

Working Paper

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**Marketing Strategies of Western
North American Sawmills**

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EXECUTIVE SUMMARY

BACKGROUND AND PURPOSE

This research is based on the following strategic issues facing the softwood lumber industry in Western North America: 1) the economic importance of the lumber industry for Western North America; 2) factors affecting the operating environment of the industry; 3) changes in customer needs; and 4) the need for information in the area of strategic planning.

The main purpose of this study is to provide information regarding the marketing strategies employed by Western North American sawmills. The results of this study will aid strategic planning in the Western North American lumber industry, and its purpose will be achieved by describing the marketing strategies used in the Western North American lumber industry and by comparing and contrasting the marketing strategies employed by U.S. and Canadian lumber producers.

RESEARCH METHODOLOGY

The theoretical background for this research is based on extensive research work reported by several authors in the area of strategic planning and marketing strategies. The concept of marketing strategy, especially that used in operationalization, has its theoretical and methodological base in the work by professor H. J. Juslin at the Department of Forest Products Marketing in University of Helsinki in Finland. This concept examines marketing strategy based on strategic decisions concerning: products, customers, market areas and competitive advantages. The generic competitive strategies are assessed based on Porter's (1980) model.

The data for this study were collected via personal interviews during the first half of 1991. A purposive sample of 79 companies was selected and a personal interview was conducted with 81.0% of the companies that were contacted. The data were analyzed using univariate methods of analysis. The results are presented mainly in two categories, namely the Western U.S. and British Columbia, Canada.

PROFILE OF THE RESPONDENT COMPANIES

The production of respondent companies represented 65.4% of the total lumber production in the targeted area in 1990. Over two-thirds of the production was commodity products in both countries. British Columbia firms exported a much higher proportion of their production (6.5 times) than the responding firms in the Western USA. However, 92% of the commodity products produced in British Columbia were exported to the USA.

According to annual gross sales, responding firms were represented by relatively more small and big companies in British Columbia than in the Western USA. In both countries, the companies interviewed concentrate on serving just a few types of customers. The five major customer types identified buy 92% of the production in both countries.

MARKETING STRATEGIES

The present production of companies reflects strategic decisions they made in the past. This might explain the differences found between production figures and product strategies. The present product strategies should be actualized in the future. The product strategies give a clear indication that companies in British Columbia are moving from commodity products to specialty and custom-made products. In the Western USA, commodity products are still being emphasized quite heavily; however, some indication of a move toward specialty and custom-made products can be observed.

According to customer strategies, companies in both countries are rather selective when choosing the customers to be targeted. Western USA companies are more selective versus responding firms in British Columbia. That is somewhat surprising, because Western USA companies continue to emphasize a commodity product strategy.

Regarding market area strategies, companies in both countries are very selective in choosing their market area. Western USA companies are perhaps more selective compared to responding firms in British Columbia, according to the interview results.

CONNECTIONS BETWEEN MARKETING STRATEGIES AND MARKETING FUNCTIONS

The marketing strategies are realized through marketing structures and functions. Marketing structures are marketing organization, planning and information systems, contact channels, and channels of physical distribution. Marketing functions can be divided into contact functions (personal contacts, marketing communication and market information) and product functions (product planning, pricing and physical distribution). The functional levels are presented in this study through the measurement of export marketing channels, product development and collection of market information.

Exports of products were divided into 12 different export marketing channels. British Columbia exports 85% of its production (most to the U.S.) compared with only 13% of responding U.S. firms' production going to international markets. In general, British Columbia companies seem to be using somewhat more direct contacts with end-users and they also use more domestic agents than companies in the Western USA.

Over half of the companies in the Western USA and over two-thirds in British Columbia are pursuing continuous and systematic product development. The companies with no product development (less than 15% of all responding firms) are found among the companies that are applying a commodity products strategy, a specialty products strategy or a combination of these two. The most important starting point for product development in both countries was to more effectively utilize raw materials and adapt production to raw material possibilities. For companies applying a specialty products strategy, raw materials seem to be an even more important starting point than for companies applying other product strategies.

In general, responding firms did not perceive a great deal of difficulty in connection with research and development. The largest problems in the Western USA appear to be the economic resources and the organization of research and development. In British Columbia the largest problems are technological and economic resources.

In both countries, most of the companies are collecting market information either continuously or occasionally. Also in both countries, companies applying a commodity product strategy or a specialty product strategy appear to be more occasional and casual in their collection of market information.

CONNECTIONS BETWEEN MARKETING STRATEGIES AND PROFITABILITY OF THE COMPANIES

In the Western U.S., over 70% of the responding companies were profitable, whereas in British Columbia under half of the companies were profitable in 1990. Only 37 of the 64 responding firms in both countries provided information on their profitability. The connections between marketing strategies and profitability were not found to be statistically significant.

1 BACKGROUND

The forest products industry is a key industry in Western North America and plays a central role for the economy in the area. The lumber industry is a very important segment of the forest industry. U.S. sawmills use 46% of the raw logs harvested in Washington state, whereas 37% of the logs are exported. Moreover, 44% of the total softwood lumber produced in the U.S. and Canada is manufactured in California, Oregon, Washington and British Columbia.

Despite its economic importance for Western North America, the lumber industry is facing serious challenges in terms of raw material supply dynamics. The changing environment requires new and better adaptation procedures, and these procedures fall within strategic planning. Among the environmental questions being posed are the effects of set-asides on supply and the resultant implications on long term planning. This situation will potentially have serious impacts on the external environment in which Western sawmills operate.

Also, rapid changes in sawmilling technology require flexibility and adaptation and will effect productivity, product quality and profitability. Cohen and Sinclair (1990) reported that the adoption of innovative technologies has consistent linkage with above-average performance. However, the implementation of any single strategic factor, such as adoption of innovative processing technology, cannot ensure business success.

Changing customer needs present another critical concern for lumber producers. In the U.S., the residential repair and remodelling market consumed an estimated 33% of U.S. softwood lumber consumption in 1991, surpassing that of new home market construction (Widman, 1991). In addition, many lumber producers are turning to export markets to offset slow domestic demand; however, producing for the international market requires a commitment to a different array of customer needs that must be taken into consideration.

These fundamental industry-wide changes are very closely related to the question of how a company adjusts to the environment in which it operates. Strategy may be viewed as an adjustor between a company and its external environment.

This phase of the research is a mainly description of the collected data. The research project will continue in the future and the next phase will explore underlying strategic factors. Data from the Finnish Lumber industry will be incorporated in this future analysis.

2 PURPOSE OF THE STUDY

The main purpose of this study is to produce information about marketing strategies applied within Western North American sawmills. The results of this study will aid strategic planning in the Western North American lumber industry.

The specific objectives of this study are:

1. Describe the marketing strategies used in the Western North American lumber industry in terms of decisions about products, customers, market areas and competitive advantages.
2. To compare and contrast the marketing strategies employed by U.S. and Canadian lumber producers.
3. To analyze how marketing strategy is reflected in the structure and organization of marketing functions.
4. To examine the relationship between marketing strategy and profitability of Western sawmills.

3 RESEARCH METHODOLOGY

3.1 Concept of Marketing Strategy

The Marketing Strategy concept, especially the operationalization used in this study, was developed by professor Heikki J. Juslin at the Department of Forest Products Marketing in the University of Helsinki in Finland during the 1980's. The ideas are presented more thoroughly in Juslin & Tarkkanen (1987). Professor Juslin's research has its origin in the work done by Igor Ansoff (1965). In addition, ideas presented by Shirley, Peters and El-Ansary (1981) and Webster (1979) influenced and supported Dr. Juslin's conceptual ideas.

A company determines its marketing strategy by making decisions concerning:

1. Customers
2. Products
3. Geographical limits of market area
4. Competitive advantage.

When a company defines its strategy, it defines the products, its customers, the geographical limits of markets and the competitive advantage on which the use of marketing tools will be planned. Strategy also defines the goals that the company tries to achieve by its actions within these four parameters. All these decisions together put the company in one strategic position and define the company's relationship with its environment. It must be emphasized that, although this relationship is defined by the strategies and goals, the methods for obtaining this relationship are not yet established.

A change in the company's external environment forces management to pay attention to its strategic position. The strategic decisions in the above-mentioned four parameters must be evaluated in relation to the changed external environment and possibly some adjustments in a company's strategy must be made.

The decisions about products, customers, market areas and competitive advantages are the main decisions to be addressed in strategic planning, and they all are closely interrelated. Depending on the marketing ideology used, each decision is given a special weight. For example, when marketing ideology is very customer-oriented, the most important of these four decisions is the choice of customers.

Eventually the strategic marketing decisions dictate the future of the firm and/or industry. The investments into the company can only be based on the possibilities of the markets.

3.2 Measurement of Marketing Strategies

3.2.1 General

This research effort was conceived of and designed following an extensive review of the literature on strategic planning and marketing strategies in the lumber industry. We found a few studies regarding lumber companies entering export markets and about attitudes and practices of exporters and non-exporters by McMahon & Gottko (1988, 1989). We also found a few studies regarding strategies in all sectors in the forest industry done by Juslin & Tarkkanen (1987), Rich (1986), Juslin, Larronmaa & Niemelä (1990) and Sinclair & Bush (1990).

Juslin & Tarkkanen (1987) studied the marketing strategies of the Finnish forest industries, which provided the starting point for this study in North America. The purpose of the Finnish industry study was both theoretical and empirical. The first purpose was to clarify the strategy concept. This also included the creation of operational measures and the generation of a basis for assessing the rationality of strategies. The second purpose was the description of the current strategies of the Finnish forest industry and the assessment of their rationality.

Juslin, Larronmaa & Niemelä (1990) later studied changes in the marketing strategies of the Finnish forest industry during the 1980's. The purpose of the study was to investigate changes in forest industry marketing strategies during the 1980's in Finland. Juslin et al. had data from the early 1980's and from the late 1980's about different sectors of the Finnish forest industry. Both above-mentioned Finnish studies dealt with the whole forest industry including sawmills, panel producers, and paper and paperboard manufacturers. The individual sectors were compared and contrasted.

Rich (1986) studied competitive strategies as they relate to all sectors of the forest industry. Rich's research compared the strategies followed by forest products companies during the 1976-79 period with strategies followed in 1984, and indicated the extent to which these strategies were reflected in the companies' marketing function and marketing organization. Rich (1986) used the Porter (1980) generic strategy model in classifying different strategies.

Sinclair & Bush (1990) studied competitive strategies in the U.S. hardwood industry. They used Porter's generic strategy model as a basis for the variables used to measure competitive strategies. Their study focused on intended competitive strategy within the hardwood industry in the U.S. By focusing on intended strategies, they also tried to investigate strategic changes in the industry.

3.2.2 Operationalization Used in This Study

The operationalization concept is concerned with the problem of measuring theoretical concepts with quantitative variables. The operationalization of the background characteristics of the companies was done by using production, exports, sales and the product classes as describing variables. The lumber products were divided into three categories based on the level of differentiation of the products:

- | | |
|-----------------------------|--|
| <i>Commodity Products</i> | These are lumber products manufactured to standard lumber sizes according to ALS or CLS/NLGA standards. |
| <i>Specialty Products</i> | These products differ from traditional lumber in drying, grading, lengths and/or dimensions or in level of value-added. (For example: lumber cut to special sizes/lengths, treated, stress graded, finger jointed or specialty kiln-dried lumber) |
| <i>Custom-made products</i> | These products are manufactured according to the needs of a specific customer. Customer needs are taken into consideration in production planning and the end-user is already known when the lumber is produced. (For example: furniture/window components produced for a specific customer) |

The *generic competitive strategies* were measured by using Porter's (1980) generic strategy model. The model includes three generic competitive strategies, which were simply presented to the company executives in the personal interview. Executives were then asked to associate their company with one strategy or combination of strategies. The three generic competitive strategies presented are as follows:

1. *Cost leadership* by using economies of large scale production. Minimization of production costs is the main objective. Differentiation of products and customers is avoided. Costs of product development and marketing are minimized.
2. *Differentiation* of products and/or services. The objective is uniqueness. Differentiation can be based on customer service, product image, distribution and/or a reputation as an innovator in developing new products.
3. *Focus* on a certain customer group, market area or product group. The company, or a product/market area-group inside the company, builds its strategy to serve a certain target group as well as possible -- better than competitors who are serving a broader area. (The company can thereby achieve a cost- or differentiation advantage within a chosen target group.)

The theoretical and methodological base for the operationalization of the *marketing strategy* concept was developed by professor Juslin in the University of Helsinki in Finland. The following operationalization of the marketing strategy concept has been used in several studies during the 1980's in Finland.

Operationalization of the marketing strategy concept by strategic decisions:

Product strategy is divided into three alternatives:

1. Emphasis on commodity products
2. Emphasis on specialty products
3. Emphasis on custom-made products.

The company chooses its product strategy by defining how much it emphasizes each alternative in its product range.

The customer strategy alternatives are:

1. As many customer and end-user groups as possible
2. A few well-defined end-use segments
3. Known end-users

A company's customer strategy is measured by how well one of these alternatives describes its principles in choosing customers.

Market area strategy is described with two alternatives:

1. As many countries/regions as possible
2. A few well-defined/regions countries

When a company chooses its market areas, the critical choice is whether to concentrate on a few countries or to market products in every possible market area.

Competitive advantage is measured in terms of ten alternatives relating to how a company perceives itself compared to its competitors:

1. Effective marketing
2. Customer relationships
3. Intensive personal selling
4. Market share
5. Aggressive credit policy
6. Effectiveness of marketing channel
7. Competitive prices
8. Well known product brand
9. Transportation expertise
10. Research and Development work

If the company feels it is strong in one or more of these alternatives, it can base its marketing activities on these strengths, or relative advantages.

3.2.3 Questionnaire Development

The questionnaire was developed after a literature review of survey research methodology and the area of strategic planning and marketing strategies. The structure of the questionnaire was identical to the study in Finland to facilitate future international comparisons.

The following areas were covered in the questionnaire:

- 1) background information about the companies (demographics)
- 2) export marketing channels
- 3) the actual marketing strategy
- 4) the overall strategy
- 5) collection of market information
- 6) research and development including product development.

Export marketing channels, collection of market information, and research and development were measured to provide examples of the firms' marketing structures and functions in connection with an attempt to investigate how different marketing strategies are reflected in a firms' marketing structures and functions.

To promote cooperation, confidentiality of the study was emphasized in the prenotification letter and in all other contacts with potential respondents. A summary of the results was also promised to respondents in the prenotification letter.

3.3 Data and Analysis

3.3.1 Sampling Frame

The geographical area for the population was Western North America, including Northern California, Oregon, Washington and British Columbia. In Northern California the following counties were included: Del Norte, Siskiyou, Modoc, Humboldt, Shasta, Trinity and Lassen. The population was defined by cross-referencing many directories including Forest Industries 1990-91 North American Factbook, Madison's Canadian Lumber Directory 1990, and the Washington State Forest Products Trade Directory.

3.3.2 Sample Design

The sample frame for the study included the largest softwood lumber producers in Western North America, based on 1990 production figures. A purposive sample of the 83 largest producers was selected, so that it included the 42 largest producers in the Western U.S. and the 41 largest producers in British Columbia, Canada. The sample size in British Columbia was decreased to 37, because during the data collection it was found out that few companies sold the products of other firms who were also included in the sample. The final sample size was 79 producers.

While a non-random sample inhibits the ability to make statistical inference to the population, the use of judgement or purposive sample in industrial marketing research is well documented in marketing research literature (e.g. Churchill 1987). The main reasons to use a purposive sample in this case were: limited personnel, funding and time.

3.3.3 Mailing & Interview Procedure

To secure a high rate of response in personal interviews an extensive 4-step procedure was followed:

1. A telephone call to identify the most suitable respondent within each company.
2. A prenotification letter.
3. A telephone call to agree on the time for an interview.
4. The actual personal interview.

The interviews were based upon a fixed questionnaire format which was completed by the same researcher during the interviews.

3.3.4 Survey Response

The data for this survey were collected during the first half of 1991. Out of the 79 companies in the sample, 64 agreed to give a personal interview. As a result, the following response rates were calculated:

	<u># Sampled</u>	<u># Responding</u>	<u>Response Rate</u>
Western USA	42	33	78.5%
British Columbia	37	31	83.8%
Total	79	64	81.0%

In the U.S. the highest response rate was in Oregon (84%). Numbers of sampled and responding firms by state/province are presented in Figure 1.

The three most common reasons for refusing the interview were a lack of time (67% of the non-respondents), a company policy prohibiting active participation in surveys or discussing strategic matters with outsiders (27% of the non-respondents), and organizational changes that were taking place (7% of the non-respondents).

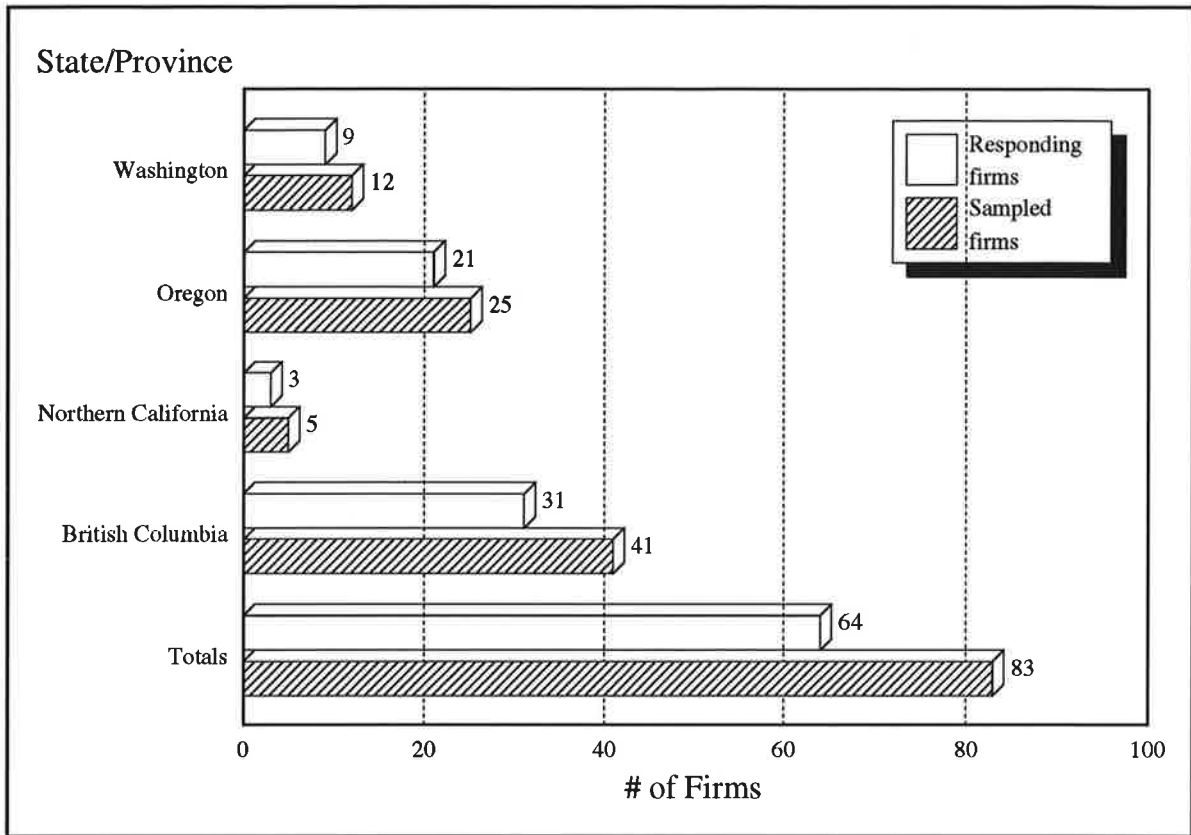


Figure 1. Number of Firms by State or Province, Sampled and Responded.

The persons targeted for interview within the companies were those responsible for strategic planning or strategic marketing planning. In smaller companies that typically was the president/general manager or the marketing manager while in larger companies the vice president of marketing, the marketing director or the strategic planner was selected. Most respondents (62%) had the highest marketing responsibility in the company (Figure 2).

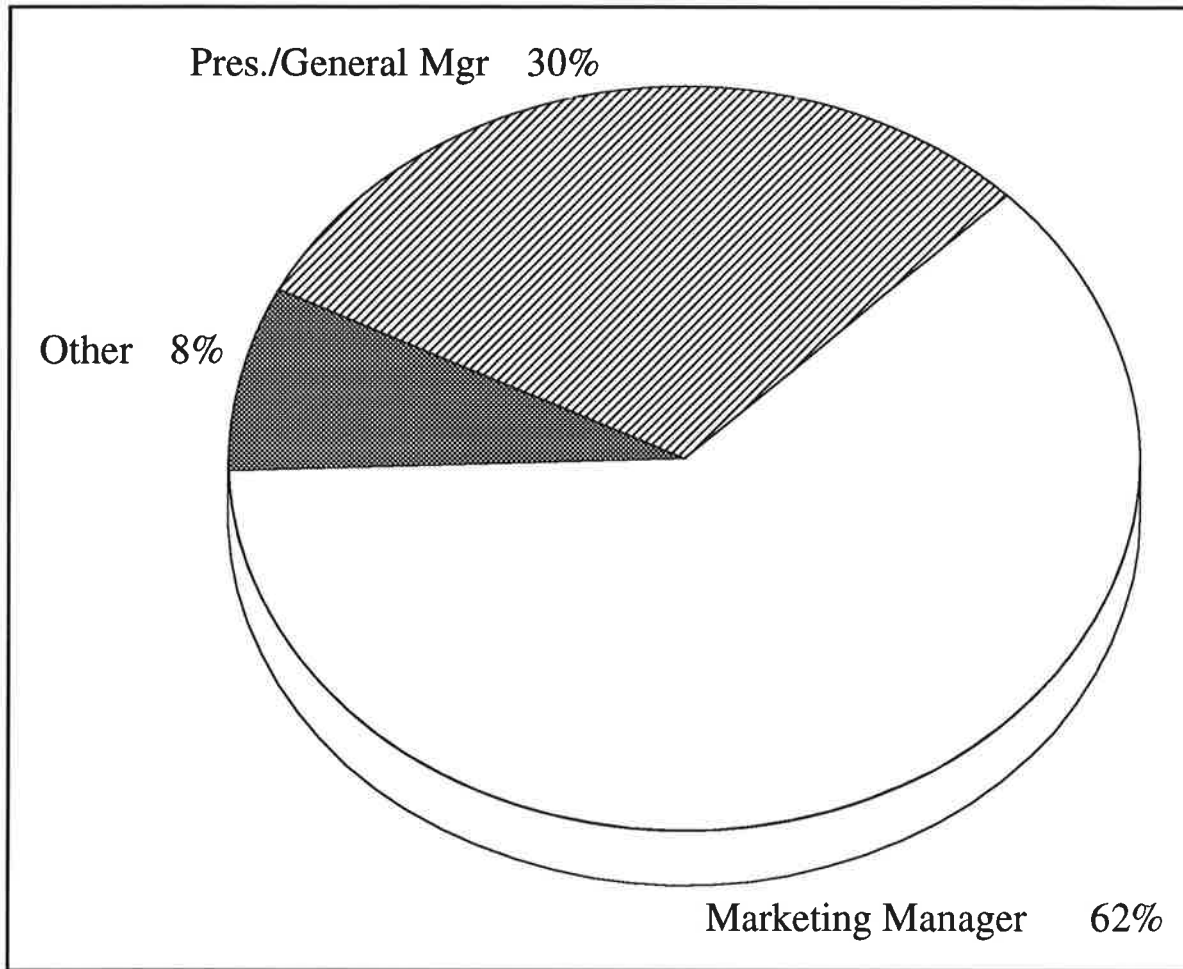


Figure 2. Title or Position of Survey Respondents.

3.3.5 Data Analysis

The data from the interviews was categorized and recorded on questionnaires during the interview. This data was subsequently entered into a Lotus 1-2-3 database and then analyzed with a personal computer based statistical program called Statgraphics. Most of the results are presented through frequency distributions, organized into tables. Other methods of analysis include: crosstabulations and mean scores. The analysis will be descriptive and will mainly compare results between the Western U.S. and British Columbia, although some parts of the profile of the companies are presented by state/province.

4 RESULTS

4.1 Profile of the Responding Companies

4.1.1 Production

The production of all the responding companies represented 65.4% of the total lumber production of the area of the population in 1990. The best coverage in production was achieved in British Columbia (77.1%) followed by Oregon (72.6%). The production of responding companies and state/province totals are shown in Figure 3.

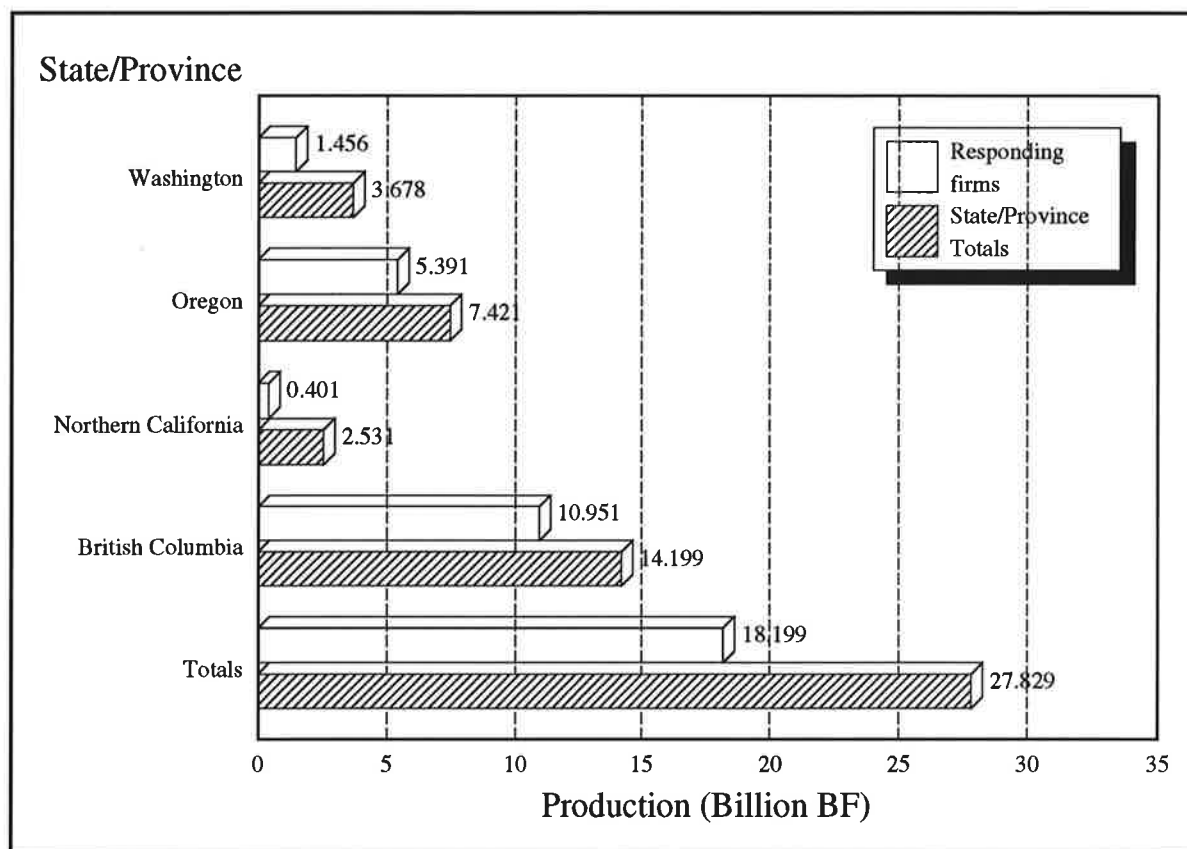


Figure 3. Softwood Lumber Production by State/Province (by Respondent and 1990 Totals).

In the Western USA, two-thirds of the firms produced under 200 MMBF annually, while in British Columbia about half of the firms were under 200 MMBF (Figure 4.). Also the average production volume was higher in British Columbia than in the Western USA. In the Western USA the largest responding firms were located in Oregon (Figure 5.).

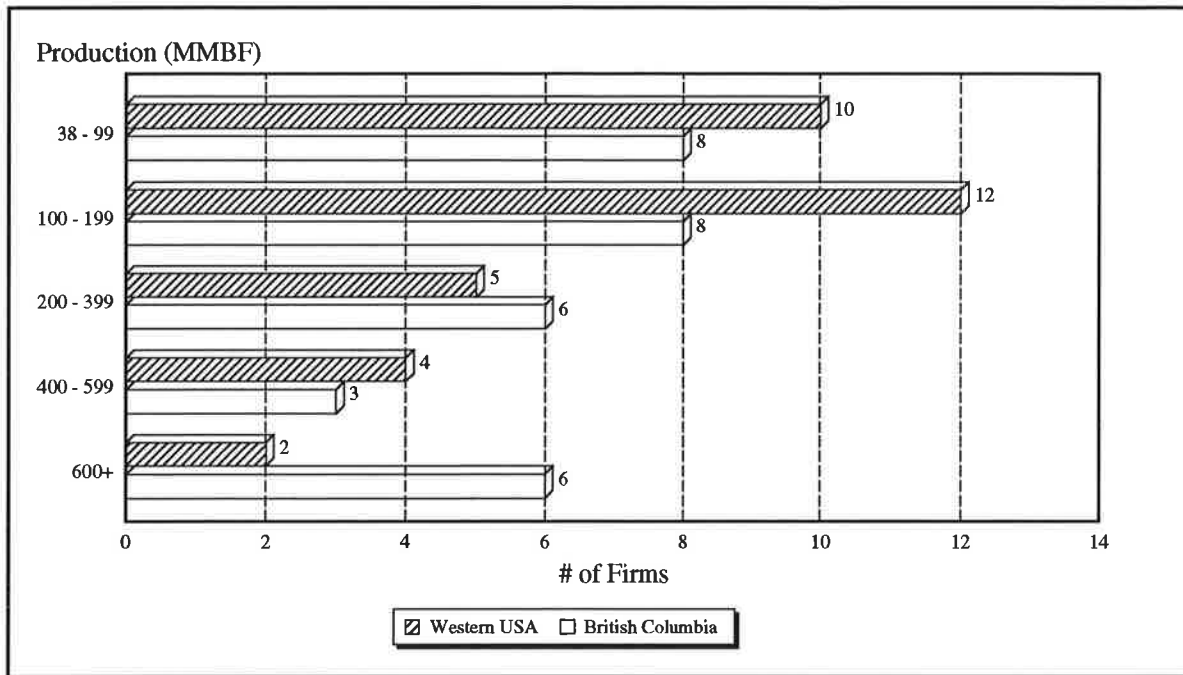


Figure 4. Respondent Firm Size by Production Category.

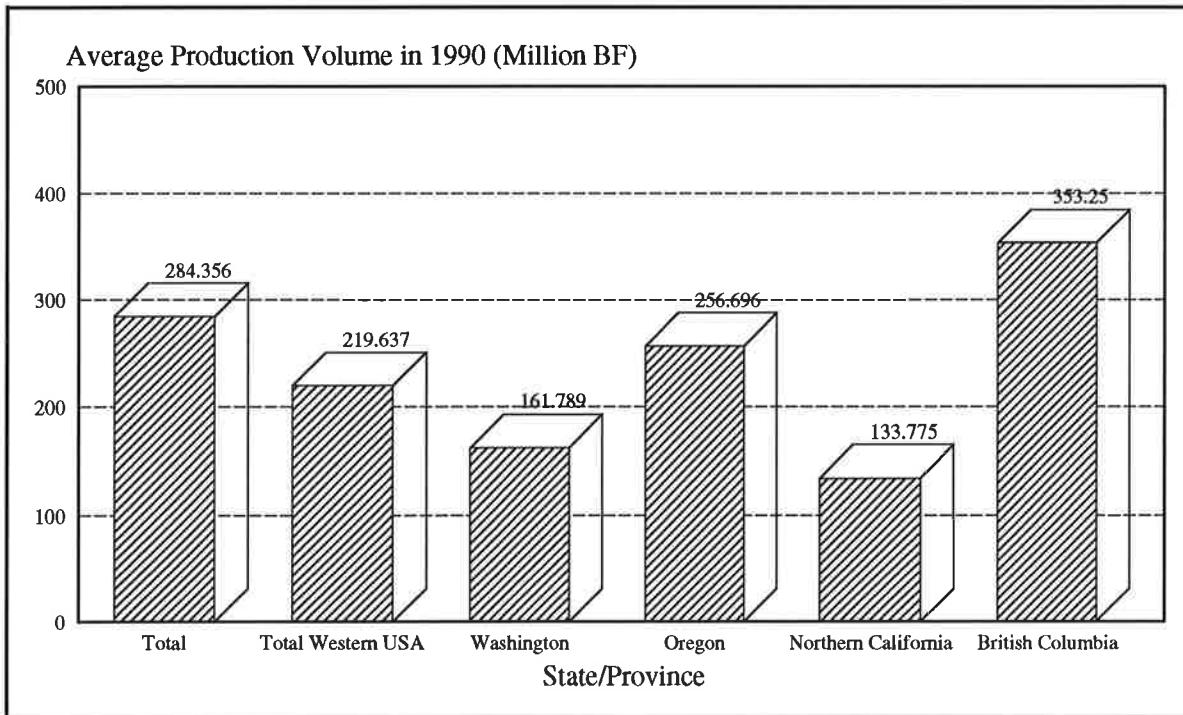


Figure 5. Average Production Volume of Respondent Firms by State/Province in 1990 (million BF).

When dividing the production of 1990 into the three product categories based on the level of differentiation of the products, no significant differences in the production structure can be noticed between the Western USA and British Columbia producers (Table 1). Both countries had a very heavy emphasis on commodity products, as represented by over two-thirds of the total production in 1990.

Table 1. Product Strategy According to Production Volume (% of Production) in 1990.

Product Strategy	% of Production	
	Western USA (n=33)	British Columbia (n=31)
Commodity Products	69	69
Specialty Products	24	26
Custom-made Products	7	5

4.1.2 Export

In this study export was considered to be all the products that go outside the borders of the country. This includes Canadian exports to the USA and vica-versa. Figure 6 shows clearly that Western USA producers are relatively domestically oriented, whereas the producers in British Columbia are very export-oriented, as evidenced by the high export share of total production, 85%.

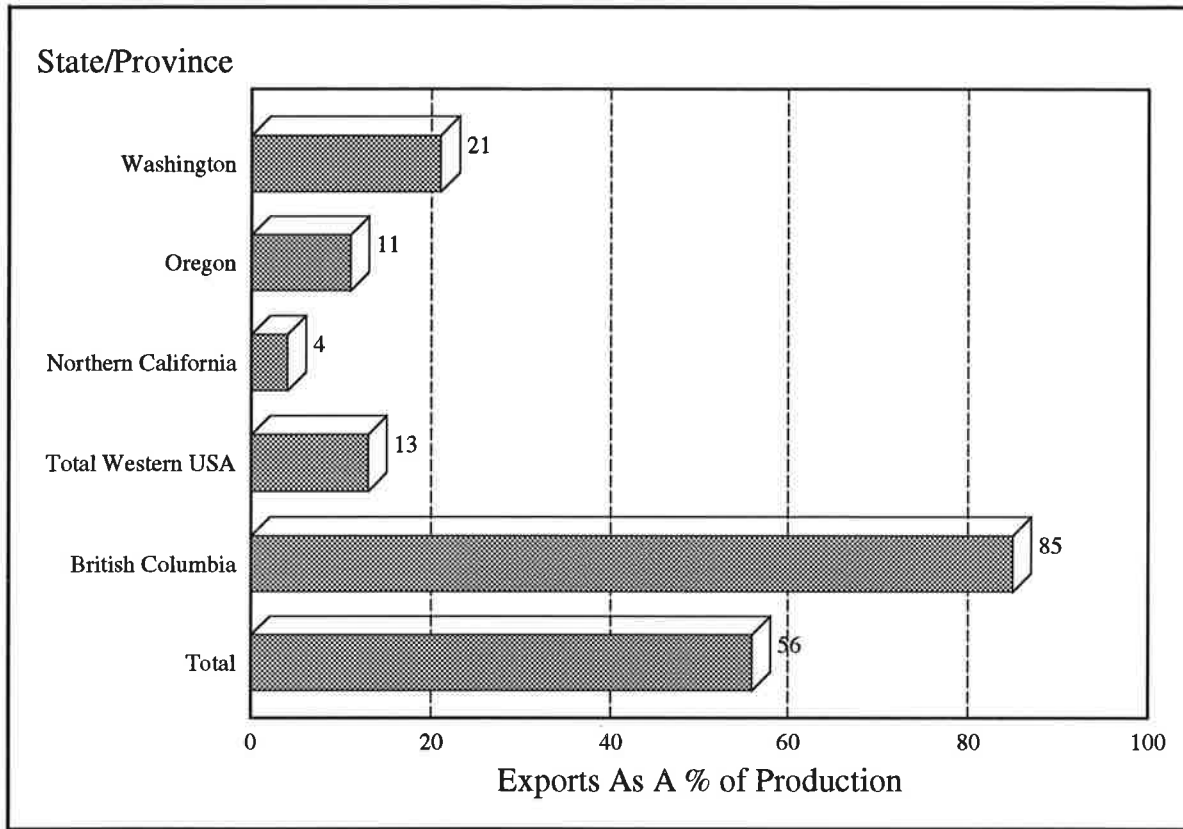


Figure 6. Percentage of Production Exported by State/Province and Total.

Among different product category exports for both countries, custom-made products are exported the most and commodity products the least (Table 2). Over 90 % of the commodity products exported from British Columbia go to the USA. Japan is the biggest market for specialty and custom-made products exported from both countries. For Western USA producers, Australia is the second largest market for both commodities and specialty/custom-made products. When speaking about exports from the Western USA, one has to keep in mind that the amounts exported are fairly modest because the proportion of production exported is low compared with British Columbia. In addition to Japan, the United Kingdom and the USA are the other major markets for specialty and custom-made products exported from British Columbia (Table 3).

Table 2. The Export Proportions for Product Categories (%) in 1990.

Product Category	Export Proportion, %	
	Western USA	British Columbia
Commodity Products	10	82
Specialty Products	17	84
Custom-Made Products	22	89

Table 3. The Most Important Export Countries.

Country	% of Export Volume			
	Commodity Products		Specialty/Custom-Made Products	
	Western USA	BC	Western USA	BC
USA	-	92	-	33
Japan	52	4	73	53
Canada	18	-	3	-
Australia	26	0	23	2
United Kingdom	2	4	0	11
Taiwan	2	0	0	0
Saudi-Arabia	0	0	1	0

4.1.3 Sales of the Respondent Companies

Annual sales categories and the number of firms within each category according to respondents' gross sales in 1990 are shown in Figure 7. In the Western USA, firms are fairly evenly divided among the seven sales categories, as compared to British Columbia in which responding firms are two-tired. Nearly 50% of BC firms have annual sales of under \$50 million and over 10% have sales of over \$300 million. The total sales of the 53 firms that provided sales figures were \$5.327 billion. The average firm size, according to annual gross sales, was largest in Oregon and British Columbia (Figure 8).

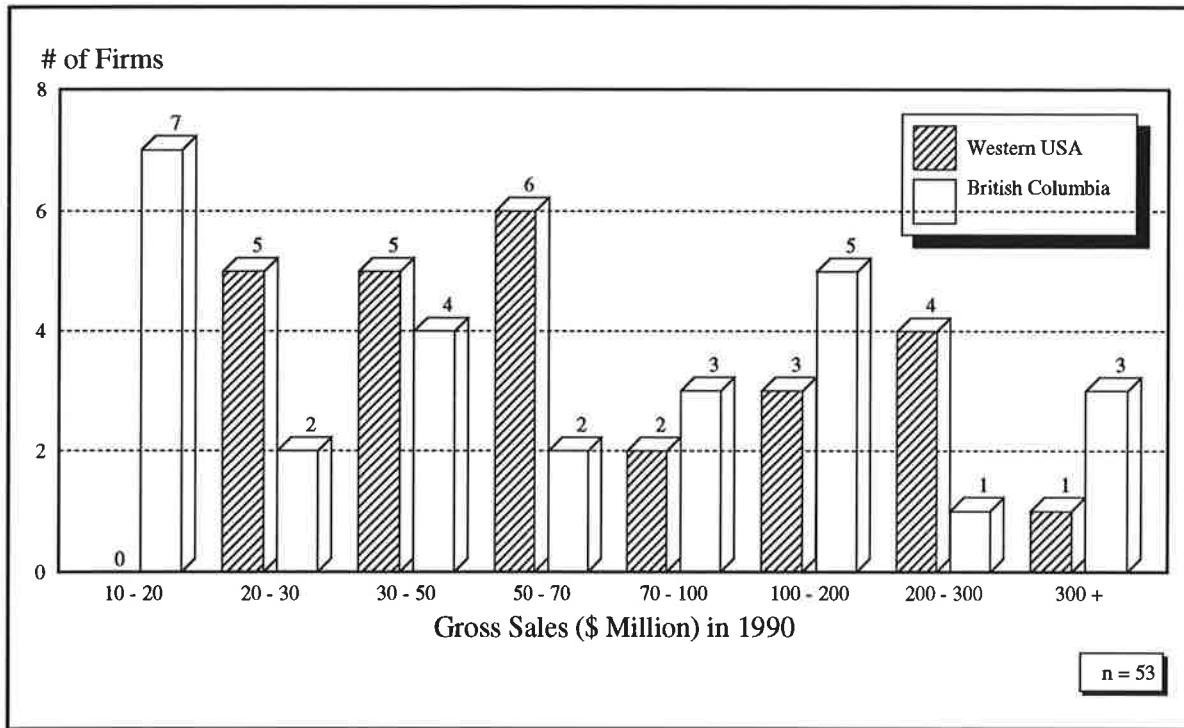


Figure 7. Annual Sales Categories and the Number of Respondent Firms within Each Category.

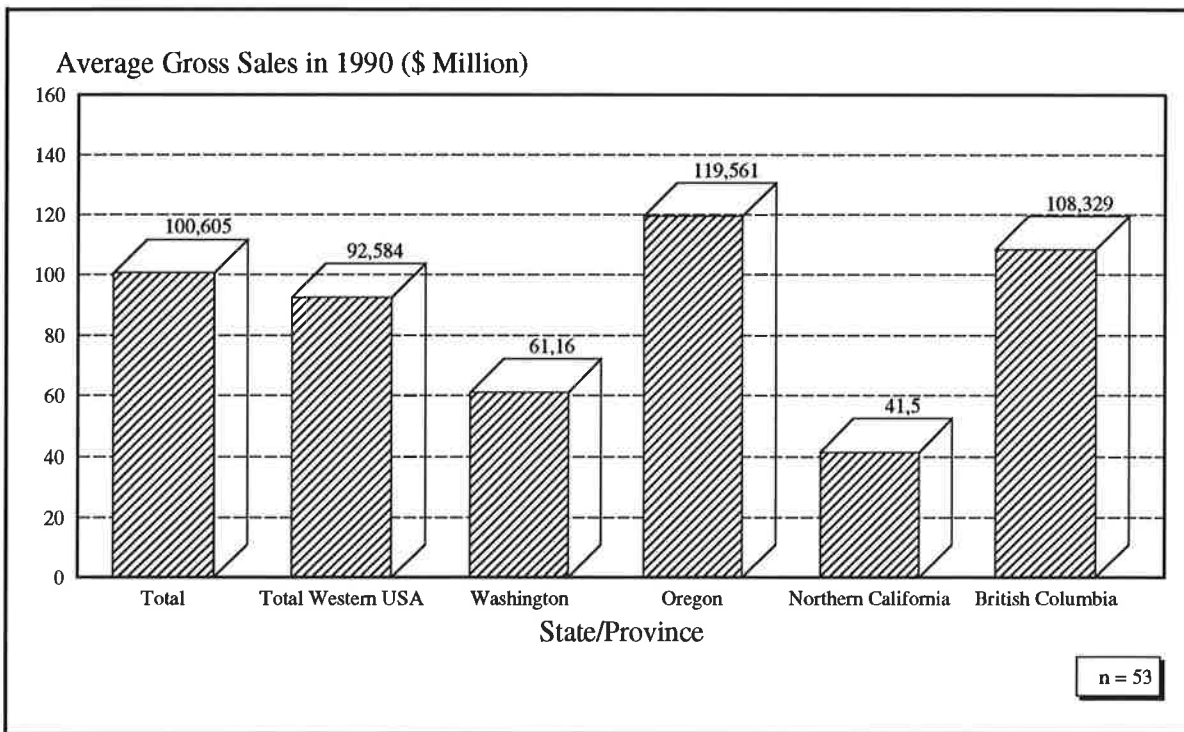


Figure 8. Average Gross Sales of Respondent Companies by State/Province in 1990 (\$ million).

4.1.4 Business Types of Respondent Companies

The division of respondent companies according to business type is shown in Figure 9. No significant differences can be noticed between the Western USA and British Columbia in business types of the respondent companies. There are relatively more companies with multiple sawmills among the Western USA respondents than in British Columbia. On the other hand, there are more single sawmill companies and integrated forest products producers among British Columbia respondents than among respondents in the Western USA.

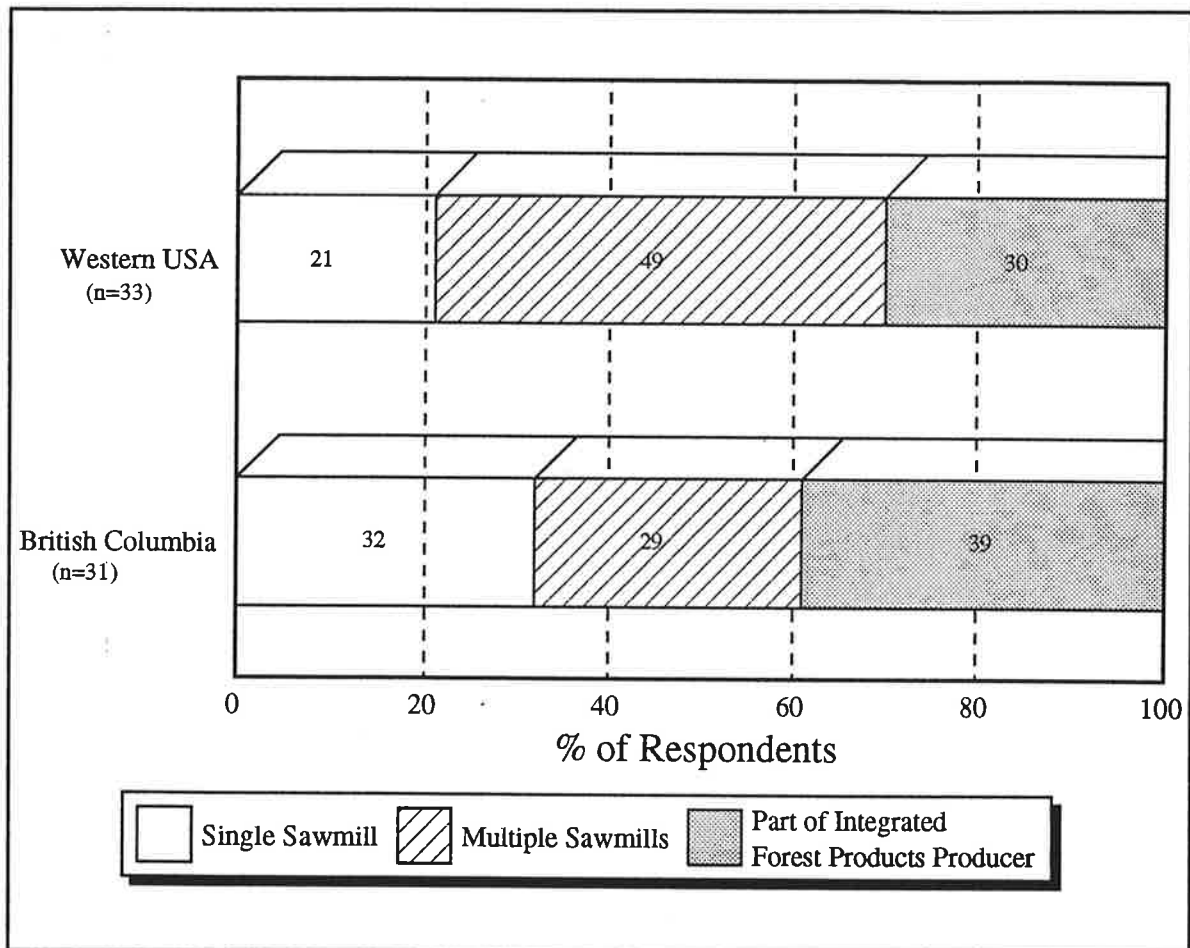


Figure 9. Respondent Companies According to the Business Type.

4.1.5 Freedom of Strategic Planning within Responding Companies

Strategic planning involves the decisions a company makes about products, customers, market areas and competitive advantages. The degree of freedom that the sawmills have in strategic planning was measured in the study. The companies with more than one sawmill and the companies also producing other forest products (panels, paper, etc.) were asked to rank the

degree of freedom that the sawmills have in strategic planning (Figure 10). Single sawmill companies were assumed to have total freedom in strategic planning. No significant differences could be seen in the freedom of strategic planning between companies with multiple sawmills and companies that are part of an integrated forest products producer (Figure 10). Strategic planning is done mostly at the corporate headquarters in both types of companies. In companies with multiple sawmills, an individual sawmill was very often seen as a production unit. No differences were found between the Western USA and British Columbia with regard to freedom in strategic planning.

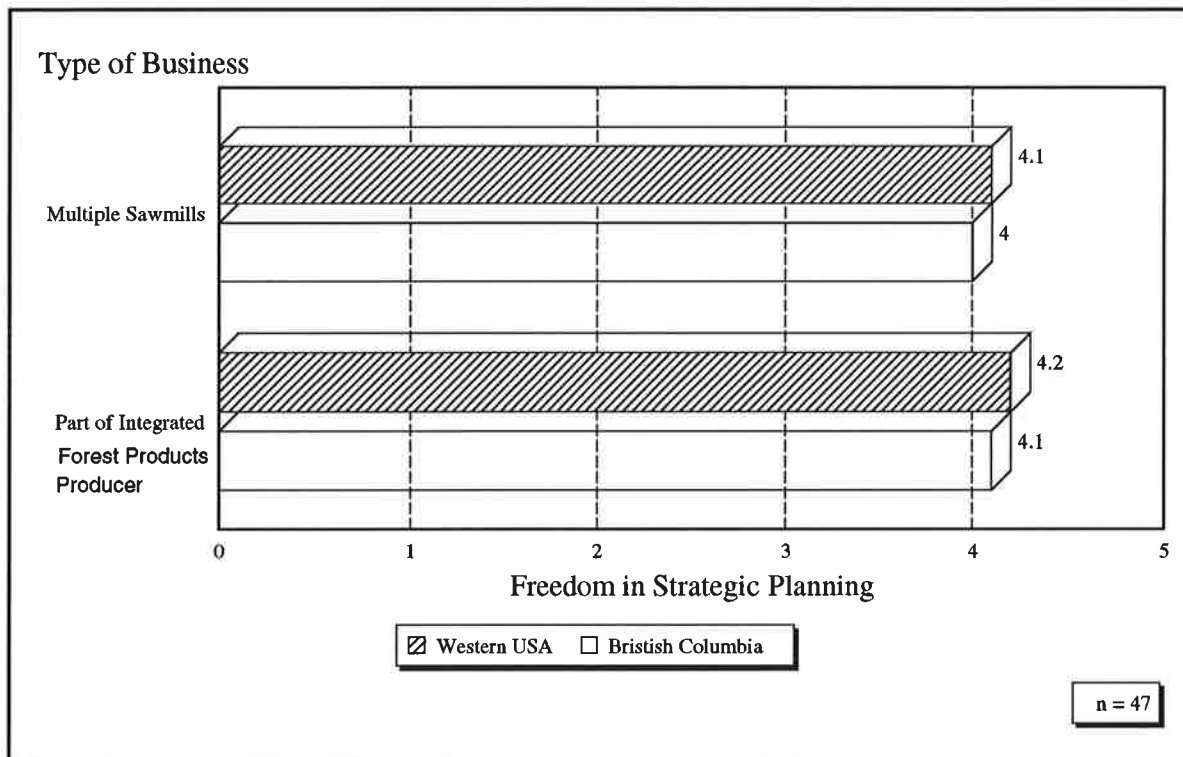


Figure 10. Freedom in Strategic Planning within the Responding Companies (1=each site conducts its strategic planning, 5=all strategic planning is done at corporate headquarters).

4.1.6 Customers

The most important customer types for Western USA sawmills are distributors, wholesalers and retailers. Two-thirds of the largest customers for Western USA sawmills belong to these categories. In British Columbia, almost half of the largest customers are wholesalers, mainly American wholesalers. Some companies in British Columbia sell almost 100% of their production to the American wholesalers. The other important customer types for British Columbia producers are distributors and export trading companies.

Table 4. Five Major Customer Types in the Western USA.

Customer Type	Customers in Order of Importance to Manufacturers by Size, %				
	1st	2nd	3rd	4th	5th
Distributors	24	18	9	32	0
Wholesalers (stocking)	21	15	31	8	10
Retailers	21	12	9	20	10
Export Trading Companies	12	15	3	4	20
Lumber Traders/Brokers	12	9	13	8	0
Importers	3	3	6	4	15
Window/Door Manufact.	3	6	6	12	0
Transfer Within Company	3	6	0	0	5
Builders/Contractors	0	6	0	0	10
Truss/Element Manufact.	0	3	3	4	20
Miscell. Manufacturers	0	6	19	8	5
Furniture Manufacturers	0	0	0	0	5

Table 5. Five Major Customer Types in British Columbia.

Customer Type	Customers in Order of Importance to Manufacturers by Size, %				
	1st	2nd	3rd	4th	5th
Wholesalers	42	26	32	16	15
Distributors	26	16	4	0	0
Export Trading Companies	6	26	21	26	8
Lumber Traders/Brokers	6	3	14	5	8
Retailers	6	6	4	16	8
Miscell. Manufacturers	6	6	14	21	8
Importers	3	3	7	5	23
Truss/Element Manufact.	3	10	0	0	23
Transfer Within Company	3	3	0	11	8
Builders/Contractors	0	3	0	0	0
Furniture Manufacturers	0	0	4	0	0

As Table 6 shows, the most important customer type typically accounts for about half of the total production in both countries. The responding companies seem to be fairly selective in choosing the customer types to be served, since five major customers types bought 92% of respondents' total production in 1990. The customer structure seems to be concentrated in both countries. Responding firms are concentrating on a few customer types as evidenced by the three biggest customer types purchasing 80% or more of the production.

Table 6. Proportion of Production Bought by Five Major Customer Types.

Customer Type	% of Production	
	Western USA	BC
1st	47	52
2nd	20	18
3rd	13	12
4th	8	6
5th	4	4
Total of 5 Major Customers	92	92

4.2 Generic Competitive Strategies

Generic competitive strategy was measured by using Porter's (1980) model. Respondent companies in British Columbia seem to identify more with focus and differentiation strategies and the Western USA companies identified more with cost leadership and differentiation strategies (Figure 11). From Table 3 (page 15) we can see that Japan was the largest export destination for specialty/custom-made products from British Columbia. These Japanese markets generally require different products as compared to Canadian or US markets (i.e. metric sizes), thus explaining the concentration on focus and differentiation strategies in British Columbia. Perhaps the commitment to domestic markets and to produce according to ALS are the main reasons that Western USA producers identified more with a cost leadership strategy than companies in BC. Also, according to Porter's theory, the cost leadership strategy can be related to the commodity product strategy, which is the most common product strategy among the Western USA companies as we will find out later in section 4.3.1 -- Figure 13.

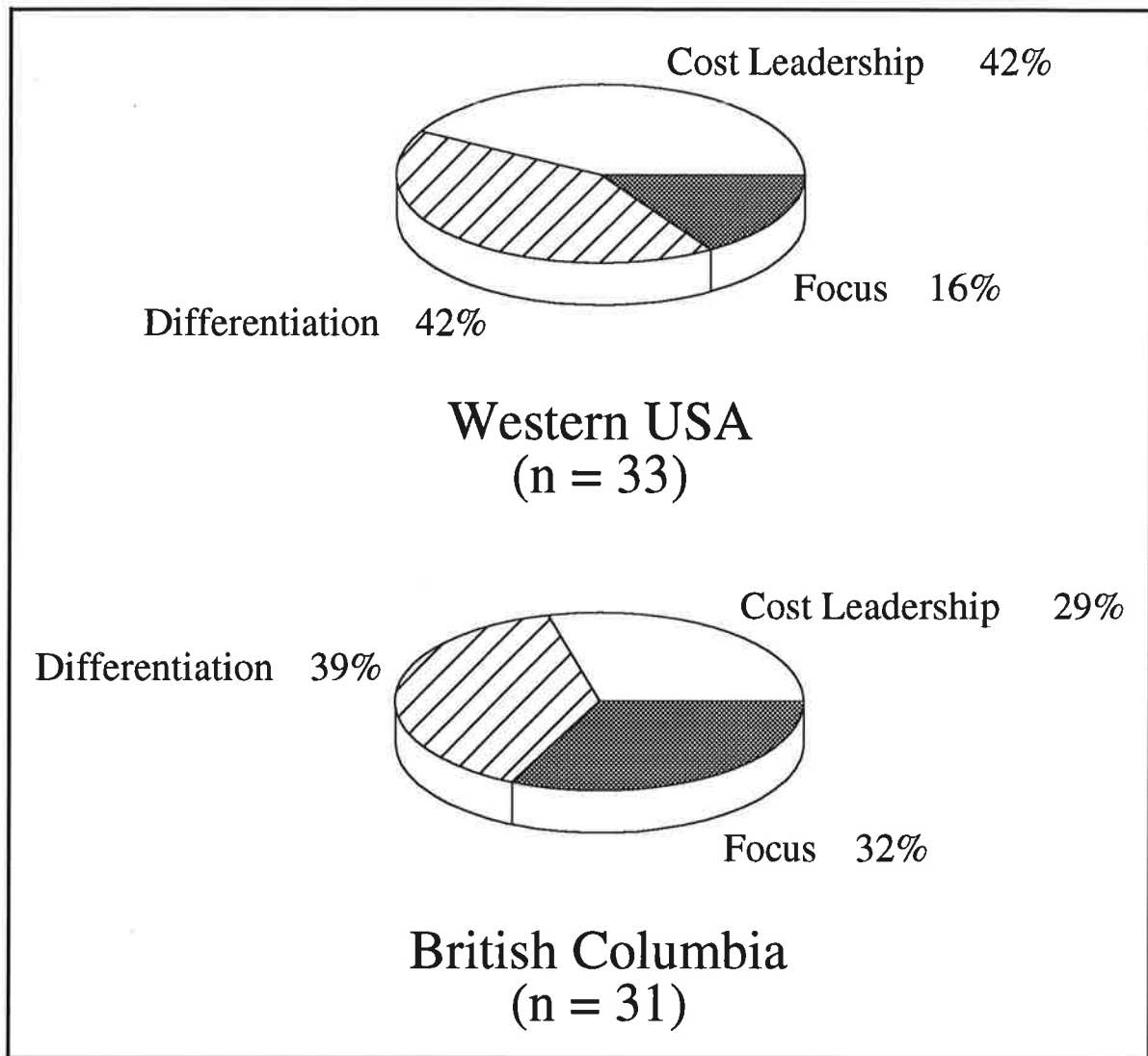


Figure 11. Generic Competitive Strategies According to Porter Model by % of Responding Firms.

4.3 Components of Marketing Strategy

4.3.1 Product Strategies

The product strategies analyzed in this project may be divided into seven combinations, although they were measured with only the three original alternative strategies presented in the questionnaire. In many cases, a company emphasized two strategies as equally important or all three alternatives as equally important; therefore, the four additional categories were developed. The seven different product strategies are as follows:

Product Strategy Emphasizes:

- 1 = Commodity products
- 2 = Specialty products
- 3 = Custom-made products
- 4 = Commodity & specialty products
- 5 = Commodity & custom-made products
- 6 = Specialty & custom-made products
- 7 = Commodity & specialty & custom-made products.

When comparing the actual production structure (Table 1 -- page 13) to the product strategies with which the responding companies identified themselves (Figures 12 and 13), a distinct trend toward specialty and custom-made products and away from commodities is evident. Past strategic decisions reflect the production figures realized in 1990, a year in which nearly 70% of production was commodity products. The production structure in the future will most likely reflect today's strategic changes toward more specialty and custom-made products: many of the companies interviewed stated that they were in the process of changing to more specialty and custom production.

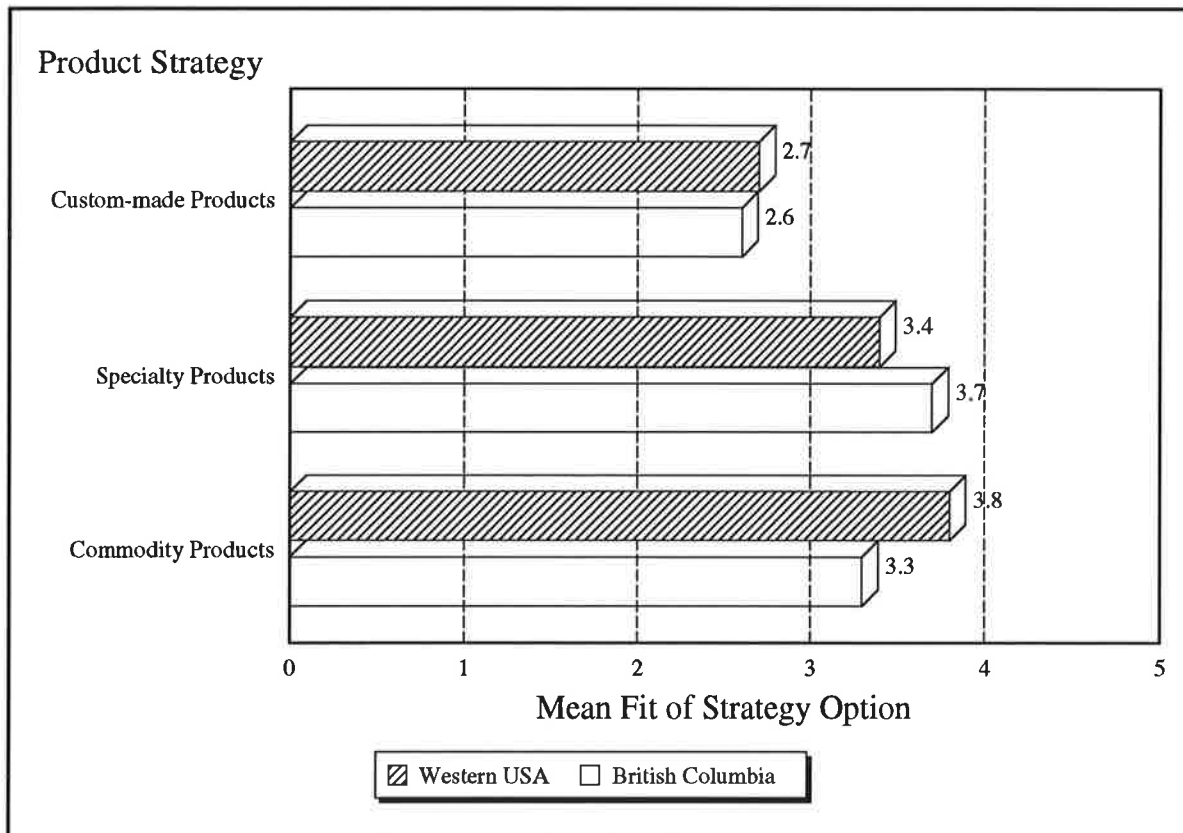


Figure 12. Respondents' Product Strategies (1=does not fit at all; 3=fits somewhat; 5=exact fit).

In British Columbia, companies are emphasizing more specialty and custom-made products than companies in the Western USA, who rely more heavily on commodity products in their product strategy. In both countries, 9% of the responding firms equally emphasize commodity, specialty and custom-made products, which gives an indication that these companies do not really have a clear strategic vision (Figure 13).

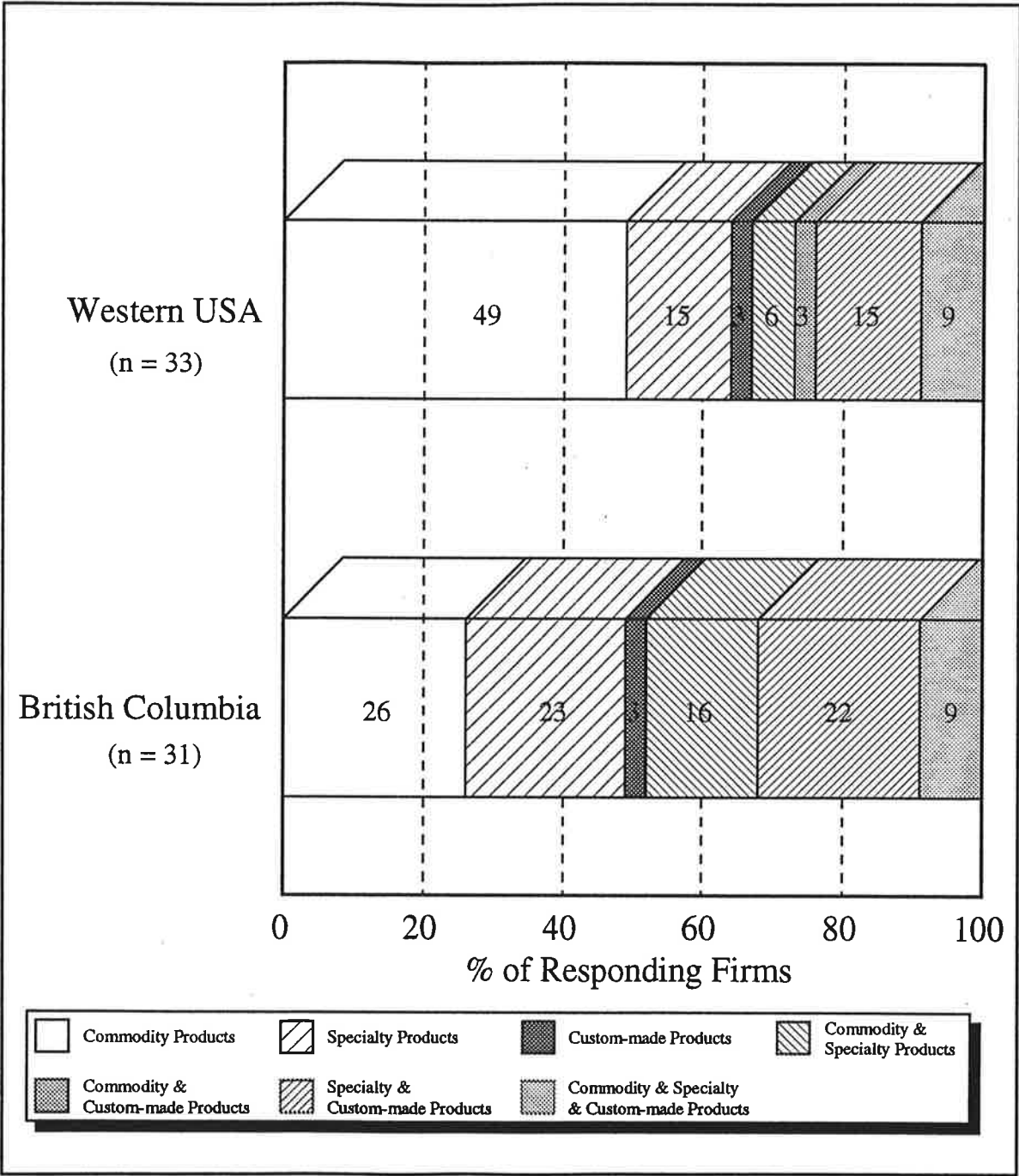


Figure 13. Respondents' Product Strategies by % of Responding Firms.

4.3.2 Customer Strategies

Customer strategies may also be divided into seven different combinations, although they were measured with only three original alternative strategies in the questionnaire. The seven targeted customer group strategies are as follows:

Customer Strategy Emphasis:

1 = As many customers and end-user groups as possible

2 = A few, well-defined end-use segments

3 = Known end-users

4 = As many customers and end-user groups as possible & few, well-defined end-use segments

5 = As many customers and end-user groups as possible & known end-users

6 = Few, well-defined end-use segments & known end-users

7 = As many customers and end-user groups as possible & few, well-defined end-use segments & known end-users.

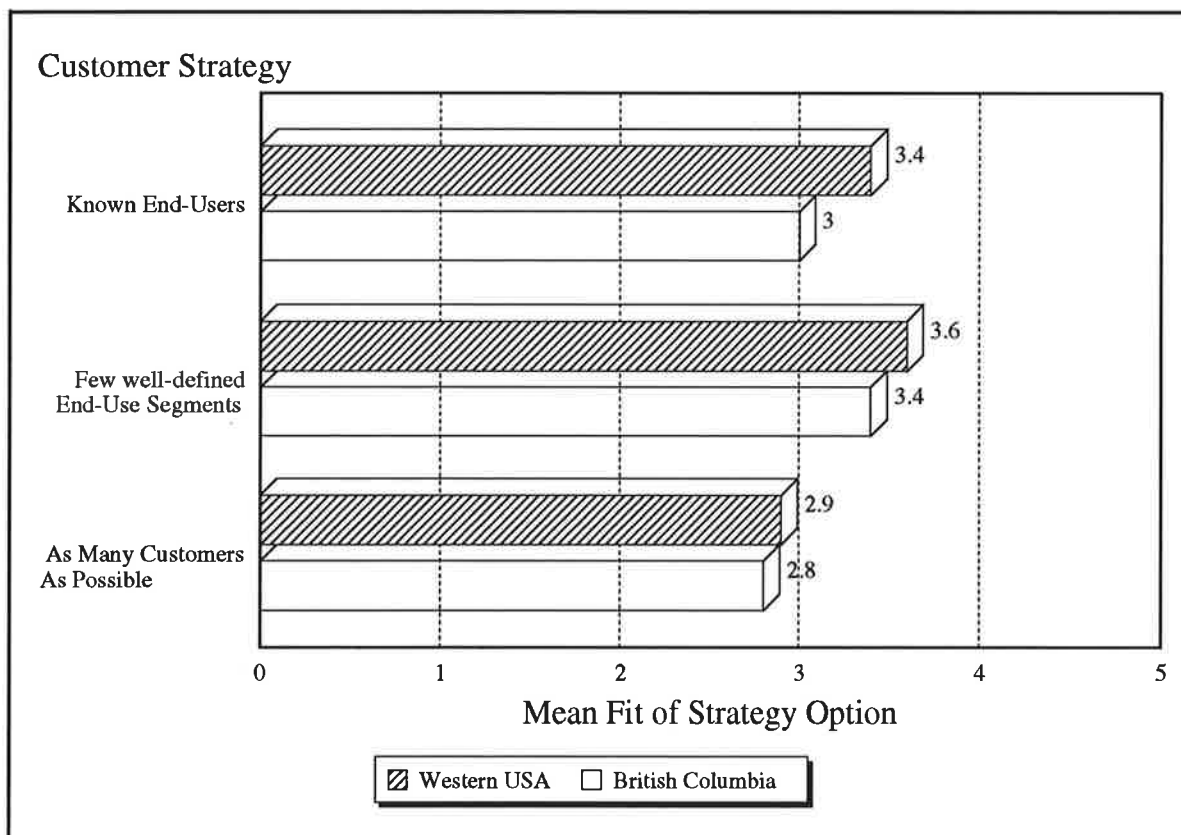


Figure 14. Respondents' Customer Strategies (1=does not fit at all; 3=fits somewhat; 5=exact fit).

In both countries the customer strategy with highest mean score (best fit with the firms' customer strategy) was to concentrate on a few, well-defined end-use segments. Western US companies appear to be more selective in choosing their customers than companies in British Columbia. It can be seen that 70% of companies in the Western USA and 58% of companies in British Columbia identified with one of the following three strategies: a few, well-defined end-use segments, known end-users, or the combination of these two. This finding supports a similar degree of selectivity in already actualized strategies as shown in Table 6 (page 20), whereby the five major customer types bought 92% of the production in both countries in 1990.

The relation between product strategies and customer strategies seem to be somewhat out of harmony. Juslin & Tarkkanen (1987) suggest in their theoretical hypothesis about relationships between individual strategic decisions that a natural customer decision connected with a commodity product strategy would be "as many customers and end-user groups as possible." The findings of Juslin's & Tarkkanen's Finnish study also support this theoretical suggestion. But, according to the findings of the current study, when a product strategy emphasizes commodity products, companies appear to be relatively selective in choosing their customers. This trend is somewhat stronger in the Western U.S. than in British Columbia.

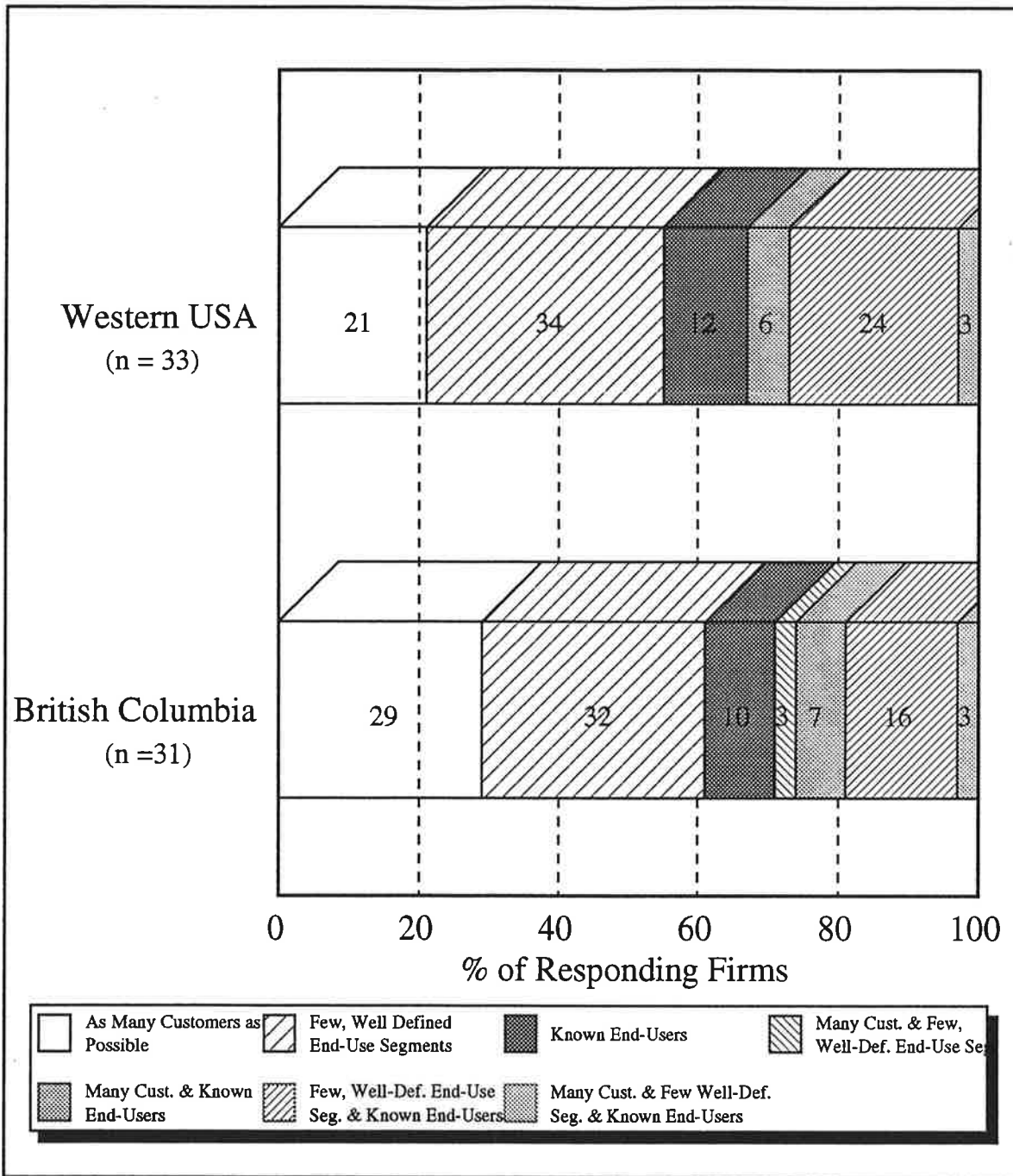


Figure 15. Respondents' Customer Strategies by % of Responding Firms.

4.3.3 Market Area Strategies

Market area strategies may be divided into the following three categories as listed below. The first and the second alternatives are very clear. The third one is a combination in which the respondents feel that both the first and the second alternatives are equally applicable.

Market Areas are:

- 1 = As many countries/regions as possible
- 2 = A few, well-defined countries/regions
- 3 = As many as possible & few, well-defined countries/regions.

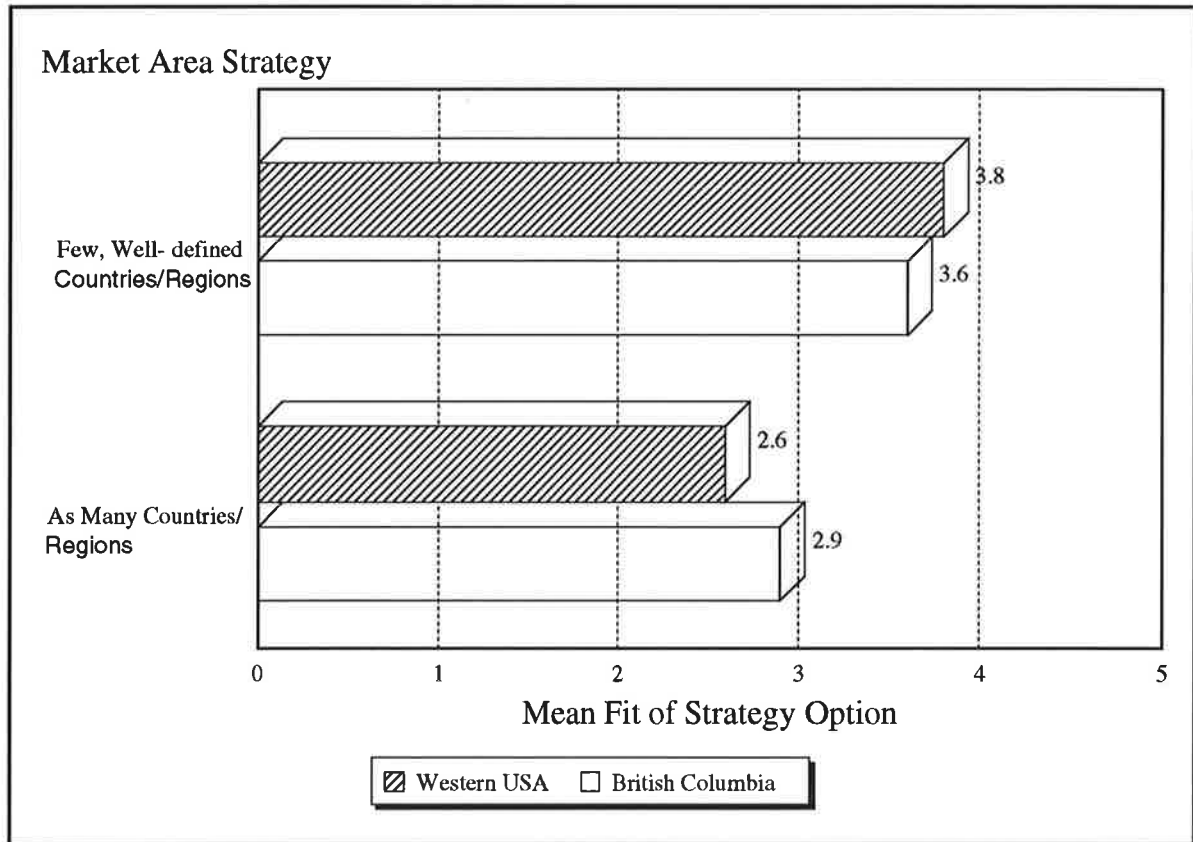


Figure 16. Respondents' Market Area Strategies (1=does not fit at all; 3=fits somewhat; 5=exact fit).

The most common market area strategy in both countries was to concentrate on a few, well-defined countries/regions. Over two-thirds of the companies in the Western USA and over half of the companies in British Columbia were applying this strategy. Again, as was the case with customer strategies, the Western US companies are more selective in their market area strategy than companies in British Columbia. In British Columbia, 16% of the companies identified with the combination market area strategies (as many as possible and a few, well-defined countries/regions), which may suggest a lack of selectivity in choosing their market area.

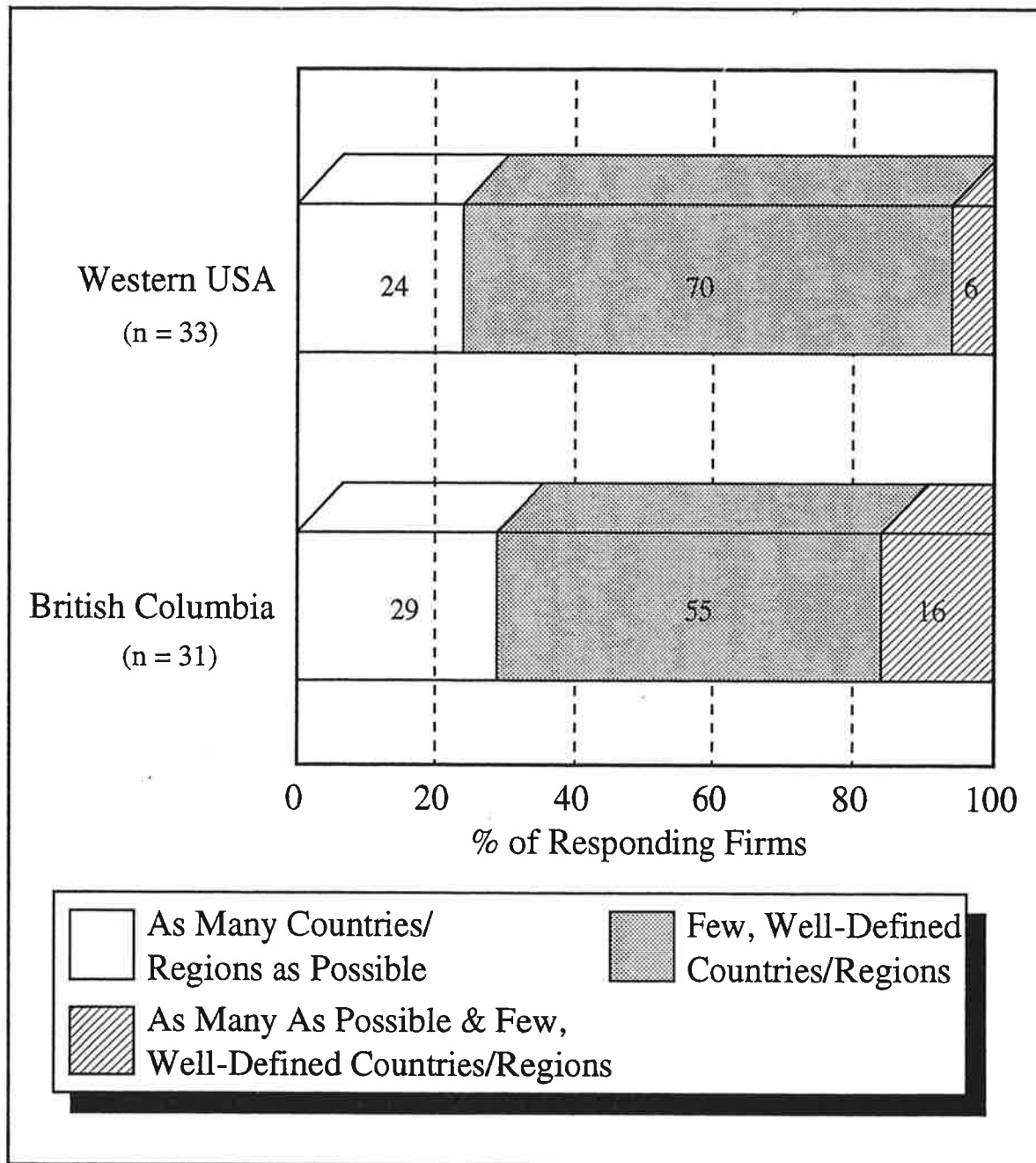


Figure 17. Respondents' Market Area Strategies by % of Responding Firms.

4.3.4 Competitive Advantages

The respondent companies were asked to compare themselves with their competitors regarding 10 selected competitive advantages as listed in Figure 18. Overall, the Western US companies see themselves in a better position vis-a-vis their competitors than firms in British Columbia. All the competitive advantages except research & development were perceived by the Western

U.S. firms to be areas in which they were equal or better than their competitors (Figure 18). B.C. firms felt about the same, although to a somewhat lower mean rating on most variables with the exception of credit policy, which they perceived to be slightly worse than their competitors. U.S. respondents perceived their firms to be most competitive with customer relationships, personal sales, effective marketing and distribution, and well known product brands. British Columbia companies perceived well known product brands, customer relations, effective marketing, and transportation expertise as their strongest competitive advantages. Interestingly, only two of the 10 factors, transportation expertise and competitive price, were rated higher (on average) by British Columbia firms than by Western U.S. firms.

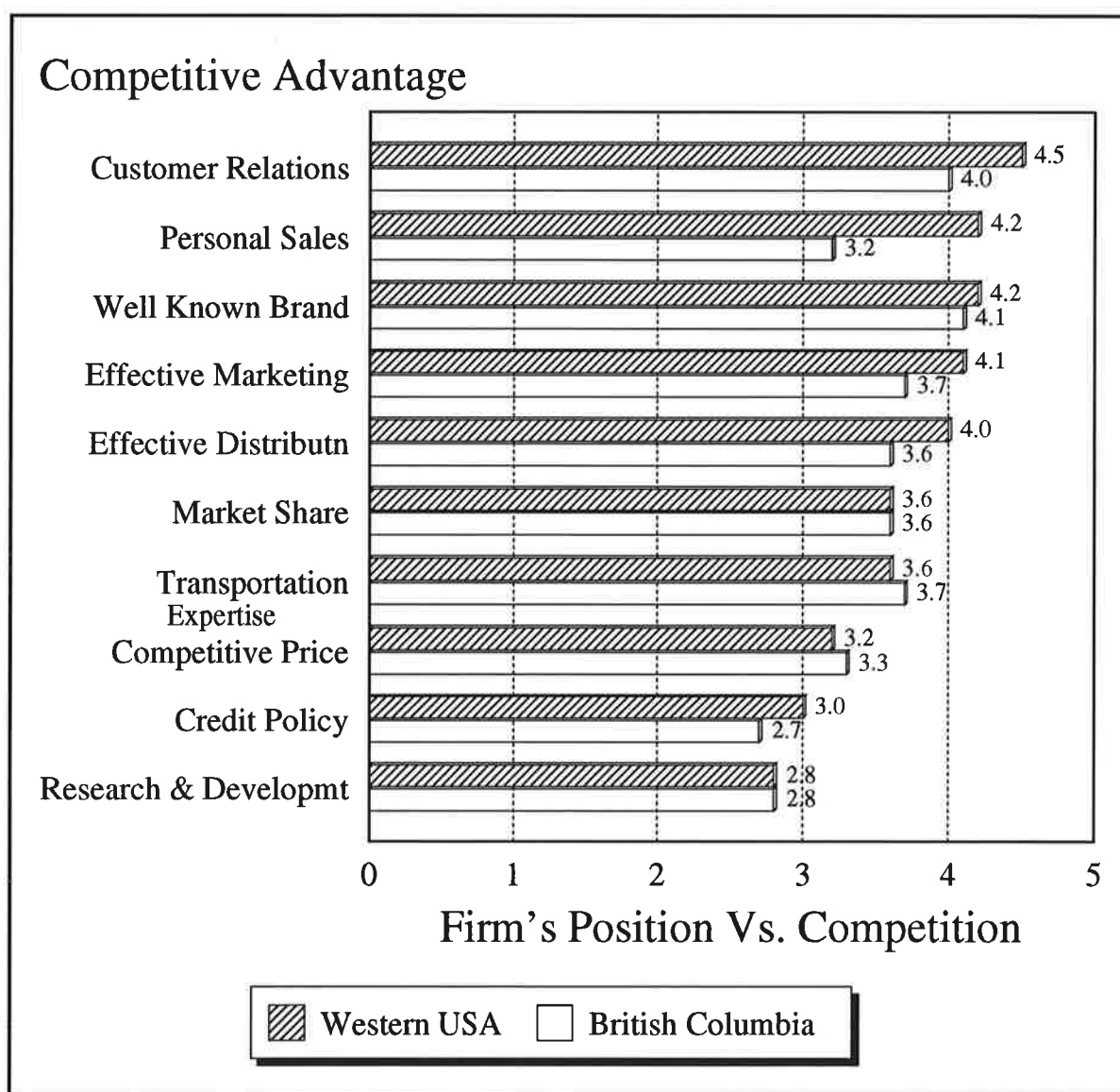


Figure 18. The Competitive Advantages Perceived by Respondents Compared to Competitors (1=worse position; 3=equal position; 5=better position).

Table 7 shows that in the future the most important competitive advantages emphasized by Western US companies will be customer relationships, effective marketing and personal selling. British Columbia companies will emphasize customer relationships, well known product brands, and effective marketing as their most important future competitive advantages.

Table 7. The Most Important Competitive Advantages Emphasized in the Future by Respondent Companies. (Frequencies have been weighted by the order of importance: the most important one, 5 x the frequency, etc. and the least important one, 1 x the frequency.)

Competitive Advantage	Importance, Weighted % of Respondents	
	Western USA (n=30)	British Columbia (n=28)
Customer Relationships	27	25
Effective Marketing	18	15
Intensive Personal Selling	14	8
Effectiveness of Marketing Channel	12	8
Well Known Product Brand	12	17
Competitive Prices	6	5
Transportation Expertise	5	10
Market Share	3	3
Research and Development Work	2	5
Aggressive Credit Policy	1	4

4.4 Connections Between Marketing Strategies and Marketing Functions

4.4.1 Export Marketing Channels

	Commodity products %		Specialty/Custom-made products %	
	Western USA	BC	Western USA	BC
1. Manufacturer ----- Industrial end-user -----	3	4	8	24
2. Manufacturer ----- Retailer ----- Private end-user -----	1	28	0	2
3. Manufacturer --- Wholesaler ----- Industrial end-user -----	19	17	1	11
4. Manufacturer --- Wholesaler --- Retailer ----- Private end-user -----	9	24	5	2
5. Manufacturer ----- Importer -----	39	4	16	6
6. Manufacturer --- Domestic Agent ----- Industrial end-user -----	7	9	42	16
7. Manufacturer ----- Foreign agent ----- Industrial end-user -----	16	2	9	7
8. Manufacturer --- Foreign agent --- Importer --- Industrial end-user -----	0	0	1	0
9. Manufacturer --- Own sales office ----- Industrial end-user -----	0	1	1	11
10. Manufacturer --- Own sales office --- Importer --- Industrial end-user -----	0	1	9	17
11. Manufacturer --- Foreign Agent --- Importer ----- Private end-user -----	1	0	3	0
12. Manufacturer --- Other -----	5	10	1	4

Figure 19. Export Marketing Channels Used by Responding Companies by Product Category.

As shown in Figure 20, commodity products from the Western USA producers are mainly sold through an importer (39% of commodity products), wholesaler (19%), or foreign agent (16%) to industrial end-users. In British Columbia the major export marketing channels used for commodity products very often include retailer to final end-user (28%), the wholesaler to retailer to the final end-user (24%) or wholesaler to industrial end-user (17%).

Almost 60% of specialty/custom-made products from the Western USA are sold through an importer or domestic agent to the industrial end-users. From British Columbia responding firms, 24% of specialty/custom-made products are sold straight to industrial end-users without intermediate parties. Other export channels commonly employed by British Columbia firms include wholesalers (11%), domestic agents (16%), or company-owned sales offices (28%) as intermediaries between the manufacturer and the industrial end-user. Less than 10% of the end-users for specialty/custom-made products from both countries are non-industrial.

These results show an increasing role of domestic agents and straight contacts with final end-users in the future, since the product strategy emphasis is changing from commodity products (see chapter 4.3.1) towards specialty and custom-made products.

4.4.2 Product Development

The intensity of product development was measured in the study. Over half of the companies in the Western USA and over two-thirds of the companies in British Columbia answered that product development is continuous and systematic in their company. Just over ten percent of the companies in both countries announced that they are not practicing any product development at all.

Table 8. The Intensity of Product Development in Respondent Companies.

Product Development is:	% of Respondents	
	Western USA (n=33)	British Columbia (n=31)
Continuous and Systematic	55	68
Occasional or Casual	33	19
No Product Development	12	13

In Table 9 the intensity of product development is crosstabulated with product strategies employed by responding companies. In both countries, companies that are not conducting any product development are mainly those applying either commodity or a combination of commodity and specialty product strategies.

It must be kept in mind as a limitation throughout section 4.5 that some categories of the product strategy included only a few companies. Those categories have been omitted in the interpretation of the tables. This restriction mainly appears when product strategy is crosstabulated with another variable.

Table 9. Product Development in Companies Applying Different Product Strategies.

Strategy	Product Development, %					
	Continuous and Systematic		Occasional and Casual		None at all	
	W-USA	BC	W-USA	BC	W-USA	BC
Commodity Products	37	63	44	13	19	25
Specialty Products	40	71	60	14	0	14
Custom-Made Products	100	0	0	100	0	0
Commodity & Specialty Products	50	60	0	20	50	20
Commodity & Custom-Made Products	100	-	0	-	0	-
Specialty & Custom-Made Products	80	71	20	29	0	0
Commodity & Specialty & Custom-Made Products	100	100	0	0	0	0

The starting points of product development were also measured in the study. The most important objective of product development in both countries was to more effectively utilize raw materials and adapt production to raw material possibilities (utilization of raw material in Table 10). The second most important objective of respondents' product development was to satisfy customer needs. In British Columbia, the difference between the first and second objective was more clear than in the Western USA. The least important objective was the utilization and development of production technology.

The responding companies in British Columbia seem to be somewhat more raw-material-oriented; Western USA firms are slightly more customer-oriented in product development. The objective of product development in a marketing-oriented company should be to satisfy customer needs within the limits of raw material possibilities and production technology. In connection with product development, the ultimate objective of doing any business should be kept in mind: namely to be profitable.

Table 10. The Starting Points of Product Development, (1=most important and 3=the least important).

Starting Point	Order of Importance, %					
	1		2		3	
	W-USA	BC	W-USA	BC	W-USA	BC
Utilization of Raw Material	49	58	39	29	12	13
Satisfy Customer Needs	42	35	36	42	21	23
Developing of Production Technology	9	6	24	29	67	65

In Table 11, different product strategies and starting points of product development are crosstabulated. Only among the companies applying a commodity product strategy are there firms having development of production technology as their most important objective of product development. For companies in both countries applying a specialty products strategy, raw material seems to be more important than for companies applying other product strategies. For companies applying the specialty & custom-made products strategy in the Western USA, customer needs are the most important starting point of product development. For companies applying the same strategy in British Columbia, raw material is the most important starting point.

Table 11. The Most Important Starting Points of Product Development for Companies Applying Different Product Strategies.

Strategy	The Most Important Starting Point of Product Development, %					
	Raw Material		Customer Needs		Technology	
	W-USA	BC	W-USA	BC	W-USA	BC
Commodity Products	44	38	44	38	12	25
Specialty Products	80	71	20	29	0	0
Custom-Made Products	0	100	100	0	0	0
Commodity & Specialty Products	50	60	50	40	0	0
Commodity & Custom-Made Products	100	-	0	-	0	-
Specialty & Custom-Made Products	20	71	60	29	20	0
Commodity & Specialty & Custom--Made Products	67	33	33	67	0	0

4.4.3 Difficulties in Research and Development

Difficulties perceived by the companies in connection with research and development are shown in Tables 12 and 13. All mean difficulty rating scores for both countries on all 11 research and development factors were below the neutral rating 3.0, thus implying that respondents overall feel a low degree of difficulty with factors presented. In a relative sense, the most difficult factors in the Western USA were economic resources and the organization of research and development. In British Columbia, the most difficult factors were technological resources and economic resources.

Table 12. Difficulties Identified in Research and Development Work by Responding Companies from Western USA.

Difficulty	No difficulties		Lot of Difficulties			Mean (n=29)
	1	2	3	4	5	
Economic Resources	41	14	10	24	10	2.5
Organization of Research & Developmt	38	7	31	17	7	2.5
Attitudes Towards Research & Development	38	10	28	17	7	2.4
Use of Outside Consulting	45	17	14	14	10	2.3
Lack of Qualified Personnel	45	10	28	17	0	2.2
Technological Resources	41	21	21	17	0	2.1
Technical Skills	45	17	17	21	0	2.1
Marketing Skills	38	28	21	14	0	2.1
Obtaining Outside Technical Info	52	14	17	14	3	2.0
Obtaining Outside Marketing Info	52	14	21	10	3	2.0

Table 13. Difficulties Identified in Research and Development Work by Responding Companies from British Columbia.

Difficulty	No difficulties		Lot of Difficulties			Mean (n=26)
	1	2	3	4	5	
Technological Resources	23	15	23	19	19	2.9
Economic Resources	38	8	19	19	15	2.6
Technical Skills	23	19	38	12	8	2.5
Organization of Research & Devlpmt	23	31	19	23	4	2.4
Lack of Qualified Personnel	27	23	27	19	4	2.4
Marketing Skills	15	46	23	15	0	2.3
Attitudes Towards Research & Development	31	27	23	19	0	2.2
Obtaining Outside Technical Info	27	46	19	8	0	2.0
Obtaining Outside Marketing Info	35	46	15	4	0	1.8
Use of Outside Consulting	42	39	15	0	4	1.8

This study also measured the responding companies emphasis on various objectives of research and development (Tables 14 and 15). In both countries, making the production process more effective (increasing recovery) and the reduction of production costs were emphasized the most. The refinement of existing products and development of new products were also given a fairly high degree of emphasis. Again, production factors were seen as more important than the development of new products. All four objectives had a mean rating above a neutral score of 3.0, implying an emphasis on all factors. The relative ratings, however, suggest that Western North American sawmills are emphasizing production, perhaps at the expense of customer needs.

Table 14. The Objectives of Research and Development Work in the Western USA.

Research & Development Objectives	No Emphasis		High Degree of Emphasis			Mean (n=33)
	1	2	3	4	5	
Making the Production Process more Efficient	0	3	0	12	85	4.8
Reduction of Production Costs	0	3	6	21	70	4.6
Refining Existing Products	0	12	24	33	30	3.8
Developing New Products	3	21	24	27	24	3.5

Table 15. The Objectives of Research and Development Work in British Columbia.

Research & Development Objectives	No Emphasis		High Degree of Emphasis			Mean (n=31)
	1	2	3	4	5	
Making the Production Process more Efficient	0	6	6	23	65	4.5
Reduction of Production Costs	0	3	19	23	55	4.3
Refining Existing Products	0	6	23	45	26	3.9
Developing New Products	0	10	39	23	29	3.7

4.4.4 Collection of Market Information

The regularity of market information collection is shown in Table 16. In both countries most of the companies are collecting market information either continuously or occasionally. In the Western USA, there are more firms which are collecting market information continuously and systematically than in British Columbia.

Table 16. Regularity in Collection of Market Information.

Collection of Market Information is:	% of Respondents	
	Western USA	British Columbia
Continuous and Systematic	76	58
Occasional or Casual	24	35
No Collection at All	0	7

Table 17 crosstabulates summaries of the continuity of market research versus product strategies. In both countries, companies applying either a commodity product strategy or a specialty product strategy appear to be more occasional and casual in their collection of market information. In addition, British Columbia companies applying a combination strategy of commodity and specialty products or a combination of all three product strategies are also less active in collecting market information.

Table 17. Regularity in Collection of Market Information in Companies Applying Different Product Strategies.

Strategy	Collection of Market Information, %					
	Continuous and Systematic		Occasional and Casual		None at all	
	W-USA	BC	W-USA	BC	W-USA	BC
Commodity Products	56	63	44	38	0	0
Specialty Products	80	57	20	29	0	14
Custom-Made Products	100	0	0	0	0	100
Commodity & Specialty Products	100	40	0	60	0	0
Commodity & Custom-Made Products	100	-	0	-	0	-
Specialty & Custom-Made Products	100	86	0	14	0	0
Commodity & Specialty & Custom--Made Products	100	33	0	67	0	0

4.5 Connection Between Marketing Strategies and Profitability of the Companies

When the companies were asked about the profitability of their sawmilling operations, only 37 companies responded (18 in the Western USA and 19 in British Columbia). The low response rate should be considered as a limitation for the reliability of the results presented in this section. In the Western USA, over 70% of the responding companies were generating profits, whereas in British Columbia less than half of the companies were profitable.

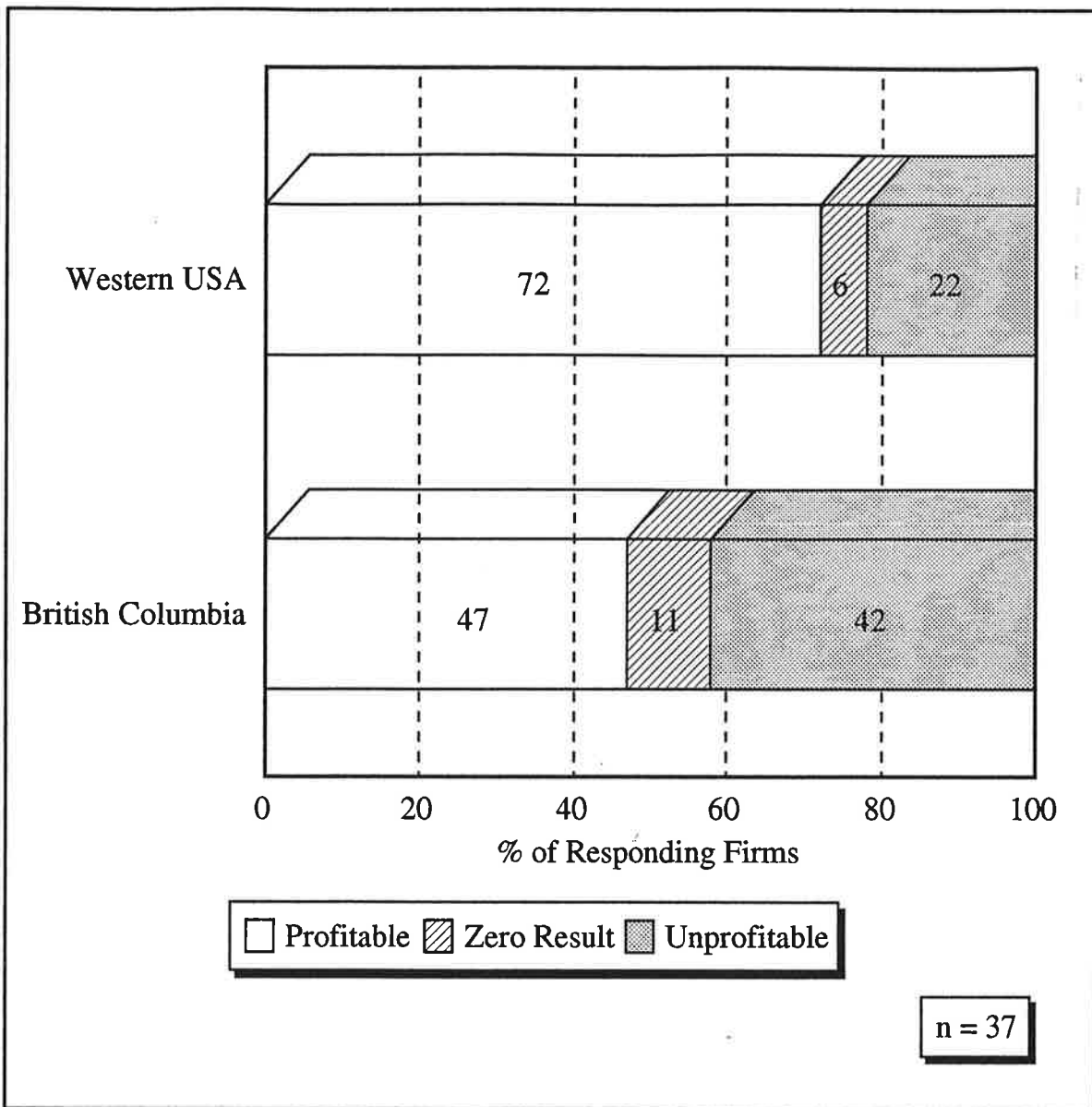


Figure 21. Profitability of the Responding Companies' Sawmilling Operations.

When crosstabulating Porter's generic competitive strategies with profitability, or when crosstabulating components of marketing strategies with profitability, the dependences were not statistically significant except in one case in the Western U.S. 70% of the companies applying a commodity product strategy in the Western U.S. were profitable, and 30% of them were unprofitable.

5 DISCUSSION

As the operating environment and customer needs change in the Western North American lumber industry, companies should be reacting by changing their marketing strategies. A clear difference between the actual production and product strategies can be noticed in the results of this study. Most of the production is in commodity products and, according to product strategies, commodities are not so heavily emphasized. The strategic decisions made earlier are reflected in today's production and today's strategies will be realized in the future. That may explain the difference between product strategies and actual production. It also indicates that the companies are changing their product strategies. The direction of change appears to be from commodity products towards specialty and custom-made products. This trend can be seen clearly in British Columbia; less so in the Western USA.

Changes in product strategy also require changes in customer strategy. A company must be more selective in choosing the customers it serves in the future when it applies a specialty/custom-made product strategy. Also, changes in customer needs require that companies be more selective about who they intend to serve and the type of products they produce. The results of this study show that the customer strategies applied by responding companies are fairly selective in both countries. In the Western USA, the relationship between product and customer strategy is not necessarily logical. Half of the companies in the Western USA are still applying a commodity product strategy, but their applied customer strategies are very selective. It would seem more plausible to market commodity products to as many customer and end-user groups as possible.

Market area strategies are also very selective, meaning that most of the companies are trying to market their products to a few, well-defined countries and/or regions. This is logical, keeping in mind that the most common product strategies applied by the responding firms are commodity and specialty product strategies.

Over two-thirds of the responding firms' production is in commodity products; therefore, one would expect competitive price to be one of the competitive advantages that companies are emphasizing. Instead, the competitive advantages the companies feel they have when comparing themselves to competitors reflect marketing-oriented strategies. This again indicates changes in marketing strategy.

Marketing strategies are reflected in marketing structures and functions. British Columbia companies seem to be using more direct contacts with end-users and they also use more domestic agents than companies in the Western USA. This is consistent with their product strategies, since specialty/custom-made product strategies require more direct contacts with end-users than a commodity product strategy. The results of this study show that both product development and the collection of market information are done in most of the responding companies

continuously and systematically. But the most important starting points for product development remains with the raw material and not with customer needs. This reflects raw material-oriented thinking, which can be more clearly noticed in British Columbia than in the Western USA.

Regarding generic competitive strategies, companies in the Western USA are identifying more with a cost leadership strategy than companies in British Columbia. This seems logical, given that a commodity product strategy can be related to a cost leadership strategy. Most of the companies in British Columbia identify with differentiation and focus strategies, which can also be seen in their product strategies.

The profitability of the responding companies sawmilling operations seems to be better among the Western USA companies (70% were profitable in 1990) than the British Columbia companies (47% were profitable in 1990). The dependences between the generic competitive strategy and profitability or between the marketing strategy components and profitability were not statistically significant.

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