

Chan H.N. and P.D. Ellis (1998), "Market orientation and business performance: Some evidence from Hong Kong," *International Marketing Review*, 15(2): 119-139.

## **Market Orientation and Business Performance: Some Evidence from Hong Kong**

**Jimmy Chan Hung Ngai and Paul Ellis**

19 Oct 1997

Jimmy Chan is with Pfizer Corporation, Hong Kong and Paul Ellis is assistant professor at the Hong Kong Polytechnic University. Please direct all correspondence to the second author at;

Department of Business Studies, Hong Kong Polytechnic  
University, Hung Hom, Kowloon, Hong Kong.

**Key Words:** Hong Kong, marketing, textiles industry, garment industry

### **Abstract**

Recent studies conducted in the United States and the United Kingdom have shown evidence of a relationship between market orientation and company performance. The overall aim of the research reported in this paper was to build on this limited body of literature by considering the evidence from another, non-Western, business environment, namely Hong Kong. In addition, this study sought to clarify the distinction, not often made in the literature, between a *market-* and a *marketing-*orientation. Data from 73 textiles and garments manufacturers were collected using an instrument based on Narver and Slater's (1990) scale. Consistent with previous findings in Western cultures, the results of this study are suggestive of a relationship between market orientation and company performance. However, surveyed firms exhibited a much higher marketing orientation suggesting that it is possible to be effective at implementing the marketing function without possessing a market-oriented organisational culture.

## Market orientation: conceptual background

The association between market orientation and business performance appears to have been taken for granted by academicians and practitioners alike (Houston, 1986; McGee and Spiro, 1988; Shapiro, 1988; Webster, 1988). However, in the last few years several empirical tests of this hypothesised linkage have been forthcoming (e.g., Atuahene-Gima 1996; Balakrishnan 1996; Bozeman and Coker, 1992; Diamontopolous and Hart, 1993; Greenley 1995; Jaworski and Kohli 1993; Pelham and Wilson, 1996; Pitt *et al.*, 1996; Raju *et al.*, 1995). This growing body of research was largely inspired by two articles both published in the *Journal of Marketing*, namely Kohli and Jaworski (1990), and Narver and Slater (1990). By apparently independent means these two pairs of authors were among the first to recognize that, despite its position at the very heart of modern marketing management, the validity of the construct had not been subjected to any serious empirical examination. Although marketing practitioners and academicians had been advocating the marketing concept as the preferred business philosophy for many years, no one had actually put the theory to the test. As Kohli and Jaworski (1990: 1) observed:

Given its widely acknowledged importance, one might expect the concept to have a clear meaning, a rich tradition of theory development, and a related body of empirical findings. On the contrary, a close examination of the literature reveals a lack of clear definition, little careful attention to measurement issues, and virtually no empirically based theory.

In their conceptual paper Kohli and Jaworski (1990) reasoned that the term ‘market orientation’ inferred the implementation of the well-known marketing concept being one type of business philosophy. It is the translation of this philosophy into practice that engenders a market orientation. In their attempt to operationally define the marketing concept Kohli and Jaworski (1990) recognised a difference between the “received view” and their own field-based view of market orientation. The received view is based on three commonly accepted components; (1) a customer focus, (2) coordinated marketing, and (3) profitability objectives. Based on their interviews with 62 marketing and non-marketing managers, Kohli and Jaworski offered an alternative operationalisation based on (1) intelligence gathering, (2) intelligence dissemination, and (3) responsiveness. Moreover they proposed that the market orientation construct is influenced by a number of antecedent variables (such as top management involvement and interdepartmental conflict), is moderated by environmental variables (including market turbulence), and is manifested in a number of outcomes (for example, esprit-de-corp and company performance).

In contrast with Kohli and Jaworski (1990), Narver and Slater’s (1990) operationalisation of market orientation stayed closer to the mainstream view by incorporating three behavioural components; customer orientation, competitor orientation, and interfunctional coordination. These variables were defined as follows:

- *customer orientation*: the sufficient understanding of target buyers so as to be able to create superior value for them continuously
- *competitor orientation*: understanding the short-term strengths and weaknesses and the long-term capabilities of both current and potential competitors
- *interfunctional coordination*: the coordinated utilization of company resources for creating superior value for target customers

Accordingly, Narver and Slater (1990) developed and refined their own measure of market orientation and investigated the association with performance in a sample of 140 strategic business units (SBUs) within a single corporation. Their results supported the hypothesis that market orientation is an important determinant of business profitability.

Judging by the subsequent response, it would appear that the two *JM* articles had scratched where there was an itch. Within a few years of their publication numerous studies investigating the market orientation-performance relationship emerged and a critical mass of conceptual and empirical material began to develop. In many ways the Kohli and Jaworski (1990) and Narver and Slater (1990) papers provided a theoretical foundation for others to build on and subsequent research reflected elements of both studies. For example, the instruments used to measure market orientation were often based on the comprehensive questionnaire developed and tested by Narver and Slater (1990) (for example; Greenley, 1995; Pelham and Wilson, 1996; Slater and Narver, 1994a). But at the same time a number of scholars responded to Kohli and Jaworski’s (1990) proposition that the market orientation-performance relationship is moderated by environmental variables such as the competitive intensity, market turbulence and technological change (for example, Diamontopolous and Hart 1993; Dobscha *et al.*, 1994; Greenley 1995; Slater and Narver, 1994a).

Research into the market orientation-performance relationship has been conducted in a variety of commercial and non-commercial environments at many different levels of analysis. While most of the research has been conducted in the United States (e.g., Jaworski and Kohli, 1993; Narver and Slater, 1990; Slater and Narver, 1994a; Pelham and Wilson, 1996; Ruekert, 1992), other studies have been conducted in the UK (e.g., Diamontopolous and Hart, 1993; Greenley, 1995; Pitt *et al.*, 1996), and Japan (Deshpande *et al.*, 1993). In the

main, the American research (Table I) shows a positive association between market orientation and business performance while the replicative studies done in other countries provide mixed support for this linkage (Table II).

=====  
INSERT TABLEs 1 & 2 ABOUT HERE  
=====

### Market orientation vs. marketing orientation

Although Drucker (1954) and Levitt (1960) both argued that marketing was the responsibility of top management and that a customer focus should be the top priority of the firm, the rise of long range planning in the 1960s and 1970s, with its attendant focus on market share and market growth rates, diluted the original emphasis on the customer (Webster 1988). Top managers, particularly in the US, became more planning oriented than customer-focused. This meant that as customer needs changed an opportunity was created for Asian competitors to enter a number of traditional American markets.

Webster (1988) records, however, that when the practice of strategic management supplanted long range planning in the 1980s, top managers began to rediscover the marketing concept. The strategic management focus on sustainable competitive advantage was fundamentally based on serving the needs of specific sets of customers better than competitors. Consequently there was a renaissance of the marketing concept as more managers recognised a market orientation as that organisational culture “that most effectively and efficiently creates the necessary behaviours for the creation of superior value for buyers and, thus, continuous superior performance for the business” (Narver and Slater, 1990: 21).

One vestige of this rise and fall and rise of the marketing concept has been the emergence of two separate orientations; a *market-orientation* and a *marketing-orientation*. As many scholars have recognised, the difference is more than semantic (eg: Pitt *et al.*, 1996; Slater and Narver, 1994b; Shapiro, 1988; Sharp, 1991). However, judging by the equally large number of scholars who have made no distinction between the two orientations (e.g., Brown, 1987; Doyle *et al.*, 1986, 1989, 1994; Golden *et al.*, 1995; Lichtenhal and Wilson, 1992; Payne, 1988), there is clearly some confusion over the terms.

#### *Measuring a market orientation*

The implementation of the marketing concept is first and foremost a functional activity. Those organisations which engage in marketing purely as a functional strategy can be said to be marketing-oriented. However, when there is a congruency between the functional level and the underlying organisation culture, when customers are the first priority of top management and when marketing strategy is a direct extension of corporate strategy, a market orientation exists. A market-oriented company develops and implements marketing strategy which is an operational interpretation of its basic business philosophy. In contrast, a marketing-oriented company merely implies the effective management of the marketing function, an activity which is typically localized within a particular division or department.

The distinction between the two orientations is perhaps most noticeable in their operational definitions. In essence, a market orientation is a reflection of a corporate state of mind (Felton, 1959) or a particular business philosophy (Gronroos, 1989; McNamara, 1972; Webster, 1988). It is manifested as that type of organisational culture which engenders the behaviours necessary for creating superior customer value (Deshpande *et al.*, 1993; Slater and Narver, 1995). Thus scholars concerned with market orientation generally measure those attitudinal behavioural variables which are presumed to reflect this underlying culture. Not included in the analysis, however, are those strategy and structure variables which may also have a bearing on the firm’s performance (Pelham and Wilson, 1996). It is tacitly or otherwise assumed by many marketing scholars that having a market orientation will, by extension, ensure the market-based efficacy of the firm’s strategy-making activities and the effective implementation of those strategies.

This downplaying of marketing’s functional role most likely stems from the inherent difficulty in making generalisations regarding marketing strategy. Marketing decisions are highly situation- and time-specific, tailored, as they are, to the unique needs of customers in different markets at particular points in time. This leads Narver and Slater (1990) to recognize a principle of equifinality by which many choices may lead to the same outcome. That is, for any given market situation there are potentially numerous ways for the market-oriented seller to create value for buyers. Consequently their measure for market orientation makes no attempt to identify particular strategies and organisational characteristics but rather assesses the more general extent of a customer and competitor orientation and interfunctional coordination. It is the presence of this “market oriented culture (which) provides a solid foundation for (various) value-creating activities” (1994b: 22). Similarly, Kohli and Jaworski (1990) shift the focus away from the practice of marketing by arguing that without the “unifying focus” of a organisation-wide market orientation, strategy-making activities will be undermined by likely inconsistencies that result when many individuals from different departments make strategic choices.

### *Measuring a marketing orientation*

In contrast, scholars investigating a marketing orientation have emphasised the very differences in the practice of marketing that market-oriented scholars choose to ignore. This stream of research can be characterised by its focus on the operationalisation of the marketing function in terms of specific marketing strategies combined with the organisation of marketing activities (e.g., Ghosh *et al.*, 1994; Lai *et al.*, 1992; Naidu *et al.*, 1992). For example, such studies may be concerned with specific differences in the marketing practices of firms in different retailing sectors (Greenley and Shipley, 1992) or from different cultures (e.g., Doyle *et al.*, 1988, 1989; Golden *et al.*, 1995; Shaw, 1994; Wong *et al.*, 1988). Whatever the context the common trait of these studies is the focus on the operationalisation of the marketing function. Less emphasis is placed on the overall corporate objectives of the firm and the embodiment of a marketing philosophy within those objectives. For example, in the Doyle *et al.*, (1988, 1989, 1992) studies, the sampled firms included subsidiaries of larger multinationals (see also Wong *et al.*, (1988) and Shaw and Wong (1996)). It is the marketing activities of the American and Japanese subsidiaries that are examined and not the organisational cultures of the MNC itself.

The focus on marketing strategies and organisation, rather than organisational culture, is justified because of the greater possibilities of emulation by other, less marketing-oriented firms. As Doyle *et al.*, (1988, 1989, 1994) observed, successful Japanese companies in the UK are managed in part by locals who are otherwise no different from those managing British firms. Shaw (1994) also found that successful German subsidiaries in the UK were managed by British managers no different from the managers of their local rivals. The practical implication is that the marketing capabilities of these firms can be copied.

### **Market orientation - an Asian perspective**

The research activity surrounding the market orientation construct is perhaps motivated primarily by the intuitive connection with business performance. By and large, the empirical confirmation for this relationship has come almost entirely from the US and the UK. Very limited research on the market orientation-performance relationship has been conducted outside of Western cultures. This is somewhat ironic given Pelham and Wilson's (1996) observation that the revived interest in the marketing concept shown by US companies was stimulated by Japanese marketing success in traditional American markets. Indeed, there is ample anecdotal evidence to suggest that Japanese companies are much more market-oriented, or at least market-share oriented, than their Western counterparts and it is this orientation which explains their success in foreign markets (Kotler and Fahey 1982).

What little research there is available reinforces the widely-held perception that successful Asian firms, and in particular Japanese firms, are highly market-oriented. In one study Deshpande *et al.* (1993) investigated the customer orientation-performance relationship based on matched "dyad pairs" or "quadrads" of Japanese manufacturers and their customers. That is, 50 sets of interviews were held both with two executives from a selling firm and with two executives from a customer firm of that supplier firm. Interestingly, they found support for the market orientation-performance relationship but only when marketing effectiveness was based on customers' subjective appraisals. Based on managers' reports of their own company's customer orientation, no relation with performance was observed. The lack of a correlation between managers' and their own customers' assessments of the firm's degree of customer orientation is curious, and is attributed by the authors to Japan's strong consensus culture which may make it difficult for some managers to be self-critical about their firm's degree of customer orientation. Another possibility raised is that many marketing managers simply do not know how customer oriented their firms really are.

While Japan has been described as a "classic textbook case" of success in marketing management (Lazer *et al.*, 1985), it could be argued that the Japanese are atypical of Asian cultures in their understanding and effective application of the marketing philosophy. However, little research has been done in other Asian societies on which to base any comparative judgments. With the economic ascendancy of the People's Republic of China, it seems particularly appropriate to investigate the relevance of a market orientation in a Chinese society. To date only a handful of authors have considered the marketing philosophy in the context of Confucian culture (e.g., Au and Tse, 1995; Ghosh *et al.*, 1994; Lai *et al.*, 1992; Yau, 1988).

In their study Lai *et al.* (1992) surveyed 777 Taiwanese executives and, based on respondents' self assessments, split their sample into successful and less successful companies to examine differences in their marketing practices. The 104 firms labelled as the better performers were found to be more marketing-oriented than the other firms in the sample. A similar methodology was used by Ghosh *et al.* (1994) to examine the marketing effectiveness of 161 Singaporean companies drawn from a cross-section of industries. Again, the better performers were found to be more committed to marketing than other firms. However, neither the Taiwanese nor the Singaporean study investigated the market orientation of respondent firms. Indeed, an extensive review of the literature revealed only one study (Au and Tse, 1995) conducted in a Chinese society where the market orientation-performance relationship was examined.

In their paper Au and Tse (1995) measured the market orientation of 41 Hong Kong and 148 New Zealand hotels to see whether a relationship with occupancy rates, their measure of performance, could be established. No association was found but it is worth noting that in this particular study the operational definition of the market orientation construct was based on Kotler's (1977) questionnaire. (It seems the authors were not aware of either Narver and Slater's (1990) or Kohli *et al.*'s (1993) instruments.) This limits the replicative value of the study with respect to the growing body of literature initiated by the two *JM* articles.

Given the aforementioned inconsistency of findings among the non-US replicative studies, there is a legitimate need to consider the hypothesized market orientation-performance linkage in other, particularly non-Western, business environments. In this study the market orientation of Hong Kong firms was examined. In addition, and by way of bridging the gap between the two separate but eminently related streams of research, the marketing orientation of local firms was also considered.

As a Chinese city with a Colonial heritage, Hong Kong has evolved a business culture that belies Kipling's misgivings about East meeting West. Thus Hong Kong presents what is arguably the best Asian context for an initial and exploratory investigation of the market orientation-performance relationship using measures developed in Western business cultures. Moreover, Hong Kong presents a unique context for replication in the sense that it is not a large consumer market in its own right. Unlike the situation found in those market orientation studies conducted in the US, the UK and Japan, many Hong Kong firms are separated from a good proportion of their final consumers by significant cultural and geographic distances. Intuitively, this could be expected to have some mitigating effect on the hypothesized linkage and lend some weight to the view that a market orientation is most valuable for firms located within large consumer markets. The following section describes the methodological procedures and the sampling frame used to conduct this investigation.

## Methodology

The overall research design of this study was based on the approach taken by Narver and Slater (1990, 1994a). However, unlike these authors, the unit of analysis in this study was defined at the level of the firm, consistent with the organisational-level of analysis used by Greenley (1995), Jaworski and Kohli (1993), Pelham and Wilson (1996), and Pitt *et al.* (1996). This focus seems appropriate when the phenomenon of interest is the operationalisation of a *corporately*-held business philosophy.

### *Operationalising the independent variables*

The market orientation construct was operationalised using fourteen items derived from the questionnaire developed by Narver and Slater (1990). This instrument has received widespread support in the literature for its reliability and validity and has since been used in a number of market orientation studies (e.g., Greenley, 1995; Pelham and Wilson, 1996; Slater and Narver, 1994a). Some minor semantic changes were made, however, based on the results of an early pilot test, in order to make the questionnaire more compatible to the Hong Kong business culture.

The twelve items used to measure marketing strategy and organisation, or the degree of marketing orientation, were based on those measures developed by Doyle *et al.* (1986, 1994) and subsequently used by a number of researchers (e.g., Shaw (1994), Shaw and Wong (1996), Wong *et al.*, (1989)). Nine of the questions in this section pertained to marketing attitudes, strategies and tactics, while the remaining three related to marketing organisation, planning and control.

### *Measuring business performance*

In addition to financial measures such as return on assets (ROA), return on equity (ROE), and net income, various marketing variables, such as market share, can be used to measure SBU and company performance within single industries (see for example, Day and Wensley, 1988; Hambrick *et al.*, 1982; Jacobson and Aaker, 1985). However, objective market-based measures are only as reliable as the product-market definitions which underlie them (Rossiter and Percy, 1987). An alternative to using objective measures of performance is to rely on managerial perceptions of past performance. Soliciting managers for their own performance impressions recognises that such people ideally should have their finger on the pulse in terms of knowing their firm's place in the market. Subjective performance measures have been shown to strongly correlate with objective measures (Dess and Robinson, 1984; Pearce *et al.*, 1987). Finally, perceptual measures of performance have been used repeatedly in market orientation studies (Deng and Dart, 1994; Greenley, 1995; Kohli and Jaworski, 1990, 1993; Narver and Slater, 1990; Pelham and Wilson, 1996; Pitt *et al.*, 1996; Ruekert, 1992).

In this study performance measures (business position and profitability) were based on the manager's response to 16 items assessing results vis-à-vis competition over a five year time period and satisfaction with results for the most recent year. The two time frames were chosen to capture both long-term trends and short term positions (Venkatraman 1989). As the sampling frame included a large proportion of private firms, objective performance measures were not sought for reasons of confidentiality. In this study a growth/share measure was

computed as the average of three other measures; sales growth, market share, and market share growth rate. Profitability was operationalised as the average of five measures; operating profits, profit/sales, cash-flow, ROI, and ROA.

#### *Sample selection*

The population for study was defined by the closely-related textiles and garments industries. Although the mitigating effect of moderator variables on the market orientation-performance relationship has not been conclusively established (Slater and Narver 1994a), defining the population in this way nevertheless served to minimise the potential for extraneous influences emanating from such environmental variables as market turbulence, buyer power, and seller concentration. At the same time the variety of products coming from these industrial sectors provided a balancing factor against the risk of selecting a sample too homogenous in terms of marketing activity and business performance. In Hong Kong, garment manufacturing enterprises produce a variety of distinct products ranging from pricey, up-market fashion items to inexpensive clothing accessories. Local garment-makers are closely connected to upstream textile-manufacturers whose main activities consist of weaving, knitting, and finishing. Their commonalities thus include a derived demand from similar sectors of the consumer market (primarily apparel-buyers) and a shared dependency on the unpredictable whims of fashion. Moreover, firms within the garment industry exhibit a fleet-footedness which may see them producing quite different items from year to year as fashion and entrepreneurial savvy dictates

#### *The textiles and garments industries*

Hong Kong's now-migrating manufacturing base was built primarily on the back of the various textiles and garments industries. No other industry-grouping played as prominent a role in the economic ascendancy of Hong Kong during the 1960s and 1970s. With 4,864 establishments the garments industry remains Hong Kong's largest manufacturing industry and its biggest export earner accounting for 32 per cent of domestic exports in 1995 (HK Industrialist 1996a). With 3,611 establishments the textiles industry is Hong Kong's third-largest manufacturing industry adding a further six per cent of domestic exports in 1995 (HK Industrialist 1996b). Collectively the two industries provide employment for almost one-third of Hong Kong's industrial workforce.

Exports of textiles and garments to most major markets (eg; the United States, the European Union) are subject to quantitative restrictions. In value terms around 60 per cent of Hong Kong's domestic textile and clothing exports have been subject to quotas. In order to mitigate the effect of these restrictions, local manufacturers have established offshore production facilities in both low-cost environments (such as Guangdong Province, Southeast Asia, and Latin America) and within those markets sheltered by trade barriers (such as Western Europe and North America). Local firms have also been compelled by increasing competitive pressures to step-up their marketing efforts, for example, through the active promotion of branded items and more involvement in direct selling. Some manufacturers have opened their own retail outlets in major centres such as New York and London while local labels have begun to appear on the racks of prestigious retailers such as Harrods (UK) and Daimaru (Japan). As there is some evidence to suggest that Hong Kong textile and garment manufacturers have become more market conscious over the past decade or so, it would seem reasonable to expect that market orientation would have a positive influence on business performance in this industry.

#### *Data Collection*

Concise, four-page questionnaires were mailed to the 1,100 textile and garment companies listed in the Directory of Hong Kong Industries (1995/96). The Directory is the most comprehensive classification of local manufacturers and contains useful company information such as the names of directors and products manufactured useful for the preparation of mail surveys. A cover letter personally addressed to the managing director was sent with each questionnaire together with a reply-paid envelope. Three weeks after the initial posting a follow-up telephone call was made to all participants and copies of the cover letter were sent out again by fax to all original addressees. Five weeks after the initial posting a second copy of the questionnaire combined with a reminder letter was faxed to all participants. By the cut-off date, eight weeks after the initial mailing, 78 questionnaires had been returned due to incorrect addresses leaving a base of 1,022 companies. From this sample 73 complete and eight incomplete responses were received giving an effective response rate of 7.1 per cent. While obviously disappointing, it was subsequently learnt that such a low response rate is not uncommon when this type of mail survey is done in Hong Kong. Similar mail surveys involving local manufacturers have resulted in response rates ranging from five per cent (Davies 1993) to fifteen percent (Davies *et al.*, 1995; Wong and Leung, 1994).

One possible reason explaining these response rates is the footlooseness of local manufacturers which renders specially-compiled databases inaccurate the moment the needs of buyers change. The large number of wrongly-addressed questionnaires returned is indicative of the speed at which such databases go out of date in Hong Kong. Using this survey as a guideline then it can be expected that about eight out of every hundred addresses will be inaccurate within a few months of publication. This suggests that other descriptive details (such

as fax numbers, the names of contact persons, etc.) may also change fairly rapidly to the detriment of response rates. While the possibility of non-response bias remains a genuine concern, the usual approach adopted in Hong Kong is to ensure that the sampling frame is large enough to guarantee a useable number of responses given the likelihood of a low-response rate.

To supplement the data generated by the mail survey, in-depth telephone interviews were conducted with the managing directors or senior managers of eight firms in order to gain qualitative insights into the different marketing practices evidenced in the larger sample. The information collected from these eight firms was not included in the quantitative analysis but was used to 'flesh out' the interpretation of the results.

#### *Profile of responding firms*

A descriptive summary of the responding firms is provided in Table III. The majority of firms surveyed were privately owned (95 per cent of the sample) and were small- to medium-sized enterprises employing less than 500 workers (90 per cent). The average firm was eighteen years of age and earned 82 per cent of its income through sales to six foreign markets. In other words, export activity dominates the firms' business. The most frequently cited export destinations were the United States, Europe, Japan and Australia. These descriptive characteristics were presented to a director of the Hong Kong Trade Development Council who confirmed that the profile of respondent firms is fairly representative of the garments and textiles industries as a whole.

=====  
INSERT TABLE 3 ABOUT HERE  
=====

In terms of respondents' own personal characteristics, 65 per cent of those answering the questionnaire listed their position in the company as either chief executive officer, managing director, general manager, marketing director, or company chairman. The remainder of respondents identified themselves as either the firm's owner (fifteen per cent), other director (eight per cent), or other functional manager (eleven per cent). All respondents were thus in a position to comment knowledgeably about the nature of their firm's activities.

### **Results and discussion**

#### *Instrument reliability*

Tables IV and V report the reliability of the two multi-item scales using Cronbach's coefficient alpha (Churchill, 1979; Nunnally, 1978). The overall coefficient alpha for the market orientation variable is 0.854 which is greater than the recommended cutoff level of 0.70 (Nunnally, 1978), suggesting that Narver and Slater's (1990, 1994a) scale is a reliable instrument for measuring market orientation in Hong Kong. Similarly, the alpha for the marketing orientation variable is also satisfactory (0.846), suggesting that the instrument used by Doyle *et al.* (1986, 1994) can be used to assess the marketing orientation of local firms. The tables also give the value that each coefficient alpha would have been if each constituent item was removed from the two scales. In both cases the scores are close to the original scale alphas implying that it is unlikely that either alpha would be improved by removing any of the items. This further supports the reliability of the scales.

=====  
INSERT TABLEs 4 & 5 ABOUT HERE  
=====

#### *Main effects on performance*

To test the relationships between the two independent variables and business performance, the total sum of the scores for market orientation and marketing orientation was regressed with the performance parameters using multiple linear regression. Table VI shows the correlation coefficients between the two independent variables and each of the four performance measures. For the market orientation variable, all of the correlations are significant at the five per cent level except the correlation with last year's profitability (which would be accepted at a ten per cent significance level). Therefore it can be concluded that there is a positive relationship with the market orientation of respondent firms and their performance (i.e., sales growth/market share growth and long term profitability). However, the  $R^2$  values of all four correlations are somewhat low suggesting that a market orientation explains only around three to ten per cent of the performance parameters. In particular, the weak association between market orientation and short term profitability supports the position adopted in the marketing literature which advocates *long run* profitability as a central tenet of the marketing concept (e.g., Baker *et al.*, 1986). On the other hand, the positive relationship between short term sales growth/share and market orientation is consistent with Balakrishnan's (1996) findings.

=====

INSERT TABLE 6 ABOUT HERE

=====

While the weak association between market orientation and business performance is consistent with previous research conducted outside of the US (e.g., Pitt *et al.*, 1996), the result stands in contrast with the greater explanatory power of the second independent variable. The findings suggest that a *marketing* orientation explains around seventeen to twenty per cent of the short term performance and as much as 38 per cent of the long term performance of the firms surveyed.

The differential effects of a market- and a marketing-orientation on business performance are interesting and may be accounted for in several ways. The simplest explanation is that the discrepancy merely reflects the fact that performance is more closely tied to the actual practice of marketing than to some underlying corporate culture or business philosophy. If this is the case then there are ramifications for those scholars who measure the attitudes of top management teams on the assumption that such variables reflect the organisation's culture which, by extension, is manifested in the way the company practices marketing. In other words, a company with a high market orientation should also be characterised by a high *marketing* orientation. There are two good reasons why this explanation does not necessarily apply to the firms in this sample. First, developing a market orientation requires a long term investment on the part of the organisation. However, Hong Kong firms, especially those connected to the fashion industry, are characterised by their "footlooseness" and "hustle" which implies a more short term orientation (Enright *et al.*, 1997). Local firms are renowned for their capacity to spot new trends and emerging market niches. Their ability to shift resources to new areas of opportunity in the hope of capturing high margins and rapid returns no doubt limits their commitment to any particular group of customers. This does not necessarily imply that they are poor marketers. Indeed, the findings show that the better performing firms are adept at implementing the marketing function. This would tend to support Hooley *et al.*'s (1990) observation that it is possible to be good at marketing without actually possessing a marketing orientation.

The second plausible explanation concerns Hong Kong's distance-to-market. The firms in this study sell more than four-fifths of their total output to customers located on the other side of the world and nearly two-thirds of that product is shipped to the market via local or foreign distributors. This arrangement stands in contrast with the various US market orientation studies where surveyed firms are located in the same market as the customers they serve. Hong Kong is not a large consumer market for either textiles and garments but it is second-to-none in terms of its competitive intensity. This compels local manufacturers to be highly competitor-focused in terms of their product quality, product range, design capabilities - in short, all those activities which infer a marketing orientation.

## Conclusions

The findings of this study have some important managerial implications. First, the positive relationship identified between performance and marketing orientation supports a long-held proposition running through the marketing literature which states that the attainment of organisational goals is determined by satisfying the needs of customers more efficiently and effectively than rivals (Kotler and Armstrong 1996). Generic marketing strategies emphasise the need to attain market position by developing quality products specifically targetted to well-defined market segments and which are backed up by dealer and customer support. The successful implementation of any marketing strategy requires that organisations strike the right balance between tight and loose control mechanisms, and formal and informal modes of communication to maintain a degree of flexibility and responsiveness appropriate to the speed of change manifest within their served product-markets. Above and beyond these practical marketing initiatives, there is some evidence in this study to suggest that managers should consider their underlying business philosophy and become more customer- and competitor-focused both at the corporate level and across the different functional departments.

However, the findings reported need to be evaluated in light of the study's limitations. Chief of these is the possible presence of a non-response bias which is often a drawback of postal questionnaires, but is particularly so in Hong Kong. Although it is likely that the single-industry population is fairly homogenous, thus limiting the potential for extraneous effects whilst simultaneously reducing the generalisability of the results, the findings nevertheless need to be interpreted with all the caution mandated by a low response rate. Future research in an Asian context is therefore required before any hard conclusions can be arrived at regarding the cross-cultural efficacy of Narver and Slater's (1990) scale. In particular, the use of other data collection methods, such as in-depth interviews, should be seriously considered in view of the inherent limitations of postal surveys. In addition, and as Greenley (1995) has observed, there may well be a lagged effect between market orientation and performance which is not captured in a cross-sectional study. Longitudinal research thus is needed to eliminate competing hypotheses (Slater and Narver 1994a). Other implications for future research include the need to examine directly the possible mitigating effects presented by the geographic and cultural separation of firms from

their final markets. One tentative finding of this study is that the concept of a corporately-held market orientation is most valuable for those firms which are situationally located within their consumer markets. Further research is needed to assess the differential effects of a market orientation among firms whose main business involves export marketing viz their domestic-marketing counterparts.

Nevertheless, in spite of its inherent limitations, this study has value as an exploratory first-step towards further empirical work investigating the market- and the marketing-orientation of Asian firms. Prior to this study most of the replicative research in these two areas had been conducted in Western settings. Thus one empirical contribution of this study is the finding that both Narver and Slater's (1990) and Doyle *et al.*'s (1986, 1994) instruments are reliable and can be used in an Oriental business culture. Furthermore, the results of this study contribute to the body of empirical evidence by showing that the performance of local firms is influenced partly by their degree of market orientation and, more significantly, by their implementation of the marketing function (that is, their marketing orientation). In short, this study provides some support for the central tenet of marketing: that firm performance is positively influenced by a customer- and competitor-focus manifested in product-market development strategies that are backed up flexible and highly committed organisations. Companies that hope to remain competitive would do well to take these lessons and apply them.

## References

- Atuahene-Gima, K. (1996), "Market orientation and innovation", *Journal of Business Studies*, Vol. 35 No. 2, pp. 93-103.
- Au, A.K.M. and Tse, A.C.B. (1995), "The effect of marketing orientation on company performance in the service sector: a comparative study of the hotel industry in Hong Kong and New Zealand", *Journal of International Consumer Marketing*, Vol. 8 No. 2, pp. 77-87.
- Baker, M.J., Hart, S., Black, C. and Abdel-Mohsen, T.M. (1986), "The contribution of marketing to competitive success: a literature review", *Journal of Marketing Management*, Vol. 2 No. 1, pp. 39-61.
- Balakrishnan, S. (1996), "Benefits of customer and competitive orientations in industrial markets", *Industrial Marketing Management*, Vol. 25 No. 4, pp. 257 - 269.
- Bozeman, B. and Coker, K. (1992), "Assessing the effectiveness of technology transfer from US government R&D laboratories: the impact of market orientation", *Technovation*, Vol. 12 No. 4, pp. 239-255.
- Brown, R. (1987), "Marketing - a function and a philosophy", *Quarterly Review of Marketing*, Spring-Summer, pp. 25-30.
- Churchill, G.A. (1979), "A paradigm for developing better measures of marketing constructs", *Journal of Marketing Research*, Vol. 16, February, pp. 64 -73.
- Davies, H. (1993), "Strategic choice in a Little Dragon: product design in Hong Kong manufacturing", in McCarty D. and Hille S. (Eds), *Research on Multinational Business Management and Internationalisation of Chinese Enterprises*, Nanjing University Press, Nanjing, pp. 316-324.
- Davies, H., Leung, T.K.P., Luk, S.T.K., and Wong, Y.H. (1995), "The benefits of 'guanxi': the value of relationships in developing the Chinese market", *Industrial Marketing Management*, Vol. 24, pp. 207-214.
- Day, G.S. and Wensley, R. (1988), "Assessing advantage: a framework for diagnosing competitive superiority", *Journal of Marketing*, Vol. 52, April, pp. 1 - 20
- Deng, S. and Dart J. (1994), "Measuring market orientation: A multi-factor, multi-item approach", *Journal of Marketing Management*, Vol. 10, pp. 725-742.
- Deshpande, R., Farley, J.U., and Webster, F.E. (1993), "Corporate culture, customer orientation, and innovativeness in Japanese firms: a quadrad analysis", *Journal of Marketing*, Vol. 57, January, pp. 23-27.
- Dess, G.G. and Robinson R.B. (1984), "Measuring organizational performance in the absence of objective measures", *Strategic Management Journal*, Vol. 5 No. 3, pp. 265 - 273.
- Diamantopoulos, A. and Hart S. (1993), "Linking market orientation and company performance: preliminary evidence on Kohli and Jaworski's framework", *Journal of Strategic Marketing*, Vol. 1 No. 2, pp. 93-121.
- Directory of Hong Kong Industries* (1995/96), Hong Kong Productivity Council, Hong Kong
- Dobscha, S., Mentzer, J.T., and Littlefield, J.E. (1994), "Do external factors play an antecedent role to market orientation?" in Wilson E. and Black W. (Eds), *Developments in Marketing Science*, Vol. 17, Academy of Marketing Science, Nashville, TN, pp. 333-337.
- Doyle, P. and Hooley, G.J. (1992), "Strategic orientation and corporate performance", *International Journal of Research in Marketing*, Vol. 9, pp. 59-73.
- Doyle, P., Saunders, J. and Wong, V. (1986), "Japanese marketing strategies in the UK: a comparative study", *Journal of International Business Studies*, Spring, pp. 27-46.

- Doyle, P., Saunders, J. and Wong, V. (1992), "Competition in global markets: a case study of American and Japanese competition in the British market", *Journal of International Business Studies*, Third Quarter, pp. 419-442.
- Doyle, P., Saunders, J. and Wong V. (1994), "Fighting for the UK market", in Saunders, J (Ed.), *The Marketing Initiative*. Prentice Hall, New York.
- Doyle, P., Saunders, J. and Wright, L. (1989), "A comparative study of British, US, and Japanese marketing strategies in the British market," *International Journal of Research in Marketing*, Vol. 5, pp. 171-184.
- Drucker, P. (1954), *The Practice of Management*, Harper and Row, New York.
- Enright, M.J., Scott, E.E., and Dodwell, D. (1997), *The Hong Kong Advantage*, Oxford University Press, Hong Kong.
- Felton, A.P. (1959), "Making the marketing concept work", *Harvard Business Review*, July-August, pp. 55-65.
- Ghosh, B. C., Schoch, H. P. , Taylor, D. B. , Kwan, W. W. , and Kim, T.S. (1994), "Top performing organisations of Australia, New Zealand and Singapore: a comparative study of their marketing effectiveness", *Marketing Intelligence and Planning*, Vol. 12 No. 7, pp. 39-48.
- Golden, P.A., Doney, P.M., Johnson, D.M., and Smith, J.R. (1995), "The dynamics of marketing orientation in transition economies: a study of Russian firms", *Journal of International Marketing*, Vol. 3 No. 2, pp. 29-49.
- Greenley, G.E. (1995), "Market orientation and company performance: empirical evidence from UK companies", *British Journal of Management*, Vol. 6, pp. 1-13.
- Greenley, G.E. and Shipley, D. (1992), "A comparative study of operational marketing practices among British department stores and supermarkets", *European Journal of Marketing*, Vol. 26 No. 5, pp. 22-35.
- Gronroos, C. (1989), "Defining marketing: a market-oriented approach", *European Journal of Marketing*, Vol. 23 No. 1, pp.52-60.
- Hambrick, D.C., MacMillan, I.C., and Day, D.L. (1982), "Strategic attributes and performance in the BCG Matrix: a PIMS-based analysis of industrial products business", *Academy of Management Journal*, Vol. 25, pp. 510 - 511
- Hong Kong Industrialist* (1996a), "Garment industry", June, p. 50.
- Hong Kong Industrialist* (1996b), "Textile industry", November, p. 58.
- Hooley, G.J., Lynch, J.E., and Shepherd, J. (1990), "The marketing concept: putting theory into practice", *European Journal of Marketing*, Vol. 24 No. 9, pp. 7-23.
- Houston, F. (1986), "The marketing concept: what it is and what it is not", *Journal of Marketing*, Vol. 50, April, pp. 81-87.
- Jacobson, R. and Aaker, D.A. (1985), "Is market share all that it's cracked up to be ?", *Journal of Marketing*, Vol. 49, Fall, pp. 11 - 22.
- Jaworski, B.J. and Kohli, A.K. (1993), "Market orientation: antecedents and consequences", *Journal of Marketing*, Vol. 57, July, pp.53-70.
- Kohli, A.K. and Jaworski, B.J. (1990), "Market orientation: the construct, research propositions, and managerial implications", *Journal of Marketing*, Vol. 54, April, pp.1-18.
- Kohli, A.K., Jaworski, B.J. and Kumar, A. (1993), "MARKOR: a measure of market orientation", *Journal of Marketing Research*, Vol. 30, November, pp. 467-477.
- Kotler, P. and Fahey, L. (1982), "The world's champion marketers: the Japanese", *Journal of Business Strategy*, pp. 3-13.
- Kotler, P. and Armstrong, G. (1996), *Principles of Marketing*, 7th ed. Prentice Hall, Englewood Cliffs, NJ.
- Lai, W. B., Huang, J.Y., Hooley, G., Lynch, J., and Yau, O. (1992), "Effective marketing in Taiwan: profiles of top performers", *European Journal of Marketing*, Vol. 26 No. 3, pp. 5-17.
- Lazer, W., Murata, S., and Kosaka, H. (1985), "Japanese marketing: towards a better understanding", *Journal of Marketing*, Vol. 49, Spring, pp. 69-81.
- Levitt, T. (1960), "Marketing myopia", *Harvard Business Review*, July-August, pp. 45-56.
- Lichtenthal, J.D. and Wilson, D.T. (1992), "Becoming market oriented", *Journal of Business Research*, Vol. 24, pp. 191-207.
- McGee, L.W. and Spiro, R.L. (1988), "The marketing concept in perspective", *Business Horizons*, May-June, pp. 40-45.
- McNamara, C.P. (1972), "The present status of the marketing concept", *Journal of Marketing*, January, pp. 50-57.
- Naidu, G.M., Kleimenhagen, A., and Pillari, G.D. (1992), "Organisation of marketing in US hospitals: an empirical investigation", *Health Care Management Review*, Vol. 17 No. 4, pp. 29-43.
- Narver, J.C. and Slater, S.F. (1990), "The effect of a market orientation on business profitability", *Journal of Marketing*, Vol. 54, October, pp.20-35.

- Nunnally, J.C. (1978), *Psychometric Theory*, 2nd ed., McGraw-Hill, New York, N.Y.
- Payne, A.F. (1988), "Developing a marketing-oriented organisation", *Business Horizons*, May-June, pp. 46-53.
- Pearce, J.A., Robbins, D.K., and Robinson, R.B. (1987), "The impact of grand strategy and planning formality on financial performance", *Strategic Management Journal*, Vol. 8 No. 2, pp. 125-134
- Pelham, A.M. and Wilson, D.T. (1996), "A longitudinal study of the impact of market structure, firm structure, strategy, and market orientation culture on dimensions of small-firm performance", *Journal of the Academy of Marketing Science*, Winter, pp. 27-43.
- Pitt, L., Caruana, A., and Berthon, P.R. (1996), "Market orientation and business performance: some European evidence", *International Marketing Review*, Vol. 13 No. 1, pp. 5-18.
- Raju, P. S., Lonial, S.C. and Gupta, Y.P. (1995), "Market orientation and performance in the hospital industry", *Journal of Health Care Marketing*, Vol. 15 No. 4, pp.34-41.
- Rossiter, J.R. and Percy, L. (1987), *Advertising and Promotion Management*. McGraw-Hill, New York.
- Ruekert, R.W. (1992), "Developing a market orientation: an organizational strategy perspective", *International Journal of Research in Marketing*, Vol. 9 No. 3, pp. 225-245.
- Shapiro, B.P. (1988) "What the hell is market oriented?", *Harvard Business Review*, November-December, pp. 119-125.
- Sharp, B. (1991), "Marketing orientation: more than just customer focus", *International Marketing Review*, Vol. 8 No. 4, pp. 20-25.
- Shaw, V. (1994), "The marketing strategies of British and German companies", *European Journal of Marketing*, Vol. 28 No. 7, pp. 30-43.
- Shaw, V. and Wong, V. (1996), "Successful marketing strategies in the changing machine tool market", *Journal of Strategic Marketing*, Vol. 4, pp. 53-69.
- Slater, S.F. and Narver, J.C. (1994a), "Does competitive-environment moderate the market orientation-performance relationship?", *Journal of Marketing*, Vol. 58, January, pp. 46-55.
- Slater, S.F. and Narver, J.C. (1994b) "Market orientation, customer value, and superior performance", *Business Horizons*, March-April, pp. 22-28.
- Slater, S.F. and Narver, J.C. (1995), "Market orientation and the learning organization", *Journal of Marketing*, Vol. 59, July, pp. 63-74.
- Venkatraman, N. (1989), "Strategic orientation of business enterprises: the construct, dimensionality, and measurement", *Management Science*, Vol. 35 No. 8, pp. 942-962.
- Venkatraman, N. and Ramanujam, V. (1986), "Measurement of business performance in strategy research: a comparison of approaches", *Academy of Management Review*, Vol. 11 No. 4, pp.801-814.
- Webster, F.E. (1988), "The rediscovery of the marketing concept", *Business Horizons*, May-June, pp. 29-45.
- Wong, V., Saunders, J. and Doyle, P. (1988), "The quality of British marketing: a comparison with US and Japanese multinationals in the UK market", *Journal of Marketing Management*, Vol. 4 No. 2, pp. 107-130.
- Wong, Y.H. and Leung, T. (1994), "Export: performance held back by tradition", in Bannister, B. and Chan, A.W. (Eds), *Management Innovation: The Changing Face of Business in Hong Kong and Guangzhou*, Longman, Hong Kong, pp. 36-43.
- Yau, O.H.M. (1988), "Chinese cultural values: their dimensions and marketing implications", *European Journal of Marketing*, Vol. 22 No. 5, pp. 44-57.

**Table I: Summary of market orientation research: US research (1990-96)**

<i>Study</i>	<i>Country</i>	<i>Sample</i>	<i>MO instrument based on</i>	<i>Performance measure</i>	<i>MO/performance relationship</i>
Narver & Slater (1990)	USA	113 SBUs in 1 corporation	literature review	ROA	positive
Ruekert (1992)	USA	5 SBUs in 1 company	discussions with managers	sales growth, profitability	positive
Jaworski & Kohli (1993)	USA	222 + 230 companies (2 samples)	Kohli & Jaworski (1990)	market share, ROE, organizational commitment, esprit de corps, overall performance	positive
Slater & Narver (1994a)	USA	107 SBUs in 2 corporations	Narver & Slater (1990)	ROA, sales growth, new product success	positive
Raju <i>et al.</i> (1995)	USA	176 hospitals	Kohli <i>et al.</i> (1993)	19 subjective measures including; ROI, service quality, mortality	positive
Pelham & Wilson (1996)	USA	68 small firms (various industries)	Narver & Slater (1990)	new product success, sales growth/market share, product quality, profitability	positive

**Table II: Summary of market orientation research: Non-US Research (1990-96)**

<i>Study</i>	<i>Country</i>	<i>Sample</i>	<i>MO instrument based on</i>	<i>Performance measure</i>	<i>MO/performance relationship</i>
Deshpande <i>et al.</i> (1993)	Japan	50 "quadrads" from public firms & their customers (various industries)	personal interviews & literature review (eg: Narver & Slater 1990, Kohli & Jaworski 1990)	profitability, size, market share, relative growth rate	positive (based on customers' assessments); none (based on managers' own assessments)
Diamontopolous & Hart (1993)	UK	87 companies	Kohli & Jaworski (1990)	sales growth & profits relative to industry average	weak association
Au & Tse (1995)	New Zealand /Hong Kong	148 NZ hotels + 41 HK hotels	Kotler (1977)	occupancy rate	none identified
Greenley (1995)	UK	240 large companies (various industries)	Narver & Slater (1990; 1994a)	ROI, new product success, sales growth	none identified
Pitt <i>et al.</i> (1996)	UK/Malta	161 UK service firms + 200 Maltese firms (various industries)	Kohli <i>et al.</i> (1993)	ROCE, sales growth, subjective impressions	weak association

**Table III: Demographic characteristics of respondents**

<i>Product Categories</i>	<i>%</i>	<i>Annual Sales Turnover</i>	<i>%</i>
Consumer products	71	< HK\$5m	1
Industrial products	29	5 - 10m	5
<i>Ownership</i>		10 - 50m	18
Private	95	50-100m	40
Public	5	100-500m	14
<i>No. of Employees</i>		> 500m	21
≤ 20	37	missing value	1
21 - 50	16	<i>Typical Customer</i>	
51 - 100	18	local agent/distributor	12
101 - 200	10	foreign agent/distributor	52
201 - 500	10	wholesaler	7
≥ 500	7	retailer	15
missing value	3	end user	14
<i>Years in Business</i>		<i>Respondent's Title</i>	
≤ 10 years	8	owner/chairman	16
11 - 20 years	25	CEO	4
21 - 30 years	36	managing director	26
31 - 40 years	20	general manager	22
41 - 50 years	10	marketing director/mgr.	12
≥ 50 years	1	other director/manager	19

N=73

**Table IV: Reliability analysis of market orientation scale**

<i>Scale Items</i>	<i>Item to Total Correlation</i>	<i>Scale Alpha if Item Deleted</i>
Coefficient alpha for scale 0.854		
<i>Customer orientation</i>		
Your firm's objectives are driven by customer satisfaction.	0.600	0.839
Your firm has a strong commitment to serving customer needs.	0.568	0.841
Your firm's competitive strategy is based on a thorough understanding of your customer needs.	0.588	0.840
Your firm's business strategies are driven by increasing value for customers.	0.635	0.836
Customer satisfaction is assessed at least once every three months.	0.530	0.843
Close attention is given to after-sales service in your firm.	0.574	0.840
<i>Competitor orientation</i>		
Sales-people within your organisation share information on competitors.	0.444	0.847
Your firm responds rapidly to competitors' actions.	0.502	0.844
Top managers discuss competitors' strengths and weaknesses at least once every three months.	0.555	0.841
Customers are targetted when you have an opportunity for competitive advantage.	0.646	0.835
<i>Interfunctional coordination</i>		
Top managers visit customers at least once a year.	0.209	0.862
Information on customers is freely communicated throughout the firm.	0.178	0.863
All your departments (not just marketing and sales) are responsive to, and integrated in serving customers.	0.461	0.847
All your managers understand how employees can contribute to creating value for customers.	0.608	0.839

N=73

**Table V: Reliability analysis of marketing orientation scale**

<i>Scale Items</i>	<i>Item to Total Correlation</i>	<i>Scale Alpha if Item Deleted</i>
Coefficient alpha for scale 0.846		
How well does 'good at marketing' describe your company?	0.584	0.834
How well do the following statements describe your strategic focus:		
- winning market share by beating competition	0.511	0.836
- good at stimulating primary demand	0.423	0.839
- enter new emerging market segments	0.460	0.838
How different from your major competitors are the following marketing elements of your firm:		
- product quality	0.418	0.840
- product design	0.437	0.840
- product range	0.333	0.843
- prices	0.266	0.845
- advertising activities	0.190	0.848
- personal selling activities	0.341	0.842
- dealer support	0.277	0.844
- customer support	0.367	0.842
What are the characteristics of your customer targets?*	0.343	0.842
How well do the following statements describe your technological capabilities:		
- good at product differentiation	0.554	0.834
- strong process development and cost reduction capabilities	0.405	0.840
- good at efficient large-scale manufacturing	0.218	0.847
- strong product design capabilities	0.490	0.837
How well do these statements describe your company's management style:		
- few hierarchical distinctions in management	0.324	0.843
- variable and ad-hoc job specifications	0.361	0.842
- informal communication predominates	0.380	0.841
- both top-down and bottom-up communication	0.499	0.837
- group responsibility and teamwork	0.469	0.838
How well does 'informal, regular communication in the firm to ensure nothing gets far out of line' describe your company?	0.503	0.837
How important to your company are the following plans:		
- five year plans	0.415	0.840
- short-term to medium plans	0.203	0.847

\* on a scale ranging from 1 (down market/less profitable) to 5 (up market/highly profitable)

N=73

**Table VI: Correlation coefficients for two independent variables**

Independent Variables	Satisfaction with Growth / Share <sup>a</sup> (1-year)	Satisfaction with Profitability <sup>b</sup> (1-year)	Relative Growth / Share <sup>c</sup> (5-year)	Relative Profitability <sup>d</sup> (5-year)
Market Orientation <sup>e</sup>				
R <sup>2</sup>	0.076	0.039	0.071	0.106
F-value	5.856**	2.881*	5.391**	8.438***
Marketing Orientation <sup>f</sup>				
R <sup>2</sup>	0.206	0.173	0.381	0.350
F-value	18.407***	14.867***	43.632***	38.225***

N=73

- a) Average score of the satisfaction with last year's sales growth rate, market share and market share growth rate.
  - b) Average score of the satisfaction with last year's operating profits, profit to sales ratio, cash flow, return on investment and return on assets.
  - c) Average score of the sales growth rate, market share and market share growth rate relative to competition over the last five years.
  - d) Average score of the operating profits, profits to sales ratio, cash flow, return on investments and return on assets relative to competition over the last five years.
  - e) Sum of the market orientation scale.
  - f) Sum of the marketing orientation scale.
- \* : significant at 0.10 level  
 \*\* : significant at 0.05 level  
 \*\*\* : significant at 0.01 level