Forms of Market Orientation and Business Performance in China

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Abstract

China is going through a rapid transition phase from the old centrally planned economy to an increasingly open market economy. This paper examines whether the market orientation (MO) concept originally developed in the West can also be applied to China. It investigates the extent of the market orientation practice among Chinese firms and its effect on business performance. Three different forms of MO, namely *Underdeveloped Orientation*, *Fragmented Orientation*, and *Comprehensive Orientation*, were found to be practised by 331 Chinese companies operating in the residential property development sector in Guangzhou, China. The three forms of MO were found to have significantly different levels of business performance and have distinct organisational characteristics.

Introduction

With rapid progress made in China's economic reform since 1978, and particularly following China's accession to the World Trade Organisation in 2001, Chinese companies have increasingly adopted many Western marketing principles and are becoming more market oriented. As an increasingly competitive market brings pressure to bear on companies operating in China, the extent of the market orientation practice is a key question worthy of more research in marketing. While there are some studies that have examined market orientation (MO) in China, most have focused mainly on the relationship between the overall measure of MO and business performance. This study takes a look at the three MO dimensions as well as the overall MO measure and examines the relationships between various forms of MO and business performance in China.

Literature Review & Research Questions

Since the conceptualization of market orientation (MO) by Kohli and Jaworski (1990) and Narver and Slater (1990), a significant number of studies have been published, examining various measures of MO and their association with business performance. The majority of studies indicated a significantly positive association between MO measures and business performance. Some studies found either a weak link or mixed results, see Uncles (2000) and Tang and Tang (2003) for more detailed reviews. While earlier studies relied mainly on samples from developed countries, more recent studies have drawn data from developing countries and transitional economies (e.g., Hooley *et al.*, 2000; Subramanian and Gopalakrishna, 2001).

As noted previously, not many published studies have systematically examined whether the MO concept, conceived and developed in the West, can be applied in the context of the emerging China market. As China's economic reform intensifies, it is logical to expect that companies in China would become more and more market-oriented. Thus, it is important to know whether they have fully or partially adopted this key marketing concept, and what

impact, if any, MO has on business performance in China. Towards this end, this study examines the following three research questions. First, what forms of MO, if any, do companies operating in China practise? Second, what is the association between the MO forms and business performance? And third, are different MO forms associated with different organisational characteristics?

Method

The research questions are examined using survey data drawn from the real estate development industry in Guangzhou, China. This industry was chosen for the current study due to the Chinese government policy in reforming the country's housing industry from welfare goods to market products in recent years, as well as to the industry's growing contribution to the gross domestic product in China.

Various MO scales were used in the past, including MKTOR (Narver and Slater, 1990), MARKOR (Kohli, Jaworski, and Kumar, 1993), DFW (Deshpande, Farley, and Bestster, 1993), Deng and Dart (1994), and Dawes (2000). While researchers differ in their operationalisation of MO, the majority of them have so far relied on either Kohli and Jaworski's (1993) scale or Narver and Slater's (1990) scale. Studies comparing the two dominant MO scales found that Narver and Slater's (1990) scale outperformed Jaworski and Kohli's (1993) scale not only in key statistics for model fit under confirmatory factor analysis (Matear at al, 1997), but also in achieving a consistent understanding among managers across different countries (Mavondo and Farrel, 2000; Selnes, Jaworski, and Kohli, 1996). In other words, there was greater face validity of the items in different cultural or national settings. We can thus conclude that Narver and Slater's MO measure appears more suited for cross-country and cross-industry studies.

Therefore, we adopted Narver and Slater's (1990) MO measure for this study. This MO scale contains 14 items relating to three behavioural components, namely: (1) Customer orientation (6 items), (2) Competitor orientation (4 items), and (3) Inter-functional co-ordination (4 items). See Table 1 for the detailed scale items. Responses to each of these 14 items were recorded using a 7-point rating scale, with 1 indicating a respondent's company does not practise a particular item, and 7 indicating it is practised to a great extent.

As noted by Uncle (2000), business performance in most studies on MO has been measured subjectively in the form of managers' assessment of their company's performance. While there are studies that show a strong correlation between objective and subjective performance measures, such a correlation is far from perfect (Dawes, 1999). As noted by Sin et al. (2003), "face saving", a key character in the Chinese culture, may inflate the result of using subjective performance measures in China. A likely reason that most researchers have relied on using subjective measures is the difficulty in obtaining hard financial performance data for their studies. Also, most previous MO studies have used cross-industry data, making it less meaningful to compare the financial performance of firms from different industries due to industry-specific factors affecting performance.

During the pilot study, we found that the Chinese government, keen to understand the effectiveness of its housing reform, had been actively collecting objective financial performance data of residential property development companies operating in China. This offered us an excellent opportunity to utilise objective performance data for research purposes. Since our study focuses on a single industry, it is useful to rely on such objective

performance data for comparing relative performance among various players in the industry. Therefore, we used objective measures as well as subjective measures of business performance in this study.

A structured questionnaire incorporating Narver and Slater's (1990) scale was translated into Chinese through back translation procedure (Brislin, 1970). It was then pre-tested among a group of bi-lingual academics and business people in Guangzhou to make sure its appropriateness in the Chinese context. A copy of the structured questionnaire and a covering letter from Guangzhou Real Estate Development Association (GREA) were sent to 1,013 real estate development companies on GREA membership list. In total, 331 usable surveys were received, representing a 32.7% response rate.

Results

After the data was collected, a number of statistical procedures were used to assess the psychometric properties of Narver and Slater's (1990) MO measure, including its three subscales. They included exploratory factor analysis, reliability analysis and confirmatory factor analysis. The Cronbach alphas for the three subscales were: Customer orientation (0.943), Competitor orientation (0.892), and Inter-functional co-ordination (0.879). Since these are three dimensions underlying MO, the Cronbach alpha for the overall measure of MO was also assessed and its value was 0.968. Since the Cronbach alpha values all exceed the 0.70 benchmark recommended by Nunnally (1978), we can conclude that Naver and Slater's (1990) scale and its three subscales are reliable measures of MO in this study.

Given Narver and Slater's (1990) MO conceptualization, a second-order confirmatory factor analysis model was run that incorporated the overall MO measure and its three dimensions. The model was found to have a reasonably good fit with the data. Some of the selected model fit statistics are as follows: Chi-square = 585.881, df = 75, p = 0.000; GFI = 0.880, AGFI = 0.857, CFI = 0.893, TLI = 0.870, RMSEA = 0.084.

Q1. What forms of MO are practised by the Chinese companies in the survey?

A cluster analysis approach was taken to answer this question, consistent with the approach by Greenley (1995) and Vorhies and Harker (2000). Following the recommendations by Milligan (1980), a combined approach to cluster analysis was used in this study. In other words, a hierarchical clustering technique known as Ward's method was first used to establish the number of clusters underlying the 14 MO items, the cluster means from the hierarchical results were then used as the initial seed points for a non-hierarchical clustering technique known as K-Means.

By calculating the percentage change in agglomeration coefficients estimated using the Ward's method for each number of clusters, one can identify the largest percentage decrease in agglomeration coefficients. The number of clusters with the largest percentage drop is the correct number of clusters to take. In our case, the optimal number of clusters was three. Table 1 presents the results of the cluster analysis, including the mean scores across all 14 MO scale items plus the three dimensions and the overall MO measure for each of the three clusters.

As can be seen from Table 1, there exist three distinct clusters. The results of ANOVA comparing the three cluster means show a similar pattern across the variables: Cluster 2

means are significantly lower than Cluster 1 means, which in turn are significantly lower than Cluster 3 means. Therefore, Cluster 2 (n = 107 or 32% of the sample) represents an *Underdeveloped Orientation*, in which companies do not pay enough attention to any of the three MO dimensions, Cluster 3 (n = 66 or 20% of the sample) represents a *Comprehensive Orientation*, in which companies have a balanced focus across all three MO dimensions, and Cluster 1 (n = 158 or 48% of the sample) represents a *Fragmented Orientation*, in which companies practise some market orientation, but do not pay enough attention to it, as compared to those companies practising *Comprehensive Orientation*.

Q2. What is the Association between the MO Forms and Business Performance?

To answer this research question, ANOVA was used to assess the relationships between the cluster membership variable and various measures of business performance. Those that practise *Comprehensive Orientation* were found to have significantly ($p < 0.05$) higher average sales and net profit (both are objective performance measures that were separately collected from the local taxation bureau) over the last three years, followed by those that practise *Fragmented Orientation* and then by those practise *Underdeveloped Orientation*. The same pattern of results was observed using subjective performance measures in terms of self-reported after-tax return on total assets, sales growth over past three years, and overall firm performance relative to average performance level of other residential property developers in Guangzhou.

Q3. Are Different MO Forms Associated with Different Organisational Characteristics?

Bivariate Chi-square test was used to answer this question. Results show that different MO forms are significantly ($p < 0.05$) associated with certain organisational characteristics. They include the ownership structure of the company and the nature of its affiliation. Space does not allow the presentation of the detailed statistical results. Suffice it to say that those that practise *Comprehensive Orientation* were more likely to be privately owned and affiliated with local Townships, those that practise *Fragmented Orientation* were more likely to be collectively-owned and affiliated with local Counties or Municipalities, and those that practise *Underdeveloped Orientation* were more likely to be State-owned enterprises and affiliated with the Provincial or the Central governments in China.

Conclusion

Results of this study have extended the MO stream of research by examining a transitional economy, namely China. Findings show that the practice of MO in Chinese companies varies from company to company. One fifth of firms surveyed were found to have a comprehensive market orientation and about one third of them practised some degree of market orientation. However, nearly half of the companies surveyed were found to have minimal amount of MO practice.

In a transitional economy such as China, companies are likely to go through different stages along its MO evolutionary process, from not market-oriented initially, to more customer and/or competitor-focused, and then to a well-balanced MO practice eventually. Such an evolution is likely to take an extended period of time in a transitional economy. The range of MO forms revealed by this study confirms this hypothesis and reflects the current situation in China. In addition, consistent with MO theory, different forms of MO were found to be significantly linked to business performance and organisational characteristics. To enhance

the generalisability of these research findings, further systematic research effort should be carried out to examine the forms of MO and their relationships with business performance in other industries and other regions in China.

Table 1. Results of Cluster Analysis and One-Way ANOVA

Market Orientation Items	ANOVA F-value *	Cluster 1 (n=158)	Cluster 2 (n=107)	Cluster 3 (n=66)
Overall Market Orientation Measure	2003.210	4.993	3.897	5.666
A. Customer orientation dimension	1267.233	5.006	3.916	5.732
1. The commitment to serving customer needs is monitored	387.414	5.139	4.047	5.712
2. Strategies are driven by beliefs about creating customer value	207.814	5.082	4.140	5.470
3. Strategies are based on understanding customer needs	359.069	5.076	3.963	5.879
4. Business objectives are driven by customer satisfaction	365.791	5.057	3.953	5.727
5. Customer satisfaction is frequently and systematically measured	375.162	4.595	3.393	5.545
6. Close attention is given to after-sales services	732.163	5.089	4.000	6.061
B. Competitor orientation	1247.451	4.968	3.778	5.655
1. Salespeople in the company share information on competitors' strategies	373.727	4.772	3.636	5.833
2. Company takes rapid response to competitors' actions	311.900	5.032	3.673	5.621
3. Top managers regularly discuss competitors' strengths and weaknesses	346.707	5.082	3.841	5.727
4. Customers are targeted for competitive advantages	323.253	4.987	3.963	5.439
C. Interfunctional coordination dimension	674.960	4.997	3.986	5.576
1. Functional managers regularly visit their customers	182.830	4.804	3.981	5.485
2. Information about customers shared amongst functional departments	241.895	4.905	3.935	5.455
3. Business functions are integrated to develop firm strategies	321.442	5.316	4.009	6.000
4. Functional managers understand how everyone can contribute to creating customer value	224.844	4.962	4.019	5.364

* Note that all ANOVA F tests were highly significant with p-value less than 0.001.

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