Explaining international performance: marketing mix, planning, and their interaction

Aviv Shoham
Lecturer of Marketing, Technion-Israel Institute of Technology, Haifa, Israel
Fredric Kropp
Assistant Professor of Marketing, Bond University, Gold Coast, Queensland, Australia

The extent of globalization of many world markets has made international marketing a crucial determinant of firms' performance. Most prior research used few measures of performance and explanatory strategy variables and, in some cases, did not discuss their reliability and validity. The research reported here includes a more comprehensive set of performance variables and investigates the reliability and validity of these measures of performance, as well as explanatory variables' measures. Research hypotheses about export performance as an outcome of international firm strategies covering channels of distribution, product, promotion, pricing, and planning are tested by data from a mail survey and from in-depth interviews. The findings are used to suggest managerial implications in the context of international marketing strategy.

Introduction

Globalization of world markets has resulted in increased demand for international marketing knowledge. This increase in demand has not been met by a matching increase in international studies of marketing (Silk, 1993). Especially disturbing is the inconsistency of findings about the relationships between international marketing strategy and performance (Aaby and Slater, 1989; Madsen, 1987). Shoham (1991) attributes these inconsistencies to conflicting conceptual and operational definitions of international performance.

An accurate understanding of the crucial link between international strategy and performance is especially important in the face of world markets that are increasingly global (Jain, 1989; Levitt, 1983). Consequently, international marketing research has moved from being descriptive — studying the differences between exporters and non-exporters (Joynt, 1982; Tesar and Tarleton, 1983) — to providing performance explanations (Madsen, 1987; Samiee and Roth, 1992). Unfortunately, most prior studies of international performance tended to use few measures of performance and a limited set of explanatory variables. Furthermore, many earlier studies did not establish the psychometric properties of the measures of central constructs.

This paper has three purposes. First, it includes a variety of performance measures along four sub-dimensions (Madsen, 1987; Shoham, 1991). Second, it incorporates international planning and international firm strategies on facets of channels of distribution, product, promotion and pricing, and models their direct and interactive influence on performance. Third, it assesses the reliability and validity of the major constructs.

Theoretical bases and research hypotheses

Two recent export performance review papers synthesize the extant literature (Aaby and Slater, 1989; Madsen, 1987). Both discuss important gaps in the cumulative knowledge generated by research about the factors underlying performance. Madsen (1987) notes that consistent effects have been reported for only eight of 20 factors that affect performance. Aaby and Slater (1989) review 55 studies and Madsen (1987) reviews 17 studies of export performance, but both make a small number of managerial recommendations.

Categorizing studies of international performance involves some form of the Strategy-Structure-Performance paradigm (Madsen, 1987). The paradigm posits that organizational performance depends on its structure, environment, and strategy. Only one of five O-structure constructs, three of six environment constructs, and four of nine strategy constructs were consistently related to export performance (Madsen, 1987). Thus, Madsen (1987) has little to recommend to export managers. Aaby and Slater (1991) also make only two managerial comments about the importance of export commitment and planning.

Madsen (1987) makes numerous recommendations for future research about international performance, three of which pertain to this study. First, future research should attempt to avoid errors of specification by using more comprehensive sets of constructs. Second, it should try to avoid errors of measurement. Third, it should include interaction effects. We explain how these recommendations were incorporated into this study in subsequent sections. We begin the discussion by reviewing the literature about the direct and interactive impact of international planning on performance. This is followed by a discussion about relationships between contents of the marketing mix and performance.

Planning

Earlier research included strategic export planning but only assessed its direct impact on performance (e.g. Evangelista, 1994). However, as seen in the strategy literature, strategic planning has a direct impact on performance (Ramanujam and Venkatraman, 1987), but also moderates the relationships between
strategy and performance (Govindarajan, 1988; Gupta and Govindarajan, 1984). Export planning is a set of activities that serve to determine future export strategies of the firm (Robinson and Pearce, 1988). Thus, it provides a global assessment of the international strategic management process (Robinson, 1983; Robinson et al., 1986; Robinson and Pearce, 1983, 1988).

While planning was found to affect international performance positively (Cavusgil, 1984; Evangelista, 1994; Kirpalani and Macintosh, 1980), its moderating role should also be recognized (Robinson, 1983; Robinson and Pearce, 1983, 1988). This role is due to the fact that strategic planning has two facets. First, it includes a strategic orientation (content) facet. Second, it includes a planning sophistication (process) facet. Whereas the impact of the former is direct (as modeled in previous studies of international performance), the impact of the latter is indirect and operates during the implementation phase to moderate the relationship between strategy and performance. In sum, it is hypothesized that:

H1: Export planning has a positive effect on performance. Export planning moderates the relationships between export strategies and performance.

Marketing mix

Product

The importance of domestic (Schoeffler, 1977; Woo and Cooper, 1981) and international (Cunningham and Spigel, 1971) product quality and design is widely recognized. Product quality determines export levels (Piercy, 1981; Schneeweis, 1985; Szymanski et al., 1992, 1993). Pre- and post-sale services are an important part of the product package and can contribute to enhanced performance (Czinkota and Johnston, 1981; Lalonde and Czinkota, 1981; Marr, 1987; Piercy, 1981). Campbell and Rao (1980) report that wide product lines provide an opportunity for increased export sales. Broad product lines enhance profitability (Morrison and Travel, 1982; Robinson and Forrell, 1986) and market share positions (Szymanski et al., 1992, 1993) in domestic and export markets.

In sum, it is expected that export product quality, its service, and broad product-lines will be positively related to performance. We note here, as is the case in later planning moderated hypothesized relationships, that we expect to find high planners at all levels of other explanatory variable. In other words, high planners may market high or low quality products, with high or low service packages, and with broad or narrow product-lines. Thus:

H2: Export performance is related positively with: (a) the quality of the product, (b) the service-package bundled with the product, and (c) broader product-lines. The relationship is moderated by planning, such that high planners outperform low planners by a larger margin for high quality, high service, and broad product-lines than for low quality, low service, and narrow product-lines.

Price

Findings about pricing are inconclusive (Bilkey, 1982, 1985; Koh and Robicheaux, 1988). Bilkey (1982, 1985) finds that higher prices lead to higher profitability (see also Koh and Robicheaux, 1988). However, Cavusgil and Zou (1994) report that the relationship between price competitiveness and performance is not significant. It may be that time horizons differed across studies. Higher prices may increase short-term profitability (before the market reacts) but, in the long-term, may lead to lower sales and profits thus explaining the conflicting findings. However, no details about the time frames as they relate to the impact of price on performance were given in these studies. For the purpose of this cross-sectional research, which assesses short-term relationships, we hypothesize:

H3: The relationship between export performance and relative price is positive. The relationship is moderated by planning such that high planners outperform low planners with larger margins at high prices than at low prices.

Promotion

Land (1978) reports that the relationship between advertising and performance is negative when market prices are low. However, brand awareness, which is enhanced by promotional activity is related positively to market share (Burke and Newman, 1980; Land, 1978; Schoeffler, 1977). Bilkey (1982) notes that advertising harms performance, whereas Kirpalani and Macintosh (1980) and Szymanski et al. (1993) find a positive relationship. It may be that the short-term impact of advertising is negative, as its costs are immediate, whereas some of the pay-off is in the future. This argument is similar to the one made earlier (about the relationship between pricing and performance). Since the research reported here is cross-sectional, it is posited:

H4: The relationship between export advertising and performance is negative. The relationship is moderated by planning such that the high planners outperform low planners with larger margins at low levels of advertising than at high levels of advertising.
Explaining international performance: marketing mix, planning, and their interaction

Fredric Kropp and Aviv Shoham

Physical distribution and channels of distribution
Lalonde and Czinkota (1981) suggest that export obstacles such as parts availability and documentation can be handled best by indirect channels. Brady and Bearden (1979), however, argue that direct channels provide a high level of control and improved information flow. Craig and Beaniishi (1989) report that direct channels are preferred to indirect channels in the UK, but not in Canada. Seifert and Ford (1987) find that the use of distributors and sales representatives is the most profitable. Cunningham and Spigel (1971) and Tookey (1964) identify personal visits to export markets as positively affecting performance. Contact intensity between exporters and channels (Bilkey, 1985; Ford and Djeffat, 1983; Ford and Rosson, 1982; Rosson and Ford, 1980, 1982) and channel support (Cavusgil and Zou, 1994) improve performance. Bilkey (1982) and Kirpalani and Macintosh (1980) report that channel quality was unrelated to performance. Penetration strategy varies between concentration and spreading. Hirsch (1971) and Piercy (1981) report that a diversified-market approach was more popular in their samples. However, no study tested the relationship between market diversification and performance.

In sum, prior research suggests that the level of support maintained by exporters leads to improved performance. Channel length and quality and have been used in prior research with conflicting findings, whereas the impact of the number of export markets has not been tested. It is hypothesized that:

H5a: The level of export performance increases with high levels of manufacturer support. The relationship is moderated by planning such that high planners outperform low planners with larger margins the higher the level of support.

H5b-d: The level of export performance differs across: a. use of direct or indirect channels; b. channel quality; and d. market diversity.

Methodology

Measurement
Performance is operationalized on four dimensions: international sales, international profits, and changes in each (Shoham, 1991). Performance is measured objectively (financial data) and subjectively (satisfaction with performance). Subjective managerial satisfaction is important because it affects future strategies (Evanellista, 1994). Including both types in the four performance scales also answers the call for multiple types of measures (Cameron, 1986).

Operationalization of the four sub-dimensions followed Shoham (1991). Measures of international sales include the ratio of export to total sales, dollar export sales, and market share for the most important product/market, and satisfaction with the three. Changes in sales were measured similarly over five years. International profitability was measured by return on assets (ROA), return on investments (ROI), and profit margin and satisfaction with them. Changes in profitability were measured similarly over five years.

We used Robinson and Pearce’s (1988) approach to operationalize international planning. They developed a six-item scale that measures the extent of planning done in the firm. This choice was due to the fact that the reliability and validity of their measures have been established under various conditions (Pearce et al., 1987; Wood and Laforge, 1981).

Marketing mix is measured on its product, place, promotion, and price sub-dimensions. We used the measures developed by Dess and Davis (1984) and Robinson and Pearce (1988).

The population and research instrument
Data were gathered from US manufacturing exporters. A firm that specializes in creating mailing lists was contacted and named from their master list were generated with a one-in-four systematic sample with a random start. The pilot included a random sub-sample of 100 exporters; the list and the main study included all other firms.

A preliminary questionnaire was developed and pre-tested. Oregon’s State Foreign Trade Agency, three experienced export managers, and two marketing professors were asked to assess face and content validity, wording, and structure of the questionnaire, resulting in a revised questionnaire for the pilot. Following the pilot, a few changes were made and the revised questionnaire was used for the main study. Because of a limited budget, the pilot and major studies consisted of one mailing only. The cover letter was addressed to the export manager and was mailed with the questionnaire and a self-addressed stamped envelope.

The first question measured the use of marketing strategies on seven-point scales (1 = we hardly ever use this strategy, to 7 = we use this strategy very often). Another question included 12 objective performance items and eight subjective satisfaction items on seven-point scales (1 = not at all, to 7 = extremely satisfied). Planning was measured by six items on seven-point scales (1 = we hardly ever use this planning tool, to 7 = we use this tool all the time).
The list supplier indicated at least 25 percent list inaccuracy (address unknown, moves, and clerical errors). Thus, the effective sample included 1,638 firms. Eighty-one responses were received by the cut-off date, representing a 5.0 percent effective response rate. This rate is low, but within the range of previous studies (e.g., Bilkey, 1987). To assess the potential effects of non-response, surrogate measures and comparing early and late respondents were used (Armstrong and Overton, 1977; Tull and Albaum, 1973). The sales and geographical distributions of the sampling frame and respondents show minor differences. Comparing substantive answers with other studies can be used to provide a measure of concurrent validity (Tull and Albaum, 1973). The questionnaire included the five measures of market globalization used by Samiee and Roth (1992; 46 percent response rate). The five means in the two studies do not differ significantly. Answers of the first 75 percent of the respondents were compared to those of late respondents (Armstrong and Overton, 1977), resulting in five significant differences (of 49 comparisons). No discernible trend was identified.

To provide a second methodology, ten in-depth interviews with top managers in international firms were conducted after the mail survey. Interviews can help to identify performance differences between firms (Tull and Hawkins, 1987). Five pairs of firms were selected: two very small (up to $50,000 per year), two small ($50,000-$500,000), two medium ($500,000-$2,500,000), two large ($2,500,000-$5,000,000), and two very large (over $5,000,000) firms.

Results
Survey
Reliability and validity
We used Cronbach's alpha to assess reliability (except for two-item scales where correlations were used). Content validity was established by conducting a comprehensive literature review and by opinions of experienced researchers and managers.

International performance was measured by five items for each of the four subdimensions. Item means are reported in Table 1. These 20 items were standardized and used to create four summed scales. Confirmatory factor analyses yielded only one factor for each performance subdimension. The four scales exhibit acceptable reliabilities ($\alpha$ sales = 0.79; $\alpha$ profits = 0.78; $\alpha_{\text{change in sales}} = 0.88; \alpha_{\text{change in profits}} = 0.89$).

We used the ethno-, poly-, regio-, and geocentrism framework to assess discriminant validity (Keegan et al., 1987). These orientations have not been linked with performance in the literature and should be unrelated to the four performance scales. We tested the relationships by four ANOVAs, none of which was significant in support of the argument for discriminant validity.

On the basis of Porter's arguments (1990) that performance may decrease with globalization, we expected international performance and the extent of market globalization (Samiee and Roth, 1992) to be weakly related. The eight correlations between world market globalization (measured by existence of standardized product technology and marketing of standardized products) and performance were significant and of medium strength as expected in support of the criterion validity of the scales.

The questionnaire included six items to measure export planning. These items were summed and the total was standardized to

| Table 1 | Means (standard deviations) for export marketing mix |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Export marketing strategy | Mean (standard deviation) |
| Broad lines | 4.91 (1.98) |
| High quality products | 6.13 (1.11) |
| Extensive customer service | 5.38 (1.78) |
| Strict quality control | 5.76 (1.46) |
| High inventories | 3.20 (1.90) |
| Unique product features | 4.99 (1.88) |
| Specialty products | 4.91 (1.82) |
| High prices | 3.15 (1.58) |
| Low prices | 4.36 (1.80) |
| Long credit terms | 2.89 (1.75) |
| Market price leaders | 3.86 (1.97) |
| Heavy advertising | 2.17 (1.37) |
| Building brand awareness | 3.76 (2.10) |
| Building reputation | 5.50 (1.68) |
| Using short channels | 3.95 (2.04) |
| High level of control over channels | 4.14 (1.90) |
| Diverse geographical markets | 5.02 (1.94) |
| Variety of customers | 5.23 (1.73) |
| High customer visit frequency | 4.32 (1.89) |
| Direct sales to end-users | 4.26 (2.23) |
| Using high quality channels | 4.88 (1.65) |
| Using well-trained salespeople | 5.21 (1.72) |
form the planning scale ($\alpha = 0.88$). Since the scale was validated extensively in previous research, we do not discuss its validity here. The means for the items used to measure the marketing mix are reported in Table II. Seven strategy scales were formed. The first strategy scale was formed by sumating the standardized scores for the seven items measuring quality, breadth of line, service, and uniqueness of the product ($\alpha = 0.58$). High scores on the scale imply that the exporter emphasizes quality, service, line breadth, and special products. The correlation between the two items measuring emphasis on low price is 0.43.

Table II: Means (standard deviations) of export performance

<table>
<thead>
<tr>
<th>Performance measure</th>
<th>Mean (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Export sales ratio$^a$</td>
<td>7.95 (2.87)</td>
</tr>
<tr>
<td>Five years change in export ratio$^b$</td>
<td>3.71 (1.06)</td>
</tr>
<tr>
<td>Export sales (millions)$^c$</td>
<td>4.11 (2.66)</td>
</tr>
<tr>
<td>Five years change in export sales$^d$</td>
<td>3.89 (1.12)</td>
</tr>
<tr>
<td>Export sales return on assets (ROA)$^f$</td>
<td>3.73 (1.02)</td>
</tr>
<tr>
<td>Five years change in export sales ROA$^b$</td>
<td>3.49 (1.15)</td>
</tr>
<tr>
<td>Export sales return on investment (ROI)$^c$</td>
<td>3.67 (1.05)</td>
</tr>
<tr>
<td>Five years change in export sales ROI$^f$</td>
<td>3.54 (1.13)</td>
</tr>
<tr>
<td>Export sales profit margin$^a$</td>
<td>6.48 (2.56)</td>
</tr>
<tr>
<td>Five years change in export profit margin$^b$</td>
<td>3.26 (0.93)</td>
</tr>
</tbody>
</table>

Market share for most important product/ market combination$^a$ | 5.28 (3.33) |
Five years change in most important product/market combination$^b$ | 3.59 (0.92) |
Satisfaction with export sales ratio$^d$ | 4.69 (1.77) |
Satisfaction with five years change in export sales ratio$^d$ | 4.64 (1.79) |
Satisfaction with export sales$^d$ | 4.71 (1.59) |
Satisfaction with five years change in export sales$^d$ | 4.56 (1.72) |
Satisfaction with export sales ROA$^f$ | 4.41 (1.65) |
Satisfaction with five years change in export sales ROA$^f$ | 4.35 (1.66) |
Satisfaction with export sales profit margin$^d$ | 4.36 (1.62) |
Satisfaction with five years change in export sales profit margin$^d$ | 4.30 (1.54) |

Notes:
$^a$ Ten-point scale (1 = 0-9.9% to 10 = 10-100%)
$^b$ Ten-point scale (1 = 0-0.49 millions to 10 = 14.0 millions or more)
$^c$ Ten-point scale (1 = loss to 10 = 16% or more)
$^d$ Ten-point scale (1 = 0-4.9% to 10 = 70% or more)
$^e$ Five-point scale (-4 = large decrease to 4 = large increase)
$^f$ Five-point scale (-4 = much lower than domestic to 4 = much higher than domestic)
$^g$ Seven-point scale (1 = not at all satisfied to 7 = extremely satisfied)

Scores on the two were summated to create a price scale. High scores on the scale imply low-price strategy. Three items measured promotion strategy. The scores on these items were summated ($\alpha = 0.51$). High frequency of salespeople’s visits to export markets and the use of trained sales personnel indicate a high level of support to the channel and were summated ($r = 0.39$). High scores on the scale imply an emphasis on supporting the channels. Channel length was operationalized using the items for direct sales and use of short channels ($r = 0.44$). High scores on the scale imply an emphasis on short channels. The scale for diversity of served markets captures diversity of customers and markets. The two items ($r = 0.51$) were summated to form the scale. High scores on the scale imply an emphasis on diverse markets and customers.

Criterion validity was assessed by interscale correlations. It was expected that a medium number of these correlations will be significant and that they will be of medium magnitude. Ten of the possible 21 were different from zero and the largest was 0.40, supporting the case for criterion validity.

To establish discriminant validity, the correlations of the items with ten measures of standardization of the 4P’s (not used for this paper) were examined. Only ten (of 70) correlations were different from zero and the largest was 0.30. Since the two sets should be distinct, the small number of significant correlations supports the argument for discriminant validity.

Statistical technique

Testing the relationships between the 4Ps, planning, and performance was done by four regressions. For each regression, residuals were plotted and only minor deviations from normality were detected. The main effects were entered first as a block, followed by stepwise entry of the interactions to minimize multi-collinearity. We preferred this approach to centering because it allows a more intuitive interpretation (Belsley et al., 1980). Given the sample size, the number of variables, and the fact that main effects were entered first as a block (thus removing their effects prior to entry of interactions), the cut-off used for interpreting the regressions and coefficients was set at $p = 0.10$ for the main effects and at 0.20 for the interactions. Table III reports the results of the regressions.

Findings

The direct effect of planning is positive in all four regressions. It reaches significance for three of the four regressions in support of H1.
Its moderating role is discussed below under each of the 4Ps separately.

- **Sales’ regression.** The negative relationship for the product scale indicates that high quality, unique products, extensive services, and broad lines are associated with reduced sales. This finding is best understood in light of the interaction between planning and product quality. This interaction substantiates H3 concerning the moderating effect of planning. Sales differences between firms with extensive and minimal planning are larger the higher the quality of the products and services. The deterioration in sales is very rapid for low planners. Apparently, the negative effect of product quality is driven by this deterioration, as sales for high planners improve with quality as expected. Offering a high level of channel support enhances sales supporting H5a.

- **Sales’ change.** The interaction between planning and the use of high quality channels suggests that the higher the emphasis placed on such channels, the larger the performance gaps between high and low planners. The increasing gap is due to an increase in performance for high planners and a decrease in performance for low planners, supporting H5c.

- **Profits’ regression.** The regression for profits provides an F-value, which does not differ significantly from zero. Consequently, this regression is not interpreted here.

- **Profits’ change.** The positive impact of channel support is similar to the one reported for other performance measures providing further support to H5a. The negative relationship for advertising suggests that high advertising is associated with a temporal reduction in performance (H4). The interactions also show that the gap in performance between low and high planners is larger the more diverse the markets, in support of H5d. Planning also moderates the relationship between advertising and profits’ change similarly. While the main effect of advertising is negative, its interaction with planning suggests that differences between firms with extensive and minimal planning are smaller for high levels of advertising, disconfirming H4. This effect is due to the faster deterioration in performance for high compared to low planners.

### Summary

The data provide support for the main effects of planning (H1), advertising (H4) and channel support (H5a). They also provide support for the expected relations for high planners for product quality, services, and breadth of lines (H2), channel quality (H5c), and diverse export markets (H5d) through the moderating effect of planning. The data disconfirm the main effects hypothesized in H3 (price) and H5b (directness of sales) and H2, H5c, and H5d for low planners.

### Results of in-depth interviews

Firms were conveniently sampled for size, products, and geographical location variability. All used sales as a measure of performance. In a few firms, sales were the only measure used. However, in most cases, last year’s sales were used as a benchmark as...
well. Benchmarking makes it possible to monitor performance over time. Somewhat surprisingly, most firms did not use profits as a measure of performance. When probed for reasons, interviewed managers indicated that costs are built into their pricing such that achieving sales budgets would result in acceptable levels of profitability.

A planning system, which is based on annual sales budgets, is used in most firms. In large firms, multiple budgets are used (sales, costs, margins, and profits) and they are split (by month, product-line, or region) to provide control mechanisms. Results are fed back to managers to allow readjustments. In sum, these interviews support H1. Planning affects performance directly and indirectly (through its use in implementation and control). Most firms export only high-quality products. Product and service quality appear to be coupled. Channels of distribution (agents, importers, etc.) have a significant role in providing high-quality services to end-users. Smaller firms recognize this role of the channel (as a service provider), but do not control it.

Exporters tend to charge prices that are comparable to industry levels. This is done to provide value-for-money. In some cases, this is done explicitly but in others, customers expect it. In these cases, a higher price for a marginally higher quality is not a viable strategic option. Larger exporters have more power to set and achieve higher than market prices.

Channels have high levels of influence on the contents of advertising, either because they promote locally or help the principal in determining the contents of campaigns. Trade-shows are the most important form of promotion, followed by brochures. Large firms exert more influence on determining advertising strategy because they allocate higher budgets to promotion. They also have to build and maintain brand awareness and firm reputation in many cases. An important part of small firms' budgets is spent in the USA, but spills over to other markets (e.g., US trade-shows that drew visitors from Canada and Mexico). Small exporters also stretch budgets by joint programs with distributors.

Except for the largest firms, foreign intermediaries (such as dealers or master distributors) are used. These intermediaries are supported heavily. This is more important for small exporters because they do not have sales subsidiaries. In many cases, the local channel is responsible for sales and services. The number of levels between exporter and end-user varies and depends most on the geographical distribution of users in a given country.

Discussion

Export planning had a positive influence on export performance (H1). All ten managers interviewed for this research indicated that at least some level of planning was done at their firms, supporting its importance qualitatively. Both methodologies established the importance of export planning as a predictor of performance. Apparently, planning results in the identification of superior contents of the 4Ps that enhance performance.

Relationships between strategy contents and performance were examined in H2-H5. The positive relationship between high-quality products, extensive services, and broad product-lines and performance (H2) failed to materialize. An explanation is provided by examining the moderated effect. The effect of high-quality products was positive, but only for high planners. Thus, high-quality products enhance performance, but only for firms with extensive export planning.

The relationship between high prices and export performance was expected to be positive (H3) but was insignificant. A plausible explanation emerged from the interviews. Especially for small exporters, prices might be constrained by the market. The survey data might disguise an interaction of exporter size and pricing. This effect could not be tested with the survey data and only the qualitative interviews substantiate it. Contrary to expectations, planning did not moderate the relationship between prices and performance. This was attributed in the interviews to low export pricing flexibility, especially for small exporters. The interactive term was predicted on the implementation argument. If prices are constrained, the opportunity to implement strategy on the basis of market response is reduced.

The negative relationship between promotion and performance (H4) was substantiated only for changes in profits. Firms with low advertising outperform firms with high levels of advertising. A possible explanation for the weakness of this relation emerged from the interviews. Almost all managers indicated low levels of advertising and promotion, except for large consumer-products firms. The data might be disguising either a size by advertising or a product-type by advertising interaction that could not be tested.

The interaction between advertising and planning was significant for sales and for change in export profits. The coefficients were negative, suggesting that high planners outperform low planners by a larger margin at high levels of advertising and promotion contrary to what was expected (H4). It may be
that firms with sophisticated planning systems recognize the viability of extensive advertising when applicable, whereas firms with less sophisticated planning systems do not. Based on the interviews, large exporters advertise more. With extensive planning systems, their probability of recognizing the most profitable level of advertising is larger than for their smaller competitors.

The relationship between channel strategy and performance was as expected (H5) for high planners. There is a positive relationship between support to the channel and performance (H5a). Using high levels of support, such as maintaining a program of frequent visits to export markets, was also evident in many of the interviews. It can be argued that channel support may harm short-term performance as its costs are immediate, whereas its benefits are longer-term. Given that the quantitative and qualitative data support H5a, the impact of channel support must have been temporally close to the costs of this support. The association between channel length and performance was insignificant disconfirming H5b. However, this relationship was noticeable in many of the interviews. Managers, especially for the smaller firms, indicated that the channel structure is extremely important. It may be that respondents to the survey perceived this measure differently. Some may have counted all levels, whereas others may have not counted wholly owned subsidiaries. The interviews provided an opportunity to probe into the issue and identify its importance more accurately.

The effect of channel quality failed to reach significance (H5c). An examination of the significant interaction suggests that channel quality only affects performance for high planners. It may be that high planners are in a better position to understand the importance of the quality of the channel. Market diversity was associated with performance (H5d) for high planners. For this sample, neither the classical mass argument for limited diversity nor the risk-diversification argument for high diversity seems to hold. It may be that the two theories cancel each other out. If this is the case, then the worst position to be in is caught in the middle, serving a medium number of markets. This possibility could not be explored with our data.

Limitations
This research has a number of limitations. First, a question of generalizability arises because an attempt is made to extrapolate from a sample. The use of a sample can be damaging to generalizability when non-respondents or non-included firms differ from respondents on key aspects of the study. Respondents had similar sales and geographical distributions as the frame; early and late respondents did not exhibit consistent differences; and mean scores on items used in this and other, high-response studies were comparable, in support of the argument for generalizability. The interviews serve a similar purpose by supporting some of the hypotheses under a different methodology.

Second, the letter was addressed to export managers, but we have no control over who answered the questionnaire. We believe that the impact of this threat is minimal. Respondents were very interested in the study. Sixteen percent commented on the questionnaire and 27 percent affixed a business card (to receive the findings), forsaking the promised confidentiality. In-depth interviews with top-ranking managers supported the quantitative findings. Thus, it is believed that the respondents were interested and knowledgeable.

Implications
This research identified some managerially important determinants of performance. Planning was consistently and positively related to performance. It also moderated the relationships of many strategy variables with performance. Firms that do not plan (or that do minimal planning) are advised to initiate a planning process (or improve it). However, sophisticated planning in and by itself is not sufficient because strategies generate competitive reactions. Some performance determinants (e.g., product quality, service package, breadth of product-lines, advertising, and channel quality) operate through strategy selection and implementation, emphasizing the importance of continuous monitoring. Therefore, managers are advised to pay close attention to implementation.

High-quality, extensive services, and broad lines have a positive relation with performance, but only for firms with extensive planning. The inability of low planners to derive better performance from these strategies may be due to their failure to identify a premium positioning strategy situation. Managers are advised to constantly look for and execute such positioning in international markets.

Prices are situation-specific, as they were unrelated to performance. This finding is probably due to the additional competitive constraints that international markets place on exporters beyond those evident in domestic markets. Further more, prices may have conflicting short and long-term effects on profits. Short-range, higher prices may result in higher profits. However, long-range, higher prices may result in lower sales and, consequently, reduced profits. Managers should be aware of both implications of pricing decisions.
Promotion should be limited since there is a negative relationship between advertising and performance. This is important, especially for smaller exporters, whose advertising is co-controlled by their channels. The direct negative effect of high promotion reached significance only for change in profits, implying that the anticipated long-range impact of promotion on sales and profits did not materialize in this study. This suggests that promotion budgets should be set at low levels, at least for small exporters or those just beginning to export. However, for high planners, promotion results in increased sales and changes in profits. Therefore, managers should closely monitor world markets searching for possible premium product positioning opportunities (as discussed above) coupled with high levels of advertising.

Channel support is important. Exporters are advised to visit markets frequently and use high quality, trained salespeople. For firms with extensive planning systems, using high quality channels, exporting to multiple markets and multiple segments enhances performance.

References


Land, S. (1978), "Does it pay to follow PIMS signals?", PIMS LETTER, No. 8, Strategic Planning Institute, Cambridge, MA.
Schoeffler, S. (1977), "Nine basic findings on business strategy", PIMS LETTER, No. 1, Strategic Planning Institute, Cambridge, MA.