

**INTERNATIONAL SUPPLIER CHARACTERISTICS
ASSOCIATED WITH SUCCESSFUL LONG-TERM
BUYER/SELLER RELATIONSHIPS**

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There is a trend in logistics management toward long-term relationships between buyers and sellers. This trend is a departure from the traditional relationship, which is based on individual orders.¹ The greater stability afforded by long-term relationships encourages suppliers to invest in improvements in product quality and customer service. Strict product quality and customer service standards are increasingly required by buyers adopting tight inventory management policies and production planning schedules.²

This research extends the logistics literature on long-term buyer/seller relationships to the context of international sourcing. The importance of this extension is substantiated in Robeson,³ who identified international sourcing as a major trend in logistics management. Long-term relationships with foreign suppliers allow U.S. buyers to take advantage of locational economies provided by low-wage areas or by proximity to sources of raw materials.⁴

The current literature reflects these trends. A growing number of articles address the issue of long-term relationships. Wagner examines the role of carrier service on buyer/seller relationships,⁵ while two recent articles explore issues related to supply chain management.^{6,7} Young⁸ and Hellberg and Engh⁹ discuss the importance of buyer/seller relations on materials supply effectiveness.

The literature on international logistics also is expanding. Bowersox and Sterling,¹⁰ and Anderson¹¹ encourage integration in international distribution, while comprehensive models in international logistics are available in Stock and Lambert¹² and in Cook and Burley.¹³ Obstacles to international distribution are discussed in

Marr¹⁴ and in Nelson and Toledano.¹⁵ A recent paper by Fawcett and Closs¹⁶ demonstrated the importance of firm perception of economic globalization as key to taking advantage of global resources in the logistics and manufacturing processes. Interestingly, these researchers revealed that this perception is typically heightened by competitive threats in their particular industries, rather than by a general awareness of economic globalization.

However, with two notable exceptions, little has been published on long-term relationships with foreign suppliers. Houlihan¹⁷ investigated international supply chains, while Ellram¹⁸ examined the reasons why firms enter into a formal international strategic alliance. The latter article also explored the main characteristics of international strategic alliances.

Specifically, this research identifies factors that help predict whether a long-term relationship with a foreign supplier is likely to succeed. The premise of the research is that a relationship with a foreign supplier is more likely to succeed if the foreign supplier is already exporting successfully. Successful exporters have already overcome many of the hurdles related to the development of export programs and hence are more likely to fulfill a long-term contract.

Identifying the characteristics of successful exporters also allows astute buyers to seek out relationships with potential suppliers who currently lack but want to acquire some of those characteristics. The buyer may then cement a long-term relationship by providing the necessary assistance to prospective foreign suppliers. This has been the policy of some pioneering global firms, such as Sweden's Ikea.¹⁹

This research identifies six predictors of export success that may be employed by U.S. buyers seeking to establish successful relationships with foreign suppliers. The six significant predictors account for a greater percentage of the variance in export success than reported in previous studies. The predictors underscore the paramount importance of exporter attitudes, rather than of any specific business policy or other set of company characteristics. By focusing on suppliers from developing countries, the research points to sources whose importance for many U.S. industries is likely to continue to increase in years to come.

Since the data for this study are cross-sectional, it may be argued that the analysis could not directly test the actual process of development of long-term relationships over time. However, the predictors in this study correspond to factors found in prior logistics studies explaining the development of long-term international relationships involving U.S. firms. More specifically, Ellram's²⁰ results indicate

that logistics, operational, and marketing reasons are fundamental to the establishment of enduring relationships. The results presented in the present study confirm that these three dimensions are also important to explain export success. Thus the existing literature suggests that these three dimensions constitute the ingredients of both long-term relationships and of export success.

STRATEGIES FOR SELECTING POTENTIAL FOREIGN SUPPLIERS

Buyers have two basic options for long-term relationships with foreign suppliers. First, they may look for local suppliers and help them build an export capability. This option, however, often entails significant investments of time and capital before a supplier is capable of consistently delivering the required level of product quality and customer service. This option also is risky because it is difficult to anticipate whether the supplier will eventually develop as expected.

Second, buyers may opt to work with foreign firms that are already exporting. Such firms require considerably less support from their clients because they have already demonstrated a capability to export and the commitment needed to overcome the initial hurdles. The key task in this second option is to identify exporters who will be able to sustain a long-term commitment to supply a U.S. buyer. The identification of such exporters as potential suppliers to U.S. firms is the goal of this research.

INGREDIENTS OF SUCCESSFUL INTERNATIONAL BUYER/SELLER RELATIONSHIPS

Achieving good relationships with foreign suppliers is more difficult than with domestic suppliers. There is not only greater physical distance separating buyer and seller, but also language and cultural differences, as well as variations in business norms and practices. Therefore, conflicts are more likely to arise in international sourcing, at times leading to interruption of the relationship.²¹

For the above reasons, good international buyer/seller relationships are only established over fairly long periods of time. A supplier must prove that it can establish good communication and maintain mutually adaptive relationships with buyers.²² This is important, because suppliers' adherence to quality and service specifications

will be more favorably rated the more they are perceived as committed to customer service and to responding to customer demands. Close, frequent, and informal contacts are associated with higher level of sales and market share.²³

Astute buyers may contribute to the success of long-term buyer/seller relationships by helping foreign suppliers to learn and master the keys to continued export success. Sellers often require assistance to overcome obstacles related to export success. Operational and infrastructure related obstacles such as delays in air or maritime transportation and bureaucratic red tape are among the problems most frequently encountered by exporters.²⁴ Some studies also note that exporters face marketing obstacles related to gathering information on potential clients and needs, meeting stiff competition, and selecting appropriate channels of distribution.^{25,26,27,28}

METHODOLOGY

The characteristics that distinguish successful from unsuccessful exporters were determined from a cross-national survey of firms that had established supply relationships with U.S. clients. This section reports the data collection process, defines the variables used in the study, and describes the method used for the data analysis.

Data Collection

The data for this research were obtained from a random sample of firms engaged in nontraditional exports from five Central American nations (Costa Rica, El Salvador, Guatemala, Honduras, and Panama). Nontraditional exports exclude nonprocessed agricultural products such as coffee or fruit that in the past comprised the majority of exports from that region.

A complete census of nontraditional exporters was secured from the central bank or the customs administration of each nation. There were 607 firms involved in nontraditional exports. They were grouped into five export volume strata in each country. Approximately 69 exporters were selected from each country by means of a proportionally stratified random sample. Of 343 firms contacted, 285 (83%) agreed to be interviewed, of which 259 were still exporting at the time of the interview. Of those, 195 firms exported to the U.S. The results of this research

concern the subsample of 132 firms which pointed to the U.S. as their main export market.

The data were obtained in structured personal interviews. Nonresponse bias is negligible, since the refusal rate was just 17%. Table 1 shows the industry representation in the U.S. subsample, which is quite broad. It is important to note that the sample did not include firms whose exports consisted solely of transfers between branches or subsidiaries of multinational firms. It concerned autonomous exporters establishing supply links with U.S. clients.

TABLE 1

INDUSTRY REPRESENTATION IN THE SAMPLE

<u>Industry</u>	<u>Count</u>	<u>Row %</u>
Processed Foods	31	23.5
Processed Lumber	31	23.5
Apparel	15	11.4
Yarns	14	10.6
Cigarettes	12	9.1
Chemicals	10	7.6
Plastics/Rubber	8	6.1
Metals	7	5.3
Others	<u>4</u>	<u>3.0</u>
Total	132	100.0

Four basic considerations support Central America as an appropriate choice for the survey. First, there are cost incentives to source products from Central America. Labor costs are lower than in North America, Europe, and most of Asia. Further incentives are provided by the U.S. government, which allows duty free entry for numerous nontraditional goods from the region. In fact, despite some lingering negative perceptions held by U.S. purchasers,²⁹ the region's nontraditional exports have increased quite markedly, particularly in labor intensive sectors.³⁰ Second, economic integration with Central American countries is likely to follow confirmation

of free trade agreements with Mexico—the region is already taking steps toward forming a free trade area with Mexico. Third, countries in Central America are reasonably homogeneous, which allows for greater comparability of results whenever multicountry data are collected.

Fourth, there is a lack of sourcing studies done in developing countries and in this region. The review of the literature revealed that only three studies have analyzed data on export performance of firms in developing countries. This research provides an opportunity to compare cross-national results with those obtained in other regions of the world. In general, results are consistent with findings of studies conducted in other parts of the world, notably in Europe and in Australia. The research also contributes some newly discovered relationships that further support the importance of customer service performance as a criterion for supplier selection.

Measurement of Export Success

The dependent variable in this research is export success. The international business literature offers a research tradition for the measurement of export success. The measures used in this paper are derived from this tradition, which is discussed below. A summary of the key measures and their sources in the literature is presented in Figure 1. In addition, Figure 2 presents the individual items used in the export success scale.

While most empirical studies have measured export success according to a single criterion, a multidimensional approach is more appropriate. The reason is that different dimensions of performance reflect distinct and equally important aspects of the firm.^{31,32} Three of the most cited measures of export success are described below:

1. *Export Volume*. Has been commonly used as a descriptor of the scale of export operations of the firm.^{33,34,35,36,37} Size may afford scale and experience advantages.^{38,39,40}
2. *Export Intensity*. Measured as percentage of sales derived from exports. It has been used as a proxy for the degree to which a firm has already internationalized itself.^{41,42,43,44}
3. *Export Profitability*. In the short run, a company may incur losses in order to break into foreign markets or to earn hard currency. In the long run, management commitment and investment will falter unless export operations are seen as profitable.⁴⁵

FIGURE 1

**LITERATURE SOURCES FOR MEASURES OF EXPORT
SUCCESS AND PREDICTORS**

Export Success

Volume	Axinn 1988; Bodur 1986; Cavusgil 1984a; Cavusgil 1984b; Karafakioglu 1986
Intensity	Axinn 1988; Cooper & Kleinschmidt 1985; Diamantopoulos & Inglis 1988; Kirpalani & Macintosh 1980
Profitability	Bilkey 1982; ⁴⁶ Madsen 1989

Organizational Characteristics and Competencies

Commitment	Axinn 1988; Barrett & Wilkinson 1985; Christensen et al. 1987; Cooper & Kleinschmidt 1985; Diamantopoulos & Inglis 1988; Kirpalani & Macintosh 1980; Piercy 1981; ⁴⁷ Eshghi 1992
Firm Size	Cavusgil 1984b; Cavusgil & Nevin 1981; ⁴⁸ Christensen et al. 1987; Denis & Depleteau 1985; ⁴⁹ Diamantopoulos & Inglis 1988; Madsen 1989; Reid 1982
Export Experience	Cavusgil 1984b; Denis & Depleteau 1985; Diamantopoulos & Inglis 1988; Madsen 1989; Reid 1982; Cooper & Kleinschmidt 1985

Perceived Operational Problems

Logistical	Bodur 1986; Barrett & Wilkinson 1985
Bureaucracy	Bodur 1986; Barrett & Wilkinson 1985; Christensen et al. 1987; Karafakioglu 1986; Reid 1983
Channel Design	Bello & Williamson 1985; ⁵⁰ Bilkey 1982; Bodur 1986; Diamantopoulos & Inglis 1988; Karafakioglu 1986

FIGURE 1 (Continued)**Perceived Operational Problems (Continued)**

Buyer/Seller Communication and Relationships	Czinkota & Johnson 1983; ⁵¹ Jackson 1985; Rosson & Ford 1982
Information About Foreign Markets	Bodur 1986; Bodur & Cavusgil 1985; Czinkota & Johnson 1983; Keng & Jiuan 1989; ⁵² Reid 1984

Export Marketing Strategies

Low Cost; Low/ Competitive Price	Christensen et al. 1987; Kirpalani & Macintosh 1980; Wortzel & Wortzel 1981 ⁵³
Product Quality/ Adaptation	Cooper & Kleinschmidt 1985; Cavusgil 1984a; Cavusgil & Nevin 1981; Kirpalani & Macintosh 1980; Madsen 1989
Channel Control	Bello & Williamson 1985; Ford 1983; Jackson 1985; Wortzel & Wortzel 1981 & 1988 ⁵⁴
Use of Formal Market Research Studies	Cavusgil 1984a; Christensen et al. 1987; Diamantopoulos & Inglis 1988; Karafakioglu 1988
Use of Informal Sources of Market Information	Denis & Depleteau 1985; Karafakioglu 1986; Reid 1984
Use of Services of Export Assistance Organizations	Brezzo and Perkal 1983; Denis and Depleteau 1985; Karafakioglu 1986; Reid 1984
Customer Service	Aaby and Slater 1989

FIGURE 2

**ITEMS USED TO MEASURE EXPORT
SUCCESS AND PREDICTORS**

Dependent Variable

1. Export Success
 - percent of sales exported
 - margins obtained
 - dollar volume exported

Organizational Characteristics and Competencies

1. Commitment
 - expanded production capacity to supply export market
 - built plant or established firm to supply export market
 - optimistic expectations of opportunities in export markets
2. Firm Size
 - number of employees
3. Export Experience
 - number of years exporting
4. Perception of Export Markets
 - do not perceive export markets as riskier than domestic
 - perceive export customers as demanding higher quality

Perceived Operational Problems

1. Logistical
 - late delivery by carriers (air & maritime)
 - handling of delays and returns
2. Bureaucracy
 - problems obtaining tax related documentation
 - problems obtaining banking related documentation
3. Channel Design
 - problems selecting intermediaries
 - intermediaries with exclusive territories, products, or customers
 - intermediaries keeps inventory and collects bills

FIGURE 2 (Continued)

4. Buyer/Seller Relations
 - problems solving shipping disputes
 - problems negotiating prices
 - problems being paid on time
 - problems making initial contacts
 - problems closing the first sale
5. Market Information
 - problems determining required quality levels
 - problems obtaining target market information
 - problems determining market prices
 - problems finding competitive information
 - problems determining customer service levels

Export Marketing Strategies

1. Product Quality and Adaptation
 - strategy based on product quality
 - designing products specifically for export market
 - branding product specifically for export market
2. Price/Cost Based Strategy
 - low price strategy
 - availability of low cost labor or raw materials
3. Country Dependence
 - number of countries exporting to
4. Product Dependence
 - number of product lines exported
5. Channel Control and Management
 - problems getting intermediary to emphasize firm products
 - problems specifying desirable clients
 - problems getting intermediary to stock firm's products
 - problems getting intermediary to properly serve customers
 - problems influencing prices
 - problems getting intermediary to find new customers
 - problems getting intermediary to promote product

FIGURE 2 (Continued)

6. Use of Formal Marketing Research
 - commission of marketing research studies
7. Use of Informal Marketing Research
 - visits to foreign markets
 - informal contacts in foreign markets
 - consulate and business missions
 - foreign libraries
8. Use of Assistance Organizations
 - private agencies
 - government agencies
9. Customer Service
 - acceptance of small orders
 - faster deliveries
 - maintaining sales office or inventories in export markets

The dependent variable is the sum of the standardized scores (deviation from the mean divided by standard deviation) for the three measures of performance. Export volume is the amount exported during the 12 months preceding the interview. Export intensity and export profitability are self-reported measures. Export intensity is the percentage of total sales which was derived from exports in the previous 12 months. The profitability measure is a three-point scale for whether profit margins increased, remain about the same, or declined in the previous 12 months.

Predictors of Export Success

The independent variables were chosen from the literature on the determinants of export performance. They were grouped into three categories:⁵⁵ (1) organizational characteristics and competencies; (2) market and product characteristics; and (3) export marketing strategies. Each is discussed separately. As in the previous section, the sources in the literature are presented in Figure 1, while the actual scale items used in the research are presented in Figure 2.

Organizational Characteristics and Competencies. Management commitment and perception of export opportunities are possible determinants of export success. There is evidence that firms whose managers are strongly committed to exporting

and who see significant growth and profit opportunities in export markets are most likely to subsequently export higher volumes and derive higher profits.⁵⁶

The firm's own resources, experience, and domestic market involvement can play an important role in determining its degree of success. Larger firms command larger resources. This enables them to invest more in export development and perhaps to incur risks and initial losses that smaller and less well capitalized firms cannot.⁵⁷

Given that exporting is a gradual learning process,^{58,59} experienced firms are generally expected to be higher performers. On the other hand, some studies have found that younger firms are more entrepreneurial and innovative and hence may out perform more established ones.^{60,61}

Perceived Operational Problems. Geographical distance increases management and logistical costs and complicates the job of communicating with employees, intermediaries, and customers. Cultural diversity significantly increases the risks and complexities faced by export managers. As a result, managers must first obtain appropriate information and then adapt their products, procedures, and strategies to foreign laws, regulations, and mores.

Most exporters also perceive gaps in product quality, delivery speed and reliability, customer service, and degree of buyer/seller communication expected by importers.^{62,63,64,65,66,67} Consequently, many firms become discouraged and desist in the initial stages of exporting.⁶⁸

Export Marketing Strategies. Figure 1 also lists key marketing strategy factors that the literature has associated with export success. In general, the literature is divided on the advisability of low price and product differentiation strategies, but in agreement on the importance of strategies based on product quality and service.

Exporters often seek information on their markets. Generally speaking, the information needs relate to exporters' problems: legal and documentary requirements, logistical aspects, channel options, and channel practices. Information also is needed to uncover customer and intermediary demands and service expectations, as well as competitors' prices and offerings.⁶⁹ Finally, customer service is proposed as an export marketing strategy variable by Aaby and Slater.⁷⁰ They suggest, based on an extensive review of export marketing studies, that firms regard distribution, delivery, and customer service as important export success factors.

Regression Model

To understand the variables explaining the success of international suppliers, a stepwise multiple regression analysis was performed. This method was chosen to provide understanding of the effect of individual variables on supplier success, as well as the collective impact of the significant predictor variables.

As referred earlier, the predictor variables chosen are detailed in Figure 2. To account for differences in units of measurements for different variables, the data were standardized. A correlation matrix suggested no significant incidence of multicollinearity, which implies stability in the results. For a further test of stability, both backward elimination and stepwise procedures were performed and identical results were obtained.

The regression is presented in Table 2. The data indicate that six independent variables may be most significant in predicting export success. The independent variables are ranked in descending order of significance (t-values). Overall, the model is highly significant. The F value of 12.123 far exceeds the critical value of 2.96 for the probability of a Type I error of .01. Consequently, the probability of results being explained by random chance is negligible.

Together, the significant independent variables account for approximately 34% of the variation in export success, a relatively high score for this type of research. For instance, Cavusgil⁷¹ explained 20% of the variance in the percent of sales exported. Madsen⁷² accounted for 19% of export profitability and 34% of export sales variances. Reid⁷³ was able to explain 29% of firms' intention to export in the next year.

RESULTS

The significant predictors of export success are grouped into the three categories employed in the discussion of the literature: organizational characteristics and competencies, perceived operational problems, and export marketing strategies.

Organizational Characteristics and Competencies

Commitment to exports was the only significant predictor of success in this group. However, it also was the single most statistically significant predictor. Note, in Figure 2, that commitment was measured as the firm's past behavior in its

willingness to expand production capacity, build a plant, or establish the business for the sole purpose of supplying export markets. It also reflects management's optimistic expectations of opportunities in export markets.

TABLE 2
MULTIPLE REGRESSION REPORT

Dependent Variable: Export Success				
<u>Independent Variable</u>	<u>Param. Estimate</u>	<u>Stand. Estimate</u>	<u>t Value</u>	<u>Probability Level</u>
Export Commitment	.469	.079	5.931	.000
Buyer/seller Relations	-.205	.076	-2.683	.008
Logistical Problems	.213	.082	2.575	.011
Formal Marketing Research	.176	.075	2.343	.021
Customer Service	.186	.080	2.323	.022
Bureaucratic Problems	.159	.076	2.092	.038

Analysis of Variance Report			
Analysis of Variance			
	<u>DF</u>	<u>Sum of Squares</u>	<u>Mean Square</u>
Regression	6	52.214	8.702
Residual	126	90.449	.718

F = 12.123 Significant F = .000

R Square	.60
Adjusted R Square	.34
Standard Error	.84

Previous studies (see Figure 1) validate the importance of export commitment. They show that high commitment to exporting is directly related to export success.^{74,75,76,77,78} Commitment may thus be a good predictor of a supplier's future performance in a long-term relationship. Some caution, however, is appropriate, because a firm may be committed to exports without necessarily being committed to a specific buyer. A recent study by Eshghi⁷⁹ provides additional support to this finding by relating attitude and exporting behavior. A positive attitude was found to be a necessary (but not sufficient) condition for exporting behavior.

Perceived Operational Problems

Three operational problems are significant predictors of export success: perceived difficulties in dealing with export related bureaucracies, perceived difficulties maintaining good buyer/seller relations, and perceived logistical problems. Of these, the last two are the second and third most significant predictors of export success.

Problems with the bureaucracy were measured as difficulties in obtaining export tax deductions and export financially related documents. The measurement scale on problems with buyer/seller relations included delivery schedules, pricing, and collection problems. They also encompass difficulties entailed in finding new customers and in closing the initial sale with each customer. The measure for logistical problems consisted of difficulties with the performance of air and maritime carriers, as well as handling of delays in shipping and returned merchandise.

Successful exporters perceived greater operational problems with bureaucracy and logistics than unsuccessful exporters. These findings are consistent with prior studies in the sense that operational concerns are widespread among exporters.^{80,81} However, they are counter-intuitive in the sense that successful exporters would be expected to have fewer problems. In fact, one previous study found that operational problems are perceived as less important once a firm starts exporting.⁸²

A plausible explanation for this result is that successful exporters are more customer conscious and therefore expect higher performance from government offices and transportation companies. To be successful, exporters must continuously improve their customer service, which requires better performance from service providers in the export business. This lowers the successful exporters' threshold for perception of operational problems when compared to unsuccessful exporters. Our results are consistent with those of an Australian study that found that a large number of

active exporters experienced what they perceived as serious operational/logistical problems.⁸³

Export success was negatively correlated with problems in buyer/seller relations, i.e., successful exporters reported fewer problems with their clients. This is consistent with previous studies reporting that successful exporters develop close, smooth working relationships with their clients.^{84,85} In international transactions, disputes over price, delivery, or payments are among the most important reasons for terminating a relationship.⁸⁶ This also is consistent with the preceding observations on the importance of improvements in customer service, and with the following observations about export strategies.

Export Marketing Strategies

Two export marketing strategies were identified as the fourth and fifth most significant contributors to export success: formal marketing research on the export market and customer service. Exporters who commissioned or conducted research studies in their export markets achieved greater export success. This result, as already discussed in the literature review, is consistent with previous studies.

As shown in Figure 2, customer service was measured as the exporter's willingness to accept small orders, the ability to make faster deliveries, and the policy of maintaining a sales office with an inventory in the export market. The results agree with prior findings that associate export success with meeting delivery schedules,⁸⁷ being responsive to client needs,⁸⁸ and developing long-term relationships with foreign buyers.⁸⁹

SUMMARY

This research explored the issue of long-term buyer/seller relationships in the context of international sourcing. More specifically, six variables were identified as helpful to a U.S. buyer when deciding whether to enter into a relationship with a foreign supplier. The results are based on the experience of exporters from Central America, a region whose exports to the United States have been increasing in the last decade.

A long-term relationship is more likely to succeed if the foreign supplier is a successful exporter, because they have solved most of their export related problems. This increases the probability that the supplier will be able to fulfill long-term

contracts. Accordingly, export success was employed as an indicator of expected success in a long-term relationship.

The independent variables were grouped into organizational characteristics and competencies, perceived operational problems, and export marketing strategies. These variables were analyzed simultaneously with a regression model, which made it possible to compare and rank the importance of each variable. The results may be summarized as follows:

1. Commitment to exports is the most important variable in distinguishing successful from unsuccessful exporters.

U.S. buyers should therefore carefully gauge a potential suppliers' commitment to exporting, since this commitment underlies the feasibility of a buyer/seller relationship. The measures used in this research also may be used by managers trying to assess a potential supplier's commitment. These measures include an optimistic view of opportunities in export markets and principally a willingness to commit resources (build plant or expand production capacity) in order to supply the export market.

The importance of commitment in predicting the success of a buyer/seller relationship is further enhanced by its characteristic as an attitudinal factor. Changing attitudes is an arduous process. It is much easier to invest the time and resources to help a highly committed potential supplier than to enter into a relationship with a capable but uncommitted exporter.

2. Successful exporters have a heightened perception of bureaucratic and logistical problems compared to unsuccessful exporters. At the same time, successful exporters maintain positive relations with their clients.

Export success is usually linked to fewer, not more, operational problems. Yet it was found that successful exporters perceived greater operational problems. This result is important because it is not intuitive. A possible explanation is that successful exporters are more sensitive to these issues and adhere to higher standards. Consequently, they are more conscious of these problems than unsuccessful exporters. This heightened perception of operational problems also may indicate a supplier's willingness to "push" the system in order to provide service to their customers. In addition, as expected, successful exporters are able to develop a good working relationship with customers.

3. Successful exporters typically undertake formal marketing research and elect customer service as a key export marketing strategy.

Thus, in addition to formally gathering information about their target markets, successful exporters examined in this research typically provided customers with better service. One could surmise that the most successful exporters have understood and are attempting to adapt to the information-driven and service-oriented nature of the U.S. market.

In sum, the variables identified in this research point more toward attitudes than to specific business policies. U.S. buyers, when searching for a long-term relationship with a foreign supplier, should probe for suppliers with the right attitude towards exporting and toward foreign markets, rather than exclusively considering more traditional predictors of performance.

CONCLUSION

The results of the research reinforce the importance of logistical considerations related to export success. U.S. buyers should seek out exporters who are prepared to make not only a general commitment to exporting, but to improved customer service and to close buyer/seller relations. Committed exporters will demand more from the transportation infrastructure and will prod government and private sector institutions to streamline bureaucratic procedures.

Finally, the results of the research, although statistically representative of the recent Central American experience, should be tested against other regions. It is possible that exporters from more industrialized countries may experience a different set of problems and require a different kind of relationship with U.S. buyers. As already seen, however, the overall pattern of results is for the most part consistent with piecemeal findings of other single-country studies.

NOTES

¹Bernard J. La Londe and James M. Masters, "Logistics: Perspectives for the 1990's," *International Journal of Logistics Management* 1, no. 1 (1990): 1-6.

²William B. Wagner, "The Role and Relevance of Improved Purchasing for Logistics," *Journal of Business Logistics* 8, no. 1 (1987): 61-78.

³James F. Robeson, "The Future of Business Logistics: A Delphi Study Predicting Future Trends in Business Logistics," *Journal of Business Logistics* 9, no. 2 (1988): 1-14.

⁴Paul S. Bender, "The Challenge of International Distribution," *International Journal of Physical Distribution and Materials Management* 15, no. 4 (1985): 20-25.

⁵William B. Wagner, "Achieving Buyer-Seller Satisfaction Through Carrier Service," *International Journal of Physical Distribution and Materials Management* 17, no. 3 (1987): 17-27.

⁶Graham C. Stevens, "Integrating the Supply Chain," *International Journal of Physical Distribution and Materials Management* 19, no. 8 (1989): 3-8.

⁷Thomas C. Jones and Daniel W. Riley, "Using Inventory for Competitive Advantage Through Supply Chain Management," *International Journal of Physical Distribution and Materials Management* 15, no. 5 (1985): 16-26.

⁸Scott T. Young, "Prime Vendor/Hospital Purchasing Relationships," *International Journal of Physical Distribution and Materials Management* 19, no. 9 (1989): 27-30.

⁹Roland B. Hellberg and M. M. Oyvind, "Buyer-Seller Relations: Improving the Effectiveness of Materials Supply," *International Journal of Logistics Management* 1, no. 1 (1990): 36-43.

¹⁰Donald J. Bowersox and Jay U. Sterling, "Multinational Logistics," *Journal of Business Logistics* 3, no. 2 (1982): 15-25.

¹¹David L. Anderson, "International Logistics Strategies for the 1980s," *International Journal of Physical Distribution and Materials Management* 15, no. 4 (1985): 5-19.

¹²James R. Stock and Douglas M. Lambert, "International Physical Distribution—A Marketing Perspective," *International Journal of Physical Distribution and Materials Management* 12, no. 2 (1982): 3-39.

¹³Robert L. Cook and James R. Burley, "A Framework for Evaluating International Physical Distribution Strategies," *International Journal of Physical Distribution and Materials Management* 15, no. 4 (1985): 5-19.

¹⁴Norman E. Marr, "The Impact of Customer Services in International Markets," *International Journal of Physical Distribution and Materials Management* 14, no. 1 (1984): 33-40.

¹⁵Paul T. Nelson and Gadi Toledano, "Challenges for International Logistics Management," *Journal of Business Logistics* 1, no. 2 (1979): 1-21.

¹⁶Stanley E. Fawcett and David J. Closs, "Coordinated Global Manufacturing, the Logistics/Manufacturing Interaction, and Firm Performance," *Journal of Business Logistics* 14, no. 1 (1993): 1-25.

¹⁷John B. Houlihan, "International Supply Chain Management," *International Journal of Physical Distribution and Materials Management* 15, no. 1 (1985): 22-38.

¹⁸Lisa M. Ellram, "Partners in International Alliances," *Journal of Business Logistics* 13, no. 1 (1992): 1-25.

¹⁹Christopher A. Bartlett and Ashish Nanda, "Ingvar Kamprad and Ikea," Harvard Business School, case #390-132 (1990).

²⁰Same reference as Note 18.

²¹Graham I. Jackson, "Exporting—From the Importer's Point of View," *European Journal of Marketing* 15, no. 3 (1985): 3-25.

²²David Ford, "Buyer/Seller Relationships in International Industrial Markets," *Industrial Marketing Management* 13 (May 1983): 101-112.

²³Philip J. Rosson and I. David Ford, "Manufacturer-Overseas Distributor Relations and Export Performance," *Journal of International Business Studies* 13 (Fall 1982): 57-72.

²⁴Muzafer Bodur, "A Study of the Nature and Intensity of Problems Experienced by Turkish Exporting Firms," *Advances in International Marketing* 1 (1986): 205-232.

²⁵Carl H. Christensen, Angela Da Rocha, and Rosanne K. Gertner, "An Empirical Investigation of the Factors Influencing Exporting Success of Brazilian Firms," *Journal of International Business Studies* 18 (Fall 1987): 61-77.

²⁶Stan D. Reid, "Information Acquisition and Export Entry Decisions in Small Firms," *Journal of Business Research* 12 (1984): 141-157.

²⁷Muzafer Bodur and S. Tamer Cavusgil, "Export Marketing Research Orientations of Turkish Firms," *European Journal of Marketing* 19, no. 2 (1987): 5-16.

²⁸Same reference as Note 23.

²⁹Massoud M. Saghafi, Fanis Varvoglis, and Tomas Vega, "Why U.S. Firms Don't Buy from Latin American Companies," *Industrial Marketing Management* 20, no. 3 (1991): 207-213.

³⁰Don P. Clark, "Measurement of Trade Concentration Under the United States Caribbean Basin Initiative," *World Development* No. 6 (1989): 861-865.

³¹Stan D. Reid, "The Impact of Size on Export Behavior in Small Firms," in Michael R. Czinkota et al., eds., *Export Management* (New York: Praeger, 1982), pp. 18-38.

³²Stan D. Reid, "Managerial and Firm Influences on Export Behavior," *Journal of the Academy of Marketing Science* 11 (Summer 1984): 323-332.

³³Catherine Axinn, "Export Performance: Do Managerial Perceptions Make a Difference," *International Marketing Review* (Summer 1988): 67-71.

³⁴Same reference as Note 24.

³⁵S. Tamer Cavusgil, "Differences Among Exporting Firms Based on Their Degree of Internationalization," *Journal of Business Research* No. 13 (1984a): 195-208.

³⁶S. Tamer Cavusgil, "Organizational Characteristics Associated with Export Activity," *Journal of Management Studies* No. 1 (1984b): 3-22.

³⁷Mehmet Karafakioglu, "Export Activities of Turkish Exporters," *International Marketing Review* (Winter 1986): 34-43.

³⁸Same reference as Note 35.

³⁹Same reference as Note 36.

⁴⁰Same reference as Note 37.

⁴¹Same reference as Note 33.

⁴²Robert G. Cooper and Elko J. Kleinschmidt, "The Impact of Export Strategy on Export Sales Performance," *International Marketing Review* (Spring 1985): 37-55.

⁴³Adamantios Diamantopoulos and Karen Inglis, "Identifying Differences Between High- and Low-Involvement Exporters," *International Marketing Review* (Summer 1988): 52-60.

⁴⁴V. H. Kirpalani and N. B. Macintosh, "International Marketing Effectiveness of Technology-Oriented Small Firms," *Journal of International Business Studies* 11 (Winter 1980): 81-90.

⁴⁵Tage K. Madsen, "Successful Export Marketing Management: Some Empirical Evidence," *International Marketing Review*, No. 4 (1989): 41-55.

⁴⁶Warren J. Bilkey, "Variables Associated with Export Profitability," *Journal of International Business Studies* 13 (Fall 1982): 39-45.

⁴⁷Nigel Piercy, "Company Internationalization: Active and Reactive Exporters," *European Journal of Marketing* 13, no. 3 (1981): 26-40.

⁴⁸S. Tamer Cavusgil and John R. Nevin, "Internal Determinants of Export Marketing Behavior: An Empirical Investigation," *Journal of Marketing Research* 18 (February 1981): 114-119.

⁴⁹Jean E. Denis and Daniel Depleteau, "Market Knowledge, Diversification, and Export Expansion," *Journal of International Business Studies* 16 (Fall 1985): 77-90.

⁵⁰Daniel C. Bello and Nicholas C. Williamson, "Exporting at Industrial Trade Shows," *Industrial Marketing Management* 15 (1985): 79-84.

⁵¹Michael R. Czinkota and Wesley J. Johnson, "Exporting: Does Sales Volume Make a Difference?" *Journal of International Business Studies* 14 (Spring 1983): 147-153.

⁵²Kau Ah Keng and Tan Soo Juuan, "Differences Between Small and Medium Sized Exporting and Non-Exporting Firms: Nature or Nurture," *International Marketing Review* 6, no. 4 (1989): 27-40.

⁵³Lawrence H. Wortzel and Heidi V. Wortzel, "Export Marketing Strategies for NIC and LDC-Based Firms," *Columbia Journal of World Business* 17 (Spring 1981): 51-59.

⁵⁴Lawrence H. Wortzel and Heidi V. Wortzel, "Globalizing Strategies for Multinationals from Developing Countries," *Columbia Journal of World Business* 24 (Spring 1988): 27-35.

⁵⁵Neils E. Aaby and Stanley F. Slater, "Management Influences on Export Performance: A Review of the Empirical Literature 1978-88," *International Marketing Review* (November 1989): 7-25.

⁵⁶A question often arises as to the direction of causality between commitment and export success. One could argue, for instance, that export success causes a firm to be more committed to exporting. In a cross-sectional study, it is impossible to determine the direction of causality. However, there is an extensive literature

that asserts the strong causal impact of commitment on export performance; some of it summarized in Aaby and Slater (see Note 43). Furthermore, the measure of commitment employed here refers to specific business policy decisions taken by the firm prior to commencement or increase in export activity. These event-related measures should be less influenced by a halo effect than general attitudinal measures.

⁵⁷Same reference as Note 31.

⁵⁸S. Tamer Cavusgil, "On the Internationalization Process of Firms," *European Research* 8 (November 1980): 273-81.

⁵⁹Jan Johansson and Jan E. Vahlne, "The Internationalization Process of Firms: A Model of Knowledge Development and Increasing Foreign Market Commitments," *Journal of International Business Studies* 8 (Spring-Summer 1977): 23-32.

⁶⁰Same reference as Note 42.

⁶¹Michael Ursic and Michael R. Czinkota, "An Experience Curve Explanation of Export Expansion," *Journal of Business Research* 12, no. 2 (1984): 159-168.

⁶²Roberto Brezzo and Isaac Perkal, "The Role of Marketing Incentives in Export Promotion: The Uruguayan Case," in M. R. Czinkota et al., eds., *Export Promotion: The Public and Private Sector Interaction* (New York: Praeger, 1983): 51-65.

⁶³Linda M. De Souza, Angela Schmidt and Juan L. Colaiacovo, "Pre-Export Behavior: An Analysis of the Variables Influencing the Decision Process," in Michael R. Czinkota et al., eds., *Export Promotion: The Public and Private Sector Interaction* (New York: Praeger, 1983): 227-240.

⁶⁴Luis V. Dominguez and Carlos G. Sequeira, "Non-Traditional Exports in Costa Rica: An Exploration of Public Policy Issues," in F. H. Rolf Seringhaus and Philip J. Rosson, eds., *Fostering Trade: Export Development by Public Organizations* (London: Kluwer, 1990).

⁶⁵Same reference as Note 22.

⁶⁶Same reference as Note 21.

⁶⁷Massoud Saghafi, Fanis Varvoglis and Tomas Vega, "Latin America's Export Marketing Dilemma," in *Proceedings of the American Marketing Association Conference* (Chicago, Ill.: 1989).

⁶⁸Same reference as Note 25.

⁶⁹Same reference as Note 24.

⁷⁰Same reference as Note 55.

⁷¹Same reference as Note 36.

⁷²Same reference as Note 55.

⁷³Same reference as Note 26.

⁷⁴Same reference as Note 36.

⁷⁵S. Tamer Cavusgil, Warren J. Bilkey, and George Tesar, "A Note on the Export Behavior of Firms: Exporter Profiles," *Journal of International Business Studies* 10 (Spring/Summer 1979): 91-97.

⁷⁶Same reference as Note 22.

⁷⁷Same reference as Note 44.

⁷⁸Same reference as Note 23.

⁷⁹Abdolreza Eshghi, "Attitude-Behavior Inconsistency in Exporting," *International Marketing Review* 9, no. 3 (1992): 40-61.

⁸⁰Nigel J. Barrett and Ian F. Wilkinson, "Export Stimulation: A Segmentation Study on the Exporting Problems of Australian Manufacturing Firms," *European Journal of Marketing* 19, no. 2 (1987): 53-71.

⁸¹Same reference as Note 24.

⁸²Same reference as Note 24.

⁸³Same reference as Note 23.

⁸⁴Same reference as Note 22.

⁸⁵Same reference as Note 23.

⁸⁶Same reference as Note 21.

⁸⁷Same reference as Note 23.

⁸⁸Same reference as Note 23.

⁸⁹Same reference as Note 22.

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