Singapore Management University

Institutional Knowledge at Singapore Management University

Research Collection Lee Kong Chian School Of Business

Lee Kong Chian School of Business

7-2004

The Relationship among Export Assistance, Pricing Strategy Adaptation to the Foreign Market, and Performance Improvement

Luis Filipe Lages
Universidade Nova de Lisboa

David B. Montgomery
Singapore Management University, dmontgomery@smu.edu.sg

Follow this and additional works at: https://ink.library.smu.edu.sg/lkcsb_research

Part of the International Business Commons, and the Sales and Merchandising Commons

The Relationship Among Export Assistance, Pricing Strategy Adaptation

to the Foreign Market, and Performance Improvement *

Luis Filipe Lages and David B. Montgomery**

July 2004

** Luis Filipe Lages is Assistant Professor of Marketing and International Business, *Universidade Nova de Lisboa (UNL), Faculdade de Economia*, Rua Marquês de Fronteira, 20, 1099-038 Lisboa, Portugal. Part of this research was developed while he was a Visiting Scholar at Stanford University, Graduate School of Business. e-mail: lflages@fe.unl.pt; http://prof.fe.unl.pt/~lflages; telephone: +351.213.826.100; fax +351.213.873.973.
David Montgomery is S.S. Kresge Professor of Marketing Strategy-Emeritus at Stanford University, Graduate School of Business, and Dean of School of Business, Singapore Management University. e-mails: montgomery_david@gsb.stanford.edu; dmontgomery@smu.edu.sg

ABOUT THE AUTHORS

Luis Filipe Lages (Ph.D., Warwick University) is currently Assistant Professor (*Professor Auxiliar*) of Marketing and International Business at Universidade Nova de Lisboa, Faculdade de Economia, Portugal. Previously, he was a Visiting Scholar at MIT's Sloan School of Management and at Stanford University, Graduate School of Business (USA). He also teaches/ has taught in several European schools, such as Solvay Business School, Bruxelles University (Belgium) and Warwick Business School, Warwick University (UK). His work is published or forthcoming in several journals including the Journal of Business Research, Journal of International Marketing, European Journal of Marketing, Journal of Global Marketing, among others. His research has been featured in numerous international conference proceedings as well as in the international and Portuguese business press. Luis Filipe has consultancy experience in both business and civic forums. e-mail: lflages@fe.unl.pt; http://prof.fe.unl.pt/~lflages; telephone: +351.213.826.100; fax +351.213.873.973.

David B. Montgomery (Ph.D., Stanford University) is S. S. Kresge Professor of Marketing Strategy- Emeritus at Graduate School of Business, Stanford University, USA and Dean of School of Business, Singapore Management University. Previously he was on the Faculty of MIT's Sloan School of Management and the Stanford Engineering School. His 10 books and over one hundred articles have focused on strategy, global and international marketing, competitor analysis, and marketing models. He was the first Marketing Department Editor for Management Science, was Consulting Editor for Journal of International Marketing, and has served on the editorial boards of Journal of Marketing Research, Strategic Management Journal, Journal of Marketing, Marketing Science, and Journal of the Academy of Marketing Science. He holds an honorary doctorate from LUC (Belgium). His "First Mover Advantages" paper won the 1996 Strategic Management Society best paper award and in 2002 he received the AMA's Mahajan Award for research contribution to marketing strategy. He was Executive Director of the Marketing Science Institute from 1995 -97 and is the all time leading author of MSI papers and publications.
e-mails: montgomery_david@gsb.stanford.edu; dmontgomery@smu.edu.sg

The Relationship Among Export Assistance, Pricing Strategy Adaptation
to the Foreign Market, and Performance Improvement

ABSTRACT

The increasing amount of export assistance provided to firms of rich and poor countries shows the high priority given by national and international policy makers to the encouragement of international trade. Despite this, relatively few international marketing researchers have discussed the effectiveness of such export assistance. This exploratory study provides an empirical foundation for simultaneously analyzing the effects of export assistance on the decision to adapt or standardize the domestic pricing strategy to the main foreign market and ultimately improve a firm's short-term export performance. Surprisingly, the findings reveal that the total effects of export assistance on short-term export performance are non-significant because although export assistance has a direct positive impact on performance, there is a negative indirect impact on performance through export pricing strategy adaptation. Findings also indicate that both export assistance and performance improve with management international experience and with the degree of export market competition. These and other surprising results have important implications for both public policy and management decision-making, and suggest several potentially fruitful streams of research.

INTRODUCTION

"Rich and poor countries alike look to export subsidies to enhance their presence on world markets. But they may be doing more harm than good."

From the point of view of most national governments, exporting is extremely attractive because it allows the accumulation of foreign exchange reserves, enhances societal prosperity, and helps national industries to develop, improve productivity and create new jobs (Czinkota 1994). All the benefits provided by the exporting activity encourage public policy makers to implement export promotion programs with the objective of helping firms improve their competitive advantage and ultimately enhance their performance in the international arena. Nevertheless, the literature has been presenting conflicting evidence concerning the export assistance-performance interface. While some studies indicate that export assistance has contributed to the development of successful export strategies (e.g. Denis and Depelteau 1985; Reid 1984), there are also some studies reporting that this support has been inadequately targeted, and has no effect in terms of performance (Gray 1997; Seringhaus and Rosson 1990). Hence, a great challenge for researchers, public policy makers and managers is to discover how to allocate the export assistance in order to obtain encouraging results. This is the focus of this research. We expect with this exploratory study to contribute to a better understanding of export assistance effectiveness in the short-term (i.e., a one-year period). One might argue that some managers develop strategies striving for long-term effects. However, the focus on specific pricing actions in the short-term is important because many firms are dependent on short-term performance for survival. This is particularly true of firms that lack financial resources and those operating in markets with low margins (due to a high level of competition or market saturation). When performance decreases from the

3

previous year to the current year, both the internal (e.g. top management, employees, union representatives) and external (e.g. suppliers, investors, and credit institutions) publics will consider it a potential threat to the whole organization and improvements in performance will be demanded. One might also argue that sometimes export assistance is designed to help firms in the long-term. However, as is the case with managers, public policy actions are constantly evaluated by several publics, and consequently have (dis)incentives accordingly (e.g. being, or not, re-elected). If they want to remain active they need to be concerned about short-term economic health. Furthermore, particularly in times of recession, some countries look to the export activity as a way to seek short-term solutions such as decreasing the nation's budget deficit. Naturally, a decrease in a firm's performance might put pressure on public policy makers to demand from managers a better allocation of the assistance received. The implication of all of this is that although long-term performance is crucial, if the exporting activities of the firm are not working properly in the short-term, it will be extremely difficult for managers and public policy makers to focus on the future. And if one considers that the long-term failures and successes of the firm are functions of its short-term actions, it is clear that understanding the impact of specific actions in the short-term can yield valuable insights into improving the use of export assistance in the long-term.

There is an increasing need to develop more policy-oriented international marketing research and, specifically, research that analyzes the interface between export assistance, pricing strategy and performance. With this exploratory study we seek to help public policy makers and managers to improve their allocation of export assistance and better understand the effectiveness of firms' exporting pricing decisions.

Unfortunately, most research on export assistance tends to be of little relevance to managers and public policy makers because it tends to focus on interesting indicators of export support (e.g. awareness, knowledge) that are of only limited use. Sixteen years ago,

Seringhaus (1986) identified this contemporary problem and suggested that academic research should change direction (1986, p. 61):

> *"What researchers should determine and management wants to know, is whether or not such [export] assistance has any impact on exporting activity and to what extent such impact manifests itself."*

Despite this recommendation, very little research was subsequently undertaken to address this important gap in the literature. Today, the key question remains the same as that of 16 years ago: how should one conduct research pertinent to international marketing theory development that can be simultaneously useful for managers and public policy makers? (Czinkota 2000).

In short, this paper aims to broaden the scope of export pricing strategy by addressing the export assistance gap in the literature (Czinkota 2000), while providing an analysis of the characteristics of successful export ventures that will be of interest for both public policy makers and managers. Given the relatively large sample (over 500 cases), it was possible to use structural equation modeling (SEM) with weighted least squares (WLS) (Curran, West and Finch 1996). WLS is an asymptotically distribution-free (ADF) method of estimation that, to our knowledge, has not previously been used in international marketing research, mainly because of sample size constraints.

In the first part of this paper, we develop a conceptual framework that incorporates export assistance, pricing adaptation to the foreign market, and annual performance improvement. The framework is then tested via a survey of 519 exporting managers. The results are presented and then its implications for theory are discussed. We conclude with the implications of these results for public policy making and managerial practice, and finally consider the limitations of the research and fruitful directions for future research.

CONCEPTUAL FRAMEWORK

Contingency Theory

This paper is based on contingency theory. This theory has its early roots in general systems theory (Boulding 1956; Von Bertalanffy 1951) and in the behavioral theory of the firm (Cyert and March 1963; March and Simon 1958; Simon 1957). During the last five decades, the contingency approach has been used in the management/business literature as an underlying topic for theory development. In brief, the key idea of the contingency approach is that performance can be improved in more than one way. However, these performance variations are not random since each way might be more or less effective depending on the situation (Zeithaml, Varadarajan and Zeithaml 1988). Based on the contingency theory we suggest that pricing strategy varies along a continuum from pure standardization to pure adaptation. We argue that it is more important to consider the *degree* of adaptation/standardization, while taking into consideration key contingent forces that might influence it, than to determine *whether* a company should adapt or standardize its strategies (Samiee and Roth 1992).

Most studies in the marketing area tend to examine only the *direct* effects among variables. However, studies that allow the analysis and testing of the complex inter-relationships among the different forces, strategy and performance may yield additional insights (Lages 2000a; Leonidou, Katsikeas and Samiee 2002). Particularly, models that take into consideration the indirect effects between variables (e.g. models that analyze how the contingent forces might indirectly affect performance through the influence of these forces on pricing strategy) are likely to enrich our theoretical and empirical understanding of export performance (Gençturk and Kotabe 2001; Walters and Samiee 1990).

6

In this paper we propose that export performance is *directly* affected by the degree of export assistance, the degree of pricing strategy adaptation, and by two contingent forces (management international experience and export market competition). Additionally, it is proposed that export performance is *indirectly* affected by the contingent forces and export assistance through the influence exercised by these variables on pricing adaptation.

Export Assistance

Export assistance is defined in this paper as the amount of support received from three different sources (national government, European Union, and trade associations) that may enhance the exporting activity of a firm. As mentioned above, the most recent literature in the export assistance topic suggests that there is a strong need to develop models that incorporate intervening and indirect influences among export assistance and export performance (Gençturk and Kotabe 2001). Indeed, a recent study (Weaver, Berkowitz and Davies 1998) even suggests that if public policy makers allocate export assistance to firms that will be willing to adapt their pricing strategies, export assistance will be well allocated because pricing adaptation will lead to a better performance. However, this indirect effect was never empirically tested. Collectively, both studies lead to an interesting question that will be answered in this empirical study: Does export assistance indirectly affect performance, through the influence of export assistance on export pricing strategy adaptation? If yes, how does it work?

Pricing Strategy Adaptation

The existing literature on pricing can be divided into four research streams: (1) the micro-economic literature on pricing, (2) buyers' perceptions and reactions to pricing, (3) intra-corporate pricing, and (4) company practice in international pricing and its impact on

performance (see Myers and Cavusgil 1996 for a summary). This paper is positioned in the fourth research stream.

The work of Cavusgil and his colleagues (Cavusgil and Nevin 1981; Myers and Cavusgil 1996) has repeatedly suggested that the fourth stream of literature is a particularly neglected area of research and a problem area for international managers. According to Myers and Cavusgil (1996), the lack of existing research on international pricing strategies can be attributed to the complexity of pricing issues and the widespread reluctance of managers to discuss their pricing strategies. Nevertheless, researchers need to be aware that managers involved in international operations regard pricing strategy as one of their main concerns (Samiee 1987).

Within this stream of research, the international marketing literature has explored two aspects of a pricing strategy: degree of price competitiveness (e.g. Cavusgil and Zou 1994) and degree of pricing adaptation/standardization (e.g. Shoham 1999). In this exploratory research, while following a contingent approach to pricing adaptation/standardization, we investigate the extent to which pricing strategies that have been developed for the domestic market might be used when exporting. We follow this approach because the few studies that actually analyze pricing adaptation/standardization in an exporting context tend to compare the strategies used by firms across various exporting markets. However, a much richer understanding of the pricing phenomenon may be obtained by considering the extent to which domestic strategies may be transferred to a particular foreign market (Cavusgil and Kirpalani 1993). In sum, we define pricing strategy adaptation as the degree to which the pricing strategies (the determination of pricing strategy, credit concessions, price discount policy and margins) for a product differ differs between the domestic and export market. This scale was influenced by Shoham's (1999) work.

8

We will look to pricing adaptation to the foreign market as a matter of degree, *contingent* upon the internal and external forces of the exporting firm. In this study we will focus on pricing strategy adaptation because pricing strategy is visible and relatively easy and quick to adapt to the foreign market. Consequently, it is easier to analyze its interface with export assistance and identify its effects on performance over the short-term.

Annual Export Performance Improvement

In line with what has been suggested in the most recent studies (e.g. Diamantopoulos and Winklhofer 2001; Katsikeas, Leonidou and Morgan 2000) we *aggregate* various performance measures into a single measure of export performance. The variable "annual export performance improvement" assesses manager's perceived achievement of sales (sales revenue and sales volume) and profitability from one year to the next. This scale was adapted from the work of Katsikeas, Piercy and Ionnidis (1996).

In the export performance literature there is no established definition of performance. This might occur because managers tend to use their own perceptions of performance, rather than objective values, in order to formulate their own decisions (Bourgeois 1980). What might be a tremendous success for one company may be a failure for another. Improving from a very good position in the previous year may be much more difficult than improving from a bad position. By asking managers to assess annual performance improvement we expect to capture the degree to which performance has matched managers' aspirations for a particular year. In this way it will be possible to have as a reference the boundary line between perceived success and failure and, consequently, to capture the starting point in decision making (Greve 1998). Furthermore, by asking managers about the annual performance improvement, they will be able to report on their perception of change from one year to the next while taking into consideration their own perception of their firm's reference

groups (including their firm's circumstance in terms of size, industry, stage of export involvement, technology intensity, the characteristics of the foreign market).

The Contingent Forces

A question that has been partially addressed by the literature (Gençturk and Kotabe 2001; Singer and Czinkota 1994) but which needs further clarification is: Which contingent forces influence the effectiveness of export assistance programs? Our model considers simultaneously two contingent forces: management international experience and export market competition.

Management international experience refers to the degree to which the firm's management has overseas experience, having lived or worked abroad, as well as the accumulated skills and abilities that support the achievement of the organization's exporting objectives and goals (Cavusgil, Zou and Naidu 1993; Das 1994). We have selected this force because international experience is a key organizational force in the export assistance-performance literature (Czinkota 1994; Gençturk and Kotabe 2001; Singer and Czinkota 1994) and a critical resource for implementing adaptation strategies (Cavusgil and Zou 1994; Cavusgil, Zou and Naidu 1993; Douglas and Craig 1989).

Export market competition is defined in this paper as the extent to which businesses must strive to outdo each other to gain the economic rents of that industry. Competition may vary along multiple dimensions, such as the number of competitors, price competitiveness, and service/delivery. We have included this force because it must be considered as a key determinant of pricing strategy adaptation (Douglas and Craig 1989; Jain 1989) and export performance (Beamish, Craig and McLellan 1993; Bilkey 1982). Additionally, recent literature on export assistance (Czinkota 1994; Demick and O'Reilly 2000) suggests that foreign competition is a key issue that needs to be considered.

By understanding how these two contingent forces influence the relationship among export assistance, pricing strategy and performance, managers will be in a better position to choose the most appropriate export pricing strategies. Similarly, by better understanding these complex relationships, public policy makers will be in a better position to expand programs that are effective and limit programs that have little or negative impact on businesses.

RESEARCH HYPOTHESES

The rationale behind the hypotheses exhibited in Figure 1 will now be discussed.

Determinants of Export Assistance

Most research tends to focus exclusively on the outcomes of export support. Although raising interesting issues for practitioners, public policy makers and also theory, there is a clear research gap in terms of identifying which forces influence export assistance (Czinkota 1994). Demick and O'Reilly's (2000) recent work reveals that public policy makers, when allocating their resources, tend to give priority to the most *experienced* firms and to the firms most able to survive in *competitive* markets. An example is a recent program funded by the European Union, government sources and local institutions, to support the export activity of Irish firms and firms from Northern Ireland. Two of the required conditions for firms wishing to participate in this program were: (1) firms should have exporting experience and (2) firms should have a product capable of competing in mainland Europe. In other words, support would be provided only to strong players.

The literature also indicates that one of the major criticisms faced by public policy makers is that their resources are often poorly targeted and ineffective (Gray 1997; Seringhaus and Rosson 1990). Hence, they are under continuing pressure to select very carefully the firms to which they will allocate their resources. Although one could expect

that managers lacking international experience may need more support from export assistance programs, it is well known that export assistance expenditures to experienced exporters are more likely to result in more exports per dollar spent. By selecting *a priori* firms that already have some experience in exporting, public policy makers know that the probability of obtaining better results in a shorter period will increase. Consequently, they will be more willing to allocate resources to these firms. Furthermore, managers tend to acquire more international business experience if they look for new opportunities, expand to physically distant markets, use more sophisticated exporting operations and commit more resources to the export activity (Johansson and Vahlne 1977). Indeed, by becoming more familiar with exporting complexity, they will also become more familiar with the different support programs and will be more capable of understanding which type of assistance is required for their specific needs. Consequently, they will be in a much better position to obtain funds than the less experienced exporters. This leads us to the first hypothesis:

> *Hypothesis 1:* Management international experience is positively associated with export assistance.

From the point of view of the firm, it is expected that firms will have the need for supplementary assistance when operating in more competitive markets. From the point of view of public policy makers, it is expected that public policy makers are most willing to provide export assistance to firms operating in the *most* competitive markets than to the ones exporting to less competitive environments (e.g. firms exporting to Less Developed Countries) (Demick and O'Reilly 2000). Although the less competitive markets might seem to be more attractive from the exporter's point of view, the typical political instability and lack of confidence in many of these markets might deter public policy makers from providing funds to firms wishing to work with these markets. Thus, the following hypothesis will be tested in this study:

Hypothesis 2: The degree of export market competition is positively associated with export assistance.

Determinants of Pricing Strategy Adaptation

At the exporting level, existing research shows that managers' international experience clearly influences export decisions (Cavusgil and Zou 1994; Johansson and Vahlne 1977). Any manager will bring his/her own set of "givens" and expertise into the decision making process (March and Simon 1958). These managerial inputs might be adjusted to the reality of a specific organization and environment through managerial training (e.g. formal courses and export seminars). Naturally, the training process will provide the appropriate tools to help managers develop a stronger customer focus and to become more sensitive to pricing adaptation to the foreign market.

Experiential learning is particularly useful in overcoming cultural barriers. That is why the most experienced managers are also more likely to have the required expertise to make the proper adjustments to the environment (Lant and Hurley 1999). While the understanding of key strategy issues is normally seen to be complex by the less experienced managers (Cavusgil and Zou 1994), the more experienced managers tend to have a better understanding of the characteristics of the foreign markets, and are therefore in a better position to better adapt the strategy to the requirements of local markets (Douglas and Craig 1989; Johansson and Vahlne 1977). Hence, the following hypothesis will be tested in this paper:

Hypothesis 3: Management international experience is positively associated with pricing adaptation.

Based on an indication provided by a recent work (Weaver, Berkowitz and Davies, 1998), we will empirically test the relationship between export assistance and price strategy adaptation. Pricing strategies may be difficult to adapt because of the need for extra financial and human resources associated with pricing adaptation. Naturally, firms receiving export

assistance are expected to allocate more human and financial resources to the export market venture. With this external support, managers will be in a better position to search for information and to develop a much more elaborate analysis of the environment that will help to exploit the existing opportunities in the foreign market. The support will help companies to improve the depth of planning procedures (e.g. in terms of market research and market analysis), which will allow managers to implement a pricing strategy more closely adapted to the needs of different markets (Cavusgil and Zou 1994). This leads to the fourth hypothesis:

Hypothesis 4: Export assistance is positively associated with pricing adaptation.

Competition is probably the most important external factor in the firm's export pricing decision (Myers and Cavusgil 1996). As emphasized by Weitz (1985), managers have to pay a great deal of attention to the impact of competition on strategy decisions. For example, managers need to identify key competitors (Clark and Montgomery 1999) and to analyze the price strategies of these competitors in the foreign market (Cavusgil and Zou 1994) in order to perform well. A direct comparison with other competitors allows managers to assess their firm's competitive advantage (Day and Wensley 1988) and to have a reference for developing a competitive pricing strategy for the different export markets. If a company opts for a standardized pricing strategy, there will always be some competitors willing to offer what the consumer wants (Kotler 1996). Consequently, the more intense the competition in foreign markets, the more a company will tend to adapt its pricing strategy (Buzzell 1968; Jain 1989; Samiee and Roth 1982). Hence, the following hypothesis will be tested in this study:

Hypothesis 5: Export market competition is positively associated with pricing adaptation.

Determinants of Export Performance

Most empirical investigations have revealed a positive relationship between management international experience and export performance (e.g. Fenwick and Amine 1979; Gray 1997; Madsen 1989). It is widely recognized that managers influence organizational performance (Astley and Van de Ven 1983). The literature on organizational learning supports the view that strategy definition results from a learning process in which managerial practices are constantly updated according to past experience (Cyert and March 1963). The more experienced managers will be in a more advanced stage of this learning process, and consequently will be in a better position to lead the firm to higher performance levels.

Research has suggested that firms employing staff with no training in international business tend to exhibit a lower performance because these managers are less aware of environmental opportunities and threats, and make frequent, costly mistakes (Nakos, Brouthers and Brouthers 1998). On the other hand, managers with greater experience and expertise in international business are expected to perform better because of their international networks and better understanding of foreign markets (Axinn 1988). Similarly, there is considerable evidence that the expertise acquired through training will help managers to improve organizational performance (e.g. Delaney and Huselid 1996; Knoke and Kalleberg 1994; Russell, Terborg, and Powers 1985). By applying this rationale to our study, we propose the following:

> *Hypothesis 6:* Management experience is positively associated with annual export performance improvement.

A very recent meta-analysis (Leonidou, Katsikeas and Samiee 2002) revealed that there is a strong link between pricing adaptation and export performance (p<0.001). While some empirical studies (e.g. Fenwick and Amine 1979; Madsen 1989) have contended that,

to perform well firms must have a competitive exporting price, other research has shown that export performance is positively correlated with price levels. For example, Koh's study (1991) of US firms points out that the price level positively influences export performance (perceived relative profitability). Bilkey's (1987) investigation of US firms indicates that export profitability increases for industrial, consumer and intermediate firms, as their products' prices are adjusted to the foreign market. This relationship is also confirmed by Das (1994), who found that Indian firms with higher export performance (ratio of export sales to total sales) were more likely to have adapted their prices for their products in foreign markets. There is, however, evidence for the opposite effect. Two empirical studies (Lages and Melewar 2001; Zou, Andrus and Norvell 1997) found that price standardization improves performance when the domestic prices are lower than average foreign market prices. Nevertheless, overall research suggests that pricing strategies need to be tailored to the foreign market because of the pricing practices of competitors, differences in exporting costs, price controls, market structures and purchasing power, financial trade barriers, the costs of product, promotion and transportation, and margins of distribution channels (Leonidou, Katsikeas and Samiee 2002). Based on this rationale, the following hypothesis is proposed:

> *Hypothesis 7:* Pricing adaptation is positively associated with annual export performance improvement.

While in some countries the lack or non-existence of governmental agencies supporting firms' export activity has harmed that activity (Colaiacovo 1982), in other countries the use of government export assistance has led to the rapid expansion of exports across different sectors (Brezzo and Perkal 1983).

At the firm level, export assistance is particularly important for better performance, as extra resources are required for foreign market entry and expansion (Demick and O'Reilly 2000; Denis and Depleteau 1985; Reid 1984). With these extra resources firms might create or develop existing international networks or hire human resources with international

16

expertise. Furthermore, firms may use these resources to develop plans which build upon a much more sophisticated analysis of the foreign environment. This will likely lead to fewer mistakes and improved performance. Hence, the following hypothesis will be tested in this research:

> *Hypothesis 8:* Export assistance is positively associated with annual export performance improvement.

The strategic imperative of a firm should be to create and sustain superior performance through a competitive advantage in the market place (Porter 1985). Thus, from the perspective of individual firms, the most desirable and easy way to achieve competitive advantage would be to operate in a less competitive market environment. This explains why previous empirical research has found that firms operating in the less competitive markets tend to perform better. For example, Sriram and Manu (1995) found that American firms that export to developing countries have better performance than firms that export to developed countries, because of the lack of competition in less developed countries. This is in line with another study of American exporters (Bilkey 1982) finding that the degree of competition in the industry is negatively correlated with export performance. Similarly, Beamish, Craig and McLellan's (1993) investigation found that for Canadian exporters there was a negative relationship between the degree of competitiveness and export sales growth. This leads us to propose the following hypothesis:

> *Hypothesis 9: Export market competition is negatively associated with annual export performance improvement.*

METHOD

The Research Setting

The unit of analysis is the *main export venture* of the firm, involving the most important product exported to the most important foreign market. This is done primarily

17

because our exploratory interviews indicated that firms typically use the export assistance received to develop specific strategies for their main export venture. Furthermore, many secondary ventures do not benefit directly from the export assistance received and do not have defined strategies, or their strategies are defined as a consequence of the main venture. Additionally, this approach of a single product or product line exported to a single foreign market allows us to associate export assistance and pricing strategy adaptation more precisely with its antecedents and outcomes.

The research setting is the country of Portugal, a member of the European Union (EU). The EU is the world's largest exporter of goods, maintaining a stable share of approximately one fifth of total world exports (intra-EU trade excluded) since 1990 (European Commission 2000). As with many countries in the EU, Portugal's economic growth depends heavily on the exporting success of its firms. Since entering the EU in 1986, the country's export growth has boomed. From 1986-91, the country's exports increased by 9.5% per annum. The most recent data show that since 1993, Portuguese exports have increased by 60% (National Statistics Institute 1999). Collectively, these characteristics provide an ideal context for considering how export assistance relates to a firm's export performance.

Survey Instrument Development

A questionnaire was developed that incorporates a variety of multi-item measures and indicators of the conceptual framework. The questionnaire was initially developed in English and was then translated into Portuguese. The content and face validity of the items was assessed by four Portuguese judges (university lecturers); each judge was asked to assess how representative each item was of the final construct. The survey was revised according to their comments. It was then given to a pretest sample of fifteen managers involved in export

operations. The pretest results were used to further refine the questionnaire. In order to avoid translation errors, the questionnaire was translated into English by a different researcher. A full listing of the final items (in English) can be found in Appendix A. The internal reliability (Cronbach 1951) for all the scales is well over the minimum level of .70. Appendix B provides an overview of the means, standard deviations, and the correlation matrix among the final items.

Data Collection Procedure

A sample of 2,500 firms was randomly generated from the government agency database of Icep-Portugal (1997). This database of 4,765 Portuguese exporters is the most comprehensive and up-to-date database available in the Portuguese market.

The data collection was conducted in the first quarter of 1999. The pretest results indicated a strong need for an incentive to motivate the respondents to participate. One manager's suggestion was incorporated into the data collection: Respondents would be provided with a list of potential overseas importers or clients in return for a completed survey. This incentive was stated in the cover letter. In the first mailing, a cover letter, a questionnaire, and an international postage-paid business reply envelope was sent to the person responsible for exporting in each of the 2,500 Portuguese firms. This missive was followed by a second mailing that included a reminder letter and a reply envelope.

Of the sample of 2,500 managers, 29 stated that they no longer exported and 119 questionnaires were returned by the mailing service. These firms had either closed down or had moved without leaving a forwarding address. Thus, the sample size was reduced to 2,352. Of these, 519 questionnaires were returned, a 22% response rate. This result is satisfactory, considering that the average upper management domestic survey response rate is between 15 and 20% (Menon, Bharadwaj, Adidam, and Edison 1999). Non-response bias

was tested by assessing the differences between the early and late respondents with regard to the means of all the variables (Armstrong and Overton 1977). Early respondents were defined as the first 75% of the returned questionnaires, and the last 25% were considered to be late respondents. These proportions approximate the actual way the questionnaires were returned. No significant differences among the early and late respondents were found, suggesting that response bias was not a significant problem in the study.

Data Profile

The Portuguese exporting industry is primarily composed of small to mid-sized enterprises (SMEs). Exporters from all the Portuguese regions participated in the survey. The average annual sales of these firms ranged in the millions from $1.4 - $4.6M US (€ 1.5M - € 5M), with 8% of the companies having annual sales over $32.2M US (€ 35M), and 5% having more than 500 employees. Over 75% of the respondents reported on ventures with other European countries, while the remainder occurred with the United States and other non-European countries. The average sales revenue of the main export venture ranged from $370,000 - $1.4M US (€ 400,000 - €1.5M).

The survey was directed to individuals who were primarily responsible for exporting operations and activities. The job title of these individuals ranged from president to marketing director, managing director, or exporting director. 39.3% of the respondents indicated that they had been responsible for the exporting operations of their firm for 8 to15 years, while 81.5% of the respondents ranged from 3 to 30 years of responsibility for the operations. Respondents were also asked to indicate their degree of experience in exporting on a scale where 1=none and 5=substantial. The mean response was 3.6 (sd=.84, range 1 to 5). Collectively, this indicates that although the title of the respondents' positions may be

wide-ranging, the individuals appear to have significant knowledge in the specific exporting

activities of the firm and are experienced with exporting in general.

Model Fit Criteria

The conceptual framework of Figure 1 is simultaneously estimated in a structural

equation model in LISREL 8.3 (Jöreskog and Sörbom 1993). Given the ordinal nature of the

scales, we tested the proposed hypotheses using weighted least squares (WLS).[1] The final

structural model revealed discriminant, convergent and nomological validity.

****
Insert Figure 1 about here
****

Specifically, the structural model contains 5 constructs, 17 observable indicators,

measurement and latent variable errors, and inter-correlations between the latent constructs.

As one can observe in Appendix A, all of the 5 constructs present the desirable levels of

composite reliability (Bagozzi 1980). Appendix A also shows that all possible pairs of

constructs passed the Fornell and Larcker's (1981) test of discriminant validity. Convergent

validity was evidenced by the large and significant standardized loadings of each item on its

intended construct (average loading size was 0.83). Nomological validity refers to the

validity of the entire model. The final model has a chi-square of 420.54 (df=109, p<.00).

Since the chi-square statistic is sensitive to sample size, we also assess additional fit indices:

the Comparative Fit Index (CFI), the Incremental Fit Index (IFI), and the Tucker-Lewis Fit

Index (TLI). The CFI, IFI, and TLI of this model are .99, .99, and .99, respectively. This

reveals that the final model is fairly good in the sense of reproducing the population

covariance structure, and that there is an acceptable discrepancy between the observed and

predicted covariance matrices.

Table 1 provides the WLS estimates for all of the direct, indirect and total effects.

****

Insert Table 1 about here

****

Consistent with hypothesis H1, the results indicate that management international experience has a highly significant positive direct impact on export assistance (γ=0.18, p<0.005). Similarly, as predicted by hypothesis H2, the degree of competition has a significant positive impact on export assistance (γ=0.08, p<0.05). Both hypotheses H3 and H4 are also confirmed. A highly significant direct impact was found regarding the effects of management international experience (γ=0.15, p<0.005) and export assistance (β=0.15, p<0.005) on pricing adaptation. Surprisingly, the results relating to the direct effect of export market competition on pricing adaptation (H5) were found to be not statistically significant. As expected, both hypotheses H6 and H8, relating to the positive direct impact of management's experience (γ=0.16, p<0.005) and export assistance (β=0.09, p<0.01) on export performance, are confirmed. Contrary to our original hypothesis H7, we found pricing adaptation (β=-0.23, p<0.01) to be highly significantly inversely related to export performance. Also surprising were the findings related to hypothesis H9. We found that export market competition has a highly significant positive direct impact on export performance (γ=0.11, p<0.01). In sum, the findings show that eight out of the nine predicted direct relationships are significant. Of these, four relationships are highly significant at the 0.005 level (H1, H3, H4, H6), three relationships are highly significant at the 0.01 level (H7, H8, H9), and one is significant at the 0.05 level (H2). Two relationships have signs significantly contrary to those predicted (H7, H9).

One of the key advantages of using a path model is the possibility of estimating not only the *direct* effects, but also the *indirect* and *total* effects among latent variables (Bollen

1989). Table 1 shows that three out of the five possible *indirect* effects are statistically significant. Both the direct (γ=0.15, p<0.005) and indirect (0.03, p<0.005) impact of management international experience on pricing adaptation are found to be highly positively statistically significant. Consequently, the indirect relationship strengthens the total effect (0.18, p<0.005). More surprising is the fact that the *total* effect of public support on export performance is found to be not significant. This situation occurs because while the direct effect is highly and positively significant (β=0.09, p<0.01), the indirect effect is highly and negatively significant (-0.03, p<0.01). Finally, although the direct impact of competition on pricing adaptation is not significant, the indirect impact is found to be significant (0.01, p<0.05), but the total effect is insignificant.

DISCUSSION

In sum, eight out of the nine predicted *direct* relationships are statistically significant. Two of the significant relationships have signs contrary to those that were predicted. Additionally, three out of the five possible *indirect* effects are significant (one sign is significantly contrary to the predicted one), and seven out of the nine possible *total* effects are significant (two signs are significantly contrary to those predicted). Of particular interest for our discussion are the surprising relationships and the relationships that have important implications for practice and public policy making. This leads to the analysis of: (1) determinants of export assistance; (2) determinants of pricing strategy adaptation; and (3) determinants of annual export performance improvement (see Table 2).

****
Insert Table 2 about here
****

Determinants of Export Assistance

The most important indicator of export assistance is management international experience, which is twice as important as export market competition. In other words, when allocating export support, the European Union, national government and trade associations will give greater emphasis to managerial experience than to the level of export market competition. This finding supports the work of some strategy theorists (e.g. McGahan and Porter 1997; Roquebert, Philips and Westfall 1996; Rumelt 1991), who have stressed the importance of firm factors versus industry factors to achieve the desired performance.

Determinants of Pricing Strategy Adaptation

Management international experience and export assistance are found to have a similar positive impact on pricing adaptation. Surprisingly, competition is found not to *directly* influence pricing adaptation. A possible explanation, based on Bilkey's (1984) work, is that, as with American firms, the competitive advantage of some Portuguese firms might reside in exporting price-inelastic products or in following the firm's price-supply function rather than foreign price-demand functions.

Although export market competition does not *directly* influence pricing adaptation, there is an *indirect* positive impact on pricing adaptation. This indirect impact results from the fact that more export assistance is provided to firms operating in more competitive markets, which in turn leads managers to do more to adapt the pricing strategy to the foreign market. A possible interpretation of this finding is that although managers tend to offer the lowest possible prices, they are aware of the importance of properly adapting their strategy to the foreign market. Consequently, if they receive export assistance they will be tempted to use this support to overcome some of the costs associated with this adaptation and to invest in human and financial resources in order to better adapt their strategies.

Our results show that pricing adaptation has the most important *direct* impact on export performance. Surprisingly, this is a strong negative effect. This unexpected relationship has also surprised some managers. For example, according to one managing director:

> *"The positive effect of standardizing prices is quite surprising. The various markets have different levels of buying power. Although people speak about the EU as a single market, the reality is that each national market is still a different market."*

Nevertheless, our findings are in line with recent findings on Israeli (Shoham 1999) and Colombian exporters (Zou, Andrus and Norvell 1997). Similar to the results of those studies, the most feasible explanation for our findings is that the Portuguese market tends to have lower prices than most of the foreign markets receiving the exports. Thus, the use of a standardized price strategy, i.e. a strategy with prices similar to those in the domestic market, might help to penetrate the export market and improve export performance (Zou, Andrus and Norvell 1997). This explanation is also in line with previous research that has associated a low competitive price with better performance (e.g. Madsen 1989; Piercy 1981; Reid 1983).

The general manager of a seeds exporting firm provides a second explanation. He suggests that this situation might occur because Portuguese exporters usually trade in US dollars for countries outside the Euro Zone. The benefits associated with the relative strength of the US dollar take some of the pressure off Portuguese exporters to increase foreign prices. Thus, the weakness of the Escudo/Euro versus the US dollar helps Portuguese exporters to maintain their foreign prices after penetrating a market with price levels similar to those in the domestic market.

A third explanation for this unexpected relationship is that price is normally associated with the consistency of a product's image across markets (Buzzell 1968). It is

possible that for most products in the sample, the adaptation of the pricing strategy would worsen the desired universal image of the product, and would consequently have a negative effect on its performance. A final explanation is provided by Cavusgil and Zou (1994), who suggest that standardized strategies might sometimes be more effective because of the associated costs.

Our findings also reveal that while the direct effect of export assistance on export performance is *positively* significant, the indirect effect is highly *negatively* significant. The indirect effect suggests that the firms receiving more export assistance make more effort to adapt their prices, which in turn leads to a worse performance. This situation leads to a non-significant total effect of export assistance on export performance. Based on the follow-up interviews, we might conjecture that the most feasible explanation for this relationship is related to the limited amount of human resources that most Portuguese firms are willing to dedicate to exporting activity. Furthermore, a large number of exporting firms still remain as *pure* family businesses. Hence, managers within these firms might have a false assessment of the external environment and be incapable of implementing pricing adaptation (for example in terms of the timing of implementation), and this might lead to a poor performance (Cavusgil and Zou 1994).

Surprisingly, export market competition has a *direct* positive impact on export performance. A possible explanation is that the less competitive markets tend to be associated with the less developed countries (Sriram and Manu, 1995), and in these countries it is harder to achieve export success because of the economic instability in these markets (Austin 1990). Another possible explanation, presented by a sales manager of a chocolate exporting firm, is that companies tend to relax in markets that are easier to operate in. On the other hand, in the most difficult markets companies need to react and be more committed; and, since companies that are more committed to export tend to perform better (Bilkey 1982;

Beamish, Craig and McLellan 1993; Cavusgil and Zou 1994; Tookey 1964), Portuguese companies selling to the more competitive markets present better results.

Implications for Practice and Public Policy Making

In addition to providing useful insights into the international marketing literature, this research can aid managers in improving their firm's performance. Our results indicate that firms are more likely to improve their short-term performance if they have more experienced managers. Hence, companies may benefit by hiring managers with experience in international business because these managers will have established networks and a better understanding of the foreign markets.

A vital issue for managers is whether to adapt or standardize the domestic pricing strategy to the foreign market. Price is relatively easy and fast to adapt and consequently, it is easier to identify its effects on short-term performance. Our findings indicate that price adaptation has a negative impact on performance improvement. In our study of the Portuguese situation the adaptation of price entails charging higher prices in the foreign market than in the domestic market. This suggests that price standardization is particularly recommended when the domestic market price is lower than competitive prices in the foreign market, and when firms might benefit from a currency advantage to maintain the prices used for the domestic market to the foreign market.

Our findings also indicate that firms exporting to more competitive markets tend to perform better, suggesting that managers exporting to these markets are more alert to market opportunities and competitors' threats, and as a result they will perform better.

By better understanding how exporting firms operate, it will also be easier for public policy makers to screen candidates in order to allocate export assistance more effectively. This study shows that a firm's export performance increases with both the degree of

management international experience and the level of export market competition. Hence, public policy makers know that the prospects for achieving better results in a shorter period, and consequently realizing a better allocation of their resources, will increase if they continue to allocate export assistance to the most experienced firms and to firms able to operate in the most competitive markets.

Finally, our findings reveal that the *total* effects of export assistance on export performance are non-significant because although support has a direct positive impact on performance, it also has a negative indirect impact through pricing strategy. Hence, as the support provided to the export activity is aimed at bringing benefits to both governments and firms, it is reasoned that public policy makers and managers should discuss the most appropriate export assistance and how this assistance can best be applied in order to maximize its effectiveness. By better understanding the relationship among export assistance, pricing strategy adaptation and short-term performance, public policy makers can avoid being caught in a vicious cycle of successive unsatisfactory allocations of their resources. In particular, when a firm's export performance is not satisfactory because of the strategy used for the foreign market, public policy makers should debate with managers how to break this pattern.

LIMITATIONS

This research analyzes the relationship among three main constructs: 1) export assistance, 2) price strategy adaptation, and 3) export performance. Since it would be impossible to include in our model the numerous contingent forces that have been presented during the last five decades as influencing each one of the three main constructs, we selected two independent constructs --international experience and export competition-- that have been debated in all the three streams of the international marketing literature. Nevertheless,

we are aware as with other non-holistic studies, that such an omission may lead to a degree of bias in the parameter estimates associated with the independent variables.

The second limitation is that the data incorporate only the view of the exporter and do not consider the views of public policy makers. The third limitation is that the survey methodology may have created common method variance that could have inflated construct relationships. This could be particularly threatening if the respondents were aware of the conceptual framework of interest. However, they were not told the specific purpose of the study and some of the construct items were separated and mixed so that no respondent would be able to detect which items were affecting which factors. Hence, the biasing possibilities of common method variance should be minimized to some degree.

A final limitation is related to the exclusive focus on exporting firms based in Portugal. Although this may limit the generalizability of the results to some degree, countries similar to Portugal may also benefit from the findings. Portugal is particularly interesting to study, as it is an emergent EU economy that is strongly dependent on the exporting activity of its firms. Furthermore, the small size of the Portuguese domestic market leads to a strong export orientation of both Portuguese managers and public policy makers. Nevertheless, generalizations to firms based in countries with characteristics similar to those of Portugal (e.g. emergent economies, export-oriented countries or small European countries) must be made with caution.

DIRECTIONS FOR FURTHER RESEARCH

As initially discussed, there is an urgent need to develop more policy-oriented international marketing research. In this research we have attempted to help fill this important gap in the literature. We have included export assistance in our research model in order to determine the extent to which it has an impact on pricing strategy adaptation and how this impact manifests itself in performance. Simultaneously, we have focused on

understanding export pricing adaptation/standardization strategy, one of the less researched topics in international marketing.

Export Assistance

Export support may be provided in many different forms: for example, elimination of bureaucratic requirements, tax concessions, various fiscal and financial incentives, production support, assistance with technological innovation, export education and training, consular services, provision of market information and contacts abroad, the evaluation of a firm's exporting potential, advice on export opportunities, the facilitation of trade mission market visits, support for participation of domestic firms in international trade fairs, among others. While it would be impossible to consider all the different forms of support in a single research study, it would be interesting for future research to select some of these forms of assistance and try to capture some of the issues not captured by this exploratory study. For example, future studies could try to identify how specific forms of assistance might relate to a firm's strategy and performance as well as which forms of assistance are available to which firms. For example, in some large countries/regions (as in the U.S.) public policy makers may target specific industries with specific supports.

In this exploratory study, we define export assistance as the amount of support received from three different sources. This study has shown that overall export assistance received from these sources has a direct impact on both pricing strategy adaptation and export performance. Another interesting avenue for future research would be to identify how the breadth (number of different supports received from various sources) and depth of assistance (frequency of use of each support received) impacts on pricing strategy and performance.

It also seems reasonable that future research might examine the use of assistance for export market entry by non-exporters, or how exporters use export assistance to enter previously unexplored markets. In sum, the export assistance-export performance topic is definitely a very rich field with immense issues to explore.

Pricing Strategy Adaptation

As previously discussed, there is an important gap in the literature concerning the analysis of international pricing strategies. This gap is even more surprising since pricing is considered to be a key issue from a managerial perspective. Based on the results presented herein, one could conjecture that annual export performance does not improve because of the manner in which firms are using the assistance to develop their pricing strategies. However, since the cost of implementing an adapted pricing strategy is not included in our model, we cannot rule out this possibility. It may be that the cost of implementing an adapted strategy outweighs the advantages of having a more adapted price. Future research could expand on this particular issue.

Further research might also attempt to examine company pricing practice in the foreign market following different perspectives: possibilities include exploring the antecedents and consequences of price competitiveness (see: Cavusgil and Zou 1994) and different price levels, such as the use of price premium, going-rate and discount pricing strategies (see: Paun, Compeau and Grewal 1997).

Annual Performance Improvement

This paper argues that it is *crucial* to develop an in-depth understanding of short-term performance, more precisely of annual performance improvement. Although neglected by previous research (see Shoham 1999 as an exception), both managers and public policy makers consider short-term performance a top priority issue.

31

First, when the results of export operations improve from one year to the following, the internal and external publics are more likely to react satisfactorily and export managers will be in a better position to request from top managers and public policy makers more resources for long-term investment in exporting. Second, if performance improves from a preceding year, firms will have more resources to develop extra actions, which will help to develop long-term results. Third, as suggested during an interview, there is a common practice of managers focusing on annual performance improvement because it is much easier to establish and quantify results annually than in the long-term. Furthermore, managers consider short-term performance vital because it relates to their own personal interests. In recent years, there has been an increasing mobility of managers across firms, and top managers spend fewer years within the same organization. This might lead them to place more importance on short-term performance. Moreover, performance improvement at the end of the year might have an immediate effect in terms of personal income (e.g. salary bonus).

Finally, if one considers that long-term success in export allocation is also a result of short-term actions, public policy makers will favorably view a positive relationship between the export assistance offered and yearly performance improvements in firms receiving that support. A proper allocation of export assistance will allow public policy makers to save resources that can be used to generate reserves or can be allocated to other activities.

For the reasons stated above, we believe that much more research on short-term performance improvement and its determinants is important to theory development as well as managerial and public policy interests.

With this exploratory research we hope to stimulate international marketing researchers to develop future studies that analyze both the antecedents and outcomes of export assistance. Our findings strongly support the argument that, in addition to the analysis of direct relationships, further insights are offered by the analysis of the indirect and total effects among variables (please compare results presented in Figure 1 with results presented in Table 1). For example, our findings reveal that while the direct effect of export assistance on short-term export performance is positive, the indirect effect is negative (the total effect became not significant). Thus, a model using only direct effects could have supported a misleading conclusion that export assistance has a positive performance payoff. Likewise, although the direct impact of competition on pricing adaptation is not significant, the indirect impact is found to be positively significant (the total effect is not significant). Hence, the insights provided by a simultaneous analysis of the direct, indirect and total effects might explain why previous research that has focused exclusively on the study of direct relationships has been inconclusive. Much more empirical research is needed to focus on the analysis and understanding of the *indirect* relationships.

Finally, in order to further test the relationships presented in this research, this study should be replicated with firms based in different countries. Two interesting possibilities would be to compare firms based in developed and developing countries, or to undertake a similar survey across different European countries (inside and outside the Eurozone). It would also be useful to test the hypotheses presented in this exploratory study when comparing industries and the level of internationalization and size of the firms. Finally, our short-term results indicate interesting and surprising features, which might well be suggestive of the potential for further surprising results when a longer horizon is examined.

REFERENCES

Armstrong, J. Scott & Terry S. Overton. 1977. Estimating Non-Response Bias in Mail Surveys. *Journal of Marketing Research,* 16 (Aug): 396-400.

Astley, G. & A. Van De Ven. 1983. Center Perspectives and Debates in Organizational Theory. *Administrative Science Quarterly,* 28: 245-73.

Austin, J. 1990. *Managing in Developing Countries*. N.Y.: Free Press.

Axinn, Catherine N. 1988. Export Performance: Do Managerial Perceptions Make a Difference? *International Marketing Review*, 5(2), 61-71.

Bagozzi, Richard P. 1980. *Causal Models in Marketing*. NewYork: Wiley.

Beamish, Paul W., R. Craig & L. McLellan. 1993. The Performance Characteristics of Canadian versus U.K. Exporters in Small and Medium Sized Firms. *Management International Review,* 33 (2): 121-37.

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

------------. 1984. Export Marketing Practices and Export Profitability In *Research in Marketing*. Eds Jagwich N. Sheth. Connecticut: JAI Press.

------------. 1987. Profitable Export Marketing Practices: An Exploratory Inquiry. In *Managing Export Entry and Expansion*. Eds P. Rosson and S. Reid. London: Praeger.

Bollen, Kenneth A. 1989. *Structural Equations with Latent Variables*. N.Y.: John Wiley.

Boulding, K. 1956. General Systems Theory- The Skeleton of Science. *Management Science,* 2: 197-208.

Bourgeois, L. 1980. Performance and Consensus. *Strategic Management Journal,* 1: 227-248.

Brezzo, Roberto & Isaak Perkal. 1983. The Role of Marketing Incentives in Export Promotion: The Uruguayan Case. In *Export Promotion: The Public and Private Sector Interaction*. Eds. Michael R. Czinkota N.Y.: Praeger Publishers.

Buzzell, Robert. 1968. Can You Standardize Multinational Marketing. *Harvard Business Review,* 46 (Nov-Dec): 102-13.

Cavusgil, S. Tamer & V. H. Kirpalani. 1993. Introducing Products Into Export Markets: Success Factors. *Journal of Business Research,* 27 (1): 1-14.

------------ & John R. Nevin. 1981. State-of-the-Art in International Marketing: An Assessment. In *Annual Review of Marketing*. Eds Ben M. Ennis & Kenneth J. Roering. Chicago: AMA.

------------ & Shaoming Zou. 1994. Marketing Strategy-Performance Relationship: An Investigation of the Empirical Link in Export Market Ventures. *Journal of Marketing,* 58 (Jan): 1-21.

------------, ------------, & G. M. Naidu. 1993. Product and Promotion Adaptation in Export Ventures: An Empirical Investigation. *Journal of International Business Studies,* 24(3): 479-506.

Chau, Patrick Y. 1997. Re-examining a Model for Evaluating Information Center Success Using a Structural Equation Modeling Approach. *Decisions Sciences,* 28 (2): 309-34.

Clark, Bruce H. & David B. Montgomery. 1999. Managerial Identification of Competitors. *Journal of Marketing,* 63 (Jul): 67-83.

Colaiacovo, J. L. 1982. Export Development in Latin America, In *Export Policy: A Global Assessment.* Eds Michael R. Czinkota & G. Tesar. N.Y.: Praegar.

Cronbach, Lee J. 1951. Coefficient Alpha and the Internal Structure of Tests. *Psychometrika* 16 (Sep): 297-334.

Cui, Charles Chi & Won Park. 1999. Assessing Service Quality Measurement in South Korea. In *EMAC's CD Rom Proceedings*. Berlin: EMAC.

Curran, P. J., Stephen G. West & John F. Finch. 1996. The Robustness of Test Statistics to Non-normality and Specification Error in Confirmatory Analysis. *Psychological Methods,* 1 (1): 16-29.

Cyert, Richard M. & James G. March. 1963. *A Behavioral Theory of the Firm*. N.J.: Prentice-Hall.

Czinkota, Michael R. 1994. A National Export Assistance Policy for New and Growing Businesses. *Journal of International Marketing,* 2 (1): 91-101.

------------. 2000. Educator Insights: The Policy Gap in International Marketing. *Journal of International Marketing,* 8 (1): 99-111.

Das, Mallika. 1994. Successful and Unsuccessful Exporters from Developing Countries: Some Preliminary Findings. *European Journal of Marketing,* 28 (12): 19-33.

Day, George S. & Robin Wensley. 1988. Assessing Advantage: A Framework for Diagnosing Competitive Superiority. *Journal of Marketing,* 52 (2): 1-20.

Delaney, John T. & Mark A. Huselid. 1996. The Impact of Human Resource Management Practices on Perceptions of Organizational Performance. *Academy of Management Journal,* 39 (4): 949-69.

Demick, David & Aidan J. O'Reilly. 2000. Supporting SMEs Internationalization: A Collaborative Project for Accelerated Export Development. *Irish Marketing Review,* 13 (1): 34-45.

Denis, Jean-Emile & Daniel Depleteau. 1985. Market Knowledge, Diversification and Export Expansion. *Journal of International Business Studies,* 16 (3): 77-89.

Diamantopoulos, Adamantios & Heidi M. Winklhofer. 2001. Index Construction with Formative Indicators. *Journal of Marketing Research,* 38 (May): 269-277.

Douglas, Susan P. & Samuel Craig. 1989. Evolution of Global Marketing Strategy: Scale, Scope and Synergy. *Columbia Journal of World Business,* (Fall): 47-58.

European Commission. 2000. http://europa.eu.int/comm/trade/index_en.htm (DGI)

Fenwick, I. & L. Amine. 1979. Export Performance and Export Policy. *Journal of the Operational Research Society,* 30 (8): 747-54.

Fornell, Claes & D. Larcker. 1981. Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research,* 28 (Feb): 39-50.

Gençturk, E. & M. Kotabe. 2001. The Effect of Export Assistance Program Usage on Export Performance: A Contingency Explanation. *Journal of International Marketing,* 9 (2): 51-72.

Goldberger, A. S. 1964. *Econometric Theory*. N.Y.: Wiley.

Gray, Brendan J. 1997. Profiling Managers to Improve Export Promotion Targeting. *Journal of International Business Studies,* 28 (2): 387-420.

Greve, Henrich R. 1998. Performance, Aspirations, and Risky Organizational Change. *Administrative Science Quarterly,* 43, 58-86.

Icep-Portugal. 1997. *CD-Export Database: Disk 1*. European Union: Dataware Technologies.

Jain, S. C. 1989. Standardization of International Marketing Strategy: Some Research Hypotheses. *Journal of Marketing,* 53 (Jan): 70-79.

Johansson, J. K. & J. Vahlne. 1977. The Internationalization Process of the Firm: A Model of Knowledge Development and Increasing Foreign Market Commitments. *Journal of International Business Studies,* 8 (1): 23-32.

Jöreskog, K. & D. Sörbom. 1993. *LISREL 8: Structural Equation Modeling with the SIMPLIS Command Language*. Chicago: SSI.
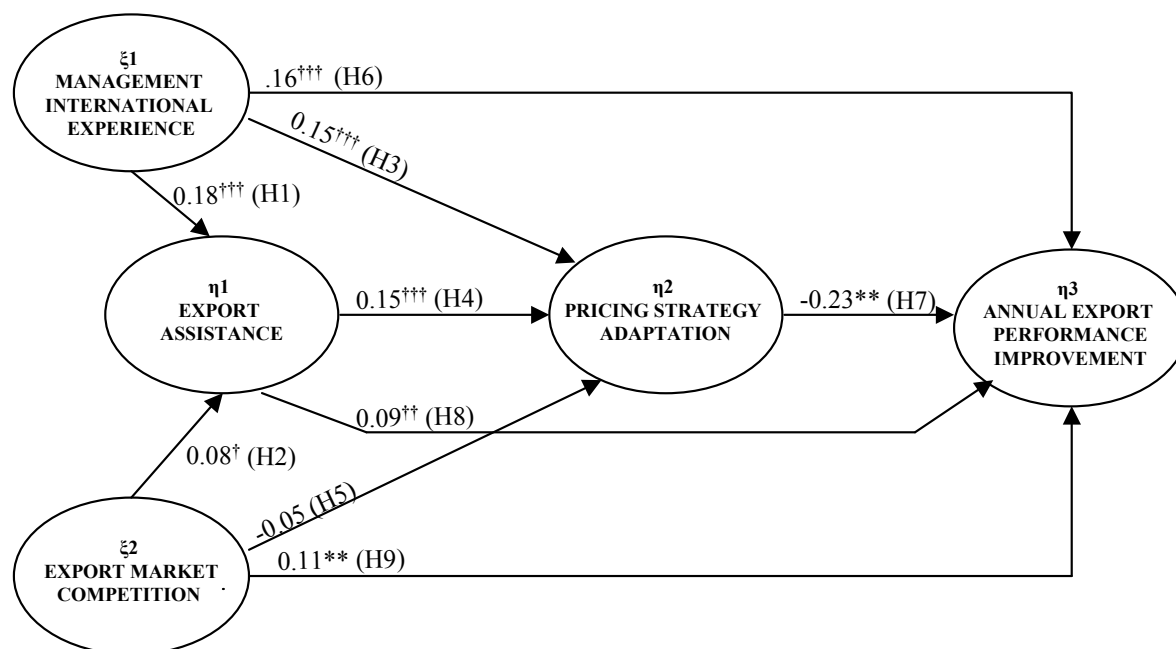
Katsikeas, Constantine S., Jim Bell & Robert E. Morgan. 1998. Editorial: Advances in Export Marketing Theory and Practice. *International Marketing Review,* 15 (5): 322-32.

------------, Leonidas C. Leonidou & Neil A. Morgan. 2000. Firm-Level Export Performance Assessment: Review, Evaluation, and Development. *Journal of the Academy of Marketing Science,* 28 (4): 493-511.

------------, Nigel F. Piercy & C. Ionnidis. 1996. Determinants of Export Performance in a European Context. *European Journal of Marketing,* 30(6): 6-35.

Knoke, D. & A. L. Kalleberg. 1994. Job Training in U.S. Organizations. *American Sociological Review,* 59: 537-46.

Koh, Anthony C. 1991. Relationship among Organizational Characteristics, Marketing Strategy and Export Performance. *International Marketing Review,* 8 (3): 46-60.

Kotler, P. 1996. *Marketing Management: Analysis, Planning, Implementation and Control*, 9th Ed. New Jersey: Prentice Hall.

Lages, Luis Filipe. 2000a. A Conceptual Framework of the Determinants of Export Performance: Reorganizing Key Variables and Shifting Contingencies in Export Marketing. *Journal of Global Marketing,* 13(3): 29-51.

------------. 2000b. Export Marketing Standardization and its Influence on Performance: A Structural Model Examination. Unpublished Ph.D. Dissertation, Warwick Business School, Warwick University, U.K. (for an abstract see: www.jibs.net).

------------ & T. C. Melewar. 2001. Linking Management Forces, Marketing Standardization and Export Performance. 30th EMAC Conference, CD Rom Proceedings, Bergen, Norway: European Academy of Marketing.

Lant, Theresa K. & Amy E. Hurley. 1999. A Contingency Model of Response to Performance Feedback: Escalation of Commitment and Incremental Adaptation in Resource Investment Decisions. *Group & Organization Management,* 24 (Dec): 421-37.

Leonidou, L. C., C. S. Katsikeas & Saeed Samiee. 2002. Marketing Strategy Determinants of Export Performance: A Meta-Analysis. *Journal of Business Research,* 55: 51-67.

Madsen, Tage K. 1989. Successful Export Management: Some Empirical Evidence. *International Marketing Review,* 6 (4): 41-57.

March, James G. & H. A. Simon. 1958. *Organizations*. N.Y.: John Wiley & Sons.

McGahan, A. M. & M. Porter. 1997. How Much Does Industry Matter, Really? *Strategic Management Journal,* 18 (SI): 15-30.

Menon, Anil, Sundar G. Bharadwaj, Phani Tej Adidam & Steven W. Edison. 1999. Antecedents and Consequences of Marketing Strategy Making: A Model and a Test. *Journal of Marketing,* 63 (Apr): 18-40.

Myers, Matthew B. & S. Tamer Cavusgil. 1996. Export Pricing Strategy-Performance Relationship: A Conceptual Framework. in *Advances in International Marketing*. Eds. S.T. Cavusgil & T.K. Madsen. Greenwich, Conn: JAI Press.

Nakos, George, K. D. Brouthers & L. E. Brouthers. 1998. The Impact of Firm and Managerial Characteristics on Small and Medium-Sized Greek Firms' Export Performance. *Journal of Global Marketing,* 11 (4): 23-47.

Paun, Dorothy A., Larry Compeau & Dhruv Grewal. 1997. A Model of the Influence of Marketing Objectives on Pricing Strategies in International Countertrade. *Journal of Public Policy & Marketin*g, 16 (1): 69-82.

Pettigrew, Andrew & Richard Whipp. 1998. *Managing Change for Competitive Success* Oxford: Blackwell Publishers, Ltd.

Piercy, Nigel. 1981. British Export Market Selection and Pricing. *Industrial Marketing Management,* 10 (4): 287-97.

Porter, M. E. 1985. *Competitive Advantage: Creating and Sustaining Superior Performance.* N.Y.: The Free Press.

Reid, S. D. 1983. Managerial and Firm Influences on Export Behavior. *Journal of the Academy of Marketing Science,* 11 (Sum): 323-32.

------------. 1984. Information Acquisition and Export Entry Decisions in Small Firms. *Journal of Business Research,* 12 (2): 141-57.

Roquebert, Jaime A., Robert L. Philips & Peter A. Westfall. 1991. Markets Versus Management: What 'Drives' Profitability. *Strategic Management Journal,* 12: 167-85.

Rumelt, Richard P. 1991. How Much Does Industry Matter? *Strategic Management Journal,* 12: 167-85.

Russell, J. S., J. R. Terborg & M. L. Powers. 1985. Organizational Performance and Organizational Level Training and Support. *Personnel Psychology,* 38: 849-63.

Samiee, Saeed. 1987. Pricing in Marketing Strategies of U.S. and Foreign Based Companies. *Journal of Business Research,* 15 (Mar): 17-30.

------------ & Kendall Roth. 1992. The Influence of Global Marketing Standardization on Performance. *Journal of Marketing,* 56 (Apr): 1-17.

Seringhaus, F. H. Rolf 1986. The Impact of Export Marketing Assistance. *International Marketing Review,* 3 (2): 55-66.

------------ & Guenther Botchen 1991. Cross-National Comparison of Export Promotion Services: The Views of Canadian and Austrian Firms. *Journal of International Business Studies,* 115-133.

------------ & P. J. Rosson. 1990. *Government Export Promotion: A Global Perspective.* N.Y.: Routledge.

Shoham, Aviv. 1999. Bounded Rationality, Planning, Standardization of International Strategy, and Export Performance: A Structural Model Examination. *Journal of International Marketing,* 7 (2): 24-50.

Simon, H. 1957. *Administrative Behavior.* N.Y.: McMillan.

Singer, T. O. & Michael R. Czinkota. 1994. Factors Associated with Effective Use of Export Assistance. *Journal of International Marketing,* 2 (1): 53-71.

Sriram, Ven and Franklyn A. Manu. 1995. Country-of-Destination and Export Marketing Strategy: A Study of U.S. Exporters. *Journal of Global Marketing,* 8(3/4), 171-190.

Styles, Chris. 1998. Export Performance Measures in Australia and the United Kingdom. *Journal of International Marketing,* 6 (3): 12-36.

Tookey, D. A. 1964. Factors Associated with Success in Exporting. *The Journal of Management Studies,* 1 (Mar): 48-66.

Von Bertalanffy, L. 1951. General System Theory: A New Approach to Unity of Science. *Human Biology,* 23 (Dec): 303-61.

Walters, Peters G. & Saeed Samiee. 1990. A Model for Assessing Performance in Small US Exporting Firms. *Entrepreneurship Theory and Practice,* 15 (2): 33-50.

Weaver, K. Mark, David Berkowitz, Les Davies. 1998. Increasing the Efficiency of National Export Promotion Programs: The Case of Norwegian Exporters. *Journal of Small Business Management,* 36 (4): 1-11.

Weitz, Barton A. 1985. Introduction to Special Issue on Competition in Marketing. *Journal of Marketing Research,* 22 (3): 229-36.

Zeithaml, Valarie A., P. Rajan Varadarajan and Carl P. Zeithaml. 1988. The Contingency Approach: Its Foundations and Relevance for Theory Building and Research in Marketing. *European Journal of Marketing,* 22(7): 37-64

Zou, Shaoming, David M. Andrus & D. Wayne Norvell. 1997. Standardization of International Marketing Strategy by Firms from a Developing Country. *International Marketing Review,* 14 (2): 107-23.

FIGURE 1
Direct effects of exogenous and prior endogenous constructs

ξ1 MANAGEMENT INTERNATIONAL EXPERIENCE

η1 EXPORT ASSISTANCE

η2 PRICING STRATEGY ADAPTATION

η3 ANNUAL EXPORT PERFORMANCE IMPROVEMENT

ξ2 EXPORT MARKET COMPETITION

.16††† (H6)
0.15††† (H3)
0.18††† (H1)
0.15††† (H4)
-0.23** (H7)
0.09†† (H8)
0.08† (H2)
-0.05 (H5)
0.11** (H9)

Values are completely standardized estimates.
†p<0.05, ††p<0.01, †††p<0.005 (one-tailed test) / **p<0.01 (two-tailed test)

TABLE 1
Direct, indirect and total effects of exogenous and prior endogenous constructs

EFFECT OF / ON	η1 Export assistance			η2 Pricing strategy adaptation			η3 Annual export performance improvement		
	Direct	Indirect	Total	Direct	Indirect	Total	Direct	Indirect	Total
ξ1 Management international experience	0.18††† 4.84 (H1)		0.18††† 4.84	0.15††† 3.32 (H3)	0.03††† 3.39	0.18††† 3.96	0.16††† 4.31 (H6)	-0.02 -1.71	0.14††† 3.84
ξ2 Export market competition	0.08† 1.84 (H2)		0.08† 1.84	-0.05 -1.10 (H5)	0.01† 1.65	-0.04 -0.85	0.11** 2.73 (H9)	0.01 1.43	0.12** 3.15
η1 Export assistance				0.15††† 3.96 (H4)		0.15††† 3.96	0.09†† 2.45 (H8)	-0.03** -3.22	0.06 1.52
η2 Pricing strategy adaptation							-0.23** -5.79 (H7)		-0.23** -5.79

Values in upper rows are completely standardized estimates. Values in lower rows are t-values.
†p<0.05, ††p<0.01, †††p<0.005 (one-tailed test) / *p<0.05, **p<0.01 (two-tailed test)

The standardized coefficients indicate how a typical variation in the independent variable leads to, or is associated with, a typical change or variation in the dependent variable (Goldberger 1964). They give an indication of relative importance to the dependent variable.

TABLE 2
Summary assessment of the effects of exogenous and prior endogenous constructs

Determinants of η1, η2, η3	Hypothesis	Expected sign[#]	Assessment
DIRECT RELATIONSHIPS			
Export assistance (η1)			
• Management international experience (ξ1)	H1	+	S
• Export market competition (ξ2)	H2	+	S
Pricing strategy adaptation (η2)			
• Management international experience (ξ1)	H3	+	S
• Export assistance (η1)	H4	+	S
• Export market competition (ξ2)	H5	+	NS
Annual export performance improvement (η3)			
• Management international experience (ξ1)	H6	+	S
• Pricing strategy adaptation (η2)	H7	+	R
• Export assistance (η1)	H8	+	S
• Export market competition (ξ2)	H9	-	R
INDIRECT RELATIONSHIPS			
Pricing strategy adaptation (η2)			
• Management international experience (ξ1)		+	S
• Export market competition (ξ2)		+	S
Annual export performance improvement (η3)			
• Management international experience (ξ1)		+	NS
• Export assistance (η1)		+	R
• Export market competition (ξ2)		+	NS
TOTAL RELATIONSHIPS			
Export assistance (η1)			
• Management international experience (ξ1)		+	S
• Export market competition (ξ2)		+	S
Pricing strategy adaptation (η2)			
• Management international experience (ξ1)		+	S
• Export assistance (η1)		+	S
• Export market competition (ξ2)		+	NS
Annual export performance improvement (η3)			
• Management international experience (ξ1)		+	S
• Pricing strategy adaptation (η2)		+	R
• Export assistance (η1)		+	NS
• Export market competition (ξ2)		-	R

Notations: S= Supported, R=Refuted, NS= not significant

The signs for the expected indirect and total effects were established by implication. We assume that if all the direct relationships involved in an indirect relationship are positive, the final indirect relationship is also expected to be positive. The same principle applies to the total effects. If both direct and indirect effects are expected to be positive, the sign for the total effect is also expected to be positive.

Please select the Main Export Venture* of your firm which will be the focus of this questionnaire:
    a) the main export of your firm (product or group of products) in terms of sales revenue _____
    b) the main importing country of your firm's main export in terms of sales revenue _____

IMPORTANT: You have just defined the Main Export Venture, which this questionnaire is about.

$\eta 1$: **Export assistance** ($\alpha = 0.76$; $\rho = 0.89$; $\rho_{vc(n)} = 0.74$)
    Question: Considering the main export venture* over the past year (1998), how do you classify the following items?
    Scale: 1=None; 5=Substantial
        y1: Support from European Union
        y2: Support from government (excluding EU support)
        y3: Support from trade associations

$\eta 2$: **Pricing strategy adaptation** ($\alpha = 0.85$; $\rho = 0.90$; $\rho_{vc(n)} = 0.69$)
    Question: Consider the main export venture* over the past year (1998). To what extent do the following aspects
                differ in comparing the main export market to the domestic market?
    Scale: 1=No Adaptation; 5=Extensive Adaptation
        y4: Determination of pricing strategy
        y5: Concession of credit
        y6: Price discounts policy
        y7: Margins

$\eta 3$: **Annual export performance improvement** ($\alpha = 0.93$; $\rho = 0.97$; $\rho_{vc(n)} = 0.93$)
    Question: How well did your company achieve the following objectives for the main export venture* from 1997 to
                1998?
    Scale: 1=Much Worse in 1998 than in 1997; 5=Much Better in 1998 than in 1997
        y8: Export sales revenue of the main export venture
        y9: Export sales volume (unit sales) of the main export venture
        y10: Export profitability of the main export venture

$\xi 1$: **Management international experience** ($\alpha = 0.75$; $\rho = 0.84$; $\rho_{vc(n)} = 0.57$)
    Question: Consider the people involved in your main export venture* during the past year (1998). How would you
                classify their:
    Scale: 1=None; 5=Substantial
        x1: Degree of professional exporting experience
        x2: Degree of overseas experience - live/work abroad
        x3: Degree of training in international business, e.g. attended formal courses and export seminars
        x4: Ability to follow-up on trade leads in the main importing market

$\xi 2$: **Export market competition** ($\alpha = 0.79$; $\rho = 0.85$; $\rho_{vc(n)} = 0.66$)
    Question: Considering the main export venture* over the past year (1998), how would you characterize the
                following aspects?
    Scale: 1=None; 5=Substantial
        x5: Extent of price competition in the industry
        x6: Competition in the accomplishment of delivery deadlines
        x7: Competition in the industry

*Main Export Venture: The <u>main product, or group of products</u>, exported by your company to the
                <u>most important foreign market</u> (in terms of sales revenue).

APPENDIX B
Means, Standard Deviations, and Correlations

	MEANS	S.D.	x1	x2	x3	x4	x5	x6	x7	y1	y2	y3	y4	y5	y6	y7	y8	y9	y10
x1	3.62	0.84	1.00																
x2	2.45	1.21	0.30**	1.00															
x3	2.56	1.00	0.40**	0.42**	1.00														
x4	3.23	0.92	0.49**	0.43**	0.54**	1.00													
x5	3.97	0.85	0.14**	0.11*	0.02	0.11*	1.00												
x6	3.76	0.92	0.07	0.07	0.06	0.15**	0.46**	1.00											
x7	3.87	0.86	0.13**	0.07	0.07	0.10*	0.62**	0.52**	1.00										
y1	1.87	0.87	0.09*	0.01	0.05	0.01	0.08	0.05	0.06	1.00									
y2	1.78	0.90	0.13**	0.09*	0.11*	0.10*	0.08	0.03	0.03	0.52**	1.00								
y3	1.63	0.81	0.06	0.00	0.09*	0.02	0.03	0.02	0.00	0.44**	0.64**	1.00							
y4	2.95	1.14	0.08	0.07	0.00	0.04	0.04	-0.01	0.03	-0.05	0.04	0.05	1.00						
y5	2.82	1.19	0.10*	0.11*	0.03	0.09*	0.02	0.01	-0.01	-0.06	0.08	0.06	0.46**	1.00					

	Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
y6	2.73	1.20	-0.01	0.06	0.01	0.02	-0.03	-0.04	-0.07	-0.03	0.06	0.08	0.49**	0.64**	1.00				
y7	2.92	1.17	0.01	0.07	-0.04	0.02	0.00	0.00	-0.04	-0.04	0.03	0.08	0.62**	0.57**	0.67**	1.00			
y8	3.38	1.01	0.04	0.11**	0.13**	0.13**	0.07	0.12**	0.08	0.00	0.06	0.01	-0.01	-0.05	-0.05	-0.10*	1.00		
y9	3.37	1.01	0.06	0.13**	0.13**	0.14**	0.06	0.09*	0.06	-0.03	0.05	0.02	-0.01	-0.08	-0.08	-0.10*	0.92**	1.00	
y10	3.19	0.91	0.04	0.11*	0.10*	0.14**	0.02	0.03	0.00	-0.02	0.05	0.04	0.02	-0.05	-0.06	-0.08	0.74**	0.76**	1.00

*p<0.05; **p<0.01 (two-tailed test)

ENDNOTE

---

[1] WLS is an asymptotically distribution free (ADF) method of estimation insensitive to the non-normality of the data. Despite being popular among other disciplines (e.g. sociology and psychology) when analyzing ordinal data, to the best of our knowledge, WLS has never been used in international business research. Some authors (see: Cui and Park 1999; Lages 2000b; Styles 1998) have recently started to recognize the advantages of ADF methods when compared with non-ADF methods, such as Maximum Likelihood Estimation (MLE). Nevertheless, the international business literature tends to use non-ADF methods (e.g. Shoham 1999; Styles 1998) or recommend their use (e.g. Cavusgil and Zou 1994). This is in part understandable, as simulations carried out by Curran, West and Finch (1996) demonstrated that a sample of at least 500 is required to use WLS. Samples larger than 500 are very difficult to obtain due to the time constraints and lack of resources usually dedicated to international business research. This situation becomes even more complex when data are collected in foreign markets because this type of research has very high costs that academics, with typically restricted budgets, must overcome (Zou, Andrus and Norvell 1997).