ul style="list-style-type: none"> * Assessment of Level of Demand for a Product or Service * Magnitude of Competition in Foreign Markets * Laws and Regulations Restricting or Preventing Imports
<p>Cavusgil (1983)</p> <p>U.S. Manufacturing Firms</p>	<p><u>Exporters</u></p> <ul style="list-style-type: none"> * Buyer Leads * Specific Marketing Intelligence * Face-to-Face Meetings with Potential Customers

**THE INTERNATIONALIZATION OF SMALL FIRMS
IN THE EASTERN HARDWOOD LUMBER INDUSTRY**

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Abstract

Internationalization is the process by which companies increase involvement in international trade. The process is characterized by the gradual movement of firms from non-interest to significant dedication to foreign marketing. While the process is gradual, distinct stages can be identified by involvement in and commitment to international markets. Data from 354 small producers and distributors were analyzed to characterize the eastern hardwood lumber industry in terms of the internationalization process. Firms were placed into one of five stages of internationalization based on the variables: desire to export, method of export, and percentage of total lumber sales from hardwood lumber exports. These stages were: (1) Domestic Oriented Firms, (2) Potential Exporters, (3) Indirect Exporters, (4) Low-Intensity Direct Exporters, and (5) High-Intensity Direct Exporters. Firms in each stage were compared based on demographic characteristics. Firms in the latter stages had larger internal marketing/management staffs, larger production staffs, greater average annual hardwood lumber output, and higher average annual lumber sales. Differential and comparative advantages suggest different export initiation and export assistance needs. The results of this study will aid those in charge of export promotion programs to identify which firms to target with what information.

Introduction

To understand a company's export behavior and its relationship with assistance and support programs, one must first understand the process by which the firm enters into and increases involvement in foreign markets. This evolutionary process is commonly referred to as internationalization (Cavusgil 1982, Bilkey and Tesar 1977). The most significant result of previous internationalization studies, and the result least incorporated into research (Diamantopoulos and Inglis 1988), has been that firms adopt a gradual pace when it comes to international involvement. Instead of large, dramatic strides, movement is a slower, gradual process in which gaining experience determines progress into further international involvement. Although the process is gradual, distinct stages can be identified along the continuum.

Internationalization is a conceptual framework designed to guide export assistance programs. However, some previous studies of export behavior have failed to recognize or investigate differing stages of international involvement. They either aggregate all firms into one homogeneous group or characterize firms as exporting and nonexporting, without further distinguishing the groups. In fact, no previous study was found which fully characterized the eastern hardwood lumber industry in terms of the internationalization process.

With the growing importance of international marketing, understanding the internationalization of an industry has become more important. Export promotion must adopt a marketing orientation and tailor marketing mixes to satisfy the differing information and guidance needs of companies existing at different stages of international involvement. Czinkota and Johnston (1981) suggest that those in charge of export promotion gather

information about firms that would permit classification into internationalization stages. Subsequent information and assistance offered by programs should then be targeted to satisfy the needs of firms in various stages.

Cavusgil (1980) called for future research that considers firms existing at different positions along the internationalization process. Czinkota and Johnston (1981) contend that investigations dealing with the segmentation of firms would better identify their needs enabling U.S. export performance to improve.

This study characterizes small eastern hardwood lumber firms in terms of the internationalization process. Several stages are identified and compared based on demographic characteristics. Attributes that differentiate firms from each other and better position them against their competitors (differential and comparative advantages) are identified.

Methods

Data Collection

A questionnaire was sent to 1,149 small¹ producers and distributors in the eastern hardwood lumber industry to characterize them in terms of the internationalization process. A convenience sample was compiled from a variety of industry fact books, state

¹ The Small Business Administration defines small manufacturing firms as those with 500 or fewer employees, depending upon the nature of the manufacturer (U.S. Small Business Administration 1984). However, this definition does not fit the characteristics of the hardwood lumber industry. For the purpose of this study, small firms were defined as those with thirty-five or fewer employees.

directories, and trade association membership directories². As many firms as possible were chosen from the available information sources. Using a variety of sources reduced the likelihood of systematic selection bias that could possibly skew results. Small firms were studied because of inadequate knowledge about this segment and their dominance, in terms of number, in the hardwood lumber industry. The sample was limited to firms from the hardwood lumber industry to avoid the influence of industry-specific factors. Sullivan and Bauerschmidt (1988 p.42) argue that selecting companies from a single industry ensures that responding firms compete *"for the same market with similar technologies, services, and substitutable products as well as experiencing the same industry economies and pressures for internationalization."*

When studying internationalization, it is essential that companies participate in an industry with substantial export potential. Firms that want to progress through the process must be able to do so. As Williams (1990) points out, timber products rank within the top ten fastest-growing U.S. exports. Hardwood lumber, in particular, is the most successful hardwood product traded in the international market (U.S. Dept. of Agriculture 1990). This export potential demonstrates the industry's ability to handle current and additional export activity. Consequently, limiting the study to hardwood lumber firms was deemed appropriate.

² Directory of the Forest Products Industry 1990, Lake States Forest Products Export Directory 1989, National Lumber Exporters Association Buyer's Guide, National Hardwood Lumber Association Exporters of North American Hardwood 1990, Southern Lumber Manufacturers Association Export Directory 1990, Southern Lumber Manufacturers Association Membership Directory 1990, Hardwood Manufacturers Association Buyer's Guide, Timber Lines Iowa Wood Industries Association Membership Directory 1990.

Companies were initially sent a postcard to notify them of the coming survey and to boost response rate (Groves 1989). Returned postcards served as a means of detecting incorrect addresses and companies which had discontinued operations. A cover letter accompanied the survey explaining the purpose and importance of the study. To further increase response rate (Gajraj et al. 1989) a token gift was presented as a form of appreciation for their effort. Follow-up letters were sent to those who did not respond within the first two weeks. A second survey was sent to those who had not returned surveys within two weeks of the follow-up letter.

Of the 589 firms responding, 136 had never handled or no longer handled hardwood lumber. Thirty-four surveys were returned as a result of incorrect address. Sixty-five of the responding companies were excluded from analysis because they exceeded the thirty-five employee limit. Therefore, the remaining 354 surveys represented an adjusted response rate of thirty-nine percent.

An extensive literature search revealed that a comparison of early and late respondents was the best method for assessing response bias. The technique is based on the assumption that late respondents are most like nonrespondents (Fowler 1988). If strong differences exist between early and late respondents, response bias is suggested. In this study, no significant differences were found between early and late respondents.

Data Analysis

Differing opinions exist concerning the variables best suited to characterizing firms into stages of internationalization. Based upon the results of previous studies (e.g., Bilkey and Tesar 1977, Forsgren 1989, Diamantopoulos and Inglis 1988), desire to export,

method of export, and percentage of sales from hardwood lumber exports were selected as the variables that best described international involvement. Firms were classified into one of five stages - two nonexporting and three exporting³. Based on techniques used by Bilkey and Tesar (1977), desire to export was used to divide the two nonexporting stages. Method of export was used to classify exporting firms based on trends reported by Forsgren (1989) who found that firms usually begin exporting through an agent, later establish sales subsidiaries, and finally set up local production in foreign markets. Percent of export sales was used to distinguish between firms that export directly to foreign customers as suggested by Diamantopoulos and Inglis (1988). Although Cavusgil (1984) did not find percentage of export sales to be a perfect correlate of internationalization, when used in conjunction with the other variables, it was considered suitable.

The respondents were first asked if they exported hardwood lumber either directly to foreign customers *or* to an export company or export broker. If they responded "yes," they were considered to be an exporter. If they answered "no," they were asked if they would like to become an exporter. Firms responding "no," were classified as Domestic Oriented firms. Firms answering "yes," were classified as Potential Exporters. The exporting firms were further classified according to method of export and the percentage of their company's total 1990 sales from hardwood lumber exports.

Exporters were asked which method of export best described the majority of their export sales. Those exporting through export brokers or export trading companies were labeled Indirect Exporters. Direct exporters were subsequently classified, based on

³ An attempt was made to classify firms into as many meaningful target groups as possible while keeping the number of firms in each group large enough to provide meaningful statistical analyses.

previous work by Cavusgil (1982), as either Low-Intensity Direct Exporters (10% or less of company's total sales from hardwood lumber exports) or High-Intensity Direct Exporters (more than 10% of company's total sales from hardwood lumber exports).

Table 1 illustrates the number of responding firms in each internationalization stage. Unclassified firms were those for which no data were given concerning one or all the stage identification variables. Phone calls were made in an attempt to reduce the number of unclassified firms. However, of the original forty-six in this category, twenty-six remained unclassified as a result of non-contact or insufficient information.

One-way analyses of variance (ANOVA) and Pearson chi-square tests were used to determine the significance of demographic differences between the internationalization stages. Interval data such as average annual lumber output and sales, number of employees, years exporting, and number of export customers were tested using the one-way ANOVA technique in association with Tukey multiple comparison tests⁴. Differences between stages based on frequency data (location of responding firms) were investigated using cross-tabulation in combination with the Pearson chi-square value.

Results and Discussion

Export Experience

Most firms (76%), regardless of stage, have been exporting for ten years or less and each stage averaged 5.3 years or less (Table 2). This indicates exporting is relatively

⁴ ANOVA determines differences between or among means ($H_0: \mu_1 = \mu_2 = \mu_3 = \mu_4 = \mu_5$). A significant F-statistic merely indicates that not all the population means are equal. The Tukey multiple comparison test determines which groups differ.

new to the eastern hardwood lumber industry. The number of years that Indirect and Low-Intensity Direct Exporters have been exporting is not significantly different from that of High-Intensity Direct Exporters. The presence of firms in all stages also supports Cavusgil's (1984) theory that some firms choose to remain in a lower stage of international involvement instead of progressing to the next level. In other words, no internationalization stage has exported significantly longer than any other stage, yet, some firms have progressed to High-Intensity Direct Exporting while others still export indirectly.

Employment

Hammett et al. (1991) found that southern Appalachian exporters of hardwood lumber were more likely to possess twenty-six or more employees and nonexporters twenty-five or fewer. The results of this study indicate that forty percent of firms with an average of twenty or fewer employees were not only exporters, but some were highly involved in export activity.

Firms in the internationalization stages did not significantly differ with respect to total number of employees (Table 2). However, significant differences were found when compared according to individual employee type (i.e., production, nonproduction, and export-related nonproduction). Domestic Oriented firms had significantly fewer production employees than Low- and High-Intensity Direct exporters. Potential Exporters had significantly fewer production employees than High-Intensity Direct Exporters. Domestic Oriented firms and Potential Exporters employed significantly fewer nonproduction employees than did Indirect and Low-Intensity Direct Exporters, suggesting that firms in the nonexporting stages may lack sufficient personnel to export.

Indirect Exporters employed significantly more export-related nonproduction employees⁵ than did Low- and High-Intensity Direct Exporters (Table 2). High-Intensity Direct Exporters did not have significantly larger export staffs than did Low-Intensity Direct Exporters. These results are nearly opposite those identified in U.S. manufacturing companies by Cavusgil (1984) and in the Scottish food and beverage products industry by Diamantopoulos and Inglis (1988). Both studies found that firms with greater international involvement staffed export divisions to a greater degree. This contradiction may be explained by the contribution of hardwood lumber exports to total lumber sales and by the average number of export-related customers served by firms in each stage.

Customers and Export Sales

Indirect Exporters may have larger export staffs than Low-Intensity Direct Exporters to accommodate the larger export-related customer base and the greater percentage of export sales (Table 2). Indirect Exporters served significantly more export distributors than Low-Intensity Direct Exporters served foreign customers (Table 2). Indirect Exporters earned nearly twenty-three percent of their total hardwood lumber sales from business with export brokers or export companies while Low-Intensity Direct Exporters received an average of only six percent of total lumber sales from hardwood lumber exports (Table 2). Consequently, Indirect Exporters have created larger staffs to serve the additional needs generated by more export-related customers and greater proportions of sales to those customers.

⁵ Nonproduction employees who work only on export operations.

On the other hand, Indirect Exporters had neither significantly more export-related customers nor a greater percentage of hardwood lumber export sales than did High-Intensity Direct Exporters (Table 2). The significantly smaller export staffs found in High-Intensity Direct Exporting firms may indicate that marketing/management staffs are more experienced in the latter stages of internationalization. Although exporting directly to overseas markets may be more complex and difficult, fewer staff members are needed to manage the additional demands.

As previously mentioned, Indirect Exporters earned nearly twenty-three percent of their total hardwood lumber sales from business with export brokers or export companies (Table 2). Some companies may elect to remain Indirect Exporters and increase sales through this channel instead of accepting greater risk by moving to the next stage of internationalization. In addition, Indirect Exporters sell to brokers who may not export all the lumber. It is possible that not all the lumber sold to these middlemen is 'exportable' or even intended for export and, therefore, is sold domestically. Consequently, it cannot be said with confidence that Indirect Exporters receive twenty-three percent of sales from exports, but only that they receive twenty-three percent of sales from business with export brokers or export companies.

Diamantopoulos and Inglis (1988) found that High-Involvement Exporters in the Scottish food and beverage industry traded with three times more overseas customers than did Low-Involvement Exporters. Although High-Intensity Direct Exporters in this study did not have significantly more customers than Low-Intensity Direct Exporters, they had a greater percentage of sales from hardwood lumber exports (Table 2).

Production

Total annual lumber output was significantly different among the stages of internationalization (Table 2). Domestic Oriented firms had lower average annual lumber production than did Indirect and Low-Intensity Direct Exporters. The nonsignificant difference between Domestic Oriented firms and High-Intensity Direct Exporters may ease concerns that modest lumber output limits the potential for companies to export.

When hardwood and softwood lumber production were considered separately, a Tukey multiple comparison test failed to find any two stages with significantly different softwood lumber output. However, nonexporters had significantly lower hardwood lumber output than did the exporting stages.

Average annual lumber sales were also significantly different among the stages of Internationalization (Table 2). Domestic Oriented firms had significantly lower sales than the exporting stages, while Potential Exporters had lower sales than Indirect and Low-Intensity Direct Exporters.

Location

Survey subjects were asked which of nine regions⁶ was the primary location of their company's hardwood lumber operation(s). Table 3 shows the percentage of firms indicating principal business operations in each of the regions. Potential Exporters were

⁶ (1) *New England*: Maine, Vermont, New Hampshire, Connecticut, Massachusetts, Rhode Island, (2) *Northeast*: New York, Pennsylvania, New Jersey, Delaware, Maryland, West Virginia, (3) *Mid-Atlantic*: Virginia, North Carolina, South Carolina, (4) *Southeast*: Georgia, Alabama, Florida, (5) *Lake States*: Wisconsin, Michigan, Minnesota, (6) *Mid-West*: Kentucky, Indiana, Illinois, Ohio, Iowa, Missouri, (7) *South*: Arkansas, Tennessee, Louisiana, Mississippi, (8) *West*: Other states (not included in survey results), (9) *Other*: (not included in survey results).

well distributed among the regions. Indirect Exporters were also evenly distributed except for a cluster in the Northeast. Approximately fifty-eight percent of Domestic Oriented firms were located in the Northeast and Midwest. About fifty-two percent of Low-Intensity Direct Exporters were concentrated in the Northeast and Mid-Atlantic. Roughly seventy-three percent of High-Intensity Direct Exporters had concentrations in the Northeast, Mid-Atlantic, and the Midwest.

The concentration of firms in the Northeast and Mid-Atlantic may be explained by regional characteristics. These regions produce large quantities of hardwood, especially oak, the primary hardwood species in both domestic and export markets (Hammett 1991). Proximity to port locations may influence firms operating in these regions. Export influences in the form of export agents, brokers, and government export promotion may also explain the concentrations of Indirect, Low-Intensity, and High-Intensity Direct Exporters.

The presence of Domestic Oriented firms in the Midwest may also be explained by regional characteristics. This region, too, produces large quantities of hardwood. However, the export influences found in the Northeast and Mid-Atlantic may not be as profound in the Midwest. Therefore, the firms located there may not be equally guided toward exporting. In addition, transportation costs to port locations may curtail export operations. Firms in the Midwest must ship their products greater distances, incurring greater cost to reach export locations than those firms already established near prime export sites.

Summary and Conclusions

This study characterized the eastern hardwood lumber industry in terms of the internationalization process. Five unique stages were defined based on desire to export, method of export, and percentage of total sales from hardwood lumber exports. Various characteristics were used to compare firms in each stage of internationalization. The company structure of eastern hardwood lumber producers and distributors differed in each internationalization stage. However, caution must be taken when implying cause and effect. For example, it cannot be proven that exports cause companies to enlarge or that companies must be larger to export. It can only be concluded that average annual hardwood lumber output and lumber sales are larger in the latter stages. However, it can be said with confidence that firms exist in unique stages of internationalization and they possess differential and comparative advantages that can be used to infer export initiation and export assistance needs.

For policy makers, this study demonstrates that firms in the eastern hardwood lumber industry exist at different stages of internationalization and display unique demographic characteristics. The unique differential and comparative advantages of firms in each stage point to differing export-related assistance needs. Those in charge of export promotion must account for these differing needs if their efforts are to be successful. As Kean (1989) stated, eight percent of all U.S. manufacturers export, each expanding and employing more workers. Initiating the other ninety-two percent to export and boosting the sales of those already exporting benefits not only the individual companies, but the economy as well. However, caution must be taken to avoid overwhelming companies with export information. Only that assistance that applies to their unique needs should be

presented to individual firms. Information overload can be confusing and even anti-productive.

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Table 1 - Sample Population in Terms of Internationalization Stage

Internationalization Stage	Number of Firms	Percentage of Total (%)
Domestic Oriented	95	26.8
Potential Exporters	93	26.3
Indirect Exporters	43	12.1
Low-Intensity Direct Exporters	48	13.6
High-Intensity Direct Exporters	49	13.8
Unclassified	26	7.3
Total	354	99.9%

Note: Percentages do not total to 100% due to rounding error.

Table 2 - Demographic Characteristics of Internationalization Stages

	<i>Domestic Oriented</i>	<i>Potential Exporters</i>	<i>Indirect Exporters</i>	<i>Low- Intensity Direct</i>	<i>High- Intensity Direct</i>	F	P
Average Number of Years Exporting							
	*NA	NA	5.3	3.4	5.2	2.09	0.13
Average Number of Employees							
Production	9.3	10.3	12.7	13.5	15.6	5.92	0.00
Nonproduction	2.8	2.8	5.5	5.0	3.8	5.01	0.00
Export Nonproduction	NA	NA	1.4	0.4	0.6	4.83	0.01
<u>TOTAL</u>	12.1	13.1	19.6	18.9	20.0	0.18	0.91
Mean Number of Export Customers							
	NA	NA	†12.2	2.7	5.5	4.92	0.01
Mean Percent of Total Sales from Hardwood Lumber Exports							
	NA	NA	†22.9	6.2	28.3	21.21	0.00
Mean Annual Lumber Output (1,000 bd ft)							
Hardwood	1,856	2,296	3,849	3,685	4,133	8.91	0.00
Softwood	481	1,661	3,979	2,876	367	2.48	0.04
<u>TOTAL</u>	2,337	3,957	7,828	6,561	4,500	4.61	0.00
Mean Annual Lumber Sales (\$1,000)							
<u>TOTAL</u>	1,100	1,430	4,340	2,930	2,760	16.31	0.00

+ NA - Not applicable. Nonexporting firms are not expected to have export-related statistics.

‡ Indirect Exporters indicated the number of export distributors to which they sold.

† Indirect Exporters indicated percent of total lumber sales from business with export distributors.

Table 3 - Location of Internationalization Stages Studied

Location	Domestic Oriented (%)	Potential Exporters (%)	Indirect Exporters (%)	Low-Intensity Direct (%)	High-Intensity Direct (%)
New England	7.4	7.6	9.3	4.2	12.2
Northeast	24.2	17.4	34.9	20.8	30.6
Mid-Atlantic	10.5	14.1	14.0	31.3	22.4
Southeast	4.2	8.7	7.0	4.2	2.0
Lake States	11.6	14.1	9.3	12.5	2.0
Midwest	33.7	18.5	16.3	12.5	20.4
South	8.4	19.6	9.3	14.6	10.2
Chi-Square Significance					
(α)	0.00	0.21	0.00	0.00	0.00

Note: A significant chi-square test indicated at least one significant concentration of firms in a particular region.
 Percentages may not total to 100% due to rounding error.

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SMALL EASTERN HARDWOOD LUMBER FIRMS**

Abstract

Increasing small business participation in exporting promises to help counteract the growing U.S. trade deficit. However, concern exists over the apparent ineffectiveness of some programs designed to assist foreign trade. Misunderstanding about the process by which firms enter into and increase involvement in foreign markets has created barriers that restrict the success of export promotion programs. The process, known as internationalization, suggests that firms move toward international involvement gradually and require different information at each stage of development. Data from 354 small producers and distributors were analyzed to determine the export assistance needs of eastern hardwood lumber firms. Firms were placed into one of five stages of internationalization based on their desire to export, method of export, and percentage of total lumber sales from hardwood lumber exports. Firms in each stage were compared based on perceived barriers to exporting and awareness, use, potential use, and perceived benefit of twenty-two export promotion programs. Few firms were aware of the programs and even fewer had used them. The large proportions of firms indicating potential use and perceiving benefit from the programs indicated that some barriers existed which prevented their use. The results suggest that firms existing in unique stages of international involvement desired different export-related information and assistance.

Introduction

The U.S. trade deficit is currently being financed by foreign interests (Kean 1989). If the deficit continues to grow, foreign investors may discontinue support, causing interest rates to greatly inflate. Subsequently, small exporters might be unable to financially support international activities and be forced to abandon export ventures, negatively affecting employment and, ultimately, the economy (Rabino 1980). Protectionism, a proposed defensive measure, falls short of the answer, because less than fifteen percent of the U.S. trade deficit is a result of restrictions imposed by trading partners (Kean 1989). Instead, the U.S. must employ offensive strategies. Increasing small business participation, a feature lacking within the U.S. trade structure (Ali and Swiercz 1991), is an important part of such a strategy.

Export expansion is contingent upon three factors - opportunity, financing, and expertise (Kean 1989). To create export opportunity, firms must identify potential markets. Due to a huge balance-of-trade deficit and the hesitation of private banks to offer assistance, financial support for small companies is increasingly difficult to attain (Kean 1989). Even with knowledge of markets and the financial capability to export, success still requires expertise. Programs designed to promote exporting must be responsive to these needs and provide the required assistance prior to and following export entry.

Great concern exists over the apparent ineffectiveness of some export promotion programs. Most studies indicate that low levels of awareness by both exporters and nonexporters are to blame, even though a large number of firms display interest in using the programs with an expectation of beneficial results (Kedia and Chhokar 1986). Reid (1984) and Lee and Brasch (1978) suggest programs are effective in stimulating export

expansion but some barriers exist to their use. As a result, much of the assistance offered by export promotion programs remains unused and, therefore, ineffective.

Misunderstanding about the process by which firms enter into and increase involvement in foreign markets has restricted the success of export promotion programs. The process, known as internationalization, suggests that firms gradually increase involvement in international activities as they accumulate experience. Although the process is gradual, distinct stages can be identified by commitment to and activity in exporting (Cavusgil 1982). Disregard for the internationalization process has caused inaccurate targeting and ineffective use of export assistance (Weil 1978).

Companies capitalize on export opportunities differently depending on their position in the internationalization process. As a result, they request and require different types and levels of information (Cavusgil 1982). Firms within the same industry should be treated as a heterogeneous rather than a homogeneous group when targeting export assistance (Czinkota and Johnston 1981, Bilkey and Tesar 1977). However, few studies account for the presence of distinct stages of internationalization. Studies often either categorize firms as a single uniform group or as exporting and nonexporting, without further recognizing different types of exporters and nonexporters. In particular, no study could be found which specifically determined the export assistance desired by eastern hardwood lumber firms existing in different internationalization stages.

The objective of this study is to determine the export-related information and assistance needs of small eastern hardwood lumber firms at various stages in the internationalization process. Several stages are identified and compared based on

perceived barriers to exporting and awareness, use, potential use and perceived benefit of existing export promotion programs.

Methods

Data Collection

A questionnaire was sent to 1,149 small¹ producers and distributors in the eastern hardwood lumber industry to determine the export-related assistance needs of firms existing in various internationalization stages based on their awareness, use, and *perceived benefit of export promotion programs*. The sample consisted of small firms as a consequence of inadequate knowledge about this group (Gottko and McMahon 1989) and their dominance, in terms of number, in the hardwood lumber industry. A convenience sample was compiled from a variety of industry fact books, state directories, and trade association membership directories². Using an assortment of sources reduced the likelihood of systematic selection bias that could possibly skew results. The sample was limited to firms from the hardwood lumber industry to avoid the influence of industry-specific factors. Sullivan and Bauerschmidt (1988) argue that, selecting companies from

¹ The Small Business Administration defines small manufacturing firms as those with 1500 to 500 or fewer employees, depending on the nature of the manufacturer (U.S. Small Business Administration 1984). However, this definition does not fit with the characteristics of the hardwood lumber industry. For the purpose of this study, small firms were defined as those with thirty-five or fewer employees.

² Directory of the Forest Products Industry 1990, Lake States Forest Products Export Directory 1989, National Lumber Exporters Association Buyer's Guide, National Hardwood Lumber Association Exporters of North American Hardwood 1990, Southern Lumber Manufacturers Association Export Directory 1990, Southern Lumber Manufacturers Association Membership Directory 1990, Hardwood Manufacturers Association Buyer's Guide, Timber Lines Iowa Wood Industries Association Membership Directory 1990.

a single industry ensures that they compete in a similar market environment and experience similar pressures for internationalization.

An extensive literature review revealed twenty-two export promotion programs worthy of investigation. A brief description of each program was presented in the questionnaire. Specific program, agency, or association names³ were excluded from the questionnaire to avoid bias resulting from perceptions concerning the sponsoring organization. The programs were grouped into five "program groups" (Table 1) to aid the interpretation of results and increase the power of the multivariate tests of significance used in analysis (Stevens 1986). The programs were grouped according to the type of assistance offered. *Importer Information* programs give information on or about potential importers, *Promotion* programs promote U.S. exporters and their products, *Physical Exporting* programs aid with the physical transport of products or with the paperwork involved, *Financial* programs aid the exporter by providing financial and legal services, and, finally, *Marketing Information* programs offer general export information and training.

Companies were initially sent a postcard to notify them of the coming survey and to boost response rate (Groves 1989). Returned postcards served as a means of detecting incorrect addresses and companies that discontinued operations. A cover letter accompanied the survey explaining the purpose and importance of the study. To further increase response rate (Gajraj et al. 1989) a token gift was presented as a form of appreciation for their effort. Follow-up letters were sent to those who did not respond

³ U.S. Department of Commerce, Small Business Administration, U.S. Department of Agriculture, State Governments, Foreign and Domestic Chambers of Commerce, and Trade Associations.

within the first two weeks. A second survey was sent to those who had not returned surveys within two weeks of the follow-up letter.

Of the 589 firms responding, 136 had never handled or no longer handled hardwood lumber. Thirty-four surveys were returned as a result of incorrect address. Sixty-five of the responding companies were excluded from analysis because they exceeded the thirty-five employee limit. Therefore, the remaining 354 surveys represented an adjusted response rate of thirty-nine percent.

An extensive literature search revealed that a comparison of early and late respondents was the best method for assessing response bias. The technique is based on the assumption that late respondents are most like nonrespondents (Fowler 1988). If strong differences exist between early and late respondents, response bias is suggested. No significant differences were found between early and late respondents in this study.

Data Analysis

Past research investigations have used different variables to distinguish stages of internationalization. Based upon the results of previous studies (e.g., Bilkey and Tesar 1977, Forsgren 1989, Diamantopoulos and Inglis 1988), desire to export, method of export, and percentage of sales from hardwood lumber exports were selected as the variables that most described international involvement. Firms were placed into one of five stages of internationalization - two nonexporting and three exporting⁴. Desire to export was used to divide the two nonexporting stages and method of export was used

⁴ An attempt was made to classify firms into as many meaningful target groups as possible while keeping the number of firms in each group large enough to provide meaningful statistical analyses.

to classify exporting firms. Percentage of export sales was used to distinguish between firms which exported directly to foreign customers as suggested by Diamantopoulos and Inglis (1988).

The respondents were first asked if they exported hardwood lumber either directly to foreign customers *or* to an export company or export broker. If they responded "yes," they were considered to be an exporter. If they answered "no," they were asked if they would like to become an exporter. Firms responding "no," were classified as Domestic Oriented firms. Firms answering "yes," were classified as Potential Exporters. The exporting firms were further classified according to method of export and the percentage of their company's total 1990 sales from hardwood lumber exports.

Exporters were asked which method of export best described the majority of their export sales. Those exporting through export brokers or export companies were categorized Indirect Exporters. Those exporting directly to foreign customers were classified, based on previous work by Cavusgil (1982), as either Low-Intensity Direct Exporters (10% or less of company's total sales were from hardwood lumber exports) or High-Intensity Direct Exporters (more than 10% of company's total sales were from hardwood lumber exports).

Table 2 illustrates the number of responding firms in each internationalization stage. Unclassified firms were those for which no data were given concerning one or all the stage identification variables. Phone calls were made to the firms in an attempt to reduce the number of unclassified firms. However, of the original forty-six in this category, twenty-six remained unclassified as a result of non-contact or insufficient information.

Multivariate and univariate analyses of variance and Pearson chi-square tests were used to determine differences among firms in the various stages of internationalization. Cross-tabulations, in combination with Pearson chi-square tests, were applied to the dichotomous data pertaining to program awareness, use, and potential use. Differences based on location of respondents and reasons for not exporting were tested with cross-tabulations and chi-square tests. Analyses of Variance (ANOVA), in association with Tukey multiple comparison tests⁵, were used to compare firms based on average annual lumber output and sales, number of employees, years exporting, and number of export customers. Multivariate analysis of variance was used to test the scaled data concerning perceived program benefit. Multivariate (Hotelling's T^2) and Helmert contrasts⁶ were performed to determine how the stages differed based on perceived benefit of individual program groups.

Results

Stage Characteristics

Table 3 displays the demographic characteristics of firms in each stage of internationalization. Production staffs were generally larger in the latter stages. Indirect Exporters had the largest export staffs, while export staff size did not significantly differ

⁵ ANOVA determines differences between or among means ($H_0: \mu_1 = \mu_2 = \mu_3 = \mu_4 = \mu_5$). A significant F-statistic merely indicates that not all the population means are equal. The Tukey multiple comparison test determines which groups differ.

⁶ A significant Hotelling's T^2 indicates overall significance. The Helmert planned comparison determines which particular groups and/or variables are responsible for the overall significance. Helmert contrasts test each group against the average of the remaining groups.

between Low- and High-Intensity Direct Exporters. Domestic Oriented firms had significantly lower average annual lumber output than did Indirect and Low-Intensity Direct Exporters. Domestic Oriented firms also had significantly lower average annual lumber sales than the exporting stages while Potential Exporters had significantly lower sales than Indirect and Low-Intensity Direct Exporters.

Indirect Exporters served significantly more export distributors than Low-Intensity Direct Exporters served foreign customers (Table 3). Indirect Exporters earned nearly twenty-three percent of their total hardwood lumber sales from business with export brokers or export trading companies while Low-Intensity Direct Exporters received an average of only six percent of total lumber sales from hardwood lumber exports (Table 3). On the other hand, Indirect Exporters had neither significantly more export-related customers nor a greater percentage of hardwood lumber export sales than did High-Intensity Direct Exporters, yet they had larger export staffs. This may indicate that High-Intensity Direct Exporters have more experienced marketing/management staffs and, therefore, do not require more personnel to overcome the challenges of export marketing.

High-Intensity Direct Exporters did not have significantly more export customers than did Low-Intensity Direct Exporters. The short time eastern hardwood lumber firms have been exporting has, possibly, been insufficient for them to expand their foreign markets. Exporting is relatively new to the eastern hardwood lumber industry and most firms, regardless of stage, have been exporting for ten years or less and each stage averaged 5.3 years or less (Table 3). The lack of a significance difference among stages based on the number of years exporting indicates that some firms progress through the internationalization process quicker than others.

Potential Exporters were evenly distributed among seven eastern regions, while the other stages had a concentration of firms in at least one particular region (Table 4). Concentrations existed where resource and/or strong export influences flourished.

Awareness of Export Promotion Programs

Respondents were asked if they were aware of twenty-two export promotion programs. Table 5 illustrates the percentage of firms in each stage indicating awareness of each program group. In general, Indirect Exporters were most aware of programs while Potential and Low-Intensity Direct Exporters were least aware. Only one program group (*Promotion*) was known by more than fifty percent of the firms in an internationalization stage.

Kedia and Chhokar (1986) discovered that greater percentages of exporters were aware of programs than were nonexporters. If the respondents were grouped as exporters and nonexporters⁷, the results would support their findings. However, by examining individual stages, unique characteristics emerged. For example, Indirect, Low- and High-Intensity Direct Exporters were not significantly more aware of programs than were Domestic Oriented firms and Direct Exporters were not significantly more aware than were Potential Exporters. The results indicate that exporters were generally no more aware of export promotion programs than were nonexporters.

⁷ Previous studies did not define the term "exporters." For the purpose of comparison, it was assumed they included only those firms which exported directly with foreign customers in the "exporter" category. Therefore, Domestic Oriented, Potential Exporters, and Indirect Exporters were grouped as nonexporters. Low-Intensity and High-Intensity Direct Exporters were grouped as exporters.

While investigating the progression from Domestic Orientation to Potential Exporting, Cavusgil (1982) found that Potential Exporters were more active in seeking export-related information. However, in this study, significantly greater proportions of Domestic Oriented firms were aware of *Promotion, Physical Exporting, Financial, and Marketing Information* programs, indicating greater inquiry into export-related information. This contradiction in results may be explained by the reasons that Domestic Oriented firms and Potential Exporters listed as barriers to exporting.

Potential Exporters considered the lack of information as the major barrier to exporting, while Domestic Oriented firms credited their small size and satisfaction with the domestic market (Table 6). Some Domestic Oriented firms may be former Potential Exporters who explored the feasibility of exporting by seeking export-related information. However, some may have become overwhelmed and disenchanted with the assistance or learned they were not ready to export and returned to Domestic Orientation. Potential Exporters, on the other hand, have not yet researched export-related information and have not made decisions based upon such information.

Indirect Exporters are former Potential Exporters who, after seeking information, pursued exporting instead of rejecting it as did some of their Domestic Oriented counterparts. Large average annual lumber sales, more nonproduction employees, and export staffs give Indirect Exporters the resources that are necessary to investigate export-related information. Greater proportions of Indirect Exporters were aware of *Importer Information, Promotion, Physical Exporting, and Financial* programs than were Potential Exporters.

Greater proportions of Indirect Exporters were aware of *Importer Information, Promotion, and Financial* programs than were Low-Intensity Direct Exporters. Low-Intensity Direct Exporters, who may not have traded through middlemen before entering into direct exporting, did not have the advantage of discovering some of the idiosyncracies involved in exporting and may not have recognized the benefit of export assistance as did Indirect Exporters. Indirect Exporters may also be more cautious than Low-Intensity Direct Exporters. The very fact they export through middlemen indicates they may be more averse to risk and seek export-related information to a greater extent to further relieve some of the risk.

Use of Export Promotion Programs

Respondents who were aware of the programs were asked if they had used them. Table 7 illustrates the percentage of firms indicating use of each program group. A total of only nine firms indicated use of *Importer Information* and *Physical Exporting* programs. The results contradict Kedia and Chhokar (1986) who found that 60 to 70 percent of those aware of programs used them. In fact, the greatest use of any program group (*Importer Information*) was by 17.5 percent of Indirect Exporters, significantly more than any other stage. The only program group used by all three exporting stages was *Physical Exporting*, yet no stage had a significantly greater percentage of firms that used the program group. The greater percentage of Indirect Exporters that used the programs may support the theory that Indirect Exporters are more cautious than are Low- and High-Intensity Direct Exporters.

Financial and Marketing Information programs were nearly unused by firms in this study. The chi-square significance level indicates that the percentage of firms in the population that used the programs was near zero. The two programs were also the least known, possibly explaining the virtual nonuse.

Potential Use of Export Promotion Programs

Respondents who were not aware of the programs were asked if they would use them. Table 8 illustrates the percentage of firms indicating potential use of export promotion programs. Kedia and Chhokar (1986) indicated that nonexporters showed greater potential use than did exporters. When the respondents were grouped as exporters and nonexporters, the results partially supported their conclusions with nonexporters showing greater potential use of *Physical Exporting and Financial* programs. However, by examining individual stages, unique characteristics appeared. For example, Domestic Oriented firms indicated significantly lower potential use of at least three program groups than did the exporting firms. On the other hand, Potential Exporters indicated significantly greater potential use of at least three program groups than did Indirect or Low-Intensity Direct Exporters. Consequently, nonexporters indicated both the greatest, as well as, the lowest potential use of export promotion programs.

Perceived Benefit of Export Promotion Programs

Respondents who had used the programs were asked how beneficial they were to their exporting. The respondents who had not used the programs were asked how beneficial they believed they would be. Five-point Likert-type scales (ranging from "not-at-

all beneficial" to "extremely beneficial") were used to rate the programs. Users and nonusers of export promotion programs were compared to determine if they responded differently. However, no significant difference was detected. Table 9 illustrates the mean *benefit score of each program group as rated by each internationalization stage.*

Kedia and Chhokar (1986) found that nonexporters perceived export promotion programs to be more beneficial than did exporters. When the respondents were grouped as exporters and nonexporters, the results partially supported their conclusions with nonexporters perceiving significantly greater benefit from *Physical Exporting, Financial, and Marketing Information* programs. However, when the respondents were characterized according to the internationalization process, a multivariate contrast indicated that Potential Exporters differed from all exporters and Indirect Exporters differed from Low- and High-Intensity Direct exporters. In particular, Potential Exporters perceived greater benefit from all the programs except for *Promotion* programs, while Indirect Exporters perceived less benefit from *Physical Exporting and Financial* programs. Domestic Oriented firms did not perceive the benefit from export promotion programs significantly different from firms in the other stages.

Summary and Conclusions

This study investigated the export-related information and assistance characteristics of eastern hardwood lumber producers and distributors. Companies were characterized into five stages of internationalization based on the firms' desire to export, *method of export, and percentage of total sales from hardwood lumber exports.* Firms in the five stages were compared according to demographic characteristics, perceived

barriers to export, and their awareness, use, potential use, and perceived benefit of existing export promotion programs.

Inadequate awareness of export promotion programs and the low rates of use should raise concern. Low awareness may be a significant contributor to the problem of nonuse. However, of those firms that were aware of the programs, very few actually used them. Therefore, merely increasing the exposure of these programs may be insufficient to stimulate exporting. In addition, targeting firms with the export assistance they desire and consider important to their operations promises to expand export activity.

Domestic Oriented firms should be targeted with motivational material. Some are unwilling to investigate export-related information, while others may not have the resources available to search for assistance because of small production and nonproduction staffs and low average annual lumber sales. Therefore, those responsible for export promotion must locate Domestic Oriented firms and target them with export-related information rather than waiting for the companies to come to them. Particular attention should be paid to the fact that Domestic Oriented firms perceived themselves as 'too small' to export. Information about middlemen which consolidate shipments and further aid in the physical transport of lumber should be supplied. Some of the firms may have already explored export assistance but rejected it, therefore, efforts must be made to re-motivate them. Once interest is sparked, they should be treated as Potential Exporters.

Potential Exporters are already motivated to export but lack export-related information. Nonproduction staffs were relatively small and, like Domestic Oriented firms, may not have the time to actively seek assistance and should be pursued instead of waiting for them to act. Potential Exporters generally considered all export assistance as

potentially useful. Care must be taken to give information in a simple, non-intimidating manner to avoid "scaring" companies back to Domestic Orientation. The interest that Potential Exporters showed in *Importer Information and Physical Exporting* programs may indicate that some are interested in direct exporting while others are interested in indirect exporting. Information concerning both methods of exporting should be targeted to each firm so they may determine which method best suits their abilities and company objectives.

Indirect Exporters had already chosen middlemen with which to do business and indicated they were no longer acutely interested in *Physical Exporting* programs. Instead, they showed interest in *Importer Information and Promotion* programs signifying that many are interested in direct exporting. However, some Indirect Exporters may be apprehensive about dealing directly with foreign customers and, consequently, elect to avoid direct exporting. Indirect Exporters may also be more cautious than other exporters and more averse to risk. Therefore, information easing the fears and concerns about direct exporting should be provided to Indirect Exporters.

Low-Intensity Direct Exporters had few export customers and received an average of only six percent of total lumber sales from export sales. They showed greater interest in *Physical Exporting, Importer Information, and Financial* programs. Their interest in those programs indicates that they want to find additional foreign customers and need help financing their operations. Low-Intensity Direct Exporters in the eastern hardwood lumber industry showed little interest in *Promotion* programs. They are either unaware of the benefits from such programs or feel they are not ready to use them.

High-Intensity Direct Exporters had few export customers but received an average of twenty-eight percent of their total lumber sales from business with them. They indicated interest in all programs except for those in the *Promotion* group. Like Low-Intensity Direct Exporters, High-Intensity Direct Exporters are interested in finding additional foreign customers and need help financing their operations. However, unlike Low-Intensity Direct Exporters, High-Intensity Direct Exporters are interested in *Marketing Information* programs, indicating that they may be interested in locating new foreign markets.

The results from the potential use and perceived benefit of export promotion programs contradict previous suggestions that firms become less dependent on external sources of assistance as they increase international involvement. In fact, an opposite trend existed. Exporters with greater international involvement were generally more interested in external sources of assistance. They showed a greater potential use of programs and expect greater benefits.

For policy makers, this study illustrates that firms in the eastern hardwood lumber industry existing at different stages of internationalization desire specific export-related information and assistance according to which stage they belong. Those in charge of export promotion must recognize the differing stages if efforts to expand exports are to be successful. As Cavusgil (1983, p.17) stated, "export promotion, by itself, is not sufficient to accomplish the necessary growth in U.S. exports. It is, however, an essential component of a national export policy."

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Table 1 - Export Promotion Programs Included in Each Program Group

<p align="center">Program Groups and Programs Included in Each</p>
<p>Importer Information:</p> <ul style="list-style-type: none"> * Mailing lists of foreign buyers * Credit information on foreign buyers * General information on foreign buyers * Lists of foreign agents and distributors
<p>Promotion:</p> <ul style="list-style-type: none"> * Promotion of U.S. products overseas * Arrangement of international trade shows * Arrangement of overseas trips to meet potential foreign buyers
<p>Physical Exporting:</p> <ul style="list-style-type: none"> * Purchase of products for resale overseas * Handling of all paperwork * Transportation routings and consolidation of shipments
<p>Financial:</p> <ul style="list-style-type: none"> * Loan guarantees * Credit assistance for foreign buyers * Funds transfer from foreign buyers * Payment guarantees by qualified buyers * Handling of all financial dealings of sale * Legal advise and assistance
<p>Marketing Information:</p> <ul style="list-style-type: none"> * General export counseling * Assessment of market potential in specific countries * Seminars on the basics of exporting * Toll-free number for export-related assistance * Contacts with experienced exporters * Information on doing business in a foreign country

Table 2 - Sample Population in Terms of Internationalization Stage

Internationalization Stage	Number of Firms	Percent of Total (%)
Domestic Oriented	95	26.8
Potential Exporters	93	26.3
Indirect Exporters	43	12.1
Low-Intensity Direct Exporters	48	13.6
High-Intensity Direct Exporters	49	13.8
Unclassified	26	7.3
Total	354	99.9%

Note: Percentages do not total to 100% due to rounding error.

Table 3 - Demographic Characteristics of Internationalization Stages

	Domestic Oriented	Potential Exporters	Indirect Exporters	Low- Intensity Direct	High- Intensity Direct	F	P
Mean Number of Years Exporting							
	*NA	NA	5.3	3.4	5.2	2.09	0.13
Mean Number of Employees							
Production	9.3	10.3	12.7	13.5	15.6	5.92	0.00
Nonproduction	2.8	2.8	5.5	5.0	3.8	5.01	0.00
Export Nonproduction	NA	NA	1.4	0.4	0.6	4.83	0.01
<u>TOTAL</u>	12.1	13.1	19.6	18.9	20.0	0.18	0.91
Mean Number of Export Customers							
	NA	NA	‡12.2	2.7	5.5	4.92	0.01
Mean Percent of Total Sales from Hardwood Lumber Exports							
	NA	NA	†22.9	6.2	28.3	21.21	0.00
Mean Annual Lumber Output (1,000 bd ft)							
Hardwood	1,856	2,296	3,849	3,685	4,133	8.91	0.00
Softwood	481	1,661	3,979	2,876	367	2.48	0.04
<u>TOTAL</u>	2,337	3,957	7,828	6,561	4,500	4.61	0.00
Mean Annual Lumber Sales (\$1,000)							
	1,100	1,430	4,340	2,930	2,760	16.31	0.00

+ NA - Not applicable. Nonexporting firms are not expected to have export-related statistics.

‡ Indirect Exporters indicated the number of export distributors to which they sold.

† Indirect Exporters indicated percent of total lumber sales from business with export distributors.

Table 4 - Location of Internationalization Stages Studied

Location	Domestic Oriented (%)	Potential Exporters (%)	Indirect Exporters (%)	Low-Intensity Direct (%)	High-Intensity Direct (%)
New England	7.4	7.6	9.3	4.2	12.2
Northeast	24.2	17.4	34.9	20.8	30.6
Mid-Atlantic	10.5	14.1	14.0	31.3	22.4
Southeast	4.2	8.7	7.0	4.2	2.0
Lake States	11.6	14.1	9.3	12.5	2.0
Midwest	33.7	18.5	16.3	12.5	20.4
South	8.4	19.6	9.3	14.6	10.2
Chi-Square Significance					
(α)	0.00	0.21	0.00	0.00	0.00

Note: A significant chi-square test indicated at least one significant concentration of firms in a particular region.
 Percentages may not total 100% due to rounding error.

Table 5 - Percent of Firms in Each Stage of Internationalization Indicating Awareness of Export Promotion Programs

Program Group	Domestic Oriented (%)	Potential Exporters (%)	Indirect Exporters (%)	Low-Intensity Direct (%)	High-Intensity Direct (%)	Chi-Square Significance (α)
Importer Information	17.6	9.2	31.0	8.9	14.6	0.02
Promotion	28.6	13.8	54.8	25.5	38.8	0.00
Physical Exporting	16.9	5.7	23.8	8.7	14.3	0.03
Financial	14.8	13.8	19.0	4.7	6.7	0.03
Marketing Information	14.1	2.4	10.0	2.3	8.5	0.03

Table 6 - Percent of Nonexporting Firms Indicating Reason For Not Exporting

Reason For Not Exporting	Domestic Oriented	Potential Exporter
Company Is Too Small To Export	43.5	15.7
Domestic Market Keeps Company Busy Enough	27.2	15.7
Have Seen Others Fail in Exporting	0	2.2
Lack of Information About Foreign Markets	1.1	44.9
Don't Believe in Exporting	3.3	1.1
Exporting Is Too Complicated	4.3	4.5
Don't Have the Equipment Needed to Export	5.4	5.6
Other	15.2	10.1
TOTAL	100%	100%

Note: A Pearson chi-square significance level of 0.00 indicated that Domestic Oriented firms and Potential Exporters indicated significantly different reasons for not exporting. Percentages may not total to 100% due to rounding error.

Table 7 - Percent of Firms in Each Stage of Internationalization Indicating Use of Export Promotion Programs

Program Group	Indirect Exporters (%)	Low-Intensity Direct (%)	High-Intensity Direct (%)	Chi-Square Significance (α)
Importer Information	17.5	0	4.3	0.01
Promotion	15.8	0	4.2	0.01
Physical Exporting	2.6	4.8	12.8	0.14
Financial	2.7	0	0	0.33
Marketing Information	3.0	0	4.5	0.40

Note: Domestic Oriented firms and Potential Exporters were excluded from the chi-square tests of significance because nonexporters were not expected to have used and did not use export programs. Their nonuse of all program groups skewed results by indicating significance when significance did not exist among groups which used the programs.

Table 8 - Percent of Firms in Each Stage of Internationalization Indicating Potential Use of Export Promotion Programs

Program Group	Domestic Oriented (%)	Potential Exporters (%)	Indirect Exporters (%)	Low-Intensity Direct (%)	High-Intensity Direct (%)	Chi-Square Significance (α)
Importer Information	41.9	90.5	73.3	72.5	80.0	0.00
Promotion	28.8	67.9	66.7	36.4	56.1	0.00
Physical Exporting	40.5	83.1	42.9	62.5	72.7	0.00
Financial	25.4	71.8	27.6	61.5	70.0	0.00
Marketing Information	26.9	73.7	50.0	56.8	64.3	0.00

Table 9 - Mean Benefit Score for Each Export Promotion Program Group by Each Stage of Internationalization

Program Group	Domestic Oriented	Potential Exporters	Indirect Exporters	Low-Intensity Direct	High-Intensity Direct
Importer Information	4.1	4.3	3.8	3.9	4.3
Promotion	3.6	3.8	3.7	3.5	3.6
Physical Exporting	3.9	4.1	3.1	3.7	3.9
Financial	4.1	4.4	3.4	4.0	4.1
Marketing Information	3.9	4.2	3.6	3.8	3.8

Note: 1 = "Not-at-all beneficial" and 5 = "extremely beneficial."

A Helmert contrast indicated that Potential Exporters differed significantly from Indirect and Low- and High-Intensity Direct Exporters on perceived benefit of all programs except *Promotion Programs*. Indirect Exporters differed significantly from Low- and High-Intensity Direct Exporters on *Physical Exporting and Financial Programs*.

**AN ASSESSMENT OF FACTORS WHICH INITIATE EXPORT ACTIVITIES IN
SMALL EASTERN HARDWOOD LUMBER FIRMS**

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Abstract

Small firms have the potential to reap great benefits from international markets. However, few take advantage of the opportunities that exporting affords. Many firms are either unaware of the opportunities or perceive barriers and risks that inhibit their entry into exporting. Data from 354 small hardwood lumber producers and distributors were analyzed to determine reasons for not exporting and to determine the factors that initiate export activity. Companies were compared based on perceived barriers to exporting and the importance of twenty-one export stimuli. Domestic oriented firms perceived themselves as too small to export and were satisfied with the domestic market. Potential exporters indicated that their lack of knowledge about foreign markets kept them from exporting. The potential for increased profits and communication with export distributors were ranked as the most important export incentives, while the chance to travel overseas and communications with chambers of commerce were ranked as the least important. The results from this study will aid export promotion programs increase the participation of small firms in the international market by identifying the attitudes those firms have toward exporting.

Introduction

The international market holds great potential for small U.S. manufacturers due to its immense size and the low participation rate by U.S. companies (Kaynak and Kothari 1984, Ali and Swiercz 1991). Although small firms produce products desired by foreign markets, relatively few take advantage of export opportunities (Ali and Swiercz 1991). In fact, eighty-five percent of exporting by U.S. manufacturers is performed by only one percent of the firms, mainly large multinational corporations (Kean 1989). Increasing small business participation in international markets offers promise to those companies and to the economy.

Recently, attempts have been made to stimulate export activity to overcome existing balance-of-trade deficits and saturated domestic markets (Dichtl et al. 1984). Bilateral and multilateral trade agreements and exchange rate alterations have been used in combination with export promotion programs that offer incentives ranging from guarantees to improved export trade information. The federal government, as well as some state governments and private organizations, have instituted programs designed to help small firms overcome the major barriers to international involvement (Kean 1989).

Little is known about the opinions that smaller firms have on exporting (Gottko and McMahon 1989). Their size gives them the flexibility to quickly enter into export activity and to adjust rapidly to currency fluctuations (Dichtl et al. 1984). However, small size also creates problems associated with the awareness and use of information required to assess export opportunities (Kedia and Chhokar 1986). Some small firms may recognize the potential offered by exporting but perceive obstacles and risks such as unfamiliar procedures and market conditions, inadequate information, and complicated trade

regulations (Gottko and McMahon 1989). Some firms may be skeptical of the programs designed to ease their entry into exporting and may be reluctant to contact them for help (Vozikis and Mescon 1985).

Previous studies have attempted to determine the barriers that inhibit companies from exporting, as well as, incentives that stimulate export activity. However, no previous study specifically addressed these issues in the eastern hardwood lumber industry. Wood and Goolsby (1987) explain that firms existing in dissimilar industries face distinct environments that require unique kinds of information to guide their export decisions. Although similarities exist among firms in different industries, unique perceptions emerge. Kedia and Chhokar (1986) agree that factors that initiate export activity in one industry may not have the same effect in another. Therefore, the objective of this study was to determine the factors that inhibit small eastern hardwood lumber firms from exporting and the factors that initiate their entry into foreign markets. Knowledge of these factors can help develop and highlight existing export promotion programs responsible for initiating exporting.

Methods

Data Collection

A questionnaire was sent to 1,149 small¹ producers and distributors in the eastern hardwood lumber industry to determine barriers to exporting and the factors that initiate

¹ The Small Business Administration defines small manufacturing firms as those with 500 or fewer employees, depending on the nature of the manufacturer (U.S. Small Business Administration 1984). However, this definition does not fit with the characteristics of the hardwood lumber industry. For the purpose of this study, small firms were defined as those with thirty-five or fewer employees.

export activity. Small firms were studied because of inadequate knowledge about this industry segment, their dominance (in terms of number) in the forest products industry, and the potential they show toward exporting.

A convenience sample, including both exporters and nonexporters, was compiled from a variety of industry fact books, state directories, and trade association membership directories². Using an assortment of sources reduced the likelihood of systematic selection bias that could possibly skew results. The sample was limited to firms from the hardwood lumber industry to avoid the influence of industry-specific factors. Sullivan and Bauerschmidt (1988) argue that selecting companies from a single industry ensures that they compete for the same market in similar environments and experience the same pressures for internationalization.

Companies were initially sent a postcard to notify them of the coming survey and to boost response rate (Groves 1989). Returned postcards served as a means of detecting incorrect addresses and companies that discontinued operations. A cover letter accompanied the survey explaining the purpose and importance of the study. To further increase response rate (Gajraj et al. 1989) a token gift was presented as a form of appreciation for their effort. Follow-up letters were sent to those who did not respond within the first two weeks. A second survey was sent to those who had not returned surveys within two weeks of the follow-up letter.

² Directory of the Forest Products Industry 1990, Lake States Forest Products Export Directory 1989, National Lumber Exporters Association Buyer's Guide, National Hardwood Lumber Association Exporters of North American Hardwood 1990, Southern Lumber Manufacturers Association Export Directory 1990, Southern Lumber Manufacturers Association Membership Directory 1990, Hardwood Manufacturers Association Buyer's Guide, Timber Lines Iowa Wood Industries Association Membership Directory 1990.

Of the 589 firms responding, 136 had never handled or no longer handled hardwood lumber. Thirty-four surveys were returned as a result of incorrect address. Sixty-five of the responding companies were excluded from analysis because they exceeded the thirty-five employee limit. Therefore, the remaining 354 surveys represented an adjusted response rate of thirty-nine percent.

An extensive literature search revealed that a comparison of early and late respondents was the best method for assessing response bias. The technique is based on the assumption that late respondents are most like nonrespondents (Fowler 1988). If strong differences exist between early and late respondents, response bias is suggested. However, no significant differences were found between early and late respondents in this study.

Data Analysis

Firms were classified as being in one of five stages of international involvement - two nonexporting and three exporting. Debate over which variables are best suited to characterize firms into internationalization stages is well documented in the literature. Based on techniques used by Bilkey and Tesar (1977), desire to export was used to divide the two nonexporting stages. Method of export was used to classify exporting firms based on trends found by Forsgren (1989), Johanson and Vahlne (1977), and Knickerbocker (1972). Percentage of export sales was used to distinguish between firms that exported directly to foreign customers as suggested by Diamantopoulos and Inglis (1988).

Respondents were first asked if they exported hardwood lumber either directly to foreign customers *or* to an export company or export broker. If they responded "yes," they were considered to be an exporter. If they answered "no," they were asked if they would like to become an exporter. Firms responding "no," were classified as Domestic Oriented firms. Firms answering "yes," were classified as Potential Exporters. The exporting firms were further classified according to method of export and the percentage of their company's total 1990 sales from hardwood lumber exports.

Exporters were asked which method of export best described the majority of their export sales. Those exporting through export brokers or export companies were categorized as Indirect Exporters. Those exporting directly to foreign customers were subsequently classified as Low-Intensity Direct Exporters (10% or less of company's total sales from hardwood lumber exports) and High-Intensity Direct Exporters (more than 10% of company's total sales from hardwood lumber exports).

Table 1 illustrates the number of responding firms in each internationalization stage. Unclassified firms were those which no data was given concerning one or all the stage identification variables. Phone calls were made in an attempt to reduce the number of unclassified firms. However, of the original forty-six in this category, twenty-six remained unclassified as a result of non-contact or inability to answer questions.

An extensive literature review revealed twenty-one export stimuli worthy of investigation. The variables were grouped into two reliable³ categories: internal and external stimuli (Table 2). As indicated by their descriptive titles, internal stimuli originate

³ Cronbach's Alpha was used to determine the internal consistency of internal and external export stimuli measures. The following were determined: External: $\alpha = 0.80$, Internal: $\alpha = 0.73$

from inside the firm and external stimuli arise from outside the company environment. Grouping the variables into smaller groups aided the interpretation of results and increased the power of the multivariate tests of significance used in analysis (Stevens 1986).

Multivariate and univariate analysis of variance, Pearson chi-square tests, and t-tests were used to determine differences among the various stages of internationalization. Analyses of variance, in association with Tukey multiple comparison tests, were used to compare firms based on average annual lumber output and sales, number of employees, and years exporting. Cross-tabulations, in combination with Pearson chi-square tests, were applied to the export barriers perceived by nonexporters. Multivariate analysis of variance was used to test the scaled data concerning the various stimuli that initiate export activity. T-tests were used to determine if respondents rated internal and external export incentives differently.

Results and Discussion

Firm Characteristics

The company structure of small eastern hardwood lumber firms differed in each stage of internationalization. Table 3 illustrates the demographic characteristics of firms in each stage. Production staffs were generally larger in the latter stages. Indirect Exporters had the largest export staffs, while export staff size did not significantly differ between Low- and High-Intensity Direct Exporters. Domestic Oriented firms had significantly lower average annual lumber output than did Indirect and Low-Intensity Direct Exporters. Total lumber output from Domestic Oriented firms did not significantly differ

from that of High-Intensity Direct Exporters. Domestic Oriented firms also had significantly lower sales than the exporting stages while Potential Exporters had significantly lower sales than Indirect and Low-Intensity Direct Exporters.

Export Barriers

Nonexporters were asked why they did not export. Table 4 illustrates the percentage of Domestic Oriented firms and Potential Exporters indicating their primary reason for not exporting. Potential Exporters considered the lack of information as the major barrier to exporting, while Domestic Oriented firms credited their small size and satisfaction with the domestic market.

These results are in general agreement with previous research which found insufficient knowledge of exporting and sufficient domestic markets as important barriers to exporting (Kedia and Chhokar 1986, Kaynak and Kothari 1984, Rabino 1980). However, past research also identified the difficulties of and complicated procedures involved in exporting as significant hindrances to firms in other industries. Few firms in the hardwood lumber industry identified complications with exporting as a major reason for not exporting (Table 4).

No previous study investigating barriers to exporting was found which specifically addressed the perceptions of company size as a barrier. Although not significantly smaller than Potential Exporters (in terms of employees, output, and sales), a larger proportion of Domestic Oriented firms considered themselves too small to export. Their greater awareness of export promotion programs and their de-emphasis on the lack of information as a barrier to exporting may indicate that they have investigated exporting to a greater

extent than Potential Exporters. Through this research, they may have received the impression they were too small to export.

Export Initiation

Respondents were asked to rate the importance of twenty-one export stimuli. Five point Likert-type scales (ranging from 1 = "not at all important" to 5 = "extremely important") were used to rate each stimulus. Exporters were asked to answer based on their experiences. Nonexporters were not expected to have previous experience on which to base their answers and, therefore, were asked to give their opinions. Table 5 illustrates the mean importance score of both internal and external export incentives as rated by the firms in each internationalization stage. As the t-test results in Table 5 reveal, respondents did not consider internal stimuli more or less important than external stimuli.

The stages of internationalization were then compared with each other to determine if their perceptions of internal and external stimuli were different. No difference existed⁴ and the population was, then, divided into exporting and nonexporting stages⁵. Again, no difference existed⁶ and, therefore, the population's perceptions were considered homogeneous and the means for the total sample were determined.

⁴ Multivariate test of significance: F-statistic = 0.05, P = 0.14.

⁵ Previous studies did not define the term "exporters." For the purpose of comparison, it was assumed they included only those firms which exported directly with foreign customers in the "exporter" category. Therefore, Domestic Oriented, Potential Exporters, and Indirect Exporters were grouped as nonexporters. Low-Intensity and High-Intensity Direct Exporters were grouped as exporters.

⁶ Multivariate test of significance: F-statistic = 0.00, P = 0.90.

The mean importance scores for the entire population were 3.4 for both internal and external export stimuli. The low scores and the lack of significance indicated that further analysis was necessary to determine the individual stimuli that were most important. The potential for increased profits, ranked as the most important factor contributing to the entry into exporting (Table 6). Communication with export distributors and brokers was also considered very important. The opportunity to travel overseas, communication with chambers of commerce, following competition into foreign markets, and recent trips overseas were considered to be the least important export stimuli.

Communication with export distributors and brokers was deemed an important stimulus for exporting (Table 6). Gottko and McMahon (1989) found that exporters of Oregon lumber, who had never communicated with export distributors, consider them to be of little importance. It is probable that those who don't contact middlemen intend to export directly and, therefore, export distributors are not important. However, most eastern hardwood lumber firms consider export companies and brokers important because the lesser risk involved attracts them to indirect exporting.

Kaynak and Kothari (1984) and Gottko and McMahon (1989) found that receipt of an unsolicited order from a foreign firm was an important export stimulus. However, firms in the eastern hardwood lumber industry did not consider unsolicited orders exceptionally important. The fact that export distributors have a larger impact on export initiation indicates that eastern hardwood lumber firms prefer dealing with a domestic middleman as a means for entering the export market instead of incurring greater risk by dealing with an unfamiliar customer in unfamiliar territory.

Poor domestic market conditions and providing a hedge against economic downturns were ranked as relatively important export stimuli. The results imply that firms consider diversification into foreign markets as a viable and important method of survival. However, Nagy (1988) warns that from the foreign market viewpoint, the practice of exporting only during soft domestic markets creates the image of unreliability and exploitation.

Summary and Conclusion

This study determined the factors that inhibit and stimulate the export activity of small eastern hardwood lumber firms. Companies were characterized into five stages of internationalization based on the firms' desire to export, method of export, and percentage of total sales from hardwood lumber exports. Nonexporting stages were compared according to their reasons for not exporting and all stages were compared according to perceived importance of export incentives.

The significant difference between Domestic Oriented Firms and Potential Exporters indicates the importance of recognizing different attitudes at different levels of export involvement. Domestic Oriented firms considered themselves too small and too busy with the domestic market to export. Potential Exporters credited their lack of knowledge about foreign markets as the main reason for not exporting.

The lack of a significant difference among stages of internationalization based on the importance of export stimuli indicates that all firms originate from the same stage when entering exporting. The potential for increased profit and communication with export distributors and brokers ranked as the most important factors initiating exporting. The

chance to travel overseas and communication with chambers of commerce ranked as the least important export stimuli.

Export promotion programs must respond to the attitudes that small firms have toward exporting to increase their participation in the international market. For example, Domestic Oriented firms should be targeted with information counteracting concerns about small size and domestic market dependency. On the other hand, Potential Exporters should be given information about foreign markets. In addition, both should be shown the potential for increased profits from export activity and the advantages of beginning exporting with the aid of export distributors.

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Table 1 - Sample Population in Terms of Internationalization Stage

Internationalization Stage	Number of Firms	Percent of Total (%)
Domestic Oriented	95	26.8
Potential Exporters	93	26.3
Indirect Exporters	43	12.1
Low-Intensity Direct Exporters	48	13.6
High-Intensity Direct Exporters	49	13.8
Unclassified	26	7.3
Total	354	99.9%

Note: Percentages do not total to 100% due to rounding error.

Table 2 - Export Stimuli Included in the Internal and External Categories

Export Stimuli Included in Each Category	
Internal:	<ul style="list-style-type: none">* Trip Overseas* Goals for Expansion* Desire to Improve Firm's Status* General Belief in Exporting* Increased Profit* Reducing Production Costs by Producing Larger Quantities* Use of Excess Production Capacity* Reduce Inventory* Travel Abroad
External:	<ul style="list-style-type: none">* Government Export Promotion Programs* Industry Associations* Chambers of Commerce* Commercial Banks* Export Distributors and Brokers* Other Company Owners* Tax Incentives* Unsolicited Order from Foreign Firm* Poor Domestic Market Conditions* Entry of Foreign Firm Into Domestic Market* Provide Hedge Against Economic Downturn* Competitors Started Exporting

Table 3 - Demographic Characteristics of Internationalization Stages

	Domestic Oriented	Potential Exporters	Indirect Exporters	Low- Intensity Direct	High- Intensity Direct	F	P
Mean Number of Employees							
Production	9.3	10.3	12.7	13.5	15.6	5.92	0.00
Nonproduction	2.8	2.8	5.5	5.0	3.8	5.01	0.00
Export Nonproduction	*NA	NA	1.4	0.4	0.6	4.83	0.01
<u>TOTAL</u>	12.1	13.1	19.6	18.9	20.0	0.18	0.91
Mean Number of Years Exporting							
	NA	NA	5.3	3.4	5.2	2.09	0.13
Mean Annual Lumber Output (1,000 bd ft)							
Hardwood	1,856	2,296	3,849	3,685	4,133	8.91	0.00
Softwood	481	1,661	3,979	2,876	367	2.48	0.04
<u>TOTAL</u>	2,337	3,957	7,828	6,561	4,500	2.48	0.00
Mean Annual Lumber Sales (\$1,000)							
	1,100	1,430	4,340	2,930	2,760	4.61	0.00

* NA - Not applicable. Nonexporting firms are not expected to have export-related statistics.

Table 4 - Reported Reasons for Not Exporting Among Domestic Oriented and Potential Exporter Firms

Reason For Not Exporting	Domestic Oriented	Potential Exporter
Company Is Too Small To Export	43.5	15.7
Domestic Market Keeps Company Busy Enough	27.2	15.7
Have Seen Others Fail in Exporting	0	2.2
Lack of Information About Foreign Markets	1.1	44.9
Don't Believe in Exporting	3.3	1.1
Exporting Is Too Complicated	4.3	4.5
Don't Have the Equipment Needed to Export	5.4	5.6
Other	15.2	10.1
TOTAL	100%	100%

Note: A Pearson chi-square significance level of 0.00 indicated that Domestic Oriented firms and Potential Exporters differed significantly on reasons for not exporting. Percentages may not total to 100% due to rounding error.

Table 5 - Mean Importance Scores for Internal and External Export Stimuli by Stage of Internationalization

Export Stimuli	Domestic Oriented	Potential Exporters	Indirect Exporters	Low-Intensity Direct	High-Intensity Direct
Internal	3.3	3.5	3.2	3.3	3.5
External	3.3	3.6	3.2	3.4	3.4
*P	0.84	0.17	0.98	0.64	0.41

1 = "not-at-all important and 5 = "extremely important."

* T-tests were performed to determine if firms in each stage placed significantly different levels of importance on internal or external export stimuli.

Table 6 - Mean Importance Scores of Export Stimuli

Export Stimuli	Mean Importance Score
Possibility of Increased Profit	4.56
Communication with Export Distributors/Brokers	4.02
Provide Hedge Against Economic Downturn	3.98
Managements Goals for Expansion	3.83
Poor Domestic Market Conditions	3.77
Management's General Belief in Exporting	3.62
Communication with Industry Associations	3.52
Possibility of tax incentives	3.52
Management's Desire to Improve Status of Firm	3.47
Communication with Other Company Owners	3.44
Communication with Government Export Promotion Programs	3.40
Chance to Use Excess Capacity	3.40
Communications with Commercial Banks	3.29
Chance to Reduce Inventory	3.23
Unsolicited Order from Foreign Firm	3.17
Possibility for Economies of Scale	3.16
Entry of Foreign Firm into Domestic Market	3.07
Competitors Started Exporting	2.89
Management's Trip Overseas	2.81
Communication with Chambers of Commerce	2.60
Chance to Travel Abroad	2.17

OPPORTUNITIES FOR FUTURE RESEARCH

Several opportunities exist for future research based on the findings and procedures used in this study:

1. Develop a predictive model for internationalization stage identification. The ability to predict in what stage of international involvement firms exist cannot be over-emphasized. Targeting firms with relevant export-related information depends upon the ability to identify the target audience correctly and with minimal amount of effort. Suggested variables for further investigation include: (1) species produced or distributed, (2) quality and quantity of each species handled, (3) species, grades and quantities of lumber exported, (4) type of equipment owned and operated by each firm (i.e., kilns and processing equipment), and (5) other variables that lend themselves to a predictive model.
2. Replicate the study with larger firms. Compare demographic characteristics and the perceptions of larger firms against those of smaller firms. Determine if differences of opinion exist and the impact on export promotion programs. Determine if companies of different size are unique target markets for export promotion programs. Does a large difference in size supersede the international involvement criteria for stage separation? Does the theory of internationalization only apply to firms of similar size?
3. Develop a cross national study. What domestic firms may desire with respect to export assistance, may not actually help them in the international market. For example, the introduction of tax incentives may stimulate the export activity of domestic firms, but if they are not familiar with the foreign customer, the venture may fail. Determine what foreign customers want from U.S. exporters and compare with what U.S. exporters want from export promotion. In addition, determine the product characteristics desired by foreign customers and compare with domestic production standards.

APPENDIX A

Research Instrument

Survey of the Hardwood Lumber Industry

This survey asks about your company's **hardwood lumber operations**. All answers are strictly confidential.

- Please check here if your company **does not** produce or distribute hardwood lumber. Please return the survey so we can remove your name from our mailing list. Just fold in half, as indicated on the back of the survey, and staple (postage is prepaid).
- Please check here if your company **does** produce or distribute hardwood lumber. Please continue with the survey. If your company has more than one location producing and/or distributing hardwood lumber, please include all of them in your answers. Thank you.

1. Does your company EXPORT hardwood lumber. By "export", we mean either exporting directly to foreign customers or selling to an export company/export broker.
(Please check one box)

Yes

No

A. Which of the following factors best describes your reason for not exporting?
(Please check only one box)

- COMPANY IS TOO SMALL TO EXPORT
- DOMESTIC MARKET KEEPS COMPANY BUSY ENOUGH
- HAVE SEEN OTHERS FAIL IN EXPORTING
- LACK OF INFORMATION ABOUT FOREIGN MARKETS
- DON'T BELIEVE IN EXPORTING
- EXPORTING IS TOO COMPLICATED
- DON'T HAVE THE EQUIPMENT NEEDED TO EXPORT
- OTHER _____

B. Would you like to become an exporter?
(Please check one box)

- Yes No

Please continue on next page ...

Certain factors may encourage companies to begin exporting. Based on your experience as an exporter or your opinions as a nonexporter, which factors do you believe are important and unimportant?

2. How important do you believe the following factors are in encouraging a company to begin exporting?
(Please circle the number that best indicates the importance of each factor)

	NOT AT ALL IMPORTANT	←————→			EXTREMELY IMPORTANT
Management's ...					
TRIP OVERSEAS	1	2	3	4	5
GOALS FOR EXPANSION	1	2	3	4	5
DESIRE TO IMPROVE STATUS OF FIRM	1	2	3	4	5
GENERAL BELIEF IN EXPORTING	1	2	3	4	5
Communications with ...					
GOVERNMENT EXPORT PROMOTION PROGRAMS	1	2	3	4	5
INDUSTRY ASSOCIATIONS	1	2	3	4	5
CHAMBERS OF COMMERCE	1	2	3	4	5
COMMERCIAL BANKS	1	2	3	4	5
EXPORT DISTRIBUTORS/BROKERS	1	2	3	4	5
OTHER COMPANY OWNERS	1	2	3	4	5
Possibility of ...					
INCREASED PROFIT	1	2	3	4	5
TAX INCENTIVES	1	2	3	4	5
REDUCING PRODUCTION COSTS BY PRODUCING LARGER QUANTITIES	1	2	3	4	5
Chance to ...					
USE EXCESS PRODUCTION CAPACITY	1	2	3	4	5
REDUCE INVENTORY	1	2	3	4	5
TRAVEL ABROAD	1	2	3	4	5
UNSOLICITED ORDER FROM FOREIGN FIRM	1	2	3	4	5
POOR DOMESTIC MARKET CONDITIONS	1	2	3	4	5
ENTRY OF FOREIGN FIRM INTO DOMESTIC MARKET	1	2	3	4	5
PROVIDE HEDGE AGAINST ECONOMIC DOWNTURN	1	2	3	4	5
COMPETITORS STARTED EXPORTING	1	2	3	4	5

Many different programs offer assistance to exporters. In the next two questions, we would like to ask your opinions concerning such programs. Of course, all answers are strictly confidential.

3. Are you aware of the following export promotion programs? If so, have you used any of the programs? If not, would you use the programs?
(Please circle the appropriate letter in each section)

	ARE YOU AWARE OF SUCH A PROGRAM?		HAVE YOU USED SUCH A PROGRAM?		WOULD YOU USE SUCH A PROGRAM?	
	YES	NO	YES	NO	YES	NO
Programs Which Provide ...						
GENERAL EXPORT COUNSELING	Y	N	Y	N	Y	N
SEMINARS ON THE BASICS OF EXPORTING	Y	N	Y	N	Y	N
CONTACTS WITH EXPERIENCED EXPORTERS	Y	N	Y	N	Y	N
INFORMATION ON DOING BUSINESS IN A FOREIGN COUNTRY	Y	N	Y	N	Y	N
ASSESSMENT OF MARKET POTENTIAL IN SPECIFIC COUNTRIES	Y	N	Y	N	Y	N
Programs Which Provide ...						
MAILING LISTS OF FOREIGN BUYERS	Y	N	Y	N	Y	N
CREDIT INFORMATION ON FOREIGN BUYERS	Y	N	Y	N	Y	N
GENERAL INFORMATION ON FOREIGN BUYERS	Y	N	Y	N	Y	N
LISTS OF FOREIGN AGENTS AND DISTRIBUTORS	Y	N	Y	N	Y	N
Programs Which ...						
GUARANTEE LOANS	Y	N	Y	N	Y	N
TRANSFER FUNDS FROM FOREIGN BUYERS	Y	N	Y	N	Y	N
HANDLE ALL FINANCIAL DEALINGS OF SALE	Y	N	Y	N	Y	N
PROVIDE CREDIT ASSISTANCE TO FOREIGN BUYERS	Y	N	Y	N	Y	N
GUARANTEE PAYMENT BY QUALIFIED FOREIGN BUYERS	Y	N	Y	N	Y	N
Programs Which ...						
BUY PRODUCTS FOR RESALE OVERSEAS	Y	N	Y	N	Y	N
HANDLE ALL PAPERWORK	Y	N	Y	N	Y	N
PROVIDE TRANSPORTATION ROUTINGS AND CONSOLIDATE SHIPMENTS	Y	N	Y	N	Y	N
Programs Which ...						
PROVIDE LEGAL ADVICE AND ASSISTANCE	Y	N	Y	N	Y	N
PROMOTE U.S. PRODUCTS OVERSEAS	Y	N	Y	N	Y	N
ARRANGE INTERNATIONAL TRADE SHOWS	Y	N	Y	N	Y	N
ARRANGE OVERSEAS TRIPS TO MEET POTENTIAL FOREIGN BUYERS	Y	N	Y	N	Y	N
TOLL-FREE NUMBER FOR EXPORT-RELATED ASSISTANCE	Y	N	Y	N	Y	N

The previous question asked if you were aware of certain programs and if you had used them. This question asks your opinion about how helpful or beneficial you think the programs are.

4. If you have used the following programs, how beneficial do you think they were to your exporting? If you have not used the following programs, how beneficial do you believe they would be?
(Please rate each program by circling the appropriate number)

	NOT AT ALL BENEFICIAL	←————→			EXTREMELY BENEFICIAL
Programs Which Provide ...					
GENERAL EXPORT COUNSELING	1	2	3	4	5
SEMINARS ON THE BASICS OF EXPORTING	1	2	3	4	5
CONTACTS WITH EXPERIENCED EXPORTERS	1	2	3	4	5
INFORMATION ON DOING BUSINESS IN A FOREIGN COUNTRY	1	2	3	4	5
ASSESSMENT OF MARKET POTENTIAL IN SPECIFIC COUNTRIES	1	2	3	4	5
Programs Which Provide ...					
MAILING LISTS OF FOREIGN BUYERS	1	2	3	4	5
CREDIT INFORMATION ON FOREIGN BUYERS	1	2	3	4	5
GENERAL INFORMATION ON FOREIGN BUYERS	1	2	3	4	5
LISTS OF FOREIGN AGENTS AND DISTRIBUTORS	1	2	3	4	5
Programs Which ...					
GUARANTEE LOANS	1	2	3	4	5
TRANSFER FUNDS FROM FOREIGN BUYERS	1	2	3	4	5
HANDLE ALL FINANCIAL DEALINGS OF SALE	1	2	3	4	5
PROVIDE CREDIT ASSISTANCE TO FOREIGN BUYERS	1	2	3	4	5
GUARANTEE PAYMENT BY QUALIFIED FOREIGN BUYERS	1	2	3	4	5
Programs Which ...					
BUY PRODUCTS FOR RESALE OVERSEAS	1	2	3	4	5
HANDLE ALL PAPERWORK	1	2	3	4	5
PROVIDE TRANSPORTATION ROUTINGS AND CONSOLIDATE SHIPMENTS	1	2	3	4	5
Programs Which ...					
PROVIDE LEGAL ADVICE AND ASSISTANCE	1	2	3	4	5
PROMOTE U.S. PRODUCTS OVERSEAS	1	2	3	4	5
ARRANGE INTERNATIONAL TRADE SHOWS	1	2	3	4	5
ARRANGE OVERSEAS TRIPS TO MEET POTENTIAL FOREIGN BUYERS	1	2	3	4	5
TOLL-FREE NUMBER FOR EXPORT-RELATED ASSISTANCE					
	1	2	3	4	5

Next, we would like to ask a few questions about your company. Your answers will allow us to group your company with similar companies when we look at the survey results. As mentioned, all information is strictly confidential and will be used only for statistical purposes.

5. Approximately, how much lumber did your company produce and/or distribute in 1990?

BOARD FEET

_____ SOFTWOOD LUMBER

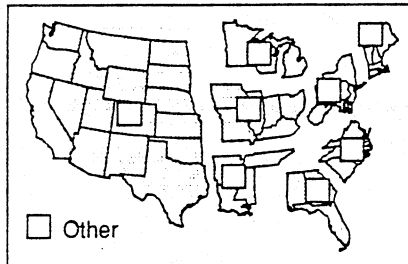
_____ HARDWOOD LUMBER

6. What was the average number of full-time people employed by your company during 1990?

_____ PRODUCTION EMPLOYEES

_____ NON-PRODUCTION EMPLOYEES

7. What is the PRIMARY location of your company's hardwood lumber operation(s)?
(please mark the box that best indicates the location)



8. Which category best describes your company's total 1990 lumber sales?
(Please check one box)

- LESS THAN \$100,000
- \$100,000 TO \$500,000
- \$501,000 TO \$1 MILLION
- \$1.1 MILLION TO \$2.5 MILLION
- \$2.6 MILLION TO \$5 MILLION
- \$5.1 MILLION TO \$7.5 MILLION
- \$7.6 MILLION TO \$10 MILLION
- OVER \$10 MILLION

This final section is only for those who are involved with exporting. Remember, you are considered an exporter if you export directly to foreign customers or if you sell to an export company/export broker. If you are not an exporter, please stop here and return the survey.

Thank You!

9. Which method of exporting describes the majority of your export sales?
(Please check one box)

- EXPORT DIRECTLY TO FOREIGN CUSTOMERS
 SELL TO EXPORT COMPANY OR EXPORT BROKER

10. How many Non-Production employees do you have working only on export operations?

_____ NON-PRODUCTION EMPLOYEE(S)

11. Which category best describes the number of years your company has been involved in exporting?

- LESS THAN 5 YEARS
 5 TO 10 YEARS
 11 TO 20 YEARS
 OVER 20 YEARS

12. Approximately how many foreign customers do you have?

_____ FOREIGN CUSTOMERS

13. With which of the following factors do you believe your foreign hardwood lumber customers are LEAST satisfied?
(Please check one box)

- LUMBER QUALITY
 DELIVERY TIME
 PRICE
 CREDIT TERMS
 AVAILABILITY OF CERTAIN SPECIES
 AVAILABILITY OF CERTAIN SIZES
 OTHER _____
 CUSTOMERS ARE SATISFIED WITH ALL FACTORS

14. Approximately, what percent of your company's total 1990 sales were from hardwood lumber exports?

_____ % OF SALES

Comments:

Is there anything else you would like to tell us about your company's export activities? Export experiences? Anything we should have asked but did not? Please use the space below if you have any additional comments.

Thank you for your help! To return the survey, just fold in half, as indicated on the back of this page, and staple (postage is prepaid).

If you would like to receive a summary of the results of this study, just write your name and address in the space below, or if you prefer, request the results separately.

Name: _____

Address: _____

APPENDIX B

Prenotification, Reminder and Cover Letters

PRENOTIFICATION (POST-CARD)

Dear (Owner's Name):

I am a graduate student at Virginia Tech studying the hardwood lumber industry. Within the next two weeks I will be sending you, and selected others, a simple survey which will ask your opinions about what encourages companies to export. I am interested in the views of both exporters and nonexporters. Your answers are essential to both the study and my future as a graduate student! If at all possible, please complete and return the survey when it arrives. Thank you in advance for your time and consideration.

Sincerely,

Paul Ifju
Graduate Research Assistant

COVER LETTER FOR FIRST SURVEY MAILING

March 12, 1991

Owner's Name
(Position Title)
Street Address
City/Town, State Zip Code

Dear (Owner's Name):

I am a graduate student at Virginia Tech studying the hardwood lumber industry. I need your help in understanding the industry's opinions concerning exporting. Whether or not your company exports, I am interested in your opinions. By completing and returning the enclosed survey you will greatly help my studies.

In recent years, there has been considerable interest in exporting hardwood lumber. This survey asks your opinions about why companies begin to export and the programs which provide export assistance. Your company's name was randomly selected from published listings of hardwood lumber producers and distributors.

The survey is **strictly confidential**. You need not identify your company or yourself. The number stamped on the survey is used only to avoid additional mailings to your company and for filing purposes. Your answers will be used only at Virginia Tech in combination with answers from other companies and your company will never be identified in the research results.

If you would like to receive a report on the findings of this study, you can write your name and address at the end of the survey or send a separate letter. I will be glad to send you a copy.

Your response is very important to the accuracy of this study, whether or not you export. Please take a moment to answer and return the survey. Return postage is prepaid. If you have any questions or comments please feel free to call collect at . Thanks for your help.

Sincerely,

Paul A. Ifju
Graduate Research Assistant

P.S. Please accept the enclosed bookmark as a token of our appreciation for your help. Thank you for your time and consideration.

FIRST FOLLOW-UP (POST-CARD)

I NEED YOUR HELP!

I am a graduate student at Virginia Tech studying the hardwood lumber industry. Recently, I sent you a survey asking your opinions about what encourages companies to export. I am interested in the views of both exporters and nonexporters. Your answers are essential to both the study and the completion of my degree. Please help me by taking time to fill out the survey and return it. Postage is prepaid. If you did not receive a survey or have any questions concerning the survey, please contact me at . **Thank you for your time and cooperation.**

Sincerely,

Paul Ifju
Graduate Research Assistant

COVER LETTER FOR SECOND SURVEY MAILING

March 20, 1991

Owner's Name
(Position Title)
Street Address
City/Town, State Zip Code

Dear (Owner's Name):

I need your help!

I am a graduate student at Virginia Tech studying the hardwood lumber industry. Recently, I sent you a survey asking your opinions about exporting. I am interested in the views of both exporters and nonexporters.

Your response is essential to both the study and the completion of my degree. Please help me by taking the time to fill out the survey and return it. Postage is pre-paid.

Remember, the survey is **strictly confidential** and you can remain anonymous. Your answers will be used only by Virginia Tech in combination with answers from other hardwood lumber operations.

If you have completed and returned the survey, please accept my thanks. If you have not received a survey or have questions concerning the survey, please contact me at . Thank you for your help.

Sincerely,

Paul A. Ifju
Graduate Research Assistant

**The vita has been removed from
the scanned document**