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## Integration of Market and Entrepreneurial Orientations; and Their Impact on Export Performance: A Contingency Approach

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**INTEGRATION OF MARKET AND ENTREPRENEURIAL ORIENTATIONS;  
AND THEIR IMPACT ON EXPORT PERFORMANCE:  
A CONTINGENCY APPROACH**

by

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Requirement for the Degree of

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## **ABSTRACT**

### **INTEGRATION OF MARKET AND ENTREPRENEURIAL ORIENTATIONS; AND THEIR IMPACT ON EXPORT PERFORMANCE: A CONTINGENCY APPROACH**

Ayşe Nilgün Kaya  
Old Dominion University, 2008  
Dr. Kiran Karande

Globalization has promoted worldwide exporting levels to soar and to account for more than 10% of global activity. Technological advances in information and communication technologies, production methods, transportation, and international logistics have led to the increase in the exporting activity. However, these advances have also resulted in highly competitive and turbulent markets, and sophisticated and demanding customers, which in return has required exporting firms to be both entrepreneurial- and market-oriented.

A review of the market orientation, entrepreneurial orientation and exporting literature revealed three gaps that the dissertation sought to fill. First, the relationship between market orientation and entrepreneurship was not clear. Second although market and entrepreneurial orientations were seen as necessary requirements for long-term survival of the firms, these two orientations, their interactions and their performance implications had rarely been explored in the context of exporting. Third, ambiguous and conflicting findings existed in the literature on the performance implications of market orientation and entrepreneurial orientation.

Thus, the purpose of this dissertation was to integrate market and entrepreneurial orientation in the context of exporting by: (1) investigating the relationships between the different components of market and entrepreneurial orientations; (2) examining the link between both orientations and

export performance, and identifying organizational, environmental and strategic contingency variables that moderate this link.

The model and hypotheses were tested with data collected from 150 export managers. Based on the analysis of the data results indicated that the three components of market orientation had different impact on the components of entrepreneurial orientation. For example, whereas customer orientation had a negative impact of proactiveness and risk-taking of an organization, competitor orientation had a positive impact. Similarly, although customer and competitor orientations had a negative impact on innovativeness, interfunctional coordination had a positive impact. Moreover, while market orientation positively impacted export performance, entrepreneurial orientations had no significant effect on export performance. Furthermore, the results revealed that the strength of the market orientation – export performance relationship did not change under different organizational and environmental conditions. Based on the study findings, managerial implications, study limitations and recommendations for future research are discussed.

This dissertation is dedicated to my father  
Doğan Kaya, and to my husband Stephen J. Balas

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## CHAPTER I – INTRODUCTION

“Because it is its purpose to create a customer, any business enterprise has two - and only these two - basic functions: marketing and innovation.”  
(Drucker 1954, p. 38)

Globalization has promoted worldwide exporting levels to soar and to account for more than 10% of global activity (Morgan, Kaleka, and Katsikeas 2004). Technological advances in information and communication technologies, production methods, transportation, and international logistics have led to the increase in the exporting activity (Webster and Deshpandé 1990; Knight and Cavusgil 2004). However, these advances have also resulted in highly competitive and turbulent markets (Caruana, Morris and Vella 1998), and sophisticated and demanding customers (Knight and Cavusgil 2004), which in return has required exporting firms to be both entrepreneurial- (Knight 1997; Caruana *et al.* 1998) and market-oriented (Knight and Cavusgil 2004).

Market orientation with its roots in the marketing concept has been central in thinking in the marketing discipline since the 1950s (Deshpandé, Farley and Webster 1993; Gray and Hooley 2002). The seminal works of Kohli and Jaworski (1990) and Narver and Slater (1990) instigated a renewed interest in market orientation (Slater and Narver 1994; Kohli, Jaworski and Kumar 1993; Ruekert 1992; Cadogan and Diamantopoulos 1995; Gray and Hooley 2002). Various scales for market orientation have been developed and tested both in the U.S. and overseas based on two main approaches: the behavioral approach (e.g., Kohli and Jaworski 1990; Deshpandé and Farley 1998a, b; Matsuno, Mentzer and Rentz 2000) and the cultural approach (e.g., Narver and Slater 1990; Deshpandé, Farley and Webster 1993). The behavioral approach

depicts market orientation in terms of behaviors related to organization-wide generation and dissemination of market intelligence on current and future customers and responsiveness to this intelligence (Kohli and Jaworski 1990; Siguaw, Simpson and Baker 1998; Langerak 2003; Kirca, Jayachandran, and Bearden 2005). On the other hand, the cultural approach describes market orientation as an organizational culture that is committed to deliver continuous superior value to its customers (Narver and Slater 1990; Han, Kim and Srivastava 1998; Langerak 2003; Kirca *et al.* 2005). Although both approaches offer valuable insights, the cultural perspective has gained more acceptance. In a study that examined the creation of market orientation in organizations, Gebhardt, Carpenter and Sherry (2006, p. 38)) found that “market orientation rests fundamentally on cultural values.”

Exporting companies need to be market-oriented, as customers are more knowledgeable and sophisticated in their choices, and require higher degrees of responsiveness (Webster and Deshpandé 1990; Knight and Cavusgil 2004). Besides, exporting firms are faced with increased competition as more and more countries are integrating to the world economy (Caruana *et al.* 1998). Furthermore, there is increased need for following the changes in macroeconomic environment, and legal and regulatory environment of various country markets that may influence customers and competitors (Rose and Shoham 2002). Thus, exporting firms that are market-oriented will have higher performance (Cadogan, Diamantopoulos and Siguaw 2002; Rose and Shoham 2002; Akyol and Akehurst 2003).

Besides market orientation, exporting firms need entrepreneurial orientation to deal with problems and opportunities that arise from competitive and turbulent global

markets (Knight 1997; Caruana, Morris and Vella 1998). Entrepreneurial orientation is defined as the propensity to take calculated risks, to be innovative and to demonstrate proactiveness (Morris and Paul 1987). The construct of entrepreneurial orientation encompasses three underlying dimensions: innovativeness, risk taking and proactiveness of companies (Miller 1983; Morris and Paul 1987; Covin and Slevin, 1988; Naman and Slevin 1993; Caruana, Morris and Vella 1998; Matsuno, Mentzer and Özsomer 2002; Liu, Luo and Shi 2002, 2003).

Creativity, ingenuity, and calculated risk-taking are crucial for companies operating in the international markets as domestic strengths might not be sufficient (Zahra and Garvis 2000, p. 470). Exporting firms need to develop and employ different skills that are not required by domestic firms, and developing and exploiting these skills require experimentation and risk taking (Zahra and Garvis 2000). Therefore, an entrepreneurial orientation in the exporting context is associated with higher performance (Balabanis and Katsikea 2003; Zahra and Garvis 2000).

In summary, exporting firms depend on market orientation and entrepreneurial orientation for their long-term survival (Caruana, Morris and Vella 1998; Barrett and Weinstein 1998; Narver and Slater 1990; Covin and Miles 1999; Covin and Slevin 1989; Webster 1994; Barringer and Bluedorn 1999; Luo, Zhou and Liu 2005; Bhunian, Menguc and Bell 2005).

Although being market and entrepreneurial-oriented are seen as necessary requirements for long-term survival of the firms, to this day these two constructs, market and entrepreneurial orientations, their interactions and their performance implications have mostly been explored in domestic settings. Only recently, one study by Knight and Cavusgil (2004) has explored the roles of international entrepreneurial orientation and

international marketing orientation on development of organizational capabilities of born-global firms<sup>1</sup>, and found that both orientations impacted the performance positively through these capabilities. Other than this study, no study has systematically studied market and entrepreneurial orientation in an international setting.

## 1.1 PROBLEM STATEMENT AND THE GOAL OF THIS DISSERTATION

A review of the literature indicates that the relationships between the components of market and entrepreneurial orientations have not been examined, and the roles of both orientations on export performance have conflicting results.

First, the relationship between market orientation and entrepreneurship is not clear. Some scholars have argued that both orientations are correlated (e.g., Morris and Paul 1987; Miles and Arnold 1991; Barrett and Weinstein 1998) or simply complement each other (e.g., Slater and Narver 1995; Jaworski and Kohli 1996; Atuahene-Gima and Ko 2001; Liu *et al.* 2002, Knight and Cavusgil 2004). Others have proposed other relationships, both on the component and aggregate level. These relationships are outlined below:

- Luo, Zhou and Liu (2005) stated that market orientation as a strategy was an antecedent to entrepreneurial orientation.
- Matsuno, Mentzer and Özsomer (2002) argued that the three components of entrepreneurial proclivity (innovativeness, risk-taking and proactiveness) were antecedents to market orientation.
- Liu, Luo and Shi's (2003) argued that entrepreneurial orientation was a consequence of market orientation.
- Kohli and Jaworski (1990) contended that risk-taking was an antecedent to market orientation.

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<sup>1</sup> The term born-global refers to firms that have international focus starting from their inception

- Hurley and Hult (1998) and Han *et al.* (1998) argued that innovativeness was a consequence of market orientation.
- Deshpandé, Farley and Webster (1993) posited that innovativeness complemented market orientation for superior performance.

In order to clarify the nature of the relationship between these two orientations it is necessary to examine them at the component level. Therefore, one of the goals of this study is to clarify the componentwise relationship between market orientation and entrepreneurship by developing and testing a model. Establishing the relationship between the orientations and their components will enhance our understanding of these two orientations and how they are related.

Secondly, ambiguous and conflicting findings exist in the literature on the performance implications of market and entrepreneurial orientations. Although it has been established that market orientation leads to superior performance through creation of superior customer value (Narver and Slater 1990; Han *et al.* 1998; Kirca *et al.* 2005), some scholars (e.g., Christensen and Bower 1996; Christensen 1997; Bennett and Cooper 1979, 1981; Workman 1993) have argued that following a market orientation inhibits innovativeness of firms, and thus impedes long-term survival of firms. By solely following a customer-focus, listening to the customers and satisfying their need, firms would neglect nascent innovations when there are disruptive changes in technology and market structure (Christensen and Bower 1996; Christensen 1997). The firms that have failed and lost their leadership positions in their markets “had their competitive antennae up; aggressively invested in new products and technologies, and listened astutely to their customers” (Christensen and Bower 1996, p. 198).

“[B]ecause these firms listened to their customers, invested aggressively in new technologies that would provide their customers more and better

products of the sort they wanted, and because they carefully studied market trends and systematically allocated investment capital to innovations that promised the best returns, they lost their positions of leadership” (Christensen 1997, p. xii).

Moreover, the equivocal nature of market orientation’s impact on performance has been raised by some marketing scholars (Matsuno and Mentzer 2000; Langerak 2003, Deshpandé and Farley 1998a; Noble, Sinha and Kumar 2002; Kirca *et al.* 2005; Cano, Carillat and Jaramillo 2004). Langerak (2003) analyzed 51 studies (that used scales by Kohli *et al.* 1993; Narver and Slater 1990; Deshpandé *et al.* 1993; and Deshpandé and Farley 1998) to examine the relationship between market orientation and firm performance and found that that the relationship was equivocal. Cano, Carillat and Jaramillo (2004) examined the strength of the association between market orientation and performance by conducting a meta-analysis on 58 studies that were carried out in 23 countries across five continents. The results indicated that this relationship was stronger in service firms and for not-for-profit organizations. In a more comprehensive meta-analysis, Kirca *et al.* (2005) examined this variation in the findings of prior studies on magnitude and direction of the relationship between market orientation and performance. The regression analysis supported the assessment of the previous scholars who posited that the association between market orientation and performance was equivocal. In samples of manufacturing firms, on low power-distance and uncertainty avoidance cultures, and in studies that used subjective measures of performance market orientation had a greater impact on performance.

Similarly, although the entrepreneurship<sup>2</sup> literature established compelling evidence on the positive effect of entrepreneurial orientation on firm performance (e.g.

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<sup>2</sup> Entrepreneurial orientation and entrepreneurship are used synonymously

Miller 1987; Miller and Friesen 1983; Morris and Paul 1987; Zahra 1991; Covin and Slevin 1989; Zahra and Covin 1995; Zahra 1993b; Barrett and Weinstein 1998, Wiklund 1999), one study conducted by marketing scholars Matsuno, Mentzer and Özsomer (2002) found contradictory result. Entrepreneurial orientation only had a positive indirect influence (through market orientation) on business performance, while its direct influence was significantly negative. Therefore, it is important to empirically examine assess the impact of both orientations on performance. As stated earlier, only one study, with a sole focus on born-global firms, has examined the impact of both market orientation and entrepreneurship in the context of exporting. This gap in the literature will be filled by this empirical examination.

To deal with these inconsistent findings researchers argued that there might be mediating effects between the orientations and performance (Noble, Sinha and Kumar 2002). Some scholars studied the mediating effect of innovation on market orientation – performance relationship (Han *et al.* 1998; Baker and Sinkula 1999b; Matear *et al.* 2002) argued that innovation mediated the strength of market orientation-performance relationship. Han *et al.* (1998) found that innovativeness only impacted the relationship between customer orientation and performance, but there were no mediating effects for the path from competitive orientation and interfunctional coordination to performance. Hult, Hurley and Knight (2004), also, examined the mediating role of innovativeness between strategic orientations (market, learning and entrepreneurial orientations) and business performance, and found partial mediation.

Others argued that learning orientation (organizational learning) would mediate the relationship between the strategic orientations and performance (Narver and Slater

1996). Liu, Luo and Shi (2002) examined the mediating effect of learning orientation on the impact of market orientation and corporate entrepreneurship on market program dynamism. Their results indicated that learning orientation fully mediated the link between entrepreneurial orientation and market program dynamism and partially mediated the link between market orientation and market program dynamism. Due to difficulties of gathering performance data in China, scholars used market program dynamism to measure organizational outcome. However, market program dynamism might not be good proxy for performance. Zhou, Yim and Tse (2005) found only partial support for the mediating effect of organizational learning on strategic orientations (market orientation, technology orientation and entrepreneurial orientation) and breakthrough innovations (technology- and market-based innovations).

Noble *et al.* (2002) examined the mediating effects of innovativeness and organizational learning on various strategic orientations (market, production, and selling orientations) and performance. They found no evidence for the mediating effects of innovativeness on the relationship between strategic orientation and performance. Moreover, the scholars found that organizational learning only positively mediated the competitor orientation and ROA (Return on Assets). In a different study, Hult, Snow and Kandemir (2003) examined the fit of different models that included models that had organizational learning and innovativeness as mediators. However, the researchers found that the model with no mediating effect had the best fit.

As the above reviews reveal the impact of mediating effects difficult to establish. One theoretical perspective that may alleviate these ambiguous and confusing results is contingency theory (Luo, Sivakumar and Liu 2005; Zhou and Li 2007; Zhou *et al.* 2007).

This theory argues that the effectiveness of an organization's orientation is contingent upon unique situations and characteristics. This theory will be discussed in more detail in the second chapter. Adopting the contingency perspective, the second part of this dissertation study develops and tests a fit-as-moderation model that contends that the relative impact of market and entrepreneurial orientation on export performance is influenced by how well the internal and external conditions complement both orientations. In other words, this study offers a new insight by examining the influence of both orientations under different internal and external conditions. The conflicting results in the management and marketing literature may be explained by the existence and interaction of these internal and external conditions. That is, one condition may favor one orientation while not favoring the other orientation. The influences of both orientations on performance under different conditions have not been examined previously. Although the literature tends to support the view that together market and entrepreneurially oriented firms outperform their competitors (Tzokas, Carter and Kyriazopoulos 2001; Atuahene-Gima and Ko 2001; Slater and Narver 1995; Knight and Cavusgil 2004) the impact of various organizational and environmental conditions on the relationships between market and entrepreneurial orientations and the organizational performance has not been investigated.

Therefore, a second objective of this dissertation is to help develop a case for a conceptual model. The model presented herein posits that viewing both orientations through a contingency perspective will offer new insights. Specifically, exporting firms may want to consider the effectiveness of both orientations on export performance depending upon different internal and external factors.

As stated earlier, only one study, with a sole focus on born-global firms, examined market orientation and entrepreneurship in the exporting context. The exporting context is appropriate, as exporting firms need both orientations for superior performance. Exporting is accepted to a degree as entrepreneurial (e.g., Samiee, Walters and Dubois 1993; Balabanis and Katsikea 2003). Exporting involves being proactive and actively looking for opportunities in foreign markets. Furthermore, exporting firms are risk-takers, as venturing and operating in foreign markets are more risky than operating in the domestic market. Finally, exporting firms need to be innovative to survive in the highly dynamic and turbulent export markets. Adopting a market orientation is also required by exporting firms for superior performance (Akyol and Akehurst 2003; Cadogan and Diamantopoulos 1995; Cadogan, Diamantopoulos and Mortanges 1999). An exporting firm that is not focused on satisfying the demands of its customers, while closely monitoring its competitors, and does not have a culture that would support interfunctional coordination will not be successful.

In summary, after a componentwise investigation on the nature of the relationship between market and entrepreneurial orientations, this dissertation attempts to identify the conditions which will favor one orientation rather than the other orientation.

Based on this foundation, the purpose of this dissertation is as follows:

The purpose of this study is to integrate market orientation and entrepreneurial orientation in the context of exporting by: (1) examining the relationship between two orientations at the component-level, (2) examining the link between both orientations and export performance, and identifying organizational, environmental and strategic contingency variables that moderate this link.

## **1.2 OUTLINE**

In Chapter 1 an overview of this dissertation was provided. An introduction was made to the concept of market and entrepreneurial orientation and the increasing impact of globalization in the world. The research problem and the goal of this dissertation were stated. Chapter 2 offers a review of pertinent literature on market orientation and entrepreneurship to provide a better understanding of the concepts that are studied. In Chapter 3 the models and hypotheses are discussed. Chapter 4 presents the research methodology used in this dissertation. Chapter 5 discusses the analysis of the data and the results. Finally, in Chapter 6 the implications and limitations of the study are discussed. Also, in this chapter, future research suggestions are made.

## **CHAPTER II – LITERATURE REVIEW**

As stated earlier the purpose of this dissertation study is to integrate market orientation and entrepreneurial orientation in the context of exporting by: (1) examining the relationship between two orientations at the component-level, (2) examining the link between both orientations and export performance, and identifying organizational, environmental and strategic contingency variables that moderate this link.

This chapter is organized into several sections. The first three sections focus on the literature review. In the first section, a review of the market orientation literature is provided by summarizing the two complementary research streams – the cultural and the behavioral perspectives. In the second section, an overview of the entrepreneurial orientation literature is offered which includes the elaboration of its three components and its key contributors. In the third section, studies that examined both orientations are reviewed.

### **2.1 MARKET ORIENTATION**

“Market Orientation is a central component of the more general notion of the Marketing Concept, the pillar upon which the modern study of marketing is based.” (Deshpandé and Farley 1998, p. 213)

Although the roots of market orientation are embedded in the marketing concept, which dates back to the 1950s, only in the early 1990s did two seminal studies conducted by Kohli and Jaworski (1990) and Narver and Slater (1990) establish the empirical foundations of the marketing concept (Gray and Hooley 2002). Previous studies focused on definition and delimitation of the marketing concept, while neglecting issues relating to its measurement (Kohli and Jaworski 1990; Esteban et al 2002). Although the

marketing concept dominated the thought in the academic and business world, its proposition that having a marketing concept would promote organizational performance was taken as an article of faith without adequate empirical support (Day 1994; Pulendran, Speed and Widing 2000). Only with the beginning of the 1990s did studies empirically examine the impact of market orientation on company performance. Two seminal studies by Kohli and Jaworski (1990) and Narver and Slater (1990) have been the foundation for much of market orientation research that has been produced to date (Noble, Sinha, and Kumar 2002). Although both studies are closely related in sharing many underlying constructs and concepts, each advocates a different perspective. While Kohli and Jaworski (1990) contend that market orientation is a behavior, Narver and Slater (1990) accept it as an immutable part of an organization's culture. Based on these two studies two streams of research have emerged: the *behavioral* perspective and the *cultural* perspective (Homburg and Pflesser 2000; Langerak 2003; Cano *et al.* 2004; Kirca *et al.* 2005; González-Benito and González-Benito 2005; Gebhardt *et al.* 2006).

Whether market orientation is an organizational culture or an organization behavior has been debated with no clear answer (Avlonitis and Gounaris 1997; Homburg and Pflesser 2000, Langerak 2003; Noble *et al.* 2002; Gainer and Padanyi 2005). The behavioral perspective defines the market orientation construct as an organization-wide generation of, dissemination of and responsiveness to market intelligence (Kohli and Jaworski 1990; Kirca *et al.* 2005). This perspective concurs that a firm's degree of market orientation is a matter of choice and resource allocation (Ruekert 1992; Noble *et al.* 2002). With proper resource allocation and single-mindedness market orientation can be achieved (Ruekert 1992). In contrast, the cultural perspective refers to fundamental

characteristics of the organization and accepts market orientation as an organizational culture, which is deeply rooted in the organization (Narver and Slater 1990; Noble *et al.* 2002; Kirca *et al.* 2005). In the following sections both perspectives are described in detail by focusing on key studies.

### **2.1.1 Kohli and Jaworski's Conceptualization - Behavioral Perspective**

By the late 1980s, the term market orientation was being used synonymously with marketing concept by several scholars (Siguaw, Simpson and Baker 1998). Based on this tradition Kohli and Jaworski (1990) interpreted market orientation to mean the implementation of the marketing concept and offered a behavioral definition of a market orientation as: “the organizationwide *generation* of market intelligence pertaining to current and future customer needs, *dissemination* of the intelligence across departments, and the organizationwide *responsiveness* to it” [original italics] (pg. 6).

According to the behavioral perspective market orientation provides “a unifying focus for the efforts and projects of individuals and departments within the organization, thereby leading to superior performance” (Kohli and Jaworski 1990, p. 13). Kohli and Jaworski (1990) first reviewed the literature on marketing concept and identified three “pillars:” (1) customer focus, (2) coordinated marketing, and 3) profitability. They stated that “...though the literature sheds some light on the philosophy represented by the marketing concept, it is unclear as to the specific activities that translate the philosophy into practice, thereby engendering a market orientation” (pg. 3).

Therefore, the scholars carried out field interviews to get a clearer idea of the construct's domain. The field interviews demonstrated that a customer focus encompassed both customer and competitor orientations, and coordination was limited to

activities dealing with market intelligence. However, profitability was seen as a consequence rather than a component of market orientation. They argued that this view was consistent with Levitt's (1969) view that strongly objected viewing profitability as a component of market orientation.

Intelligence generation, intelligence dissemination and responsiveness were identified as the three components of the market orientation construct (Kohli and Jaworski 1990; Kohli, Jaworski and Kumar 1993). Market intelligence generation refers to the multi-departmental "collection and assessment of both customer needs/preferences and the forces (i.e., task and macro environments) that influence the development and refinement of those needs" (Kohli *et al.* 1993, p. 468). Intelligence dissemination refers to "the process and extent of market information exchange within a given organization" (p. 468). Both horizontal and vertical transmission of information is emphasized. The third dimension, responsiveness, refers to "action taken in response to intelligence that is generated and disseminated" throughout the organization (Kohli and Jaworski 1990, p.6).

The antecedents and consequences of market orientation were examined by Kohli and Jaworski's (1990) study. A conceptual framework that examined the antecedents, consequences of market orientation with moderator variables was developed. Kohli and Jaworski (1990) proposed that senior management factors (i.e., top management attitude toward change, upward mobility and education of top management), interdepartmental dynamics (i.e. interdepartmental conflict), and organizational systems (i.e., departmentalization, formalization) were antecedents to market orientation. The consequences of being market oriented were identified as customer satisfaction, business performance and employee responses (i.e. esprit de corps). Four moderating variables

(market turbulence, technological turbulence, competition, strength of economy) were also identified, which they classified into two groups: supply-side moderators and demand-side moderators.

Jaworski and Kohli (1993) empirically examined the conceptual model proposed by Kohli and Jaworski (1990) that dealt with the antecedents and consequences of market orientation. For the purposes of their study a 32-item scale for market orientation was developed that had items separately representing the three components – intelligence generation, intelligence dissemination and responsiveness – where responsiveness was analyzed in two different parts: response design and response implementation. This 32-item scale is illustrated in Appendix A.1. The scale loaded on five factors: one general market orientation factor, one factor for intelligence generation, one factor for dissemination and responsiveness, one factor for marketing informant, and one factor for non-marketing informant factor.

The researchers examined the effects of antecedents separately on the four components of market orientation – intelligence generation, intelligence dissemination, response design, and response implementation – as the same antecedent might have an opposite effect on different components (p. 54). Similarly, the effects of the three components were assessed separately on proposed consequences. The results of the empirical study indicated that market orientation of a business was an important determinant of its performance, while there was no significant moderating effect of the environment in which the business operated. Market turbulence, competitive intensity and the technological turbulence were the environmental factors examined in Jaworski and Kohli's (1993) study. Although the results were positive for some of the performance

measures, Jaworski and Kohli (1993) found no relationship between their measure of market orientation and return on equity (ROE) or market share.

Kohli, Jaworski and Kumar (1993) developed a measure of market orientation which was labeled as MARKOR. The scholars came up with 25 items based on the review of the previous literature. Three pretests were conducted to assess the quality of the items generated. The first pretest was carried out by administering a brief questionnaire to 27 marketing and non-marketing executives. Four items were eliminated on the basis of either low item-total correlations or cross-loadings. The second pretest was conducted with the input of seven academic experts. Based on their detailed comments, some items were eliminated, other modified and new items developed. 32 items emerged after the second pretest. These 32 items were evaluated in the third pretest by seven managers. After minor refinements the 32 items constituted the final measure.

Data were collected from two samples: for single-informant survey 230 executives from the American marketing Association member roster, and for multi-informant survey 102 companies with a total of 229 SBUs from the Dun and Bradstreet database. The measure for market orientation decreased to 20, after the items that did not adequately reflect any of the theoretical components of the constructs were eliminated. Furthermore, the scholars tested several theoretically plausible alternative factor structures and assessed the predictive validity of the 20-item MARKOR scale. The MARKOR scale assessed the degree to which a strategic business unit engaged in multi-departmental market intelligence generation and dissemination activities, as well as, development and implementation of marketing programs based on the intelligence generated (p. 473). The MARKOR scale is illustrated in Appendix A.2.

### 2.1.2 Narver and Slater's Conceptualization - Cultural Perspective

Although the behavioral approach to market orientation is very valuable, the cultural conceptualization has gained wide acceptance in the marketing discipline (e.g., Hunt and Morgan 1995; Hurley and Hult 1998; Han *et al.* 1998; Hult and Ketchen 2001; Atuahene-Gima and Ko 2001; Noble, Sinha and Kumar 2002; Hult, Snow and Kandemir 2003; Im and Workman 2004 Gebhardt, Carpenter and Sherry 2006). "Culture reflects norms, values and beliefs that reinforce behaviors ultimately related to business performance" (Hult, Hurley and Knight 2004, p. 430). Market orientation is an aspect of culture and its signs are values, beliefs, and symbols that exhibit an interest for markets (Hult *et al.* 2004). In the absence of shared beliefs and values that form the market-driven culture, the behaviors related to market orientation would not be observed (Day 1994). Hurley and Hult (1998, p. 43) supported this view by stating: "[T]he deepest manifestations of market...orientation are at the cultural level where over time, stories, reinforcements of behaviors, and the creation of organizational processes produce a basic assumption among employees that customers ... are important." The scale, MKTOR, developed by Narver and Slater (1990) is the first and most influential scale to measure market orientation from a cultural perspective. Narver and Slater (1990, p. 21) defined market orientation as: "an organization culture ... that most effectively and efficiently creates the necessary behaviors for the creation of superior value for buyers and, thus continuous superior performance for the business."

Based on a review of previous literature on sustainable competitive advantage and the marketing concept, Narver and Slater (1990) delineated the market orientation

construct as being composed of three components: customer orientation, competitor orientation and interfunctional coordination.

In Narver and Slater's (1990, p. 21) conceptualization customer orientation refers to the firm's sufficient understanding of its target buyers to be able to create superior value for them continuously. In another similar concept by Deshpandé, Farley and Webster's (1993, p. 27) customer orientation was defined as "the set of beliefs that puts the customer's interest first." A customer-oriented culture fosters collection of intelligence about customers to create customer value. A customer-oriented firm closely monitors customers' needs (Im and Workman 2004).

Competitor orientation is defined as "understanding the short-term strategies of both the key current and the key potential competitors" (Narver and Slater 1990, p. 22). A competitor-oriented firm has a propensity to keep a constant eye on its rivals to identify, analyze, and respond to competitors' weaknesses and strengths (Narver and Slater 1990; Im and Workman 2004).

The third component - interfunctional coordination - refers to coordination among different departments to create superior value for target customers (Narver and Slater 1990). Interfunctional coordination fosters greater communication, collaboration, and cohesiveness (Auh and Menguc 2005, In Press). It also coordinates the resources of the organization to combat competitors and to serve customers effectively (Narver and Slater 1990; Noble, Sinha, and Kumar 2002). That is, interfunctional coordination has strong associations with the other components of market orientation – customer and competitor orientations.

The authors developed an instrument to measure market orientation. First, they developed multiple items, and then submitted these items to a panel of three

academicians who rated each item. Later, the items with high ratings and suggested new items were presented to a second panel of three academicians. Only the items that the second panel found to be appropriate were incorporated in the instrument. This preliminary questionnaire was pre-tested with six strategic business unit (SBU) managers in a corporation. Based on their feedback the final instrument was developed.

The scholars collected data from 113 SBUs (commodity and non-commodity) in the forest products division of a major corporation. The sample was split into two samples for evaluation of reliability and validity. The scale reliability was assessed with coefficient  $\alpha$ . The results showed that long-term orientation and profit objective measures did not have scale reliability. Therefore, the scholars concluded that profitability was viewed as a consequence of market orientation.

Finally, construct validity (convergent, discriminant and concurrent) was established. Convergent validity was evaluated based on the correlation among the three components of market orientation. Discriminant validity was assessed based on comparing correlation between interfunctional coordination and human resource management policy, and correlations between interfunctional coordination and the two other components of market orientation. Concurrent validity was assessed by conducting correlation analysis among the three market orientation components and differentiation-based competitive advantage and low-cost-based competitive advantage. The results indicated the measure was reliable and valid. Narver and Slater's (1990) 15-item MKTOR scale is shown in Appendix A.3.

After developing and assessing the psychometric properties of the 15-item scale, its effect on business performance was examined. It was hypothesized that the greater the

market orientation of a firm, the greater the profitability of the firm. Subjective performance measure was used. The managers were asked to assess the return of assets (ROA) in relation to that of all other competitors in their SBUs' principal served market. In order to test this general hypothesis, the sample was divided into two – commodity and non-commodity- and separate hypotheses relating to two different types of businesses were made. Eight situational variables were included in the study as control variables (buyer power, supplier power, seller concentration, ease of entry of new competitors, rate of market growth, rate of technological change, relative size, and relative cost). The results of ordinary least squares regression analysis suggested that, for the non-commodity businesses, there was a monotonically increasing relationship between market orientation and ROA. For commodity businesses, this association was nonlinear and positive, as it was suggested by the researchers.

In the next section, relevant literature is reviewed to compare and contrast Kohli *et al.*'s (1993) and Narver and Slater's (1990) scales. Although various other attempts (e.g., Ruekert 1992; Lado, Maydeu-Olivares and Rivera; Matsuno, Mentzer and Rentz 2000) have been made to measure market orientation, these two scales have been utilized more often in the market orientation research stream than any other scale.

### **2.1.3 Comparison between the Two Measures of Market Orientation**

Both scales have received criticism in the literature (Oczkowski and Farrell 1998; Pulendran, Speed and Widing 2000; Lado, Maydeu-Olivares, and Rivera 1998). In this section Narver and Slater's (1990) scale is compared and contrasted to Kohli, Jaworski and Kumar's (1993) scale.

One of the first criticisms of Narver and Slater's measure of market orientation was made by Kohli, Jaworski and Kumar (1993). The scholars criticized Narver and Slater's (1990) scale on a theoretical basis (Oczkowski and Farrell 1998). They argued that Narver and Slater's scale placed great weight on the role of customers and competition, yet neglecting to take into account other factors which drive customer needs and expectations (Pulendran, Speed and Widing 2000). According to Kohli *et al.* (1993, p. 467), Narver and Slater's measure:

“(1) adopt[ed] a focused view of markets by emphasizing customers and competition as compared with a view that focuses on these two stakeholders and additional factors that drive customer needs and expectations (e.g., technology, regulation),

(2) [did] not tap the speed with which market intelligence is generated and disseminated within an organization, and

(3) include[d] a number of items that do not tap *specific* activities and behaviors that represent a market orientation.” [original italics].

On the other hand, the MARKOR scale by Kohli, Jaworski and Kumar (1993) has also received criticisms. Lado *et al.* (1998) argued that Kohli *et al.*'s (1993) study can also be criticized on methodological grounds. First, it had consisted of a small sample of firms. Secondly, no information had been given on the characteristics of these firms. Another critique dealt with the conceptualization of market orientation. Lado *et al.* (1998, p. 24) contended that “the importance of the roles of the distributors, the environment, and the competitors who are important stakeholders directly intervening in the competitive strategies of the market” was neglected in MARKOR. Moreover, the MARKOR scale did not adequately represent the theoretical dimensions mentioned by Kohli and Jaworski (1990) and Jaworski and Kohli (1993).

Based on these critiques, Matsuno, Mentzer and Rentz (2000) developed an improved measure of market orientation that was built on the MARKOR scale developed previously by Kohli, Jaworski and Kumar (1993). They conducted in-depth interviews with managers to establish the domain. This interviews showed that additional items on macroeconomic elements, suppliers, social and cultural trends, and regulatory environment needed to be added to the MARKOR scale. The new scale labeled MO had improved psychometric properties as it had satisfied unidimensionality, reliability and validity. The EMO scale is illustrated in Appendix A.4.

At the same time, several studies tested the validity and reliability of Narver and Slater's (1990) and Kohli *et al.*'s (1993) scales. Farrell and Oczkowski (1997) examined unidimensionality and within-method convergent validity of MKTOR by Narver and Slater (1990) and MARKOR by Kohli, Jaworski and Kumar (1993) by conducting confirmatory factor analysis. Their analysis was based on a sample of 206 privately owned Australian companies, and validated on a sample of 262 publicly listed companies. The results of the confirmatory factor analysis revealed that the measure by Narver and Slater (1990) outperformed the MARKOR scale in relation to unidimensionality and within-method convergent validity (Pulendran, Speed and Widing 2000).

Oczkowski and Farrell (1998) discriminated between Kohli *et al.*'s (1993) scale, MARKOR, and Narver and Slater's (1990) scale, MKTOR by developing a procedure using non-nested tests and two-stage least squares (2SLS) estimators. The scholars stated that their focus was on criterion (concurrent) validity and hence they were concerned with the selection of measures used to explain or predict a dependent or criterion variable

(p. 350). They added that although their emphasis was on assessing criterion validity, utilization of non-nested tests also addressed construct validity, while neglecting discriminant and convergent validity. The result of their analysis revealed that the MKTOR measure was superior to MARKOR measure in explaining the variations in measures of business performance (p. 363).

Deshpandé and Farley (1998a) assessed the psychometrics of both Narver and Slater's (1990) measure and Kohli, Jaworski and Kumar's (1993) measure on a sample of 82 marketing executives from 27 companies. The results showed that both scales satisfied reliability, and predictive and discriminant validity. Reliability of the scales was tested by comparing Cronbach  $\alpha$  in the original studies with that from the study conducted by Deshpandé and Farley (1998a). Although satisfactory, Kohli *et al.*'s (1993) scale's reliability was a bit weaker than the other two (p. 216). Predictive validity of the scales was investigated by correlating the measures with performance. Discriminant validity was checked by correlating with items not expected to correlate. In this case, Deshpandé and Farley (1998a) used Organizational Climate scale used by Deshpandé *et al.* (1997). Moreover, both scales were reliable in different cultural settings (i.e., industrialized/unindustrialized, Asia/Europe).

Matsuno, Mentzer and Rentz (2005) compared Narver and Slater's (1990) MKTOR scale, Kohli and Jaworski's (1993) MARKOR scale, and their scale labeled EMO (Extended Market Orientation). They argued that from the theoretical domain perspective MARKOR scale was superior to MKTOR scale as it was developed consistent with the domain of market orientation as a set of intelligence-related behaviors with a broader scope of factors in the market. They also contended that their own scale,

EMO was an improvement to MARKOR, therefore, theoretically sound. In case of the reliability of the scales, EMO scale had the highest Cronbach  $\alpha$ , followed by Narver and Slater's (1990) scale. However, they mentioned that MKTOR scale offered greater efficiency as it had less items than EMO. Furthermore, Narver and Slater's (1990) MKTOR scale was found to be superior in regards to unidimensionality and predictive validity.

In summary, although both scales have been criticized in the literature they offer different perspectives. Thus, both scales have been the cornerstones of the research stream on market orientation. In the next section, an overview of the literature on entrepreneurial orientation is explained.

## 2.2 ENTREPRENEURIAL ORIENTATION

“[T]he entrepreneur always searches for change, responds to it, and exploits it as an opportunity.” (Drucker 1985, p. 28)

In his book *Innovation and Entrepreneurship* Peter Drucker quoted the French economist J.B. Say, who around 1800 defined the entrepreneur as the one who “shifts economic resources out of an area of lower and into an area of higher productivity and greater yield.” Drucker (1985) continued to add that nearly 200 years after his definition, the concept of entrepreneurship was still not clear. Entrepreneurship was identified in the US with new small business, while the Germans identified it with power and ownership (Drucker 1985). Although Drucker (1985) failed to give a clear definition for entrepreneurship, he refuted both definitions saying that size, growth and ownership did not constitute an entrepreneur. He believed that entrepreneurship was attainable by both individuals and corporations.

The initial empirical studies on entrepreneurship focused on the personal traits and demographic characteristics of individual entrepreneurs. These studies offered little insight into entrepreneurs and entrepreneurship as there was no typical entrepreneur (Gartner 1988; Bull and Willard 1993) as there were so many “human complexities, different situations, issues of luck, serendipity, timing, and so forth” (Slevin and Covin 1990, p. 43). Entrepreneurs defied aggregation as they tended to reside at the tails of population distributions, which made developing a profile of a typical entrepreneur futile (Low and MacMillan 1988, p. 148).

Due to problems with individual-level entrepreneurship research, the focus has shifted to firm-level entrepreneurship. Firm-level analysis allowed the effectiveness of entrepreneurial orientation to be measured. Furthermore, an individual’s psychological profile does not make a person entrepreneurial (Covin and Slevin 1991, p. 8).

Several different terms have been used to describe entrepreneurship in companies, such as, entrepreneurial proclivity (e.g., Matsuno *et al.* 2002), entrepreneurial management (e.g., Stevenson and Jarillo 1990), entrepreneurial posture (e.g., Covin 1991, Covin and Slevin 1989b), and entrepreneurial orientation (e.g., Lumpkin and Dess 1996), and entrepreneurship orientation (e.g., Atuahene-Gima and Ko 2001). For the purposes of this study the term entrepreneurial orientation is adopted and used interchangeably with entrepreneurship. It is important to note that organizational-level entrepreneurship is not limited to new ventures or small businesses (Naman and Slevin 1993). It can be observed in established and large firms.

Although different approaches to defining entrepreneurship are not as pronounced as the studies in market orientation, there is no consensus on whether entrepreneurial

orientation is a behavior or an attitude – culture – (Bhuian, Menguc and Bell 2005; Brown, Davidson and Wiklund 2001). One approach (e.g., Morris and Lewis 1995; Dess, Lumpkin and Covin 1997; Slevin and Covin 1990) defines entrepreneurial orientation as “the process of creating value by bringing together a unique package of resources to exploit an opportunity” (Davis *et al.* 1991, p. 44). Yet others (e.g., Dess and Lumpkin 2005) define it as “...a frame of mind and a perspective about entrepreneurship that are reflected in a firm’s ongoing processes and corporate culture” (Lumpkin and Dess 2005, p. 147). However, other studies accept entrepreneurship as solely a guiding philosophy (e.g., Covin and Slevin 1999; Barrett and Weinstein 1999; Matsuno *et al.* 2002; Hult and Ketchen 2001; Hult, Snow and Kandemir 2003; Hult, Hurley and Knight 2004). Bird (1988, p. 442) argued that behaviors can be observed due to unconscious and unintended antecedents, while attitudes (mind-set) guide goal setting and commitment. Thus, it is at cultural level rather than behavioral level that entrepreneurship can be best observed. Although both views offer valuable insight in understanding entrepreneurial orientation for the purposes of this study the cultural perspective is adopted.

### 2.2.1 Conceptualizations

One of the influential definitions for firm entrepreneurship was offered by Miller (1983, p. 771) based on a review of the prior research:

“An entrepreneurial firm is one that engages in product-market innovation, undertakes somewhat risky ventures, and is *first* to come up with “proactive” innovations, beating competitors to the punch” [original italics and parentheses].

This definition influenced the later studies that identified innovativeness, risk-taking and proactiveness as the three dimensions of the entrepreneurial orientation

concept (Miller 1983; Morris and Paul 1987; Covin and Slevin 1989; Morris, Avila, Allen 1993, Slevin and Covin 1990). Although the three-dimensional conceptualization of entrepreneurial orientation is dominantly accepted in the literature, Lumpkin and Dess (1996) proposed two additional dimensions that they find critical to the entrepreneurial orientation concept: autonomy and competitive aggressiveness. However, their definition of entrepreneurial orientation was limited to only new entry (p. 136). In this dissertation study, the wider approach to defining entrepreneurial orientation is adopted as new entry only constitutes one part of entrepreneurial culture (Stevenson and Jarillo 1990). If one only defines entrepreneurship in terms of new ventures then McDonald's under the management of Ray Kroc would not qualify as an entrepreneurial company (Stevenson and Jarillo 1990). This view is consistent with much of the studies that accept the three dimensional conceptualization (Barrett and Weinstein 1998).

Innovativeness refers to a firm's tendency and willingness to place strong emphasis on research and development, new products/services, and technological improvements, and to engage in and support new ideas, products or processes (Zaltman, Duncan, and Holbek 1973; Slevin and Covin 1990; Lumpkin and Dess 1996). It is an essential component of entrepreneurial orientation as it indicates how firms pursue new opportunities (Lumpkin and Dess 1996). It is important to distinguish innovativeness, which is an organization's cultural orientation from innovative capacity, which is the ability of the organization to successfully develop or adopt new products and processes (Hult, Snow and Kandemir 2003). In other words, innovativeness is "a cultural readiness and appreciation for innovation," while innovative capacity is "the degree of innovations actually produced or adopted by the organization" (Hurley, Hult and Knight 2005).

There are three different types of innovativeness: technological innovativeness, product-market innovativeness and administrative innovativeness (Dess and Lumpkin 2005). While technological innovativeness deals with product and process development, engineering, research, with an emphasis on technical expertise and industry knowledge, product-market innovativeness consists of product design, market research and advertising and promotion (Lumpkin and Dess 1996, p. 413). Administrative innovativeness refers to “novelty in management systems, control techniques and organizational structures” (Dess and Lumpkin 2005, p. 150). These broad types of innovativeness are often intertwined. The case of technologically sophisticated new products designed to meet specific market demand is an example of the overlap between the two categories (Lumpkin and Dess 1996, p. 143).

The second component of entrepreneurial orientation is risk-taking. In the context of entrepreneurship, risk-taking refers to resource allocation decisions and the choice of products and markets (Venkatraman 1989b). Miller and Friesen (1978, p. 923) defined risk-taking as “the degree to which managers are willing to make large and risky resource commitments – i.e., those which have a reasonable chance of costly failures.” These risks are not uncalculated, extreme risks that involve reckless decision-making, but are calculated risks that are identified by management (Davis, Morris and Allen 1991). Management explores the outcomes of various prospects and generates scenarios of likely outcome (Dess and Lumpkin 2005). That is, management identifies key risk factors and their underlying sources, and then endeavors to manage or alleviate these factors (Caruana *et al.* 1998; Dess and Lumpkin 2005, Morris, Schindehutte, LaForge 2002). Furthermore, risk-taking proclivity might lessen strategic stagnation and could lead to

superior performance (Miller and Toulouse 1986). Risk-taking propensity is an important component of entrepreneurial orientation as it is often used to illustrate entrepreneurship (Lumpkin and Dess 1996; Morgan and Strong 1998).

There are three broad types of risk that organizations and their managers face: business risk, financial risk and personal risk (Dess and Lumpkin 2005). Business risk refers to dealing with unknown and probability of failure. Committing to unproven technologies or entering untested markets can be given as examples (Dess and Lumpkin 2005). Financial risks involves encompasses high leverage from borrowing and heavy commitment of resources (Lumpkin and Dess 1996; Dess and Lumpkin 2005). Finally, personal risk-taking “refers to the risks that a manager assumes in taking a stand in favor of a strategic course of action” (Dess and Lumpkin 2005, p. 152).

The third dimension of entrepreneurial orientation is proactiveness. “Proactiveness refers to a firm’s inclination to seize new opportunities” (Dess and Lumpkin 2005, p. 150). Proactiveness is the willingness to initiate actions to which competitors respond (Slevin and Covin 1990, p. 43). While some researchers (e.g., Davis, Morris and Allen 1991) contended that proactiveness was the opposite of reactivity - where the company only responds to threats by the competitors or environmental forces, others (e.g., Lumpkin and Dess 1996) claimed that the opposite of proactiveness was passiveness – where the firm is indifferent to or unable to seize opportunities or to lead. Proactive firms do not only have a forward-looking perspective but they are also willing to change the nature of competition in their industry (Dess and Lumpkin 2005, p. 150).

By adopting proactiveness, firms take the initiative to pursue growth opportunities by:

“[P]articipation in emerging industries, continuous search for market opportunities and experimentation with potential responses to changing environmental trends. It is expected to be manifested in terms of seeking new opportunities which may or may not be related to the present line of operations, introduction of new products and brands ahead of competition, strategically eliminating operations which are in the mature or declining stages of life cycle.” (Venkatraman 1989b, p. 949)

A proactive firm does whatever is required to accomplish the entrepreneurial concept by persevering, adapting and assuming responsibility for failure (Morris and Lewis 1995). These characteristics of proactiveness are associated with entrepreneurship and, thus make proactiveness an essential dimension of entrepreneurial orientation

To the extent an organization exhibits all three of these dimensions it can be considered an entrepreneurial firm (Miller 1983). He argued that for a firm to be labeled as entrepreneurial it needs to have innovativeness, risk-taking, and proactiveness. If a company solely changed its technology or production line by imitating its competitors without taking any risks and being proactive it wouldn't be considered an entrepreneurial firm. The same holds true for firms that are proactive risk-takers, but fail to innovate. Firms may exhibit different levels of entrepreneurship rather than either having it or not having it (Morris and Lewis 1995).

### **2.2.2 Scale Development for Entrepreneurial Orientation**

Previous literature guided Miller (1983) in identifying three dimensions for entrepreneurial orientation as risk-taking, proactiveness and innovativeness. To measure these three dimensions he employed Miller and Friesen's (1982) measures for strategy-making. After developing items to measure these three dimensions he tested the validity and reliability on data collected from managers from 52 businesses in the Montreal region. However, Miller mentioned that his sample was a convenience sample rather than

a random sample. Based on this data Miller tested the reliability and validity of his seven-item entrepreneurship scale and some other independent variables. The reliability was established by the Cronbach Alpha coefficient. For the overall seven-item measure the Cronbach Alpha was 0.88, while it was 0.77 for innovativeness, 0.81 for proactiveness and 0.91 for risk-taking. The validity was assessed in two stages. First, the scholar conducted a correlation analysis among the three components. Later, correlations between the entrepreneurship scale and the independent variables were assessed to establish construct validity. The results indicated that this measure was valid.

Covin and Slevin (1989) extended and refined the instrument developed by Miller (1983). A nine-item scale based on the three dimensions identified by Miller was developed by Covin and Slevin. In order to develop these nine items Covin and Slevin (1989) adapted some items from existing instruments and developed some original items. Items 1, 2, 3, 7 and 8 were adapted from Miller and Friesen (1982) and Khandwalla (1977). Four new items (4, 5, 6, and 9) were added to develop a better scale that more fully reflected the entrepreneurial orientation construct's hypothetical domain (Miles and Arnold 1991, p. 53). Data was collected from the senior managers of 344 firms from Western Pennsylvania. The coefficient alpha of 0.87 indicated that the scale was reliable. Construct validity was checked through factor analysis and all item loaded on a single factor. Covin and Slevin's (1989) scale was utilized in other studies (e.g., Miles and Arnold 1991; Covin 1991). Covin and Slevin's (1989) scale is shown in Appendix A.5.

Although the measures developed by Miller (1983) and Covin and Slevin (1989) are viable instruments for capturing firm-level entrepreneurship, these scales have their weaknesses (Wiklund 1999, p. 38):

“Researchers disagree on how to label the scale and what type of concept it really represents. This is probably because the actual items represent a mix of past behaviors and current attitudes.”

Building on these previous works Matsuno, Mentzer and Özsomer (2002) developed a new scale that captured only the attitudinal aspects of entrepreneurial orientation. In order to differentiate from the previous scales that accepted entrepreneurship mostly as a behavior rather than an attitude or culture, Matsuno *et al.* (2002, p. 19) called their construct *entrepreneurial proclivity* and defined it as the “organizations predisposition to accept entrepreneurial possesses, practices, and decision making, characterized by its preference for innovativeness, risk taking, and proactiveness.” In order to develop a cultural scale first, the scholars generated eight items based on the previous scales by Covin and Slevin (1989) and Morris and Paul (1987). Furthermore, they conceptualized entrepreneurship construct as a second-order factorial structure in which the three dimensions (i.e., innovativeness, risk taking, proactiveness) represented first-order factors that were the manifestation of the higher-order entrepreneurship construct. In the item purification process that was based on empirical criteria it was found that one of the indicators loaded on both innovativeness and proactiveness. After eliminating this item the scale consisted of 7 items. In order to assess discriminant and convergent validity of the 7-item ENTRE scale a correlation analysis with other constructs in their study (i.e., market orientation, formalization, centralization, and departmentalization) was conducted while constraining the measurement items and their error terms to be uncorrelated. The results of their fit statistics for the confirmatory factor analysis (CFA) indicated an acceptable level of

convergent and discriminant validity. The ENTRE scale by Matsuno *et al.* (2002) is shown in Appendix A.6.

In the next section, studies that examined both market and entrepreneurial orientation are reviewed. As stated previously, both orientations are necessary for the long-term survival and profitability of export ventures.

## **2.3 MARKET ORIENTATION AND ENTREPRENEURIAL ORIENTATION**

As this dissertation study examines the relationship between market orientation and entrepreneurship, as well as, their impact on export performance in this section a review on studies that examined both concepts is provided. The literature points that market-orientation can achieve maximum effectiveness when it is complemented by entrepreneurship (Slater and Narver 1995, Atuahene-Gima and Ko 2001, Lafferty and Hult 2001, Matsuno *et al.* 2002).

The early studies in the management literature examined whether both concepts were correlated with each other and whether they represented the same business philosophy. Davis, Morris and Allen (1991, p. 46) argued that value creation was the common link between market orientation and entrepreneurship:

“Entrepreneurs create value where there was none before. They engineer a unique package of resources to capitalize on untapped opportunities. Marketing represents a set of value-creating activities directed at identifying and satisfying a consuming public.”

One of the first empirical studies was conducted by Morris and Paul (1987), who contended that both orientations would foster each other as both represented responses to an increasingly complex and turbulent business environment. Morris and Paul (1987) used a 13-item scale for entrepreneurial orientation adapted from Miller and Friesen

(1983). As there was no established scale for market orientation at the time of the study; the researchers developed a 22-item dichotomous scale that focused on extent of marketing emphasis in firms to measure marketing orientation based on the previous studies on marketing concept by Hise (1965), Barksdale and Darden (1971), McNamara (1972) and Lawton and Parasuraman (1980). Prior to the articles of Shapiro (1988), Narver and Slater (1990) and Kohli and Jaworski (1990) the terms “marketing” orientation and “market” orientation were used interchangeably to refer to the implementation of the marketing concept (Wrenn 1997, p. 33). Morris and Paul (1987) called their measure marketing orientation, and their measure is shown in Appendix A.7.

The weakness of their scale for market orientation was raised in the limitations of their study:

“While composite measures used herein cover a wide range of marketing activities, simply performing such specific activities is not a guarantee that a firm is actually marketing oriented. This suggests a potential validity problem. Also, placing equal weight on each of the marketing measures may not be completely appropriate.” (p. 258).

The results of their study verified that companies that scored higher in entrepreneurial orientation also were more market-oriented. The relationship between the two concepts increased under high levels of environmental uncertainty.

In an empirical study, Miles and Arnold (1991) investigated whether market orientation construct and entrepreneurship construct describe the same underlying business philosophy or two unique perspectives. The two different characteristics of the constructs were stated as:

“While a marketing orientation implies that a firm should focus on its customers, an entrepreneurial orientation suggests that organizations must constantly seek to exploit the dynamics of their macroenvironment and task environments” (Miles and Arnold 1991, p. 49).

Miles and Arnold's (1991) study showed support for the findings of Morris and Paul's (1987) study, and identified a correlation between both constructs. Furthermore, they established by pairwise correlations and factor analysis that although both concepts are related they did not constitute the same underlying business philosophy (Even as pairwise correlations implied a correlation between the two constructs, the factor analysis failed to support a monofactor). In this study, the market orientation scale developed by Morris and Paul (1987) and the entrepreneurial orientation scale developed by Covin and Slevin (1989b) were utilized.

After these two studies established the relationship between market orientation and entrepreneurial orientation, later studies examined the impact of both constructs on firm performance. Becherer and Maurer (1997) examined the relationship between the two concepts and their relationship with firm performance, as well as the role of environment on these relationships. According to the scholars, both orientations represented responses to an increasingly complex and turbulent environment, and therefore, would be fostering each other. That is, under conditions of environmental turbulence and environmental hostility the relationship between the orientations will be increasing. The researchers adapted the entrepreneurial orientation scale of Covin and Slevin (1989b), and market orientation scale of Morris and Paul (1987). Once again, the correlation analysis indicated that entrepreneurial and market orientations were related constructs. While entrepreneurial orientation was significantly correlated with firm performance no such support was found for market orientation and firm performance. Additionally, it was established that under conditions of environmental turbulence and environmental hostility the relationship between market and entrepreneurial orientation

got stronger. No empirical support was found for the moderating effect of the environmental variables on both orientations and performance.

Most of the early studies that examined the relationship between market orientation and entrepreneurial orientation utilized Morris and Paul's (1987) scale. However, Morris and Paul (1987) questioned the validity and appropriateness of their scale. In the early 1990s the marketing literature provided valid and reliable measures for market orientation. One of these scales, the scale by Kohli and Jaworski's (1993), was adopted by Barrett and Weinstein (1998) in their investigation of their CEFMO model that incorporated firm entrepreneurship, market orientation, flexibility and business performance. They tested their model on 142 manufacturing firms that operated in Tennessee. The results of their correlation analysis indicated that market orientation and entrepreneurship were positively correlated. Furthermore, market orientation had the strongest correlation with business performance, and entrepreneurship and flexibility followed it in that order. Multiple regression analysis suggested that all three concepts were significantly influencing the firm performance.

In a conceptual study, Slater and Narver (1995) suggested that market orientation and entrepreneurship were the two key elements of culture that were necessary to form a learning organization. They argued that market orientation must be complemented by entrepreneurship, as by itself it wouldn't be sufficient for a learning organization. Although market orientation promoted organizational learning through external emphasis on developing information about customers and competitors, it did not provide risk-taking that was necessary for generative learning. Slater and Narver (2000) tested the assessment that market orientation and entrepreneurship were components of a business

culture that generated high business performance. The results of the multiple regression test indicated no significant support for a positive association between entrepreneurial orientation and return on investment (ROI). However, Slater and Narver's (2000) study had a low statistical power due to small sample size and many independent variables.

The importance of adopting both market and entrepreneurial orientations was investigated by Atuahene-Gima and Ko (2001). Their main premise was that firms, which had combined high levels of market and entrepreneurial orientation, would outperform other firms. "[A]n alignment of market and entrepreneurship orientation processes and practices enables the firm to adapt to and manage its market environment to meet current and emerging customer needs" (p. 54). "The coalignment" perspective was adopted and four groups of firms were compared with each other on different dimensions of new product performance. The four groups of firms were: firms with both high market and entrepreneurial orientations (ME); firms with high market orientation (MO); firms with high entrepreneurial orientation; and conservative firms with low degrees of market and entrepreneurial orientations (CO). The results on analysis of 181 Australian firms demonstrated that ME firms had higher new product performance and were more effective in the product innovation process.

Matsuno, Mentzer and Özsomer (2002) study was different than the prior research in terms of their conceptualization of the relationship between the two concepts. They accepted the behavioral perspective on market orientation, and suggested that entrepreneurship was an underlying culture. In their conceptual model, entrepreneurship impacted market orientation both directly, as well as, indirectly through organizational structure. Although the empirical results indicated an existence of positive impact of

entrepreneurship on market orientation, it did not strongly support the linkage through organizational structure. While entrepreneurial orientation affected strongly all three of the organizational structure variables, namely formalization, centralization and departmentalization, only departmentalization impacted market orientation. Furthermore, the results of the structural equations analysis indicated that only through market orientation entrepreneurial orientation had a positive impact on organizational performance. The direct impact of entrepreneurial orientation on organizational performance was negative. Based on these results, the researchers contended that entrepreneurial culture should be coupled with market-oriented behavior for superior performance. By itself an entrepreneurial culture might be detrimental for the organization (Matsuno *et al.* 2002).

Market orientation, entrepreneurship, innovativeness, and organizational learning were examined together in an “organizational capabilities” approach by Hult and Ketchen (2001). They asserted that these four constructs were necessary but not sufficient enough to create “positional advantage”. They collectively contributed to the creation of a unique resource rather than contributing independently. Hult and Ketchen (2001) accepted Lumpkin and Dess’ (1996) definition of entrepreneurial orientation that is only limited to new entry. Therefore, entrepreneurship and innovativeness were examined as two different constructs. However, organization-level entrepreneurship is not restricted to new ventures or small ventures (Naman and Slevin 1991). Market orientation was measured by Narver and Slater’s (1990) scale, entrepreneurship was measured by five indicators from Naman and Slevin’s (1993) scale<sup>3</sup>, innovativeness was measured by Hurley and Hult’s (1998) scale, and organizational learning was measured by Hult

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<sup>3</sup> Naman and Slevin’s (1993) scale is the same as Covin and Slevin’s (1989) scale

(1998)'s measure. Their higher-order model of positional advantage and long-term performance was tested on 127 SBUs. The results of the structural equation modeling analysis supported the positional advantages taking place from the convergence of market orientation, entrepreneurship, innovativeness, and organizational learning. Market orientation had the greatest effect, while learning was found to be less important.

Knight and Cavusgil (2004) investigated the role of international entrepreneurial orientation and international market orientation as cultural foundations for success in born-global firms. Their case study analysis indicated that born-global firms benefit both from international entrepreneurial and international marketing orientations. International entrepreneurial orientation and international market orientation influenced the business strategies of the born-global firms, which in return enhanced their performance in international markets. The scholars defined international entrepreneurial orientation as "the firm's overall innovativeness and proactiveness in the pursuit of international markets" (p. 129). A scale was developed based on the previous scales by Khandwalla (1977) and Covin and Slevin (1989). International market orientation was defined as "managerial mindset that emphasizes creation of value, via key marketing elements, for foreign customers" (p. 130). A scale was developed based on a research by McKee *et al.* (1992). They identified global technological competence, unique products development, quality focus, and leveraging of foreign distributor competences as the most essential business strategies adopted by born-global firms. After pretesting a draft questionnaire on 82 small exporting firms the final questionnaire was established. Following a three-wave mailing 203 responses were attained. The results were significant for most of the hypothesized relationships, which revealed a support for the positive impacts of

international market and entrepreneurial orientations on international performance through the four identified business strategies.

Similarly, Luo, Zhou and Liu (2005) investigated the relationships among customer orientation, entrepreneurship and organizational performance of Chinese international ventures. 218 Chinese firms participated in their study; and the results of multivariable regression analysis showed that there was a strong correlation between market and entrepreneurial orientations. To measure entrepreneurial orientation the scholars used six items based on the previous scales developed (i.e., Covin and Slevin 1989, Miller and Friesen 1983, Morris and Paul 1987). Customer orientation was measured by 10 items adopted from the previous studies (i.e., Deshpandé and Farley 1998, 1999, 2000; Deshpandé *et al.* 1993; Kohli and Jaworski 1990; Slater and Narver 1994). The researchers concluded that customer orientation drove the firm to be more entrepreneurial, as it would create a predisposition toward entrepreneurial responses to the environment (p. 283).

In a more recent study, Zhou *et al.* (2005) investigated the impact of market orientation, entrepreneurial orientation and technology orientation on firm performance using a model that links these different types of strategic orientations and market forces, through organizational learning, to breakthrough innovations and then to performance. The scholars contended that strategic orientations will influence the performance of the firm through breakthrough innovations – technology-based innovation and market-based innovation. Zhou *et al.* (2005) argued that market orientation would have a positive impact on tech-based innovations and negative impact on market-based innovations, while entrepreneurial orientation would have a positive effect on both tech- and market-

based innovations. A Chinese marketing research firm was hired to administer the survey through personal interviews with managers of 350 Chinese firms. Narver and Slater's (1990) scale for market orientation and Hult and Ketchen's (2001) scale for entrepreneurial orientation was employed. The results confirmed that market orientation had a positive effect on tech-based innovation, and a negative effect on market-based innovation. Entrepreneurial orientation had positive impact on both tech- and market-based innovation.

Olson, Slater and Hult (2005) examined the impact of two components of market orientation (customer and competitor orientation) and one component of entrepreneurial orientation (innovation orientation) on perceived overall performance in a contingency model. They argued that overall firm performance was shaped by how well the structural characteristics and strategic organizational behavior matched the alternative business strategies. The four alternative business strategies were identified as customer-, competitor-, innovation-, and internal/cost-oriented behaviors, although measures from cultural perspective were used to tap these constructs. Narver, Slater and MacLachlan's (2004) scale for customer-oriented behavior, Narver and Slater's (1990) scale for competitor-oriented behavior, and Hurley and Hult's (1998) scale for innovation-oriented behavior were adapted. It is also important to state that Narver, Slater and MacLachlan's (2004) customer orientation scale had two dimensions: reactive customer orientation and proactive customer orientation. The three alternative forms of organizational structure included in the model were formalization, decentralization and specialization. The four business strategies examined in this study were prospectors, analyzers, low-cost defenders and differentiated defenders. The results of regression analysis on 228 firms

provided supported their model and revealed that each strategy type required different combinations of marketing organization structures and strategic behaviors for success. A brief review of the studies mentioned in this section and other related studies can be seen at Table 2.3.1.

TABLE 2.3.1

**Studies that investigated both market orientation and entrepreneurship**

<b>Study</b>	<b>Focus</b>	<b>Scale</b>	<b>Empirical basis</b>	<b>Results</b>
Morris and Paul (1987)	The relationship between MO and EO is examined	EO-13 item scale adapted from Miller and Friesen (1987) MO-22 item dichotomous scale	t-test on 116 firms	EO and MO are highly related
Miles and Arnold (1991)	Whether MO and EO are part of the same underlying philosophy was examined	EO- Covin and Slevin (1989) MO - Morris and Paul (1987)	Pairwise correlations and factor analysis on a sample of 169 firms	EO and MO are correlated but different constructs
Davis <i>et al.</i> (1991)		Marketing-10 item (MO and Information gathering) EO- 8 item adapted from Miller and Friesen (1987)	Structural equations analysis on 93 industrial firms	Both EO and MO were positively associated with turbulence
Slater and Narver (1995)	MO and EO are the cultural components of an organization and when supplemented with necessary climate form a learning organization that provides the organization with sustainable competitive advantage	Conceptual		
Barrett and Weinstein (1998)	A model that incorporates MO, EO and flexibility is tested, with interaction variables	MO - Kohli et al (1993) EO - Covin and Slevin (1989)	Correlation and moderated multiple regression analysis on 142 US firms	Both EO and MO were positively correlated with subjective business performance (Kohli and Jaworski 1993). Furthermore, both constructs were highly correlated with each other

TABLE 2.3.1 (continued)

Study	Focus	Scale	Empirical basis	Results
Slater and Narver (2000)	MO and EO impact business performance positively	MO- Narver and Slater (1990) EO-Naman and Slevin (1993)	Regression analysis on 53 SBUs in Western USA	MO significantly <i>positive</i> for: ROI EO is not significantly related to ROI
Hult and Ketchen (2001)	MO, EO, IO and LO are dimensions of a higher-order construct, positional advantage, that lead to superior performance	MO-Narver and Slater (1990) EO-Naman and Slevin (1993) IO-Hurley and Hult (1998) LO-Hult (1998)	Higher-order structural equations analysis on 181 SBUs	MO had the greater explanatory power on positional advantage (PA) EO and IO was found both impact PA Learning was the least important capability
Atuahene-Gima and Ko (2001)	For successful new product development both MO and EO are necessary	MO-Kohli <i>et al.</i> (1993) EO-adapted from Covin and Slevin (1989)	MANOVA and ANOVA tests on 181 Australian firms	Firms that employ both MO and EO had better innovation outcomes than the firms that employed one or none
Matsuno <i>et al.</i> (2002)	EO is accepted as a culture that affects MO directly and through organizational structure. EO's diirect effect on performance is also examined	MO- Matsuno <i>et al.</i> (2000) EO- Adapted from Covin and Slevin (1989), Morris and Paul (1987) and Naman and Slevin (1993)	Structural Equations Modeling analysis on 364 US Firms	MO significantly <i>positive</i> for: SOM, PCTNP, ROI EO significantly <i>negative</i> for: ROI However, EO had an indirect positive impact on performance through MO
Liu <i>et al.</i> (2002)	MO and EO has positive impact on performance through organizational learning (marketing program dynamism is used as a performance measure)	MO- Deshpandé and Farley (1998) EO-Smart and Conant (1994)	Regression analysis and MANOVA analysis on 304 Chinese state-owned companies	MO has a significantly <i>positive</i> impact on marketing program dynamism and organizational learning negatively mediates this relationship EO-marketing program dynamism relationship is positively mediated by organizational learning

TABLE 2.3.1 (continued)

Study	Focus	Scale	Empirical basis	Results
Liu <i>et al.</i> (2003)	MO is proposed to impact EO, LO and performance positively.	MO- Deshpandé and Farley (1998) EO-Smart and Conant (1994)	Correlation and MANOVA analysis on 304 Chinese state-owned companies	MO significantly <i>positive</i> relationship with: LO, EO and marketing program dynamism
Knight and Cavusgil (2004)	International EO and International MO are two organizational culture factors that impact performance in international markets through various business strategies	IMO-Knight and Cavusgil (2004) IEO- Knight and Cavusgil (2004)	Structural Equation Analysis on 203 US Exporters	IMO and IEO impact performance positively through organizational capabilities.
Luo, Zhou and Liu (2005)	MO as a strategy was among the antecedents of entrepreneurship	MO- Previous scales of Deshpandé and Farley (1998, 1999, 2000); Deshpandé <i>et al.</i> (1993); Kohli and Jaworski (1990); Slater and Narver (1994) is modified EO- Previous scales of Covin and Slevin (1989), Miller and Friesen (1983), Morris and Paul (1987) is modified	Regression analysis on 218 Chinese firms	A firm that has follows a market-oriented strategy is likely to create a predisposition toward entrepreneurial responses

In this section, a review of the studies that examined both market and entrepreneurial orientation is offered. Although these studies enhanced our knowledge on how these two orientations in general interacted and their performance, they failed to offer a thorough understanding and this is especially holds true in the context of exporting. In the next section, two models are offered that attempt to fill this gap in the literature. In the first study, a componentwise approach (Han et al. 1998, Lukas and Ferrell 2000, Gatignon and Xuereb 1997; Im and Workman 2004; Hughes and Morgan

2007) is employed to provide a better understanding how market and entrepreneurial orientations interact. In the second study, contingency factors have been identified to examine the relative impact of both orientations on export performance.

## 2.4 EXPORT PERFORMANCE

Although several different scales have been developed and used in the exporting literature, there is still no agreement on how to measure export performance (Zou and Stan 1998; Katsikeas, Leonidou, and Morgan 2000). In a literature review of the exporting articles Zou and Stan (1998, p. 341) stated that researchers used different export performance measures and labeled them unique names, resulting in dozens of such measures. Similarly, Katsikeas *et al.* (2000) identified 42 different performance indicators that were broadly categorized in three groups, namely, economic measures, non-economic measures and generic measures<sup>4</sup>. Economic measures encompassed sales-related measures, profit-related measures and market-share related measures. Non-economic measures consisted of market-related measures, product-related measures and miscellaneous non-economic measures. Generic measures consisted of collective approaches, such as export managers' degree of satisfaction with overall export performance, or perceived export success. The use of multiple measures instead of single indicators became popular in the literature as multiple performance indicators complemented each other in capturing different facets of the underlying phenomena (Shoham 1998; Walters and Samiee 1990; Katsikeas *et al.* 2000).

Another issue with the export performance measures dealt with the unit of analysis. Most studies in the literature used corporate level as their unit of analysis of

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<sup>4</sup> For detailed information on the measures and their criticisms refer to Katsikeas *et al.*'s (2000) study.

export performance (Katsikeas *et al.* 2000). However, this approach is problematic (Cavusgil, Zou, and Naidu 1993; Cavusgil and Zou 1994; Katsikeas *et al.* 2000). Big variations across various product-market export ventures of the same firm might exist, and thus using firm-level measures would discount the variability of performance (Cavusgil *et al.* 1993; Cavusgil and Zou 1994; Myers 1999; Katsikeas *et al.* 2000; Morgan *et al.* 2004).

Finally, the mode of assessment, objective versus subjective measures, was an important issue. While some scholars utilized objective measures others used subjective measures. Katsikeas, Leonidou, and Morgan (2000, p. 505) reviewed the literature on firm-level export performance and contended that although subjective assessments of export performance may cause some problems they were proven more valid in measuring the long-term aspects of export performance and in determining the mode of performance most likely to influence strategic managerial decision making and actions. The scholars argued that there were three ways in which objective assessment could pose measurement problems in export performance evaluations:

“(a) company financial statements and reports – the major source of objective data – often neither distinguish between domestic and export business operations nor provide venture information; (b) intrinsic characteristics of certain objective measures may raise comparability concerns...; (c) the cut-off point for successful/unsuccessful firms is arbitrarily set by the researcher...” (Katsikeas *et al.* 2000, p. 505).

In a later study, Morgan, Kaleka and Katsikeas (2004) empirically established a strong correlation between objective export venture performance and subjective assessments of export venture performance.

Zou, Taylor and Osland (1998) developed a measure of export performance that addressed the three issues stated above. Their scale, EXPERF was a multi-dimensional

measure that focused on the performance of export ventures. The three dimensions of EXPERF scale were financial export performance, strategic export performance and satisfaction with export venture. In an effort to develop a measure for export performance Zou *et al.* (1998) first conducted a review of the literature to identify previously used measures of export performance. Based on the literature review, a set of items were developed and a preliminary questionnaire was developed. This preliminary questionnaire was pretested by personal interviews with three US and three Japanese executives who were responsible for international market ventures, as well as, several academicians who conducted research on exporting. Necessary modifications were made based on their feedback and the validity of the revised items were tested by administering the new questionnaire to several US and Japanese executives. Based on their feedback, the final questionnaire was developed in English. The questionnaire in English was translated into Japanese and back-translated and the equivalence of items was established. The finalized questionnaire consisted of a total of nine items for the three dimensions. Data was collected using mail survey in both US and Japan. The scholars conducted confirmatory factor analysis (CFA) and evaluated the models following the procedure recommended in the literature. The goodness-of-fit indices suggested that the three-factor model fitted both the US and Japanese sample. The convergent validity was established for both the US and Japanese samples as all the item loadings were positive and significant. Based on the coefficient alpha results the scale was found to be reliable for both the US sample and for the Japanese sample. Cross-national consistency of the EXPERF scale was examined by conducting two-group confirmatory factor analyses. The results suggested that the scale exhibited factorial

similarity and factorial equivalence. Thus, the EXPERF scale will be applied to multiple countries.

In this chapter, the review of the literature on market and entrepreneurial orientations are illustrated. In the next chapter, models and hypotheses relating to the models with theoretical background is presented.

## **CHAPTER III – MODEL DEVELOPMENT**

This chapter is organized in different sections. Based on the goals stated earlier this study is organized in two main sections. In the first section, titled Study I, the relationships between the components of both orientations are examined. A conceptual model that examines the relationship among the components of market and entrepreneurial orientation is developed and related hypotheses are presented. In the second section, titled Study II, the relative export performance implications of market orientation and entrepreneurship are examined by a contingency model. The theoretical underpinning for this conceptual model is presented. Hypotheses based on the developed model are offered.

### **3.1 STUDY I**

As stated earlier, the purposes of this dissertation are to examine the relationship between market and entrepreneurial orientation and to understand in what conditions which orientation would have greater impact on the performance of export ventures. Combining the main tenets of market orientation and entrepreneurship literatures, as well as, export marketing literature, two conceptual models are proposed that illustrates the expected relationships between the components of both orientations, and how internal and external conditions could affect the impact of both orientations relative to each other. Therefore, in Study I hypotheses relating to the componentwise relationships between market orientation and entrepreneurship of exporting firms are developed. In Study II, hypotheses relating to the external and internal conditions that would favor one orientation over the other orientation are developed.

In this dissertation study, it is contended that market orientation and entrepreneurial orientation are two distinct but intertwined cultures of an exporting venture. The first part of the study investigates the complex relationship between market and entrepreneurial orientations. Both of these two orientations are required to attain sustainable competitive advantage and therefore, it is important to determine the relationship between them. Each orientation has three components. Customer orientation, competitor orientation and interfunctional coordination are the three components of the market orientation construct, and proactiveness, risk-taking and innovativeness are the three components of entrepreneurial orientation. As discussed earlier some of the previous studies have reported a correlation (e.g., Morris and Paul 1987; Miles and Arnold 1991; Smart and Conant 1994; Becherer and Maurer 1997), others have found a one-way directional relationship between the orientations (e.g., Matsuno, Mentzer and Özsomer 2002; Liu, Luo and Shi 2003). Although these studies were valuable in establishing a relationship between market orientation and entrepreneurship, none of these studies focused on studying how these two important constructs were related at the component level. As stated previously, one of the goals of this study is to provide better understanding between market and entrepreneurial orientation by conducting a componentwise examination. Figure 1 illustrates a visual presentation of hypothesized relationships among various components of the two orientations.



interfunctional coordination) and the three components of entrepreneurial orientation (proactiveness, risk-taking and innovativeness) are intricate. For example, while proactiveness is proposed to influence customer and competitor orientation positively, interfunctional coordination is argued to have a positive impact on proactiveness.

### **3.1.1 Hypotheses**

#### **3.1.1.1 Proactiveness and Dimensions of Market Orientation**

Market orientation is reactive in nature and does not encompass proactiveness (Atuahene-Gima and Ko 2001). The proactiveness dimension of entrepreneurial orientation enables the firms to actively shape the marketplace by introducing new products, technologies, and administrative techniques (Miller and Friesen 1978; Miller and Friesen 1983; Lumpkin and Dess 1996). A proactive culture will encourage identifying and acting on new market opportunities by seizing initiative and acting opportunistically in order to shape the environment (Lumpkin and Dess 1996; Matsuno, Mentzer and Özsomer 2002). The relationships between proactiveness and the three dimensions of market orientation have not been investigated.

#### **Customer Orientation and Proactiveness**

Customer orientation is described by Narver and Slater (1990, p. 21) as “the sufficient understanding” of customers in order to create value for them. Consumers’ habits, incomes and expectations may change overtime. A company’s offerings that “meet customers’ needs today may not meet their need tomorrow” (Zhou *et al.* 2005, p. 1051). Thus, a firm must be proactive and continuously searching for promising opportunities (Slater and Narver 1993; Morgan and Strong 1998). This view is supported

by Han *et al.* (1998, p. 33) who contended that because of customer orientation's focus on continuously finding ways to provide superior customer value, there would be "increased boundary-spanning activity beyond the status quo." They explained that, in other words, customer orientation advocated proactive disposition in order to meet customers' demands (Han *et al.* 1998, p. 33).

Therefore, in this dissertation study it is argued that a customer-oriented culture, with a great demand and willingness to obtaining intelligence about the current and latent export customer needs and requirements, will promote a culture that emphasizes an incessant pursuit of up-and-coming prospects. That is, customer orientation will have a positive influence on proactive stance.

H1a: Customer orientation will have a positive impact on proactiveness of exporting companies.

### *Competitor Orientation and Proactiveness*

A competitor-oriented culture with a focus on identifying the competitors, and their weaknesses and strengths (Narver and Slater 1990) will promote a proactive culture that is ready to deal with the treats (Slater and Narver 1993). That is, a culture that stresses gathering and thorough analysis of competitors' capabilities and strategies (Lafferty and Hult 2001) will encourage a proactive stance. The impetus behind a positive relationship between competitive orientation and proactiveness is due to the competitor-oriented exporting firms' using the target rivals as a frame of reference, and constantly seeking to identify their own strengths and weaknesses (Han et al. 1998; Wu, Maharajan, and Balasubramanian 2003). It is argued that such attention to competitive

factors would grant an exporting firm with a proactive disposition toward shaping the competitive environment and its own strategy (Wu *et al.* 2003, p. 431).

Consequently, competitor orientation will drive proactiveness in the exporting firm. Therefore, it is contended that:

H1b: Competitor orientation will have a positive impact on proactiveness of exporting companies.

### *Interfunctional Coordination and Proactiveness*

Interfunctional coordination is described as “the process that assimilates the results of being customer and competitor oriented and allows coherent action” (Wooldridge and Minsky 2002, p. 31). Knowledge about customers, competitors and other market factors are generated through customer and competitor orientation (Narver and Slater 1990). Many organizations collect customer- and competitor-oriented data, but only when the data are circulated and “become a shared organization-wide platform from which the decisions are made” (Kennedy, Goolsby and Arnold 2003, p. 78) the benefits of these orientation can be observed. Therefore, interfunctional coordination is essential in identifying and acting on opportunities in the marketplace (Im and Workman 2004). The intelligence generated by customer and competitor orientation, and distributed and shared throughout the organization by interfunctional coordination enables identifying the emerging opportunities, and thus promote the proactiveness of the organization.

Furthermore, by enabling the distribution of this information throughout the organization interfunctional coordination will promote a sense of control in the organization, which in return would foster a proactive culture (Kennedy, Goolsby and Arnold 2003). Based on the above arguments, it is hypothesized that interfunctional

coordination will have a positive impact on the proactiveness dimension of the entrepreneurial orientation.

H1c: Interfunctional coordination will have a positive impact on proactiveness of exporting companies.

### **3.1.1.2 Dimensions of Market Orientation and Risk-taking**

The literature does not clarify the relationships among the components of market orientation and the risk-taking dimension of entrepreneurial orientation. Slater and Narver (1995, p. 67) argued that “a market orientation may not encourage a sufficient willingness to take risks,” without elaborating the impact of each of the components of market orientation on risk-taking.

#### **Customer Orientation and Risk-Taking**

A customer orientation will discourage willingness to take risks. An exporting firm with a priority on meeting the demands of its customers might not step outside the immediate voice of its customers (Jaworski *et al.* 2000). However, customers' needs are limited to what they are accustomed to, and what they can relate to (Lukas and Ferrell 2000). When an export firm is customer-driven, its focus and resources will be centered solely on the satisfying its customers' needs. In a study conducted by Christensen and Bower (1996), it was found that when companies were customer-oriented they were less likely to be risk-takers.

“[C]urrent customers could articulate features, performance, and quantities they would purchase with *much* less ambiguity.”

While,

“Information provided by innovating engineers was at best hypothetical: without existing customers, they could only guess at the size of the

market, the profitability of products, and required product performance” [original italics] (Christensen and Bower 1996, p. 211).

Companies allocate resources based on rational assessments of returns and risks (Christensen and Bower 1996). A customer-oriented firm will be prone to take less risky investments, as well-understood needs of known customers will constitute a rather risk-averse choice. Therefore, a customer-oriented export firm will have proclivity for being risk-averse. Hence,

H2a: Customer orientation will have a negative impact on risk-taking dimension of entrepreneurial orientation of exporting companies.

#### Competitor Orientation and Risk-Taking

Competitor orientation, with its focus on the competitive rivals, will have a positive influence on the exporting companies’ risk-taking propensity. A competitor-oriented exporting company will be willing to take calculated risks to distance themselves from their competitors (Matsuno, Mentzer and Özsomer 2002). A focus on competitors and outperforming them requires taking risks on untested approaches in new technologies and/or new systems. Therefore, a logical outcome of competitor orientation is a culture that is prone to risk-taking.

H2b: Competitor orientation will have a positive impact on risk-taking dimension of entrepreneurial orientation of exporting companies.

#### 3.1.1.3 Dimensions of Market Orientation and Innovativeness

Before examining the relationships between the three components of market orientation and the innovativeness dimension of entrepreneurial orientation, it is important to differentiate between innovativeness and capacity to innovate:

“Innovativeness is the notion of openness to new ideas as an aspect of a firm’s culture ... The capacity to innovate...is the ability of the organization to adopt or implement new ideas, processes, or products successfully” (Hurley and Hult 1998; p. 44).

Thus, innovativeness is accepted as an organizational culture, while innovative capacity is the organizational outcome. Innovativeness, as an organization culture, will promote a greater capacity to innovative (Hurley and Hult 1998; Hult *et al.* 2005). Similar to proactiveness, innovativeness has the potential to create markets and customers through development of new products or new systems (Berthron, Hulbert, and Pitt 1999). Existing market structures are disrupted by creation of new goods or systems through innovativeness, and resources are shifted away from existing firms to the innovative firm (Lumpkin and Dess 1996, p. 142).

#### Customer Orientation and Innovativeness

Getting close to the customer will hinder innovativeness in the exporting firm (MacDonald 1995, Christensen and Bower 1996; Christensen 1997; Berthron *et al.* 1999). Customer-oriented exporting companies will be too occupied with satisfying the immediate demands of its customers rather than concentrating its resources on the needed fundamental change (MacDonald 1995; Christensen and Bower 1996, Christensen 1997).

Gatignon and Xuereb (1997) found that a strong customer orientation resulted in less radical innovation. Im and Workman (2004) studied the role of customer orientation on new product and marketing program novelty. The results showed that customer orientation had a negative impact on new product novelty, and did not have any significant effect on marketing program novelty. The scholars concluded that consistent

with the previous claims, they found that customer orientation could be detrimental to the generation of novel perspectives for new products (p. 127). Therefore,

H3a: Customer orientation will have a negative impact on innovativeness dimension of the entrepreneurial orientation of exporting companies.

### *Competitor Orientation and Innovativeness*

“A competitor-oriented firm tends to monitor progress against rival firms continuously, which can lead to opportunities to create products or programs that are differentiated from those of competitors” (Im and Workman 2004, p. 118).

Thus competitor orientation tends to facilitate innovativeness (Im and Workman 2004; Low, Chapman and Sloan 2007; Tajeddini, Truman, and Larsen 2006). One of the studies that found empirical support was conducted by Lukas and Ferrell (2000), in which the scholars found that competitor orientation was significantly related to two different types of innovation studied – “me-too products” and “new-to-the world products.” Another study, conducted by Im and Workman (2004), concluded that competitor orientation had a significant impact on new product and marketing program novelty. Competitor orientation with its focus on identifying, analyzing and responding to competitors’ weaknesses and strengths will encourage innovativeness (Narver and Slater 1990; Im and Workman 2004). Accordingly, it is argued that:

H3b: Competitor orientation will have a positive impact on innovativeness dimension of the entrepreneurial orientation of exporting companies.

### *Interfunctional Coordination and Innovativeness*

Interfunctional coordination is characterized by enhanced communication and exchange between all organizational departments (Narver and Slater 1990; Im and

Workman 2004). Greater interfunctional coordination will foster trust and dependence among different departments and decreases the departmentalization in the organization that might inhibit innovativeness (Zahra, Nash and Bickford 1995; Lukas and Ferrell 2000; Auh and Menguc 2005). As well, interfunctional coordination promotes innovativeness in the organization as it “involves open generation and sharing of new ideas, resolution of problems and disagreements by means of non-routine methods and different frames of reference” (Im and Workman 2004, p. 118). “[I]nterfunctional coordination may serve as an impetus to innovativeness because increases in communication and team work are likely to generate new ideas and technology explorations” (Woodside 2005). When functional units work autonomously, they are more likely to follow their own routine mode of problem solving and are less likely to be creative; however, when they are integrated, the information sharing and interaction will give rise to willingness to accept new ideas and engagement in innovative activities (Han *et al.* 1998). Furthermore, interfunctional coordination is likely to eradicate impediments to transfer of tacit knowledge, which is necessary for breakthrough innovation (Lukas and Ferrell 2000). Tacit knowledge is knowledge that is “difficult to articulate fully even by an expert and is best transferred from one person to another through a long process of apprenticeship” (Lukas and Ferrell 2000, p. 241). In consequence, interfunctional coordination, which is characterized by high level of information sharing, coordination, interaction and communication, will have a positive impact on organizational innovativeness (Damanpour 1991; Woodside 2005).

However, the relationship between innovativeness and interfunctional coordination is not one directional, but “a positive feedback loop” (Woodside 2005).

Woodside (2005) argued that interfunctional coordination will not only have a positive impact on innovativeness, but it will also be influenced by innovativeness. In order to attain interfunctional coordination, firms may establish cross-functional teams; and innovative projects may stimulate such team creation (Woodside 2005).

The importance of interfunctional coordination is emphasized in exporting due to different and complex export markets. Accordingly, it is hypothesized that interfunctional coordination is influenced by and influences innovativeness component of entrepreneurial orientation positively for exporting companies. As a result, it is hypothesized that:

H3c: Interfunctional coordination will have a positive influence on innovativeness of exporting firms.

H3d: Innovativeness will have a positive influence on interfunctional coordination of exporting firms.

In Study I, the relationships between the various components of market and entrepreneurial orientations are explored and hypotheses are proposed. In the next section that deals with Study II, the relative impact of both orientations under different contingency factors is examined.

## **3.2 STUDY II**

### **3.2.1 Theoretical Underpinnings and the Conceptual Framework**

Before delving into the conceptual model that examines the relative effectiveness of both orientations on export performance, it is useful to review the theoretical perspective adapted and the unit of analyses used in this study.

### 3.2.1.1 The Contingency Theory Perspective

The contingency theory has guided the theoretical background of the second part of this dissertation study. As stated previously, one of the goals of this dissertation is to investigate the conditions that would promote market orientation – performance relationship versus entrepreneurial orientation – performance relationship for exporting firms. The contingency theory posits that there are “no universal principles that apply to all organizations and that not all available approaches are equally effective” (Caruana, Morris and Vella 1998, p. 17). “Fit” is the key concept in the contingency theory as fit between organization context, structure and process determines the organizational performance (Drazin and Van de Ven 1985). In other words, the success of a firm depends upon fit (congruence) between a firm’s internal elements and external environment (e.g., Ruekert, Walker and Roering 1985; Zeithaml, Varadarajan, and Zeithaml 1988). There are two types of fit: macro and micro fit. While macro fit refers to congruence between elements of the organizational subsystem and the external environment, micro fit refers to the congruence between the elements of the subsystem (Caruana *et al.* 1998).

Venkatraman (1989a) identified six alternative perspectives of fit (congruence): moderation, mediation, matching, gestalts, profile deviation and covariation. Among these six perspectives the moderation perspective has been commonly used by researchers (Venkatraman 1989a) and is used in the dissertation study. Venkatraman (1989a, p. 424) stated that “(a)ccording to the moderation perspective, the impact that a predictor variable has on a criterion variable is dependent on the level of a third variable, termed here as the *moderator*” [original italics]. Furthermore, “(t)he fit between the

predictor and the moderator is the primary determinant of the criterion variable” (p. 424). He continued by arguing that this perspective was utilized when the underlying theory specified that the impact of the predictor varied across the different levels of moderator and a moderator could be viewed “categorically (types of environment, stages of product life cycle, organizational types) or characteristically (degree of business-relatedness, degree of competitive intensity),” and it would impact the direction or the strength of the relationship between a predictor variable and a dependent variable (p. 424).

The use of contingency perspective in marketing has been adapted by Olson, Slater and Hult (2005) when examining the effects of customer, competitor, and innovation orientation on performance. As stated in an earlier section, the researchers posited that overall firm performance was impacted by how well the strategic behaviors (customer-, competitive-, innovation-, and cost control-oriented behaviors) were complemented by organizational structure (formalization, decentralization, and specialization), and business strategies (prospector, analyzer, and low-cost and differentiated defender). Their empirical analysis supported their model.

Similarly, the use of contingency perspective in examining the determinants of export performance has been advocated in the export marketing literature (Walters and Samiee 1990; Walters 1993; Yeoh and Jeong 1995). For example, Walters and Samiee (1990, p. 35) stated that “universally valid prescriptions for success are unlikely to be found” and “the nature of the firm’s business position and the environmental context” should be taken to account. Madsen (1994, p. 41) stated that the contingency approach was appropriate to investigate the export performance since overall generalizations about optimal strategy, structure, and behavior of the firm were hard to establish. A

coalignment between internal and external environments, as well as, export market strategy was suggested as a necessary requirement for success of exporting firms (Cavusgil and Zou 1994).

### **3.2.2 Proposed Model**

The assessment that both orientations would lead to different performance levels based on various organizational and environmental factors is tested using a contingency model (Figure 2). These two orientations are not mutually exclusive, but rather support each other. Different strategies employed, different resource bases, structure and environmental factors impact the superiority of one orientation over the other.

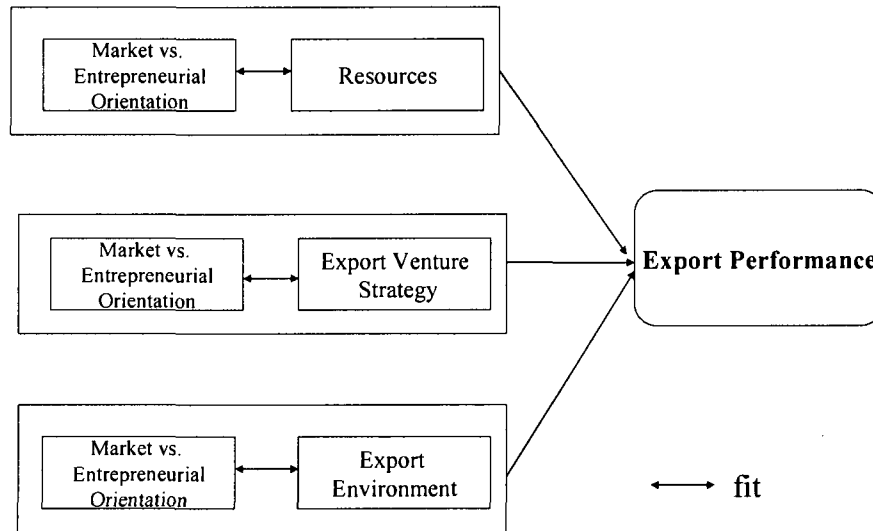
Narver and Slater (1996) argued that market orientation should be complemented by entrepreneurial spirit. Atuahene-Gima and Ko (2001) pointed out and empirically supported that both orientations are required in the long-term survival and success of a firm. Deshpandé, Farley and Webster's (1993, p. 32) study demonstrated that merely having a market orientation or being innovative, one dimension of entrepreneurial orientation, did not deliver the best performance for the companies. The best performers would be both market-oriented and innovative. Jaworski and Kohli (1996, p. 127) argued that "proactively shaping markets even ... in hi-tech industries" requires market orientation.

Although each orientation impacts the export performance positively, only together they can assure the long-term success and survival of the export venture (Sheth and Sisodia 1999, Slater and Narver 1995). Export ventures that combined high market orientation and entrepreneurial orientation will outperform others (Slater and Narver 1995, Atuahene-Gima and Ko 2001). Exporting firms that only focus on responding to

the exigencies of the market might fail to recognize opportunities to come up with new products or processes (Christensen and Bower 1996). Furthermore, market orientation is argued to be reactive in nature and by using market orientation firms react or respond to the conditions in the marketplace (Atuahene-Gima and Ko 2001; Sheth and Sisodia 1999; Jaworski, Kohli and Sahay 2000). Market orientation enables exporting firms to react or respond to conditions in the market environment while entrepreneurial orientation enables them to be proactive and alter the competitive landscape to the venture's advantage (Atuahene-Gima and Ko 2001, p. 57). Therefore, it is imperative to complement market orientation with entrepreneurship, which would facilitate creative and proactive stance towards innovation (Atuahene-Gima and Ko 2001). On the other hand, implementing an entrepreneurship might cause market failure when it is not complemented with market orientation (Matsuno, Mentzer and Özsomer 2002). Entrepreneurial orientation might incite expensive pioneering efforts, excessive risk-taking and "bold wide-ranging acts" that might harm the firm (Knight 2001, p. 166).

The necessary level of each orientation required for long-term success of the export venture depends on a number of contingency factors (Berthon, Hulbert and Pitt 1999). A tight fit (congruence) between the orientations (market orientation and entrepreneurial orientation), environmental factors, exporting strategy and specific exporting firms characteristics are most likely to deliver superior export performance (Hult *et al.* 2003). These factors are examined mainly in two categories: internal and external factors. The internal factors are the resources of the firm (export firm size and experience), and export venture competitive strategy (market concentration/market

diversification and adaptation/standardization). The external factor is the export environment (export market dynamism). The contingency model is shown in Figure 2.



**Figure**

## **2-Contingency model on effectiveness of MO and EO for export ventures**

In this section the theoretical background of the conceptual model is explained, the unit of analysis is demonstrated, and finally, the conceptual model is illustrated. In the next section, hypotheses are elaborated.

### **3.2.2.1 Hypotheses**

#### **Market Orientation and Perceived Export Performance**

Although there still has been much debate over what constitutes a market orientation, being market oriented has generally been found to have a positive impact on organizational performance (Wrenn 1997; Cadogan, Diamantopoulos and de Mortanges 1999). There are ample studies that established a significant relationship between market

orientation and organizational performance (Langerak 2003; Kirca *et al.* 2005; Shoham, Rose and Kropp 2005). The rationale behind the positive relationship is best summarized by Narver and Slater (1990, p. 21): “Market orientation is the organization culture ... that most effectively and efficiently creates the necessary behaviors for the creation of superior value for buyers and, thus, continuous superior performance for the business.” Market orientation presents a unifying focus in delivery of customer value, which leads to sustained competitive advantage and superior performance (Day 1994). Also, market orientation as an organizational culture is valuable as it is rare and non-imitable by the competitors. These characteristics provide the firms with sustained competitive advantage (Homburg and Pflesser 2000). In a meta-analysis Cano, Carrillat and Jaramillo (2004) found that the relationship between market orientation and performance was positive and consistent worldwide. The sample of their meta-analysis included 53 studies conducted in 23 countries in five continents. The results of multivariate analysis found support for the argument for borderless world in which various degrees of socioeconomic development and national culture does not affect the strength of the relationship between market orientation and performance. Consistent with Cano *et al.*'s (2004) study, in a more comprehensive meta-analysis that consisted of 130 independent samples reported in 114 studies, Kirca *et al.* (2005) found that market orientation-performance relationship was positive. However, this relationship was stronger for manufacturing firms; low power distance and uncertainty-avoidance cultures; and when subjective measures of performance were used.

While a market-oriented culture results in high performance for domestic firms, the same holds true for exporting firms. Based on a sample of firms from New Zealand

Gray *et al.* (1999) found that more market-oriented exporters had higher levels of overseas sales growth and greater overseas market share than less market-oriented exporters. Exporting firms that are market-oriented will better recognize and respond to changes and opportunities in their current and future export markets (Rose and Shoham 2002; Kropp, Lindsay, and Shoham 2006). Therefore, being market-oriented will result in higher export performance. Thus, it is argued that:

H4: The higher the level of market orientation, the higher is the perceived export performance

#### *Entrepreneurial Orientation and Export Performance*

Entrepreneurship is suggested to be the key in achieving competitive advantage, which in return, stimulates an organization's economic performance (Covin and Slevin 1991, Zahra and Covin 1995, Wiklund 1999). The literature on entrepreneurship has established a significant positive relationship between entrepreneurial orientation and firm performance (e.g., Miller 1987; Miller and Friesen 1983; Morris and Paul 1987; Zahra 1991; Covin and Slevin 1989; Zahra and Covin 1995; Zahra 1993b; Barrett and Weinstein 1998, Wiklund 1999; Wiklund and Shepherd 2003). Table 3.2.1.1.1 offers a summary of studies that examine the entrepreneurial orientation – performance relationship.

TABLE 3.2.1.1.1

## Major Studies on Entrepreneurial Orientation and Business Performance

Study	Empirical Basis	Scale	Results
Covin and Slevin (1989)	Moderated regression analysis on 161 small manufacturing firms	Covin and Slevin (1989) - adapted from Miller's (1983) scale	Significantly <i>positive</i> for: Subjective performance scale
Zahra (1993b)	Correlation and regression analysis on 102 US companies	Zahra (1993b)	Significantly <i>positive</i> for: ROS, Sales growth
Zahra and Covin (1995)	Regression analysis on 108 companies	Miller (1983)	Significantly <i>positive</i> for: Overall performance (ROA, ROS, GR-Growth in revenue) that increased overtime
Wiklund (1999)	Multiple regression analysis on small Swedish firms	Miller (1983)	<b>Significantly positive for:</b>
Barrett <i>et al.</i> (2000)	Moderated regression analysis on 142 firms	Covin and Slevin (1989)	Significantly <i>positive</i> for: Business performance (subjective)
Zahra and Garvis (2000)	Regression analysis on 149 US companies that are involved in international activities	Modified Miller's (1983) 7-item scale	Significantly <i>positive</i> for: Overall performance - ROA, Sales growth Foreign profitability (subjective, 3-year average)
Knight (2001)	Structural equations analysis on 268 SMEs	Covin and Slevin (1989)	International entrepreneurial orientation influences international performance (adapted from Cavusgil and Zou 1994) through international preparation, strategic competence and technological acquisition
Dimitratos <i>et al.</i> (2004)	Correlation and moderated hierarchical regression analysis on 152 Greek firms	Dimitratos <i>et al.</i> (2004) 9-item scale based on previous scales	Significantly <i>positive</i> for: Satisfaction with performance in the foreign country <i>Not significant</i> for: Foreign country sales ratio

This positive entrepreneurial orientation-performance relationship sustains and gets stronger over time (Zahra and Covin 1995, Wiklund 1999). The impetus behind this

argument is based on the first-mover advantages attained by entrepreneurial companies. Companies which lead the way in creation and introduction of new products or technologies can target premium market segments, skim the market by charging high prices, create barrier to entry by setting industry standards and dominating distribution channels (Zahra and Covin 1995, p. 46). These advantages assist first-mover firms to acquire sustained rather than temporary high performance (Zahra and Covin 1995, Wiklund 1999). However, it is important to define clearly what constitutes a pioneer. Lumpkin and Dess (1996, p. 146) contended that:

“...the idea of being first to market is somewhat narrowly construed. A firm can be novel, forward thinking, and fast without always being the first. Miller and Camp (1985), for example, in their study of 84 SBUs, found that the second firm to enter a new market was as pioneering as the first entrant and just as likely to achieve success via proactiveness... Thus, a proactive firm is a leader rather than a follower, because it has the will and foresight to seize new opportunities, even if it is not always the first to do so.”

In summary, by being innovative - being the first one (not in the narrowly interpreted way) to come up with the new product or technology, by being proactive – identifying and responding quickly to emerging opportunities, and by being a risk-taker – investing the company resources to unknown products and technologies entrepreneurial firms would attain superior performance.

In the context of exporting, few studies have investigated the role of entrepreneurial orientation or its components in achieving high export performance. One of the earliest studies conducted by Cavusgil (1984) suggested that management's attitudes toward risk-taking were positively related to export performance. Dichtl, Koeglmaier and Mueller (1990)'s cross-cultural study conducted in five countries (Finland, Japan, Korea, Germany and South Africa) revealed that the manager's

willingness to accept product-policy risks had a positive impact on export performance. Calantone *et al.* (2006) in a cross-cultural study that was conducted in US, Korea and Japan found that firms that were more open to innovation had better export performance. Balabanis and Katsikea (2003) examined the relationship between adoption of entrepreneurial posture and export performance in UK. The results of their analysis supported the proposition that entrepreneurial orientation had a positive relationship with export performance. In other words, entrepreneurial exporters performed better than non-entrepreneurial exporters.

In summary, the impetus behind the argument for the positive influence of entrepreneurial orientation on performance is based on the first-mover advantages implied by entrepreneurship (Zahra and Covin 1995; Wiklund 1999). Innovativeness, risk-taking and proactiveness enable a firm to transform itself, its markets, and its industry through value creating innovations and proactive stance (Naman and Slevin 1993; Covin and Miles 1999; Lumpkin and Dess 1996). There is compelling empirical evidence that entrepreneurial orientation would lead to higher performance (Lumpkin and Dess 1996; Luo, Zhou, and Liu 2005). Please refer to Table 4 for a review of studies that support this positive relationship. The complex and unpredictable nature of export markets favors the embracing of entrepreneurial orientation for high performance (Balabanis and Katsikea 2003). Adopting entrepreneurial orientation in diverse foreign markets is likely to boost international success (Knight and Cavusgil 2004). Therefore, adoption of an entrepreneurial culture is an important determinant of export performance. Accordingly, it is hypothesized that:

H5: The higher the level of entrepreneurial orientation, the higher is the perceived export performance

### *The Contingency Factors*

Based on the review of the market orientation, entrepreneurship and export marketing literature contingency factors and variables have been identified. The contingency factors are classified into internal contingencies and external contingencies. Furthermore, the internal contingencies are classified into three subsections: resources, structure and strategy. The only external contingency identified is the external environment.

### ***Resources of Exporting Firms***

The two resources that are identified as contingency variables are firm size and international experience. In export marketing, the resources (assets) of a firm include size advantages, and international experience (Cavusgil and Zou 1994, p. 5).

### ***Firm Size***

Firm size is one of the most often investigated factors in studying export performance of firms. However, there was little agreement on the effect of organization size on either propensity to export or export performance (Bilkey 1978, Cavusgil 1984b; Madsen 1987, Aaby and Slater 1989, Chetty and Hamilton 1993, Zou and Stan 1998). A group of authors saw firm size as one of the differential firm advantages that facilitated the firms to be more effective exporters (e.g., Cavusgil and Nevin 1981; Reid 1982; Cavusgil and Naor 1987, Cavusgil and Zou 1994, Moini 1995) and argued that firm size was an important determinant of export performance. The proponents of this view argued

that larger exporting firms would have more financial and human resources than smaller firms or would be able to take advantage of economies of scale. In contrast, another group of scholars reported contradictory results (e.g., Czinkota and Johnston 1983, Cooper and Kleinschmidt 1985; Bonaccorsi 1992; Diamantopoulos and Inglis 1988, Katsikeas, Piercy and Ioannidis 1996, Moen 1999). The contingency perspective might help in resolving these contradictory findings by offering a coalignment of organizational orientation with the export firm size. That is, only when firm size is aligned with the right type of organizational orientation the result will be higher export performance.

As stated earlier, in the exporting literature firm size has been used as a proxy for organizational resources (Cavusgil and Nevin 1981). The larger an exporting firm, the more financial, and human resources it possesses (Reid 1982). Larger exporting firms, also, are able to take advantage of economies of scale. Larger exporting firms will have the resources to take advantage of market-oriented culture and achieve cost leadership or differential advantage. Smaller exporting firms with limited resources may have a harder time to benefit from market orientation, as with limited resources it may be difficult for them to gather and process the necessary information on their export markets.

On the other hand, the impact of entrepreneurial culture on export performance will be enhanced when the firm size is small. Although, it is argued that entrepreneurial orientation was applicable both in large and small firms most of the studies on entrepreneurship have focused on small- and medium-sized companies. It was emphasized that smaller size gives the exporting firm flexibility to respond to the changing market conditions more quickly than larger firms (Knight 2001; Balabanis and Katsikeas 2003). As smaller firms tend to have less bureaucracy and formalized

structures, they have a higher ability to adapt, and are less resistant to accepting and implementing change (Knight 2001; Balabanis and Katsikeas 2003). Thus, firm size will determine the relative effectiveness of market orientation and entrepreneurship in exporting firms. In summary, while market orientation – export performance would be relatively stronger among larger firms, entrepreneurial orientation – export performance would be stronger among smaller firms.

Given the above arguments, it is expected that market orientation and entrepreneurship will have varying levels of impact depending on the size of the exporting firm. Accordingly, the following is hypothesized:

H6a: Market orientation will have a positive effect on export performance for larger exporting firms.

H6b: Entrepreneurial orientation will have a negative effect on export performance for larger exporting firms.

### ***Export Experience***

Export experience is another important variable that has been investigated by many researchers who could not agree on its effect on export performance. While some scholars reported a positive effect of exporting experience on export performance and the degree of internationalization (e.g., Madsen, 1989; Denis and Depelteau, 1985; Amine and Cavusgil 1986; Dominguez and Sequeira 1993; Dean, Menguc and Myers 2000), others found empirical evidence inconsistent with these findings (e.g., Cavusgil 1984a; Cooper and Kleinschmidt 1985); Naidu and Prasad 1994; Moon and Lee 1990; Bodur 1994; Moini 1995; Katsikeas, Piercy and Ioannidis 1996). Consistent with the contingency theory, it is argued in the dissertation study that export experience does not

have a direct impact on export performance. It assists the impact of the two organizational orientations on export performance.

Increased experience would lead to better comprehension of market mechanisms and a network of personal contacts, which in return determine appropriate product decisions, agent/distributor choice, and communication (Madsen 1989). “[L]ack of experience ... leads to lack of knowledge of export markets” (Hart, Webb and Jones 1994, p. 7). With increased experience exporting firms learn how to get appropriate market intelligence on their export markets. This intelligence facilitates reduction of foreign market uncertainty (Katsikeas and Morgan 1993; Katsikeas, Piercy and Ioannidis 1996) and allows firms to have a better understanding of their export market[s]; namely their customers, competitors, rules and regulations. Without adequate experience, exporting firms might not know how or where to get information on their customers, competitors, and other environmental forces even though they might have a market oriented culture. Similarly, the ability to gain a more complete comprehension of the “internal and external environment” might develop over time and only more experienced exporters might be able to better understand their environment and design and implement their response behavior properly (Diamantopoulos and Cadogan 1996). Thus, export firms that have high levels of experience in exporting and export markets are able to benefit more from a market-oriented culture compared to less experienced firms.

On the other hand, experienced exporting firms will be entrenched in routine and bureaucratic rules and system (Christensen 1997; Lumpkin and Dess 1996; Naman and Slevin 1993; Luo, Zhou and Liu 2005). The inherent bureaucracy and inertia in experienced export firms are not aligned with entrepreneurial values (Park and Luo

2001). On the other hand, experienced exporters will have stable and perfected routines, stable organizational politics and regular links with key actors in the environment (Park and Luo 2001, p. 464). Thus, less experienced export firms will take better advantage of entrepreneurial orientation due to their lack of established routines, and openness to employing new ways to do business. The lack of experience and stable routines, politics and contacts will enhance the impact of an entrepreneurial culture.

Based on the above discussions, it is hypothesized that:

H7a: Market orientation will have a positive effect on export performance for more experienced exporting firms.

H7b: Entrepreneurial orientation will have a negative effect on export performance for more experienced exporting firms.

### ***Export Venture Strategy***

The review of the literature pointed two different export market strategies that might have an impact on relative impact of market and entrepreneurial orientations. The two export strategies are market concentration strategy vs. market diversification strategy, and adaptation strategy vs. standardization strategy. In this section their roles are examined.

#### ***Market Concentration/Market Diversification***

Export market expansion strategy refers to the rate of entry into new markets and the allocation of marketing efforts among different markets (Ayal and Zif 1979, Lee and Yang 1990). Two major and opposing strategies are explored in market expansion strategies: market concentration and market diversification. A market concentration strategy is characterized as exporting to a small number of key markets and gradual expansion into new markets overtime (Piercy 1981a). This strategy is sometimes referred

to as “nearest neighbor” approach as when a firm is starting to export it tends to export to countries that are similar to the its home market or to markets it is serving (Erramilli 1991). Also, some scholars refer it as “low levels of regional diversification,” where business operations are restricted to a couple of regions, such as a firm’s home country region and one other (Qian *et al.* 2008). The proponents of market concentration strategy emphasize the importance of devoting most of the company resources to key markets as a source of competitive advantage. By focusing on key markets, firms are able to reduce costs and gain greater market knowledge (Piercy 1981b). In contrast, market diversification (geographic dispersion, market spreading, world orientation) is characterized as exporting to “as many country-markets as possible, with no selectivity” rapidly (Piercy 1981a, p. 32). The companies that follow this strategy spread their products across a large number of country-markets (Ayal and Zif 1979). The proponents of this view have suggested that contrary to the assertions made on behalf of an export market concentration strategy, there were many benefits of adapting an export market spreading strategy, such as sales volume maximization, product specialization, future potential of small markets, and benefits of competing for a smaller share of the (Piercy 1981b). Some empirical studies have found that market diversification strategy delivers higher export performance (e.g., Hirsch and Lev 1973, Piercy 1981b, Cooper and Kleinschmidt 1985, Diamantopoulos and Inglis 1988).

Having market orientation will deliver better performance for firms that employ an export market concentration strategy, as following such a strategy would allow a firm to focus on gaining greater market knowledge (Piercy 1981b). However, as the firm starts serving export markets that are physically and culturally distant, the investments in

developing market orientation increases. For example, the investments in marketing research that are needed to be market-oriented would be higher (Madsen 1994). When a diversification strategy is used, the level of resources allocated to each market will be limited, given fixed financial and managerial resources (Ayal and Zif 1979). With limited resources allocated to each country market, the benefits of market orientation will also be limited.

On the other hand, the impact of entrepreneurial culture on export performance would be higher for firms that employ a diversification strategy rather than a concentration strategy. An entrepreneurial firm with its proactive approach and innovative, unique product (or a product manufactured with an innovative process that would enable low prices) would be able to sell its product in diverse markets and achieve superior performance, as it will have the flexibility to do so. Moreover, when the competitive “lead-time” is short, diversification strategy will give the entrepreneurial export firm a key advantage of being first in a market, which in return will result in higher performance (Ayal and Zif 1979).

Given the above arguments, it is expected that perceived export performance would be enhanced when exporting firms match their entry strategies with the appropriate organizational strategy. Accordingly, the following is hypothesized:

H8a: Market orientation will have a negative effect on export performance for exporting firms that are serving diversified markets.

H8b: Entrepreneurial orientation will have a positive effect on export performance for exporting firms that are serving diversified markets.

### ***Adaptation/Standardization***

In international marketing, whether to standardize or to adapt the market strategy to the conditions of the foreign market is among the critical issues (Cavusgil and Zou 1994, Diamantopoulos and Inglis 1988). Advances in communication and transportation technologies, as well as, increased worldwide travel have created global consumers with homogenized preferences (Levitt 1983, Jain 1989). It has been argued by the proponents of standardization that companies that offer standardized products for global consumers benefit from economies of scale in production. This cost efficiency enables the firms that employ a standardized product strategy to achieve superior performance. On the other hand, proponents of adaptation claim that diverse conditions in different national markets make standardization infeasible and required adapting products to local conditions. Consumer preferences across national markets may differ by culture, value structures, economies and political and legal systems (Samiee and Roth 1992, Cavusgil *et al.* 1993). Therefore, the marketing programs would be different for each national market (Cavusgil *et al.* 1993).

In the marketing literature, two aspects of standardization are examined: marketing program standardization and marketing process standardization (Jain 1989, Cavusgil *et al.* 1993). While marketing program standardization refers to various aspects of the marketing mix, such as product, advertising, marketing communications, marketing process standardization refers to tools that aid in development and implementation of the marketing program (Jain 1989, p. 71). A firm may choose to standardize one or both. Consistent with prior research in international marketing, this study focuses on product, rather than other aspects of the marketing program. It has been

stated that “[p]roduct policy is the one where the propensity of firms toward international standardization is the greatest” (Walters 1986, p. 38) and it offers the greatest potential for cost savings. When examining the role of market orientation in exporting firms the focus on physical product is required as “the marketing concept often is manifest in the product better fulfilling the needs and wants of target consumers” (Calantone *et al.* 2004, p. 187) rather than other aspects of the marketing program.

A product adaptation strategy in export marketing is an extension of market orientation as both of them suggest designing product offerings that match with the target market (Cooper and Kleinschmidt 1985).

“The marketing concept holds that consumer needs vary and that marketing programs will be more effective when they are tailored to each target group. This also applies to foreign markets where economic, political and cultural conditions vary widely.” (Kotler 1999, p. 380)

This positive alignment is supported by the empirical studies. For example, Calantone *et al.* (2004) found a positive link between international product adaptation and customer-focused marketing practices. The scholars stated that an intimate knowledge of customer requirements and the existence of an organizational culture that values market feedback were aligned with international product adaptation. Similarly, Knight and Cavusgil (2004) found that international market orientation facilitates product adaptation.

On the other hand, when an export firm is following a standardization strategy an entrepreneurial orientation might have better performance implications. To benefit from a standardization strategy in international markets, export firms need to be willing to take risks and seek growth in unfamiliar circumstances (Jain 1983). Standardization is aligned with particularly the innovativeness dimension of entrepreneurship (Porter 1990, p. 202).

Entrepreneurial orientation when it is moderated by a standardization strategy would result in higher perceived export performance.

It is contended that when an export firm is employing an adaptation strategy it would benefit more from market orientation rather than entrepreneurial orientation. Performance implications of an orientation are enhanced in the existence of a matching strategy.

The preceding arguments suggest the following propositions:

H9a: Market orientation will have a positive impact on export performance for exporting firms that are following an adaptation strategy.

H8b: Entrepreneurial orientation will have a negative impact on export performance for exporting firms that are following an adaptation strategy.

### ***Export Environment***

The environment of a firm is defined as “...the knowledge base it must draw upon...its geographic setting, the economic, political and even meteorological climate in which it must operate and so on” (Mintzberg 1979, p. 267). Environmental dynamism is identified as a potential contingency factor that may influence the effectiveness of one orientation over the other.

### ***Export Market Dynamism***

Environmental dynamism (turbulence) is characterized by unpredictable change and uncertainty in a firm’s environment, and it erodes the predictability of future events and their impact on the organization (Lumpkin and Dess 2001). In a review of the exporting literature, Yeoh and Jeong (1995, p. 102) stated that majority of the studies have accepted it as “uncontrollable” or “given,” and perceived it as an obstacle to

exporting rather than an opportunity. Environmental dynamism (turbulence) is characterized by unpredictable change and uncertainty in a firm's environment, and it erodes the predictability of future events and their impact on the organization (Lumpkin and Dess 2001).

Environmental dynamism (turbulence) and hostility have been among the various conceptualizations of environment that were examined and it was contended that entrepreneurial orientation might not be equally suitable for all environments (Covin and Slevin 1989b; Miller and Friesen 1982, Zahra 1993).

“[C]ompetitive advantage, industry structure and product performance are generally short-lived or in a constant state of flux” in turbulent environments (Dess, Lumpkin and Covin 1997, p. 681). Entrepreneurship leads to superior performance when the environment is dynamic (Miller 1983; Covin and Slevin 1989b, Dess *et al.* 1997). Entrepreneurship is associated with exploration of resources and the creation of new niches (Lumpkin and Dess 2001, p. 436). When the environment is turbulent, full of uncertainty and change, the risks associated with being entrepreneurial can be justified by seizing new markets (Lumpkin and Dess 2001). Thus by being proactive, innovative and a risk-taker an exporting firm can achieve competitive advantage (Covin and Slevin 1989b). Only through adopting an entrepreneurial orientation can an exporting firm effectively deal with forces prevalent in turbulent export markets (Miller 1983). This moderating effect of environmental turbulence has been established by empirical studies (e.g., Zahra 1993, Zahra and Covin 1995). On the other hand, when the environment becomes more predictable pursuit of an entrepreneurial orientation may not be viable (Yeoh and Jeong 1995, p. 103). The export firms that emphasize entrepreneurship might

take unnecessary risks that would not be rewarded in stable markets. “Extensive risk taking, forceful proactiveness, and a strong emphasis on novelty can be very hazardous when competitive conditions are becoming more taxing” (Miller and Friesen 1983, p. 223). Stable environments reward the efficient exploitation of existing prospects rather than new entries in the form of entrepreneurship (Zahra and Covin 1995; Luo, Sivakumar and Liu 2005). Thus, the literature suggests that entrepreneurial orientation results in better performance in dynamic environments, but not in stable environments (Luo, Sivakumar and Liu 2005).

However, reaction to competitors, and customer needs through market orientation may not be beneficial in dynamic environments; as adaptation and reaction to customers and competitors are quite difficult if the exporting firm must constantly chase moving targets associated with dynamic and uncertain environments (Lumpkin and Dess 2001, p. 437). Market-driven exporting firm’s focus on customers and competitors may lead the firm to deliver products that are line extensions or imitations, which might, in return, lead to low performance.

As the environment becomes more stable market orientation would offer higher performance than entrepreneurship as “reaction to competitive conditions through market would be facilitated in stable and certain environments where the “rules of the game” are more evident and unchanging” (Lumpkin and Dess 2001, p. 437).

Based on the above arguments the below hypotheses are offered:

H10a: Under conditions of export market dynamism market orientation will have a negative influence on export performance

H10b: Under conditions of export market dynamism entrepreneurial orientation will have a positive influence on export performance

In this chapter, the hypotheses and the theoretical rationale for the hypothesized relationships have been offered. The methodology of the study to test the hypothesized relationships is presented in the next chapter.

## **CHAPTER IV - RESEARCH METHODOLOGY**

The purpose of this research is to test the hypotheses based on the conceptual frameworks presented in the third chapter. The first set of hypotheses deals with the relationships among the dimensions of market and entrepreneurial orientations. The second set of hypotheses describes contingent relationships between market and entrepreneurial orientation and perceived export performance. In order to test both sets of the hypotheses, a field survey of exporting firms is conducted.

However, before conducting the main study a series of pretests are conducted with 18 export managers. The objective of the first qualitative study is to determine at which level market and entrepreneurial orientations are observed at exporting firms. The second qualitative study's objectives are to determine whether market orientation and entrepreneurship and their dimensions are of relevance to practitioners, and whether the manifestations of the cultural dimensions are applicable in the context of exporting. The final qualitative study involves detecting any problems in respondents' understanding of the questionnaire by pretesting the survey instrument.

This chapter is organized as following. First, key informants are identified and possible unit of analysis is mentioned. Second, the qualitative studies, which are mentioned above, are explained in detail. Third, a discussion on questionnaire design and measures used are offered. Finally, issues relating to research design, such as sample selection and data collection methods are discussed.

#### 4.1 KEY INFORMANTS

Single-informant method is used to collect data from exporting firms. A pre-survey telephone screening is conducted to identify appropriate managers that are involved with the export operations, to request their participation in the study, and to confirm their contact information (Bello and Gilliland 1997; Morgan, Kaleka and Katsikeas 2004; Calantone *et al.* 2004). Export managers are appropriate key informants for obtaining information about the issues addressed in this study as they are knowledgeable about the export venture and, familiar with its environment (Gençtürk and Kotabe 2001; Cavusgil and Zou 1994).

#### 4.2 UNIT OF ANALYSIS

For most of the constructs the unit of analysis is the firm's export venture (Knight and Cavusgil 2004). The unit of analysis is identified as the export venture – a single product or product line exported to a single export market – because adopting firm-level unit of analysis might cause problems for some of the contingency variables (Cavusgil, Zou and Naidu 1993; Katsikeas, Leonidou and Morgan 2000). The over-generalization of the responses would make it difficult to identify and isolate specific variables that distinguish the performance implications of both orientations, as extensive variations might exist across various product-market export ventures of the same firm (Cavusgil, Zou, and Naidu 1993; Cavusgil and Zou 1994; Myers 1999; Morgan *et al.* 2004).

As market orientation and entrepreneurship are organizational culture constructs the unit of analysis is the general firm level (Knight and Cavusgil 2004). From the cultural perspective market and entrepreneurial orientations are deeply embedded in the organization rather at the department level, as they form the shared values and beliefs

throughout the organization (Slater and Narver 1990; Tzokas, Carter and Kyriazopoulos 2001). However, it is possible that market orientation and entrepreneurship could potentially be at the export venture level.

#### 4.3 QUALITATIVE RESEARCH PHASE 1

Structured in-depth interviews with 5 export managers were conducted to understand which level market orientation and entrepreneurship exist – at the market level, the product level, the product-market level (export venture) or company level. The in-depth interview is a qualitative technique used to “to get at subconscious or unconscious motivations, to attempt to get at ‘true’ rather than ‘surface’ answers to why type questions” (Boyd and Westfall 1972, p. 139). It is a one-to-one interview, which is organized to encourage the respondent to express his ideas on the subject investigated freely (Bellenger; Bernhardt; and Goldstucker 1976, p. 29).

In a qualitative interviewing process care must be taken in both planning and conducting the interview (Rao and Perry 2004). Carson *et al.* (2001) stated that most interviews were planned in three ways. Based on Carson *et al.*'s outline first, the *overall objective* was determined. The overall objective of the in-depth interview for this dissertation study was to gain insights on which level market and entrepreneurial orientation exist – at the market level, the product level, the product-market level, or the company level – by conducting in-depth interviews. Second, an *interview guide* or protocol was written to guide the researcher during the interview. Third, within each of the general topics identified in the interview guide there were *probe topics*.

### 4.3.1 Participants

The contact information of the exporting firms that are located in Virginia was determined by a directory published by *MyExports*, a public-private partnership of the Department of Commerce and Global Publishers LLC. This online directory on US export firms includes 12,000 firms and the export company information is periodically updated. This national directory of US exporting firms has been used in previous studies (e.g., Samiee and Walters 1990; Bello and Gilliland 1997). The database offers general information such as, the full address of the export company, phone and fax numbers, and the name of its president, as well as, a business profile that includes products and services, current markets and desired markets. The online directory is organized in different categories (e.g., Agribusiness, Apparel/Textiles, Auto/Transportation, Aviation/Aerospace, etc.). These categories, also, have subcategories. Furthermore, personal contacts were used to determine other companies that export that was not in the directory but were located in the researcher's hometown.

The initial contact with the informants was established by phone. During the initial phone call a brief overview of the research project and its purpose was given and their participation in the in-depth interview was requested. The respondents were assured of the confidentiality of their responses. If the respondent agreed then a venue and time for the interview was arranged (Carson *et al.* 2001).

The telephone calls resulted in 5 qualified managers that accepted to participate. These managers were knowledgeable on the export operations of the companies that they worked. 2 of the participants were Presidents of their companies, 1 participant was marketing manager, 1 participant was export manager, and 1 participant was international

sales manager. The firms were from different industries: surgical instruments, transformers, coils, filters, and etc.

#### 4.3.2 Procedure

The interviews were conducted at the interviewee's place of work. First, a brief introduction was given in which I introduced myself and offered brief information on the dissertation study. The introductory phase of the in-depth interview provided information on the purpose of the interview, the ways in which the information provided would be used, and what the respondent would be expecting in the course of the interview. The confidentiality of the data and of the respondent in the study were mentioned as *informed consent* to be interviewed is an ethical requirement for research (Carson *et al.* 2001). The information in the introductory phase was important as it delineates the expectations involved; the respondents' role will be specified, which in return might minimize their insecurities (Seymour 1988). The introductory phase, also, established a rapport and served as a transition stage to the questions (Seymour 1988).

After the introductory phase, a brief description on the company was requested to aid the researcher in wording of the following questions on market and entrepreneurial orientations. Closed antecedent questions were followed by open questions that allow the informant full scope. Whenever appropriate, based on the answers of the respondents, probing questions were asked. Probing was done in two cases (1) when the respondent's initial answer were vague, (2) to reinforce the respondents positively and to encourage a continuing dialogue (Seymour 1988). When questions on market orientation were covered similar questions were used to investigate the level at which entrepreneurial orientation was observed. The interview was concluded by summarizing the contents of

the interview and ensuring that all the questions had been covered, and to confirm the interviewee's responses (Rao and Perry 2004). Finally, the interviewee was thanked for his/her participation in the in-depth interview.

#### **4.3.3 Results**

All respondents stated that there were no differences in their customer orientation for different country-markets or for different products. All but one exporting manager stated that their competitor orientation was same for all country markets they exported and for all their products. Only the manager of Firm IV stated that in their lead markets they were more competitor oriented while they were not focused on tracking their competitors in small and insignificant country markets, such as Guam. Three export managers said that their companies' innovativeness did not change for the countries that they exported to or the products they exported. However, managers from Firm I and II indicated that some products required more innovative spirit. These products were highly specialized products that were designed and manufactured based on customer's specifications. These were custom products while the other products manufactured by the companies were highly standardized and used older technology. All five of the exporting firm managers confirmed that the level of proactiveness did not differ for different countries or different products. Finally, although four of the managers mentioned language barrier and ethics of business partners as causes of higher risks, further questioning revealed that these firms tried to lower their risks when operating in developing nations by requiring prepayment before shipping, and other ways. One manager stated that as the firm gained more experience the manager's understanding of the conditions was enhanced and his company was able to minimize probable risks.

Overall, the export manager stated that there were risks involved for both developing and developed countries but the nature of the risks were different. The results of the in-depth interviews are summarized below at Table 4.3.3.1.

**TABLE 4.3.3.1**

**Summary of Results of the In-Depth Interviews with Managers of Exporting Companies**

	Market Orientation		Entrepreneurial Orientation		
	Customer Orientation	Competitor Orientation	Innovativeness	Proactiveness	Risk-Taking
<b>Firm I</b>	No	No	Yes	No	No
<b>Firm II</b>	No	No	Yes	No	No
<b>Firm III</b>	No	No	No	No	No
<b>Firm IV</b>	No	Yes	No	No	No
<b>Firm V</b>	No	No	No	No	No

Overall, the results of the case studies suggest that both market and entrepreneurial orientation are observed at the company level, and do not differ for different countries or different products.

## **4.4 QUALITATIVE RESEARCH PHASE 2**

### **4.4.1 Purpose**

In the second phase of the qualitative research, in-depth interviews with export managers were conducted over telephone. The purpose of the in-depth interviews was to determine how market and entrepreneurial orientations were manifested in the exporting context. Specifically, (1) whether the specific dimensions of market orientation and entrepreneurship apply the same way in the exporting context, (2) whether all the

manifestations of the organizational culture dimensions (items) apply in the exporting context, and (3), whether there were new manifestations (items) of each dimension.

#### **4.4.2 Participants**

Before conducting the interviews, the wording of the items relating to market and entrepreneurial orientation were changed to emphasize the focus on exporting, which was consisted with previous exporting studies (Cadogan, Diamantopoulos and de Mortanges 1999, Cadogan, Diamantopoulos and Siguaw 2002). Then, approximately 15 managers from different states were contacted to ask for their participation. These managers were chosen based on convenience from *Export Yellow Pages*, a directory published by *MyExports*, a public-private partnership of the Department of Commerce and Global Publishers LLC. This directory provides the name, telephone and fax number of the executive who is responsible for exporting, as well as, company information such as the address, industry, and current export markets. For some companies additional information is provided on the products and services offered by the firm. Some of the managers were unavailable, and others were busy, resulting in six managers who accepted the invitation to participate. These six managers were from Pennsylvania (3), Ohio, Minnesota and Utah. Two respondents were international sales managers, two were export managers, one was a senior marketing manager and one was a vice-president. The respondents were from different industries: snack foods; garage doors, consumer electronics, maintenance equipment, baking equipment, and lawn and garden equipment.

#### **4.4.3 Procedure**

After giving a brief introduction about the research project, each respondent was told that two organizational cultures were being investigated and their answers would assist in determining the applicability of these cultures in the context of exporting. The in-depth interview started by giving a brief description of customer orientation without naming the dimension itself, and reading the first three items of this dimension and asking the respondents if that culture and its manifestations apply to their exporting business unit and how. After getting the responses they were asked if they could think of other ways in which this type of organizational culture was manifested in their organization. Then after, the remaining items were asked one at a time until all the items on customer orientation were exhausted. Once again, the respondents were asked if they could think of other ways in which that specific dimension of organizational culture, that is customer orientation, was manifested in their organization. This was an important part to see if anything had been left out. If not, they were told that another culture will be examined by the next set of statements and the above procedure was repeated for competitor orientation and interfunctional coordination. After the items on market orientation were finished, the respondents were told that a new culture with three different dimensions would be explored. The same steps were taken to explore the applicability of entrepreneurial orientation in the context of exporting. However, the dimensions of entrepreneurial orientation had two or three manifestations, therefore, the items were read one-by-one.

#### 4.4.4 Results

##### 4.4.4.1 Market Orientation

Based on the phone interviews with six export managers, it was established that customer orientation, competitor orientation and interfunctional coordination applied in the exporting context. The results are summarized below.

##### Customer Orientation

Customer orientation as a culture was found to apply in the exporting context. In-depth interviews with six managers responsible for exporting revealed that its manifestations were also applicable in the context of exporting.

- (1) Monitoring the level of commitment and orientation to serving export customer needs was found to be an important manifestation of customer orientation in the context of exporting. Some companies monitored it through contacts by email, visits and phone calls. Other companies conducted formal written surveys, and others conducted meetings with key distributors a couple times per year to assess their level of commitment.
- (2) Almost all managers identified customer satisfaction as a primary driver for their export business objectives. Except one manager who stated that shareholder value was her company's driving force.
- (3) All respondents agreed that understanding of customers' needs was the basis for their export strategy. One manager stated that their export customer demanded high end products and that was what his company offered. Another manager mentioned quality as an emphasis based on customers' needs analysis.
- (4) Almost all managers indicated that their export business strategies were driven by creating greater value for their customers. Flexibility with product design and function were two strategies employed by one of the business units to create greater value for their customers. Beauty, endurance, safety and total value were identified by another manager. Only one manager mentioned that this manifestation was not relevant in her business unit as the focus of the company was on shareholder value.
- (5) Measuring export customer satisfaction systematically and frequently was also found relevant by most of the respondents. Following up with orders, formal surveys, feedback from distributors/representative were some of the ways to

measure export customer satisfaction. However, two managers reported that they did not monitor end user satisfaction directly. Their distributors gave them feedback.

- (6) Most respondents indicated that they gave some attention to after-sales service. In some cases service centers were founded in different countries for servicing of products. In other cases, distributors were responsible for after-sales service but the company offered training. Only one manager responded that this manifestation was not relevant in his business unit due to the nature of their product (This company's product did not have any moving parts that required servicing).

One manager suggested that trust and relationship with distributors, and customer's trust and relationship with distributors were important manifestations of this culture. However, further interviews revealed no support for this view.

Also, the literature on market orientation indicated that these were different constructs by themselves (Zhao and Cavusgil 2006; Siguaw, Simpson and Baker 1998, 1999; Farrelly and Quester 2003; Langerak 2001).

### Competitor Orientation

Similar to customer orientation, competitor orientation, as an organizational culture, applied in the exporting context. All of its four items were found to be relevant in the context of exporting:

- (1) Responding to competitive actions in export markets was done in some firms directly, in others indirectly by distributors or representatives. Adding new features to the product or adjusting the price were some of the actions taken to respond to competitors.
- (2) The importance of the salespeople's sharing the information within the organization concerning competitor's strategies was agreed upon by all respondents. However, two respondents stated that it was not the practice in their company as their companies' main focus was on domestic markets. The rest of the respondents stated that sharing the information was common practice in their organization.

- (3) Regular discussion of export competitor's strengths and strategies was also found to be relevant. However, three of the respondents said it was not the practice in their organization. These three firms had three different reasons: (a) competitors were tiny and local (b) export manager had the sole responsibility (c) exports were not the main focus of the company. The other three firms stated it was regular practice in their firm/business unit.
- (4) All six respondents agreed that their companies targeted export customers where they had an opportunity for competitive advantage. Technology, quality, need for the firm's product in a certain market were stated as some of the competitive advantages these firms had.

One manager made a specific comment that pricing, shelf-life, shipping, and issues dealing with promoting distributors were other issues that dealt with this culture.

However, later interviews did not found support for this view.

#### Interfunctional Coordination

Finally, interfunctional coordination was found to be applicable in the exporting context.

- (1) Integration of all business functions (marketing/sales, manufacturing, R&D, finance/accounting, etc) in order to serve the needs of target export markets was also found relevant by the interviewees. Managers stated that these functions were integrated to serve the needs of domestic market and the same departments were involved in exporting operations as well. However, one manager stated that these resources are shared with their domestic market and not much emphasis was given to exporting operations in her organization.
- (2) All managers agreed that it was important that all of the business functions were responsive to each other's needs and requests in order to serve the export markets better. For example, one manager mentioned that electrical products required different sockets and different voltage for different countries. To fulfill this requirement different business functions worked together.
- (3) Although most of the manifestations of interfunctional coordination were found to be relevant, issues were raised whether top managers from every business function regularly visited current and prospective export customers. While, such a practice could be observed in small firms, it was not realistic for bigger companies. Also, one manager mentioned that trust of the customer was lost when there were many different people contacting the customer on behalf of the company. Therefore, this item was dropped.

- (4) All managers agreed that communicating information about successful and unsuccessful export customer experiences across all business functions was an important manifestation of interfunctional coordination.

Top management commitment was emphasized by one manager. The feedback from other managers supported the view that when top management was committed to exporting whole organization was committed. However, based on the previous literature (Jaworski and Kohli 1990) top management emphasis was accepted as a possible antecedent to interfunctional coordination, instead of a manifestation.

In summary, qualitative research with six respondents indicated that the three dimensions of market orientation applied in the exporting context, and most of their manifestations were found to be relevant (Except the item regular visits of current and prospective export customers by top managers from every business function).

#### 4.4.4.2 Entrepreneurial Orientation

The results of in-depth interviews with six export managers indicated that innovativeness, risk-taking, and proactiveness dimensions of entrepreneurial orientation were applicable in the exporting context. The results are reviewed below.

##### Innovativeness

Majority of the managers agreed with the two manifestations of innovativeness.

- (1) Creating new solutions through problem solving was found significant by most the managers who participated in the qualitative research. Developing new features was mentioned by the managers as an example of how their companies dealt with problems in export markets. One manager argued that sometimes his company relied on solutions of conventional wisdom, other times, they valued creative new solutions. One manager stated his company mostly relied upon and encouraged conventional wisdom.
- (2) The relevance of top managements' encouragement of innovative export marketing strategies was agreed upon by the interviewees. In some companies, especially, when a company was trying to enter new markets aggressive and innovative export marketing strategies were utilized. In others, it was valued and practiced regularly.

##### Risk-taking

- (1) While all respondents agreed upon the relevance of the item on orderly and risk-reducing management process, some managers agreed with the statement, others opposed. Three managers stated that their organization valued the orderly and risk-reducing management process and tried to minimize risk by not conducting business in risky export markets, such as Middle East, and requiring prepayment. Other managers indicated that their management valued initiatives for change. Overall, this manifestation was found to be relevant in the context of exporting.
- (2) The second item of risk-taking was also found to be relevant. Most managers indicated that they did not like to "play it safe" all the time, as being cautious might make them lose opportunities. One manager mentioned that in his organization sometimes managers liked to play it safe, other times they took risks. Only one manager stated that in his organization managers like to be cautious in the export markets.
- (3) The relevance of the top managers' emphasis on implementing plans only if it was certain that they would work was established. One manager mentioned that

before implementing plans in regard to exporting managers got feedback from sales people and distributors, and through analysis of the situation they decide to take action or not. Another manager stated that before decision making a solid business and action plan was developed by the export department with many options in the portfolio. Managers chose the best option. While most of the managers agreed with implementing plans only if they were certain that they would work, one manager stated that they like to be first in the market, and took chances to establish themselves.

### Proactiveness

- (1) Most managers revealed that they believed a change in their export markets created positive opportunities for their companies. Several managers indicated that they have been gaining new customers, distributors over the years and their sales have been increasing. Another manager stated that the domestic market was stable, and most of their growth expectation was from their overseas markets. Overall, this manifestation of being proactive was found relevant based on the answers of the six managers responsible for exporting.
- (2) The second manifestation of proactiveness dealt with talking more about opportunities in export markets rather than problems. Some managers stated that although they talked about both their emphasis were on opportunities. Others solely talked about opportunities. Only one manager indicated that members of her business unit focused on problems. She stated that their business was complex and as exporting had relatively low priority in the company they had limited resources, which made things difficult for the exporting team.

No additional items for any of the three cultural dimensions of entrepreneurial orientation were suggested by the six export managers that were interviewed. In summary, the results of the qualitative research indicated that innovativeness, risk-taking and proactiveness and their manifestations applied in the exporting context.

In this section, the second phase of the qualitative research was discussed. The second phase of the qualitative research was focused on investigating how market and entrepreneurial orientations were manifested in the exporting context. The results indicated that both market orientation and entrepreneurial orientation were relevant in the exporting context, as well as, their cultural dimensions. Most of the manifestations of the

cultural dimensions were also relevant in exporting. No additional items were added as there was no support for various manifestations raised by the managers. One item of interfunctional coordination, which dealt with managers from different departments regularly visiting export customers, was eliminated as most of the interviewed managers found it to be irrelevant. In the next section, the third phase of the qualitative research – pretesting the survey instrument with export managers – is discussed.

#### **4.5 QUALITATIVE RESEARCH PHASE 3 – PRETESTING**

The questionnaire was pretested for readability and clarity of the items, and to identify any potential problems regarding the use of survey instrument with in-depth interviews of export managers.

Approximately 20 managers from different states were contacted by telephone to ask their participation in the pilot test of the questionnaire. These managers were chosen based on convenience from *Export Yellow Pages*. Copies of the survey questionnaire with a cover letter were sent by fax or email to the managers who agreed to assist with the research project. Then managers filled out the questionnaire and faxed the completed questionnaire back. Only six completed surveys were received.<sup>5</sup> These six managers were from different industries, such as, manufacturers of batteries, chemical pumps, industrial fabrics, snack foods, amplifiers and from different states, such as, New York, Missouri, New Jersey, California, and Indiana.

As a result of this process, one major problem was identified. When asked to recall a recent export venture, respondents had trouble answering questions that measure export venture performance, as it was too early to assess the performance implications. In

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<sup>5</sup> Further follow-up indicated that one manager's completed survey was not received

order to deal with this problem, two sets of questionnaire were prepared (Weiss, Anderson and MacInnis 1999; Morgan, Kaleka and Katsikeas 2004; Shankarmahesh, Ford, and LaTour 2004). The questionnaire were identical, except that the first set asked respondents to focus on one of their *more successful* export ventures, and the other asked the respondents to focus on *less successful* export ventures (Morgan *et al.* 2004). This procedure ensured variation in export performance, as well. Also, based on the feedback of these export managers minor changes were made to the content and the format of the survey instrument.

#### **4.6 QUESTIONNAIRE DESIGN AND MEASUREMENT OF VARIABLES**

As explained in the previous sections, the questionnaire was developed with extensive pretesting. First, with the help of the face-to-face in-depth interviews it was determined whether market orientation and entrepreneurship were organization level constructs or product or market level constructs. Afterwards, further telephone interviews were conducted to assess how market and entrepreneurial orientation were observed in the context of exporting. Finally, pretests were conducted to test the questionnaire. The pretests indicated that respondents could easily answer the measures and the survey instrument.

The questionnaire was accompanied with a cover letter that briefly explains the objectives of the research and requests the respondents' assistance. The main survey was had a very brief introduction. Multiple-item measures were used for the constructs under investigation except for the size of the exporting firm. Most of the questions were displayed in the form of seven-point Likert scales to ensure "maximal respondent specificity" (Knight 2001, p. 163). Most of the constructs were operationalized using

items developed in prior research, and were previously tested for reliability and validity. As some of the constructs had well-established measures that had been used in similar contexts, they required little or no modification. In order to assess potential nonresponse bias, questions were included with regards to years of exporting, age of the venture, number of export markets, the industry, and key informant self-reported competency evaluation indicators (Morgan *et al.* 2004). This section discusses the measures for the constructs used in this study.

#### **4.6.1 Independent Variables**

Market orientation is conceptualized as composing of customer orientation, competitor orientation, and interfunctional coordination as the three components (Zhou *et al.* 2005; Menguc and Auh 2006; Zhou *et al.* 2007). Each of the three dimensions is distinct, but collectively constitutes the broader, multidimensional market orientation construct. Narver and Slater's (1990) scale, which conceptualizes market orientation as a culture, was utilized. The three dimensions of market orientation are measured by 15 items (6 items for customer orientation, 4 items for competitor orientation, and 5 items for interfunctional coordination). As stated in the previous chapter, this scale is well established and tested in different contexts. Table 4.6.1.1 illustrates the items that measure the three sub-constructs.

**Table 4.6.1.1**  
**Survey Items for Market Orientation**

---

**Customer Orientation**

We constantly monitor our level of commitment and orientation to serving export customers' needs.

Our export business objectives are driven primarily by customer satisfaction.

Our export strategy for competitive advantage is based on our understanding of export customer's needs.

Our export business strategies are driven by our belief about how we can create greater value for customers.

We measure export customer satisfaction systematically and frequently.

We give close attention to after-sales service in our export markets.

**Competitor Orientation**

We rapidly respond to competitive actions that threaten us in our export markets.

Our export salespeople regularly share information within our business concerning competitor's strategies.

Top management regularly discusses export competitor's strengths and strategies.

We target export customers where we have an opportunity for competitive advantage.

**Interfunctional Coordination**

All of our business functions (marketing/sales, manufacturing, R&D, finance/accounting, etc.) are integrated in serving the needs of our target export markets.

All of our business functions are responsive to each other's needs and requests in order to serve the export markets better.

We freely communicate information about our successful and unsuccessful export customer experiences across all business functions.

Our managers understand how everyone in our business can contribute to creating value for export customers.

---

Entrepreneurial orientation is measured by the scale developed by Matsuno, Mentzer and Özsomer (2002), who adapted the previous scales by Covin and Slevin (1989b), Morris and Paul (1987), and Naman and Slevin (1993). Two of the scales, Covin and Slevin's and Naman and Slevin's scales, are also adaptations of a scale developed by

Miller (1983). Miller (1983) developed one of the first valid scales of entrepreneurial orientation, and identified innovativeness, proactiveness and risk-taking as the three underlying dimensions. Covin and Slevin (1989b) extended and refined the scale developed by Miller (1983). Naman and Slevin (1993) modified Covin and Slevin's (1989b) scale. The literature is not specific on the within-construct relationships among the three dimensions of entrepreneurial orientation (Matsuno, Mentzer and Özsomer 2002; Lyon, Lumpkin and Dess 2000; Dess and Lumpkin 2005). While some scholars, (e.g., Miller 1983, Covin and Slevin 1989), advocated a unidimensional approach, others (e.g. Lumpkin and Dess 2001) argued that the dimensions of entrepreneurial orientation are independent (Lyon *et al.* 2000, Dess and Lumpkin 2005). Table 4.6.1.2 illustrates the items that measure the three sub-constructs.

**Table 4.6.1.2****Survey Items for Entrepreneurial Orientation****Innovativeness**

When it comes to problem solving, we value creative new solutions more than the solutions of conventional wisdom in our export operations.

Top managers in this business unit encourage the development of innovative export marketing strategies, knowing well that some will fail.

**Risk-taking**

We value the orderly and risk-reducing management process much more highly than leadership initiatives for change in our export operations. [-]

Managers responsible for exports like to “play it safe.” [-]

Top managers in this company like to implement export plans only if they are very certain that they will work. [-]

**Proactiveness**

We firmly believe that a change in export market creates a positive opportunity for us.

Members of this business unit tend to talk more about opportunities rather than problems in export markets.

---

[-] These items were negatively worded and needed to be re-coded before analysis.

**4.6.2 Dependent Variable**

To measure export performance, Zou, Taylor, and Osland's (1998) EXPERF scale is used. The EXPERF scale has three underlying dimensions based on the three different ways of measuring export performance in the literature. The three dimensions are financial export performance (3 items), strategic export performance (3 items), and satisfaction with the export venture (3 items). The nine-item measure of export performance is presented in Table 4.6.2.1.

**Table 4.6.2.1****Survey Items for Export Performance (EXPERF)****Financial Export Performance**

This export venture has been very profitable.

This export venture has generated a high volume of sales.

This export venture has achieved rapid growth.

**Strategic Export Performance**

This export venture has improved our global competitiveness.

The export venture has strengthened our strategic position.

This export venture has significantly increased our global market share.

**Satisfaction with Export Venture**

The performance of this export venture has been very satisfactory.

This export venture has been successful.

This export venture has fully met our expectations.

**4.6.3 Contingency Variables**

Firm size, in this study, is measured by number of full-time employees as it is the most common measure of size used in exporting research, as well as entrepreneurship research (Balabanis and Katsikea 2003). This criterion has been used in several previous studies (e.g., Samiee and Walters 1990; Balabanis and Katsikea 2003; Deng and Dart 1999; Prasad, Ramamurthy and Naidu 2001). It has been argued that this measure is highly correlated with other measures of size, such as sales and size of assets (Balabanis and Katsikea 2003, p. 242). The scale for firm size used in this study is shown in Table 4.6.3.1.

**Table 4.6.3.1****Survey Item for Size**


---

How many employees do your firm or business unit currently have? (Please check **one** only)

- |                                  |                                    |                                    |                                  |                                  |
|----------------------------------|------------------------------------|------------------------------------|----------------------------------|----------------------------------|
| <input type="checkbox"/> 1-19    | <input type="checkbox"/> 20-49     | <input type="checkbox"/> 50-99     | <input type="checkbox"/> 100-249 | <input type="checkbox"/> 250-499 |
| <input type="checkbox"/> 500-999 | <input type="checkbox"/> 1000-4999 | <input type="checkbox"/> 5000-9999 | <input type="checkbox"/> 10000 + |                                  |
- 

The 2-item international experience scale by Zou and Cavusgil (2002) is adapted for exporting and used in this study to measure export experience. Using this measure would tap the conceptual domain of export experience more adequately than measuring it with the number of years of exporting. Number of years of exporting may not be a good measure of export experience as companies may export for a long time reactively, thus not learning much about their export markets, and exporting (Diamantopoulos and Cadogan 1996). The two-item scale for international experience is shown at Table 4.6.3.2.

**Table 4.6.3.2****Survey Items for Export Experience**


---

Our management possesses a great deal of exporting experience.

We have a long history of export involvement.

---

Market concentration/diversification is measured by an item adapted from Katsikeas and Leonidou (1996). Although Katsikeas and Leonidou (1996) used a dichotomous scale, in this study a Likert scale is used. The scale is shown in Table 4.6.3.3.

**Table 4.6.3.3****Survey Item for Market Diversification**


---

Our organization focuses its efforts on, and allocated resources for its export operations to, certain carefully selected export markets. [-]

---

As product adaptation/standardization is examined in this study, the scale developed by Cavusgil and Zou (1994) is adapted, and only items related to product standardization are included. The resulting three-item scale is shown in Table 4.6.3.4.

**Table 4.6.3.4****Survey Items for Product Adaptation**


---

For this export venture the degree of initial product adaptation is high.

For this export venture the degree of product adaptation subsequent to entry is high

For this export venture the extent to which product label is in local language

---

Environmental dynamism is measured using Miller and Friesen's (1982) scale. It is a five-item, seven-point Likert scale. The five items in the scale reflect a high rate or degree of change in demand, competitors and technology. The scale for environmental dynamism is illustrated in Table 4.6.3.5.

**Table 4.6.3.5****Survey Items for Export Market Dynamism**


---

In this export venture market, our firm must change its marketing practices extremely frequently (for example semi-annually)

In this export venture market, the rate of obsolesce is very high (as in some fashion goods and semiconductors)

In this export venture market, actions of competitors are unpredictable

In this export venture market, demands and tastes are unpredictable (e.g., high fashion goods)

In this export venture market, the modes of production change often in a major way (e.g., advanced electronic components).

---

**4.7 SAMPLE SELECTION AND DATA COLLECTION PROCEDURE**

A multiple-industry sampling is adopted; as such a procedure would enhance observed variance, and strengthen the generalizability and the external validity of the findings (Samiee and Roth 1992; Gatignon and Xuereb 1997; Morgan, Kaleka and Katsikeas 2004). Moreover, focusing on a single industry would have severely reduced the size of the sample.

The sample for the survey is withdrawn from the *Export Yellow Pages*, a directory published by *MyExports*, a public-private partnership of the Department of Commerce and Global Publishers LLC. As stated previously, this directory provides the name, telephone and fax number of the executive who is responsible for exporting, as well as, company information such as the address, industry, and current export markets. For some companies additional information is provided on the products and services offered by the firm and a link to the company website are provided. This directory was used in previous studies (e.g., Samiee and Walters 1990; Bello and Gilliland 1997)

Only manufacturing firms are included in the sample. Prior research on exporting (i.e. Zou and Cavusgil 2002; Morgan, Kaleka and Katsikeas 2004) had excluded the service firms and firms engaged in primary industries because of their peculiar international expansion patterns, regulatory requirements, and performance characteristics. Moreover, industry differences (i.e., manufacturing vs. service industry) affect the strength of the relationships involving market orientation (Kirca *et al.* 2005). The four selection criteria used to determine which export firms are included in the sampling frame are: (1) businesses should be manufacturing, (2) businesses should not be prone to any monopoly power (3) businesses should not produce bulk or commodity products, (4) businesses should not be contract manufacturers, and (5) businesses should not be sporadic exporters.

#### **4.8 DATA COLLECTION**

The survey method is utilized as a data collection tool in this study. Each manufacturing firm in the directory that was not prone to any monopoly power and did not produce bulk or commodity products were contacted by telephone to identify an appropriate key informant for the study, and to prenotify the firm of the research project (Bello, Chelariu, and Zhang 2003; Morgan, Kaleka and Katsikeas 2004). To ensure that firms were indeed manufacturing firms, and regular exporters rather than sporadic exporters the managers were asked questions before requesting their participation. With this procedure more than 10,000 firms were contacted and approximately 600 firms were identified as qualified the above criteria. Out of these 600 firms, only 314 export firm managers agreed to participate. Each manager who consented to participate in the survey was asked whether they would like to receive the questionnaire by email or fax and based

on their answers their email or fax numbers were collected. A cover letter with an Old Dominion University letterhead and a copy of the survey were emailed or faxed based on the manager's preference. If a manager was sent an email and no response was received in 2-3 days it was followed by a fax as some managers did not check their emails, or the email was put in junk or spam folder by the company email system. Approximately 2 weeks after sending the survey non-respondents were contacted by telephone to ensure that they received the questionnaire. In cases where the respondents did not receive or misplaced the questionnaire, a second email or fax was sent. Approximately a month after the second contact a reminder email or fax was sent to the non-respondents. The cover letter and the questionnaire are shown in Appendix B.

The responsibility of the export manager is characterized by frequent international travel, and by irregular and fragmented work patterns. These make collecting data from these managers a relatively cumbersome task, with potential negative effect on response rates (Katsikeas *et al.* 2000, p. 501). It is hoped that survey method via fax and email would yield better response rates in this situation.

## **CHAPTER V- ANALYSIS AND RESULTS OF THE STUDY**

In this chapter issues related to data analysis and interpretation of these results are discussed. First, the characteristics of the sample are presented. This section is followed by a section on data analysis in which issues related to the measurement model and structural model are elaborated and results of the data analyses are reported.

### **5.1 CHARACTERISTICS OF THE SAMPLE**

#### **5.1.1. Response Rates**

For the survey study, firms that were not previously contacted for the qualitative studies were contacted to determine manufacturing firms that exported on a regular basis that qualified the other identified criteria. It was not possible to reach some of the exporting managers due to the frequency of their foreign travel. Out of all the managers that were reached by telephone 200 managers declined to participate. A total of 314 managers accepted to participate in the research study. Out of these 314 managers 151 managers did not submit a completed questionnaire. A total of 168 questionnaires were returned. Of the 168 surveys returned, 2 were unusable due to excessive missing data, 12 were eliminated due to respondents' low level of knowledge on the topic of interest, and 4 were eliminated due to respondents not specifying a single product (or product line) for a single country-market. Mean replacement was performed on the few values that were missing in some surveys. The response rate is calculated as 29%. Response rates ranging from 12% to 20% are regarded as acceptable for cross-sectional samples (Churchill 1991). This response rate is higher than similar market orientation (e.g., 15.7% for Rose and Shoham 2002, and 17.2% for Ellis 2007) and comparable to entrepreneurial orientation studies involving exporters (e.g., 32% for Knight 2000; 41% for Smart and

Conant 1994) due to personally contacting each manager by phone (Calantone *et al.* 2006). It has been stated that telephone prenotification increases the response rate substantially more than prenotification by letter or postcard (Haggett and Mitchell 1994).

### **5.1.2 Nonresponse Bias**

Nonresponse bias was assessed by extrapolation techniques. Extrapolation techniques that compare early respondents to late respondents are based on the assumption that subjects who are late respondents are more like nonrespondents (Armstrong and Overton 1977). Consequently, it is assumed that if significant differences do not exist on specific variables between early and late respondents differences will not be found between respondents and nonrespondents.

The elapsed time between the date of the initial distribution of the survey and the date of the return of the survey was recorded for each firm that participated in this study. The identity of one company was not established and therefore response date was not calculated. A cut-off date of 0 business day was chosen for early responders (n=54). 5 and more business days was chosen for late responders (n=40). The usable responses obtained from the early responders and late responders were compared. Comparisons were made along the classification variables such as the amount of the respondent's experience in his/her current position, the respondent's experience in his/her current business unit or company, and the number of export countries (Morgan, Kaleka and Katsikeas 2004). Comparisons of early and late respondents, in which later respondents were taken as representatives of non-respondents, revealed no statistically significant differences. Various firm characteristics were compared: years of exporting, age of the venture, and number of export markets (Morgan *et al.* 2004). Independent-samples t-test

(the two sample t-test) was used to test the equality of the means for each variable for each respondent group for classification variables. The results of the t-tests indicated that, in terms of the mean values of the selected demographic variables, there were no statistically significant differences between the early respondents and the late respondents (please refer to Appendix C.1) since none of the t-values for the preceding variables are statistically significant. Therefore, there was no indication of nonresponse bias.

### **5.1.3 Respondent Competency**

A major concern was the selection of appropriate managers that would be knowledgeable on export operations. As stated before a pre-survey telephone screening was conducted to identify appropriate exporting managers, to request their participation in the study, and to confirm or gather their contact information (Bello and Gilliland 1997; Morgan *et al.* 2004; Calantone *et al.* 2004). In addition to that, additional data was collected at the end of the survey to assess respondent competency (Doney and Cannon 1997; Morgan *et al.* 2004; Shankarmahesh, Ford and LaTour 2004). As the model relied on perceived export venture performance it was important to establish respondents' competency (Jap 1999). In the last section of the questionnaire respondents were asked to provide information concerning their knowledge of their export ventures' activities, strategies, and performance, as well as, their export ventures' main competitors. Furthermore, a question was asked to identify whether the respondent had confidence in answering the survey questions. On the basis of this assessment 2 respondents were eliminated from further analysis as they reposted an average score of less than 4 on the seven-point scales for the items. In the final data set (n =150), the average main

informant scores were greater than 5 on seven-point scales for 129 cases. This indicates a high level of competency among the key informants.

#### **5.1.4 Characteristics of the Sample**

The sample consists of 150 manufacturing firms that export on a regular basis. Various industries are represented in this sample of 150 manufacturing firms, and a list of the industries is presented below in Table 5.1.4.1. This list is based upon how the firms are listed in the *Export Yellow Pages* directory. Furthermore, the respondents were asked to report the industry of their company or SBU, however, the results were not as specific as the industry classifications reported in the *Export Yellow Pages*.

The characteristics of the sample were analyzed based on characteristics of the company and the characteristics of the respondents. In characteristics of the company the number of countries exported to and the product type were examined. In characteristics of the respondent's current job title, the amount of experience in his/her current position, the amount of experience in the current business unit or division, and the respondents' title were examined. The characteristics of the sample are illustrated in Table 5.1.4.2, and the descriptive statistics and frequency tables related to the characteristics of the sample are shown in Appendix C.2. (1) current job title, (2) amount of experience in the current position, (3) amount of experience in the current business unit or division.

**Table 5.1.4.1****Industrial Categories of Exporting Firms**


---

Aerospace Equipment  
 Agribusiness  
 Agricultural Chemicals  
 Agricultural Machinery & Equipment  
 Apparel & Textiles  
 Apparel/Uniforms  
 Automotive & Ground Transportation  
 Automotive Parts  
 Bath Accessories  
 Chemical Plant Equipment and Supplies  
 Cleaning Equipment & Supplies  
 Construction Materials  
 Drilling Equipment  
 Electrical & Electronic Equipment  
 Environmental Products and Equipment  
 Fabrics  
 Food & Beverages  
 Food Packaging Machinery  
 General Industrial Equipment/Supplies  
 Industrial Control Systems  
 Laboratory Equipment  
 Marine Equipment  
 Materials Handling Equipment  
 Power Transmission Equipment  
 Prepared Foods  
 Publishing Services  
 Plastic Manufacturing Equipment  
 Renewable Energy Equipment  
 Retail Trade  
 Safety Equipment  
 Testing Equipment  
 Textile Machine/Equipment  
 Transportation  
 Water Purifying Equipment  
 Water Resources Equipment  
 Wastewater Treatment Equipment

**Table 5.1.4.2****Characteristics of the Sample**

n = 150

<b>Product Type</b>	<b>Frequency</b>	<b>Percentage</b>
• Consumer Products	29	19.3
• Consumer Product & Industrial Product	14	9.3
• Consumer Product & Industrial Product & Consumer Services & Industrial Services	1	0.7
• Industrial Products	96	64.0
• Industrial Products & Services	4	2.7
• Industrial Services	3	2.0
<b>Respondents' Job Title</b>		
• President/CEO/Owner	24	16.0
• <b>VP (All)</b>	<b>36</b>	<b>24.0</b>
• VP (No detailed information)	9	6.0
• VP - International	2	1.3
• VP – Sales and/or Marketing	18	12.0
• VP – Other	7	4.7
• <b>Director (All)</b>	<b>24</b>	<b>16.0</b>
• Director – International	12	8.0
• Director – Sales and/or Marketing	5	3.3
• Director – Other	7	4.7
• <b>Manager (All)</b>	<b>28</b>	<b>18.1</b>
• Manager – Sales and/or Marketing	16	10.1
• Manager – Other	12	8.0
• Other	13	8.7

	<u><b>Mean</b></u>	<u><b>Median</b></u>	<u><b>St. Deviation</b></u>	<u><b>Range</b></u>
<b>Number of export countries</b>	32	32	28.202	99
<b>Years in current position</b>	10	10	8.758	47
<b>Years in current company</b>	13	13	10.261	47

The companies in the sample vary in terms of number of countries that are exported to and by product type. The average number of companies exported to was 32 and the range of companies exported to was 99 countries. Most of the companies

included in the sample are classified as Industrial Product manufacturers by the respondents (96, 64 %). This group is followed by Consumer Products companies (29, 19.3%) and companies that manufacture both consumer products and industrial products (14, 9.3%). Although during the first telephone contact it was assured that only manufacturing companies are included in the sample, 3 companies are classified as Industrial Service companies. Further, analysis reveals that although these companies might be manufacturing firms based on how the responding manager indicates the industry of the business unit (e.g. aluminum bronze producer, oil testing and manufacturing) or based on the name of the company (XYZ Manufacturing Division of ABC): Three companies fail to indicate the type of product the company produces.

The characteristics of the survey participants are evaluated on the basis of the following four criteria: (1) current job title, (2) the amount of experience in the current position, (3) the amount of experience in the current business unit or division, and (4) the respondent's job title. Most of the respondents are President and/or CEO and/or Owner (24, 16%). This is followed by Vice President for Sales and/or Marketing (18, 12%). This is closely followed by Sales and/or Marketing Managers (16, 10%). The Other category consists of respondents with titles such as Administrator, Sales Associate, Export Sales, Executive Assistant – Marketing and Sales, Secretary and Treasurer, Sales Representative/Technical Support Specialist, International Sales and Marketing, Chief of Operations, International Operations Administrator, Office Operations Manager, Export Administrator and Marketing Associate with 12 respondents (8%). 2 respondents did not report their title, but their title is established using the information available at *Export*

*Yellow Pages*. As a category more Vice Presidents respond to the questionnaire than any other group (36, 24 %), followed by Managers (28, 18.1%), and Directors (24, 16%).

The respondents, on average, have approximately 10 years of experience in their current position and 13 years of experience in their business unit. While the range of the respondents' experience in the current position and the range of experience in the current division or business unit are about 47 years.

## **5.2 DATA ANALYSIS**

A two-stage approach is used to analyze the data and test the hypotheses for Model 1 and 2. According to the two-stage approach, the measurement model first is developed and evaluated, and then the full structural equation model is evaluated. As two different models were proposed the analyses would be conducted separately for the two models. Therefore, this section is organized as follows: (1) Analysis of measurement model: unidimensionality, reliability and construct validity, (2) Fitting of the proposed models.

### **5.2.1 Measurement Model - Unidimensionality, Reliability and Construct Validity**

Before proceeding with analysis of the two models, it is first necessary to assess the unidimensionality, reliability and construct validity of the measures that are used in these models. To test for unidimensionality/multidimensionality, reliability and construct validity of the measures the measurement models are first analyzed by principle components analysis (PCA) using SPSS. Later, construct validity is assessed for the measures in two models separately by confirmatory factor analysis (CFA) using AMOS (Gerbing and Anderson (1988)).

### **5.2.1.1 Principle Components Analysis**

To assess the unidimensionality/multidimensionality of each construct, first each construct of the model is subjected to principle components analysis (PCA) with orthogonal rotation using varimax (De Luca and Atuahene-Gima 2007). The major objective of varimax rotation is to have a factor structure in which each variable loads highly on one and only one factor (Sharma 1996, p. 119). Eigenvalue greater than 1 is used to assess the unidimensionality/multidimensionality of the constructs. The results of the PCA of scale items are summarized at Table 5.2.1.1.1.

**Table 5.2.1.1.1****Summary Results of Principle Component Analysis of Scale Items**

<b>Construct</b>	<b>Number of Items</b>	<b>Number of Factors Extracted</b>	<b>% of Variance Extracted</b>
Market Orientation	14	3	62.79
Customer Orientation	6	1	56.86
Competitor Orientation	4	1	60.19
Interfunctional Coordination	4	1	64.34
Entrepreneurial Orientation	7	3	70.80
Innovativeness	2	1	79.24
Risk-taking	3	1	66.90
Proactiveness	2	1	64.70
Export Performance*	9	1	79.61
Export Experience	2	1	80.62
Product Adaptation	3	1	59.88
Market Turbulence	5	1	53.60

\* Contrary to the literature one factor was found instead of three factors.

For market orientation PCA with varimax rotation and an Eigenvalue of 1 results in three factors as predicted by the literature. For entrepreneurial orientation PCA with varimax rotation and an Eigenvalue of 1 resulted in only two factors. However, the Eigenvalue of the third factor was .94, which is very close to 1. As the Eigenvalue of the third factor is very close to 1 a three factor loading for the entrepreneurial orientation is accepted. For perceived export venture performance contrary of the findings of the literature one factor is extracted instead of three. Second- and first-order confirmatory factor analysis (CFA) is conducted for export performance using AMOS. The fit of two models is assessed by comparing the difference in  $\chi^2$ s. For this model both  $\chi^2$  values are

statistically significant, as this is often the case. A number of goodness-of-fit indices are developed to overcome the problems with  $\chi^2$  goodness-of-fit test (McDonald and Marsh 1990). For the three-factor model the fit is much better [ $\chi^2 (24) = 74.6$   $P < .00$ , Relative Chi ( $\chi^2/\text{df}$ ) = 3.1, GFI = .91, TLI = 0.96, RMSEA = .12], while the fit is not as good for the nine variable model [ $\chi^2 (27) = 284.3$   $P < .00$ , Relative Chi ( $\chi^2/\text{df}$ ) = 10.5, GFI = 0.69, TLI = .81, RMSEA = 0.25].

Thus, the three-factor model was accepted. After the principle component analysis the reliability of the scales was appraised by using Cronbach's coefficient alpha which was obtained using a reliability analysis in SPSS 15.0. It has been suggested that the reliability of the total construct should not be calculated using the Cronbach alpha but by the formula suggested by Nunnally (1967) (Churchill 1979, pg. 69). Therefore, reliability of linear combinations were calculated for market and entrepreneurial orientation and export performance. The reliability of a linear combination is calculated by the formula  $\rho = 1 - (\sum \sigma_i^2 - \sum \sigma_i^2 r_{ii}) / \sigma_y^2$ , where  $\rho$  is the reliability of linear combinations,  $\sigma_i^2$  is the variance of component  $i$ ,  $r_{ii}$  is the reliability of component  $i$ ,  $\sigma_y^2$  is the variance of the sum of the three components (construct).

The reliability of linear combinations for market orientation is:

$$\rho = 1 - [\{(42.49 + 24.66 + 25.24) - \{(42.49 \times .84) + (24.66 \times .77) + (25.24 \times .81)\} / 197.78\}] = 1 - [(92.39 - 75.46) / 197.78] = 1 - (16.82 / 197.78) = 1 - .08 = .91$$

The reliability of linear combinations for entrepreneurial orientation was .66, and the reliability of linear combinations for export performance was .98. The results are given in Table 5.2.1.1.2. Most of the coefficient alphas were greater than 0.70, which is the suggested threshold by Bagozzi and Yi (1988). However, the reliability for the overall

entrepreneurial orientation and one dimension of entrepreneurial orientation – proactiveness - the values were 0.66 and 0.45 respectively, which are lower than the suggested value of 0.70. The values for the other dimensions of entrepreneurial orientation were 0.73 for innovativeness and 0.75 for risk-taking. The low reliability of the proactiveness dimension and the overall entrepreneurial orientation scale supports the assessment of previous studies which suggest that the proactiveness dimension is ambiguous (Lumpkin and Dess 1996; Brown, Davidson and Wiklund 2001). As the reliability of proactiveness is lower than the suggested .70 threshold, additional analysis were conducted without this dimension, however, the overall reliability of linear combinations for entrepreneurial orientation did not change and stayed at .66.

**Table 5.2.1.1.2****Reliability of Estimates of Model Constructs**

<b>Construct</b>	<b>Cronbach Alpha</b>	<b>Cronbach Alpha's of Previous Studies</b>
Market Orientation	.91	.88 (Narver and Slater 1990)
Customer Orientation	.84	.85, .87 (Narver and Slater 1990)
Competitor Orientation	.78	.72, .73 (Narver and Slater 1990)
Interfunctional Coordination	.81	.71, .73 (Narver and Slater 1990)
Entrepreneurial Orientation*	.66	.83 (Matsuno et al. 2002)
Innovativeness	.73	unknown
Risk-taking	.75	unknown
Proactiveness	.45	unknown
Export Performance	.98	unknown
Financial Export Performance	.93	.83, .89 (Zou et al 1998)
Strategic Export Performance	.94	.68, .84 (Zou et al 1998)
Satisfaction with Export Venture	.97	.92, .92 (Zou et al 1998)
Export Experience	.78	unknown
Product Adaptation	.82**	N/A
Market Turbulence	.78	.75 (Miller and Friesen 1982)

\* The reliability was .77 when proactiveness was dropped from the overall scale

\*\* One item was eliminated

Common method variance due to the self-reported nature of the data was tested using the Harman one-factor test (Podsakoff and Organ 1986). In this procedure all of the variables were entered into a factor analysis and the unrotated factor solution was investigated for the emergence of a single factor and one general factor that accounts for the majority of the covariance in the independent and criterion variables (Podsakoff and Organ 1986, p. 536). The factor analysis revealed nine components with Eigenvalues greater than 1.0. The nine components accounted for 71.95% of the variance and the first

factor accounted for 23.35% of variance. These findings suggested that common method bias was not a major issue in the study.

### **5.2.1.2 Confirmatory Factor Analysis – Model 1**

Validity refers to the degree to which a scale really measures the concept that it purports to measure (Bryman and Cramer 2005, Pallant 2007). The construct validity is explored by convergent and discriminant validity.

Convergent validity entails demonstrating convergence between two measures by investigating a measure's relationship with other constructs (Bryman and Cramer 2005, Pallant 2007). To assess convergent validity of the six latent variables (i.e., customer orientation, competitor orientation, interfunctional coordination, innovativeness, risk-taking and proactiveness) in Model 1, confirmatory factor analysis (CFA) was conducted using AMOS. Appendix C.5.1 presents the model fit indices, standardized residuals and modification indices.

The model fit was found to be not good. The CFA fit statistics are as follows: The  $\chi^2$  goodness of fit was statistically significant [ $\chi^2 (174) = 325.75$   $P < .00$ ], relative chi ( $\chi^2/\text{df}$ ) was 1.87, the goodness of fit index (GFI) was .83, the Turner-Lewis Index (TLI) was 0.85, and the root mean square error of approximation was .08.

In order to identify possible areas of model misfit, the standardized residuals and modification indices were examined. Standardized residuals “represent estimates of the number of standard deviations the observed residuals that would exist if the model were perfect fit.” (Byrne 2001, p. 89) Examination of standardized residuals revealed that only one residual exceeded the suggested cutoff point of 2.58 (Byrne 2001). The residual

value of 3.662 represents the covariance between the two indicators of interfunctional coordination – IC3 and IC4. The modification indices revealed that the parameter representing a covariance between two error residuals of interfunctional coordination – namely, err13 for and err14 – was 42.87 with expected parameter change of .93. The specification of an error covariance between the error terms err13 and err14 can be justified as both error terms are associated with different items of interfunctional coordination. Similarly, modification indices suggested that model fit will improve if the err11 and err14 were correlated. Once again, these two error terms are related to two different items of the same construct – interfunctional coordination. Also, the modification indices indicated that the model fit would improve if we correlated the error variance associated with one item of customer orientation [err2] with the error variance associated with one item of competitor orientation [err8]. Prior research indicated that although customer and competitor orientations distinct constructs there was a relatively high correlation between these two orientations (Frambach, Prabhu, and Verhallen 2003; Homburg, Grozdanovic and Klarmann 2007; Yau *et al.* 2007). Homburg *et al.* (2007, p. 31) suggested that (1) some firms might be highly attuned to the customers and competitors, and (2) both constructs might be causally linked – in-depth knowledge of customers could be associated with better knowledge of competitors' actions.

After the modifications the model was rerun and the results indicated a better fit. Although, the  $\chi^2$  is still statistically significant, its value dropped from 325.75 to 248.83 with the loss of three degrees of freedom [ $\chi^2 (171) = 248.83 P < .00$ ]. Relative chi ( $\chi^2/\text{df}$ ) decreased from 1.84 to 1.46, GFI increased from .83 to .87, TLI increased from .85 to .92, and RMSEA decreased from .08 to .05. All the paths between the observed variables

and their assigned latent variables were significant, and the standardized loadings were equal to or greater than .40. Therefore, all items met the convergent validity criterion of .40. That is, all the items were correlated at least .40 with their own scale (Nunnally and Bernstein 1994). A summary table for first-order confirmatory factor analysis results is offered in Table 5.2.1.2.1.

**Table 5.2.1.2.1****Confirmatory Factor Analysis of the Constructs for Model 1**

<b>Construct</b>	<b>Indicator</b>	<b>Standardized Loading</b>	<b>t-value</b>
Customer Orientation	CO1	.66	6.838*
	CO2	.64	6.617*
	CO3	.78	7.680*
	CO4	.70	7.127*
	CO5	.74	7.427*
	CO6	.62	--- <sup>a</sup>
Competitor Orientation	CmO1	.78	4.671*
	CmO2	.78	4.666*
	CmO3	.77	4.665*
	CmO4	.40	--- <sup>a</sup>
Interfunctional Coordination	IC1	.85	7.230*
	IC2	.85	7.819*
	IC3	.48	6.987*
	IC4	.66	--- <sup>a</sup>
Innovativeness	I1	.69	--- <sup>a</sup>
	I2	.84	6.233*
Risk-taking	RR1	.54	--- <sup>a</sup>
	RR2	.85	5.787*
	RR3	.76	5.893*
Proactiveness	P1	.59	--- <sup>a</sup>
	P2	.50	3.585*

(\*) Significant at the .01 level ( $t_{critical} = 2.576$ )

<sup>a</sup> Fixed Parameter

Another indicator of convergent validity is variance extracted (VE) (Hair *et al.* 2006). The calculated values for VE for each latent construct are shown in Appendix C2. VE values reveal what percentage of variance is due to error (Fornell and Larcker 1981). Fornell and Larcker (1981) suggest 0.50 as a rule of thumb. “A VE of less than 0.50 indicates that on average more error remains in the items than variance explained by the latent factor structure imposed on the measure” (Hair *et al.* 2006, p. 777). The calculated

VE values indicate that all but two constructs are .50 or higher. The value for variance extracted for customer and competitor orientations are very close to .50, thus it satisfies the rule of thumb. However, the value for variance extracted for proactiveness is .30, which is below the suggested .50. Therefore, it can be stated that all constructs but proactiveness satisfied the convergent validity criteria.

Discriminant validity refers to the extent to which a construct is truly distinct from other constructs (Hair *et al.* 2006). Discriminant validity was tested in two different ways. First, variance of a construct was compared to the correlation between this construct and another construct. If variance of construct A is larger than the square of correlation between construct A and construct B, then we state that there is evidence for discriminant validity [ $\text{var}(A) > \text{cor}^2(A,B)$ ]. The results of this analysis indicate support for discriminant validity for the constructs, with the exception of the relationship between customer and competitor orientations. The variance of competitor orientation is .31 and the square of correlation between customer and competitor orientations is .75, which results in -.44 as the difference between these two values.

Second, discriminant validity for two estimated constructs was assessed by constraining the estimated correlation parameter between them to 1.0 and comparing the  $\chi^2$  to the  $\chi^2$  of the unconstrained model (Anderson and Gerbing 1988, p. 416). As suggested by Anderson and Gerbing this test was performed for one pair of factors at a time. If the unconstrained model has a  $\chi^2$  value lower than the constrained model this is an indication that the traits are not perfectly correlated and that discriminant validity is achieved (Bagozzi and Phillips 1982, p. 476). The results of  $\chi^2$  difference tests between the constrained and unconstrained models indicated that the dimensions differed.

Although the results of the first test indicated low discriminant validity between customer and competitor orientation, the second test found strong support for discriminant validity. The results of the discriminant analyses are displayed below at Appendix C.2.

### **5.2.1.3 Confirmatory Factor Analysis – Model 2**

The means, standard deviations and Pearson correlation matrix for all variables are shown in Table 5.2.1.3.1. To assess convergent validity a CFA with the nine constructs was conducted and the fit of the data and the standardized loadings of the indicators on their respective constructs were assessed (Bello and Gilliland 1997; Bello, Chelariu and Zhang 2003). The  $\chi^2$  goodness of fit is statistically significant [ $\chi^2$  (369) = 644.16  $P < .00$ ]. Additional diagnostics include a relative chi ( $\chi^2/\text{df}$ ) of 1.75, a goodness of fit index (GFI) of .78, a Turner-Lewis Index (TLI) of .89, and a root mean square error of approximation (RMSEA) of .07. An analysis of modification indices suggests a correlation between the error indicators of interfunctional coordination [err13 and err14, err11 and err14], financial export performance [err22 and err24] and one indicator of customer orientation with an indicator of competitor orientation [err2 and err8]. Although the  $\chi^2$  is still statistically significant [ $\chi^2$  (365) = 551.9  $P < .00$ ], other fit indices improved slightly [ $\chi^2/\text{df}$  = 1.51, GFI = .81, TLI = .93, RMSEA = .06). All items met the convergent validity criterion of .40. The detailed information on standardized item loadings is provided in Appendix C.3 and a summary table for first-order confirmatory factor analysis results is offered in Table 5.2.1.3.2.

Table 5.2.1.3.1

Means, Standard Deviations and Pearson Correlations for the Constructs in Model 2 (N = 150)

Variables	Mean	S.D.	1	2	3	4	5	6	7	8	9
1. Customer Orientation	5.12	1.09	1								
2. Competitor Orientation	4.89	1.24	.698**	1							
3. Interfunctional Coordination	4.63	1.26	.565**	.464**	1						
4. Proactiveness	5.26	1.08	.329**	.302**	.273**	1					
5. Risk-Taking	3.46	1.25	-.081	-.011	-.064	.078	1				
6. Innovativeness	4.61	1.30	.364**	.367**	.362**	.358**	.223**	1			
7. Financial Export Performance	4.11	1.73	.200*	.206*	.035	.105	-.142	.000	1		
8. Strategic Export Performance	3.92	1.67	.189*	.247**	.054	.010	-.088	.097	.804**	1	
9. Satisfaction with Export Venture	4.28	1.94	.200**	.168*	.046	.047	-.156	.002	.868**	.804**	1

(\*) Significant at the .05 level (2-tailed)

(\*\*) Significant at the .01 level (2-tailed)

**Table 5.2.1.3.2****First-Order Confirmatory Factor Analysis of Constructs in Model 2**

<b>Construct</b>	<b>Indicator</b>	<b>Standardized Loading</b>	<b>t-value</b>
Customer Orientation	CO1	.66	6.876*
	CO2	.64	6.671*
	CO3	.77	7.731*
	CO4	.70	7.164*
	CO5	.74	7.456*
	CO6	.63	--- <sup>a</sup>
Competitor Orientation	CmO1	.78	4.732*
	CmO2	.78	4.724*
	CmO3	.77	4.720*
	CmO4	.40	--- <sup>a</sup>
Interfunctional Coordination	IC1	.85	6.951*
	IC2	.86	7.738*
	IC3	.47	7.131*
	IC4	.65	--- <sup>a</sup>
Innovativeness	I1	.71	6.540*
	I2	.83	--- <sup>a</sup>
Risk-taking	RR1	.54	5.908*
	RR2	.85	7.159*
	RR3	.76	--- <sup>a</sup>
Proactiveness	P1	.58	3.896*
	P2	.51	--- <sup>a</sup>
Financial Export Performance	FEP1	.88	14.611*
	FEP2	.94	21.791*
	FEP3	.93	--- <sup>a</sup>
Strategic Export Performance	SP1	.92	16.429*
	SP2	.94	17.110*
	SP3	.87	--- <sup>a</sup>
Satisfaction with Export Venture	SEV1	.97	23.956*
	SEV2	.98	25.017*
	SEV3	.92	--- <sup>a</sup>

(\*) Significant at the .01 level ( $t_{critical} = 2.576$ )

<sup>a</sup> Fixed Parameter

The calculated values for VE for each latent construct are shown in Appendix C.3. The calculated VE values indicate that all but two constructs are 0.50 or higher. The value for variance extracted for customer orientation is also very close to 0.50, thus it satisfies the rule of thumb. However, the value for variance extracted for proactiveness is 0.30, which is below the suggested 0.50.

Once again, discriminant validity was tested in two different ways. The first test compared the variance of a construct to the correlation between this construct and another construct. That is, if variance of construct A was larger than the square of correlation between construct A and construct B, then it indicated evidence for discriminant validity. The results of this analysis indicated support for discriminant validity for the constructs, with the exception of the relationship between customer and competitor orientations. The variance of competitor orientation is .31 and the square of correlation between customer and competitor orientations is .70, which results in -.39 as the difference between these two values.

As the results of the first test indicated problems with discriminant validity, a second test was conducted by comparing the  $\chi^2$  difference of constrained and unconstrained models. The results of  $\chi^2$  difference tests between the constrained and unconstrained models indicated that the dimensions differed. Thus, demonstrating support for discriminant validity. The results of these analyses are attached as Appendix C.3.

The literature is not clear whether the constructs have first- or second-order factorial structures. Some studies accept market orientation (Narver and Slater 1990), entrepreneurial orientation (Covin and Slevin 1989), and export performance (Zou,

Taylor, Osland 1998) as a first-order factor. Others accept market orientation (Matsuno, Mentzer and Özsomer 2002; Menguc and Auh 2006; Zhou *et al.* 2005), entrepreneurial orientation (Matsuno *et al.* 2002) accept both market orientation and entrepreneurial orientation as second-order constructs, meaning they are best conceptualized and measured as a higher-order construct.. Second-order factorial structure indicates that each of the three dimensions is distinct, but collectively constitutes the broader, multidimensional higher-order construct. Therefore, both factorial structures are analyzed and compared based on fit indices.

For the second-order confirmatory factor analysis the fit statistics are as follows:  $\chi^2 (390) = 594.0$   $P < .00$ , Relative Chi ( $\chi^2/df$ ) = 1.52, GFI = .80, TLI = .93, RMSEA = .06. The fit of this model can be considered to be only marginally good. The loadings for first- and second-order factors are shown in Table 5.2.1.3.6.

**Table 5.2.1.3.6****Second-Order Confirmatory Factor Analysis of Constructs for Model 2**


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<b>First-Order Construct</b>	<b>Indicator</b>	<b>Standardized Loading</b>	<b>t value</b>
Customer Orientation	CO1	.66	--- <sup>a</sup>
	CO2	.63	6.85*
	CO3	.78	8.17*
	CO4	.70	7.50*
	CO5	.74	7.82*
	CO6	.63	6.87*
Competitor Orientation	CmO1	.77	--- <sup>a</sup>
	CmO2	.78	9.48*
	CmO3	.77	9.46*
	CmO4	.40	4.69*
Interfunctional Coordination	IC1	.62	--- <sup>a</sup>
	IC2	.63	8.38*
	IC3	.71	6.09*
	IC4	.84	6.19*
Innovativeness	I1	.70	5.79*
	I2	.84	--- <sup>a</sup>
Risk-Taking	RR1	.52	5.81*
	RR2	.90	6.17*
	RR3	.72	--- <sup>a</sup>
Proactiveness	P1	.60	3.44*
	P2	.49	--- <sup>a</sup>
Financial Export Performance	FEP1	.88	--- <sup>a</sup>
	FEP2	.95	17.78*
	FEP3	.93	14.56*
Strategic Export Performance	SP1	.92	--- <sup>a</sup>
	SP2	.94	33.82*
	SP3	.87	23.93

---

**Table 5.2.1.3.6 (continued)**

<b>First-Order Construct</b>	<b>Indicator</b>	<b>Standardized Loading</b>	<b><i>t</i> value</b>
Satisfaction with Export Venture	SEV1	.97	23.96
	SEV2	.98	25.02
	SEV3	.92	--- <sup>a</sup>

**Second-Order Confirmatory Factor Analysis of Constructs**

<b>First-Order Construct</b>	<b>Second-Order Factor</b>	<b>Second-Order Loading</b>	<b><i>t</i> value</b>
Customer Orientation	Market Orientation	.99	--- <sup>a</sup>
Competitor Orientation	Market Orientation	.87	6.56**
Interfunctional Coordination	Market Orientation	.64	4.86**
Innovativeness	Entrepreneurial Orientation	.83	--- <sup>a</sup>
Risk-taking	Entrepreneurial Orientation	.25	2.08*
Proactiveness	Entrepreneurial Orientation	.79	3.13**
Financial Export Performance	Export Performance	.95	--- <sup>a</sup>
Strategic Export Performance	Export Performance	.89	12.35**
Satisfaction with Export Venture	Export Performance	.94	14.12**

\*  $t \geq 1.960$ ,  $p < .05$  (two-tailed test)

\*\*  $t \geq 2.576$ ,  $p < .01$  (two-tailed test)

<sup>a</sup> Fixed Parameter

A confirmatory factor analysis was conducted for first-order factorial measures for market and entrepreneurial orientations and export performance to compare the results with the results of the model with second-order measures (Kandemir, Yaprak and Cavusgil 2006). Item-factor scores were averaged to form the factor scores for path analysis. The results indicated a better fit for this model:  $\chi^2 (24) = 39.4$   $P < 0.02$ , Relative Chi ( $\chi^2/df$ ) = 1.64, GFI = .94, TLI = .96, RMSEA = .07. Thus, it was concluded that the model in which market and entrepreneurial orientation and export performance were

represented as second-order measures were not superior to the first-order model. The loadings for first-order model are shown in Table 5.2.1.3.7.

**Table 5.2.1.3.7**

**Summated First-Order Confirmatory Factor Analysis of Constructs for Model 2**

<b>First-Order Construct</b>	<b>Indicator</b>	<b>Standardized Loading</b>	<b>t value</b>
Market Orientation	Customer Orientation	.88	--- <sup>a</sup>
	Competitor Orientation	.79	9.26**
	Interfunctional Coordination	.63	7.58**
Entrepreneurial Orientation	Proactiveness	.53	3.91**
	Risk-taking	.18	1.69*
	Innovativeness	.72	--- <sup>a</sup>
Export Performance	Financial Export Performance	.93	--- <sup>a</sup>
	Strategic Export Performance	.86	16.20**
	Satisfaction with Export Venture	.93	19.16**

\*  $t \geq 1.960$ ,  $p < .05$  (two-tailed test)

\*\*  $t \geq 2.576$ ,  $p < .01$  (two-tailed test)

<sup>a</sup> Fixed Parameter

## 5.2.2 Structural Models

As stated before a two-stage procedure was adopted. In the first stage the unidimensionality, reliability and construct validity of the measured used in Model 1 and Model 2 are established. After obtaining satisfactory measurement models for Model 1 and Model 2, the analyses proceed with testing the structural model. In this section, issues dealing with structural models are analyzed separately for Model 1 and Model 2.

### 5.2.2.1 Model 1

The conceptual model 1 (Figure 1) calls for a reciprocal relationship between interfunctional coordination and innovativeness. The proposed Model 1 is a nonrecursive

model with a feedback loop between two of its constructs. These two constructs are seen as both a predictor and an outcome of each other (Hair *et al.* 2006). The model was run using AMOS 16.0 with a reciprocal relationship. AMOS provides stability index for the non-recursive subset in the model. If the stability index is less than 1.0, then there is positive evidence of that the system of linear equations associated with the model is 'stable' If the stability index is one or greater, the model is 'unstable' meaning it is not in equilibrium (Kline 2006). The results of the structural equation modeling with feedback-loop indicated that stability index for both variables were 1.784. The high values might indicate either that the model is wrong or that the sample size is too small (Arbuckle 2007a). Non-recursive models, especially when there is a reciprocal relationship, require larger sample sizes (Wong and Law 1999).

Further analysis by comparison of fit statistics revealed that the model with a path from interfunctional coordination to innovativeness (Model 1-A) offered better model fit. (For Model 1-A, modification indices suggested correlations among some of the error residuals [err13 and err14, and err11 and err14, which are error residuals for interfunctional coordination; and err8 and err2, which are error residuals for customer orientation and competitor orientation]. The same error terms were also correlated for Model B. Table 5.2.2.1.1 compares the fit indices for both models, Model 1-A and Model 1-B.

**Table 5.2.2.1.1**  
**Comparison of Fit**

	<u>Model 1 - A (IC → I)</u>	<u>Model 1 - B (I → IC)</u>
$\chi^2$	271.92	314.57
df	175	177
P	.000	.000
$\chi^2/\text{df}$	1.55	1.78
GFI	.86	.82
TLI	.91	.87
RMSEA	.06	.07

The structural model's validity was assessed by assessing overall structural model fit. As Table 5.2.2.1.1 indicates the fit is acceptable. There is evidence for structural theory validity as the structural model fit is only marginally worse than the CFA model fit (Hair *et al.* 2006, p. 857). [ $R^2$  for Innovativeness = .72,  $R^2$  for Risk-Taking = .26,  $R^2$  for Proactiveness = .51]. The parameter estimates of the suggested links and parameter estimates for Model 1-A are stated below and also summarized in Table 5.2.2.1.2.

H1a suggests that an export firm's customer orientation is positively associated with its proactiveness. This hypothesis is refuted, since the path coefficient is negative rather than positive ( $\beta = -3.566$ ,  $t = -1.463$ ,  $p = .856$ ).

H1b proposes that an export firm's competitor orientation is positively associated with its proactiveness. This hypothesis is supported by the data. The path coefficient is negative and significant ( $\beta = 3.968$ ,  $t = 1.591$ ,  $p = .056$ ).

H1c states that the higher an export firm's interfunctional coordination, the higher is the level of its proactiveness. This hypothesis is rejected by the data since the path coefficient is not significant ( $\beta = .181, t = 1.081, p = .405$ ).

H2a argues that customer orientation of an exporting firm is negatively related with its risk-taking propensity. This hypothesis is supported as the path coefficient between customer orientation and risk-taking is found to be negative and significant ( $\beta = -3.701, t = -1.647, p = .050$ ).

H2b suggests that an export firm's competitor orientation is positively associated with its risk-taking. This hypothesis is supported as the path coefficient is positive and significant ( $\beta = 3.657, t = 1.580, p = .057$ ).

H3a states that an export firm's customer orientation is negatively associated with its innovativeness. This hypothesis is supported by the data as the path coefficient is positive and marginally significant ( $\beta = -.5350, t = -1.459, p = .072$ ).

H3b proposes that an export firm's competitor orientation is positively associated with its innovativeness. This hypothesis is marginally supported as the path coefficient is positive and significant ( $\beta = 5.465 = 1.477, p = .070$ ).

H3c argues that an export firm's interfunctional coordination is positively associated with its innovativeness. This hypothesis is supported by the survey data. The path coefficient is positive and significant ( $\beta = .537, t = 2.001, p = .022$ ).

H3d could not be tested because of the issue with the stability of the model.

**Table 5.2.2.1.2****Parameter Estimates for Hypothesized Relationships of Proposed Model 1-A**

<b>Sign/Hypothesized Relationship</b>	<b>Hypothesis</b>	<b>Parameter Estimate</b>	<b>t-value</b>
(+) Customer Orientation – Proactiveness	(H1a)	-3.566	-1.460
(+) Competitor Orientation – Proactiveness	(H1b) ✓	3.968	-1.591*
(+) Interfunctional Coordination – Proactiveness	(H3a)	.181	.833
(-) Customer Orientation – Risk-taking	(H2a) ✓	-3.071	-1.647**
(+) Competitor Orientation – Risk-taking	(H2b) ✓	3.657	1.580*
(-) Customer Orientation – Innovativeness	(H3a) ✓	-5.350	-1.459*
(+) Competitor Orientation – Innovativeness	(H3b) ✓	5.465	1.477
(+) Interfunctional Coordination – Innovativeness	(H3c) ✓	.537	2.003**

\*  $t \geq 1.282, p < .10$  (one-tailed test)

\*\*  $t \geq 1.645, p < .05$  (one-tailed test)

✓ Hypothesis is supported

Note: Values shown are standardized path coefficients

**5.2.2.2 Model 2**

The hypotheses H4 and H5 were tested simultaneously using AMOS 16.0. The structural model's validity was assessed by assessing overall structural model fit. The fit statistics are the same as the CFA model and are as follows:  $\chi^2 (24) = 39.40$   $P < .02$ , Relative Chi ( $\chi^2/df$ ) = 1.64, GFI = .94, TLI = 0.96, RMSEA = .07 [ $R^2$  for Export Performance = .07]. The parameter estimates of the suggested links and parameter estimates for Model 2 are summarized in Table 5.2.2.2.1.

**Table 5.2.2.2.1****Parameter Estimates for Hypothesized Relationships of Proposed Model 2**

Sign/Hypothesized Relationship	Hypothesis	Parameter Estimate	t-value
(+) Market Orientation – Export Performance	(H4)    ✓	.346	2.375***
(+) Entrepreneurial Orientation – Export Performance	(H5)	- .179	- .285

\*\*\*  $t \geq 2.326, p < .01$

✓ Hypothesis is supported

Note: Values shown are standardized path coefficients

H4 states that a higher level of MO will results in higher level of perceived export performance (EP). This hypothesis is supported as the path coefficient is positive (.305) and significant.

H5 suggests that the higher an export firm's EO, the higher is the level of its EP. This hypothesis is rejected by the data since the path coefficient is negative and not significant.

#### 5.2.2.2.1 Model 2 – Moderating Effects

Hierarchical multiple regression procedure is employed to test the moderating effects, rather than multiple group analysis<sup>6</sup> (Zhou *et al.* 2007; Menguc and Auh 2006). When both predictor and moderator variables are continuous regression techniques that maintain the continuous nature of variables are desired over using cut points (e.g., median splits) to create artificial groups to compare correlations between groups, as it has been found that hierarchical multiple regression procedures that retain the true nature of

<sup>6</sup> Multiple group analysis using AMOS was not possible for an extended model that took into consideration the relationships explored in Model 1. A summated scales approach was utilized to conduct multiple group analysis, but due to sample size most of the results were inadmissible.

continuous variables result in fewer Type I and Type II errors for detecting moderator effects relative to procedures that involve the use of cut points (Frazier, Tix and Barron 2004, p. 117). Even when the group variable is categorical hierarchical regression procedures are suggested because “different correlations between groups may reflect differential variances between groups rather than true moderator effects (Frazier *et al.* 2004, p. 117).

In the moderated hierarchical regression analysis the main terms (market and entrepreneurial orientations and the moderating variable) were entered in the first step. In the second step, the interaction variable was entered. To deal with possible multicollinearity between the interaction terms and their components, each scale that constituted the interaction terms were standardized. Standardization is suggested as there might be multicollinearity between the predictor and moderator variables and the interaction terms created for them (Frazier *et al.* 2004). Standardization also makes it easier to interpret the results (Frazier *et al.* 2004). In order to standardize the scales first the values for market orientation, entrepreneurial orientation, and the multidimensional contingency variables were calculated by summing their respective components and dividing the total value by the number of components. Afterwards, the values for the predictor variables (market and entrepreneurial orientations) and the moderating variables (size, market diversification, product adaptation, and market dynamism) were first standardized by converting individual data points into z scores by subtracting the mean of each item and dividing by its standard deviation (Hair *et al.* 2006). Furthermore, as correlations among interaction terms containing the same components are likely to generate multicollinearity a blockwise approach was utilized to test the hypotheses (Zhou

*et al.* 2007, p. 313). That is, when examining the moderating effects of the contingency variables, two separate regression analyses were conducted, one with an interaction term constituted by market orientation and the contingency variable, one with an interaction term constituted by entrepreneurial orientation and the contingency variable.

Before conducting the moderated hierarchical regression analyses, the main effects of market and entrepreneurial orientations' on export performance were assessed. The results indicated that the unstandardized coefficient beta for market orientation was .361 with a *t-value* of 2.513 which was significant at .01 level. The unstandardized coefficient beta for entrepreneurial orientation was -.313 with a *t-value* of -1.083 which was not significant. This results support the results attained by structural equation modeling previously.

### ***Moderated Hierarchical Regression Analyses***

As stated earlier a blockwise approach was employed which required analysis of ten different moderated hierarchical regression models. The results of these analyses are reported below and in Table 5.2.2.2.2.

#### ***H6a-b - Size***

H6a posited that market orientation would have a positive effect on export performance for larger firms. The results of the hierarchical regression analysis are as follows:

- The unstandardized coefficient beta for market orientation was .422 with a *t-value* of 2.951 which was significant at  $P < .01$  level ( $\beta = .422, t = 2.951, p = .004$ ).
- The unstandardized coefficient beta for entrepreneurial orientation was -.221 with a *t-value* of -.754 which was not significant ( $\beta = -.221, t = -.754, p = .45$ ).
- The unstandardized coefficient beta for size was .267 with a *t-value* of 1.977 which was significant at  $P < .01$  level ( $\beta = .267, t = 1.977, p = .05$ ).

- The unstandardized coefficient beta for the interaction term MOxSIZE was -.094 with a *t-value* of -.643 which was not significant ( $\beta = -.094, t = -.643, p = .52$ ).
- Variance inflated factor (VIF) and tolerance values indicated no evidence for multicollinearity<sup>7</sup>.

These results indicated that market orientation – export performance relationship was significantly positive, while entrepreneurial orientation – export performance relationship was not significant. Size did not moderate the relationship between market orientation and export performance. Therefore, H6a was not supported by the data.

H6b argued that entrepreneurial orientation would have a negative impact on export performance for larger firms. The results of the moderated regression analysis are as follows:

- The unstandardized coefficient beta for market orientation was .433 with a *t-value* of 3.047 which was significant at  $P < .01$  level ( $\beta = .433, t = 3.047, p = .003$ ).
- The unstandardized coefficient beta for entrepreneurial orientation was -.236 with a *t-value* of .422, which was not significant ( $\beta = -.236, t = -.805, p = .42$ ).
- The unstandardized coefficient beta for size was .225 with a *t-value* of .144 which was not significant ( $\beta = .225, t = 1.470, p = .11$ ).
- The unstandardized coefficient beta for the interaction term EOxSIZE was .139 with a *t-value* of .614 which was not significant ( $\beta = .139, t = .506, p = .614$ ).
- The VIF and tolerance values indicated no evidence for multicollinearity.

These results indicated that market orientation – export performance relationship was significantly positive, while entrepreneurial orientation – export performance relationship was not significant. Size did not have any significant impact on export performance, and it did not moderate the relationship between entrepreneurial orientation and export performance. Therefore, H6b was rejected by the data.

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<sup>7</sup> Multicollinearity was not an issue as VIF value was smaller than 3.5 (Ramani and Kumar 2008)

### ***H7a-b - Export Experience***

H7a proposed that for firms with more export experience market orientation would have a positive effect on export performance. The results of the hierarchical regression analysis are as follows:

- The unstandardized coefficient beta for market orientation was .286 with a *t-value* of 1.725 which was marginally significant ( $\beta = .286, t = 1.725, p = .09$ ).
- The unstandardized coefficient beta for entrepreneurial orientation was -.339 with a *t-value* of -1.164 which was not significant ( $\beta = -.339, t = -1.164, p = .25$ ).
- The unstandardized coefficient beta for experience was .144 with a *t-value* of .891 which was not significant ( $\beta = .144, t = .891, p = .37$ ).
- The unstandardized coefficient beta for the interaction term MOxEXP was -.015 with a *t-value* of -.120 which was not significant ( $\beta = -.015, t = -.124, p = .90$ ).
- The VIF and tolerance values indicated no evidence for multicollinearity.

These results indicated that market orientation – export performance relationship was significantly positive, while entrepreneurial orientation – export performance relationship was not significant. Size of the exporting firm did not moderate the relationship between market orientation and export performance. Therefore, H7a was not supported by the data.

H7b argued that for firms with more export experience entrepreneurial orientation would have a negative effect on export performance. The results of the hierarchical regression analysis are as follows:

- The unstandardized coefficient beta for market orientation was .298 with a *t-value* of 1.834 which was marginally significant at  $P < .07$  level ( $\beta = .298, t = 1.834, p = .07$ ).
- The unstandardized coefficient beta for entrepreneurial orientation was -.306 with a *t-value* of .635, which was not significant ( $\beta = -.306, t = -1.066, p = .29$ ).

- The unstandardized coefficient beta for export experience was .101 with a *t-value* of 1.470 which was not significant ( $\beta = .101, t = .635, p = .53$ ).
- The unstandardized coefficient beta for the interaction term EOxEXP was .496 with a *t-value* of 2.200 which was significant ( $\beta = .496, t = 2.200, p = .04$ ).
- The VIF and tolerance values indicated no evidence for multicollinearity.

The results of the hierarchical regression analysis that examined the moderating effect of size on entrepreneurial orientation - export performance indicated that export experience of the company did not have an impact on the strength of the relationship between entrepreneurial orientation and export performance. Therefore, H7<sub>b</sub> is not supported by the survey data.

#### ***H8<sub>a-b</sub> - Market Diversification***

H8<sub>a</sub> which proposed that for firms serving diversified markets market orientation would have a negative impact on export performance. The results of the hierarchical regression analysis are as follows:

- The unstandardized coefficient beta for market orientation was .331 with a *t-value* of 2.079 which was significant ( $\beta = .331, t = 2.079, p = .04$ ).
- The unstandardized coefficient beta for entrepreneurial orientation was -.348 with a *t-value* of -1.198 which was not significant ( $\beta = -.348, t = -1.112, p = .23$ ).
- The unstandardized coefficient beta for market diversification was .119 with a *t-value* of .787 which was not significant ( $\beta = .119, t = .750, p = .43$ ).
- The unstandardized coefficient beta for the interaction term MOxDIV was .121 with a *t-value* of 1.023 which was not significant ( $\beta = .121, t = 1.122, p = .38$ ).
- The VIF and tolerance values indicated no evidence for multicollinearity.

These results of the moderated hierarchical regression analysis indicated that market orientation – export performance relationship was significantly positive, while entrepreneurial orientation – export performance relationship was not significant. The

level of market diversification did not moderate the relationship between market orientation and export performance. Therefore, H8a was not supported by the data.

H8b posited that entrepreneurial orientation would have a negative impact on export performance for firms serving diversified markets. The results of the hierarchical regression analysis are as follows:

- The unstandardized coefficient beta for market orientation was .289 with a *t-value* of 1.828 which was marginally significant ( $\beta = .289, t = 2.397, p = .07$ ).
- The unstandardized coefficient beta for entrepreneurial orientation was -.331 with a *t-value* of -1.074, which was not significant ( $\beta = -.331, t = -.963, p = .28$ ).
- The unstandardized coefficient beta for market diversification was .112 with a *t-value* of .740 which was not significant ( $\beta = .112, t = -.866, p = .46$ ).
- The unstandardized coefficient beta for the interaction term EOxDIV was .248 with a *t-value* of 1.046 which was not significant ( $\beta = .248, t = 1.252, p = .30$ ).
- The VIF and tolerance values indicated no evidence for multicollinearity.

These results indicated that market orientation – export performance relationship was significantly positive, while entrepreneurial orientation – export performance relationship was not significant. Export experience did not moderate the relationship between market orientation and export performance. Therefore, H8b was rejected by the data.

### ***H9<sub>a-b</sub> - Product Adaptation***

H9<sub>a</sub> proposed that for firms following a product adaptation strategy would have a positive effect on export performance. The results of the hierarchical regression analysis are as follows:

- The unstandardized coefficient beta for market orientation was .327 with a *t-value* of 2.177 which was significant ( $\beta = .327, t = 2.177, p = .03$ ).
- The unstandardized coefficient beta for entrepreneurial orientation was -.368 with a *t-value* of -1.275 which was not significant ( $\beta = -.368, t = -1.275, p = .20$ ).
- The unstandardized coefficient beta for product adaptation was .258 with a *t-value* of 1.794 which was marginally significant ( $\beta = .258, t = 1.794, p = .07$ ).
- The unstandardized coefficient beta for the interaction term MOxPAD was .061 with a *t-value* of .470 which was not significant ( $\beta = .061, t = .470, p = .64$ ).
- The VIF and tolerance values indicated no evidence for multicollinearity.

These results indicated that market orientation – export performance relationship was significantly positive, while entrepreneurial orientation – export performance relationship was not significant. Product adaptation strategy did not moderate the relationship between market orientation and export performance. Therefore, H9<sub>b</sub> was rejected by the data.

H9<sub>b</sub> posited that entrepreneurial orientation would have a negative impact on export performance for firms with higher levels of product adaptation. The results of the moderated regression analysis are as follows:

- The unstandardized coefficient beta for market orientation was .308 with a *t-value* of 2.124 which was significant ( $\beta = .308, t = 2.124, p = .03$ ).
- The unstandardized coefficient beta for entrepreneurial orientation was -.355 with a *t-value* of -1.233, which was not significant ( $\beta = -.355, t = -1.233, p = .22$ ).
- The unstandardized coefficient beta for product adaptation was .267 with a *t-value* of 1.829 which was significant ( $\beta = .267, t = 1.829, p = .07$ ).

- The unstandardized coefficient beta for the interaction term EOxPAD was .054 with a *t-value* of .220 which was not significant ( $\beta = .054, t = .220, p = .83$ ).
- The VIF and tolerance values indicated no evidence for multicollinearity.

These results of the moderated hierarchical regression analysis indicated that market orientation – export performance relationship was significantly positive, while entrepreneurial orientation – export performance relationship was not significant. Product adaptation strategy did not moderate the relationship between market orientation and export performance. Thus, H9b was not supported.

#### ***H10a-b – Market Dynamism***

H10a which proposed that under conditions of export market dynamism market orientation would have a negative influence on export performance. The results of the hierarchical regression analysis are as follows:

- The unstandardized coefficient beta for market orientation was .396 with a *t-value* of 2.684 which was significant ( $\beta = .396, t = 2.684, p = .01$ ).
- The unstandardized coefficient beta for entrepreneurial orientation was -.304 with a *t-value* of -1.044 which was not significant ( $\beta = -.304, t = -1.044, p = .30$ ).
- The unstandardized coefficient beta for market dynamism was -.163 with a *t-value* of -1.042 which was not significant ( $\beta = -.163, t = -1.042, p = .30$ ).
- The unstandardized coefficient beta for the interaction term MOxDYN was .118 with a *t-value* of .879 which was not significant ( $\beta = .118, t = .879, p = .38$ ).
- The VIF and tolerance values indicated no evidence for multicollinearity.

These results of the moderated hierarchical regression analysis indicated that market orientation – export performance relationship was significantly positive, while entrepreneurial orientation – export performance relationship was not significant. Market

dynamism did not moderate the relationship between market orientation and export performance. Thus, H10a was rejected.

H10b posited that entrepreneurial orientation would have a positive influence on export performance under conditions of export market dynamism. The results of the hierarchical regression are as follows:

- The unstandardized coefficient beta for market orientation was .376 with a *t-value* of 2.560 which was significant at  $P < .01$  level ( $\beta = .376, t = 2.560, p = .01$ ).
- The unstandardized coefficient beta for entrepreneurial orientation was -.271 with a *t-value* of -.922, which was not significant ( $\beta = -.271, t = -.922, p = .36$ ).
- The unstandardized coefficient beta for market dynamism was -.146 with a *t-value* of -.916 which was not significant ( $\beta = -.146, t = -.916, p = .36$ ).
- The unstandardized coefficient beta for the interaction term EOxDYN was .154 with a *t-value* of .587 which was not significant ( $\beta = .154, t = .587, p = .56$ ).
- The VIF and tolerance values indicated no evidence for multicollinearity.

These results indicated that market orientation – export performance relationship was significantly positive, while entrepreneurial orientation – export performance relationship was not significant. Market dynamism did not moderate the relationship between market orientation and export performance. Therefore, H10b was rejected by the data.

**Table 5.2.2.2.2**  
**2-Stage Hierarchical Regression Analysis Results**

<b>Variables</b>	<b>Hypothesis</b>	<b>Unstandardized Coefficient</b>		<b>t-value</b>	<b>Collinearity Statistics</b>	
		<b>Beta</b>	<b>Standard Error</b>		<b>Tolerance</b>	<b>VIF</b>
<b>Size (MO→EP)</b>						
<u>Main effects-only model (<math>R^2 = .075</math>)</u>						
(Constant)		4.053	.144	28.167***		
MO		.432	.142	3.053***	.882	1.134
EO		-.231	.292	-.789	.884	1.131
SIZE		.261	.134	1.942**	.967	1.035
<b>Moderator effects model (<math>R^2 = .078</math>)</b>						
(Constant)		4.043	.145	27.883***		
MO		.422	.143	2.951***	.870	1.150
EO		-.221	.293	-.754	.882	1.134
SIZE		.267	.135	1.977**	.962	1.039
MOxSIZE	(H6a)	-.094	.146	-.643	.979	1.022
<b>Size (EO→EP)</b>						
<u>Main effects-only model (<math>R^2 = .075</math>)</u>						
(Constant)		4.053	.144	28.167***		
MO		.432	.142	3.053***	.882	1.134
EO		-.231	.292	-.789	.884	1.131
SIZE		.261	.134	1.942**	.967	1.035
<b>Moderator effects model (<math>R^2 = .077</math>)</b>						
(Constant)		4.047	.145	27.971***		
MO		.433	.142	3.047***	.882	1.134
EO		-.236	.293	-.805	.883	1.133
SIZE		.225	.153	1.470	.752	1.330
EOxSIZE	(H6b)	.139	.274	.506	.768	1.302

**Table 5.2.2.2.2 (Continued)**  
**2-Stage Hierarchical Regression Analysis Results**

<b>Variables</b>	<b>Hypothesis</b>	<b>Unstandardized Coefficient Beta</b>	<b>Standard Error</b>	<b>t-value</b>	<b>Collinearity Statistics Tolerance</b>	<b>VIF</b>
<b>Export Experience (MO→EP)</b>						
<u>Main effects-only model (<math>R^2 = .047</math>)</u>						
(Constant)		4.106	.147	25.875***		
MO		.288	.165	1.749*	.675	1.482
EO		-.338	.291	-1.164	.876	1.141
EXP		.146	.160	-.914	.713	1.402
<u>Moderator effects model (<math>R^2 = .047</math>)</u>						
(Constant)		4.114	.163	25.271***		
MO		.286	.166	1.725*	.669	1.494
EO		-.339	.292	-1.164	.875	1.142
EXP		.144	.162	.891	.704	1.421
MOxEXP	(H7a)	-.015	.120	-.124	.950	1.052
<b>Export Experience (EO→EP)</b>						
<u>Main effects-only model (<math>R^2 = .047</math>)</u>						
(Constant)		4.106	.147	25.875***		
MO		.288	.165	1.749*	.675	1.482
EO		-.338	.291	-1.164	.876	1.141
EXP		.146	.160	-.914	.713	1.402
<u>Moderator effects model (<math>R^2 = .048</math>)</u>						
(Constant)		4.034	.149	27.086***		
MO		.286	.163	1.834*	.674	1.483
EO		-.306	.287	-1.066	.874	1.144
EXP		.101	.160	.635	.701	1.426
EOxEXP	(H7b)	.496	.225	2.200	.981	1.019

**Table 5.2.2.2.2 (Continued)**  
**2-Stage Hierarchical Regression Analysis Results**

<b>Variables</b>	<b>Hypothesis</b>	<b>Unstandardized Coefficient Beta</b>	<b>t-value</b>	<b>Collinearity Statistics Tolerance VIF</b>
<b>Market Diversification (MO→EP)</b>				
<u>Main effects-only model (<math>R^2 = .045</math>)</u>				
(Constant)		4.098	28.011***	
MO		.305	1.937**	.740 1.351
EO		-.321	-1.108	.884 1.132
DIV		.134	.892	.812 1.231
<u>Moderator effects model (<math>R^2 = .053</math>)</u>				
(Constant)		4.046	26.088***	
MO		.331	2.079**	.720 1.389
EO		-.348	-1.198	.876 1.142
DIV		.119	.787	.804 1.243
MOxDIV	(H8a)	.121	1.023	.969 1.032
<b>Market Diversification (EO→EP)</b>				
<u>Main effects-only model (<math>R^2 = .045</math>)</u>				
(Constant)		4.098	28.011***	
MO		.305	1.937**	.740 1.351
EO		-.321	-1.108	.884 1.132
DIV		.134	.892	.812 1.231
<u>Moderator effects model (<math>R^2 = .055</math>)</u>				
(Constant)		4.079	27.658***	
MO		.289	1.828*	.733 1.364
EO		-.331	-1.074	.883 1.133
DIV		.112	.740	.797 1.255
EOxDIV	(H8b)	.248	1.046	.954 1.048

**Table 5.2.2.2.2 (Continued)**  
**2-Stage Hierarchical Regression Analysis Results**

<b>Variables</b>	<b>Hypothesis</b>	<b>Unstandardized Coefficient Beta</b>	<b>Standard Error</b>	<b>t-value</b>	<b>Collinearity Statistics Tolerance</b>	<b>VIF</b>
<b>Product Adaptation (MO→EP)</b>						
<u>Main effects-only model (<math>R^2 = .068</math>)</u>						
(Constant)		4.105	.144	28.454***		
MO		.309	.145	2.133**	.856	1.169
EO		-.357	.287	-1.244	.879	1.137
PAD		.278	.137	2.020**	.948	1.055
<u>Moderator effects model (<math>R^2 = .069</math>)</u>						
(Constant)		4.090	.148	27.610***		
MO		.327	.150	2.177**	.799	1.252
EO		-.368	.289	-1.275	.873	1.145
PAD		.258	.144	1.794*	.869	1.151
MOxPAD	(H9a)	.061	.130	.470	.878	1.139
<b>Product Adaptation (EO→EP)</b>						
<u>Main effects-only model (<math>R^2 = .068</math>)</u>						
(Constant)		4.105	.144	28.454***		
MO		.309	.145	2.133**	.856	1.169
EO		-.357	.287	-1.244	.879	1.137
PAD		.278	.137	2.020**	.948	1.055
<u>Moderator effects model (<math>R^2 = .068</math>)</u>						
(Constant)		4.101	.146	28.103***		
MO		.308	.145	2.124**	.855	1.169
EO		-.355	.288	-1.233	.879	1.138
PAD		.267	.146	1.829*	.845	1.183
EOxPAD	(H9b)	.054	.245	.220	.887	1.127

**Table 5.2.2.2.2 (Continued)**  
**2-Stage Hierarchical Regression Analysis Results**

<b>Variables</b>	<b>Hypothesis</b>	<b>Unstandardized Coefficient Beta</b>	<b>Standard Error</b>	<b>t-value</b>	<b>Collinearity Statistics Tolerance</b>	<b>VIF</b>
<b>Market Dynamism (MO→EP)</b>						
<u>Main effects-only model (<math>R^2 = .045</math>)</u>						
(Constant)		4.077	.146	27.915***		
MO		.380	.146	2.597***	.857	1.166
EO		-.294	.291	-1.011	.877	1.140
DYN		-.101	.139	-.724	.946	1.057
<u>Moderator effects model (<math>R^2 = .050</math>)</u>						
(Constant)		4.050	.149	27.131***		
MO		.396	.147	2.684***	.844	1.185
EO		-.304	.291	-1.044	.876	1.142
DYN		-.163	.156	-1.042	.755	1.325
MOxDYN	(H10a)	.118	.134	.879	.793	1.261
<b>Market Dynamism (EO→EP)</b>						
<u>Main effects-only model (<math>R^2 = .045</math>)</u>						
(Constant)		4.077	.146	27.915***		
MO		.380	.146	2.597***	.857	1.166
EO		-.294	.291	-1.011	.877	1.140
DYN		-.101	.139	-.724	.946	1.057
<u>Moderator effects model (<math>R^2 = .047</math>)</u>						
(Constant)		4.061	.149	27.305***		
MO		.376	.147	2.560***	.855	1.169
EO		-.271	.294	-.922	.862	1.161
DYN		.146	.159	-.916	.727	1.376
EOxDYN	(H10b)	.154	.263	.587	.755	1.324

\*\*\*  $p < .01$

\*\*  $p < .05$

\*  $p < .10$   
✓ Hypothesis is supported

## **CHAPTER VI – DISCUSSION AND CONCLUSIONS**

In this chapter the results of the data analyses are interpreted and discussed. First, a detailed discussion of the finding is provided. Next, contributions of this current study are highlighted. Finally, the limitations of the study are discussed.

### **6.1 DISCUSSION OF RESEARCH FINDINGS**

This section discusses the empirical findings presented in the previous chapter. One of the objectives of this study was to investigate the component-level relationship between market and entrepreneurial orientation. A second objective was to identify how these two orientations differed. A set of contingency variables were identified and their relative influence on market and entrepreneurial orientations impact on export performance were assessed. Therefore, this section is organized in two sections. In the first section, the results of the first model (Model 1-A) is discussed. In the second section, the results of the second model (Model 2) are discussed.

#### **6.1.1 Discussion of the Results for Model 1**

Although the conceptual model calls for a reciprocal relationship between interfunctional coordination and innovativeness, such a model with a feedback loop is not possible to examine as the model is instable. Therefore, two models with one directional path, one with a path from interfunctional coordination to innovativeness, the other with a path from innovativeness are compared based on their fit indices. The model (Model 1-A) which has a path from interfunctional coordination to innovativeness has better model fit, therefore, is chosen for the analyses of H1a-H3c.

The results of the analysis indicate that customer orientation has a negative influence on the proactiveness of exporting firms. This finding is contrary to the expectations and previous research (e.g., Zehir and Eren 2007; Low, Chapman and Sloan 2007) that established a positive relationship between customer orientation and proactiveness. One possible explanation for such a finding could be that customer orientation is reactive in nature (Han, Kim and Srivasta 1998; Day and Wensley 1988):

“[A] complete reliance on customer orientation often can lead to incompleteness in business strategy, which leaves an organization prone to a reactive posture, as opposed to a proactive disposition” (Han *et al.* (1998, p. 34).

Future studies may utilize Narver, Slater and MacLachlan's (2000) customer orientation scale with two dimensions: reactive customer orientation and proactive customer orientation. Low reliability of the proactiveness scale casts doubt to the accuracy of this finding.

This study demonstrates that customer orientation has negative impact on risk-taking and innovativeness of exporting firms, as expected. The presence of strong negative relationship between customer orientation and risk-taking supports the view that the more market-oriented an export firm is the more risk-averse it will be. Similarly, exporting firms that are customer-oriented will be less innovative (Gatignon and Xuereb 1997; Voss and Voss 2000). This finding is consisted with the arguments of the scholars who warned about the negative impact of focusing too much on the customers (MacDonald 1995; Christensen and Bower 1996; Christensen 1997; and Berthron *et al.* 1999). Cadogan *et al.* (2002) summarized this view:

“[T]he central tenet of the marketing concept, customer orientation, is too restrictive for many firms, and that the adoption of other business philosophies may be more appropriate for some companies. That is,

market-oriented approaches to business reduce innovation and risk taking, resulting in the design and production of inferior products in the long run, since customers are unable to vocalize future needs beyond their current consumption experiences.”

The study results demonstrate that the more competitor-oriented an export firm is the more proactive and innovative it will be. These findings are consistent with the view suggested by previous studies (Han et al. 1998; Wu, Maharajan, and Balasubramanian 2003). It is argued that such attention to competitive factors would grant an exporting firm with a proactive disposition toward shaping the competitive environment and its own strategy (Wu *et al.* 2003, p. 431). Also, competitor orientation is positively related to risk-taking proclivity of exporting firms. Highly competitor-oriented exporting firms are more likely to take risks (Matsuno, Mentzer and Özsomer 2002)

No significant relationship is found between interfunctional coordination and proactiveness of exporting firms. This result does not support the argument that a strong interfunctional coordination leads to strong proactiveness in exporting firms. This may be due to the low reliability for the proactiveness scale.

As expected when different functions in the organizations are highly connected with each other the higher the innovativeness in the organization (Narver and Slater 1990; Im and Workman 2004). As this study focuses on the exporting operations it can be said that innovativeness on exporting operations depends upon the interfunctional coordination of the whole organization.

### **6.1.2 Discussion of the Results of Analyses of Model 2**

Consistent with the expectations, market orientation is positively related to export performance. This result is consistent with prior research on domestic (Kropp, Lindsay,

Shoham 2006; Kirca *et al.* 2005) and international firms (Rose and Shoham 2002; Cadogan, Diamantopoulus and de Mortanges 1999; Gray *et al.* 1999). This research adds on to the previous research findings on positive market orientation-performance relationship by focusing on international operations.

In terms of entrepreneurial orientation - export performance relationship, the results indicated no statistically significant relationship between these two constructs. This finding is not consistent with the results of earlier studies (e.g., Zahra and Covin 1995; Wiklund and Shepherd 2003; Barrett *et al.* 2000) that suggested a strong positive impact of entrepreneurial orientation on firm performance. However, there are other studies that found a negative relationship between entrepreneurial orientation and firm performance (e.g., Matsuno *et al.* 2002; Morgan and Strong 2003; Slevin and Covin 1990; Smart and Conant 1994). This insignificant result might be due to entrepreneurial orientation's delayed effect on export performance (Slater and Narver 2000; Zahra and Covin 1995). Thus, future studies can utilize longitudinal design to deal with this delayed effect (Zahra and Covin 1995). Additionally, different dimensions of entrepreneurial orientation might have different effects on export performance. For example, Hughes and Morgan (2007) found that only proactiveness and innovativeness have a positive influence on business performance, while risk-taking has a negative relationship. An aggregate (higher-order) approach "neglects the individual influence of each dimension and assumes a universal and uniform influence by each dimension" (Hughes and Morgan 2007, p. 652). However, each dimension can vary independently (Lumpkin and Dess 1996). This finding also agrees with the contingency perspective adopted in this dissertation study. As stated earlier contingency theory argues that the performance

implications of market orientation and entrepreneurial orientation (Dess, Lumpkin, and Covin 1997) are dependent on contingency factors. In the next section, the results of the hierarchical regression analysis are discussed.

### **Moderator Effects**

In the current study, organizational resources, organizational strategy and export environment were believed to moderate the relationships between market and entrepreneurial orientations and export performance. Specifically, size and experience were identified to be two important resources of an organization; market diversification and product adaptation were identified to be two important strategies; and export market dynamism was identified to be an important environmental factor in the context of exporting. However, contrary of the expectations results of the data analyses indicated a lack of support for the moderating of these factors, with the exception of support for the moderating role of export experience on the entrepreneurial orientation – export performance relationship.

#### **Size**

The results of the moderated regression analysis indicate that market orientation significantly impacts export performance of all sizes of firms and there is no significant difference for smaller and larger firms. Therefore, it is concluded that regardless of size market orientation has a significant impact on export performance. This is consisted with the literature on domestic firms that found that regardless of the firm size market orientation has positive impact on firm performance (Pelham 2000; Kara, Spillan and DeShields 2005). As stated earlier, contrary to the expectation entrepreneurial orientation does not have any significant effect on the export performance of firms. The results also

indicate that this relationship is not different among different sizes of exporting firms. This finding supports Brown, Davidson and Wiklund's (2001) statement that entrepreneurship is irrelevant to the size of the firm and firms of all sizes can benefit from an entrepreneurial posture. Another possible explanation of not finding any differences might be based on the operationalization of the size. In this dissertation research size was measured by the total number of employees working in the company. A better operationalization might be only including employees involved with the exporting operations or working in the export department. It is possible that a firm might be large in size but would not be allocating resources to the exporting department. It is also possible the firm might be small in size but exporting is emphasized and thus more resources might have been made available for exporting operations.

One of the interesting findings is the positive direct impact of firm size on export performance when it is entered with market and entrepreneurial orientations, and the interaction term – size and market orientation. However, if it is entered into regression with the interaction term – size and entrepreneurial orientation it is not significant. This points out that the direct impact of firm size is not robust. This is consistent with other studies that controlled for firm size and reported finding no such effect (e.g., Im and Workman 2004; Jantunen *et al.* 2005). Post-hoc analyses were conducted to examine whether firm size had a direct impact on export performance in the presence of other variables, but no significant support was found for this relationship.

#### Export Experience

The results indicated lack of support for the moderating role of export experience on market orientation – export performance relationship. It was argued that the more

experienced an exporting firm was the more likely it is going to be benefitting from a market oriented culture. However, adopting the behavioral perspective of market orientation, Cadogan *et al.* (2006) establish that export experience enhances the market orientation of firms in their export operations. They suggest that “experience may provide business with knowledge of information sources and intuitive understanding of market responses to marketing plans” (p. 642). It is possible that as the company gains experience in export markets its culture is going to be effected by these experience as well, where the focus will be satisfying export customers needs and wants better than its competitors. Trying to serve customers with diverse needs might emphasize the need for focusing on customers instead of products, production or selling.

The results indicate no support for the moderating impact of export experience on entrepreneurial orientation – export performance relationship, contrary to the expectation that there will be a negative moderating effect. It was argued that with increased experience the impact of entrepreneurial orientation on export performance would be less pronounced. Future studies might examine the antecedent role of export experience on market and entrepreneurial orientations of exporting firms.

#### Product Adaptation

The finding that product adaptation does not have any moderating impact is not expected. One possible explanation for the lack of support for the moderating effect of product adaptation strategy on market orientation and performance relationship and entrepreneurial orientation and performance relationship might be due to product adaptation strategy mediating the relationships instead of moderating them. Knight and Cavusgil (2004) argued that business strategies were mediators of the international

market orientation- and international entrepreneurial orientation-performance relationships. International market orientation and international entrepreneurial orientation stimulate the development of organizational strategies, which in return enhances the export performance (Knight and Cavusgil 2004, p. 130). Although Knight and Cavusgil's (2004) study does not specifically examine the mediating impact of product adaptation strategy, it can be argued that product adaptation strategy mediates the relationships between the orientations and export performance. Calantone *et al.* (2006) established that the level product adaptation in exporting firms depends upon firm factors, such as openness to innovation and export dependence. The measures used by Calantone *et al.* (2006) for openness to innovation deal with innovativeness, customer focus and interfunctional coordination. Thus, it is possible to include market and entrepreneurial orientation in internal factors. In summary, one can argue that market and entrepreneurial orientations have direct impact on product adaptation decisions of exporting firm. Future studies may examine the antecedent roles of market and entrepreneurial orientations on product adaptation decisions of exporting firms.

#### Export Market Diversification

Similar to finding no moderating role of product adaptation strategy, the results of the study indicated that exporting firms that used an export market diversification strategy or export market concentration strategy equally benefited from market orientation. That is, firms that focused on a few export markets, or firms that served diverse markets were both able to take advantage of a customer and competitor focus. Also, implementation of diversification or concentration strategy did not have any impact on the entrepreneurial orientation – performance relationship. The lack of moderating

role of market diversification strategy might be also explained by its mediating role. As stated in the previous section, based on Knight and Cavusgil's (2004) study, international market orientation and international entrepreneurial orientation of a company might determine the international strategic choices, which in return determine the export performance. To enter the international markets by a diversification or concentration strategy might be influenced by market and entrepreneurial orientations of exporting firms. Therefore, study of such relationship is proposed for future studies.

#### Export Market Dynamism

Contrary to expectations but consistent with the Jaworski and Kohli's (1993) and Slater and Narver's (1994) the findings indicate that regardless of market dynamism market orientation is an important determinant of export performance. However, this finding is not in agreement with Lumpkin and Dess's (2001) argument that uncertain and dynamic environments make it difficult to adapt and react to customers and competitors. Also, contrary to expectations this study find no support for the argument that firms that operate in export markets that are defined by high rate of obsolesce, unpredictable competitors, consumer demands and tastes would benefit from an entrepreneurial spirit than firms that operate in stable export markets. The finding of no moderating role is unexpected given the positive reports from Luo *et al.*'s (2005); Zahra's (1993), Zahra and Covin's (1995) works.

The lack of support for the moderating impact of the identified contingency variables might be due to weaknesses inherent in the current study. First, as stated previous although hierarchical multiple regression analysis posited to be superior to multiple group analysis (Frazier, Tix and Barron 2004) it has its own weaknesses. This

methodology has been criticized in the literature based on its low power (Aguinis 1995, Aguinis 2002). In other words, it causes high Type II errors, which is concluding there is no interacting effect when indeed there is an interacting effect. One of the explanations for its low power is based on the size of main effects (Rogers 2002). Unless there are strong main effects the interaction effects would not be significant (Rogers 2002). In this study, the main effects are not strong; indeed one of the main effects – entrepreneurial orientation – is not significant. A second explanation concerns the strength of the moderating impact. Darrow and Kahl (1982, p. 45) state that the search of moderator effects is often futile as “the detection of moderator effects depends not so much on the existence of those effect but, rather, on the strengths of those effects.” The scholars added that this was especially the case for continuous moderating variables. However, they also warn about creating sub-groups from continues variables as this would result in lost of information. In this dissertation all the moderating variables were either continues or ordinal. The third reason for not finding significant moderator effects for the entrepreneurial orientation – export performance relationship might be due to low reliability of the entrepreneurial orientation scale. Measurement error in individual variables considerably decreases the reliability of the interaction term constructed by this variable (Frazier 2004, Aguinis 1995). In summary, failure to find a moderation effect does not really suggest the nonexistence of such effect, but that the effect is not exceptionally strong (Darrow and Kahl 1982).

## **6.2 MANAGERIAL IMPLICATIONS**

Managers are interested in three main issues pertaining to market and entrepreneurial orientations. First, how adopting one orientation influences the other

orientation? Second, what are the impacts of both orientations? Third, under certain conditions what is the relative effectiveness of market orientation and entrepreneurial orientation? This dissertation study provides insights into each of these issues.

*First*, export managers should assess the trade-offs between adopting different dimensions of market orientation. For example, when an exporting firm focuses on satisfying its customers it tends to be risk-averse, while when it focuses on tracking its competitors it is more likely to take risks. Also, when an exporting firm listens to its customers and monitors its competitors it tends to have problems with providing innovative products/services/processes. On the other hand, an exporting firm that shares information throughout its organization tends to be more innovative. Adopting a customer and competitor oriented posture might be successful in industries where the need for innovation is less pronounced. Another implication of the study which is consistent with the previous studies (Sheth and Sisodia 1999; Jaworski, Kohli and Sahay 2000; Atuahene-Gima and Ko 2001) is that customer and competitive orientations leads to reactive posture. That is, these two orientations do not promote taking initiative.

As stated earlier this reactive nature of market orientation was raised in the literature. In response, Jaworski, Kohli and Sahay (2000) presented a new perspective that encompassed not only being influenced by the market but also influencing and shaping it to the advantage of the company. The scholars called the new approach “Driving Markets,” and argued that this approach was a complimentary approach to market-driven perspective<sup>8</sup>. Jaworski *et al.* (2000, p. 45) stated that although both approaches involved a focus on market conditions (customers, competitors, and other), “the market-driven” perspective “accept[ed] the market structure and/behavior of market

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<sup>8</sup> The terms market orientation and market-driven are used in the marketing literature interchangeably.

players as a constraint and work[ed] to enhance customer value within these constraints.” On the other hand, “the driving markets” perspective entailed “changing the structure or composition of a market and/or behavior[s] of players in the market” (Jaworski *et al.* 2000, p. 46). The existing scales for market orientation measure the market-driven perspective and focused on discovering current needs of customers. Jaworski *et al.* (2000) stated that latent needs are not apparent to customers and competitors and could only be uncovered by implementing a driving markets perspective.

*Second*, focusing on the needs of the customers, monitoring the activities of the competitors and coordination of different functional departments are required for success in export markets. *Third*, market orientation is beneficial to all firms, regardless of size, export experience, export strategy or environmental conditions. Thus, it is important for exporting firms to foster an export market-oriented culture. There are basically two different approaches to developing a market orientation: programmatic approach and market-back approach (Narver, Slater and Tietje 1998). The programmatic approach is an a priori approach where it focuses on training the employees on the nature and importance of export market orientation, as well as how it can be attained. Market-oriented training enhances employees’ sensitivity to customer needs, thus inspiring actions that are consistent with the requirements of market orientation (Ruekert 1992). The market-back approach is based on continuous experiential learning where the employees continuously learn from day-to-day operations to create customer value based on outcomes. Managers of exporting firms are suggested to use both approaches as although market-back approach is more effective it is insufficient. Thus, both approaches

should be used complementing each other. Under the programmatic approach top managers of the exporting firms needs to pursue the following suggestions:

*First*, managerial emphasis is very important in establishing a market orientation, as without the management's encouragement market orientation would not take root in the exporting firms (Kohli and Jaworski 1990; Jaworski and Kohli 1993; Pulendran, Speed and Widing 2000; Kennedy, Goolsby and Arnould 2003; Gebhardt, Carpenter and Sherry 2006). "Without managerial vision and purpose organized to satisfy customers, employees may work conscientiously, but individually they cannot transform an organization" (Kennedy *et al.* 2003, p. 68). Although initially the focus was on top management emphasis (e.g., Kohli and Jaworski 1990; Jaworski and Kohli 1993), Kennedy, Goolsby and Arnould (2003) found by their qualitative study that middle management emphasis was as important as top management emphasis. For staff members to internalize a market orientation, "an unbroken circuit of passionate, sincere, unified, and committed leadership," should be observed from senior managers to lower level managers (Kennedy *et al.* 2003, p. 77). Gebhardt *et al.* (2006, p. 53) state that the change process begins with the formation of elite group of insurgents. This elite group activates the "masses" to build a consensus for organizational change. Therefore, for exporting firms those want to develop and internalize a market-oriented culture, their managers need to emphasize its importance.

*Second*, reward systems that are based on customer satisfaction facilitate market orientation (Pulendran *et al.* 2000). "Market-based reward systems use market-oriented behaviors as metrics to reward employees, thus motivating employee actions that enhance market orientation" (Kirca *et al.* 2005). Rewarding the employees on export market-based criteria such as export market share, export customer retention, export customer satisfaction indexes facilitates market orientation in exporting operations of US firms (Cadogan *et al.* 2006). Thus, the exporting firms should provide the resources, motivation and appropriate rewards to its employees to encourage them to be more focused on their export customers and competitors, and establish and maintain coordination among different departments in the organizations. Customer satisfaction assessments could be used as a tool to reward the employees (Pulendran *et al.* 2000) and establish and foster a market-oriented culture (Kirca *et al.* 2005).

*Third*, for larger firms interdepartmental conflict should be minimized as it inhibits market orientation (Kohli and Jaworski 1990; Jaworski and Kohli 1993; Pulendran *et al.* 2000). Interdepartmental conflict is defined as the tension between departments that arises from different goals (Jaworski and Kohli 1993). Interdepartmental conflict among exporting department and other departments restrains the collaborative responses to export market needs (Jaworski and Kohli 1993). Therefore, it is important for managers to minimize conflict between various departments through "cross functional activities and training, a focus on

overall objectives, alignment of departmental objectives and a sense of synergy and commitment within the organization” (Pulendran *et al.* 2000, p. 135).

*Fourth*, for larger firms interdepartmental connectedness enhances market orientation by leading to greater sharing and use of information (Kennedy, Goolsby, and Arnould; Kirca *et al.* 2005). Export managers are recommended to ensure that exporting department is not isolated from the organization.

In summary, this main finding implies that market orientation is the driving force for the success in export markets and an export market orientation needs to be cultivated in the organization.

### **6.3 LIMITATIONS AND SUGGESTIONS FOR FUTURE RESEARCH**

There are several limitations intrinsic in this study, which grant possibilities for future research. In this section, the weaknesses and shortcomings of the current study are discussed and opportunities for future research are suggested.

One of the weaknesses of this dissertation study deals with the low reliability of proactiveness and entrepreneurial orientation scales. The scale for entrepreneurial orientation was borrowed from a previous study (Matsuno, Mentzer and Özsomer 2002) and was adjusted to be used in the context of exporting. Future research should focus on refining the current scales for entrepreneurial orientation, especially in the context of exporting. Matsuno *et al.*'s scale has not been used in many different studies. On the other hand, Covin and Slevin's (1989) entrepreneurial orientation scale is an established scale with proven record of high reliability. Adopting this established scale with proven high reliability might result in a reliable scale for entrepreneurial orientation for exporting firms.

The *second* limitation is the cross-sectional design of the study. A longitudinal design may be more appropriate to study market orientation (Kohli and Jaworski 1990;

Greenley 1995; Siguaw, Simpson and Baker 1998; Noble, Sinha and Kumar 2002) and entrepreneurial orientation (Zahra and Covin 1995), as it might take time before these orientations significantly affect company performance. Also, with a longitudinal design it may be possible to test the reciprocal relationship between interfunctional coordination and innovativeness. Longitudinal studies that examine the impact of market and entrepreneurial orientations on export performance are suggested for future research.

*Third*, the sample size of 150 is relatively small, which may limit the generalizability of the findings. The sample size of 150 usable survey responses is relatively small for the number of questionnaire items. Additionally, the small size might be the reason why the analysis of the nonrecursive model (with a reciprocal relationship between interfunctional coordination and innovativeness) by AMOS indicated instability of the model. Future studies could try to test this reciprocal relationship by utilizing a significantly bigger sample size.

The *fourth* limitation of the study is the questionnaire survey method utilized for data collection. While questionnaire survey method has many advantages, such as speed and cost-advantages, the data is highly influenced by the informants' willingness or ability to provide the information required. It is hard to get the cooperation of the respondents when the responses would be embarrassing, humiliating or showing the respondent in an undesirable light (Churchill 1999). Future studies might attempt to utilize different methods of data collection.

*Fifth*, self-assessment and perceived measures for market and entrepreneurial orientations and export performance are used. Although this is a common practice in the literature, the survey data could be biased due to common method variance (Campbell

and Fiske 1959). The common method variance takes place when observed correlations between variables are inflated or is influenced by some type of systematic respondent bias. The Harman one-factor test results confirmed no evidence for common method variance.

*Sixth*, key informant approach was used to collect data. Data collected from a single manager in each exporting firm might suffer from validity problems (Van Bruggen, Lilien and Kacker 2002). Future research could focus on collecting information from multiple informants who are both knowledgeable about the exporting operations. Furthermore, this study adopts the cultural perspective and accepts market and entrepreneurial orientations as an organizational culture. “(C)ulture is an organizational level construct and therefore needs to be measured at such level,” and key informant approach might not be appropriate (Matsuno and Mentzer 2000,p. 7). Although no evidence of common respondent bias is found, use of multiple raters may enhance the reliability (Huber and Power 1985).

*Seventh*, exclusive reliance of intra-organizational respondents to provide adequate insight might cause problems (Harris 2002, p. 243). For example, the market orientation scale of exporting firms measures orientation toward customers and competitors not from the perspective of the customers and competitors, but from the perspective of export managers (Harris 2002). It is suggested that future studies attempt to collect information from export partners, such as distributors or representatives.

*Finally*, the results of this study are applicable only to US exporters. Caution should be exercised when generalizing the findings of the current study to exporters from

other countries. Future studies can be conducted to test whether the findings apply to exporters from different countries and emerging markets.

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## APPENDICES

## APPENDIX A: MEASUREMENT SCALES

### APPENDIX A.1 – Jaworski and Kohli’s 32-Item Market Orientation Scale

(Jaworski and Kohli 1993)

#### *Intelligence Generation*

1. In this business unit, we meet with customers at least once in a year to find out what products or services they will need in the future.
2. Individuals from our manufacturing department interact directly with customers to learn how to serve them better.
3. In this business unit, we do a lot of in-house market research.
4. We are slow to detect changes in our customer’s product preferences. (R)
5. We poll end users at least once a year to assess the quality of our products and services.
6. We often talk with or survey those who can influence our end users’ purchases (e.g., retailers, distributors).
7. We collect industry information through informal means (e.g., lunch with industry friends, talks with trade partners).
8. In our business unit, intelligence on our competitors is generated independently by several departments.
9. We are slow to detect fundamental shifts in our industry (e.g., competition, technology, regulation). (R)
10. We periodically review the likely effect of changes in our business environment (e.g., regulation) on customers.

#### *Intelligence Dissemination*

1. A lot of informal “hall talk” in this business unit concerns our competitors’ tactics or strategies.
2. We have interdepartmental meetings at least once a quarter to discuss market trends and developments.
3. Marketing personnel in our business unit spend time discussing customers’ future needs with other functional departments.
4. Our business unit periodically circulates documents (e.g., reports, newsletters) that provide information on our customers.
5. When something important happens to a major customer of market, the whole business unit knows about it in a short period.
6. Data on customer satisfaction are disseminated at all levels in this business unit on a regular basis.
7. There is minimal communication between marketing and manufacturing departments concerning market developments. (R)

8. When one department finds out something important about competitors, it is slow to alert other departments. (R)

### *Response Design*

1. It takes us forever to decide how to respond to our competitor's price changes. (R)
2. Principles of market segmentation drive new product development efforts in this business unit.
3. For one reason or another we tend to ignore changes in our customer's product or service needs. (R)
4. We periodically review our product development efforts to ensure that they are in line with what customers want.
5. Our business plans are driven more by technological advance than by market research. (R)
6. Several departments get together periodically to plan a response to changes taking place in our business environment.
7. The product lines we sell depend more on internal politics than real market needs. (R)

### *Response Implementation*

1. If a major competitor were to launch an intensive campaign targeted at our customers, we would implement a response immediately.
2. The activities of the different departments in this business unit are well coordinated.
3. Customer complaints fall on deaf ears in this business unit. (R)
4. Even if we came up with a great marketing plan, we probably would not be able to implement it in a timely fashion. (R)
5. We are quick to respond to significant changes in our competitors' pricing structures.
6. When we find out that customers are unhappy with the quality of our service, we take corrective action immediately.
7. When we find that customers would like us to modify a product or service, the departments involved make concerted efforts to do so.

## **APPENDIX A.2 – The MARKOR Scale (Kohli, Jaworski, and Kumar 1993)**

### *Intelligence Generation*

1. In this business unit, we meet with customers at least once in a year to find out what products or services they will need in the future.
2. In this business unit, we do a lot of in-house market research.
3. We are slow to detect changes in our customer's product preferences. (R)
4. We poll end users at least once a year to assess the quality of our products and services.
5. We are slow to detect fundamental shifts in our industry (e.g., competition, technology, regulation). (R)
6. We periodically review the likely effect of changes in our business environment (e.g., regulation) on customers.

### *Intelligence Dissemination*

1. We have interdepartmental meetings at least once a quarter to discuss market trends and developments.
2. Marketing personnel in our business unit spend time discussing customers' future needs with other functional departments.
3. When something important happens to a major customer of market, the whole business unit knows about it in a short period.
4. Data on customer satisfaction are disseminated at all levels in this business unit on a regular basis.
5. When one department finds out something important about competitors, it is slow to alert other departments. (R)

### *Organizational Responsiveness*

1. It takes us forever to decide how to respond to our competitor's price changes. (R)
2. For one reason or another we tend to ignore changes in our customer's product or service needs. (R)
3. We periodically review our product development efforts to ensure that they are in line with what customers want.
4. Several departments get together periodically to plan a response to changes taking place in our business environment.
5. If a major competitor were to launch an intensive campaign targeted at our customers, we would implement a response immediately.
6. The activities of the different departments in this business unit are well coordinated.
7. Customer complaints fall on deaf ears in this business unit. (R)
8. Even if we came up with a great marketing plan, we probably would not be able to implement it in a timely fashion. (R)

9. When we find out that customers are unhappy with the quality of our service, we take corrective action immediately.

### **APPENDIX A.3 – MKTOR Scale (Narver and Slater 1990)**

#### *Customer Orientation*

1. Our business objectives are driven primarily by customer satisfaction.
2. We constantly monitor our level of commitment and orientation to serving customers' needs.
3. Our business strategies are driven by our belief about how we can create greater value for customers.
4. We measure customer satisfaction systematically and frequently.
5. We give close attention to after-sales service.
6. We target customers where we have an opportunity for competitive advantage.

#### *Competitor Orientation*

1. Our salespeople regularly share information within our business concerning competitors' strategies.
2. We rapidly respond to competitive actions that threaten us.
3. Our strategy for competitive advantage is based on our understanding of customers' needs.
4. Top management regularly discusses competitors' strengths and strategies.

#### *Interfunctional Coordination*

1. Our top managers from every function regularly visit our current and prospective customers.
2. We freely communicate information about our successful and unsuccessful customer experiences across all business functions.
3. All of our business functions (marketing/sales, manufacturing, R&D, finance/accounting, etc.) are integrated in serving the needs of our target markets.
4. All of our managers understand how everyone in our business can contribute to creating customer value.
5. We share resources with other business units.

## APPENDIX A.4 – Market Orientation Scale (Matsuno, Mentzer and Rentz 2000)

### *Intelligence Generation*

1. In this business unit, we meet with customers at least once in a year to find out what products or services they will need in the future.
2. Individuals from our manufacturing department interact directly with customers to learn how to serve them better.
3. In this business unit, we do a lot of in-house market research.
4. We are slow to detect changes in our customer's product preferences. (R)
5. We poll end users at least once a year to assess the quality of our products and services.
6. We often talk with or survey those who can influence our end users' purchases (e.g., retailers, distributors).
7. We collect industry information through informal means (e.g., lunch with industry friends, talks with trade partners).
8. In our business unit, intelligence on our competitors is generated independently by several departments.
9. We are slow to detect fundamental shifts in our industry (e.g., competition, technology, regulation). (R)
10. We periodically review the likely effect of changes in our business environment (e.g., regulation) on customers.
11. In this business unit, we frequently collect and evaluate general macro-economic information (e.g., interest rate, exchange rate, GDP, industry growth rate, inflation rate). \*
12. In this business unit, we maintain contacts with officials of government and regulatory bodies (e.g., Department of Agriculture, FDA, FTC, Congress) in order to collect and evaluate pertinent information. \*
13. In this business unit, we collect and evaluate information concerning general social trends (e.g. environmental consciousness, emerging lifestyles) that might affect our business.
14. In this business unit, we spend time with our suppliers to learn more about various aspects of their business (e.g., manufacturing process, industry practices, clientele). \*
15. In our business unit, only a few people are collecting competitor information. (R)  
\*

### *Intelligence Dissemination*

1. A lot of informal "hall talk" in this business unit concerns our competitors' tactics or strategies.
2. We have interdepartmental meetings at least once a quarter to discuss market trends and developments.

3. Marketing personnel in our business unit spend time discussing customers' future needs with other functional departments.
4. Our business unit periodically circulates documents (e.g., reports, newsletters) that provide information on our customers.
5. When something important happens to a major customer of market, the whole business unit knows about it in a short period.
6. Data on customer satisfaction are disseminated at all levels in this business unit on a regular basis.
7. There is minimal communication between marketing and manufacturing departments concerning market developments. (R)
8. When one department finds out something important about competitors, it is slow to alert other departments. (R)
9. We have cross-functional meetings very often to discuss market trends and developments (e.g., customers, competition, suppliers). \*
10. We regularly, have interdepartmental meetings to update our knowledge of regulatory requirements. \*
11. Technical people in this business unit spend a lot of time sharing information about technology for new products with other departments. \*
12. Market information spreads quickly through all levels in this business unit. \*

### *Responsiveness*

1. It takes us forever to decide how to respond to our competitor's price changes. (R)
2. The principles of market segmentation drive new product development efforts in this business unit.
3. For one reason or another we tend to ignore changes in our customer's product or service needs. (R)
4. We periodically review our product development efforts to ensure that they are in line with what customers want.
5. Our business plans are driven more by technological advance than by market research. (R)
6. Several departments get together periodically to plan a response to changes taking place in our business environment.
7. The product lines we sell depend more on internal politics than real market needs. (R)
8. We are slow to start business with new suppliers even though we think they are better than existing ones. (R) \*
9. If a major competitor were to launch an intensive campaign targeted at our customers, we would implement a response immediately.
10. The activities of the different departments in this business unit are well coordinated.
11. Customer complaints fall on deaf ears in this business unit. (R)
12. Even if we came up with a great marketing plan, we probably would not be able to implement it in a timely fashion. (R)
13. We are quick to respond to significant changes in our competitors' pricing structures.

14. When we find out that customers are unhappy with the quality of our service, we take corrective action immediately.
15. When we find that customers would like us to modify a product of service, the departments involved make concerted efforts to do so.
16. If a special interest group (e.g., consumer group, environmental group) were to publicly accuse us of harmful business practices, we would respond to the criticism immediately. \*
17. We tend to take longer than our competitors to respond to a change in regulatory policy. (R) \*

(R) – Reverse item

\* - New item developed by Matsuno *et al.* (2000)

## APPENDIX A.5 – Covin and Slevin's 9-Item Entrepreneurial Orientation

### Scale (Covin and Slevin 1989)

*In general, the top managers of my firm favor...*

A strong emphasis on the marketing of tried and true products or services

1 to 7

A strong emphasis on R&D, technological leadership, and innovations

*How many new lines of products or services has your firm marketed in the past 5 years?*

No new lines of products or services

1 to 7

Very many new products or services

Changes in product or service lines have been mostly of a minor nature

1 to 7

Changes in product or service lines have usually been quite dramatic

*In dealing with its competitors, my firm...*

Typically responds to actions which competitors initiate

1 to 7

Typically initiates actions which competitors then respond to

Is very seldom the first business to introduce new products/services, administrative techniques, operating technologies, etc

1 to 7

Is very often the first business to introduce new products/services, administrative techniques, operating technologies, etc.

Typically seeks to avoid competitive clashes, preferring a 'live-and-let-live' posture

1 to 7

Typically adopts a very competitive, 'undo-the-competitors' posture

*In general, the top managers of my firm have...*

A strong proclivity for low-risk projects (with normal and certain rates of return)

1 to 7

A strong proclivity for high-risk projects (with chances of very high returns)

*In general, the top managers of my firm believe that...*

Owing to the nature of the environment, it is best to explore it gradually via timid, incremental behavior

1 to 7

Owing to the nature of the environment, bold, wide-ranging acts are necessary to achieve the firm's objectives

*When confronted with decision-making situations involving uncertainty, my firm...*

Typically adopts a cautious, 'wait-and-see' posture in order to minimize the probability of making costly decisions

1 to 7

Typically adopts a bold, aggressive posture in order to maximize the probability of exploiting potential opportunities

## **APPENDIX A.6 – Entrepreneurial Proclivity Scale (Matsuno, Mentzer and Özsomer 2002)**

### *Innovativeness*

1. When it comes to problem solving, we value creative new solutions of conventional wisdom.
2. Top managers here encourage the development of innovative marketing strategies, knowing well that some will fail.

### *Risk-taking*

1. We value the orderly and risk-reducing management process much more highly than leadership initiatives for change. (R)
2. Top managers in this business unit like “to play it safe.” (R)
3. Top managers around here like to implement plans only if they are very certain that they will work. (R)

### *Proactiveness*

1. We firmly believe that a change in market creates a positive opportunity for us.
2. Members of this business unit tend to talk more about opportunities rather than problems.

## APPENDIX A.7 – Morris and Paul's 22-Item Marketing Orientation Scale

(Morris and Paul 1987)

### *Structure and Policies*

- Have a marketing department
- Employ marketing consultants
- Have marketing vice-president
- Prepare annual marketing plan
- Have product managers
- Prepare annual written marketing plan
- Have product managers
- Regularly perform marketing research
- Have a new product development department
- Have a marketing research group or department
- Utilize market segmentation and targeting
- Highest-ranking marketing person:
  - Chairman
  - President
  - Senior Vice-President
  - Vice-President Marketing
  - Marketing Manager
  - Sales Manager
  - Other
- Marketing people are hired:
  - Internally
  - Externally
  - Both

### *Sources of Customer Feedback*

- Informal feedback (e.g., through salespeople)
- Complaint/service department
- Formal questionnaires/surveys
- (800) number
- Suggestion box; mail-in-card

### *Attitudes/Perceptions*

- Marketing/sales is an area where creativity, new ideas, and new approaches are most important.
- Marketing/sales is an area that demonstrates most entrepreneurial orientation.
- Marketing/sales generates most new product/service ideas.
- Impact of marketing department on overall strategic direction of firm:

Major impact  
Some impact  
Little of no impact  
Have no marketing department

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**APPENDIX B: SURVEY MATERIALS****APPENDIX B.1 – Cover Letter**



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**COLLEGE OF BUSINESS AND PUBLIC ADMINISTRATION**

Business Administration Department - Marketing

2126 Constant Hall

Norfolk, VA 23529-0223

Phone: (757) 683-3557

Fax: (757) 683-3258

Dear Export Manager,

The enclosed questionnaire is a part of my doctoral dissertation research on how export firms benefit from marketing and entrepreneurship. The objective of this research is to understand the linkages and differences between marketing and entrepreneurship in exporting firms.

I would appreciate your filling out this questionnaire, giving your honest opinions. The questionnaire is designed to be completed in about 15-20 minutes, with most questions requiring you only to circle the appropriate response. Please keep in mind that there are no right or wrong answers. After answering all the questions in the survey please fax the completed survey to (866) 384-4458.

All information gathered in this study will be held in strict confidentiality. Results of the study will be tabulated and analyzed in aggregate form, so information about individual firms cannot be identified. In thanks to your participation I would be happy to offer you a summary of the study findings. If you are interested in receiving such a summary report of this survey later, please email me at [akaya001@odu.edu](mailto:akaya001@odu.edu).

Because the survey is being sent to select group of exporters your participation is very important. I look forward to the opportunity to learn from your experience, and thanks in advance for your participation.

Sincerely yours,

Ayse Nilgun Kaya  
Ph.D. Candidate  
Old Dominion University, Norfolk

P.S. Please contact me at 434-227-6995 or [akaya001@odu.edu](mailto:akaya001@odu.edu) if you have any questions or concerns about this survey.

## APPENDIX B.2 – Survey

### EXPORT PRACTICES SURVEY

Please read each question carefully and then circle the response that best matches your opinion. Please remember that there are no correct or incorrect answers. Your complete response is very important for the accuracy of the research, so please complete all the questions.

#### SECTION A: GENERAL PRACTICES OF YOUR ORGANIZATION

To what extent do the following statements describe your organization?

- | <i>Not<br/>At All</i> |   |   |   |   | <i>Great<br/>Extent</i> |   |   |
|-----------------------|---|---|---|---|-------------------------|---|---|
| 1                     | 2 | 3 | 4 | 5 | 6                       | 7 |   |
| 1                     | 2 | 3 | 4 | 5 | 6                       | 7 | (1) When it comes to problem solving, we value creative new solutions more than the solutions of conventional wisdom in our export operations.  |
| 1                     | 2 | 3 | 4 | 5 | 6                       | 7 | (2) Top managers in this business unit encourage the development of innovative export marketing strategies, knowing well that some will fail.   |
| 1                     | 2 | 3 | 4 | 5 | 6                       | 7 | (3) We value the orderly and risk-reducing management process much more highly than leadership initiatives for change in our export operations. |
| 1                     | 2 | 3 | 4 | 5 | 6                       | 7 | (4) Managers responsible for exports like to "play it safe."  |
| 1                     | 2 | 3 | 4 | 5 | 6                       | 7 | (5) Managers responsible for exports like to implement plans only if they are very certain that they will work.                                 |
| 1                     | 2 | 3 | 4 | 5 | 6                       | 7 | (6) We firmly believe that a change in export market creates a positive opportunity for us.   |
| 1                     | 2 | 3 | 4 | 5 | 6                       | 7 | (7) Members of this business unit tend to talk more about opportunities rather than problems in export markets.                                 |

**Please indicate to what extent you agree with the following statements about your organization.**

- | <i>Not<br/>At All</i> |   |   |   |   |   | <i>Great<br/>Extent</i> |  |
|-----------------------|---|---|---|---|---|-------------------------|--|
| 1                     | 2 | 3 | 4 | 5 | 6 | 7                       |  |
|                       |   |   |   |   |   |                         | (8) We constantly monitor our level of commitment and orientation to serving export customers' needs.  |
|                       |   |   |   |   |   |                         | (9) Our export business objectives are driven primarily by customer satisfaction.  |
|                       |   |   |   |   |   |                         | (10) Our export strategy for competitive advantage is based on our understanding of export customer's needs.   |
|                       |   |   |   |   |   |                         | (11) Our export business strategies are driven by our belief about how we can create greater value for customers.  |
|                       |   |   |   |   |   |                         | (12) We measure export customer satisfaction systematically and frequently.  |
|                       |   |   |   |   |   |                         | (13) We give close attention to after-sales service in our export markets.   |
|                       |   |   |   |   |   |                         | (14) We rapidly respond to competitive actions that threaten us in our export markets.   |
|                       |   |   |   |   |   |                         | (15) Our export salespeople regularly share information within our business concerning competitor's strategies.  |
|                       |   |   |   |   |   |                         | (16) Top management regularly discusses export competitor's strengths and strategies.  |
|                       |   |   |   |   |   |                         | (17) We target export customers where we have an opportunity for competitive advantage   |
|                       |   |   |   |   |   |                         | (18) All of our business functions (marketing/sales, manufacturing, R&D, finance/accounting, etc.) are integrated in serving the needs of our target export markets. |
|                       |   |   |   |   |   |                         | (19) All of our business functions are responsive to each other's needs and requests to serve export markets better.   |
|                       |   |   |   |   |   |                         | (20) We freely communicate information about our successful and unsuccessful export customer experiences across all business functions.                              |
|                       |   |   |   |   |   |                         | (21) Our managers understand how everyone in our business can contribute to creating value for export customers.   |

**Please indicate your degree of agreement or disagreement with the following statements regarding the general practice observed in your organization.**

- | <i>Strongly<br/>Disagree</i> |   |   |   | <i>Strongly<br/>Agree</i> |   |   |  |  |
|------------------------------|---|---|---|---------------------------|---|---|--|--|
| 1                            | 2 | 3 | 4 | 5                         | 6 | 7 |  |  |
| 1                            | 2 | 3 | 4 | 5                         | 6 | 7 | (22) Our management possesses a great deal of exporting experience.  |  |
| 1                            | 2 | 3 | 4 | 5                         | 6 | 7 | (23) We have had a long history of export involvement.   |  |
| 1                            | 2 | 3 | 4 | 5                         | 6 | 7 | (24) Our organization focuses its efforts on, and allocates resources for its export operations to, certain carefully selected export markets. |  |

## **SECTION B: SIZE OF YOUR ORGANIZATION**

**Please indicate the appropriate size of your company by checking the appropriate box.**

(25) How many employees do your firm or business unit currently have? (Please check **one** only)

- |                                  |                                    |                                    |                                  |                                  |
|----------------------------------|------------------------------------|------------------------------------|----------------------------------|----------------------------------|
| <input type="checkbox"/> 1-19    | <input type="checkbox"/> 20-49     | <input type="checkbox"/> 50-99     | <input type="checkbox"/> 100-249 | <input type="checkbox"/> 250-499 |
| <input type="checkbox"/> 500-999 | <input type="checkbox"/> 1000-4999 | <input type="checkbox"/> 5000-9999 | <input type="checkbox"/> 10000 + |                                  |

(26) What is the amount of annual sales for your division or business unit last year? (Please check **one** only)

- |   |  |
|---|--|
| <input type="checkbox"/> <\$5 million                   | <input type="checkbox"/> ≥\$5 million - <\$10 million    |
| <input type="checkbox"/> ≥\$10 million - <\$20 million  | <input type="checkbox"/> ≥\$20 million - <\$50 million   |
| <input type="checkbox"/> ≥\$50 million - <\$100 million | <input type="checkbox"/> ≥\$100 million - <\$500 million |
| <input type="checkbox"/> ≥\$500 million - <\$1 billion  |  |

## SECTION C: EXPORT VENTURE PRACTICES

Please complete this section with respect to one of the **less successful** export ventures that you were involved with. Export venture is defined as a **single product** or **product line** to a **specific country**. Please refer to this venture when answering the below questions.

**What is the product line and the specific country market you are referring in this section?**

The export venture is for \_\_\_\_\_(product) to \_\_\_\_\_(country).  
(Please make sure you are focusing on ONE specific product (product line) in ONE specific country).

**To what extent does each statement listed below correctly describe the market conditions of this export venture? Please indicate your level of agreement or disagreement with each of the following statements by circling the appropriate number.**

Not  
At All

Great  
Extent

1 2 3 4 5 6 7 (27) In this export market our firm must change its marketing practices extremely frequently (for example semi-annually).

1 2 3 4 5 6 7 (28) The rate of obsolescence is very high (as in some fashion goods and semiconductors).

1 2 3 4 5 6 7 (29) In this export venture market actions of competitors are unpredictable.

1 2 3 4 5 6 7 (30) In this export venture market demands and tastes are unpredictable (e.g., high fashion goods).

1 2 3 4 5 6 7 (31) In this export venture market the modes of production/service change often in a major way (e.g., advanced electronic components).

**Please consider the product characteristics of this export venture, and indicate your level of agreement or disagreement with each of the following statements by circling the appropriate number.**

Strongly  
Disagree

Strongly  
Agree

1 2 3 4 5 6 7 (32) For this export venture the degree of initial product adaptation is high.

1 2 3 4 5 6 7 (33) For this export venture the degree of product adaptation subsequent to entry is high

1 2 3 4 5 6 7  
local language is high.

(34) For this export venture the extent to which product label is in

**For this export venture to what extent does each statement listed below apply?  
Please indicate your level of agreement or disagreement with each of the  
following statements by circling the appropriate number.**

- | <i>Strongly<br/>Disagree</i> |   |   |   | <i>Strongly<br/>Agree</i> |   |   |   |
|------------------------------|---|---|---|---------------------------|---|---|---|
| 1                            | 2 | 3 | 4 | 5                         | 6 | 7 |   |
| 1                            | 2 | 3 | 4 | 5                         | 6 | 7 | (35) This export venture has been very profitable.                            |
| 1                            | 2 | 3 | 4 | 5                         | 6 | 7 | (36) This export venture has generated a high volume of sales.                |
| 1                            | 2 | 3 | 4 | 5                         | 6 | 7 | (37) This export venture has achieved rapid growth.                           |
| 1                            | 2 | 3 | 4 | 5                         | 6 | 7 | (38) This export venture has improved our global competitiveness.             |
| <i>Strongly<br/>Disagree</i> |   |   |   | <i>Strongly<br/>Agree</i> |   |   |   |
| 1                            | 2 | 3 | 4 | 5                         | 6 | 7 | (39) This export venture has strengthened our strategic position.             |
| 1                            | 2 | 3 | 4 | 5                         | 6 | 7 | (40) This export venture has significantly increased our global market share. |
| 1                            | 2 | 3 | 4 | 5                         | 6 | 7 | (41) The performance of this export venture has been very satisfactory.       |
| 1                            | 2 | 3 | 4 | 5                         | 6 | 7 | (42) This export venture has been successful.                                 |
| 1                            | 2 | 3 | 4 | 5                         | 6 | 7 | (43) This export venture has fully met our expectations.                      |

### Section D: GENERAL INFORMATION

The following information will be used only for classification purposes, and will not be reported on an individual or company basis.

Please indicate your level of agreement or disagreement with each of the following statements by circling the appropriate number.

Strongly Disagree		Strongly Agree					
1	2	3	4	5			
6	7						
1	2	3	4	5	6	7	I am responsible for this export venture's strategy decisions.
1	2	3	4	5	6	7	I am highly knowledgeable of this export venture's activities.
1	2	3	4	5	6	7	I am highly knowledgeable of this export venture's strategies.
1	2	3	4	5	6	7	I am highly knowledgeable of performance of this export venture.
1	2	3	4	5	6	7	I am highly knowledgeable of this export venture's main competitors.
1	2	3	4	5	6	7	I have great confidence in answering the survey questions.

**Please write your answers next to the questions.**

Which industry (s) is your division or business unit in? \_\_\_\_\_

What type of products does your division or business unit mostly produce? (Please check **all** that apply)

\_\_\_\_\_ Consumer Products    \_\_\_\_\_ Industrial Products    \_\_\_\_\_ Consumer services  
                                  \_\_\_\_\_ Industrial Services

Approximately how many different countries your firm exports to? \_\_\_\_\_

What is your current title? \_\_\_\_\_

How long have you been in your current position? \_\_\_\_\_ years

How long have you been working your current division or business unit? \_\_\_\_\_ years

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***Thank you for your participation!***

Please fax the completed questionnaire to (866) 384-4458  
 or scan the completed questionnaire and send it to akaya001@odu.edu

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## APPENDIX C: RESULTS OF ANALYSES

### APPENDIX C.1 – ASSESSMENT OF NONRESPONSE BIAS

#### Nonresponse Bias Assessment

##### T-Test

##### Group Statistics

	Resp. time	N	Mean	Std. Deviation	Std. Error Mean
CAct	>= 10	19	6.05	.970	.223
	< 10	128	6.03	.963	.085
CStr	>= 10	19	6.00	1.054	.242
	< 10	127	6.06	.911	.081
CPerf	>= 10	19	6.16	.898	.206
	< 10	128	6.23	.798	.071
CComp	>= 10	19	5.68	1.293	.297
	< 10	128	5.53	1.391	.123
CConf	>= 10	19	5.95	1.129	.259
	< 10	128	6.14	1.010	.089
NXC	>= 10	20	22.80	21.703	4.853
	< 10	123	33.64	28.862	2.602
YCP	>= 10	20	9.06	9.766	2.184
	< 10	128	10.55	8.641	.764
YCC	>= 10	20	15.46	11.825	2.644
	< 10	128	13.94	10.121	.895

## Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Upper	Lower
CAct	Equal variances assumed	.221	.639	.090	145	.928	.021	.237	-.447	.490
	Equal variances not assumed			.090	23.582	.929	.021	.238	-.471	.514
CStr	Equal variances assumed	1.307	.255	-.241	144	.810	-.055	.229	-.507	.397
	Equal variances not assumed			-.216	22.210	.831	-.055	.255	-.584	.473
CPerf	Equal variances assumed	.392	.532	-.383	145	.702	-.076	.200	-.471	.318
	Equal variances not assumed			-.351	22.425	.729	-.076	.218	-.528	.375
CComp	Equal variances assumed	.158	.691	.451	145	.653	.153	.339	-.517	.823
	Equal variances not assumed			.476	24.614	.638	.153	.321	-.509	.815
CConf	Equal variances assumed	.049	.825	-.767	145	.445	-.193	.252	-.691	.305
	Equal variances not assumed			-.705	22.482	.488	-.193	.274	-.761	.374
NXC	Equal variances assumed	5.605	.019	-1.606	141	.111	-10.842	6.752	-24.190	2.506
	Equal variances not assumed			-1.969	31.099	.058	-10.842	5.507	-22.072	.387
YPP	Equal variances assumed	.195	.660	-.702	146	.484	-1.485	2.115	-5.665	2.694
	Equal variances not assumed			-.642	23.880	.527	-1.485	2.313	-6.261	3.291
YCP	Equal variances assumed	1.094	.297	.612	146	.541	1.525	2.491	-3.397	6.447
	Equal variances not assumed			.546	23.552	.590	1.525	2.791	-4.242	7.292

## APPENDIX C.2 – Model 1

### Variance Extracted (VE) for Model 1

---

Construct	Variance Extracted
Customer Orientation	.48
Competitor Orientation	.49
Interfunctional Coordination	.53
Innovativeness	.60
Risk-taking	.53
Proactiveness	.30

---

### $\chi^2$ Difference Test for Discriminant Validity for Model 1

---

Constrained Relationship	$\chi^2$ Value	d.f.
Unconstrained Model	248.8	171
CO ↔ CmO	259.6	172
CO ↔ IC	253.4	172
CO ↔ I	261.7	172
CO ↔ R	261.7	172
CO ↔ P	271.0	172
CmO ↔ IC	279.5	172
CmO ↔ I	319.2	172
CmO ↔ R	278.7	172
CmO ↔ P	279.5	172
IC ↔ I	271.2	172
IC ↔ R	313.0	172
IC ↔ P	271.2	172
I ↔ R	262.8	172
I ↔ P	258.2	172
R ↔ P	276.1	172

---

## APPENDIX C.2 – Model 1 (Continued)

### Discriminant Validity for Model 1

---

Variables	var - cor <sup>2</sup>	Variables	var - cor <sup>2</sup>
CO and CmO	.15	CmO and CO	-.44
CO and IC	.42	CmO and IC	.02
CO and I	.68	CmO and I	.14
CO and R	.89	CmO and R	.31
CO and P	.63	CmO and P	.12
IC and CO	.48	I and CO	.67
IC and CmO	.66	I and CmO	.71
IC and I	.79	I and IC	.71
IC and R	.86	I and R	.78
IC and P	.87	I and P	.50
R and CO	.56	P and CO	.33
R and CmO	.55	P and CmO	.44
R and IC	.55	P and IC	.54
R and I	.46	P and I	.25
R and P	.52	P and R	.59

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**APPENDIX C.3 – Model 2****Variance Extracted (VE) for Model 2**

---

<b>Construct</b>	<b>Variance Extracted</b>
Customer Orientation	.48
Competitor Orientation	.50
Interfunctional Coordination	.52
Innovativeness	.59
Risk-taking	.53
Proactiveness	.30
Financial Export Performance	.83
Strategic Export Performance	.83
Satisfaction with Export Venture	.91

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### APPENDIX C.3 – Model 2 (Continued)

#### $\chi^2$ Difference Test for Discriminant Validity for Model 2

---

Constrained Relationship			$\chi^2$ Value	d.f.
Unconstrained Model			551.9	365
CO	↔	CmO	562.3	366
CO	↔	IC	556.8	366
CO	↔	I	557.6	366
CO	↔	R	600.5	366
CO	↔	P	567.5	366
CO	↔	FEP	562.1	366
CO	↔	SP	566.3	366
CO	↔	SEV	561.3	366
CmO	↔	IC	574.5	366
CmO	↔	I	570.4	366
CmO	↔	R	605.3	366
CmO	↔	P	588.1	366
CmO	↔	FEP	571.9	366
CmO	↔	SP	575.1	366
CmO	↔	SEV	573.1	366
IC	↔	I	559.2	366
IC	↔	R	602.0	366
IC	↔	P	577.1	366
IC	↔	FEP	571.9	366
IC	↔	SP	570.2	366
IC	↔	SEV	566.1	366
I	↔	R	559.2	366
I	↔	P	557.9	366
I	↔	FEP	567.2	366
I	↔	SP	563.3	366
I	↔	SEV	565.0	366
R	↔	P	579.6	366
R	↔	FEP	584.9	366
R	↔	SP	581.4	366
R	↔	SEV	581.1	366
P	↔	FEP	586.6	366
P	↔	SP	580.5	366
P	↔	SEV	569.5	366
FEP	↔	SP	583.8	366
FEP	↔	SEV	620.7	366
SP	↔	SEV	587.7	366

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### APPENDIX C.3 – Model 2 (Continued)

#### Discriminant Validity for Model 2

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Variables	var - cor <sup>2</sup>	Variables	var - cor <sup>2</sup>
CO and CmO	.20	CmO and CO	-.39
CO and IC	.42	CmO and IC	.02
CO and I	.69	CmO and I	.12
CO and R	.90	CmO and R	.31
CO and P	.63	CmO and P	.11
CO and FEP	.03	CmO and FEP	.25
CO and SP	.13	CmO and SP	.25
CO and SEV	.02	CmO and SEV	.28
IC and CO	.43	I and CO	1.44
IC and CmO	.62	I and CmO	1.47
IC and I	.74	I and IC	1.49
IC and R	.90	I and R	1.56
IC and P	.82	I and P	1.27
IC and FEP	.91	I and FEP	1.66
IC and SP	.89	I and SP	1.65
IC and SEV	.90	I and SEV	1.66
R and CO	1.26	P and CO	.15
R and CmO	1.24	P and CmO	.26
R and IC	1.24	P and IC	.37
R and I	1.15	P and I	.07
R and P	1.22	P and R	.43
R and FEP	1.24	P and FEP	.44
R and SP	1.25	P and SP	.46
R and SEV	1.24	P and SEV	.46
FEP and CO	2.81	SP and CO	2.24
FEP and CmO	2.79	SP and CmO	2.21
FEP and IC	2.85	SP and IC	2.26
FEP and I	2.86	SP and I	2.27
FEP and R	2.84	SP and R	2.28
FEP and P	2.84	SP and P	2.28
FEP and SP	2.15	SP and FEP	1.57
FEP and SEV	2.06	SP and SEV	1.58

**APPENDIX C.3 – Model 2 (Continued)****Discriminant Validity for Model 2**

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<b>Variables</b>	<b>var - cor<sup>2</sup></b>
SEV and CO	3.39
SEV and CmO	3.40
SEV and IC	3.41
SEV and I	3.43
SEV and R	3.41
SEV and P	3.43
SEV and FEP	2.63
SEV and SP	2.73

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## VITA

### **Educational Background**

*Ph.D. in Business Administration/Marketing*, Old Dominion University, Norfolk, Virginia, 2008

*M.B.A. in Marketing*, Wright State University, Dayton, Ohio, 1996

*B.Sc. in Business Administration*, Hacettepe University, Ankara, Turkey, 1993

### **Teaching Experience**

Midwestern State University - Instructor

Old Dominion University – Marketing Department - Instructor

### **Academic Consortia and Activities**

21<sup>st</sup> UIC Research Symposium on Marketing and Entrepreneurship, George Washington University, Washington DC 2007

8<sup>th</sup> Doctoral Workshop in International Entrepreneurship, Georgia Institute of Technology, Atlanta, GA 2007

Summer American Marketing Association DocSig Session, Washington DC, 2002

American Marketing Association 18<sup>th</sup> Faculty Consortium in International Marketing, Michigan State University, East Lansing, MI, 1998

### **Awards and Honors**

Kaufman Scholarship to participate in the 21<sup>st</sup> UIC Research Symposium on Marketing and Entrepreneurship, Washington DC 2007

Mu Kappa Tau, The National Marketing Honor Society

Phi Beta Delta, Honor Society for International Scholars

Merit scholarship from Turkish Ministry of Education to pursue graduate degree in the USA

### **Professional Affiliations**

American Marketing Association

Academy of Marketing Science

Academy of International Business