

Factors that influence the export success of forest products companies in the Pacific Northwest

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Abstract

While most North American firms reported a decline in export revenues from Japan over the period 1997 to 1998, some firms experienced increases. This anomaly prompted an investigation into why some firms were successful in increasing their exports while other firms were not. The primary objective of this study was to identify the key characteristics of successful exporters. The study was a census of firms involved in the export of wood building materials to Japan from the Pacific Northwest (Washington, Oregon, and British Columbia). A combination mail/fax survey was used to collect primary data. The survey was sent out to 173 exporters and 72 completed surveys were received, providing an overall response rate of 41.6 percent. The results of this research suggest that export success during the 1997 to 1998 economic recession in Japan was closely related to firm size, shortened distribution channels, product mix, having a company presence in Japan, and maintaining a close relationship with Japanese customers even during an economic downturn.

firms experienced increases. This anomaly prompted an investigation into why some firms were successful in increasing their exports while other firms were not. The objectives of this research were to: 1) document the differences between exporters and manufacturers in their perceptions of services offered to Japanese customers; 2) identify the key characteristics and attributes of companies who successfully exported secondary wood building materials to Japan during the economic crisis compared to those who did not; and 3) identify the impact of the marketing mix on export performance.

Background

Japanese housing starts reached a high of 1.64 million in 1996 as homeowners rushed to beat the consumption tax increase scheduled for 1997. The Asian economic recession caused housing starts to fall to 1.2 million in 1998. The decline in housing starts contributed to a dramatic decrease in imports of wood building materials. During the economic downturn, Japanese imports of Pacific Northwest (PNW) primary wood products fell 30 percent in 1998, while exports of secondary wood products fell 36 percent (Eastin et al. 2002). Events that occurred before and during the Asian recession have caused permanent structural changes in the flow of wood products to Japan. The consumption tax

increase, the strong U.S. dollar, and the extended economic recession all combined to heighten price sensitivity among Japanese consumers and reduce the competitiveness of U.S. wood products in the Japanese market (Eastin et al. 2002). While most North American firms reported a decline in export revenues from Japan over the period 1997 to 1998, some

The Japanese housing market is extremely important to PNW solid wood producers and exporters. Because the Japanese market is very important, the effects of the Asian downturn transmitted through the decline in demand of imported wood building materials had severe impacts on PNW producers and exporters. The following changes in trade patterns between Japan and the

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PNW were, in part, a result of the economic recession and regulatory changes in Japan, PNW supply constraint issues, and global competition. One effect of the economic recession in Japan was the weakening of the yen. While the weak yen made U.S. goods, and to a lesser extent Canadian goods, more costly in Japan; it also increased the anxiety of U.S. and Canadian producers and exporters to negotiate any contracts. With shipment times of 2 to 3 weeks and payment due upon delivery, substantial foreign exchange reversals could easily negate profit margins and even reduce the principal (Columbian 1998).

The Asian downturn had deep impacts on PNW exporters of wood building materials, especially for the smaller exporters and exporter consolidators. While the Asian downturn has had substantial impacts on Washington and Oregon forest products companies, the booming U.S. economy absorbed some of the production meant for exports. Many companies have proven that successful exporting often requires the ability to quickly shift to alternate foreign and or domestic markets (Rich 1981d, Read 1999). Canadian firms were hit especially hard by the Asian downturn and 21 of 37 major sawmills in British Columbia slowed production (Chipello 1997). Canadian sawmills are now more dependent upon the Japanese market because the U.S.-Canadian Softwood Lumber Agreement limits their access to the U.S. market and a ban on green lumber imports in Europe limits Canadian access to European markets.

Price

The Asian downturn has had significant impacts on the buying behavior of the Japanese consumer. The legendary Japanese demand for high quality at any price has been replaced by a product value orientation (Eastin et al. 2001b). There has been a notable increase in price sensitivity and Japanese consumers are shopping more rationally and are less likely to pay premium prices, even to the extent of delaying purchases (Reid 1999). As Fahy and Taguchi (1995) observed, Japanese consumers have become more price conscious, and are using price to evaluate products with less dependency on information from the manufacturers and retailers. Perhaps more significantly, this change has not been limited to a few economic classes. Even relatively affluent customers can

be price sensitive when there are large savings to be had (Johansson 1996). The value-oriented behavior favors the consumption of value-added products that offer quality at reasonable prices. Even though secondary products may cost more, the perceived value of their attributes can influence consumers' purchase decisions.

Distribution

The role of distribution in the marketing and export of forest products has become increasingly important. Exporting channels can be classified as indirect or direct. However, the two options are not mutually exclusive. Dickerson and Stevens (1998) found that experienced and inexperienced exporters used a combination of domestic and foreign distributors in conjunction with direct sales. The combined use of direct and indirect channels allows firms to gather benefits of each type while increasing market reach and exposure. Gottko and McMahon (1989) found that among Oregon exporters there was a positive and significant relationship in export sales between the use of an independent overseas distributor and a firm's own domestically based sales staff. More recently, Hammet and DeForest (1993) found that many southern hardwood lumber exporters use several export channels simultaneously.

Distribution channels for PNW exports of wood building materials to Japan appear to be shortening. In a study of export strategies for prefabricated wood housing materials, Rahikainen and Eastin (1997) found that over half of the firms exported directly to the Japanese homebuilder or homebuyer, although 40 percent of the firms used Japanese trading companies or wholesalers to distribute their products in Japan.

Product

In contrast to North America, the Japanese residential construction industry (with the exception of the relatively small 2 by 4 segment) requires a wide variety of structural components cut to metric dimensions for post and beam homes. In the past, North American sawmills have focused on supplying commodity dimension lumber for 2 by 4 homes and a limited range of metric-sized posts while ignoring the wider range of custom metric lumber products (Eastin et al. 2001b). In contrast, European suppliers have been quick to pro-

vide a wide range of post and beam components cut to precise Japanese specifications. This willingness to provide a broad range of metric components manufactured to exacting Japanese specifications initially provided them with a foothold in the Japanese market. Subsequently, this success has allowed the European suppliers to substitute their products for North American products (Eastin et al. 2001b). Most industry observers attribute the success of European lumber to the willingness of European sawmills to manufacture a broad range of products based on the specifications of Japanese home builders and manufacturers (Eastin et al. 2001a, 2001b; Eastin 2002; Eastin et al. 2002; Cunningham and Eastin 2002). The success of the Europeans suggests that a strategy of product customization in Japan provided a competitive advantage over a strategy of product standardization.

Promotion and service

Effectively promoting imported products in Japan can be a challenging endeavor. Builders and contractors in Japan insist on having detailed technical and cost information for every product and supplying this information is important for successful entry into the Japanese market (Coaldrake 1990). Most successful U.S. housing suppliers exporting to Japan have Japanese-speaking employees familiar with Japanese regulations, business practices, and customer needs (Jenkins 2000).

Japanese customers are known to be very demanding about quality and service. This places difficult demands on foreign producers of building products to supply support for their products. Services can include a Japanese-speaking salesforce, a sales office in Japan, offering a warranty, warehousing inventory in Japan, and service technicians in Japan to aid in the installation, repair, and replacement of products.

Offering a warranty may be an effective sales tool. A warranty on a product can be viewed as a form of insurance and after-market support. This can be especially important when the product is foreign made and buyers are wary of the difficulty of making claims (Lee et al. 1992). Once offered, warranty and service claims must be handled quickly and to the customer's satisfaction. This may be difficult if there is not a local service technician or spare parts available. In

many cases, products damaged during shipment must be replaced at exorbitant expense to avoid costly delays in the construction.

Firm size and export strategy

There is little agreement in the literature on the relationship between firm size and export success. Two of the characteristics of successful exporting firms are management commitment to export and knowledge of the market (Ilinitich et al. 1994). While this applies to firms that export wood building materials and firms that manufacture and export these products, greater attention is given to the manufacturing firms since their primary business is not totally focused on exporting and they may lack several key elements to export success. For example, a study of export strategies for U.S. prefabricated wood building materials (Rahikainen and Eastin 1997) reported that none of the manufacturing firms had a sales office or employed sales representatives in Japan. However, 11 percent of the export consolidators had a sales office in Japan and 19 percent had a sales representative in Japan.

Small firms often view exporting as a risky expenditure of capital and labor. A study by Ifju and Bush (1993) found that non-exporting manufacturers considered themselves too small to export even though, on average, they were no smaller than exporting firms. While overall firm size may not impact a firm's ability to export, there may be a relationship between the size of the firm, the number of sales people on staff, and levels of export activity. It should be recognized that larger firms may be better able to accumulate export experience (Dickerson and Stevens 1998). In addition to the perception of being too small, Edmunds and Khoury (1986) developed a list of specific reasons small firms have for not exporting. The list includes: 1) lack of knowledge about overseas markets for their products; 2) lack of interest; 3) perceived complexity of exporting; 4) lack of awareness of government assistance; and 5) financing difficulties.

Rich (1981a, 1981b, 1981c) observed that, for wood producers, knowledge of the market and careful planning was more of a determinant of export success than the size of the mill. In many cases, mill operators do not know of potential markets for their products. In a study of southern hardwood exporters, Hammet

and DeForest (1993) found the most common problem encountered by exporting mills was the lack of knowledge about overseas market opportunities. Knowledge of customer needs and characteristics is vital to success when entering a foreign market.

Small firms often lack the capital to pay the overhead costs of initial export market penetration (Guldin 1984). The risk of nonpayment and the different styles of payment terms may be unappealing to companies that lack financial resources to endure hardship during the transaction period. Also, the profits from products being exported are vulnerable to unfavorable changes in the exchange rate between the time of shipment and payment (Ringe et al. 1987).

Competition

The competitive environment in the Japanese market was substantially transformed as a result of the economic recession. For the first time in recent memory, price superceded quality, and this change fundamentally shifted the competitiveness of exporters in Japan. While much of this transformation has been attributed to the weakening yen and increasing price sensitivity of Japanese homebuilders, another factor was also contributing to this change. The Japanese homebuilding industry, traditionally dominated by small companies that built the entire post and beam house on the construction site, was being transformed by the rapid emergence of post and beam pre-cutting manufacturers who produced all of the structural components of a house in a factory setting. Given the tight tolerances of the post and beam components and the considerable time between cutting a component and assembling it on the construction site, the pre-cut manufacturers specified kiln-dried lumber. This fundamental shift favored the European suppliers who were already supplying kiln-dried lumber in Japan. In contrast, U.S. and Canadian sawmills observed the demand for green hemlock lumber, their primary product, take a precipitous decline (Eastin et al. 2001a, 2001b, 2002; Eastin 2002; Cunningham and Eastin 2002).

Methods

The study was a survey of firms involved in the export of wood building materials to Japan from the PNW region (Washington, Oregon, and British Co-

lumbia). A combination mail/fax survey was used to collect primary data. The survey was pre-tested by two marketing professors and several exporters for grammar and readability. The survey totaled four pages and was designed to solicit basic information on firm characteristics and export performance. The export performance questions focused on identifying the distribution channels, products, pricing, promotion, and services offered by exporters in Japan. The demographic questions were designed to collect information on the operating characteristics of the respondents.

The cover letter and survey were administered by fax in January of 1999. Concurrently, survey questionnaires were mailed to the survey participants. A second fax was sent 10 days after the initial fax while a third fax was sent out 1 week later. The survey was sent out to 173 exporters and 72 completed surveys were received, providing an overall response rate of 41.6 percent. The response rate for U.S. and Canadian firms was 34.5 and 57.4 percent, respectively.

In some cases, differences between early respondents and late respondents can bias the results of a study. In order to assure that non-response bias did not significantly affect the results, independent sample t-tests comparing the mean responses of early respondents (those that responded in less than 14 days) and late respondents (those that responded after 60 days) were performed for each of the variables. The Armstrong-Overton test for non-response bias (1977) determined that non-response bias was not significant.

Results and discussion

Survey respondents were asked to estimate the percent change in their exports sales from 1997 to 1998. This data was coded into three categories based on a natural grouping of the survey data and to facilitate analysis of the data. The first group, including 15 respondents, reported that their 1998 export sales increased by more than 9 percent over their 1997 export sales. The second group (15 respondents) reported that their change in export sales was between a 9 percent increase and a 9 percent decrease. Finally, the third group (42 respondents) reported that their export sales had declined by more than 9 percent. The primary objective of this research was to identify the attributes of firms that had been able to increase their

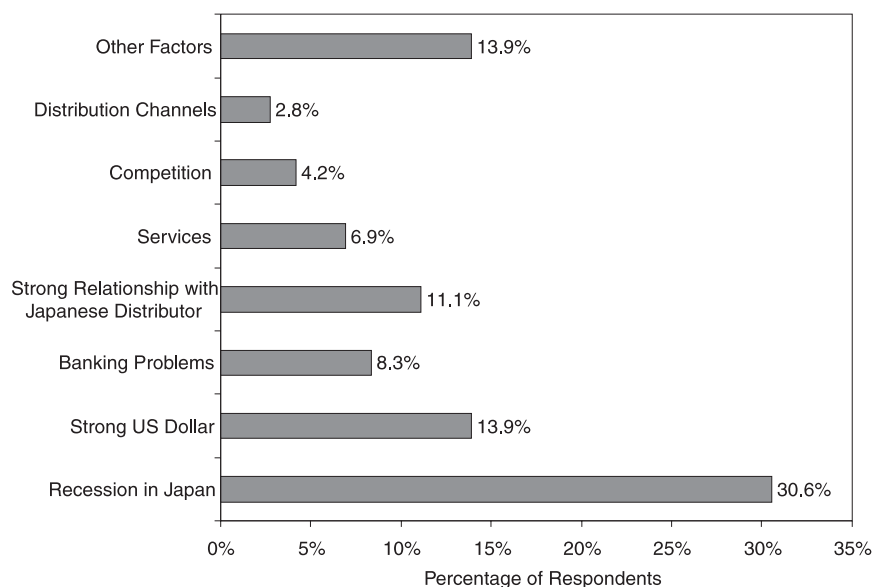


Figure 1. — Factors that were perceived to impact export performance of respondents.

Table 1. — Average importance of providing services in Japan.^a

	Overall rating	Do you provide this service?	
		Yes	No
Provide translated product information	5.58	6.11*	5.19*
Provide translated installation instructions	5.60	6.00*	5.26*
Provide translated maintenance instructions	5.22	5.80*	4.89*

^aImportance was rated using a Likert-like scale where 1 = negative impact, 4 = neutral, and 7 = positive impact on export performance; * = statistically significant at the .05 level.

exports to Japan during the 1997-1998 economic downturn relative to firms whose exports decreased. The responses of firms in the first and third groups were used to test for differences in marketing practices and basic demographic characteristics that might help differentiate between the two groups.

Survey respondents were asked to identify the single factor that had the greatest impact on their export performance in Japan (**Fig. 1**). Over half of the respondents noted that economic factors had the greatest negative impact (the Japanese recession was cited by 30.6% of respondents, the strong U.S. dollar by 13.9%, and the Japanese banking crisis by 8.3%). In contrast, 11.1 percent of respondents noted that a strong relationship with their Japanese customers had a positive impact on their business in Japan.

Survey respondents were asked to rate the impact of offering specific services to their Japanese customers on their export performance in Japan. In general,

the positive impact of providing a range of different services was rated significantly higher by firms that provided these services relative to firms that did not. Interestingly, even those firms that did not provide specific services rated them as having a positive impact on export performance (**Table 1**). For example, the three services that received the highest importance ratings were: providing translated product information, providing translated installation information, and providing translated maintenance information. The survey data clearly show that even firms that did not provide these services in Japan perceived them to have a positive impact on export performance.

The product mix and distribution channel of firms that reported positive export performance in Japan differed in several aspects from the less successful exporters (**Table 2**). The firms that did well had export product mixes containing significantly higher proportions of value-added wood products, while the

less successful exporters tended to focus more on commodity products such as lumber and structural panels. Successful exporters also tended to report a higher use of short distribution channels, usually exporting directly to a homebuilder, whereas less successful exporters were twice as likely to export through a Japanese trading company. In addition, successful exporters sold a substantially higher percentage of their products to post and beam builders and other non-2 by 4 segments of the construction industry. In contrast, the less successful exporters sold a substantially higher percentage of their products to 2 by 4 builders in Japan. Finally, less successful firms were over three times less likely to know in which market segment their products were used.

Having a presence in the Japanese market also appears to have benefited the more successful exporters (**Table 2**). For example, the exporters that experienced improved export performance were significantly more likely to have a sales office and a sales or technical representative in Japan. Similarly, a higher percentage of their export sales were directly to Japanese homebuilders. The survey data show that the firms who reported that the Japanese market was very important to their business exported a significantly higher percentage of their products directly to Japanese homebuilders and a significantly lower percentage through Japanese trading companies as compared to the companies that reported that the Japanese market was only somewhat important to their business (**Fig. 2**). The survey data also show that the percentage of exports sold to Japanese trading companies was twice as high by the less successful exporters. Although the successful exporters appeared to have a stronger presence in Japan, this was not true across all facets of their operations. For example, in contrast to the less successful exporters, the successful exporters reported that they did not inventory any products or spare parts in Japan, thus allowing them to reduce their in-country costs (**Table 2**). Analysis of total sales by export success reveals some interesting patterns (**Table 2**). Medium-sized firms (export sales revenues between \$1 million and \$5 million) performed substantially better than both small firms (export sales revenues less than \$1 million) and large firms (export sales revenues above \$5 million). Fully two-thirds of the companies who

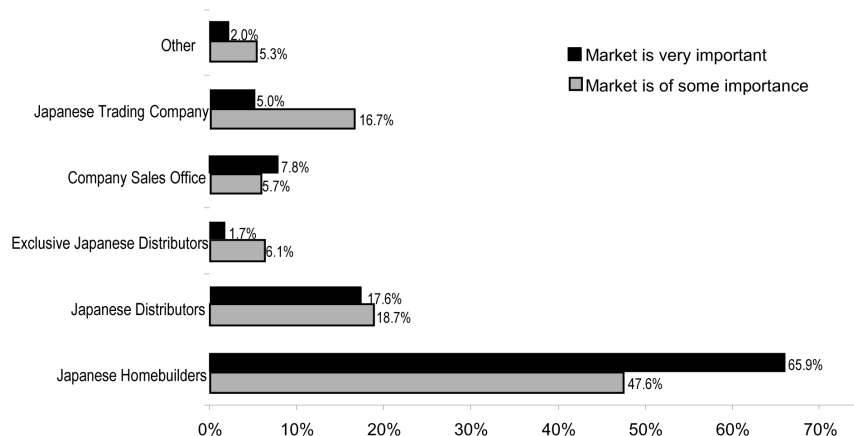


Figure 2. — Distribution channel strategies were strongly influenced by the perceived importance of the Japanese market.

Table 2. — Analysis of survey means based on export performance of respondent firms.^a

Marketing variable	Export performance	
	Increased more than 9%	Decreased more than -9%
Percent of total revenue derived from Japan	62.2%	59.6%
Average sales revenue*	\$1-5 million	\$5-10 million
Total number of employees**	15.5	38.9
Total number of Japanese-speaking employees	3.8	3.7
Total number of employees in Japan	1.0	1.6
Maintain sales office in Japan**	60.0%	28.6%
Have sales/technical representative in Japan*	73.3%	45.2%
Primary exports (as % of total exports)*	19.6%	30.6%
Secondary exports (as % of total exports)*	80.3%	69.4%
Percent of sales direct to Japanese home builders	63.1%	56.4%
Percent of sales through Japanese trading company*	6.9%	13.8%
Maintain product inventory in Japan*	0%	7.1%
Maintain spare parts inventory in Japan*	0%	9.5%
Percent of sales into P&B construction	19.3%	12.1%
Percent of sales to 2 by 4 construction	61.3%	72.9%
Percent of sales into other types of construction*	17.1%	7.3%
Percent of sales into unknown construction types*	2.3%	7.7%
Provide translated product information*	5.93	5.55
Provide translated installation instructions*	5.91	5.50
Provide translated maintenance instructions*	5.54	5.26

^a * = significant at .05 level; ** = significant at .10 level

reported an increase in export revenues were medium-sized firms. In contrast, almost 40 percent of the large firms reported a decline in export revenues as did 37 percent of the small companies.

As mentioned previously, exports tended to be a much higher percentage of the total sales revenue of the small- and medium-sized firms. In contrast,

the larger firms appear to have a heavier focus on the U.S. market with exports rarely comprising more than 10 percent of their total sales. Thus, it appears that the medium-sized firms are more committed to the Japanese market and have been more effective in developing and implementing marketing strategies that provide them with a greater chance of succeeding in Japan, even when the

markets are poor. While smaller firms were also more focused on the export market, their lack of export success appears to be related to the fact that they did not have the financial and marketing resources to effectively respond to the serious decline in the Japanese economy. This observation is supported by the fact that 83.3 percent of the small firms reported declines in their export revenues in Japan.

Finally, nearly all of the survey respondents reported that their Japanese customers had become more price sensitive. However, while most firms reported that increased price sensitivity had a negative impact on their export performance, a small set of respondents indicated that their exports to Japan had increased despite the increased price sensitivity of their Japanese customers. This observation suggests that these exporters were able to maintain their competitiveness even as their customers were becoming more price sensitive. Further analysis of the survey data found that most of these companies also reported that their export success was strongly related to their strong relationship with their Japanese customers.

Conclusions

The results of this research suggest that export success during the 1997-1998 economic recession in Japan was closely related to firm size, shortened distribution channels, product mix, having a company presence in Japan, and maintaining a close relationship with Japanese customers even during an economic downturn.

Perhaps most importantly, it suggests that medium-sized companies were more likely to be successful than were large or small exporters, although for different reasons. Exports are a smaller percentage of total sales for large companies and these companies appear to have a strong focus on the domestic market, suggesting that exports are less important strategically. In contrast, export sales are extremely important to the small companies in this survey and it appears that their lack of export success may be related to a more limited access to financial and marketing resources during the Japanese recession.

The product mix of the more successful exporters had a significantly higher percentage of value-added wood products, allowing them to compete in less commodity-oriented market segments

that may have been less sensitive to the economic downturn in Japan.

The survey results also suggest that shortening distribution channels is important to success in Japan. Not only does this allow firms to reduce the cost of their products to the final customer, but it also provides them more control on how their products are marketed in Japan while providing them with more access to market information. As a result, the exporter is better positioned to gain a deeper understanding of the Japanese market and develop more effective marketing strategies based on timely market information. This advantage is further supported by having a direct company presence in Japan (either through a sales office or a company sale or technical representative).

This study documents structural changes in the trade of PNW wood building materials with Japan. It also provides quantitative and qualitative insights into the impacts of the Asian downturn on the performance of exporters in the PNW. The Asian downturn may have served to accelerate the changes occurring in the distribution channels, product mix, and services offered to the Japanese housing market. Changes in the demands of the Japanese consumers have opened new areas and created new opportunities for firms to develop or increase their competitiveness. These changes include shortening the distribution channel and shifting the export mix to include more value-added products. Providing more after-sales support, primarily translated product information, was also perceived to be important. While some of these strategies may not be suitable for all firms, exporters should realize the need for increasing their competitiveness in the expanding global economy.

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