

# Testing the Direct Market Orientation-Performance Relationship: The Case of Stock Brokerage Firms

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**Abstract**—Recent research has shown that more market-oriented business units seem to enjoy a higher level of business performance. However, some have questioned the extent of such relationship and its diminished returns in relation to the strength of market orientation. Others have argued that marketing orientation adds to the cost of doing business. The present study attempts to provide some empirical evidence to examine such suspicion by testing the existence or the lack of a direct relationship. We examine the mediating role of service quality in the market orientation-performance linkage in the context of a homogeneous stock brokerage sector. A direct effect of market orientation on performance is compared with an indirect one to test the direct relationship. The results suggest that the effect of market orientation on business performance is largely attributed to the mediating role of service quality. A direct relationship is shown to be weak. It indicates that market orientation does not directly affect business performance and show how an intermediate variable, service quality, may mediate a market orientation-performance relationship. Important implications are provided for marketing practitioners and academic researchers.

**Index Terms**—market orientation, service quality, business performance, mediators

## I. INTRODUCTION

Marketing researchers has long stressed the importance of the marketing concept and has regarded it as a foundation of the marketing discipline. Recent research provides the much-needed theoretical framework for the effect of market orientation, the implementation of a marketing concept, on business performance and shows some empirical support (e.g., [1] [2]). Overall, more market-oriented business units seem to enjoy a higher level of business performance. However, the extent of such relationship has been questioned on whether or not marketing orientation adds to the cost of doing business [3] and its diminished returns in relation to the strength of market orientation [4]. The present study attempts to provide some empirical evidence for such suspicion by

testing the existence or the lack of a direct relationship. We examine the mediating role of service quality in the market orientation-performance linkage in context of a stock brokerage service industry. A direct effect of market orientation on performance is compared with an indirect one to test the direct relationship. The results are expected to shed some light on how market orientation, service quality, and business performance are related and to offer important managerial implications for marketing practitioners.

## II. CONCEPTUAL DEVELOPMENT

### A. Market Orientation and Service Quality

Market orientation implies that a business obtains information from customers about their needs and takes action based on that information, while considering competition and regulations. In a dynamic marketing environment, marketers continuously modify their offering mix in response to and/or in anticipation of changing needs and competitors' actions. Such consistent efforts by a market-oriented firm narrow the perceptual gap between the firm's management and its customers [5]. Service firms take various steps to assure that they provide adequate services to customers in response to changing customer needs. For example, a number of automobile service centers now provide evening and/or over-night services. Consumers in Minneapolis can drop off their cars at an auto service center at night and pick up their cars the next morning. Many health clinics offer evening business hours. At Loyola University in New Orleans, an undergraduate business class was offered for the first time on Saturday in 1997, responding to the needs of a growing number of working undergraduate students. Therefore, premium service quality is expected to be an end result of a market-oriented service firm. This leads to the first hypothesis:

- Hypothesis 1: Market orientation has a positive effect on service quality.

### B. Service Quality and Business Performance

When Zeithaml, Parasuraman, and Berry [5] observed that leading U.S. service companies are obsessed with

service excellence, Excellent service is a key to being different, productive, and efficient, and it can payoff richly, Empirically, the relationship between quality and profitability has been acknowledged by a series of PIMS studies (e.g., [6] [7]). The acknowledged relationship provides a strong incentive for firms to improve quality. Buzzell and Gale [6] suggested that achieving superior quality have three competitive advantages: premium price, resources for R&D, and better customer value. Building on the PIMS data, [7] demonstrated that the quality of an SBU's products and services is the most important factor affecting the unit's performance. In a multi-company empirical study, Zeithaml, Berry, and Parasuraman [8] found that service quality has a strong effect on behavioral intentions: subjects' loyalty to the company (+), propensity to switch (-), willingness to pay more (+), and external response to problem (-). Rust, Zahorik, and Keiningham [9] proposed a model of service quality improvement and profitability and found that service quality improvements lead to higher customer satisfaction and retention rate, achieve cost reduction, attract new customers, and yield greater profitability. In conclusion, superior service quality has a positive effect on business profitability.

- Hypothesis 2: Service quality has a positive effect on business profitability.

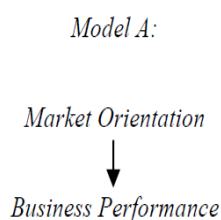
### C. Market Orientation and Business Performance

Competition and profitability are two dominant reasons for adopting the marketing concept, which requires a firm to understand and satisfy its customers to the extent that doing so yields profits [10]. A few recent studies demonstrate the usefulness and importance of market orientation by examining its impact on business profitability and suggest that profitability is a consequence of market orientation [1] [11] [2]. The research findings provide some conceptual and empirical support for a positive market orientation-business performance relationship.

- Hypothesis 3: Market orientation has a positive effect on business profitability.

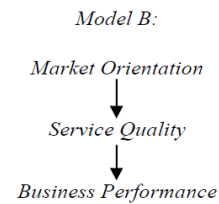
### D. A Comparison of Two Models

The previous discussion on the market orientation-performance relationship suggests a simple relationship as follow:



Past research has shown support for the positive market orientation-performance relationship [12]. However the positive market orientation-service quality and service

quality-performance relationships suggest a second model:



The main difference between Model A and Model B is that Model A indicates a direct effect of market orientation on performance; whereas Model B indicates the effect of market orientation on performance is mediated by service quality and, thus, indirect. An indirect market orientation-performance linkage will suggest that the effect of market orientation on performance is contingent on the effect of market orientation on service quality. Past literature has suggested a number of mediators and moderators in the relationship between market orientation and performance (e.g., [13] [14]). This leads to the following hypothesis:

- Hypothesis 4: Service quality is a mediator in the market orientation-business performance relationship.

## III. METHODOLOGY

Stock brokerage firms in Taiwan were the selected sample population. Taiwan's service sector has been growing at a faster rate than its manufacturing sector in recent years, and the stock brokerage industry is one of the fastest growing service sectors. The industry is highly regulated and known for its highly standardized practices.

Respondents were managers, vice presidents, or general managers in charge of brokerage operations. A sample of more than three hundred respondents, one per company, was compiled by the Taiwan Stock Exchange upon request. Personal interviews were requested via the phone and one hundred fifty respondents were successfully interviewed in their offices. The subjects were asked to participate in a financial industry practices survey, and anonymity was guaranteed. The procedure yielded 116 valid interviews.

Narver and Slater [2] adopted a twenty-item scale. Although the three behavioral components were favorably supported by their empirical data, the two decision variables were not. A pretest on Narver and Slater's [2] scale based on a sample of thirty-two business executives from various companies participating in a weekend senior management seminar sponsored by a major university in Taiwan also failed to support the two decision variables because of the poor factor loadings (Cronban's alpha = 0.78). Based on further analysis, we modified Narver and Slater's scale by dropping the two decision variables and replacing them with a simplified performance anticipation component including three items: quarterly profit objective expectation, quick payback expectation, and long-term market performance anticipation. A pretest on

this revised scale on a separate section of the same seminar with thirty-seven participants produced satisfactory results (Cronban's alpha = 0.88). In conclusion, the revised scale (MKTORN) contains four components: customer orientation, competitor orientation, interfunctional coordination, and performance anticipation.

Marketing researchers have asserted that quality is a multidimensional construct for both products and services [15] [16]. For services, the SERVQUAL scale provides an approximate measure of quality for a general class of services [16] [5]. Its conceptualization and operationalization of service quality are based on a gap theory. The 22-item SERVQUAL scale is built on five components: tangibility, responsiveness, reliability, accuracy, and empathy. The five components provide adequate content validity for the select stock brokerage services. We used non-difference SERVQUAL score approach as suggested by Brown, Churchill, and Peter [17].

Objective profitability information is difficult to obtain for the selected industry due to the issue of confidentiality. Therefore, business performance was measured by the managers' own assessments of the profitability of their units in relation to that of their major direct competitors. This approach has been widely used in previous studies, and it has been suggested that direct and indirect measures of business profitability are strongly correlated (e.g., [18] [2] [19]).

#### IV. RESULTS

Use The MKTORN and SERVQUAL scales were examined for their reliability and validity. Cronban's alphas (0.94 and 0.92 for the MKTORN and SERVQUAL scales, respectively) and Guttman's split-half reliability coefficients (0.93 and 0.90, respectively) were satisfactory for both scales. Factor analysis was performed on the MKTORN and SERVQUAL scales to examine their consistency with previous studies. The oblique-rotated factor patterns of the overall are generally congruent with the four-(MKTORN) and five-component (SERVQUAL) structures of the original scales. In addition, strong correlations among the theoretical components indicated a converging validity. Convergent validity was also supported by an exploratory one-factor analysis for each scale in which 51 % and 43% of the variances were explained by a single factor for the MKTORN scale and the SERVQUAL scale, respectively. The one-factor solutions of the MKTORN and SERVQUAL scales were in line with findings in related literature (e.g., [2] [20]). Both the MKTORN and SERVQUAL scales are accepted as one-dimensional, multi-component constructs.

A linear regression model was performed for each of the first three hypotheses (Models 1, 2 and 3 in the Table I). All three hypotheses are supported: a statistically significant relationship between market orientation and service quality (0.01 level; Model 1), a positive relationship between service quality and business profitability (0.01 level; Model 2), and a positive of market orientation on profitability effect (0.01 level;

Model 3). In all tests, industry, firm, and respondents factors were included as covariates. Among them, only market size showed a positive significant effect in Model 1 ( $p < 0.10$ ) and Model 3 ( $p < 0.05$ ).

TABLE I. REGRESSION MODELS

Models	Model 1	Model 2	Model 3	Model 4
Independent/Dependent	SERVQUAL	Profit	Profit	Profit
Covariates:				
Conglomerate Status	0.025	-0.022	-0.064	-0.033
Respondent Seniority	-0.100	-0.102	-0.054	-0.057
Market Size	0.143 <sup>a</sup>	0.160 <sup>a</sup>	0.060	0.095
Market Share	0.001	-0.037	-0.051	-0.038
Sales Volume	0.085	0.021	0.006	0.018
Market Orientation	0.447 <sup>b</sup>	0.507 <sup>b</sup>		0.304 <sup>b</sup>
Service Quality			0.591 <sup>b</sup>	0.454 <sup>b</sup>
n	116	116	116	116
R-Square	0.236 <sup>b</sup>	0.291 <sup>b</sup>	0.378	0.449

To support Hypothesis 4, that quality is a mediator of the market orientation-profitability relationship, a test showing that market orientation affects business profitability via quality is necessary. Baron and Kenny [21] propose a statistical test procedure for mediation and maintain that one needs to examine three linear regression models to support a mediation effect:

- (a) Quality (mediator) on market orientation,
- (b) Profitability on market orientation, and
- (c) Profitability on market orientation and quality

And to establish mediation, four conditions must all hold:

- (1) Market orientation must affect quality in (a),
- (2) Market orientation must affect profitability in (b),
- (3) Quality must affect profitability in (c), and
- (4) The effect of market orientation on profitability must be less in (c) than in (b).

The results of the regression analysis for (a), (b), and (c) are reported in the Table (Models 1, 3 and 4 respectively). A closer examination of Models 1, 3, and 4 shows that all effects are in the hypothesized directions. Further examination of Models 3 and 4 reveals that the effect (in terms of standardized coefficient) of market orientation on profitability in (c) is materially (40%) less than that in (b) and a test of a reduced model vs. a full model, based on Model 4 with the null hypothesis that the regression coefficient of market orientation in Model 4 equal to that in Model 3, was performed. The resulted F-value of 6.20 with degrees of freedom of 1 and 108 indicated a p-value of 0.02. Hence we conclude that the beta coefficient of market orientation in Model 3 is significantly greater than that in Model 4. Therefore, the mediation effect of quality is supported. However, such a mediation effect is not perfect because market orientation still has a significantly positive effect on profitability in (c) and the addition of market orientation contributes a significant 0.071 to R-square value as indicated by an F-test (Model 3 vs. Model 4; F-value= 13.94, p-value < 0.01). Above all, the contention that quality is a mediator of the market orientation-profitability relationship is supported.

## V. DISCUSSION

The present study successfully replicates the positive market orientation-profitability relationship. The hypothesized market orientation-quality and quality-profitability relationships are also supported. The test of the mediating effect of quality in the market orientation-profitability relationship provides a clearer picture on how the three important marketing constructs are linked. Further examination of the results revealed that the addition of market orientation to the model only contributed 0.071, an 18.8% increase, to the R-Square value (Model 3 versus Model 4). Given that there are other potential mediators unaccounted for, the true direct effect of market orientation on profitability may be even smaller. It also notes that marketing orientation has also been suggested to be a mediating variable between knowledge management orientation and firm performance [22]. This illustrates the importance of the identification of mediating variables.

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