GLOBAL COMPETITIVENE,SS OF NORTHEASTERN FOOD FIRM"S:

EXPERIENCE AND INTEREST IN FOREIGN ACTIVITY

By:

JAMES M. HAGEN AND CARLOS A. SANTOS

J

It is the policy of Cornell University actively to support equality of educational and employment opportunity, No person shall be denied admission to any educat[onal program or activity or be denied emplQymeni on th~ basis of any legally prohibited discrimination
involving, but *riot* fimited to, such factors as race, color, creed, religion, national or ethnic origin, sex, age or handicap. The University is committed to the maintenance of affirmative action programs which will assure the continuation of such equality of opportunity.

PREFACE

The authors of this Research Bulletin are Dr. James M. Hagen, Assistant Professor and Carlos A. Santos, Master's Degree Candidate, Department of Agricultur(\l, Resource and Managerial Economics, Cornell University.

Requests for additional copies of this bulletin may be addressed to:

Sharon Wyllie
ARME Department
Cornell University
14 7 Warren Hall
Ithaca, NY 14853

(607) 255-1622
Email: srw2@cornell.edu

ABSTRACT

The objective of this study was to gain a better understanding of the characteristics of small to medium sized food firms in the Northeast (New York and Pennsylvania) that influence their decision to be involved or interested in foreign markets. The study involved the use of a survey, and we used a series of logistic regression models as well as correlation and cross-tabulations.

Of the 116 food-manufacturing firms of New York and Pennsylvania that we successfully contacted in the survey, 55 are involved in foreign activity or were in the past, and 73 firms were interested in starting or expanding their foreign activity. We grouped the determinants that influence a firm's decision to enter or be interested in entering foreign markets ~n seven categories: size, product type, diversification/specialization, marketing knowledge advantage, R&D intensity, seller concentration and competitive nature of the firm. The results indicated that the characteristics found in firms that have experience in foreign activity are large size, high diversification, less marketing knowledge, high R&D intensity, low local competition and high domestic competition. The characteristics associated with an interest in starting or expanding foreign activity were the type of product (perishable), high amount of own brands, high R&D expenses as a percentage of total sales, low local competition, and a high percent of domestic and foreign competition.

Size was not significantly associated with any entry mode. Canada, Mexico, Europe, South America and Asia were the preferred foreign markets entered. Firms with experience in foreign markets were associated with an interest in direct exports. Firms producing non-perishable products tended to be more interested in establishing warehouses abroad. Small and more specialized firms tended to be more interested in copacking and licensing as entry modes. Europe was the market most firms were interested in entering, for every entry mode.

Firms without experience in foreign activity described lack of information as a barrier to enter foreign markets. Firms with experience in foreign markets considered price competition, tariff barriers and other government regulations as obstacles to enter foreign markets. Lack of time was perceived as a barrier by firms that were specialized and had interest in foreign activity. Tariff barriers were a concern for firms that were large and diversified. Firms with no experience in foreign activity perceived their small size as a barrier. Almost all firms believed that their size is too small before entering foreign markets. When firms actually decide to go abroad, they realize that size is not that important. Firms that feel threatened by foreign competition tended to have experience or interest in foreign activity.

T ABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

GLOBAL COMPETITIVENESS OF NORTHEASTERN FOOD FIRMS: EXPERIENCE AND INTEREST IN FOREIGN ACTIVITY

1. INTRODUCTION

Food industry markets are becoming increasingly global and integrated (Henderson, Handy and Neff, 1996). All over the world, countries are reducing the barriers imposed on foreign trade, and many are entering the GATT treaty. This globalization of world markets is presenting opportunities and challenges to American food firms, especially small and medium sized firms, since larger companies have been international for a long time (Birch, 1996). Firms facing more competition in their domestic markets will probably need to become more involved in other areas, such as foreign markets, in order to stay competitive. Most of the research on globalization of the US food-processing industry to date has focused on trade and foreign direct investment by the large US food-processing firms (i.e. multinationals). The objective of this study is to determine the characteristics of small to medium sized food firms in the Northeast (New York and Pennsylvania) that influence their decision to be involved or interested in foreign markets. The study also involved descriptive analysis of the barriers that affect smaller firms' foreign market entry decisions as well as the regions they are involved and interested in for further foreign activity.

We divided the paper in 8 chapters. After this introduction, the second chapter describes the main international marketing theories and the third chapter reviews the literature on firm characteristics that have been associated with foreign activity. The fourth chapter presents the hypotheses developed from previous foreign activity research with the specific features presented for this study. The fifth chapter explains the methodology adopted for this
paper. It describes the sample' selection and questionnaire development, the method of
analysis, the model and the variables. The sixth chapter presents the results obtained from the descriptive and empirical analysis done on the sample. The seventh chapter discusses these results obtained and the eighth and last chapter presents a summary of the study and its
conclusions. It identifies weaknesses in the methodology used, presents the implications of the findings and suggests further research extensions and topics.

2. INTERNATIONAL MARKETING THEORIES

The eclectic and transaction cost explanations are the best-known approaches to explain a firm's choice of entry mode into a foreign market. Andersen (1993) points out that both of these explanations consider in a high degree the influence of the market and decisionmaker's strategy, and that they are probably more relevant at the later stages of the internationalization process.

Dunning's (1988) eclectic explanation suggests that the firm's decision to enter a foreign market and the choice of entry mode depend on its specific ownership, internalization and location advantages. In other words, a firm establishes foreign production to match internal firm-specific advantages with location specific advantages. West and Vaughan (1995), consider specific ownership advantages to be managerial knowledge and product quality; location to be foreign demand and market structure; and internalization to be the reduction of transaction costs and risk by internalizing the functions of foreign activity. Hill, Hwang and Kim (1990) present an eclectic theory of the choice of international entry mode that suggests that domestic and foreign environmental variables affect the entry mode primarily through their influence on the appropriate level of resource commitments.

Anderson and Gatignon (1986) considered the transactions costs point of view, treating the choice of entry modes from the perspective of choosing the degree of vertical integration of international business, ranging from contractual entry modes to full integration. They suggest that the most efficient entry mode is a function of the tradeoff between control and the cost of resource commitment. The more mature the product class, the less control firms should demand over a foreign business opportunity. They believe that in this case the gains and incentives for control are lower because it is relatively easy to transfer mature products across national boundaries. Klein, Frazier and Roth (1990) found that larger volumes of sales merit economies of scale in acquiring international marketing resources and developing export management skills.

Transaction cost theory is ideal for evaluating the export agent strategy because it suggests a cost-effective structure for conducting international operations (Hennart, 1982). Nevertheless, the focus of this theory on only firm-specific assets in explaining the decision of firms to expand abroad, ignoring strategic interactions between firms, makes it limited (Hennart and Park, 1994). This theory only assumes that firms act by themselves, Dot reacting to competitors. Although transaction cost theory has been widely used in studying international business (Shane, 1992, 1993; Rugman & Verbeke, 1992; Hennart, 1988, 1990, 1991; Contractor, 1990), they fail to demonstrate how the model applies to smaller entrepreneurial firms (Zackarakis, 1997).

3. FIRM CHARACTERISTICS THAT INFLUENCE THE FOREIGN MARKET ENTRY DECISION

The present study advances our understanding of global competitiveness by addressing the characteristics that influence the involvement and interest of food firms in foreign markets. It examines the differences between those firms that are involved and interested in starting or expanding foreign activity and those that are not. Many studies done in the past have focussed on high technology industries or used highly aggregated data. As a lower technology industry, food processing challenges us to find the differences between firms active or interested in foreign markets and those that are not.

Since other studies have been done in other areas of the United States, we feel the need to test the theory in food firms of the northeastern portion of the US, specifically New York and Pennsylvania.

Past research suggests that the choice of entry mode to foreign markets will depend on the opportunity, the firm's resources, the type of product, and the product life cycle (Rosson and Reid, 1987; Young, Hamill, Wheeler and Davies, 1989). Miesenbock (1988) and Root (1994) grouped the factors affecting the entry mode decision into internal (firm level) and external (macro variables). Firm size, organization and commitment to exporting are the internal factors. The external factors are industry characteristics, the business environment of the firm and host-country environment. The purpose of this study is to determine which factors or firm characteristics are associated with the involvement or interest of northeastern food firms in foreign activity. This paper proposes seven characteristics that determine the firm's propensity to enter foreign markets. They are: firm size, type of product, diversification/specialization, marketing knowledge, research and development (R&D) intensity, seller concentration, and the competitive environment of the firm.

3.1. **Firm** size

Van Hoorn (1979) and Roth (1992) identified important factors that distinguish the strategic behavior of small firms from that of larger firms. Among these factors are limited resources and capabilities, insufficiently developed administrative procedures and methods and less formal centralized planning and control systems. Horst (1974) found that firm size had a positive and significant effect on foreign production. As an explanation, he suggests that larger firms perceive less risk in any potential foreign investment, are limited in domestic expansion by US antitrust regulations, and have fewer small targets for domestic acquisition. Katsikeas, Deng and W ortzel (1997) suggest that small firms may perceive a higher risk in entering foreign markets because they devote proportionately more resource.s and greater efforts to enter export markets than larger compames.

Munro and Beamish *(1981,)* found that larger firms are more likely to attract attention from the suppliers and distributors, making foreign activity a more promising effort. Connor (1983) also discusses the possibility that size may be a proxy for a firm's ability to manage widely dispersed enterprises. Bourgeois (1981) argued that since larger organizations tend to have unused or underutilized resources, they can direct greater efforts to export activities in comparison to smaller firms. Bonaccorsi (1992), also noting the larger resource base oflarger companies, argues that these firn1s perceive lower levels of risk concerning overseas markets and operations. Henderson, Voros and Hirschberg (1993) found that food and beverage-manufacturing firms' extent of foreign production was also positively associated with large firm size. Henderson (1980) proposed that with each doubling of a firm's accumulated export output, a potential 20-30% export cost reduction per unit of production exists.

On the other hand, some studies have found either no relationship or a negative relationship between size and export behavior or export success (Calof, 1993; Julien, Joyal, Deshaies and Ramangalahy, 1997; Ringe, Graves and Hansen, 1987). Cavusgil, Bilkey and Tesar (1979) and Cavusgil (1984) have found only a weak relationship between size and the firm's commitment of resources towards international sales or production (Yaprak, 1985).

3.2. Type of product offered by the firm

The involvement or interest in foreign activity can differ among firms producing different types of products. Access to distribution is also usually crucial, both because food products are often perishable, and because food is a mass-consumption item. Hagen (1997) suggests that producing perishable products with a very short shelf life may not have favorable economical and te«hnical conditions to export, inducing firms to produce abroad through ownership interests in order to enter foreign markets. For this study, we considered a product perishable if it needed refiigeration for maintenance of quality and had very short shelf life (i.e. meat products and frozen fruits, vegetables and other products). We considered canned and bottled products, flours, sugars and candy, nuts, potato chips, and different types of pasta as non-perishable goods.

3.3. Diversification/specialization

Current literature present contrasting results, making it unclear as to whether firms involved in foreign activity tend to be more diversified or specialized in the number of products marketed. Horst (1974) noted that diversified firms tended to explore foreign markets more actively than specialized firms do. He argues that through domestic diversification, firms learned how to run multinational operations. Handy and Henderson (1992) also found this to apply to US food-manufacturing firms with foreign operations, where they tend to be more diversified than those with home operations only. Firms with a large portfolio of products may have an advantage for foreign production. Reed and Ning (1996) explained that if a product originally intended for a new market was not successful, the firm could easily put a substitute in the market. They also stated that the managerial assets of a firm that are used for managing multiple products might also be useful for managing those products in multiple regions.

On the other hand, Connor (1983) found that multinational firms with a higher specialization are more likely to be involved in foreign activity. Stopford and Wells (1972) indicated that there was a tradeoff between diversifying at home and engaging in foreign activity. This could be especially true for small firms, since diversification could overly stretch the resources of the firm. It is difficult to be diversified geographically as well as by product because of the resulting excessive complexity and insufficient managerial time (Hagen 1997).

3.4. **Marketing knowledge**

Lyon and Durham (1994) found in a case study of a Michigan specialty fruit packer that the development of direct export markets was most severely constrained by a lack of managerial resources in the existing organizational structure. Previous research leads us to group managerial knowledge, with respect to foreign activity, into two categories: marketing knowledge and international experience.

Marketing knowledge is referred to as the introduction of a product into a new market (Hennart, 1982), or the improvement of existing marketing methods (Buzzell and Nourse, 1967). Hennart (1982) argues that technology is of relatively common knowledge in the food-processing industry, making marketing and other managerial knowledge to be a major part of the finn's essential knowledge assets. He also suggests that finns with a large percent of their sales coming from their own brands tend to have high marketing' knowledge. Horst (1974) considers intellectual capital, in the fonn of marketing knowledge, to be one major advantage of US food finns. He regards US finns as being aware that advertising can be effective and economic. Reed and Ning (1996) found that food-processing finns with higher ratios of advertising to sales also have a higher ratio of foreign to domestic sales. Horst (1974) suggests two reasons for the association between advertising and foreign production: (1) products that are advertised locally can also be marketed abroad, and (2) finns in industries where advertising is intensive are more aware of the value of using it. He also suggests that experience with product differentiation in the domestic market is related with foreign production.

Other studies have found different marketing knowledge factors correlated with export success (Yaprak, 1985). Among these factors are: Personal contacts with their overseas distributor (Hunt, Froggatt and Hovell, 1967; Cunningham and Spiegel, 1971) and smoother communications and sales effort (Czinkota and LaLonde, 1980). Cavusgil and Kaynak (1983) also include factors such as: after sales service and company image, extension of credits to foreign buyers, unique features of product offerings, and motivations of foreign distributors through incentives. The impact of pricing strategy has had contrary findings. Studies from Bilkey (1982, 1985) and Koh and Robicheaux (1988) indicate that policies charging premium prices are associated with export success. Other work indicates no significant association (Hirsch, 1971), or the opposite, that is export success and competitive pricing and promotion are correlated (Kirpalani and MacIntosh, 1980). Bilkey (1982) also found a positive correlation between direct exports and export profit experiences.

Lyon (1995) found that a greater experience in international markets tends to decrease the foreign market risk perceptions, as knowledge accumulates over time. Gatignon and Anderson (1988) found that large US multinationals were more likely to use integrated entry modes at higher levels of cumulative international experience. Wiedersheim-Paul, Olson and Welch (1978), point out that in addition to the international experience of the finn, the value system and the past history and experience of the decision-maker himself are also important. This makes the personal characteristics and experience of the decision-maker relevant in the export entry process. Kleinschmidt &

Cooper (1984) and Malette, Denis & Beliveau (1988) noted that firms prefer to export through intermediaries, and then as they gain experience, move onto a direct export strategy (Julien, Joyal, Deshaies and Ramangalahy, 1997). Katsikeas and Piercy (1993) suggest that firms that exhibit greater levels of export involvement experience are likely to be more capable not only of seeking, identifying, and responding to export market opportunities, but of coping with foreign market expansion problems.

3.5. Research and development (R&D) intensity

Many studies have documented the strong positive impact of the firms' R&D expenses (as a percent of total expenses or sales) on commercial success in global markets (Kogut and Chang, 1991; Drake and Caves, 1992; Hennart and Park, 1994). This has also been found to apply in the food industry, where multinational firms with higher R&D expenses are also more active in foreign markets (Henderson, Handy and Neff, 1996).

3.6. Seller concentration

Handy' and Henderson (1991) described the US. food-processing industry as having a high seller concentration relative to other industries: 4-firm ratio of 50 percent or more and 8-firm ratio of 65 percent or more. The 4-firm ratio indicates the percent of the firm's total production sold to their top four buyers, and the 8-firm ratio the percent sold to their top eight buyers. These high ratios indicate that food firms tend to sell a large volume of their total sales to a few customers, suggesting that the food industry may be oligopolistic in nature (Hagen, 1997). Root (1994) hypothesized that firms in oligopolistic industries tend to imitate the actions of domestic rivals that threaten to upset the competitive equilibrium by gaining advantages through international markets. Another possibility is that fewer buyers may induce a firm to a higher customer loyalty. The firm may need to follow a customer overseas if they decide to expand in this manner.

Glesjer, Jacquemin and Petit (1980) found that a high degree of domestic concentration negatively affects the share of exports in total industry sales, probably due to a lack of competitive pricing and output decisions. Root (1994) also suggested that companies in less concentrated industries would be more inclined to use low risk modes of foreign entry, such as indirect exports.

3.7. Competitive environment

The relationship between domestic market conditions and the motivation to enter foreign markets is an important factor for managers considering the appropriate entry mode to use abroad. The size of the market has proven to be a determining factor for firms deciding to engage in foreign activity. Wiedersheim-Paul, Olson and Welch (1978) suggest that for the initial decision to start exporting it may be more relevant to analyze the transition from a local market to a distant national market than from domestic to foreign markets. They consider the extra-regional expansion process to be an important

factor that "prepares" firms for exporting, due to the development of communication networks and greater exposure to export stimuli.

Bilkey (1978), Pavord & Bogart (1975) and Liouville (1992) reported that declining domestic market shares or saturated home markets might be strong motivators for the initiation of export marketing activity. The incentive firms have to go abroad may be caused by the exhaustion of local markets that in turn increases the local competitive pressure on the firm (Horst, 1974). The growing number of merger activities in the food-processing industry may cause this limitation of local markets. On the other hand, if a large percentage of their competition were local, firms would feel the need to focus in strengthening their domestic market.

Root (1994) theorizes that a large domestic market allows firms to grow significantly before venturing foreign markets, while firms with a small domestic market may be attracted to exporting as a means of achieving economies of scale. A survey to Belgium exporters 'performed by Glesjer, Jacquemin and Petit (1980) found that when domestic sales increased, the ratio of exports to domestic turnover decreased. They explained that firms with large domestic sales could achieve economies of scale without incurring in the extra costs associated with exporting. On the other hand, Koh and Robicheaux (1988) indicated that domestic price competition was not necessarily a deterrent to direct export investments. They point out that although a firm's products may not be considered unique in the domestic market, they can be perceived as such in the export market and command premium export-prices. This gives them an insurance band of profits when the dollar price fluctuates.

4. HYPOTHESES DEVELOPMENT

The hypotheses developed are based on the effect of the different firm characteristics that influence the decision to enter foreign markets. The objective will be to determine the profile of the firms that are involved in foreign markets and of the firms that are interested in expanding into markets abroad. The first 12 hypotheses relate to the influence of the firms' characteristics on their involv,ement in foreign activity, whereas the last 12 hypotheses refer to the influence of these characteristics on their interest in foreign markets.

Since most larger firms have already evolved into multi-national corporations (Sterns and Peterson, 1996), the study focused on small and medium sized firms in order to better understand the early or mid stages of the internationalization process itself. Larger firms perceive less risk when investing in any potential foreign market and are limited in domestic expansion (Horst, 1974). One of the objectives of this study is to identify if smaller companies are less likely to be involved (or interested) in foreign activity, mainly exports. Following this argument, we hypothesize:

HI: Larger food firms are more involved in foreign activity than smaller firms.

The involvement or interest in foreign activity can qiffer between firms producing different types of products. Firms producing perishable products, with a very short shelf life may be reluctant to export, and firms producing non-perishable goods may be more willing to export. Formally stated:

H2: Food firms producing non-perishable goods are more involved in foreign activity.

US multinational firms tend to be more diversified than those with home operations only (Handy and Henderson, 1992 and Reed and Ning, 1996). Firms with a large portfolio of products may hav'e an advantage for foreign production. If the product that was originally intended for a new market was not successful, a substitute could be easily taken (Hagen, 1997). Based on this, we predict:

H3: Food firms that have a higher diversification are more involved in foreign activity.

On the other hand, another study found that multinational firms with a higher specialization are more likely to be involved in foreign activity (Connor, 1983). Diversification could be disadvantageous for small firms as it could over-stretch \the resources of the firm and cause excessive complexity and insufficient managerial time (Hagen 1997). This leads to the formulation of an alternative hypothesis:

H4: Food firms that have a higher specialization are more involved in foreign activity.

Firms are involved in foreign investment only when they have some type of advantage over the firms competing in the foreign market. One major advantage of US food firms is their intellectual capital, in the form of marketing knowledge. Firms know that advertising can be effective and economic (Horst, 1974). Past studies have found that food-processing firms with higher ratios of advertising to sales have a higher percentage of foreign sales to domestic sales (Reed and Ning, 1996). In addition, firms in which a large percent of their sales comes from own labels are considered to have more marketing knowledge (Hennart, 1982). Based on this research we hypothesize:

H5: Food firms with higher marketing expenses (as a percent of total sales) are more involved in foreign activity.

H6: Food firms with a higher amount of own brands or a higher percentage of sales from own labels are more involved in foreign activity.

Many studies have documented the strong positive impact of Research and Development intensity, on commercial success in global markets (Kogut and Chang,

1991; Drake and Caves, 1992; Hennart and Park, 1994). Henderson, Handy and Neff (1996) also found this to apply in the food industry. Based on this, we predict:

H7: Food firms with higher R&D expenses are more involved in foreign activity.

A high percentage of US food industries have a high seller concentration (Handy and Henderson, 1991). Thi~ indicates that food firms tend to sell a large volume of their total sales to a few customers. This paper proposes that if a food firm has a larger customer basis, it may be another form of intellectual capital, regarding marketing knowledge. On the other hand, fewer customers may induce a firm to follow a customer overseas if they decide to expand in this manner. Although the two arguments have conflicting conclusions, we propose the following hypothesis:

H8: Food firms with a higher percentage of sales to the top four or eight buyers are more involved in foreign activity.

If a large percentage of the competition smaller firms face were local, they would feel the need to focus in £trengthening their domestic market.

H9: Food firms with a higher percentage of local competition are less involved in foreign activity.

On the other hand, The incentive firms have to go abroad could be caused by the exhaustion of local markets (Horst, 1974). As competition is more accentuated from regions geographically further away, firm's may need to get involved in foreign markets in order to expand.

HI0: Food firms with a higher percentage of their competition coming from the NE region are more involved in foreign activity.

Hll: Food firms with a higher percentage of their competition coming from the domestic US market are more involved in foreign activity.

Another assumption is that if a firm has a high level of competition coming from abroad, they will become more involved in foreign markets in order to compete with these firms in their markets also.

H12: Food firms with a higher percentage of their competition coming from

abroad are more involved in foreign activity.

The hypotheses involving interest in foreign activity were considered separately because interest in foreign markets may be more telling than experience in foreign activity, since it has fewer limitations than to actually be involved in foreign markets. These hypotheses are the same as the first 12 related to experience in foreign markets, with the difference that they now relate only to the firms' interest in foreign activity.

H13: Larger food firms are more interested in starting or expanding foreign activity.

H14: Food firms producing non-perishable products are more interested in foreign activity.

HIS: Food firms that have a higher diversification are more interested in foreign activity.

H16: Food firms that have a higher specialization are more interested in foreign activity.

HI?: Food firms with hig,her marketing expenses are more interested in foreign activity.

H18: Food firms with a higher amount of own brands or a higher percentage of sales from own labels are more interested in foreign activity.

H19: Food firms with higher R&D expenses are more interested in foreign activity.

H20: Food firms with a higher percentage of sales to the top four or eight buyers are more interested in foreign activity.

H21: Food firms with a higher percentage of local competition are less interested in foreign activity.

H22: Food firms with a higher percentage of their competition coming from the NE region are more interested in foreign activity.

H23: Food firms with a higher percentage of their competition coming from the domestic US market are more interested in foreign activity.

H24: Food firms with a higher percentage of their competition coming from abroad are more interested in foreign activity.

5. METHODOLOGY

The study involved the use of a survey to be used on small and mid-sized food firms located in the northeastern portion of the United Sates, mainly New York and Pennsylvania. The survey focussed on gathering information on the characteristics that differentiate firms involved in foreign markets from the ones not involved, and of firms interested in starting or expanding their foreign activity from the ones not interested in

starting or expanding in foreign markets. The survey was also designed to provide information on the firms' barriers to enter foreign markets as well as their perception on the challenges and opportunities presented by increasingly global markets.

5.1. Sample selection and questionnaire development

We constructed the list of surveyed firms from the following sources:

. New York State Department of Agriculture and Markets list of food-processing firms; . Pennsylvania Department of Agriculture list of food-processing firms;
. New York State Association of Food-Processors mailing list; and,
. The 2010 Vision committee of the Metropolitan Development Association of Syracuse.

The list provided by the New York State Department of Agriculture and Markets consisted of food and agribusiness firms that have expressed an interest in exporting by participating in their department's activities. Since anyone company could be listed in more than one different product category, we eliminated repeated firms, which left us with 484 different firms. In order to optimize the limited time and resource availability, we targeted the sample towards food firms that are more likely to be involved or interested in foreign activity. We did this in two steps. First, we eliminated the following product categories out of the concern that many of the firms producing these products are targeting specifically their local markets or that their products may be intended only for consumption on the premises: fluid milk, bakery products and alcoholic and non-alcoholic beverages. The following SIC product categories remained (Dun & Bradstreet Information Resources, 1989): meat products; dairy products (except fluid milk); canned, frozen and preserved fruits and vegetables and food specialties; grain mill products; sugar and confectionery products; fats and oils; and, miscellaneous food preparations and kindred products. Secondly, we selected only the firms that appear to produce or manufacture at least one product of their own. We eliminated firms listed only as markets, farms, importers, retailers or distributors. The final count of New York firn1s included in the mail survey was 215.

The Pennsylvania Department of Agriculture provided a similar list of food and agribusiness firms in Pennsylvania. This list included 472 firms that had expressed interest in foreign activity by filling out an "Export Registration Form". Given his familiarity with the database and the firms listed in it, the task of reducing the number of firms in the same method as for the New York sample was left to Mr. Peter Witmer, Chief of the Domestic and International Trade Division of the Pennsylvania Department of Agriculture. The number of Pennsylvania food firms included in the survey was 158.

After an iterative process of drafting survey questions and designing a survey format to address the research questions in the most concise way, a mail survey was ready to be pre-tested. The objective of this pre-test was to assess the survey format and questions. We selected three firms for the pretest. Two (one located in New York and one in Pennsylvania) were contacts of Professor James Hagen and we selected randomly

the third firm from the list of 158 firms from Pennsylvania. Following the pretest, we made the necessary changes to the survey and adjustments to the implementation of the mail survey.

The "Total Design Method" (Dillman, '1978) was used as a guide to develop the questionnaire and the procedure used. We sent each survey (Appendix 1) with a cover letter (Appendix 2, 3 and 4) and a stamped self-addressed envelope. A week later, we sent a post card (Appendix 5) as a reminder to each of the firms from which we had not received an answer. Three weeks after we sent the first survey, we mailed a second follow up to the firms that did not respond. This included a cover letter (Appendix 7), another copy of the survey, and another stamped self addressed envelope. About two months after we sent the first survey, we mailed the third and last follow up. This was the same as the second, only that th~s time we sent it by certified mail and the cover letter was more urging (Appendix 8). We sent a thank you post card to each of the respondents that returned the survey (Appendix 6).

We then screened the 215 New York firms by telephone in order to eliminate the ones that were no longer in business or at another address. We contacted by telephone 173 firms of the original list. We mailed a survey to the'23 firms that confirmed their willingness to participate (NYY). We also mailed a survey to the 47 firms that we contacted by telephone but could not reach in person (NYZ). Due to time constraint, we did not screen the last 42 firms in the list and all of them were included in the study and mailed a survey (NLL). This caused the response rate to be lower for this group because we sent 11 surveys to a wrong address and one firm was out of business. Nevertheless, the response rate (not considering wrong addresses and firms out of business) was similar for all three groups (Table 1). Of a total (effective) number of surveys sent (246), 124 responded giving a response rate of 50.41 %. We added 42 companies interviewed in the Central New York Area to these responses, giving us a total of 1§6 companies or cases. The following criteria were used to select the final number of firms included in the study. We only selected companies that process or manufacture at least one product of their own. The firms not included in the original seven SIC categories were eliminated. Finally, we eliminated the larger firms (with more than 500 million dollars in total sales). A final count of 116 firms remained.

We did a final revision of the sample when analyzing the entry modes used by the firms (section 6.3), the perceived barriers in entering foreign markets (section 6.6.) and the perceived importance of global competition (section 6.7). Those surveys that had no answers for the sections regarding past and current foreign activity, future foreign activity and attitudes toward foreign activity were not included in this section of the analysis. This left us with 110 firms in our sample for these variables analyzed.

Table 1. Summary of the response rate for each group surveyed

Group	Surveys sent	Surveys received	Response rate	Database error 1	surv1 effec	Effective response3	Refused answer 4	No reply 6	Final coune
NYY	23	14	60.9%	0	23	60.9%	1	8	11
NYZ	47	26	55.3%	2	45	57.8%	2	17	19
NYL	42	19	45.2%	12	30	63.3%	3	8	16
NYTOT	112	59	52.7%	14	98	60.2%	6	33	46
PA	158	65	41.1%	10	148	43.9%	8	75	51
Survey	270	124	45.93%	24	246	50.4%	14	108	97
CNY	42	42	100%	0	42	100%	0	0	19
TOTAL	312	166	53.2%	24	288	57.6%	14	108	116

Notes:

NYY: New York firms contacted by telephone and willing to participate in the study

NYZ: New York firms contacted by telephone but not reached in person

NYL: New York firms not contacted by telephone

P A: Pennsylvania firms included in the study

CNY: Central New York firms interviewed

I Number of surveys returned because of wrong address or the firm was no longer in business

2 Number of surveys sent, not considering surveys returned because of database error

3 Response rate (sample) without considering the surveys returned because database error

4 Number of surveys received without response because firms did not wish to disclose the information or were not interested in participating

5 Number of surveys not returned

6 Final count of firms included in this study (excluding chosen site categories)

Method of analysis

We suggested the following detenninants of finn internalization: finn characteristics (size, product type, diversification, marketing knowledge, R&D expenses, and seller concentration) and the competitive environment of the finn (local, regional, domestic and foreign competition). In order to attempt to quantify the relationship between the independent variables (finn characteristics and competitive nature) and the dependent variables (experience or interest in foreign' activity), we used cross-tabulations and the chi-square test statistic (SPSS Inc., 1993). The null hypotheses were that the suggested detenninants of foreign activity are unrelated to experience or interest in globalization (i.e., the proportion of finns experienced/interested in foreign activity is the same regardless of the size of the finn, etc.). A review of the cross-tabulations gives us some indication as to what may be important to the internationalization process for at least the finns in this sample population.

In order to predict a finn's involvement or interest in foreign activity, as well as identifying the finn characteristics useful in making the prediction (impute causality) we used regression analysis (Kennedy, 1993). When the dependent variable is qualitative and dichotomous, a logistic regression model should be employed (Kennedy, 1993). In

this study, we attempted to model the food finn's experience and interest in foreign activity as a way of testing the hypotheses stated earlier. We considered a finn to have.

experience in foreign activity if they are currently exporting or have done it in the past. We considered a finn to be interested in foreign activity if they expressed an interest in starting or expanding foreign activity, regardless of whether they had experience exporting or not. The explanatory variables used in the assessment of the logistic models were questions taken directly from the mail survey, regarding the finns' characteristics and competitive environment. When using logistic regression, each categorical response needs to be converted to sets of dichotomous zero-one variables, one less than the original number of categories. The Beta coefficient (P) can be interpreted as the change in the value of the ratio of the probability that a finn will have experience in foreign activity over the probability that the finn will not have experience, caused by a change in the value of a detenninant from zero to one (Hosmer and Lemeshow, 1989). The same applies for the model of interest in foreign activity. Figure 1 displays the econometric model used for logistic regression.

$$P (Yi = 1) = 1 / (1 + e\text{-}z), \text{ whe}\sim\text{e}$$

Yi = 1 if a firm has experience in foreign activity
in Models 1 to 4

Yi = 1 if a firm has interest in foreign activity in
Models 5 and 6

$$Z = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 \ldots + \beta_i X_i$$

Xi = The vector of independent variables for
the firm characteristics

Figure 1. Logistic regression model
Source: Maddala, 1983.

We used descriptive statistics and cross-tabulations to analyze the entry modes preferred by the surveyed food finns and to detennine the regions where they were more involved or interested in. These methods were also used to describe the attitudes of the surveyed food fimls regarding the barriers they perceived in entering foreign markets (section 5.4.) and the importance of global competition (section 5.5.).

5.3. Variable selection

In order to classify the food finns by size, we used three attributes: Total sales (TOTSALE), Total assets (TOT ASET) and Number of full-time employees (FULEMP). Since there exists a highly significant positive correlation «0.001) between the variables TOTSALE, TOT ASSET, and FULLEMP (Appendix 9), we used the variable TOTSALE as a measure of firin size in the logistic regression analysis. We

classified the finns by size according to the amount of total sales reported (in millions of dollars): less than 1, 1 to 9.9,10 to 99.9, and 100 to 499 million dollars in total sales.

In order to detennine the influence of the type of product the finn offers we used the variable Type of product offered (TYPEPROD). We divided the finns into the ones producing goods that have a very short shelf life and need refrigeration (perishable goods), and the ones producing more stable products that do not need refrigeration (nonperishable goods). We considered a finn to produce a perishable product if it belonged to one of the following SIC categories: meat packing plants (2011), sausages and other prepared meat products (2013), poultry slaughtering and processing (2015), natural, processed and imitation cheese (2022), ice cream and frozen desserts (2024), frozen fruits, fruit juices and vegetables (2037), frozen specialties, not elsewhere classified (2038) and prepared fresh or frozen fish and seafood (2092). We considered a finn to produce non-perishable goods if it belonged to any of the following SIC categories: dry, condensed and evaporated dairy products (2023), canned specialties (2032), canned fruits, vegetables, preserves, jams and jellies (2033), dried and dehydrated fruits, vegetables and soup mixes (2034), pickled fruits and vegetables, vegetable sauces and seasonings and salad dressings (2035), flour and other grain mill products (2041), prepared flour mixes and dough (2045), prepared feeds and feed ingredients for animals and fowls, except dogs and cats (2048), cane sugar, except refining (2061), candy and other confectionery products (2064), chocolate and cocoa products (2066), chewing gum (2067), salted and roasted nuts and seeds (2068), shortening, table oils, margarine and other edible fats and oils (2079), roasted coffee (2095), potato chips, com chips and similar snacks (2096), macaroni, spaghetti, vennicelli and noodles (2098) and food preparations not elsewhere classified (2099).

The variable we used to test for diversification and specialization was Number of products offered – excluding size and color variations - (NUMPROD). According to the number of products made, we divided the finns into the ones producing fewer than 10, from 10 to 99, and 100 or more products.

The variables we used to capture the finns' Marketing knowledge advantage were marketing expenses as a percent of total sales (MARKET), Own labels as a percent of total volume sales (OWNLABEL), and Number of brands offered excluding private labels – (NUMBRAND). Regarding the number of brands, we divided the finns into the ones that offer fewer than 10, and the ones that offer 10 or more brands.

In order to assess the impact of R&D intensity (Research and Development) on foreign activity, we included a variable for R&D expense as a percent of total sales (R&DEXP).

We used the variables percent of total production sold to Top four buyers (4BUYER) and percent of total production sold to Top eight buyers (8BUYER) to capture the influence of Seller concentration in the finns' foreign activity. Since there exists a highly significant positive correlation «0.001) between the variables 4BUYER

and 8BUYER (Appendix 9), we used the variable 4BUYER as a measure of sales concentration in the logistic regression analysis.

We used four variables to determine the effect of the competitive environment on the firms' foreign activity experience and interest. The effect of Local competition was captured by the variable LOCCOMP, which is the percent of competitors located in their State of operation (New York and Pennsylvania). The Regional competition effect was represented by the variable REGCOMP, which is the percent of competitors located in Northeastern US, excluding their local state. Domestic competition was represented with the variable DOMCOMP, which is the percent of competition located in the United States, excluding the Northeast. Foreign competition was represented by the variable FORCOMP, which is the percent of competitors located abroad.

6. RESULTS

6.1. Sample analysis

Of the 116 firms considered in the study, 38 had no interest in starting or expanding foreign activity. Two firms are also not interested but have participated in foreign activity in the past. Three firms are currently active in foreign activity but are not interested in expanding it. The number of firms that are interested in starting foreign activity is 23. There are 50 firms involved in foreign activity and interested in expanding it. In brief, 55 firms have experience in foreign activity and 73 firms are interested in starting or expanding foreign activity.

Table 2 displays the number of firms for each of the seven product categories. The largest category was the canned, frozen and preserved fruits, vegetables and food specialties (28% of the total firms). The smallest group, with only 2%, was for firms producing fats and oils.

Table 2. Companies surveyed classified by three digit SIC codes

SIC INDUSTRY CODE	Frequency	Percent
201 Meat products	19	16 %
202 Dairy products (except fluid milk)	4	3.%
203 Canned, frozen and preserved fruits and vegetables	32	28%
204 Grain mill products	8	7%
206 Sugar and confectionery products	20	17 %
207 Fats and oils	2	2%
209 Miscellaneous food preparations and kindred products	31	27%
TOTAL	116	100%

Table 3 presents the summary of the characteristics used in the analysis of the 116 firms that were included in the study. The majority of the firms had between one and 100 million dollars in total sales, with the mean closer to the 1 to 10 million dollar range. The average number of full-time employees was 156. Most of the firms (86%) were involved in the production of non-perishable foods.

Table 3. Characteristics of the 116 firms included in the analysis					
Variable	Survey data			N*	Mean
Total sales (million $)	(1) Fewer than 1 = 28 (2) 1-9.9 =35		(3) 10-99.9 =36 (4) 100- 500 = 14		113	2.32
Tot. assets . (million $)	(1) Fewer than 1 = 36 (2) 1-9.9 =35		(3) 10-99.9 =27 (4) 100- 500 = 5		103	2.01
Product type	(0) Perishable = 29	(1) Non-perishable = 86		116	0.74
Number of products	(1) Fewer than 10 = 37 1(2) 10-99=45	(3)100 or more = 34		116	1.97
Number of brands	(1) Fewer than 10 = 92	(2)10 or more = 21		113	1.19
Label ownership	Own labels =77.91 %	Private labels = 22.09 %		108	
Competition distribution	Local = 35.16% Regional = 22.95%	Domestic = Foreign = 31.32% 10.57%		85	
Top 4 buyers (%)				97	35.45
Top 8 buyers (%)				93	50.92
R&D (% tot. sales)				87	2.49
Marketing (%total sales)				93	7.99
Full time employees (Range = 1 to 1400)				113	156

NOTES:
*N = Number of firms answering the question

The correlation tables (Appendix 9) and the cross-tabulation analysis (Appendix 17, section 1), gave the following insights regarding the relationship among the characteristics of the firms in the sample. Firms of less than 10 million dollars in total sales and less than 10 million dollars in total assets (smaller firms), tended to be located in the state of New York, and the larger firms in the sample (10 million or more in total sales and more than 10 million dollars in total assets) were located more in Pennsylvania. Firms producing perishable products tended to be of higher total sales and total assets
than firms that produce non-perishable goods. Firms producing a higher number of
products also had the tendency to have higher total sales and total assets. Firms producing
less than 10 products tended to be the ones that produce non-perishable products.

"'
I'

1;
t;'

6.2. Geographical distribution of foreign activity involvement or interest.

The countries where the surveyed food finns had foreign activity experience were grouped into eight commonly used regions: Canada (27 responses), Mexico (9), South America and the Caribbean (10), Eastern / Central Europe (6), Western Europe (15), Asia and the Pacific Rim (18), Africa and the Middle East (8) and Australia and New Zealand (2). Figure 2 displays the regions as a percentage of the total responses for each entry mode. The region of Canada was the most common for direct export and warehouses or sales offices established abroad. Mexico is the most important in establishing ownership interests. For indirect exports, the regions of S.A. and Caribbean, Eastern/Central and Western Europe and Asia and the Pacific Rim were the most important. S.A. and Western Europe were important for co-packing and licensing, while Mexico was only for co-packing.

Figure 2. Foreign activity experience regions divided by entry mode
(Percentage of total answers)

o Canada   ~ Mexico
. S.A. and Caribbean   Fa Eastern/Central Europe
[] Western Europe   ~ Asia and Pacific Rim
o Africa and Middle East   ~ Australia and New Zealand
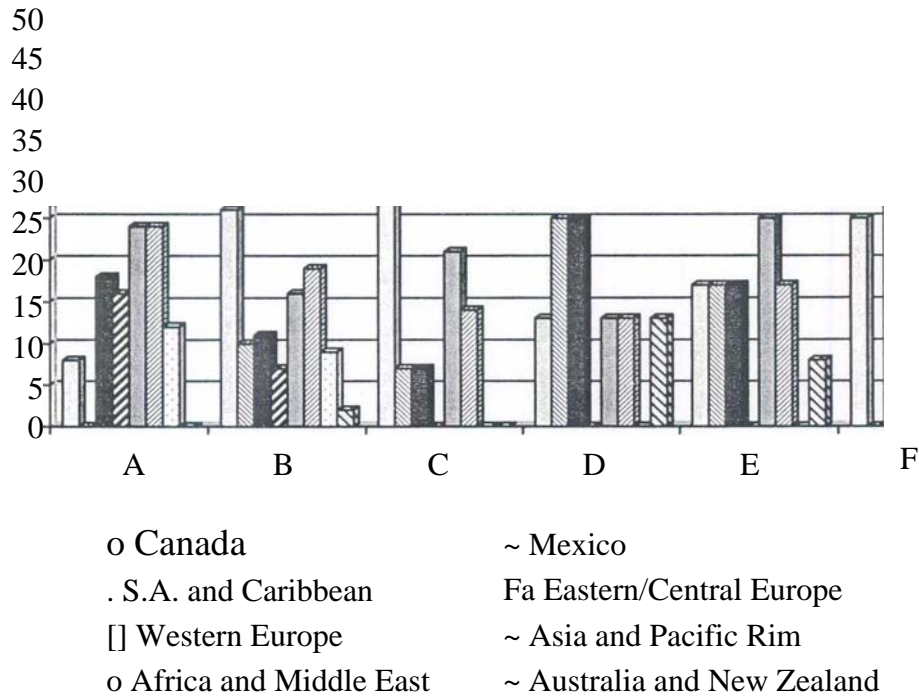
NOTE:
A: Indirect export regions of experience (51 firms)
B: Direct export regions of experience (91 firms)
C: Warehouses and sales offices regions of experience (14 firms)
D: Ownership experience regions (8 firms)
E: Co-packing regions of experience (12 firms)
F: Licensing regions of experience (4 firms)

The countries where the surveyed food firms were most interested in entering were grouped in the same eight regions as before, except that the region for Australia and New Zealand is not included because no firm was interested in this market. Instead, a worldwide region was included to represent when the respondent did not name a specific region or country but answered "anywhere". Europe was overwhelmingly the market most firms were interested in entering, in every entry mode category. Asia and the Pacific Rim was another important region (Figure 3).

Figure 3. Foreign activity interest regions divided by entry mode
(Percentage of total answers)
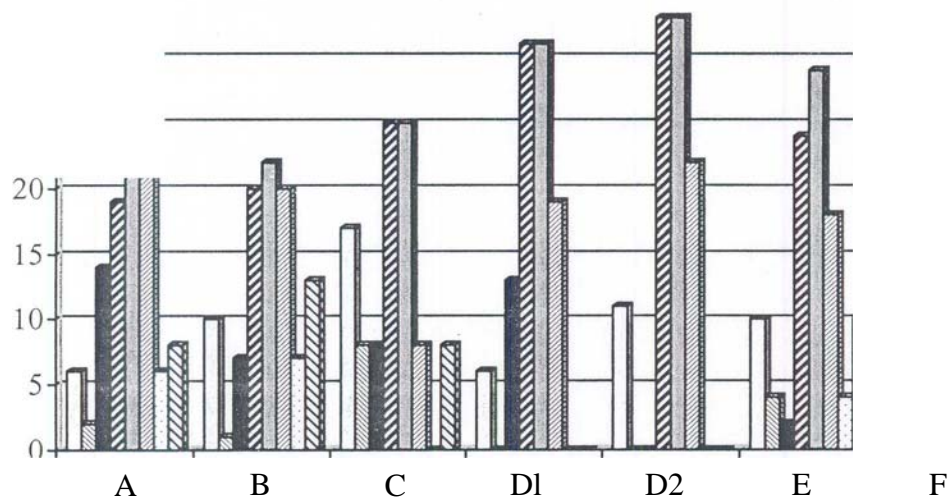
o Canada   I1§l Mexico   8S.A. and Caribbean Fm

~ Eastern/Central   Em Western Europe ~   Asia and Pacific Rim

Europ'e o Africa and   Worldwide

NOTE: Middle East

A: Indirect export regions of interest (99 finns)
B: Direct export regions of interest (88 finns)
C: Warehouses and sales offices regions of interest (12 finns) D
I: Minority ownership regions of interest (16 finns)
D2: Majority ownership regions of interest (9 finns)
E: Co-packing regions of interest (51 finns)
F: Licensing regions of interest (22 finns)

6.3. Empirical analysis of experience in foreign activity: hypotheses testing

We analyzed experience in foreign activity with four separate models (Table 4). Model 1 explains the effect of total sales, product type, number of brands, own labels, seller concentration, R&D intensity and marketing knowledge on the probability that a firm has experience in foreign activity. Because of the high correlation of the variable TOTSALE with NUMPROD, we included NUMPROD separately. Model 2 explains experience in foreign activity dependent only on the diversification/specialization of the firm. Model 3 captures the effect of local competition on the probability that a firm will have experience in foreign activity, and Model 4 the effect of regional, domestic and foreign competition on experience in foreign activity. We used these last two models separately to avoid multicollinearity, since the sum of the last four variables is 100%. Table 4 displays the logistic regression models developed in the present study, together with the overall performance and g~odness of fit of the models. Appendix 17 (sections 2) displays the cross-tabulation tables used in the analysis. Table 5 presents a summary of the results for each hypothesis analyzed. Appendix 16 indicates the relative frequencies for Models I and 2, as well as their parameter coding.

6.3.1. Size

The cross-tabulation analysis shows that size is important. In this sample, larger firms (measured by total sales) tend to be more involved in foreign activity than smaller firms are. Model 1 shows that the coefficients for the variable TOTSALE are positive and statistically significant for experience in foreign activity. This indicates that firms with more than one million dollars in total sales (medium and large) are more likely to have experience in foreign activity. These results support Hypothesis 1.

6.3.2. Industry type

The cross-tabs for the variable TYPEPROD did not test significant at the 0.1 level for this sample. The coefficient for the variable TYPEPROD (non-perishable goods) was not significant in Model 1. Since Hypothesis 2 could not be tested, this indicates that the type of good a firm produces does not alter the firm's probability of being involved in foreign activity.

6.3.3. Diversification / specialization

The cross-tabs indicated that diversification matters when deciding to enter foreign markets. In the sample, firms that offered 10 or more products tend to have experience in foreign activity. The logistic regression analysis corroborated this result. Model 2 shows that the coefficients for the variable NUMPROD were positive and significant at the 0.05 level. This indicates that firms with higher diversification (more than 10 products) are more likely to have experience in foreign activity, supporting Hypothesis 3 and not supporting Hypothesis 4.

VARIABLE			MODEL 1	MODEL 2	MODEL 3	MODEL 4	MODEL 5	MODEL 6
Table 4. Logistic regression models: experience (1 – 4) and interest in foreign activity (5 – 6)								
TOTSALE		SIO	0.0192	21			1.1825	
	(I) 1-9.9	P	2.2804				-I. 7600	
		S.E.	0.8965				2.1259	
		SIO	0.0110**				0.4077	
	(2) 10-99.9	P	1.9111,				-4.7759	
		S.E.	0.9022				2.2283	
		SIO	0.0342**				0.0321 **	
	(3) lOO-499.9	p	4.0976				4.8665	
		S.E.	1.4650				47.6183	
		SIO	0.0052***				0.9186	
TYPEPROD	(I):Non-perishable	p	0.1824				-6.3684	
		S.E.	0.6391				3.0651	
		SIO	0.7753				0.0377**	
NUMBRAND	(2): 10 or more	p	-0.3213				3.9545	
		S.E.	0.7047				2.2093	
		SIO	0.6485				0.0735*	
OWNLABEL		P	0.0134				0.0275	
		S.E.	0.0098				0.0189	
		S[O	0.1716				0.1455	
4BUYER		P	-0.0108				0.0543	
		S.E.	0.0118				0.0341	
		SIO	0.3629				0.1105	
R&DEXP		P	0.3903				0.9264	
		S.E.	0.1449				0.4510	
		S[O	0.007[***				0.0400**	
MARKET		P	-0.0630				0.0374	
		S.E.	0.0357				0.0898	
		SIO	0.0779*				0.6772	
NUMPROD		S[O		0.0336**			0.5928	
	(1): 10 to 99	P		0.9937			-2.4684	
		S.E.		0.4676			2.4366	
		S[O		0.0336**			0.3110	
	(2): 100 or more	p		1.2169			-1.6824	
		S.E.		0.5008			[.8333	
		SIO.		0.0151**			0.3588	
LOCCOMP		P			-0.0187			-0.0210
		S.E.			0.0072			0.0071
		SIO			0.0089***			0.0031 ***
REGCOMP		P				0.0090	0.0570	
		S.E.				0.0102	0.0390	
		SIO				0.3785	0.1438	
DOMCOMP		P			,	0.0259	0.0756	
		S.E.				0.0088	0.0338	
		SIG				0.0033***	0.0254**	
FORCOMP		P				0.0145	0.1192	
		S.E.				0.0112	0.0531	
		SIG				0.1949	0.0247**	
CONSTANT		P	-2.9447	-0.8602	0.5671	-1.2496	-1.1397	1.2852
		S.E.	1.4512	0.3597	0.3245	0.5374	2.4208	0.3618
		SIO	0.0424**	0.0168**	0.0805*	0.0201 **	0.6378	0.0004***
Percent Correct / base			74.7%/75	60.3%/1 16	63.5%/85	62.4%/85	81.1 %/53	64.7%/85
[nitial-2 Log Likelihood			103.85	160.50	117.73	117.73	66.51	112.59
Model -2 Log Likelihood			77.99	153.29	110.12	107.53	34.18	103.06
Model	Chi-square		25.866	7.214	7.607	10.197	32.327	9.533
	Deg. Freedom		9	2	I	3	14	1
	Significance		0.0021 ***	0.0271 **	0.0058***	0.0170**	0.0036***	0.0020***

Note: Beta Coefficient (Standard Error) Significance: *** = Probability level < 0.01; ** = Probability level < 0.05; * = Probability level < 0.1

Table 5. <u>Logistic regression results for each Hypothesis</u>

<u>Hypotheses</u> — <u>Result</u>

HI: Larger food finns are more involved in foreign activity than smaller finns .... H2: Food finns producing non-perishable goods are more involved in foreign activity................................. — Supported / Inconclusive

H3: Food finns that have a higher diversification are more involved in foreign activity. . . . . H4: Food finns that have a higher specialization are more involved in foreign activity. . . .. H5: Food finns with higher marketing expenses (percentage of sales) are more involved in foreign activity....... H6: Food finns with a higher amount of own brands or a higher percentage of sales from own labels are more — Supported / Not supported / Not supported / Inconclusive

Involved in foreign activity .... — Supported

H7: Food finns with higher R&D expenses are more involved in foreign activity...................................... H8: Food finns with a higher percentage of sales to the top four buyers are more involved in foreign activity..... — Inconclusive / Supported

H9: Food finns with a higher percent of local competition are less involved in foreign activity .... — Inconclusive

HI0: Food finns with a higher percent of competition from the NE region are more involved in foreign activity... — Supported

HII: Food finns with a higher percent of competition from the US market are more involved in foreign activity... — Inconclusive

H12: Food finns with a higher percent of competition from abroad are more involved in foreign activity............ — Inconclusive

H13: Larger food finns are more interested in starting or expanding foreign activity. .. .. — Not supported

H14: Food finns producing non-perishable products are more interested in foreign activity............................ H15: Food finns that have a higher diversification are more interested in foreign activity............................. H16: Food finns that have a higher specialization are more interested in forei~ activity. . . . . — Inconclusive / Inconclusive / Inconclusive

H17: Food finns with higher marketing expenses are more interested in foreign activity............................. ... .
H18: Food finns with a higher amount of own brands or a higher percentage of sales from own labels are more — Supported

Interested in foreign activity............

H19: Food finns with higher R&D expenses are mor~ interested in foreign activity.................................... — Supported

H20: Food finns with a higher percentage of sales to the top four buyers are more interested in foreign activity... — Inconclusive

H2I: Food finns with a higher percent of local competition are less interested in foreign activity.................... — Supported

H22: Food finns with a higher percent of competition from the NE region are more interested in foreign activity.. — Inconclusive

H23: Food finns with a higher percent of competition from the US market are more interested in foreign activity.. — Supported

H24: Food finns with a hi!!her oercent of comoetition from abroad are more interested in forei!!n activit....................... — Suooorted

6.3.4. Marketing knowledge

Although the cross-tabs did not give any significant results, Model 1 shows no significant effect of the number of brands and the percentage of own labels offered (Hypothesis 6 was inconclusive). Marketing expense as a percentage of total sales had a negative coefficient, indicating that firms with higher marketing expenses are less likely to have experience in foreign activity, not supporting Hypothesis 5. The percentage of own labels produced by a firm does not influence their involvement abroad.

6.3.5. Research and development expense

We could not test the variable for R&D expense (as a percent of total sales) using cross-tabulations, since it is a continuous variable. The coefficient for the variable R&DEXP was positive and significant at the 0.01 level in ModelL This indicates that firms with higher R&D expenses ("intellectual capital") are more likely to be involved in foreign activity. These results support Hypothesis 7.

6.3.6. Seller concentration

We could not test the variable used to measure seller concentration using cross-tabulations, since it is a continuous variable. The coefficient for the variable 4BUYER was not significant at the 0.1 level in Model 1, so we could not test Hypothesis 8. This means that the seller concentration does not influence the probability of a firm to be involved or interested in foreign activity.

6.3.7. Local competition

The variables used to measure the competitive environment of the firm are continuous, so they were not tested using cross-tabulations. In Model 3, the coefficient for the variable LOCCOM had a negative sign and was significant at the 0.01 level. This indicates that the higher the competition coming from local markets, the less likely the firm is to be involved in foreign activity. These results support Hypothesis 9.

6.3.8. Regional competition

In Model 4, the percentage of competition coming from their own region (the Northeast, without their own state) was non-significant, so Hypothesis 10 could not be tested. This indicates that the competitive nature of their region does not affect the firms' involvement in foreign markets.

6.3.9. Domestic competition

In Model 4 we can see that the variable for domestic (United States, excluding the NE) competition had a statistically significant positive coefficient. This indicates that the higher the competition coming from the domestic market, the more likely the firm is to be involved in foreign activity. These results support Hypothesis 11.

6.3.10. Foreign competition

The variable measuring the finns' foreign competition was not significant in Model 4. Since we could not test Hypothesis 12, this detennined that foreign competition does not influence the finns' involvement in foreign markets.

6.4. Empirical analysis of interest in foreign activity: hypotheses testing

We analyzed interest in foreign activity with two models. Model 5 incorporates all the suggested detenninants of interest in foreign activity, both finn characteristics and competitive environment of the finn, except local competition. We modeled this last variable separately in order to, avoid multicollinearity, since the sum of all the competitive variables is 100%. Table 4 displays the logistic regression models developed in the present study, together with the overall perfonnance and goodness of fit of the models. Appendix 17 (sections) displays the cross-tabulation tables used in the analysis. Table 5 presents a summary of the results for each hypothesis analyzed. Appendix 16 indicates the relative frequencies for Model 5, as well as its parameter coding.

6.4.1. Size

The cross-tabulation analysis shows that size is important. In this sample, larger finns (measured by total sales) tended to be more interested in starting or expanding foreign activity than smaller finns are. With the logistic regression analysis, the results were contradictory. The only statistically significant result was that finns of medium size (from 10 to 99.9 million in total sales) were less likely to be interested in foreign markets than finns with less than 1 million in sales were. Hypothesis 13 was inconclusive for the rest of the coefficients. This may indicates that finn size does not influence the finn's probability to be interested in foreign activity.

6.4.2. Industry type

The cross-tabs for the variable TYPEPROD did not test significant at the 0.1 level for this sample.   The coefficient for the variable TYPEPROD was negative and significant in Model 5. This result does not support Hypothesis 14, indicating that finns producing non-perishable products were less interested in starting or expanding their foreign activity.

6.4.3. Diversification / specialization

The cross-tabulation analysis was not significant. Hypotheses number 15 and 16 could not be tested since the coefficient for the variable NUMPROD was not significant at the 0.1 level. This indicates that the diversification or specialization of a finn is not a factor that affects the interest in starting or expanding foreign activity.

6.4.4. Marketing knowledge

The cross-tabs did not give any significant results for the finns in the sample. In Model 5, only the coefficient for number of brands offered was positive and significant, indicating that finns with a higher percentage of own labels produced were more likely to be interested in foreign markets, supporting Hypothesis 18. We could not test Hypothesis 17, resulting that the percentage of marketing expenses as a percent of total sales did not influence the finns' interest in starting or expanding their foreign activity.

6.4.5. Research and development expense

We could not test research and development expense (as a percent of total sales) using cross-tabulations, since it is a continuous variable. The coefficient for the variable R&DEXP was positive and significant at the 0.05 level in Model 5. This indicates that finns with higher R&D expenses ("intellectual capital") are more likely to be interested in foreign activity. These results support Hypothesis 19.

6.4.6. Seller concentration

We could not test the variable used to measure seller concentration using crosstabs, since it is a continuous variable. The coefficient for the variable 4BUYER was not significant at the 0.1 level in Model 5, so we could not test Hypothesis 20. This means that the seller concentration does not influence the probability a finn has to be interested in foreign activity.

6.4.7. Local competition

In Model 6, the coefficient for the variable LOCCOM had a negative sign and was significant at the 0.01 level. This indicates that the higher the competition coming from local markets, the less likely the finn is to be interested in foreign activity. These results support Hypothesis 21.

6.4.8. Regional competition

In Model 5, the percentage of competition aoming from their own region (the Northeast, without their own State) was non-significant, so Hypothesis 22 could not be tested. This indicates that the competitive nature of their region does not affect the finns' interest in foreign markets.

6.4.9. Domestic competition

In Model 5 we can see that the variable for domestic (United States, excluding the NE) competition had a statistically significant positive coefficient. This indicates that the higher the competition coming from the domestic market, the more likely the finn is to be interested in foreign activity. These results support Hypothesis 23.

6.4.10. Foreign competition

The variable measuring the finns' foreign competition was positive and significant in Model 5. This indicates that the higher the competition from abroad, the more the finns became interested in starting or expanding their foreign activity. This result supports Hypothesis 24.

6.5. Entry mode involvement analysis

A correlation (Appendix 10) and cross tabulation analysis (Appendix 17, section 4) was used to detennine the characteristics that are associated with the entry modes chosen by the 53 food finns participating in the study that are currently involved in foreign activity or were involv~d in the past. A surprising result was that the characteristic for size (total sales) was not associated in a statistically significant manner
with any entry mode. Nevertheless, it is interesting to note that only finns of more than 1 million dollars in total sales entered foreign markets with warehouses, ownership interests, co-packing or licensing. Small finns of less than 1 million dollars in total sales only used exporting as a way to enter foreign markets.

Exporting. No finn characteristic was associated with this entry mode. The only relationship that existed was with foreign activity interest. Finns that were exporting are also more interested in expanding their foreign activity. Finns that were exporting intennittently tended to be smaller in size (total sales). When we controlled the intennittent exports variable for seasonality of production, size was not related to intennittent exports. Of the finns that have export experience, 58% had export sales as a
percentage of total sales of 5% or fewer and 90% had export sales of less than 20% of their total sales.

Warehouses and sales offices established in foreign markets. Finns located in New York tended to be more involved in warehouses abroad (27.6%, compared to only 7.7% in P A). This may be caused by their closeness to Canada. Another related characteristic is number of products. Finns with more than 10 products tended to also be more involved in foreign activity.

Ownership interest in foreign manufacturing operations. Of the surveyed finns, all of those who had ownership interests abroad were located in the state of New York.

Co-packing arrangements to manufacture a product abroad. The finns that were copacking their products abroad were mainly from the state of New York (88%). The finn characteristic associated with this entry mode was number of products. Finns producing more than 10 products tended to be more active in co-packing abroad.

Production under license from a foreign firm. This entry mode was highly correlated with the local competitive environment of the finns. Finns with higher competition from within their own state tended to be more involved in licensing agreements abroad.

6.6. Entry mode interest results

Correlation (Appendix 11) and cross-tabulation analysis (Appendix 17, section 5), at the 0.1 level of significance, gave the following results for interest in foreign activity:

Interest in indirect export. Finns located in Pennsylvania seemed to be more interested in this type of entry mode than those from New York (62% of finns in PA were very interested in this entry mode, whereas only 33% of NY finns were). The finn characteristic associated with an interest in this entry mode was number of brands offered. Finns that offered less than 10 brands tended to be interested in this particular entry mode. All the finns that were interested in indirect exports were already involved in export activity. Regarding the competitive environment, finns interested in indirect exports had a high negative correlation with regional competition. Finns with higher regional competition were less interested in indirect exports.

Interest in direct export. Finns located in Pennsylvania seemed to be more interested in this type of entry mode than those from New York. Finns interested in this entry mode tended to be those that had experience in foreign markets and all those interested are currently involved in at least one type of exporting.

Interest in establishing warehouses or sales offices abroad. Finns producing nonperishable products (86%) or already involved in warehouses abroad (67%) or copacking (60%) activities tended to be very interested in this entry mode. Finns interested in this entry mode were positively correlated with local competition. Finns with higher competition coming from within their own state tended to be more interested in warehouses abroad.

Interest in minority ownership in foreign manufacturing operations. Finns interested in minority ownership ventures abroad tended to have higher amounts of R&D expenses (high correlation) and be already involved in warehouse activities. The majority (90%) of the finns interested in this entry mode had experience in foreign acti vity.

Interest in majority ownership in foreign mapufacturing operations. Finns interested in majority ownership tended to have a lower domestic (US) competitive pressure (negatively correlated). The majority (89%) of the finns interested in majority ownership arrangements abroad had experience in foreign markets. They also tended to be already involved in warehouse activities (positive correlation).

Interest in co-packing arrangements for foreign manufacturing. Finns interested in this entry mode tended to be of smaller size (94% had less than 100 million dollars in total sales), and be more specialized ‐ produce a lower number of products (negative correlation). Finns that were currently involved in warehouses or co-packing abroad tended to be interested in this entry mode (positive correlation). Finns with experience in foreign activity tended to be the most interested in this entry mode.

Interest in licensing agreements. The firms that were very interested in this entry mode tended to be of smaller size (less than 10 million dollars in total sales), more specialized and have a lower percentage of their production sold to their top four buyers. They also tended to have a higher R&D expense as a percent of their total sales (positively correlated).

6.7. Perceived barriers towards increasing international sales

The number of firms that answered a question regarding the major barriers that their companies perceived in increasing their international sales was 106. Out of these firms, 31 % answered lack of information, 29% lack of time, 39% price competition, 32% tariff barriers, 25% other regulations by foreign governments (colorant restrictions, declarations, labeling requirements, protectionist policies, phytosanitary issues, foreign language labeling. Taxes, etc.), 3% inability to provide training or service, 32% company size too small, 20% other barriers (product perishibility, transportation, financing, communication, lack of dollar strength, promotion costs, religious barriers, payment security, interest is strengthening domestic markets). The information that the firms thought were lacking was in contacts, "know how", distribution, marketing strategy, customer information, shipping instructions, labeling requirements, logistics and regulations.

The correlation (Appendix 12) and cross-tabulation (Appendix 17, section 6) analysis gave the following insights with regards to the perception of the firms' barriers to enter foreign markets.

Firms that had no experience (64%), were interested in foreign activity (81 %), or are currently not involved in co-packing agreements abroad (100%) perceived that lack of information was a barrier to increasing the company's international sales. This variable also had a positive significant correlation with the amount of product sold to their top four buyers.

Firms producing less than 10 brands (94%), interested in foreign activity (79%) or that source their products from abroad (55%) perceived lack of time as a barrier. This barrier was also negatively correlated with the percentage of own labels produced by the firms. It was also positively correlated with the amount of R&D expenses, marketing expenses, and the percentage of competition coming from abroad.

Firms that produced perishable goods (67%) and had experience in foreign activity (60%) tended to perceive that price competition was a barrier. This barrier was also negatively correlated with the seller concentration variable. This indicaTes that firms that sell to many more customers perceive this price competition as a barrier.

Tariff barriers were a major concern for larger firms (66% had mere than 10 million dollars in total sales), more diversified (81 % offered more than 10 products), had experience (84%) and interest (78%) in foreign activity, or were regular exporters (67%).

L

This barrier also had a negative correlation with seller concentration and local (in-state) competition, but a positive correlation with domestic (US) competition.

Larger firms (90% had more than 1 million in total sales) or had experience in foreign activity (66%) tended to perceive other regulations by foreign governments as a barrier. This barrier also had a negative correlation with local (in-state) competition, but a positive correlation with domestic (US) competition.

Companies that produced perishable goods tended to perceive that the inability to provide training or service was a barrier (67%). This barrier also had a positive significant correlation with the amount of R&D expenses as a percentage of total sales, and their current involvement in warehouses abroad.

The small size of the company was perceived as a barrier for firms that did not have experience in foreign markets (70%) or that were not interested in starting or expanding their foreign markets. This barrier was also negatively correlated with total sales, number of products offered, and foreign competition. It was also positively correlated with the firms' local competition. Despite that the size of the firm did not have a statistically significant association with this barrier, firms that were smaller in total sales perceived their small size as a barrier, but medium and large firms also thought they were too small.

The other barriers mentioned above (product perishability, transportation, financing, communication, lack of dollar strength, promotion costs, religious barriers, payment security, interest is strengthening domestic markets) were more of a concern for firms that had experience in foreign markets (65%), were currently exporting (80%), and not involved in ownership interests (73%), co-packing (67%) or licensing agreements abroad (80%).

6.8. **Perceived importance of global competition**

Of the surveyed firms, 18 (19%) said that they felt threatened by foreign competition in the US. When asked for a reason to explain this, 39% said that an increasing number of foreign firms are taking away their business, 72% said that foreign firms have lower overall costs of doing business, 17% that local firms who are active in foreign markets are more competitive than they are, and 28% said other reasons. Among the other reasons, the firms stated that local customers are getting accustomed to buying foreign products, lack of US tariffs for entering products, lack of support towards local firms because of New York State regulations and that the Canadian currency has an advantage. Only 6% of the firms said that foreign firms have more advanced technoiogy,

Of our sample, 51 firms said that they feel the need to be (more) active in foreign markets. When asked to explain this, 84% said because there are opportunities abroad that they are not taking advantage of, 51 % because increasingly global markets will force them to be active internationally, and 10% because of other reasons. Among the other reasons given to be more active in foreign markets were the need for growth and that they

must follow customers which are entering foreign markets. Only 8% of the firms answered that they need to be more involved in foreign markets because local firms who are active in foreign markets are more competitive than the ones not active in foreign markets.

Of the surveyed firms, 43 expressed the need for strategic alliances (partnerships). The main types of strategies listed as important were: with customers, financing institutions, other food fimls, marketing agents, co-packing arrangements, sales agents, distribution partners, brokers, suppliers, retailers, etc.). Another consideration is that 44 of the surveyed firms source some of their raw materials from foreign firms or farms. These materials were mainly vegetables, nuts, spices, sugar, grains, cocoa beans and chocolate, meat, coffee beans and fruit juices.

Correlation (Appendices 13, 14 and 15) and cross-tabulation (Appendix 17, section 7) analysis gave the following results:

Firms that thought that their company felt threatened by foreign competition in the US tended to have experience (80%) or interest (85%) in foreign markets, or source some raw materials from abroad (67%). This variable was also negatively correlated with their local competition (in-State). Only the firm that produced perishable goods perceived that foreign firms have more advanced technology. Firms that offered fewer than 10 brands perceived that local firms who are active in foreign markets are more competitive than they are (67%). This variable also had a positive correlation with the number of brands produced, but a negative correlation with the percent of own labels produced. Firms that do not source any raw materials from abroad perceived that other reasons (increase of local demand for foreign products, lack of US tariffs for entering products, lack of support, etc.) caused their company to feel threatened by foreign firms (80%).

Firms located in Pennsylvania (55%), produced non-perishable goods (69%), had experience (61 %) and interest (90%) in foreign activity tended to perceive a need to be (more) active in foreign markets. All firms that perceived this need were currently exporting, but not involved in co-packing (93%) or licensing (100%). They also tended to be the firms that perceive lack of information as a barrier (71 %), but not firm size (59%). This need was also noted more in firms that feel threatened by foreign competition (68%), and need strategic alliances (78%). The perceived need to be more active in foreign markets also had a high positive correlation with the amount of R&D expenses as a percent of total sales and with foreign competition. It had a negative correlation with local (in-state) competition. All of the firms that felt that local firms who are active in foreign markets are more competitive than they are source some of their raw materials from abroad. These firms also perceived lack of information and lack of time, but not training inability as barriers to enter foreign markets (75%), or perceived that they were threatened by foreign competition (75%). This variable also had a positive
correlation with R&D expenses as a percent of total sales. Firms that perceived lack of time (95%) but not high tariffs (93%) as barriers of entry into foreign markets tended to believe that there are opportunities abroad that they are not taking advantage of. This variable was also negatively correlated with total sales (smaller firms tended to perceive

more opportunities abroad). Firms of larger size (96% with more than 1 million dollars in total sales), located in New York State (71 %), were regular exporters (79%), perceived tariff barriers (68%) and other foreign regulations (71 %) as barriers of entry into foreign markets, thought that they were being threatened by foreign competition (77%), and that foreign firms were taking away their business (60%), tended to believe that increasingly global markets will force them to be active internationally. This variable was also positively correlated with domestic (US) competition. Only firms that had experience in foreign activity perceived other reasons to be more active in foreign markets (need to grow, financing, follow growing customers, etc.).

Firms that produced perishable products (60%), have interest in foreign activity (51%); are currently exporting (52%), source some of their raw materials from abroad (56%), or perceive lack of time as a barrier of entry into foreign markets (59%), perceived a need for strategic alliances.

7. DISCUSSION

In this section, we will discuss the results obtained from the analysis of the determinants that influence the decision of smaller food firms to enter foreign markets and to be interested in global opportunities. We will also discuss the results from the firms' choices of entry modes, perceived barriers and importance of foreign activity.

The empiri~al analysis performed on the sample indicated that larger firms tend to be more involved in foreign activity. This is reasonable, since larger firms perceive less risk when going abroad and are able to attract better deals with suppliers (Horst, 1974).

Although some past studies found that firms that are more specialized are more likely to be involved in foreign activity (Connor, 1983), in the present study we found that diversification is important for firms involved in foreign activity. These results support those obtained by Horst (1974), and Reed and Ning (1994). Firms with more than 10 products reduce the risk of doing business abroad. The firm has variety from which to choose from in order to determine their customer's preferences. We also need to take into account the fact that the number of products a firm produces is highly correlated with the size of the firm. This causes a difficulty when trying to determine which of these two characteristics is the important determinant of foreign activity because we can not isolate their effect. The number of brands a firm offers did not test significant in the model.

When determining the marketing knowledge effect, the results did not support past studies. Surprisingly, firms with lower marketing expense were more likely to have experience in foreign activity. The negative effect of marketing expenses may be because more firms may be delegating the marketing responsibility to their customers (Horst, 1974). We can also interpret the negative effect using Vernon's (1971) product

life cycle, considering that the advertisement intensity should decline as a product matures. This would make the percentage of own labels a better proxy for marketing knowledge.

The intellectual capital of a firm, expressed as R&D intensity, was a positive and significant determinant of foreign activity experience. Firms with higher R&D expenses are usually more innovative in nature, and thus more tolerant to .the risk involved in entering foreign markets.

The competitive environment of the firm proved to be an important determinant of foreign activity experience. Firms with less local competition are more involved in foreign activity. Firms with low competitive pressures in their local markets can divert energy and resources to explore markets and opportunities abroad. On the other hand, firms that sell primarily in their State may feel the need to expand their domestic market first, before venturing in foreign markets, which are considered more involved and risky than selling domestically. Firms with a larger amount of domestic competition (excluding the Northeast) are more involved in foreign activity than firms with low domestic competition. It seems reasonable to believe that this may be caused by an exhaustion of their domestic market, particularly if they are niche-market oriented.

The type of product a firm produces did not affect their involvement or experience in foreign markets. Both types of firms were similarly involved in foreign activity. Firms producing perishable goods preferred to use foreign production to enter foreign markets. Seller concentration also did not affect the predictive ability of the model. Both firms with few and many customers are similarly involved in foreign activity. Seller concentration was not a determinant factor when deciding to enter foreign markets. The stimuli from competition coming from outside their local markets (other domestic regions and abroad) did not influence the decision to enter foreign markets.

Regarding the firms' interest in starting or expanding foreign activity, only three determinants were important. Firms producing non-perishable products tended to be more interested in starting or expanding their foreign activity. This may be caused by lower risk levels involved in exporting due to the longer shelf life of their products. Firms with higher R&D intensity were also more interested in foreign markets. Firms with higher intellectual capital may have products which are differentiated by embodying more knowledge, giving them an advantage in broader markets. The competitive environment was also a determinant of foreign activity interest. Firms with low local competition and high competition from abroad are more interested in foreign markets. Firms with lower local competition are not obligated to strengthen their local market and can seek opportunities abroad. Competition coming from outside their region and abroad can open a firm's interest in global markets, since they see other doing it. Size did not have statistically significant predictive power regarding a firm's interest in foreign activity. This may indicate a trend where smaller firms are becoming more aware of the need to be active in global markets. Smaller firms can take advantage of their size to gain versatility, and thus be able to adapt more quickly to the changing economic environment that surrounds them.

L

Firms with interest in foreign activity were associated with only exporting as an entry mode. This may indicate that firms first enter foreign markets by exporting, to test if whether they can succeed abroad. This result supports the stages model of internationalization theory (Bilkey and Tesar, 1978). Then, if the experience is positive, they can evolve into other entry modes more suitable for their particular firm. The state where the firms were located proved to be an important factor to decide to use other more involved entry modes when going abroad. Firms located in New York were the ones that had ownership interests abroad, and the majority of co-packing arrangements. This is likely to be caused by the closeness (geographically, culturally, etc.) of N ew York to Canada, which makes foreign activity easier. Diversification was also important, since firms producing more than 10 products were more involved in warehouses abroad and co-packing agreements. Firms that had licensing agreements abroad tended to have a higher competitive pressure from local firms. This local competition may cause the firms to focus on their domestic markets and select to use licensing agreements abroad in order to manage more efficiently their scarce resources. Canada was the most common region for direct export and warehouses. Mexico was for ownership interests. Firms preferred Europe, South America and Asia when using indirect export as an entry mode. For copacking and licensing, firms preferred South America and Western Europe. Mexico was also preferred for co-packing.

Firms interested in direct exports, ownership interests or co-packing arrangements abroad tended to already have experience in international markets. Firms producing non-perishable products tended to be interested in establishing warehouses abroad. Mainly smaller, specialized fimls tended to be more interested in licensing agreements to enter foreign markets. A lack of resources may cause this, making these smaller firms delegate international responsibilities to their foreign partner. Europe was by far the market most firms were interested in entering, for every entry mode, followed by the Asian markets.

Firms with experience'in foreign activity did not see lack of information or small firm size as barriers, but rather price competition and tariff barriers and other government regulations as obstacles to enter foreign markets. Through there own experience, these have been difficult obstacles to avoid. The information needed was in contacts, "know how", distribution, marketing strategy, customer information, shipping instructions, labeling requirements, logistics and regulations. Lack of information and time was perceived as a barrier for firms that had interest in starting foreign activity. Firms producing perishable goods perceived a higher impact of price competition and inability to provide training or service when entering foreign markets. Tariff barriers was a concern for firms that were large, diversified or regular exporters. Firms of all sizes believed that they were too small to enter foreign markets. When firms actually decide to go abroad, they realize that size is not that important. This explains why firms of all sizes are involved in foreign activity.

Firms that feel threatened by foreign competition tended to have experience or interest in foreign markets, or source some of raw materials from abroad. Firms located in Pennsylvania, produced non-perishable goods, had experience or interest in foreign

activity tended to be more aware of the need to be active in foreign markets. Smaller finns tended to perceive opportunities abroad that they need to address. Larger, regular exporting finns expressed that increasingly global markets will force them to be active internationally. The exhaustion of local markets and the need to go abroad in order to continue to grow may explain this result.

This study has limitations. By intentionally selecting the product categories to be considered in order to include only finns that may have an interest in foreign markets may not produce results that can be generalized to all smaller food finns.

This study has been dependent on survey data to create dependent variables and independent variables to represent a model of the internationalization process. Andersen (1993) argues that survey data only provides static managerial perceptions and often does not incorporate the dynamic changes that managers need to face over time. Further studies should involve the use of longitudinal case study analysis. This seems appropriate since a cross-sectional design cannot document that finns proceed in stages nor detennine the factors that influence a finn's move fonn one stage to the next (Root, 1994; Katsikeas, Deng and W ortzel, 1997). Further stuqies should try to explore the cases in an attempt to identify if there is an advantage to export directly as opposed to the option of outsourcing exports by doing it indirectly. Small finns may believe that it is more efficient for them to specialize in production and use independent intennediaries that specialize in international marketing. Given the major contribution of job creation and regional restructuring, the current trend is to encourage more small businesses to enter foreign markets in order to increase their market potential. If the "stages model" proves inaccurate, one result may be that there is no transition from indirect to direct
export, and the policy implications would be of great value. For example, instead of
focussing on trying to make finns move from one stage to a more "involved" stage of the internationalization process when developing promotion programs, the policy-makers may need to focus more on strengthening the current status of the finn, whether it's direct or indirect exports, since that may be the only efficient avenue for them to pursue foreign markets. This finn-level analysis would help guide the development of government export-support policies for small businesses.

8. CONCLUSIONS

The objective of this study is to gain a better understanding of the characteristics of small to medium sized food finns in the Northeast (New York and Pennsylvania) that influence their decision to be involved or interested in foreign markets. The study also involved descriptive analysis of the barriers that affect smaller finn's foreign market entry decisions as well as the regions they are involved and interested in for further foreign activity.

The study involved the use of a survey that focussed on gathering infonnation on the characteristics that differentiate finns involved in foreign markets from the ones not involved, and of finns interested in starting or expanding their foreign activity from the ones not interested. The survey was also designed to provide infonnation on the finns' barriers to enter foreign markets as well as their perception on the challenges and opportunities presented by increasingly global markets.

Of the 116 food-manufacturingfinns of New York and Pennsylvania that we successfully contacted in the survey, 55 are involved in foreign activity or were in the past. **In** addition, 73 finns in this sample said to be interested in starting or expanding their foreign activity.

We grouped the detenninants that influence a finn's decision to enter or be interested in entering foreign markets in seven categories: size, product type, diversification/specialization, marketing knowledge advantage, R&D intensity, seller concentration and competitive nature of the finn. We then tested these detenninants in a series of logistic regression models in which the dependent variables were experience and interest in foreign activity. The analysis also included correlation and cross-tabulations.

The analysis indicated that the characteristics found in finns that have experience in foreign activity are large size, high diversification, less marketing knowledge and high R&D intensity. The competitive environment of the finn proved to be an important detenninant of foreign activity experience. Finns with low local and high domestic competition were more involved and interested in foreign activity. Since size was not important when detennining a finn's interest in foreign activity, smaller finns may be becoming more aware of the need to be active in global markets. The characteristics associated with interest in starting or expanding foreign activity were finns producing perishable products, offered a higher amount of own brands and had higher R&D expenses as a percentage of total sales. **In** addition to low local and high domestic competition, a high percent of foreign competition seemed to stimulate the finns' interest in foreign activity.

Size was not significantly associated with any entry mode. **In** addition, finns located in New York tended to be more involved in warehouses, ownership interests or co-packing arrangements abroad, although finns 100.ated in Pennsylvania were more interested in starting or expanding their exports. Canada, Mexico, Europe, South America and Asia were the preferred foreign markets entered.

Finns with experience in foreign markets were associated with direct export interest. Companies producing non-perishable products tended to be more interested in establishing warehouses abroad. S!llall and more specialized finns tended to be more interested in co-packing and licensing as entry modes. Europe was the market most finns were interested in entering, for every entry mode.

Finns without experience in foreign activity described lack of infonnation as a barrier for entering foreign markets. Finns with experience abroad described price

competition and tariff barriers and other government regulations as obstacles to enter foreign markets. Lack of time was perceived as a barrier by firms that were specialized and had interest in foreign activity. Firms producing perishable goods perceived a higher impact of price competition and inability to provide training or service when entering foreign markets. Tariff barriers was a concern for firms that were large and diversified. Firms with no experience in foreign activity perceived their small size as a barrier. Almost all firms believe that their size is too small before entering foreign markets. When firms actually decide to go abroad, they realize that size is not that important. This explains why firms of all sizes are involved in foreign activity.

Firms that felt threatened by foreign competition tended to have experience in foreign activity. Firms producing non-perishable goods, with high R&D intensity and experience abroad tended to be more aware of the need to be active abroad.

L

APPENDICES

t

APPENDIX 1. The survey instrument for New York and Pennsylvania.

Note: The following survey was used for New York finns and differs from the Pennsylvania survey in questions 2 and 13 of part I, where references are made to Pennsylvania instead of New York.

ID#:

CORNELL
UNIVERSITY

1997 Food Industry Survey
on Global Competitiveness

The purpose of this survey is to learn how food finns in New York and Pennsylvania are responding to challenges and opportunities presented by increasing global competitiveness.

In this survey, questions about your business refer to *this local business.* We would like your responses to reflect only the infonnation relevant to this establishment, and not to other branches or affiliated units.

There are 4 parts to this survey. Please answer all of parts ∼ and IV. Answer parts II and III only if they apply to your company (see page 3). All responses will be kept strictly confidential.

If you have any questions, please contact Carlos Santos, Graduate Research Assistant, at (607) 255 1615 or bv e-mail: cas49(@cornell.edu. Thank vou!

Part I: COMPANY BUSINESS CHARACTERISTICS

1. What is your position within this business? *(Circle ALL that apply.)*

1 Owner
2 Chief Executive Officer / President 3
Plant Manager
4 Other *(specify)*

2. Which of the following best describes where your corporate headquarters is located? *(Circle ONE number.)*

1 At this site
2 In New York state *(specify)* 3
In another state *(specify)* 4 In
another country *(specify)*

3. What is the nature of your business? *(Circle ALL that apply.)*

1 Processor
2 Manufacturer 3
Retailer
4 Distributor
5 Broker
6 Sales agent
7 Other *(specify)*

L

4. Please enter the beginning date (mm/dd/yy) of your most recent fiscal year:
Beginning date   /   /

5. What were your company's Total Sales for the most recent fiscal year? *(Circle ONE response.)*

 1 Less than $1 million 2
$1-$9.9million
3 $10 - $99.9 million 4
$100 - $499.9 million 5
$500 million or more

6. What were your company's Total Book Value Assets for the most recent fiscal year? *(Circle ONE response.)*

1   Less than $1 million
2 $1 - $9.9 million
3 $10 - $99.9 million 4
$100 - $499.9 million 5
$500 million or more

7. We'd like to know what products you offer. Please list up to four products *ill order of their importance to your business's total volume of sales* and approximate their percentage contribution to your total volume of sales.

Product or Service Description	Percent of Total Volume of Sales
1.	%
2.	%
3.	%
4.	%

8. Excluding size and color variations, how many different products do you currently offer? *(Circle ONE response.)*

1 Less than 10 2
10 - 99 3100-499
4 500 - 999
5 1000 or more

9. Excluding private labels, how many different brands do you currently offer? *(Circle ONE response.)*

1 Less than 10 2
10 ‑ 49
3 50-199
4 200 or more

I

~

.1
.1

10. Approximately what percentage of your total volume of sales are:

Own Labels   %
Private Labels   %

11. Approximately what percentage of your total production is sold to your:

Top 4 buyers   %
Top 8 buyers   %

12. For the most recent fiscal year, approximately what percent of your company's Total Sales were:

Research and Development (R&D) Expenses   %
Marketing Expenses   %

13. What percent of your competitors are located in the following areas:

1. Upstate New York
2. Downstate New York (NY City and Long Island) 3.
North East (excluding NYS)
4. U.S. (excluding Northeast)
5. Outside the U.S.
                                        =;: 100%

14. We'd like to get an idea of who your major suppliers are and the approximate percentage each
    contributes to your total volume of purchases.

Major Suppliers (type, name, and location)	Percent of Total Purchases
1.	%
2.	%
3.	%
4.	%

15. How many of all types of employees currently work here?

1. Number of full-time employees
2. Number of part-time employees
3. Number of temporary or seasonal employees
    Total number of employees

The next 2 parts of this survey may not be applicable to your company:
Please note: "Foreign Activity" is defined as *exporting, having warehouses or sales offices abroad, having ownership in manufacturing operations abroad, having co packing arrangements for foreign manufacturing* and/or *licensing.*

Is your company interested in starting or expanding foreign activity? *(Circle ONE response.)*

I NO - Skip to Part IV. on the bottom half of page 6
2 NO, but did have foreign activity in the past
3 NO, but currently have foreign activity
4 YES, starting foreign activity - Skip to Part III. on page 6 5
YES, expanding foreign activity

PART II.   PAST AND CURRENT FOREIGN ACTIVITY

1. Is your company currently involved in exporting? *(Circle ONE response.)*

I NO - Skip to Question 5. 2
NO, but did in the past
3 YES

2. Which countries did you or do you currently export to, indirectly or directly, and approximately when did exporting first begin? *(Indirect Export* is defined as through US brokers, distributors, or agents. *Direct Export* is defined as through foreign brokers, distributors, or agents or directly to customers abroad.)

| *(Please list.)* | *(Check ONE box for each row.)* | | *(Circle ONE letter.)* |
COUNTRY	INDIRECT	DIRECT	# OF YEARS AGO
1.	0	0	a 2 or less b 3-5 c 6-8 d 9 or more
2.	0	0	a 2 or less b 3-5 c 6-8 d 9 or more
3.	0	0	a 2 or less b 3-5 c 6-8 d 9 or more

Please use additional sheets if necessary.

3. Is your exporting intermittent? If so, please explain.

4a. Approximately what percent of your company's Total Sales were or are:

Domestic Sales Foreign   %
Export Sales   %
                          = 100%

4b. Approximately what percent of Domestic Sales were or are:

Direct to customers   %
Through US brokers, distributors, or agents   %
                          = 100%

4c. Approximately what percent of Foreign Export Sales were or are:

Direct to customers abroad   %
Through US brokers, distributors, or agents   %
Through foreign brokers, distributors or agents   %
                          = 100%

5. Does your company currently have warehouses or sales offices established in foreign markets? *(Circle ONE response.)*

1 NO - Skip to Question 7.
2 NO but did in the past
3 YES

6. In which countries did you or do you currently have warehouses or sales offices, and approximately when were they first established?

(Please list.)   *(Circle ONE letter.)*
COUNTRY #OFYEARSAGO
1.   a 2 or less   b   3-5   c   6-8   d 9 or more d
2.   a 2 or less   b   3-5   c   6-8   9 or more d 9
3.   a 20rless ,b 3-5   c 6-8   or more
Please use additional sheets if necessary.

7. Does your company currently have an ownership interest in any foreign manufacturing operations? *(Circle ONE response.)*

1 NO - Skip to Question 11.
2 NO, but did in the past
3 YES

8. In which countries did you or do you have ownership interest, what percentage of ownership, and approximately when did ownership first begin?

(Please list.)   *(Please provide.)*   *(Circle ONE letter.)*
COUNTRY   % OF OWNERSHIP   # OF YEARS AGO
1.   %   a 2 or less   b 3-5   c 6-8   d 9 or more d
2.   %   a 2 or less   b 3-5   c 6-8   9 or more d 9
3.   %   a 2 or less   b 3-5   c 6-8   or more
Please use additional sheets if necessary.

9.   Approximately what percent of your Total Sales were or are Foreign Affiliate Sales?   %

10. Approximately what percent of your Total Book Value Assets were or are Foreign Assets?   %

11. Are any of your company's products currently manufactured abroad through co-packing arrangements? *(Circle ONE response.)*

1 NO - Skip to Question 13. 2
NO, but did in the past
3 YES

12. In which countries did you or do you currently have co-packing arrangements, and approximately when did they first begin?

(Please list.)   *(Circle ONE letter.)*
COUNTRY #OFYEARSAGO
1.   a 2 or less   b   3-5   c   6-8   d 9 or more d
2.   a 2 or less   b   3-5   c   6-8   9 or more d 9
3.   a 2 or less   b   3-5   c   6-8   or more
Please use additional sheets if necessary.

r

13. Is your company currently involved in licensing technology or brand names for use in any foreign country? *(Circle ONE response.)*

1 NO - Skip to Question 17. 2 NO, but did in the past
3 YES

14. In which countries did you or do you currently license, and approximately when did licensing first begin?

(Please list.)   *(Circle ONE letter.)*
COUNTRY   # OF YEARS AGO
1.   a 2 or less   b 3-5   c 6-8   d 9 or more d
2.   a 2 or less   b 3-5   c 6-8   9 or more d 9
3.   a 2 or less   b 3-5   c 6-8   or more
Please use additional sheets if necessary.

15. Approximately what percent of your company's Total Sales were or are Licensing Income? %

16. Does your company produce under license from a foreign firm? *(Circle ONE response.)*

   No   2 Yes

17. Does your company take advantage of the following in entering foreign markets? *(Circle ALL that apply.)*

1 Government programs, services, and agencies *(specify)* 2 Participate in trade delegations *(specify)*
3 Attend trade fairs *(specify)*
4 Other (specify)

PART III.   FUTURE FOREIGN ACTIVITY

1. How interested is your company in starting or expanding the following foreign activities? *(Circle ONE number on the following scale for each alternative.)*

Foreign Activity	Un-Interested	Have Not Considered	Somewhat Interested	Very Interested
Indirect Export	I	2	3	4
Direct Export	I	2	3	4
Establishing.warehouses or sales offices abroad	1	2	3	4
Minority ownership in foreign manufac. Operations	I	2	3	4
Majority ownership in foreign manufac. Operations	I	2	3	4
Co-packing arrangements for foreign manufacturing	I	2	3	4
Licensing	I	2	3	4

111

I
1"
1

2. If you circled "3" or "4" in Question I above, please list the countries or regions in which you are interested in starting or expanding the foreign activity. Otherwise, - Skip to Part IV. below

Foreign Activity	Country/Region	Country/Region	Country/Region
Indirect Export			
Direct Export			
Establishing warehouses or sales offices abroad			
Minority ownership in foreign manufac. Operations			
Majority ownership in foreign manufac. Operations			
Co-packing arrangements for foreign manufacturing			
Licensing			

Please use additional sheets if necessary.

PART IV.   ATTITUDES TOWARD FOREIGN ACTIVITY

1. What do you feel are the major barriers to increasing your company's international sales? *(Circle ALL that apply.)*

I Lack of information
2 Time
3 Price competition
4 Tariff barriers
5 Other regulations by foreign governments *(specify)* 6
Inability to provide training or service
7 Company size too small
8 Other *(specify)*

2. If you circled" 1" in Question I above, specifically what kind of information does your company need?

1.   3.
2.   4.

3a. Does your company feel threatened by foreign competition in the U.S.? *(Circle ONE response.)*

    No - Skip to Question 4.   2 Yes

3b. If Yes, which of the following helps to explain this? *(Circle ALL that apply.)*

I Increasing number of foreign firms are taking away our business
2 Foreign firms have lower overall costs of doing business
3 Foreign firms have more advanced technology
4 Local firms who are active in foreign markets are more competitive than we are 5
Other *(specify)*

4a. Does your company feel the need to be (more) active in foreign markets? *(Circle ONE response.)*

    No - Skip to Question 5.   2 Yes

4b. If Yes, which of the following helps to explain this? *(Circle ALL that apply.)*

1 Local finns who are active in foreign markets are more competitive than we are 2
There are opportunities abroad we are not taking advantage of
3 Increasingly global markets will force us to be active internationally
4 Other *(specify)*

Sa. Does your company see the need for strategic alliances (partnerships)? *(Circle ONE response.)*

No   2 Yes

Sb. If Yes, what types of strategic alliances (partnerships)?

1.   3.
2.   4.

6a. Does your finn source raw materials from foreign finns or fanns? *(Circle ONE re,sponse.)*

No   2 Yes

6b. If Yes, what kinds of raw materials?

1.   3.
2.   4.

Would you like a summary of the survey results?

D No   DYes

And if we need to clarify any responses, how can we reach you?

Name
Telephone Number

I

THANK YOU FOR YOUR HELP IN THIS IMPORT ANT STUDY! PLEASE ENCLOSE THE
COMPLETED SURVEY IN THE ENVELOPE PROVIDED AND MAIL IT TO US TODAY.

APPENDIX 2. Cover letter for New York firms contacted by telephone and willing to participate in the survey.

«Date»

«First Name» «Last Name»
 «Company _Name»
«Street»
«City», «State _» «Zip»

Dear Mr. «Last_Name»,

Thank you for consenting on the telephone today to take a look at the enclosed survey I referred to. Professor James M. Hagen and I are conducting a study on the foreign activity of U.S. food firms. We would be most grateful if you would take the time to help us by completing and returning the survey. Your participation is very important to the success of our study.

Please note that your company need only be interested, not necessarily involved, in foreign activity to provide meaningful infonnation for analysis. Also, no individual responses will be reported, though a summary report of our survey results will be available to you upon request (a space is provided on the survey). Even if you still feel that certain information can not be provided, we would greatly appreciate it if you would fill out as much of the survey as possible.

As you know, markets are increasingly global and integrated, and they present opportunities and challenges to food firms. The objective of our study, which is partially sponsored by the Metropolitan Development Association (MDA) of Syracuse & Central
New York and supported by Mr. William Kimball, Development Administrator of
Agricultural Business, New York Department of Agriculture (please see enclosed letter), is to assess the global competitiveness of food firms in the Northeast (New York and Pennsylvania). The survey component will help identify global strategies that have been effective for particular firms.

Please return the survey in the stamped envelope provided. If you have any questions, please contact Charmaine lng, Graduate Research Assistant, at (607) 254-7491 or by e-mail: cti 1@cornell.edu.

Thank you very much for your time and support of our research.

Sincerely,

Charmaine Ing
Graduate Research Assistant

APPENDIX 3. Cover letter for New York finns not contacted by telephone

«Date»

«First Name» «Last Name»
      «Company_Name»
«Street»
«City», «State _» «Zip»

Dear Mr. «Last_Name»,

I am sorry I could not reach you in person on the telephone today, but hope you received my message regarding the enclosed survey. Professor James M. Hagen and I are conducting a study on the foreign activity of U.S. food finns. We would be most grateful if you would take the time to help us by completing and returning the survey. Your participation is very important to the success of our study.

Please note that your company need only be interested, not necessarily involved, in foreign activity to provide meaningful infonnation for analysis. Also, no individual responses will be reported, though a summary report of our survey results will be available to you upon request (a space is provided on the survey). Even if you still feel that certain infonnation can not be provided, we would greatly appreciate it if you would fill out as much of the survey as possible.

As you know, markets are increasingly global and integrated, and they present opportunities and challenges to food finns. The objective of our study, which is partially sponsored by the Metropolitan Development Association (MDA) of Syracuse & Central
New York and supported by Mr. William Kimball, Development Administrator of
Agricultural Business, New York Department of Agriculture (please see enclosed letter), is to assess the global competitiveness of food finns in the Northeast (New York and Pennsylvania). The survey component will help identify global strategies that have been effective for particular finns.

Please return the survey in the stamped envelope provided. If you have any questions, please contact Channaine lng, Graduate Research Assistant, at (607) 254-7491 or by e-mail: ctil@cornell.edu.

Thank you very much for your time and support of our research.

Sincerely,

Channaine Ing
Graduate Research Assistant

48

APPENDIX 4. Cover letter sent to New York and Pennsylvania

«Date»

«First Name» «Last Name»
       «Company_Name»
«Street»
«City», «State _» «Zip»

Dear Mr. «Last_Name»,

Professor James M. Hagen and I are conducting a study of the global competitiveness of the food industry in New York and Pennsylvania. We would be most grateful if you would take the time to help us by completing and returning the enclosed survey. Your participation is very important to the success o,f our study.

Please note that your company need only be interested, not necessarily involved, in foreign activity to provide meaningful information for ,analysis. Also, no individual responses will be reported, though a summary report of our survey results will be available to you upon request (a space is provided on the survey). Even if you still feel that certain information can not be provided, we would greatly appreciate it if you would fill out as much of the survey as possible.

Our research unit has undertaken this study in order to assess the response to the challenges and opportunities presented by the increasing global competitiveness. The survey component will help identify global strategies that have been effective for particular firms. In order for the results of this study to be truly representative of the food firms in New York and Pennsylvania, it is essential that each survey is completed and returned for analysis.

Please return the survey in the stamped envelope provided. If you have any questions, please contact Carlos Santos, Graduate Research Assistant, at (607) 255-1615, by fax at (607) 255-4776, or bye-mail: cas49@cornell.edu.

Thank you very much for your time and support of our research.

Sincerely,

Carlos Santos
Graduate Research Assistant

APPENDIX 5. Post card sent for first follow-up to New York and Pennsylvania firms.

Dear

Last week we mailed the "1997 Food Industry Survey on Global Competitiveness" to you. The purpose of this study is to determine the attitudes of the food industry towards global competitiveness.

If you have already completed and returned it to me, please accept my sincere thanks. If not, I would be most grateful if you would do so today. Your participation is extremely important to the success of our study.

If you did not receive a survey, or it was misplaced, please call me at (607) 255-1615, and I will mail another one to you today.

Once again, thank you for your time and support of our research.
Sincerely,

Carlos Santos
Graduate Research Assistant

APPENDIX 6. Thank you post card sent to New York and Pennsylvania firms.

Dear

Thank you very much for taking the time to complete the "1997 Food Industry Survey on Global Competitiveness" that was mailed to you.

Your participation is extremely important to t~e success of this study.

If you requested a summary of the survey results (by indicating so on the survey), I will send it to you as soon as it is available. If you did not request a copy but would like to receive one, please call me at (607) 255-1615.

Once again, thank you for your time and support of our research.

,i
f

Sincerely,

I'

Carlos Santos
Graduate Research Assistant

APPENDIX 7. Second follow-up letter sent to New York and Pennsylvania

«Date»

«First_Name» «Last Name»
        «Company _ N ame»«Other
_Name»
«Street»
«City», «State _» «Zip»

Dear Mr. «Last_Name»,

About three weeks ago, I sent you a survey we are conducting for a study of the global competitiveness of the food industry in New York and Pennsylvania. As of today we have not yet received your completed questionnaire.

Please remember that your company need only be interested, not necessarily involved, in foreign activity to provide meaningful information for analysis. Also, no individual responses will be reported, though a summary report. of our survey results will be available to you upon request (a space is provided on the survey). Even if you still feel that certain information can not be provided, we would greatly appreciate it if you would fill out as much of the survey as possible.

Our research unit has undertaken this study in order to assess the response to the challenges and opportunities presented by the increasing global competitiveness. The survey component will help identify global strategies that have been effective for particular firms.

I am writing to you again because of the significance each questionnaire has to the usefulness of this research. In order for the results of this study to be truly representative of the food firms in New York, it is essential that each survey is completed and returned for analysis. You can also have in mind that the survey may be completed partially considering only the questions that apply to your business.

In the event that your survey has been misplaced, a replacement is enclosed. Please return the survey in the stamped envelope provided. If you have any questions, please contact Carlos Santos, Graduate Research Assistant, at (607) 255-1615, by fax at (607) 255-4776, or bye-mail: cas49@cornell.edu.

4.

Thank you very much for your time and support of our research. Your cooperation is greatly appreciated.

Cordially,

Carlos Santos
Graduate Research Assistant

APPENDIX 8. Third follow-up letter sent to New York and Pennsylvania finns

«Date»
«First Name» «Last Name»
    «Company_Na
me»
«Street»
«City», «State _» «Zip»
Dear Mr. «Last_Name»,

I am writing to you about our study of the global competitiveness of the food industry in New York and Pennsylvania. We are still hopeful of receiving your completed questionnaire.

The large number of surveys returned is very encouraging. But, whether we will be able to describe accurately how the food industry in these Northeastern states is responding to challenges and opportunities presented by increasing global competitiveness, depends upon you and the others who have not yet responded. In order for the results of this study to be truly representative, it is essential that each survey is completed and returned for analysis. You can also have in mind that the survey may be completed partially considering only the questions that apply to your business.

 Please remember that your company need only be interested, not necessarily involved, in foreign activity to provide meaningful information for analysis. Also, no individual responses will be reported, though a summary report of our survey results will be available to you upon request (a space is provided on the survey). Even if you still feel that certain infonnation can not be provided, we would greatly appreciate it if you would fill out as much of the survey as possible.

Our research unit has undertaken this study in order to assess the response to the challenges and opportunities presented by increasing global competition. The survey component will help identify global strategies that have been effective for particular finns.

The usefulness of our results depends on how accurately we are able to describe the attitudes of the food finns in New York. It is for these reasons that I am sending this by certified mail to insure delivery. In case our earlier correspondence did not reach you, I am enclosing a replacement questionnaire and a self addressed stamped envelope. I will be grateful if you return the completed questionnaire by return mail. If you have any
questions, please contact me at (607) 255-1615, by fax at (607) 255-4776, or bye-mail: cas49@cornell.edu. .

Your contribution to the success of this study will be appreciated greatly.
Most sincerely,

Carlos Santos
Graduate Research Assistant

APPENDIX 9. Correlation table for firm characteristics

	STATE	TOTSALE	TOTASET	SIC CODE	TYPEPROD	NUMPROD	NUMBRAND	OWNLABEL
STATE	1							
Sig.								
TOTSALE	0.238**	1						
Sig.	0.011							
TOT ASSET	0.167*	0.826***	1					
Sig.	0.092	0.000						
SIC CODE	-0.063	-0.151	-0.208**	1				
Sig.	0.498	0.110	0.035					
TYPEPROD	-0.072	-0.326***	-0.264***	0.576***	1			
Sig.	0.444	0.000	0.007	0.000				
NUMPROD	0.074	0.410***	0.419***	-0.065	-0.271***	1		
Sig.	0.432	0.000	0.000	0.488	.0.003			
NUMB RAND	-0.051	0.087	0.053	-0.018	-0.032	0.334***	1	
Sig.	0.593	0.369	0.594	0.851	0.738	0.000		
OWNLABEL	-0.009	-0.046	-0.054	0.028	-0.045	0.036	-0.169*	1
Sig.	0.925	0.645	(0.600)	0.776	0.646	0.714	0.081	
4BUYER	-0.176*	-0.134	-0.096	-0.033	0.077	-0.253**	-0.113	-0.168
Sig.	0.085	0.198	(0.379)	0.751	0.455	0.013	0.274	0.110
8BUYER	-0.074	-0.184*	-0.210*	-0.072	0.058	-0.307***	-0.055	-0.155
Sig.	0.484	0.083	(0.056)	0.490	0.581	0.003	0.605	0.150
R&DEXP	-0.062	-0.156	-0.099	0.153	0.023	-0.024	-0.068	0.039
Sig.	0.570	0.153	0.385	0.158	.0.836	0.824	0.532	0.727
MARKET	0.132	-0.178*	-0.205*	0.205**	0.035	-0.105	-0.140	0.005
Sig.	0.207	0.094	0.059	0.049	0.742	0.318	0.184	0.964
LOCCOMP	-0.182*	-0.326***	-0.316***	0.110	0.077	-0.115	0.008	0.120
Sig.	0.096	0.003	0.006	0.318	0.482	0.294	0.941	0.291
REGCOMP	0.323***	0.130	0.062	0.090	0.088	0.117	"0.117	-0.025
Sig.	0.003	0.243	0.597	0.415	0.423	0.287	0.294	0.828
DOMCOMP	-0.014	0.331 ***	0.464***	-0.249**	-0.221 **	0.126	-0.018	-0.104
Sig.	0.899	0.002	0.000	0.022	0.042	0.250	0.873	0.361
FORCOMP	-0.061	-0.093	-0.174	0.073	0.087	-0.128	-0.118	-0.018
Sig.	0.581	0.407	0.134	0.508	0.427	0.243	0.287	0.876
FULLEMP	0.308***	0.642***	0.606***	-0.079	-0.251***	0.345***	-0.011	0.083
Sig.	0.001	0.000	0.000	0.406	0.007	0.000	0.911	0.398

APPENDIX 9 (CONT.)

	4BUYER	8BUYER	R&DEXP	MARKET	LOCCOMP	REGCOMP	DOMCOMP	FORCOMP
4BUYER	1							
Sig.								
8BUYER	0.821 ***	1						
Sig.	0.000							
R&DEXP	-0.060	0.022	1					
Sig.	0.594	0.849						
MARKET	-0.156	-0.195*	0.410***	1				
Sig.	0.155	0.080	0.000					
LOCCOMP	-0.060	0.002	-0.081	0.108	1			
Sig.	0.627	0.986	0.526	0.376				
REGCOMP	0.009	0.245**	-0.213*	-0.044	-0.368***	1		
Sig.	0.939	0.045	0.091	0.719	0.001			
DOMCOMP	0.014	-0.180	0.141	-0.142	-0.591 ***	-0.264**	1	
Sig.	0.907	0.146	0.266	0.242	0.000	0.015		
FORCOMP	0.052	-0.058	0.189	0.082	-0.347***	-0.187*	-0.161	1
Sig.	0.670	0.641	0.135	0.500	0.001	0.086	0.141	
FULLEMP	-0.151	-0.164	-0.080	-0.070	-0.172	0.122	0.116	-0.028
Sig.	0.141	0.116	0.462	0.503	0.120	0.271	0.297	0.805

*** = Pr?bability level < 0.01, ** = Probability level < 0.05, *= Probability level < 0.1

APPENDIX 10. Correlation table for finn entry mode and finn characteristics.

	Foreign activity experience	Foreign activity interest	Current export Activity	Intermittent exporting	Intermittent and seasonal exporting	Current warehouse activity	Current ownership abroad	Current co-packing abroad	Current licensing
STATE	0.063	0.248***	0.026	0.164	0.039	-0.253*	-0.229**	-0.298**	-0.125
Sig.	0.500	0.007	0.849	0.241	0.783	0.062	0.026	0.029	0.363
TOTSALE	0.370***	0.218**	-0.001	-0.444***	-0.248*	0.020	0.075	0.041	0.162
Sig.	0.000	0.021	0.995	0.001	0.083	0.886	0.596	0.773	0.250
SIC CODE	-0.043	-0.240***	0.049	-0.059	0.041	0.091	0.070	0.119	0.144
Sig.	0.647	0.009	0.721	0.677	0.773	0.510	0.613	0.391	0.293
TYPEPROD	-0.1 09	-0.127	0.077	0.161	0.163	-0.162	-0.199	-0.166	0.187
Sig.	0.242	0.174	0.578	0.249	0.243	0.237	0.145	0.229	0.171
NUMPROD	0.230**	-0.003	-0.107	-0.231 *	-0.212	0.236*	0.016	0.259*	0.033
Sig.	0.013	0.956	0.435	0.096	0.128	0.082	0.909	0.059	0.811
NUMB RAND	0.015	0.046	-0.073	0.129	0.263*	0.047	- 0.172	0.194	-0.141
Sig.	0.872	0.625	0.609	0.373	0.065	0.739	0.223	0.172	0.319
OWNLABEL	0.065	-0.1l2	-0.001	-0.067	-0.176	0.090	0.232	0.129	0.159
Sig.	0.504	0.250	0.996	0.650	0.230	0.533	0.106	0.378	0.269
4BUYER	-0.215**	-0.048	0.129	0.123	0.074	-0.130	0.098	0.048	-0.190
Sig.	0.034	0.642	0.392	0.428	0.633	0.390	0.516	0.752	0.206
R&DEXP	0.220**	0.203*	0.153	-0.058	-0.131	0.223	0.071	0.190	0.025
Sig.	0.041	0.059	0.333	0.721	0.414	0.156	0.657	0.234	0.875
MARKET	-0.092	0.031	-0.088	-0.089	-0.293*	-0.001	0.069	-0.094	0.031
Sig.	0.378	0.770	0.569	0.572	0.056	0.993	0.656	0.548	0.841
LOCCOMP	-0.294***	-0.334***	-0.082	0.049	0.062	0.254	0.221	0.253	0.493***
Sig.	0.006	0.002	0.611	0.762	0.705	0.110	0.165	0.115	0.001
REGCOMP	-0.023	-0.030	-0.001	0.054	0.020	-0.116	-0.225	-0.110	-0.166
Sig.	0.832	0.788	0.993	0.740	0.901	0.471	0.158	0.498	0.300
DOMCOMP	0.305***	0.304***	0.221	-0.168	-0.143	0.006	0.020	-0.098	-0.248
Sig.	0.005	0.005	0.164	0.299	0.377	0.971	0.903	0.549	0.119
FORCOMP	0.067	0.141	-0.181	0.092	0.081	-0.224	-0.073	-0.090	-0.158
Sig.	0.543	0.199	0.258	0.571	0.618	0.159	0.652	0.580	0.323
INTEREST F.A	0.550***	1.000	0.349***	-0.038	0.195	-0.081	0.100	-0.047	-0.155
Sig.	0.000		0.009	0.787	0.161	0.555	0.468	0.738	0.259
SOURCE RAW	0.071	-0.154	-0.016	0.177	0.070	0.081	0.085	0.035	0.017
Sig.	0.479	0.123	0.910	0.224	0.632	0.572	0.551	0.809	0.905

APPENDIX 11. COITelation table for foreign activity interest and firm characteristics.

	Interest indirect eXDort	Interest direct export	Interest warehouses abroad	Interest minority ownership	Interest majority ownership	Interest co-packing	Interest licensing
STATE	0.173	0.251 **	-0.145	-0.079	0.019	0.046	0.176
Sig.	0.152	0.031	0.237	0.520	0.881	0.701	0.154
TOTSALE	-0.134	0.113	-0.027	-0.078	-0.019	-0.319***	-0.240*
Sig.	0.274	0.349	0.829	0.530	0.881	0.008	0.056
SIC CODE	0.063	0.093	0.223*	0.258**	0.249**	-0.008	0.261 **
Sig.	0.603	0.428	0.067	0.034	0.042	0.944	0.033
TYPEPROD	0.128	-0.087	0.015	0.007	0.116	0.024	0.188
Sil!.	0.291	0.463	0.904	0.954	0.351	0.842	0.128
NUMPROD	-0.160	0.076	0.030	-0.108	-0.060	-0.229*	-0.279**
Sig.	0.186	0.518	0.805	0.380	0.631	0.055	0.022
NUMB RAND	-0.218*	-0.144	0.001	-0.065	-0.136	0.009	-0.091
Sig.	0.071	0.230	0.996	0.601	0.271	0.941	0.463
OWNLABEL	0.034	0.062	0.015	-0.177	0.010	-0.137	0.043
Sig.	0.790	0.612	0.904	0.161	0.936	0.265	0.734
4BUYER	-0.101	-0.197	-0.112	0.134	0.152	-0.031	-0.229*
Sil!.	0.438	0.118	0.389	0.308	0.245	0.812	0.079
R&DEXP	0.138	0.143	0.189	0.345**	0.203	0.046	0.356***
Sig.	0.315	0.284	0.168	0.010	0.136	0.736	0.008
MARKET	0.040	0.092	0.063	-0.015	-0.034	-0.103	0.164
Sig.	0.765	0.486	0.641	0.910	0.804	0.422	0.228
LOCCOMP	0.153	-0.180	0.277*	-0.051	0.090	0.192	0.165
Sil!.	0.288	0.194	0.054	0.730	0.542	0.172	0.261
REGCOMP	-0.429***	0.078	-0.069	0.029	0.198	-0.133	-0.095
Sil!.	0.002	0.573	0.637	0.845	0.177	0.348	0.520
DOMCOMP	0.128	0.155	-0.125	-0.041	-0.260*	-0.089	-0.135
Sil!.	0.374	0.262	0.393	0.781	0.074	0.530	0.362
FORCOMP	0.019	-0.034	-0.145	0.092	0.033	-0.027	0.041
Sig.	0.894	0.809	0.319	0.534	0.823	0.848	0.782
Experience fac.	-0.197	0.110	0.113	0.014	0.066	-0.187	-0.172
Sil!.	0.102	0.352	0.358	0.910	0.597	0.118	0.165
Interest factivit.	0.218*	0.387***	0.048	0.105	0.086	0.169	0.133
Sig.	0.069	0.001	0.696	0.396	0.491	0.159	0.285
Current exporter	0.360**	0.554***	-0.152	0.139	0.122	-0.116	0.154
Sig.	0.012	0.000	0.308	0.353	0.418	0.426	0.308
Intermittent exp	0.205	-0.160	-0.127	-0.022	-0.020	0.037	0.076
Sig.	0.172	0.268	0.407	' 0.886	0.899	0.807	0.624
Intermt/seasonal	0.076	-0.121	-0.071	0.011	0.008	-0.007	0.026
Sig.	0.617	0.402	0.641	0.945	0.959	0.963	0.868
Current wareho	0.014	-0.025	0.557***	0.244*	0.265*	0.360**	0.216
Sil!.	0.922	0.859	0.000	0.099	0.075	0.011	0.149
CurrentFDI	-0.076	-0.054	0.203	0.138	0.196	0.121	0.091
Sig.	0.606	0.704	0.171	0.354	0.191	0.408	0.547
Current Co-pak	-0.223	-0.205	0.402***	0.210	0.244	0.266*	-0.051
Sil!.	0.132	0.149	0.006	0.161	0.106	0.067	0.740
Current licensin	-0.005	-0.105	-0.005	-0.175	0.041	-0.101	0.235
Sig.	0.973	0.457	0.976	0.241	0.785	0.489	0.116
Source abroad	0.152	0.098	0.072	0.088	-0.004	-0.075	0.140
Sig.	0.216	0.419	0.563	0.481	0.972	0.539	0.261

APPENDIX 12. Correlation table for entry barriers and firm characteristics.

	Lack of infonnation	Lack of time	Price compe-tition	Tariff barriers	Other foreign barriers	Training! service inability	Small size	Other barriers
STATE	-0.039	-0.044	0.040	0.024	0.091	-0.038	-0.056	0.083
Sig.	0.695	0.656	0.682	0.810	0.352	0.700	0.569	0.398
TOTSALE	-0.047	-0.040	0.099	0.356***	0.194**	0.002	-0.227**	0.106
Sig.	0.638	0.685	0.318	0.000	0.049	. 0.981	0.021	0.285
SIC CODE	-0.140	0.109	-0.134	0.013	-0.044	-0.073	0.054	0.011
Sig.	0.153	0.267	0.170	0.898	0.655	0.459	0.584	0.911
TYPEPROD	0.023	0.096	-0.197**	-0.153	-0.008	-0.173*	0.080	-0.031
Sig.	0.815	0.327	0.043	0.118	0.935	0.076	0.412	0.752
NUMPROD	-0.085	-0.037	0.1 02	0.276***	0.093	0.084	-0.161*	-0.027
Sig.	0.384	0.709	0.297	0.004	0.345	0.390	0.099	0.782
NUMB RAN	-0.012	-0.195*'"	0.020	0.041	-0.001	0.073	-0.128	0.074
Sig.	0.901	0.047	0.842	0.679	0.991	0.461	0.197	0.454
OWNLABEL	-0.107	-0.207**	-0.116	0.136	-0.140	0.067	-0.028	0.135
Sig.	0.294	0.041	0.255	0.181	0.169	0.515	0.787	0.186
4BUYER	0.192*	-0.114	-0.175*	-0.233**	0.032	-0.043	0.096	-0.026
Sig.	0.070	0.283	0.098	0.027	0.767	0.684	0.368	0.807
R&DEXP	0.051	0.246**	-0.101	0.135	-0.067	0.327***	0.151	0.017
Sig.	0.648	0.027	0.932	0.229	0.555	0.003	0.179	0.881
MARKET	0.023	0.227**	-0.127	-0.118	-0.065	0.039	0.045	0.077
Sig.	0.832	0.035	0.244	0.277	0.554	0.723	0.684	0.481
LOCCOMP	0.118	-0.107	-0.163	-0.231 **	-0.232**	0.018	0.258**	0.027
Sig.	0.305	0.352	0.153	0.042	0.041	0.878	0.023	0.813
REGCOMP	-0.143	-0.044	-0.136	0.014	0.027	-0.070	0.038	-0.020
Sig.	0.211	0.699	0.236	0.900	0.812	0.540	0.738	0.862
DOMCOMP	-0.007	0.010	0.168	0.223**	0.211 *	0.093	-0.134	-0.097
Sig.	0.954	0.934	0.141	0.042	0.064	0.420	0.242	0.398
FORCOMP	-0.013	0.208*	0.174	0.030	0.035	-0.080	-0.263**	0.119
Sig.	0.910	0.068	0.127	0.797	0.761	0.484	0.020	0.297
ExpeL f.activ	-0.172*	0.026	0.204**	0.523***	0.214**	-0.050	-0.269***	0.180*
Sig.	0.077	0.792	0.036	0.000	0.028	0.607	0.005	0.065
Interest f.acti	0.220**	0.194**	0.132	0.191**	0.127	0.002	-0.227**	-0.009
Sig.	0.024	I 0.046	0.176	0.050	0.193	0.982	0.019	0.926
Current expor	0.161	0.097	0.200	0.155	0.212	0.039	0.033	-0.326**
Sig.	0.258	0.496	0.159	0.278	0.135	0.786	0.819	0.020.
Intennit expo	0.108	0.032	-0.010	-0.333**	0.040	-0.130	-0.092	0.210
Sig.	0.460	0.829	0.945	0.019	0.787	0.372	0.528	0.166
Intennt/seas	0.239*	0.041	0.045	-0.432***	-0.078	-0.101	0.043	-0.024
Sig.	0.099	0.779	0.758	0.002	0.595	0.492	0.771	0.869
Current wareh	-0.203	-0.017	-0.081	0.132	-0.112	0.278**	0.075	0.136
Sig.	0.152	0.904	0.572	0.355	0.436	0.048	0.601	0.340
Current FDI	-0.193	-0.233	0.047	-0.005	-0.118	-0.047	-0.173	0.366***
Sig.	0.175	0.100	0.745	0.971	0.411	0.745	0.225	0.008
Current co-pk	-0.245*	-0.182	-0.144	0.134	-0.117	I	-0.082	0.310**
Sig.	0.086	0.205	0.317	0.355	0.419		0.572	0.029
Current licen	-0.171	-0.206	-0.163	-0.064	0.228	-0.041	-0.153	0.292**
Sig.	0.231	0.146	0.252	0.653	0.108	0.774	0.284	0.038
NOTE abroad	0.092	0.170*	0.090	0.054	0.006	0.087	0.049	0.005
Sig.	0.365	0.093	0.374	0.595	0.957	0.393	0.628	0.964

NOTE. No mesure of association was computed because at least one variable is a constant

APPENDIX 13. Correlation table for Perception of Threat and Finn Characteristics.

	Threatened by foreign competition	Increase in foreign takeover	Lower foreign cost of business	More advanced foreil1:n tech.	Local exporters more compet.	Other reasons of threat
STATE	0.002	-0.255	0.055	-0.217	-0.400	-0.055
Sig.	0.981	0.307	0.827	0.387	0.100	0.827
TOTS ALE	0.118	0.125	-0.314	0.319	0.286	-0.194
Sig.	0.237	0.634	0.220	0.213	0.266	0.455
SIC CODE	-0.077	0.545**	-0.228	-0.125	-0.033	-0.046
Sig.	0.434	0.019	0.363	0.622	0.897	0.857
TYPEPROD	0.033	0.152	-0.033	-0.454*	-0.120	0.033
Sig.	0.738	0.546	0.896	0.059	0.637	0.896
NUMPROD	-0.120	0.089	-0.368	0.076	-0.070	0.019
Sig.	0.222	0.725	0.133	0.765	0.783	0.939
NUMB RAN	-0.129	0.299	-0.387	-0.063	0.540**	-0.139
Sig.	0.196	0.244	0.125	0.812	0.025	0.596
OWNLABEL	-0.206**	-0.511 **	0.004	-0.334	-0.508**	0.224
Sig.	0.043	0.043	0.989	0.205	0.045	0.403
4BUYER	0.056	-0.060	0.274	I	-0.297	-0.386
Sig.	0.599	0.826	0.304		0.265	0.140
R&DEXP	0.145	0.308	-0.229	I	-0.198	0.341
Sig.	0.203	0.246	0.393		0.461	0.196
MARKET	-0.003	-0.021	0.024	I	-0.254	-0.036
Sig.	0.975	0.941	0.931		0.360	0.897
LOCCOMP	-0.287**	0.038	-0.084	I	-0.077	0.047
Sig.	0.010	0.898	0.775		0.792	0.874
REGCOMP	0.094	-0.346	0.212	I	-0.272	0.250
Sig.	0.408	0.226	0.467		0.348	0.389
DOMCOMP	0.147	0.199	-0.329	I	0.358	-0.159
Sig.	0.196	0.494	0.251		0.209	0.587
FORCOMP	0.142	0.223	0.277	I	-0.019	-0.230
Sig.	0.212	0.443	0.338		0.949	0.429
Exper. f.activt	0.305***	0.051	-0.277	0.108	0.200	0.277
Sig.	0.002	0.841	0.265	0.668	0.426	0.265
Interest f.acti	0.197**	0.282	-0.219	0.086	0.158	0.219
Sig.	0.044	0.257	0.382	0.735	0.531	0.382
Current expor	0.186	I	I	I	I	I
Sig.	0.190					
Intermit expo	-0.075	-0.389	0.289	-0.218	-0.068	0.000
Sig.	0.607	0.152	0.297	0.435	0.810	1. 000
Intermtlseaso	-0.114	-0.312	0.231	-0.175	-0.055	0.000
Sig.	0.437	0.258	0.407	0.533	0.847	1.000
Current wareh	-0.031	-0.068	0.000	-0.134	-0.250	0.000
Sig.	0.828	0.810	1.000	0.635	0.369	1.000
Current FDI	0.061	-0.320	0.277	-0.105	-0.196	-0.277
Sig.	0.669	0.245	0.317	0.710	0.484	0.317
Current co-pk	-0.167	-0.207	0.175	-0.077	-0.145	-0.175
Sig.	0.247	0.478	0.549	0.794	0.621	0.549
Current licen	-0.040	-0.218	0.189	-0.071	-0.134	-0.189
Sig.	0.780	0.435	0.500	0.800	0.635	0.500
Source abroad	0.221**	-0.161	0.088	0.171	0.000	-0.614***
Sig.	0.028	0.523	0.729	0.496	1. 000	0.007

NOTE: I no me sure of association was computed because at least one variable is a constant

APPENDIX 14. C   lation table fc   ds of fc   tivit   dfi   h   terist'

	Need to be more active in foreign market	Local exporters are more competitive	Opportunities abroad	Forced by increasingly global markets	Other reasons of need for foreign activtv	Need for strategic alliances
STATE	0.190*	-0.194	-0.159	-0.354**	0.156	-0.014
Sig.	0.057	0.182	0.274	0.013	0.285	0.888
TOTS ALE	0.149	-0.069	-0.274*	0.293**	0.006	0.024
Sig.	0.143	0.641	0.059	0.043	0.966	0.815
SIC CODE	-0.218**	0.203	0.149	0.157	0.020	-0.214**
Sig.	0.028	0.161	0.306	0.283	0.890	0.033
TYPEPROD	-0.181*	0.036	0.186	-0.031	-0.069	-0.198**
Sig.	0.071	0.804	0.201	0.834	0.639	0.048
NUMPROD	0.103	-0.016	-0.196	0.215	0.160	-0.056
Sig.	0.305	0.912	0.178	0.137	0.271	0.581
NUMB RAN	0.059	-0:148	0.204	-0.064	-0.148	-0.159
Sig.	0.560	0.319	0.170	0.667	0.319	0.117
OWNLABEL	-0.025	-0.045	-0.247	-0.044	0.112	0.010
Sig.	0.813	0.768	0.102	0.772	0.463	0.925
4BUYER	-0.071	-0.112	0.175	0.013	-0.115	-0.093
Sig.	0.517	0.480	0.266	0.935	0.469	0.397
R&DEXP	0.231 **	0.558***	0.191	-0.034	0.036	0.100
Sig.	0.044	0.000	0.238	0.837	0.828	0.385
MARKET	0.032	0.198	0.264	-0.070	-0.036	0.041
Sig.	0.778	0.220	0.100	0.666	0.827	0.718
LOCCOMP	-0.347***	-0.055	0.185	-0.151	-0.176	-0.151
Sig.	0.002	0.751	0.281	0.380	0.305	0.202
REGCOMP	0.063	-0.186	-0.169	-0.139	0.186	-0.102
Sig.	0.595	0.278	0.324	0.419	0.277	0.389
DOMCOMP	0.165	0.134	-0.133	0.398**	0.081	0.141
Sig.	0.160	0.437	0.441	0.016	0.641	0.235
FORCOMP	0.250**	0.097	0.118	-0.129	-0.089	0.152
Sig.	0.032	0.574	0.493	0.452	0.606	0.199
Exper. for.act.	0.228**	0.237	-0.125	0.142	0.268*	0.107
Sig.	0.022	0.101	0.393	0.331	0.062	0.291
Interest f.acti	0.545***	0.076	0.118	-0.250*	0.086'	0.223**
Sig.	0.000	0.603	0.421	0.083	0.556	0.026
Current expor	0.356**	I	I	I	I	0.262*
Sig.	0.011					0.060
Intermit expo	0.157	-0.026	0.033	-0.413**	0.239	0.081
Sig.	0.288	0.891	0.861	0.023	0.203	0.578
Intermt/seaso	0.154	0.083	0.070	-0.302	0.126	0.000
Sig.	0.296	0.664	0.712	0.104	0.508	1.000
Current wareh	-0.181	0.114	0.217	0.185	-0.194	0.118
Sig.	0.209	0.550	0.249	0.327	0.303	0.406
Current FD I	-0.225	-0.073	0.093	0.162	-0.083	0.078
Sig.	0.117	0.702	0.626	0.391	0.663	0.583
Current co-pk	-0.274*	-0.092	0.139	0.245	-0.124	-0.099
Sig.	0.057	0.633	0.472	0.200	0.521	0.488
Current licen	-0.377***	I	I	I	I	0.011
Sig.	0.007					0.938
Source abroad	0.035	0.342**	0.126	0.210	0.038	0.225**
Sig.	0.736	0.017	0.392	0.152	0.798	0.026

NOTE: no mesure of association was computed because at least one variable is a constant

APPENDIX 15. C   I .   ble for Needs ofF   A ..   dB   d Th

	Need to be more active in foreign market	Local exporters are more competitive	Opportunities abroad	Forced by increasingly global markets	Other reasons of need for foreign activity	Need for strategic alliances
Barrier: lack of information	0.291 ***	0.317**	0.194	0.022	-0.047	0.125
Sig.	0.004	0.026	0.181	0.882	0.749	0.221
Barrier: lack of time	0.123	0.375***	0.238*	0.026	0.008	0.232**
Sig.	0.227	0.008	0.099	0.861	0.954	0.021
Barrier: price competition	0.052	0.168	-0.027	-0.142	0.223	0.102
Sig.	0.607	0.250	0.853	0.331	0:123	0.320
Barrier: tariff barriers	0.076	-0.084	-0.328**	0.277*	0.147	0.049
Sig.	0.453	0.565	0.021	0.054	0.314	0.635
Barrier: other foreign tariffs	-0.006	0.141	-0.210	0.258*	0.235	0.066
Sig.	0.950	0.332	0.148 .	0.073	0.105	0.519
Barrier: train/srv inability	0.057	0.315**	0.091	0.202	-0.070	-0.034
Sig.	0.574	0.027	0.533	0.164	0.635	0.738
Barrier: small size	-0.243**	0.197 0.175	0.105	0.038	-0.020	0.000
Sig.	0.015		0.4 71	0.796	0.893	1.000
Barrier: other barriers	-0.103	-0.141	0.067	-0. 168	0.014	-0.120
Sig.	0.312	0.332	0.648	0.249	0.923	0.239
Threatened by foreign competit	0.184 *	0.323**	-0.009	0.346**	-0.059	0.103
Sig.	0.068	0.027	0.955	0.017	0.693	0.312
Increase in foreign takeover	0.240	0.225	0.395	0.507*	-0.267	-0.290
Sig.	0.337	0.459	0.182	0.077	0.377	0.259
Lower foreign cost of business	-0.385	0.058	0.101	-0.433	0.228	0.167
Sig.	0.115	0.851	0.742	0.139	0.453	0.521
More advanced foreign tech.	0.150	0.527*	0.123	0.158	-0.083	..0.265
Sig.	0.551	0.064	0.689 '	0.606	0.787	0.304
Local exporters more competitive	0.227	0.133	0.234	0.300	-0.158	-0.182
Sig.	0.265	0.664	0.443	0.319	0.606	0.485
Other reasons of threat	0.385	-0.058	-0.101	0.058	-0.228	-0.426*
Sig.	0.115	0.851	0.742	0.851	0.453	0.088
Need for stratigic alliances	0.447***	-0.073	-0.124	0.104	0.130	1.000
Sig.	0.000	0.624	0.407	0.485	0.384	

APPENDIX 16. Parameter description for the categorical variables used in the logistic regression models.

Variable	Value	Frequency Model I & 2	Frequency ModelS	Parameter coding		
TOTSALE						
Fewer than $1 million	1	18	13	0	0	0
$1 to $9.9 million	2	21	12	1	0	0
$10 to $99.9 million	3	27	22	0	1	0
$100 to $499.9 million	4	9	6	0	0	1
TYPEPROD						
Perishable goods	0	23	16	0		
Non-perishable goods	1	52	37	1		
NUMPROD						
F ewer than 10	1	28	15	0	0	
10 to 99	2	33	20	1	0	
100 or more	3	24	18	0	1	
NUMB RAND						
F ewer than 10	1	59	44	0		
10 or more	2	16	9	1		

~

APPENDIX 17. CROSS-TABULATION TABLES

1. FIRM CHARACTERISTICS

1.1. STATE

		TOTAL SALES (million dollars)				TOTAL ASSETS (million dollars)			
		<1	1-9.9	10 - 99.9	100 - 499.9	<1	1-9.9	10 - 99.9	100 - 499.9
NEWYORK	COUNT	18	25	15	5	23	25	10	3
	PERCENT	64.3%	71.4%	41.7%	35.7%	63.9%	71.4%	37.0%	60.0%
PENNSYL VANIA	COUNT	10	10	21	9	13	10	17	2
	PERCENT	35.7%	28.6%	58.3%	64.3%	36.1%	28.6%	63.0%	40.0%
SIGNIFICANCE ı		9.487; 3; 0.023				7.988; 3' 0.046			

Pearson chi-:square; degrees of freedom; asymptotic significance

1.2. TOTAL SALES (million dollars)

		TOTAL ASSETS (million dollars)				PRODUCT TYPE		NUMBER OF PRODUCTS		
		<1	1-9.9	10 - 99.9	100 - 499.9	PERISHABLE	NON-PERISHABLE	< 10	10 - 99	>= 100
< 1	COUNT	26	1			2	26	17	8	3
	PERCENT	72.2%	2.9%			6.9%	31.0%	45.9%	19.0%	8.8%
1-9.9	COUNT	9	21	1		7	28	11	17	7
	PERCENT	25.0%	61.8%	3.7%		24.1%	33.3%	29.7%	40.5%	20.6%
10 - 99.9	COUNT		12	18	1	13	23	8	11	17
	PERCENT		35.3%	66.7%	20.0%	44.8%	27.4%	21.6%	26.2%	50.0%
100 - 499.9	COUNT	1		8	4	7	7	1	6	7
	PERCENT	2.8%		29.6%	80.0%	24.1%	8.3%	2.7%	14.3%	20.6%
SIGNIFICANCE ı		117,253; 9; 0.000				12.029; 3' 0.007		23.089; 6; 0.001		

Pearson chi-square, degrees of freedom; asymptotic significance

1.3. TOTAL ASSETS (million dollars)

		PRODUCT TYPE		NUMBER OF PRODUCTS		
		PERISHABLE	NON-PERISHABLE	< 10	10 - 99	>= 100
< 1	COUNT	5	31	20	12	4
	PERCENT	18.5%	40.8%	60.6%	29.3%	13.8%
1-9.9	COUNT	9	26	7	19	9
	PERCENT	33.3%	34.2%	21.2%	46.3%	31.0%
10 - 99.9	COUNT	10	17	6	9	12
	PERCENT	37.0%	22.4%	18.2%	22.0%	41.4%
100-499.9	COUNT	3	2		1	4
	PERCENT	11.1%	2.6%		2.4%	13.8%
SIGNIFICANCE[1] Pearson chi-square; degrees of freedom; asymptotic significance		7.418; 3; 0.060		24.317; 6; 0.000		

		SIC IDENTIFICATION CODE GROUP						
		Meat products	Dairy products	Fruits/vee:etab1	Mill products	Sue:ar products	Fats & oils	Miscellaneous
< 1	COUNT	2	2	9	4	6	1	12
	PERCENT	11.1%	50.0%	31.0%	50.0%	35.3%	50.0%	48.0%
1- 9.9	COUNT	5	1	14	4	4	1	6
	PERCENT	27.8%	25.0%	48.3%	50.0%	23.5%	50.0%	24.0%
10 - 99.9	COUNT	9		5		6		7
	PERCENT	50.0%		17.2%		35.3%		28.0%
100 - 499.9	COUNT	2	1	1		1		
	PERCENT	11.1%	25.0%	3.4%		5.9%		
SIGNIFICANCE[1] Pearson chi-square; degrees of freedom; asymptotic significance		24.918; 18; 0.127						

1.4. PRODUCT TYPE

		NUMBER OF PRODUCTS		
		FEWER THAN 10	1 0 TO 99	100 OR MORE
PERISHABEL	COUNT	2 5.4% 35 94.6%	16	12 35.3% 22
	PERCENT		35.6%	64.7%
NON-PERISHABLE	COUNT		29	
	PERCENT		64.4%	
SIGNIFICANCE I.			11.858; 2; 0.003	

Pearson chi-square; degrees of freedom; asymptotic significance

		SIC IDENTIFICATION CODE GROUP						
		Meat prod.	Dairv produc	Fruits/ve!!eta	Mill products	Sue:ar produ	Fats & oils	Miscellaneous
PERISHABEL	COUNT	19	3	6				2
	PERCENT	100.0%	75.0%	18.8%				6.5%
NON-PERISHABLE	COUNT		1	26	8	20	2	29
	PERCENT		25.0%	81.3%	100.0%	100.0%	100.0%	93.5%
SIGNIFICANCE I					76.905; 6; 0.000			

0\W

I Pearson chi-square; degrees of freedom; asymptotic significance

2. FOREIGN ACTIVITY EXPERIENCE

		TOT AL SALES (million dollars)				NUMBER OF PRODUCTS			INTEREST IN F.A.	
		<1	1-9.9	10 - 99.9	100 - 499.9	< 10	10 - 99	> 100	NO	YES
NO	COUNT	23	17	20	1	26	21	14	38	23
	PERCENT	82.1 %	48.6%	55.6%	7.1%	70.3%	46.7%	41.2%	88.4%	31.5%
YES	COUNT	5	18	16	13	11	24	20	5	50
	PERCENT	17.9%	51.4%	44.4%	92.9%	29.7%	53.3%	58.8%	11.6%	68.5%
SIGNIFICANCE I		21.751; 3; 0.000				7.048; 2; 0.029			35.095; 1; O.OOOH	

I Pearson chi-square; degrees of freedom; asymptotic significance

		SIC IDENTIFICATION CODE GROUP						
		Meat products	Dairy products	Fruits/vel!etabl	Mill products	SUl!ar products	Fats & oils	Miscellaneous
NO	COUNT	9	2	18	4	9	1	18
	PERCENT	47.4%	50.0%	56.3%	50.0%	45.0%	50.0%	58.1%
YES	COUNT	10	2	14	4	11	1	13
	PERCENT	52.6%	50.0%	43.8%	50.0%	55.0%	50.0%	41.9%
SIGNIFICANCE I		1.252; 6; 0.974						

Pearson chi-square; degrees of freedom; *asymptotic* significance

3. FOREIGN ACTIVITY INTEREST

		STATE		GROUP SURVEYED					NUMBER BRANDS	
		NEW YORK	PENNSYL VANIA	NYY	NYZ	NYL	PA	CNY	< 10	>= 10
NO	COUNT	31	12	7	7	9	12 -	8	36	7
	PERCENT	47.7%	23.5%	63.6%	36.8%	56.3%	23.5%	42.1%	39.1%	33.3%
YES	COUNT	34	39	4	12	7	39	11	56	14
	PERCENT	52.3%	76.5%	36.4%	63.2%	43.8%	76.5%	57.9%	60.9%	66.7%
SIGNIFICANCE		7.152; 1; 0.007		10.066; 4; 0.039					0.244; 1; 0.622	

Pearson chi-square; degrees of freedom; *asymptotic* significance

0\ ~

		TOTAL SALES (million dollars)				PRODUCT TYPE		NUMBER OF PRODUCTS		
		<1	1- 9.9	10 - 99.9	100 - 499.9	PERISHABLE	NON-PERISHABLE	< 10	10 - 99	>= 100
NO	COUNT	15	13	13	2	8	35	15	14	14
	PERCENT	53.6%	37.1%	36.1%	14.3%	26.7%	40.7%	40.5%	31.1%	41.2%
YES	COUNT	13	22	23	12	22	51	22	31	20
	PERCENT	46.4%	62.9%	63.9%	85.7%	73.3%	59.3%	59.5%	68.9%	58.8%
SIGNIFICANCEl		6.285; 3; 0.099				1.877; 1; 0.171		1.122; 2; 0.571		

I Pearson chi-square; degrees of freedom; asymptotic significance

		SIC IDENTIFICATION CODE GROUP						
		Meat products	Dairv products	Fruits/ve!!etabl	Mill prod ucts	Su!!ar products	Fats & oils	Miscellaneous
NO	COUNT	6	1	9	1	7	1	18
	PERCENT	31.6%	25.0%	28.1%	12.5%	35.0%	50.0%	58.1%
YES	COUNT	13	3	23	7	13	1	13
	PERCENT	68.4%	75.0%	71.9%	87.5%	65.0%	50.0%	41.9%
SIGNIFICANCE [1]		9.701; 6; 0.138						

[1] Pearson chi-square; degrees of freedom; asymptotic significance

4. FOREIGN MARKET ENTRY MODES

4.1. EXPORTING

		TOTAL SALES million dollars)				FOREIGN ACTIVITY INTEREST	
		<1	1-9.9	10 - 99.9	100 - 499.9	NO	YES
NO	COUNT		1		1	1	1
	PERCENT		5.6%		7.7%	20%	2.0%
NO, DONE IT BEFORE	COUNT		2	1		1	2
	PERCENT		11.1%	6.3%		20.0%	4.0%
YES	COUNT	5	15	15	12	3	47
	PERCENT	- 100.0%	83.3%	93.8%	92.3%	60.0%	94.0%
SIGNIFICANCE I		3.555; 6; 0.737				6.761; 2; 0.034	

1 Pearson chi-square; degrees of freedom; asymptotic significance.

4.2. INTERMITENT EXPORTING

		TOTAL SALES (million dollars)				NUMBER OF PRODUCTS		
		<1	1-9.9	10 - 99.9	100 - 499.9	FEWER THAN 10	10 - 99	100 OR MORE
NO	COUNT		8	10	10	4	13	13
	PERCENT		47.1 %	62.5%	83.3%	36.4	56.5%	68.4%
YES	COUNT	5	9	6	2	7	10	6
	PERCENT	100.0%	52.9%	37.5%	16.7%	63.6%	43.5%	31.6%
SIGNIFICANCE I		10.828; 3; 0.013				2.915; 2: 0.233		

Pearson chi-square; degrees of freedom; asymptotic significance

4.3. INTERMITENT *I* SEASONAL *I* DEMAND-ORIENTED EXPORTING

		TOTAL SALES million dollars)				NUMBER OF PRODUCTS			NUMBER OF BRANDS	
		<1	1-9.9	10 - 99.9	100 -499.9	< 10	10 - 99	> = 100	< 10	>= 10
NOT	COUNT	2	9	II	10	5	14	15	28	5
INTERMIT.	PERCENT	40.0%	52.9%	68.8%	83.3%	45.5%	60.9%	78.9%	68.3%	55.6%
SEASONAL	COUNT	2	5	3	1	4	6	2	10	
/CYCLICAL	PERCENT	40.0%	29.4%	18.8%	8.3%	36.4%	26.1%	10.5%	24.4%	
INTERMIT.	COUNT	1	3	2	1	2	3	2	3	4
	PERCENT	20.0%	17.6%	12.5%	8.3%	18.2%	13.0%	10.5%	7.3%	44.4%
SIGNIFICANCE I		4.380; 6; 0.625				3.863; 4; 0.425			9.643; 2; 0.008	

Pearson chi-square; degrees of freedom; asymptotic significance.

4.4. FOREIGN WAREHOUSES OR SALES OFFICIES

		STATE		TOTAL SALES (million dollars)				NUMBER OF PRODUCTS		
		NEW YORK	PENNSYLVANIA	<1	1- 9.9	10 - 99.9	100 - 499.9	< 10	10 - 99	> = 100
NO	COUNT	20	23	4	14	12	11	11	18	14
	PERCENT	69.0%	88.5%	80.0%	77.8%	75.0%	84.6%	100.0%	75.0%	70.0%
NO, DONE	COUNT	1	1	1	1				1	1
IT BEFORE	PERCENT	3.4%	3.8%	20.0%	5.6%				4.2%	5.0%
YES	COUNT	8	2		3	4	2		5	5
	PERCENT	27.6%	7.7%		16.7%	25.0%	15.4%		20.8%	25.0%
SIGNIFICANCE I		3.657; 2; 0.161		6.177; 6; 0.404				3.997; 4; 0.406		

I Pearson chi-square; degrees of freedom; asymptotic significance.

		SIC IDENTIFICATION CODE GROUP						
		Meat products	Dairy product	Fruits/vel!etab	Mill products	Suar product	Fats & oils	Miscellaneous
NO	COUNT	7	2	12	2	11	1	8
	PERCENT	70.0%	100.0%	85.7%	50.0%	100.0%	100.0%	61.5%
NO, DONE	COUNT				2			
IT BEFORE	PERCENT				50.0%			
YES	COUNT	3		2				5
	PERCENT	30.0%		14.3%				38.5%
SIGNIFICANCE I		34.505; 12; 0.001						

I Pearson chi-square; degrees of freedom; asymptotic significance

r

4.5. OWNERSHIP INTERESTS

		STATE		TOTAL SALES million dollars)			
		NEW YORK	PENNSYLVANIA	<1	1- 9.9	10 - 99.9	100 - 499.9
NO	COUNT	24	26	5	17	15	12
	PERCENT	82.8%	100.0%	100.0%	94.4%	93.8%	92.3%
YES	COUNT	5			1	1	1
	PERCENT	17.2%			5.6%	6.3%	7.7%
SIGNIFICANCE I.		4.931; 1; 0.026		0.403; 3; 0.940			

-re Pearson chi-square; degrees of freedom; asymptotic significance

4.6. CO-P ACKlNG

		STATE		TOTAL SALES (million dollars)				NUMBER OF PRODUCTS		
		NEW YORK	PENNSYLVANIA	<1	1-9.9	10 - 99.9	100 - 499.9	< 10	10 - 99	> = 100
NO	COUNT	21	25	5	15	13	12	11	20	15
	PERCENT	75.0%	96.2%	100.0%	88.2%	81.3%	92.3%	100.0%	87.0%	75.0%
YES	COUNT	7	1		2	3	1		3	5
	PERCENT	25.0%	3.8%		11.8%	18.8%	7.7%		13.0%	25.0%
SIGNIFICANCE 1		4.780; 1; 0.029		1.626; 3; 0.653				3.614; 2; 0.164		

0\ -J

I Pearson chi-square; degrees of freeoom; asymptotic significance

4.7. LICENSING

		TOTAL SALES million dollars)			
		<1	1- 9.9	10 - 99.9	100 - 499.9
NO	COUNT	5	17	16	11
	PERCENT	100.0%	94.4%	100.0%	84.6%
YES	COUNT		1		2
	PERCENT		5.6%		15.4%
SIGNIFICANCE I		3.498; 3; 0.321			

I Pearson chi-square; degrees of freedom; asymptotic significance

5. ENTRY MODES INTEREST

5.1. INTEREST IN INDIRECT EXPORT

		STATE		NUMBER OF BRANDS		INTEREST FOREIGN ACTIVITY		CURRENT EXPORT ACTIVITY		
		NY	PA	< 10	>= 10	NO	YES	NO	NO, DONE	YES
NOT INTERESTED	COUNT	5	4	4	5	1	8	2		6
	PERCENT	15.2%	10.8%	7.1%	38.5%	25.0%	12.1%	100.0%		13.6%
NOT Considered	COUNT	2	3	5		1	4			3
	PERCENT	6.1%	8.1%	8.9%		25.0%	6.1%			6.8%
SOME INTEREST	COUNT	15	7	19	2	2	20		2	15
	PERCENT	45.5%	18.9%	33.9%	15.4%	50.0%	30.3%		100.0%	34.1%
VERY INTERESTED	COUNT	11	23	28	6		34			20
	PERCENT	33.3%	62.2%	50.0%	46.2%		51.5%			45.5%
SIGNIFICANCE		7.251; 3; 0.064		10.319; 3; 0.016		4.907; 3; 0.179		14.086; 6; 0.029		

T Pearson chi-square; degrees of freedom; asymptotic significance

5.2. INTEREST IN DIRECT EXPORT

		STATE		EXPERIENCE FOREIGN ACT!.		INTEREST FOR. ACT.		CURRENT EXPORT ACTIVITY		
		NY	PA	NO	YES	NO	YES	NO	NO, DONE	YES
NOT INTERESTED	COUNT	6	1	1	6	2	5	2	1	3
	PERCENT	18.2%	2.4%	4.5%	11.5%	50.0%	7.1%	100.0%	50.0%	6.3%
NOT CONSIDERED	COUNT	2	3	3	2	1	4			2
	PERCENT	6.1%	7.3%	13.6%	3.8%	25.0%	5.7%			4.2%
SOME INTEREST	COUNT	10	11	10	11	1	20		1	10
	PERCENT	30.3%	26.8%	45.5%	21.2%	25.0%	28.6%		50.0%	20.8%
VERY INTERESTED	COUNT	15	26	8	33		41			33
	PERCENT	45.5%	63.4%	36.4%	63.5%		58.6%			68.8%
SIGNIFICANCE		5.975; 3; 0.113		8.258; 3; 0.041		11.790; 3; 0.008		21.420; 6; 0.002		

T Pearson chi-square; degrees of freedom; asymptotic significance

5.3. INTEREST IN WAREHOUSES AND SALES OFFICES ABROAD

		PRODUCT		CURRENT WAREHOUSE ACTIVITY			CURRENT CO-PACK ACTIV	
		PERISHABLE	NON-PERISHABLE	NO	NO, DONE	YES	NO	YES
NOT INTERESTED	COUNT	12	28	24	2	2	25	3
	PERCENT	66.7%	56.0%	68.6%	100.0%	20.0%	65.8%	37.5%
NOT CONSIDERED	COUNT	1	15	8			8	
	PERCENT	5.6%	30.0%	22.9%			21.1%	
SOME INTEREST	COUNT	4	1	1		4	3	2
	PERCENT	22.2%	2.0%	2.9%		40.0%	7.9%	25.0%
VERY INTERESTED	COUNT	1	6	2		4	2	3
	PERCENT	5.6%	12.0%	5.7%		40.0%	5.3%	37.5%
SIGNIFICANCE Pearson chi-square; degrees of freedom; asymptotic significance		11.512; 3; 0.009		24.133; 6; 0.000			10.650; 3; 0.014	

		SIC IDENTIFICATION CODE GROUP						
		Meat products	Dairv product	Fruits/vel!:etab	Mill products	SUl!:ar product	Fats & oils	Miscellaneous
NOT INTERESTED	COUNT	7	3	11	4	7	1	7
	PERCENT	70.0%	100.0%	55.0%	50.0%	63.6%	100.0%	46.7%
NOT CONSIDERED	COUNT			7	4	3		2
	PERCENT			35.0%	50.0%	27.3%		13.3%
SOME INTEREST	COUNT	2		1		1		1
	PERCENT	20.0%		5.0%		9.1%		6.7%
VERY INTERESTED	COUNT	1		1				5
	PERCENT	10.0%		5.0%				33.3%
SIGNIFICANCE Pearson chi-square; degrees of freedom; asymptotic significance		23.375; 18; 0.177						

5.4. INTEREST IN MINORITY OWNERSHIP INTERESTS ABROAD

		EXPERIENCE IN FOREIGN ACTIVITY		CURRENT WAREHOUSE ACTIVITY		
		NO	YES	NO	NO, DONE BEFORE	YES
NOT INTERESTED	COUNT	10	30	24	2	4
	PERCENT	47.6%	63.8%	66.7%	100.0%	44.4%
NOT CONSIDERED	COUNT	10	8	7		1
	PERCENT	47.6%	17.0%	19.4%		11.1%
SOME INTEREST	COUNT	1	7	4		3
	PERCENT	4.8%	24.9%	11.1%		33.3%
VERY INTERESTED	COUNT		2	1		1
	PERCENT		4.3%	2.8%		11.1%
SIGNIFICANCE	Pearson chi-square; degrees of freedom; asymptotic significance	7.942; 3; 0.047		- 5.597; 6; 0.470		

ȯˑʲ

		SIC IDENTIFICATION CODE GROUP						
		Meat products	Dairy product	Fruits/vel!.etab	Mill products	SUl!.ar product	Fats & oils	Miscellaneous
NOT INTERESTED	COUNT	9	2	11	4	6		8
	PERCENT	90.0%	66.7%	52.4%	50.0%	54.5%		57.1%
NOT CONSIDERED	COUNT	1		7	4	5		1
	PERCENT	10.0%		33.3%	50.0%	45.5%		7.1%
SOME INTEREST	COUNT		1	3			1	3
	PERCENT		33.3%	14.3%			100.0%	21.4%
VERY INTERESTED	COUNT							2
	PERCENT							14.3%
SIGNIFICANCE	Pearson chi-square; degrees of freedom; asymptotic significance	30.326; 18; 0.034						

.... .,ˉ.

5.5. INTEREST IN MAJORITY OWNERSHIP ABROAD

		EXPERIENCE IN FOREIGN ACTIVITY		CURRENT WAREHOUSE ACTIVITY		
		NO	YES	NO	NO, DONE BEFORE	YES
NOT INTERESTED	COUNT	12	32	25	2	5
	PERCENT	57.1 %	69.6%	73.5%	100.0%	50.0%
NOT CONSIDERED	COUNT	8	6	5		1
	PERCENT	38.1%	13.0%	14.7%		10.0%
SOME INTEREST	COUNT	1	2	1		1
	PERCENT	4.8%	4.3%	2.9%		10.0%
VERY INTERESTED	COUNT		6	3		3
	PERCENT		13.0%	8.8%		30.0%
SIGNIFICANCE Pearson chi-square; degrees of freedom; asymptotic significance		7.414; 3; 0.060		5.203; 6; 0.518		

		SIC IDENTIFICATION CODE GROUP						
		Meat products	Dairv oroduct	Fruits/vel!etab	Mill products	Sugar product	Fats & oils	Miscellaneous
NOT INTERESTED	COUNT	9	2	12	4	8		9
	PERCENT	90.0%	66.7%	60.0%	50.0%	66.7%		64.3%
NOT CONSIDERED	COUNT	1		6	4	3		
	PERCENT	10.0%		30.0%	50.0%	25.0%		
SOME INTEREST	COUNT		1	1				1
	PERCENT		33.3%	5.0%				7.1%
VERY INTERESTED	COUNT			1		1		4
	PERCENT			5.0%		8.3%		28.6%
SIGNIFICANCE Pearson chi-square; degrees of freedom; asymptotic significance		24.965; 15; 0.050						

5.6. INTEREST IN COPACKING

		TOTAL SALES (million dollars)				NUMBER OF PRODUCTS			EXPERIENCE FOREIGN ACTIVITY	
		<1	1-9.9	10 - 99.9	100 - 499.9	< 10	10 - 99	> = 100	NO	YES
NOT	COUNT	2	9	7	8	3	13	11	4	23
INTERESTED	PERCENT	16.7%	39.1%	31.8%	72.7%	16.7%	41.9%	50.0%	18.2%	46.9%
NOT	COUNT		5	3	1	2	5	2	4	5
CONSIDERED	PERCENT		21.7%	13.6%	9.1%	11.1%	16.1%	9.1%	18.2%	10.2%
SOME	COUNT	5	6	9	1	9	6	6	10	11
INTEREST	PERCENT	41.7%	26.1%	40.9%	9.1%	50.0%	19.4%	27.3%	45.5%	22.4%
VERY	COUNT	5	3	3	1	4	7	3	4	10
INTERESTED	PERCENT	41.7%	13.0%	13.6%	9.1%	22.2%	22.6%	13.6%	18.2%	20.4%
SIGNIFICANCE		16.002; 3; 0.078				7.935; 6; 0.243			6.819; 3; 0.078	

T Pearson chi-square; degrees of freedom; asymptotic significance

		CURRENT WAREHOUSE ACTIVITY			CURRENT COP ACKING ACTIVITY	
		NO	NO, DONE BEFORE	YES	NO	YES
NOT	COUNT	20	1	2	21	2
INTERESTED	PERCENT	54.1%	50.0%	20.0%	52.5%	25.0%
NOT	COUNT	5			4	1
CONSIDERED	PERCENT	13.5%			10.0%	12.5%
SOME	COUNT	7		4	9	1
INTEREST	PERCENT	18.9%		40.0%	22.5%	12.5%
VERY	COUNT	5	1	4	6	4
INTERESTED	PERCENT	13.5%	50.0%	40.0%	15.0%	50.0%
SIGNIFICANCE		9.198; 6; 0.163			5.332; 3; 0.149	

T Pearson chi-square; degrees of freedom; asymptotic significance

5.7. INTEREST IN LICENSING

		TOTAL SALES (million dollars)				NUMBER OF PRODUCTS		
		<1	1- 9.9	10 - 99.9	100 - 499.9	< 10	10 - 99	> = 100
NOT INTERESTED	COUNT	2	10	8	6	4	11	12
	PERCENT	16.7%	47.6%	40.0%	54.5%	23.5%	37.9%	57.1%
NOT CONSIDERED	COUNT	2	8	6	1	5	6	6
	PERCENT	16.7%	38.1%	30.0%	9.1%	29.4%	20.7%	28.6%
SOME INTEREST	COUNT	5	2	6	4	7	7	3
	PERCENT	41.7%	9.5%	30.0%	36.4%	41.2%	24.1%	14.3%
VERY INTERESTED	COUNT	3	1			1	5	
	PERCENT	25.0%	4.8%			5.9%	17.2%	
SIGNIFICANCEl		17.897; 9; 0.036				10.141; 6; 0.119		

I Pearson chi-square; degrees of freedom; asymptotic significance

6. FOREIGN MARKET ENTRY BARRIERS

6.1. LACK OF INFORMATION

		EXPERIENCE F.A.		INTEREST F.A.		INTERMITENT EXPORTER			CURRENT COP ACKING	
		NO	YES	NO	YES	NO	SEASONAL	YES	NO	YES
NO	COUNT	32	38	29	41	25	8	3	30	8
	PERCENT	58.2%	74.5%	80.6%	58.6%	80.6%	66.7%	50.0%	71.4%	100.0%
YES	COUNT	23	13	7	29	6	4	3	12	
	PERCENT	41.8%	25.5%	19.4%	41.4%	19.4%	33.3%	50.0%	28.6%	
SIGNIFICANCE I		3,146; 1; 0.076		5.123; 1; 0.024		2.799; 2; 0.247			3.008; l' 0.083	

Pearson chi-square; degrees of freedom; asymptotic significance

6.2. TIME

		NUMBER OF BRANDS		INTEREST IN FOREIGN ACTIVITY		SOURCE RAW MAT. ABROAD	
		< 10	10 OR MORE	NO	YES	NO	YES
NO	COUNT	56	16	29	43	43	25
	PERCENT	65.1%	88.9%	80.6%	61.4%	75.4%	59.5%
YES	COUNT	30	2	7	27	14	17
	PERCENT	34.9%	11.1%	19.4%	38.6%	24.6%	40.5%
SIGNIFICANCE₁		3.949; 1; 0.047		3.992; 1; 0.046		2.848; 1; 0.092	

Pearson chi-square; degrees of freedom; asymptotic significance.

6.3. PRICE COMPETITION

		PRODUCT		EXPER1ENCE IN FOREIGN ACTIVITY
		PERISHABLE	NON-PERISHABLE	NO YES 37 24 67.3% 47.1% 18 27 32.7%
NO	COUNT 10		51	52.9% 4.426; 1; 0.035
	PERCENT 40.0%		63.0%	
YES	COUNT	15	30	
	PERCENT 60.0%		37.0%	
SIGNIFICANCE ₁		4.123; 1; 0.042		

Pearson chi-square; degrees of freedom; asymptotic significance.

6.4. TARIFF BARRIERS

		TOTAL SALES (million dollars)				NUMBER OF PRODUCTS			EXPERIENCE FOREIGN ACTIVITY	
		<1	1-9.9	10 - 99.9	100 - 499.9	< 10	10 - 99	> = 100	NO	YES
NO	COUNT	23	22	18	5	27	29	13	49	20
	PERCENT	92.0%	68.8%	52.9%	41.7%	79.4%	67.4%	44.8%	89.1%	39.2%
YES	COUNT	2	10	16	7	7	14	16	6	31
	PERCENT	8.0%	31.3%	47.1%	58.3%	20.6%	32.6%	55.2%	10.9%	60.8%
SIGNIFICANCE₁		13.393; 3; 0.004				8.414; 2; 0.015			28.971; 1; 0.000	

₁ Pearson chi-square; degrees of freedom; asymptotic significance

....

r

		INTEREST FOREIGN ACTIVITY		INTERMITENT EXPORTER		INTERMITENT *I* SEASONAL EXPORTER		
		NO	YES	NO	YES	NO	SEASONAL	YES
NO	COUNT	28	41	6	12	7	6	5
	PERCENT	77.8%	58.6%	22.2%	54.5%	22.6%	50.0%	83.3%
YES	COUNT	8	29	21	10	24	6	1
	PERCENT	22.2%	41.4%	77.8%	45.5%	77.4%	50.0%	16.7%
SIGNIFICANCE ı		3.860; 1; 0.049		5.450; 1; 0.020		9.187; 2; 0.010		

ı Pearson chi-square; degrees of freedom; asymptotic significance.

6.5. OTHER REGULATIONS BY FOREIGN GOVERNMENTS

		TOT AL SALES 'million dollars)				EXPERIENCE IN FOREIGN ACTIVITY	
		<1	1-9.9	10 - 99.9	100 - 499.9	NO	YES
NO	COUNT	22	20	27	5	45	32
	PERCENT	88.0%	62.5%	79.4%	41.7%	81.8%	62.7%
YES	COUNT	3	12	7	7	10	19
	PERCENT	12.0%	37.5%	20.6%	58.3%	18.2%	37.3%
SIGNIFICANCE ı		10.972; 3; 0.012				4.844; 1; 0.028	

1 Pearson chi-square; degrees of freedom; asymptotic significance

6.6. TRAINING AND SERVICE INABILITY

		PRODUCT CATEGORY		CURRENT WAREHOUSE ACTIVITY		
		PERISHABLE	NON-PERISHABLE	NO	NO, DONE IN PAST	YES
NO	COUNT	23	80	39	2	9
	PERCENT	92.0%	98.8%	100.0%	100.0%	90.0%
YES	COUNT	2	1			1
	PERCENT	8.0%	1.2%			10.0%
SIGNIFICANCE ı		3.180; 1; 0.075		4.182; 2; 0.124		

I Pearson chi-square; degrees of freedom; asymptotic significance

6.7. SMALL COMPANY SIZE

		TOTAL SALES million dollars)				NUMBER OF PRODUCTS		
		< I	1 - 9.9	10 - 99.9	100 - 499.9	< 10	10 - 99	>= 100
NO	COUNT	13	19	23	I I	19	28	22
	PERCENT	52.0%	59.4%	67.6%	91.7%	55.9%	65.1%	75.9%
YES	COUNT	12	I3	I I	I	15	15	7
	PERCENT	48.0%	40.6%	32.4%	8.3%	44.1%	34.9%	24.1%
SIGNIFICANCE		6.048; 3; O. I 09				2.750; 2; 0.253		

Pearson chi-square; degrees of freedom; asymptotic significance

		EXPERIENCE IN FOREIGN ACTIVITY		INTEREST IN FOREIGN ACTIVITY	
		NO	YES	N~	~S
NO	I COUNT	29	40	18	51
	PERCENT	52.7%	78.4%	50.0%	72.9%
YES	l COUNT	26'	I I	18	19
	PERCENT	47.3%	21.6%	50.0%	27.1%
SIGNIFICANCE I		7.695; I; 0.006		5.466; 1; 0.019	

Pearson chi-square; degrees of freedom; asymptotic significance.

6.8. OTHER BARRIERS OF ENTRY

		EXPERIENCE F.Az		EXPORT ACTIVITy3			OWNERSHIP}		COPACKING3		LICENSING3	
		NO	YES	NO	NO, DONE	S	NO	S	NO	S	NO	YES
NO	COUNT	47	36		I	35	35	I	32	3	35	I
	PERCENT	85.5%	70.6%		50.0%	74.5%	76.1%	20.0%	76.2%	37.5%	74.5%	25.0%
YES	COUNT	8	15	2	I	12	II	4	10	5	12	3
	PERCENT	14.5%	29.4%	100.0%	50.0%	25.5%	23.9%	80.0%	23.8%	62.5%	25.5%	75.0%
SIGNIFICANCE I		3.442; 1; 0.064		5.549; 2; 0.062			6.833; I; 0.009		4.790; I; 0.029		4.345; I; 0.037	

Pearson chi-square; degrees of freedom; asymptotic significance. Experience in foreign activity. Current involvement in these entry modes.

7. PERCEIVED IMPORTANCE OF GLOBAL COMPETITION

7.1. THREATENED BY FOREIGN COMPETITION

		TOTAL SALES (million dollars)				EXPERIENCE F.A.2		INTEREST F.A.3		SOURCE ABROAD4	
		<1	1- 9.9	10 - 99.9	100 - 499.9	No	Yes	No	Yes	No	Yes
NO	COUNT	20	26	30	7	50	35	33	52	50	31
	PERCENT	87.0%	78.8%	88.2%	58.3%	92.6%	68.6%	91.7%	75.4%	89.3%	72.1%
YES	COUNT	3	7	4	5	4	16	3	17	6	12
	PERCENT	13.0%	21.2%	11.8%	41.7%	7.4%	31.4%	8.3%	24.6%	10.7%	27.9%
SIGNIFICANCE I		5.877; 3; 0.118				9.769; 1; 0.002		4.078; 1; 0.043		4.833; 1; 0.028	

Pearson chi-square; degrees of freedom; asymptotic sig.nificance. < Experience in Foreign Activity. ₃ Interest in Foreign Activity. ₄ Source raw materials abroad.

7.1.1. INCREASING NUMBER OF FOREIGN FIRMS ARE TAKING AWAY THEIR BUSINESS

SIC IDENTIFICATION CODE GROUP

		Meat products 2	Dairv Products	Fruits/ve etabl	Mill roducts	Su ar roducts		Fats & Oils	Miscellaneous
NO	COUNT	100.0%		7 2 77.8%	50.0% 2 I 2	22.2% 100.0%	50.0%		
	PERCENT				7.247; 4; 0.123				
YES	COUNT								2
	PERCENT								100.0%
SIGNIFICANCE I									

1 Pearson chi-square; degrees of freedom; asymptotic significance

7.1.2. FOREIGN FIRMS HAVE MORE ADVANCE TECHNOLOGY

PRODUCT TYPE

		PERISHABLE PRODUCTS 3		NON-PERISHABLE PRODUCTS
NO	COUNT	75.0% 1	25.0%	14 100.0%
	PERCENT			
YES	COUNT			
	PERCENT			
SIGNIFICANCE I			3.706; 1; 0.054	

I Pearson chi-square; degrees of freedom; asymptotic significance

7.1.3. LOCAL FIRMS ACTIVE IN FOREGN MARKETS ARE MORE COMPETITIVE

		NUMBER OF BRANDS	
		FEWER THAN 10 PRODUCTS	10 OR MORE PRODUCTS
NO	COUNT	14 87.5% 2 12.5%	
	PERCENT		
YES	COUNT		1
	PERCENT		100.0%
SIGNIFICANCE		4.958; 1; 0.026	

Pearson chi-square; degrees of freedom; asymptotic significance

7.1.4. OTHER REASONS OF FOREIGN THREAT

		FIRMS SOURCE RAW MATERIALS FROM ABROAD
		NO YES
NO	COUNT	2 11
	PERCENT	33.3% 91.7%
YES	COUNT	4 1
	PERCENT	66.7% 8.3%
SIGNIFICANCE		6.785; 1; 0.009

ōʊˀ

Pearson chi-square; degrees of freedom; asymptotic significance

7.2. NEED TO BE ACTIVE IN FOREIGN MARKETS

		STATE		PRODUCT TYPE		EXPERIENCE F.A		INTEREST F.A.	
		NY	PA	PERISHABLE	NON-PERISHABLE	NO	YES	NO	YES
NO	COUNT	32	18	8	42	31	19	31	19
	PERCENT	58.2%	39.1%	33.3%	54.5%	60.8%	38.0%	86.1%	29.2%
YES	COUNT	23	28	16	35	20	31	5	46
	PERCENT	41.8%	60.9%	66.7%	45.5%	39.2%	62.0%	13.9%	70.8%
SIGNIFICANCE		3.673; 1; 0.057		3.293; 1; 0.070		5.243; 1; 0.022		29.986; 1; 0.000	

Pearson chi-square; degrees of freedom; asymptotic significance

		SIC IDENTIFICATION CODE GROUP						
		Meat products	Dairv Products	Fruits/ve!?:etabl	Mill products	SU2ar products	Fats & Oils	Miscellaneous
NO	COUNT	6	2	12	3	6	1	18
	PERCENT	40.0%	50.0%	42.9%	37.5%	42.1 %	50.0%	72.0%
YES	COUNT	9	2	16	5	11	1	7
	PERCENT	60.0%	50.0%	57.1%	62.5%	57.9%	50.0%	28.0%
SIGNIFICANCE I		6.976; 6; 0.323						

I Pearson chi-square; degrees of freedom; asymptotic significance

		CURRENT EXPORT ACTIVITY INVOLVEMENT			CURRENT COP ACKING		CURRENT LICENSING	
		NO	NO, DONE BEFORE	YES	NO	YES	NO	YES
NO	COUNT	2	2 .	15	14	5	15	4
	PERCENT	100.0%	100.0%	32.6%	33.3%	71.4%	32.6%	100.0%
YES	COUNT			31	28	2	31	
	PERCENT			67.4%	66.7%	28.6%	67.4%	
SIGNIFICANCE I		7.094; 2; 0.029			3.668; 1; 0.055		7.094; 1; 0.008	

I Pearson chi-square; degrees of freedom; asymptotic significance.

		LACK OF *lNFORMATION2*		SMALL FIRM SIZE2		FOREIGN THREAT3		NEED ALLIANCES	
		NO	YES	NO	YES	NO	YES	NO	YES
NO	COUNT	39	10	27	22	44	6	38	9
	PERCENT	60.0%	29.4%	40.9%	66.7%	55.0%	31.6%	67.9%	22.5%
YES	COUNT	26	24	39	11	36	13	18	31
	PERCENT	40.0%	70.6%	59.1%	33.3%	45.0%	68.4%	32.1%	77.5%
SIGNIFICANCE I		8.355; 1; 0.004		5.839; 1; 0.016		3.369; 1; 0.066		19.210; 1; 0.000	

Pearson chi-square; degrees of freedom; asymptotic significance. ∟Barriers of entry to foreign markets. ₃Firm feels threatened by foreign competitiOn.

7.2.1. LOCAL FIRMS ACTIVE IN FOREGN MARKETS ARE MORE COMPETITIVE (COMPETITIVE NEED)

		SOURCE ABROAD2		LACK OF INFORMATIONJ		LACK OF TIME3		TRAINING INABILITy3		FOREIGN THREAr	
		NO	YES	NO	YES	NO	YES	NO	YES	NO	YES
NO	COUNT	27	17	26	19	30	15	44	1	33	10
	PERCENT	100.0%	81.0%	100.0%	82.6%	100.0%	78.9%	93.6%	50.0%	97.1%	76.9%
YES	COUNT		4		4		4	3	1	1	3
	PERCENT		19.0%		17.4%		21.1%	6.4%	50.0%	2.9%	23.1%
SIGNIFICANCE		5.610; 1; 0.018		4.924; 1; 0.026		6.877; 1; 0.009		4.868; 1; 0.027		4.807; 1; 0.027	

Pearson chi-square; degrees of freedom; asymptotic significance. ɪFirms sources raw materials from abroad. ₂Barriers of entry to foreign markets.
4 Firm feels threatened by foreign competition

7.2.2. NEED TO TAKE ADVANTAGE OF OPPORTUNITIES ABROAD

		TOTAL SALES (million dollars				LACK OF TIME2		TARIFF BARRIERS2	
		<1	1- 9.9	10 - 99.9	100 - 499.9	NO	YES	NO	YES
NO	COUNT		2	2	3	7	1	2	6
	PERCENT		15.4%	11.8%	37.5%	23.3%	5.3%	6.7%	31.6%
YES	COUNT	10	11	15	5	23	18	28	13
	PERCENT	100.0%	84.6%	88.2%	62.5%	76.7%	94.7%	93.3%	68.4%
SIGNIFICANCE ɪ		5.195; 3; 0.158				2.780; 1; 0.095		5.285; 1; 0.022	

Pearson chi-square; degrees of freedom; asymptotic significance. ₂Barriers of entry to foreign markets.

7.2.3. FORECED BY INCREASINGLY GLOBAL MARKETS

		TOTAL SALES (million dollars				STATE		INTEREST IN FOR. ACT.2	
		<1	1- 9.9	10 - 99.9	100 - 499.9	NY	PA	NO	YES
NO	COUNT	9	3	9	2	6	18		24
	PERCENT	90.0%	23.1%	52.9%	25.0%	28.6%	64.3%		52.2%
YES	COUNT	1	10	8	6	15	10	3	22
	PERCENT	10.0%	76.9%	47.1%	75.0%	71.4%	35.7%	100.0%	47.8%
SIGNIFICANCE ɪ		12.166; 3; 0.007				6,125; 1; 0.013		3.068; 1; 0.080	

Pearson chi-square; degrees of freedom; asymptotic significance. ₂Interest in foreign activity.

		INTERMITENT EXPORTS		TARIFF BARRIERS2		OTHER REGULA TIONS23		FOREIGN THREA T4		FOREIGN TAKEOVERs	
		NO	YES	NO	YES	NO	YES	NO	YES	NO	YES
NO	COUNT	3	10	18	6	20	4	21	3	3	
	PERCENT	21.4%	62.5%	60.0%	31.6%	57.1%	28.6%	61.8%	23.1%	42.9%	
YES	COUNT	11	6	12	13	15	10	13	10	4	6
	PERCENT	78.6%	37.5%	40.0%	68.4%	42.9%	71.4%	38.2%	76.9%	57.1%	100.0%
SIGNIFICANCE I		5.129; 1; 0.024		3.760; 1; 0.052		3.267; 1; 0.071		5.633; 1; 0.018		3.343; 1; 0.067	

1 Pearson chi-square; degrees of freedom; asymptotic significance. 7. Barriers of entry to foreign markets. 3 Other foreign regulations. 4 Firm feels threatened by foreign competition. 5 Increasing number of foreign firms are taking away their business

7.2.4. OTHER EXPLANATIONS FOR NEED TO ENTER FOREIGN MARKETS

		FOREIGN ACTIVITY EXPERIENCE	
		NO 19	YES
NO	COUNT	100.0%	25
	PERCENT		83.3%
YES	COUNT		5
	PERCENT SIGNIFICANCEI		16.7%

I Pearson chi-square; degrees of freedom; asymptotic significance

3.527; 1; 0.060

7.3. NEED STRATEGIC ALLIANCES

		SIC IDENTIFICATION CODE GROUP						
		Meat products	Dairv Droducts	Fruits/ve!!:etabl	Mill Droducts	Suar products	Fats & oils	Miscellaneous
NO	COUNT	7	1	13	4	13	1	18
	PERCENT	46.7%	25.0%	48.1%	50.0%	72.2%	50.0%	69.2%
YES	COUNT	8	3	14	4	5	1	8
	PERCENT	53.3%	75.0%	51.9%	50.0%	27.8%	50.0%	30.8%
SIGNIFICANCE I		6.676; 6; 0.352						

I Pearson chi-square; degrees of freedom; asymptotic significance

		PRODUCT TYPE		INTEREST FOREIGN ACTIVITY		CURRENT EXPORT INVOLVEMENT		
		PERISHABLE	NON-PERISHABLE	NO	YES	NO	NO, DONE BEFORE	YES
NO	COUNT	10	47	24	33	2	2	23
	PERCENT	40.0%	62.7%	72.7%	49.3%	100.0%	100.0%	47.9%
YES	COUNT	15	28	9	34 .			25
	PERCENT	60.0%	37.3%	27.3%	50.7%			52.1%
SIGNIFICANCE 1		3.930; 1; 0.047		4.971; 1; 0.026		4.012; 2; 0.135		

Pearson chi-square; degrees of freedom; asymptotic significance

		SOURCE RAW MATERIALS ABROAD		BARRIER: LACK OF TIME		OTHER REASONS NEED FOREIGN ACTIVITY	
		NO	YES	NO	YES	NO	YES
NO	COUNT	36	19	43	13	4	4
	PERCENT	66.7%	44.2%	65.2%	40.6%	33.3%	80.0%
YES	COUNT	18	24	23	19	8	1
	PERCENT	33.3%	55.8%	34.8%	59.4%	66.7%	20.0%
SIGNIFICANCE		4.928; 1; 0.026		5.294; 1; 0.021		3.085; 1; 0.079	

Pearson chi-square; degrees of freedom; asymptotic significance.

REFERENCES

Andersen, Otto. 1993. On the Internationalization process of firms: a critical analysis. *Journal of International Business Studies,* 24(2): 209-231.

Anderson, Erin and Hubert Gatignon. 1986. Modes of Foreign Entry: A Transaction Cost Analysis and Propositions. *Journal of International Business Studies, 17(3):* 1-26.

Bilkey, Warren. 1978. An attempted integration of the literature on the export behavior of firms. *Journal of International business studies,* 8 (Spring-Summer): 33-46

Bilkey, Warren. 1982. Variables Associated with Export Profitability. *Journal of International Business Studies,* 13(Fall): 39-55.

Bilkey, Warren. 1985. Development of Export Marketing Guidelines. *International Marketing Review,* 2(1): 31-40.

Birch, David. 1996. The world will beat a path to your door. *Inc,* 18(7): 21.

Bonaccorsi, Andrea. 1992. On the relationship Between Firm Size and Export Intensity. *Journal of International Business Studies,* 23(Fourth Quarter): 605-635.

Bourgeois, L. J. 1981. On the Measurement of Organizational Slack. *Academy of Management Review,* 6(1): 20-39.

Buzzell, Robert D. and Robert E. Nourse. 1967. *Product innovation in food processing,* 1954-1964. Boston: Harvard University.

Calof, lL. 1993. The Impact of Size on Internationalization. *Journal of Small Business Management,* 31(4): 60-69.

Cavusgil, Tamer, Warren Bilkey and George Tesar. 1979. A Note on the Export Behavior of Firms: Exporter Profiles. *Journal of International Business Studies,* (Spring/Summer): 91-97.

Cavusgil, Tamer and Erdener Kaynak. 1983. Success'Factors in Export Marketing: An Empirical Analysis. *Journal of International Marketing and Marketing Research,* 8(2): 63-73.

Cavusgil, S. Tamer. 1984. Differences Among Exporting Firms Based on Their Degree ofInternationalization. *Journal of Business Research,* 12(3): 1-14.

Connor, John M. 1983. Determinants of foreign direct investment by food and tobacco manufacturers. *American Journal of Agricultural Economics,* 65 (2). May: 395-404.

Contractor, F.J. 1990. Contractual and cooperative fonns of international business: Towards a unified theory of modal choice. *Management International Review,* 30(1): 31-54.

Cunningham, M.T. and R.I. Spiegel. 1971. A Study in Successful Exporting. *British Journal of Marketing,* 5(Spring): 2-12.

Czinkota, Michael and Barnard LaLonde. 1980. An Analysis of Export Development Strategies in Selected U.S. Industries. Working Paper No. 80-17, The Ohio State University.

Dillman, Don A. 1978. *Mail and Telephone Surveys: The Total Design Method.* New York: John Wiley and Sons" Inc.

Drake, Tracy and Caves, Richard. 1992. Changing detenninants ofJapanese foreign investment in the United States. *Journal of Japanese and International Economics,* 6: 228-246.

Dun & Bradstreet Infonnation Resources. 1989. *Standard Industrial Classification Manual.* January: 45-61.

Dunning, John H. 1988. The Eclectic Paradigm of International Production: A Restatement and Some Possible Extensions. *Journal of International Business Studies,* 19(5pring): 1-31.

Gatignon, Hubert and Erin Anderson. 1988. The Multinational Corporation's Degree of Control over Foreign Subsidiaries: An Empirical Test of a Transaction Cost Explanation. *Journal of Law, Economics, and Organization,* 4(2): 305-336.

Glesjer, Herbert, Alexis Jacquemin and Jean Petit. 1980. Exports in an Imperfect Competition Framework: An Analysis of 1,446 Exporters. *The Quarterly Journal of Economics,* 94(3): 507-524.

Hagen, James.] 997. *Determinants of Foreign Production by US Food Processing Firms: A Firm-Level Analysis.* Doctoral thesis. Champaign: University of Illinois.

Handy, Charles and Dennis R. Henderson. 1991. *Industry Organization and Global Competitiveness in Food Manufacturing.* OP-26. April.

Handy, Charles and D~nnis R. Henderson. 1992. Foreign Investment in Food Manufacturing. OP-41. Prepared for the International Agricultural Trade Research Consortium symposium *Competitiveness in International Food Markets,* Annapolis, MD, August 1992.

Henderson, Bruce. 1980. *Perspectives on Experience.* Ann Harbor, MI: The Boston Consulting Group.

Henderson, Dennis, Peter Voros and Joseph Hirschberg. 1993. Industrialdetenninants of international trade and foreign investment by food and beverage manufacturing finns. Paper presentation at NC-194 *Conference, Empirical Studies of Industrial Organization and Trade in the Food and Related Industries.* Indianapolis. April.

Henderson, D., Handy C. and Neff, S. 1996. *Globalization of the Processed Foods Market.* Agricultural Economic Report Number 742. United States Department of Agriculture. Washington, D.C.

Hennart, Jean-Francois. 1982. *A Theory of Multinational Enterprise.* Ann Arbor: University of Michigan Press.

Hennart, Jean-Francois. 1988. A transaction cost theory of equity joint ventures. *Strategic management Journal,* 9(4): 361-374.

Hennart, Jean-Francois. 1990. The transaction cost theory of the multinational enterprise. In C. Pitelis & R. Sugden, Eds., *The Nature of the Transnational Firm.* London: Routledge.

Hennart, Jean-Francois. 1991. The transaction costs theory of joint ventures: An empirical study of Japanese subsidiaries in the United States. *Management Science,* 37(4): 483-497.

Hennart, Jean-Francois and Young-Ryeol Park. 1994. Location, governance, and strategic detenninants of Japanese manufacturing investment in the United States. *Strategic Management Journal,* 15: 419-436.

Hill, Charles, Peter Hwang and W. Chan Kim. 1990. An Eclectic Theory of the Choice of International Entry Mode. *Strategic Management Journal,* 11: 117-128.

Hirsch, Seev. 1971. *The Export Performance of Six Manufacturing Industries: A Comparative Study of Denmark, Holland and Israel.* New York, NY: Praeger.

Horst, Thomas. 1974. *At home abroad: A study of the domestic and foreign operations of the American food-processing industry.* Cambridge, Mass: Ballinger.

Hosmer, David and Stanley Lemeshow. 1989. *Applied Logistic Regression.* New York: Jo1m Wiley & Sons.

Hunt, H.G., J.D. Froggatt and PJ. Hovell. 1967. The Management of Export Marketing in Engineering Industries. *British Journal of Marketing,* 1 (Spring): 10-24.

Julien, P., A. Joyal, L. Deshaies and C. Ramangalahy. 1997. A Typology of Strategic Behavior Among Small and Medium-sized Exporting Businesses. A Case Study. *International Small Business Journal,* 15 (2): 33-50. London.

Katsikeas, Constantine and N. F. Piercy. 1993. Long-tenn Export Stimuli and Finn Characteristics in a European L.D.C. *Journal of International Marketing, 1(3):* 23-47.

Katsikeas, Constantine, Shengliang Deng and Lawrence W ortzel. 1997. Perceived Export Success Factors of Small and Medium-Sized Canadian Finns. *Journal of International Marketing,* 5(4): 53-72.

Kennedy, Peter. 1993. *A Guide to Econometrics.* Third Edition, The MIT Press, Cambridge, Massachusetts.

Kirpalani, V.H. and N.B. MacIntosh. 1980. International Marketing Effectiveness of Technology-Oriented Small, Finns. *Journal of International Business Studies,* (Winter): 81-90.

Kleinschmidt, E.J. and R.G. Cooper. 1984. A Typology of Export Strategy Applied to the Export Perfonnance of Industrial Finns. In Kaynak, E. (ed.), *International Marketing Management,* Toronto: Praeger.

Klein, Saul, Gary Frazier and Victor Roth. 1990. A Transaction Cost Analysis Model of Channel Integration in International Markets. *Journal of Marketing Research,* 27(May): 196-208.

Kogut, Bruce and Chang, Sea-Jingo 1991. The effect of national culture on the choice of entry mode. *Journal of International Business Studies,* 19(3): 411-432.

Koh, Anthony and Robert Robicheaux. 1988. Variations in Export Perfonnance due to Differences in Export Marketing Strategy: Implications for Industrial Marketers. *Journal of Business Research,* 17: 249-258.

Liouville, Jacques. 1992. Under what Conditions can Exports Exert a Positive Influence on Profitability? *Management International Review,* 32(1): 41-53.

Lyon, Jesse and Catherine Durham. 1994. MGB Marketing: Export Case Study. Department of Agricultural Economics, CS-94-6. West Lafayette, IN: Purdue University.

Lyon, Jesse Dean. 1995. Direct and Indirect Exports of Processed Fruit: An Industry and Finn Level Analysis. *Master's Thesis.* West Lafayette, IN: Purdue University.

Maddala, G.S. 1983. *Limited dependent and qualitative variables in econometrics.* Cambridge: Cambridge University Press.

Malette, H., J.M. Denis and D. Beliveau. 1988. La Perfonnance a l'Exportation, une Consolidation des Evidences Empiriques. University of Ottawa, Working Paper 88-28.

Miesenbock, KJ. 1988. Small Business and Exporting: A Literature Review. *International Small Business Journal,* 6(2): 42-61.

Munro, Hugh and Paul Beamish. 1987. Distribution Methods and Export Performance. In Philip Rosson and Stan Reid, editors, *Managing export entry and expansion.* New York: Praeger.

Pavord, W.e. and R.G. Bogart. 1975. The Dynamics of the Decision to Export. *Akron Business and Economic Review,* 6(1): 6-11.

Reed, Michael and Yulin Ning. 1996. Foreign investment strategies of US multinational firms. In Sheldon, Ian M. and Philip C. Abbot (Eds.) *Industrial organization and trade in the food industries.* Boulder: Westview Press.

Ringe, James, Donald Graves and Bruce Hansen. 1987. Characteristics and Marketing Methods of Kentucky Hardwood Lumber Exporters. *Forest Products Journal,* 37(5): 31-34.

Root, Franklin. 1994. *Entry Strategies for International Markets.* New York, NY: Lexington Books.

Rosson, Philip and Stan Reid. 1987. Managing export entry and expansion: An overview. In Philip Rosson and Stan Reid, editors, *Managing export entry and expansion.* New York: Praeger.

Roth, K. 1992. Implementing International Strategy at the Business Unit Level: The Role of Managerial Decision-Making Characteristics. *Journal of Management,* 18(4): 769-789.

Rugman, A.M. and A. Verbeke. 1992. A note on the transnational solution and the transaction cost theory of multinational strategic management. *Journal of International Business,* 23(4): 761-771.

Shane, S.A. 1992. The effect of cultural differences in perception of transaction costs on national differences in the preference of licensing. *Management International Review,* 32(4): 295-311.

Shane, S.A. 1993. The effect of cultural differences in perception of transaction costs on national differences in the preference for international joint ventures. *Asia Pacific Journal of Management,* 10(1): 57-69.

SPSS, Inc. 1993. *SPSSfor Windows: Base system User's Guide.* Release 6.0. Chicago: SPSS Inc.

Stems, James and Christopher Peterson. 1996. The Propensity to Enter and Exit Export Markets: A Mail Survey of Smaller Agri-Food Firms in Michigan. *Staff Paper 96-30.* Department of Agricultural Economics, Michigan State University, East Lansing, Michigan.

Stopford, John M. and Louis T. Wells. 1972. *Managing in the multinational enterprise.* New York: Basic Books.

Van Hoorn, T. P. 1979. Strategic planning in small and medium-sized companies. *Long Range Planning,* 12(2): 84-91.

West, Don and Odette Vaughan. 1995. Globalization and the Food and Beverage Processing Industry. *Canadian Journal of Agricultural Economics,* 43(4): 565-578.

Wiedersheim-Paul, Finn, Hans Olson and Lawrence Welch. 1978. Pre-Export Activity: The First Step in Internationalization. *Journal of International Business Studies,* 9(Spring/Summer): 47-58. ,

Yaprak, Attila. 1985. A Empirical Study of the Differences between Small Exporting and Non-Exporting US Firms. *International Marketing Review,* (Summer): 72-83.

Young, Stephen, James Hamill, Colin Wheeler and Richard Davies. 1989. *International market entry and development.* Englewood Cliffs, NJ: Prentice-Hall.

Zacharakis, Andrew. 1997. Entrepreneurial Entry Into Foreign Markets: A Transaction Cost Perspective. *Entrepreneurship Theory and Practice,* 21(3): 23-39.

OTHER A.R.M.E. RESEARCH BULLETINS

B8..N2		Ee..(lf . applicable)	Author(s)
99-06	Impact of Generic Fluid Milk and Cheese Advertising on Dairy Markets, 1984-98		Kaiser, H.M. and C. Chiambalero
99-05	Impact of Generic Milk Advertising on New York State Markets		Kaiser, H.M. and C. Chung
99-04	Optimal Temporal Policies in Fluid Milk Advenising		Vande Kamp, P.R. and H.M.Kaiser
99-03	Commodity Promotion Programs in the United States "		Vande Kamp, P.R. and H.M. Kaiser
99-02	Employee Compensation and Satisfaction on Dairy Farms in the Northeast	($10 ea.)	Fogleman, S.L., R.A. Milligan, T.R. Maloney and W.A. Knoblauch
99-01	Economics of Drip Irrigation for Juice Grape Vineyards in New York State		Cuykendall, C.H., G.B. White, B.E. Shaffer, A.N. Lakso and R.M. Dunst
98-1 0	Distribution of Gains from Research and Promotion in Multi-Stage Production Systems: Further Results		Chung, C. and H.M. Kaiser
98-09	Structural and Marketing Changes in U.S. Retailing, 1987-1997, Foundation for the Future	($25 ea.)	Weaver, R.V.
98-08	Focus on People: Marketing and Performance Benchmarks for the Fresh Pr<;>duce Industry		McLaughlin, EW., K. Park, D.J. Perosio, G.M. Gr.een
98-07	Economics of Drip Irrigation for Apple Orchards in New York State		White, G.B. and C. Cuykendall
98-06	Dairy Farm Management Business Summary, New York State, 1997	,	Knoblauch, W.A. and L.D. Putnam
98-05	Normative Estimates of Class I Prices Across U.S. Milk Markets	($15 ea.)	Pratt, J.E, P.M. Bishop, EM. Erba, A.M. Novakovic and M.W. Stephenson
98-04	Impact of National Generic Dairy Advertising on Dairy Markets, 1984-97		Kaiser, H.M.