



7th International Strategic Management Conference

The Impact of International Entrepreneurial Orientation on Strategic Adaptation

Gulzhanat Tayauova*

Department of Management, Suleyman Demirel University, Almaty, Kazakhstan

Abstract

The paper explores the relationship between international entrepreneurial orientation and strategic adaptation. Data was collected from owners and top managers of 114 companies operating in Kazakhstan and Kyrgyzstan. International entrepreneurial orientation was analyzed using three dimensions; innovativeness, risk-taking, and proactiveness. Strategic adaptation was measured using an instrument developed by Zajac and Shortell (1989) based on Miles and Snow's typology (1978). The study revealed that prospector organizations were more likely to have higher innovativeness, risk-taking, and proactive orientation than defenders and analyzers.

© 2011 Published by Elsevier Ltd. Selection and/or peer-review under responsibility of 7th International Strategic Management Conference

Keywords: International entrepreneurship; international entrepreneurial orientation; strategic adaptation; Miles and Snow's typology

1. Introduction

With the globalization of world economy, international entrepreneurship has become one of the most important research perspectives. To date, the bulk of research has focused on studying the nature and effect of international entrepreneurship. However, there are a few studies that have explored the relationship between international entrepreneurship and outcomes with inconclusive and contradictory results. Moreover, existing studies mostly relies on US and high-tech western firms^[1]. Similarly, little is known about how these firms remain entrepreneurial in their approach and survive after entering to new markets. The importance of these issues is that they require an overlap with strategy literature. Drawing from international entrepreneurship and strategy literature, this paper examines the impact of international entrepreneurial orientation on strategic adaptation of Turkish firms operating in two Central Asian countries, namely Kazakhstan and Kyrgyzstan. The article proceeds in the following manner. First, brief review of the literature regarding international entrepreneurial orientation and strategic adaptation will be

* Corresponding author. Tel.: +7-701-187-0745; fax: +7-727-229-7772.
E-mail address: dr.gulzhanat@gmail.com

presented. Then I develop hypothesis concerning the effect of international entrepreneurial orientation on strategic adaptation. Next, I test hypothesis using data from 114 Turkish firms operating in Kazakhstan and Kyrgyzstan. I explain in detail the data collection method and analytical procedures. Finally, I provide the research findings and discuss their managerial and theoretical implications.

2. Theory and hypothesis

International entrepreneurship research reflects the confluence of the entrepreneurship, strategic management, and international business literatures. Yet, so little is known about the process, context, and outcomes of such internationalization. Currently, the nature of the relationship between international entrepreneurship and strategic adaptation is far from clear. The present study examines an influence of international entrepreneurial orientation on strategic adaptation typologies provided by Miles and Snow (1978).

2.1. *International Entrepreneurship*

International entrepreneurship was first introduced in 1988 by Morrow as a new growth opportunity for both new ventures and established firms. Early research on this field mainly focused on international new ventures or “born global” firms. McDougall (1989), who is a true pioneer in this field, focused on “the development of international new ventures or start-ups that, from inception, engage in international business, thus viewing their operating domain as international from the initial stages of firm’s operation”^[2]. Zahra (1993), however, suggests that the study of international entrepreneurship should include both new and established firms since entrepreneurial activities are an ongoing process that unfolds over time^[3]. McDougall and Oviatt (2000) defined international entrepreneurship as “a combination of innovative, proactive, and risk-seeking behavior that crosses or is compared across national borders and is intended to create value in business organizations”^[4].

2.2. *International Entrepreneurial Orientation*

The concept of international entrepreneurial orientation encapsulates the firm-level processes, practices, decision-making style^[5], and strategic orientation^[6] of firms operating across national borders. Prior researchers focused mainly on three dimensions of international entrepreneurial orientation: innovativeness, risk-taking and proactiveness^{[7][8]}. Innovativeness reflects a firm’s tendency to enter into experimentation, support new ideas and depart from established practices. Innovation generates new products, processes, and organizational systems that set the company apart from its rivals as it expands its international operations^[9]. Innovation also revises the firm’s knowledge base, allowing it to develop new competitive approaches, which can be exploited in new foreign markets and achieve growth and profitability^[10]. Pro-activeness can be defined as a process of anticipating and acting on future needs by the firm’s seeking new opportunities that may or may not be related to its present line of operations, by introducing new products or brands ahead of competition, and by eliminating operations that are in a mature or declining life cycle stage^[11]. It is a firm’s propensity to take initiative actions to compete aggressively with other firms^[12]. Risk-taking can be defined as the degree to which managers are willing to make large and uncertain resource commitments that have a substantive chance of costly failure^[13]. From a strategic viewpoint, risk-taking is a firm’s propensity to take business-related chances with regard to strategic actions in the face of uncertainty^[14]. Thus, international entrepreneurial orientation involves a willingness to innovate to rejuvenate market offerings, to be more proactive than competitors toward new market place opportunities, and to take risks to try out new and uncertain products, services, and markets^{[15][16][17]}. International entrepreneurial orientation used to be examined primarily at an individual level of analysis; however, it recently has been investigated as a firm-level behavior emphasizing an

entrepreneurial process of the firm rather than a behavioral characteristic of the manager or entrepreneur^[18].

2.3. *Strategic Adaptation*

According to Zahra and George (2002) the fundamental question for the area of international entrepreneurship is "what happens after internationalization?" This question is primarily derived from strategy literature on the basis of adaptation and firm performance. Adaptation can be defined as the changes in firm behavior in order to fit the environment in which it operates. Here is the interest with strategic adaptation which refers to business strategies implemented by international firms. The most commonly used strategic adaptation typology is the Miles and Snow typology of strategic types^[19]. According to Miles and Snow (1978) four identifiable strategic adaptation types exist within an industry: defenders, prospectors, analyzers and reactors. Zahra and Pearce (1990) summarize the four types: "It is sufficient here to observe that Defenders emphasize a narrow domain by controlling secure niches in their industries. They engage in little or no product/market development and stress efficiency of operations. Prospectors constitute the other end of the continuum, constantly seeking new opportunities and initiating product development. Analyzers exhibit characteristics of both Defenders and Prospectors. Finally, Reactors do not follow a conscious or consistent strategy and are viewed as a dysfunctional organizational type^[20]" Research using the Miles and Snow typology finds that different strategy types pursue distinctive adaptive processes and structures to align with the environment, and also to distinguish themselves from others. These adaptive strategies allow some organizations to be more adaptive or more sensitive to their environments than others, and the different organization types represent a range of adaptive companies^{[21][22]}.

2.4. *Hypothesis*

A firm's strategic adaptation is affected by influential firm-level factors. Studies empirically examining the Miles and Snow typology have not examined whether the international entrepreneurial orientation influences strategic adaptation of companies operating in international markets. Success in global business operations requires creativity, ingenuity, and calculated risk taking^[23], because domestic strengths do not always guarantee success in foreign markets^[24]. Prior studies, however, offer some insights into the relationships between international entrepreneurship and firm performance. Proactiveness such as pioneering or first entry, can improve company performance. Kimura (1989), for example, has concluded that first entrants enjoyed significant strategic advantages in international markets^[25]. Mascarenhas (1992) concludes that firms that are first entrants have a higher rate of survival in foreign markets^[26]. These "first mover" companies can proactively set the rules of competition by setting product and technological standards, investing heavily in establishing and controlling distribution channels, and promoting their products in ways that reduce switching to subsequently entering rival brands. Innovation generates products, goods, processes, services, and systems that can be used to meet customer needs and build a strong international market position^[27]. According to Morris and Kuratko (2002), it is not essential to divide firms operating across country boundaries into entrepreneurial and non-entrepreneurial, only the level of entrepreneurial orientation will differ among them^[28]. Stevenson and Jarillo (1990) suggest that firms with more entrepreneurial orientation focus on growth-oriented strategies, whereas firms with less entrepreneurial orientation focus on maximizing efficiency^[29]. Shortell and Zajac (1990) found that Prospectors stress innovation and seek a competitive edge through innovation and Defenders engage in little new product development^[30]. If they do, it is closely related to current goods or services. Analyzers selectively follow pioneers after acknowledging the demonstrated promise of some innovative products or services^[31]. Similarly, Tanewski et al. (2003) analyzed the relationship between strategic posture and innovation performance in terms of family and non-family firms. Results indicated that strategic posture

had a significant effect on innovation performance for both family and non-family businesses^[32]. Zahra and Garvis (2000) also suggested that international corporate entrepreneurship in terms of innovation; venturing and proactiveness usually seek to increase the firm's innovativeness, adaptation, and agile strategic responses to changes in the external environment. Zahra (1987) investigates managerial beliefs about risks among the strategy types and finds that Prospectors are aggressive in taking risks, followed by Analyzers with moderate attitudes towards risks, and Defenders who avoid risks as much as they can^[33]. The above discussion suggests the following hypothesis:

H1: International entrepreneurial orientation will be positively associated with a firm's strategic adaptation.

3. Research design

3.1. Sample Selection

The empirical data used in this study is drawn from a dataset collected using a structured mail questionnaire. The survey was carried out in spring 2008. The initial population consisted of 285 Turkish firms which are the members of Kyrgyz-Turkish Businessmen Association (KITIAD) in Kyrgyzstan and Kazakh-Turkish Businessmen Association (KATIAD) in Kazakhstan. The questionnaire was developed partly by using extant measurement scales, which were translated into Turkish. The use of a back-translation procedure involving professional English speakers ensured that the meanings of the item statements were not altered. The owners or CEO himself was chosen because they are clearly the most knowledgeable persons regarding their companies' strategies and overall business situations.

A total of 287 companies were identified from the associations's databases (105 were from KITIAD and 182 were from KATIAD) and questionnaires were mailed to their e-mail addresses. Participation in the survey was solicited by means of incentives such as the offer of a summary report of the results, and by assuring confidentiality of the responses. From the mailed 72 questionnaires, I received an "error report" concerning their e-mail addresses. A reminder e-mail was sent to those who had not answered within two weeks. A total of 114 responses were received, yielding a satisfactory effective response rate of 39.7% (114/287). Since the aim in this study was to capture firm-level entrepreneurial orientation, the respondents referred to in this paper included companies from different industries and company size.

3.2. Measurement of Variables

The constructs in this study were developed by using measurement scales adopted from prior studies. The dependent variable used to test the hypotheses was derived from the response to the self-identified strategic adaptation types. Respondents were asked to identify the strategic adaptation type that best characterizes them. The descriptions were modified from those developed by Zajac and Shortell (1989) based on Miles and Snow's (1978) typology. Empirical validity of the Miles and Snow's typology has been reported in various studies^{[34][35]}.

The independent variable of this study is international entrepreneurial orientation, which was conceptualized as consisting of the dimensions of innovativeness, proactiveness and risk-taking. The measure was adapted from Miller&Friesen (1982), Covin&Slevin (1989), Antoncic&Hisrich (2001), and Barringer&Bluedorn (1999)^{[36][37]}. The measure included fifteen items, which had Five-point Likert scales ranging from 'strongly agree' to 'strongly disagree'. Pretests were conducted, after which three items from innovativeness dimension were dropped. A composite measure was constructed as an average of all twelve items, resulting in a reliability coefficient of 0.87.

There are firm-specific and external factors that may affect a firm's strategic adaptation in international markets regardless of its entrepreneurial orientation. Therefore, I controlled success, longevity and environmental hostility. Success assessed in a subjective manner. The respondents were asked to indicate their level of satisfaction with their activities in host country. The five-point scale was used to measure this criterium. Longevity in terms of the number of years that the firm had operated in the host country may also have a positive effect on strategic adaptation. Environmental hostility which indicates unfavorable external forces for a firm's business also may influence the firm's strategic adaptation. Unfavorable environmental conditions result from radical industry changes, intense regulatory burdens placed on the industry, or fierce rivalry among competitors^[38]. The measures developed and validated by Khandwalla (1977) and Miller&Friesen (1984) were employed in this study^{[39][40]}. Respondents were asked to report levels of agreement with statements indicating degrees to which host country's environment was risky, difficult for firms to keep afloat in, and the extent to which firms controlled their own destinies within these environments. This scale had a coefficient alpha of 0.74.

4. Data analysis and hypothesis test results

Table 1 provides means, standard deviations and correlations for all continuous variables. The correlation matrix reveals that the international entrepreneurial construct has a significant influence (0.544) on the strategic adaptation. Also, the results of cross table analysis (Table 2) shows that international entrepreneurial orientation has the mean 4.55 in prospectors, 3.63 in defenders, and 3.92 in analyzers, meaning that prospectors have more innovative, risk-taking, and proactive characteristics than defenders and analyzers. Environmental hostility was positively associated (0.303) with international entrepreneurial orientation. This seems natural, as a hostile environment may require firms to be proactive and to take risks. Additionally, strategically adapted firms tended to be more satisfied with their success in host country (0.226).

Table 1. Means, standard deviation and correlations for quantitative variables

Variables	Mean	S.D.	1	2	3	4	5	6	7
1. Strategic adaptation	3.31	0.82	1						
2. International Entrepreneurial Orientation	4.18	0.62	0.544**	1					
3. Innovativeness	4.32	0.58	0.501**	0.608**	1				
4. Risk-taking	4.04	0.87	0.536**	0.682**	0.521**	1			
5. Proactiveness	4.18	0.73	0.525**	0.614**	0.323**	0.620**	1		
6. Success	4.12	0.62	0.413*	0.226*	0.214*	0.124	0.171*	1	
7. Longevity	2.41	0.98	0.118	-0.098	0.064	0.134	-0.111	-0.226	1
8. Environmental hostility	2.61	0.81	-0.312	0.303**	-0.112	0.223**	0.316**	-0.113	0.092

* $p < 0.05$; ** $p < 0.01$ ($n=114$)

Table 2. Cross table for strategic adaptation and international entrepreneurial orientation

International entrepreneurial orientation	Strategic Adaptation		
	Prospector N=61	Defender N=27	Analyzer N=26
Innovativeness	4.48	3.95	4.33
Risk-taking	4.47	3.28	3.86
Proactiveness	4.55	3.67	3.92
Mean	4.51	3.63	4.04

The hypotheses were tested using regression analysis. The results are displayed in Table 3 and 4. The base model explains a statistically significant influence on strategic adaptation ($R^2 = 0.339$, $p < 0.001$).

The positive and significant effect international entrepreneurial orientation supports Hypothesis of this study.

Table 3. Model summary

Model	R	R ²	Adj.R ²	S.D.
1	0.582 (a)	0.339	0.327	0.677

a. Predictors: (Constant), international entrepreneurial orientation

Table 4. ANOVA test

Model		Sum of squares	df	Mean square	F	Sig.
1	Regression	12.695	1	12.965	27.716	0.000 (a)
	Residual	24.734	54	0.458		
	Total	37.429	55			

a. Predictors: (Constant), international entrepreneurial orientation

b. Dependent Variable: strategic adaptation

5. Conclusion

The primary contribution of this study to the literature on international entrepreneurship and strategy research is the investigation of the impact of the firm-level international entrepreneurial orientation on strategic adaptation. For international entrepreneurship scholars the relationship between international entrepreneurship and internationalization outcomes was far from clear. The results of this study support the existence of stable patterns of strategic adaptation typologies and behaviors of internationalized firms according to strategies hypothesized by Miles and Snow (1978). Owner-managers in both countries adopted only three types of strategies. Another finding of this study is that there were no respondent indicating itself as a reactor type. As predicted, international entrepreneurial orientation represented by innovativeness, risk-taking, and pro-activeness dimensions were positively and significantly correlated with strategic adaptation. This result is consistent with previous studies done in strategy literature, suggesting that firms with prospector strategic adaptation typologies are tended to be more innovative, risk taker and proactive than defender and analyzer types. Thus, prospector organizations often are the creators of change and uncertainty to which their competitors must respond.

References

- [1] Zahra SA, George G. International entrepreneurship: the current status of the field and future research agenda. In: Hitt MA, Ireland RD, Camp SM, Sexton DL, editors. *Strategic entrepreneurship: creating a new mindset*. Blackwell publishing; 2002, p. 255-88.
- [2] McDougall PP. International versus domestic entrepreneurship: new venture strategic behavior and industry structure. *Journal of Business Venturing* 1989; 4; 6:388-400.
- [3] Zahra SA. A conceptual model of entrepreneurship as firm behavior: a critique and extension. *Entrepreneurship Theory and Practice* 1993; 17; 4:5-21.
- [4] McDougall PP, Oviatt BM. International entrepreneurship: the intersection of two research paths. *Academy of Management J* 2000; 43; 5:902-6.

- [5] Lumpkin GT, Dess GG. Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review* 1996; 21;1:135-72.
- [6] Wiklund J, Shepherd D. Research notes and commentaries: knowledge-based resources, entrepreneurial orientation, and the performance of small and medium-sized businesses. *Strategic Management Journal* 2003; 24:1307-14.
- [7] Miller D, Friesen PH. Strategy making and environment. *Strategic Management Journal* 1983; 4:221-35.
- [8] Knight GA. Entrepreneurship and strategy in the international SME. *Journal of International Management* 2001; 7:155-71.
- [9] Hitt MA, Hoskisson RE, Ireland RD. A mid-range theory of the interactive effects of international and product diversification on innovation and performance. *Journal of Management* 1994; 20;2:297-326.
- [10] Hitt MA, Ireland RD, Camp SM, Sexton DL. Guest editors' introduction to the special issue. strategic entrepreneurship: entrepreneurial strategies for wealth creation. *Strategic Management Journal* 2001; 22:479-91.
- [11] Shane S, Venkataraman S. The promise of entrepreneurship as a field of research. *Academy of Management Review* 2000; 25;1:217-26.
- [12] Covin JG, Slevin DP. Strategic management of small firms in hostile and benign environments. *Strategic Management Journal* 1989; 10:75-87.
- [13] Miller D, Friesen PH. Innovation in conservative and entrepreneurial firms: two models of strategic momentum. *Strategic Management Journal (pre-1986)* 1982; 3;1:1-25.
- [14] Richard OC, Barnett T, Dwyer S, Chadwick K. Cultural diversity in management, firm performance, and the moderating role of entrepreneurial orientation dimensions. *Academy of Management Journal* 2004; 47:255–66.
- [15] Covin JG, Slevin DP. A conceptual model of entrepreneurship as firm behavior. *Entrepreneurship Theory and Practice* 1991; 16;1:7-25.
- [16] Knight GA. Cross cultural reliability and validity of a scale to measure firm entrepreneurial orientation. *Journal of Business Venturing* 1997; 12;3:213-25.
- [17] Miller D. The correlates of entrepreneurship in three types of firms. *Management Science (pre-1986)* 1983; 29;7:770-91.
- [18] Wiklund J. The sustainability of the entrepreneurial orientation-performance relationship. *Entrepreneurship Theory and Practice* 1999; 24;1:39-50.
- [19] Miles RE, Snow CC, Meyer AD, Coleman Jr HJ. *Organizational strategy, structure, and process*. McGraw-Hill; 1978.
- [20] Zahra SA, Pearce J. Research evidence on the Miles-Snow typology. *Journal of Management* 1990; 16;4:751-68.
- [21] Snow CC, Hrebiniak LG. Strategy, distinctive competence and organizational performance. *Administrative Science Quarterly* 1980; 31:171–93.
- [22] Hambrick DC. Some tests of the effectiveness and functional attributes of Miles and Snow's strategic types. *Academy of Management Journal* 1983; 56;1:5-26.
- [23] Zahra SA, Garvis DM. International corporate entrepreneurship and firm performance: the moderating effect of international environmental hostility. *Journal of Business Venturing* 2000; 15;5:469-92.
- [24] Hu YS. The international transferability of competitive advantage. *California Management Review* 1995; 37;4:73–88.
- [25] Kimura Y. Firm specific strategic advantages and foreign direct investment behavior of firms: the case of Japanese semi-conductor firms. *Journal of International Business Studies* 1989; 20:296-314.
- [26] Mascarenhas B. Order of entry and performance in international markets. *Strategic Management Journal* 1992, 13;7:499-510.
- [27] Bannon L. Mattel plans to double sales abroad. *Wall Street Journal* 1998; Feb 11; A3 and A8.
- [28] Morris MH, Kuratko DF. *Corporate entrepreneurship: entrepreneurial development within organizations*. Orlando: Harcourt College Publishers; 2002.
- [29] Stevenson HH, Jarillo JC. A paradigm of entrepreneurship: entrepreneurial management. *Strategic Management Journal* 1990; 11:17-27.
- [30] Shortell SM, Zajac EJ. Perceptual and archival measures of miles and snow's strategic types: a comprehensive assessment of reliability and validity. *Academy of Management Journal* 1990; 33;4:817-32.
- [31] Slater SF, Narver JC. Market orientation and learning organization. *Journal of Marketing* 1995; 59;3:63-74.
- [32] Tanewski GA, Prajogo D, Sohal A. Strategic orientation and innovation performance between family and non-family firms. In: Berrow G, ed. *ICSB 48th World Conference Proceedings* 2003; p.1-21.

- [33] Zahra SA. Corporate strategy types, environmental perceptions, managerial philosophies, and goals: an empirical study. *Akron Business and Economic Review* 1987; 18:64-77.
- [34] Conant JS, Mokwa MP, Varadarajan PR. Strategic types, distinctive marketing competencies and organisational performance: a multiple measures-based study. *Strategic Management Journal* 1990; 11:365-383.
- [35] Smith KG, Guthrie JP, Chen MJ. Miles and Snow's typology of strategy, organisational size and organisational performance. *Academy of Management Proceedings* 1986; p.45-9.
- [36] Antoncic B, Hisrich RD. Intrapreneurship: construct refinement and cross-cultural validation. *Journal of Business Venturing* 2001; 16:495-527.
- [37] Barringer BR, Bluedorn AC. The relationship between corporate entrepreneurship and strategic management. *Strategic Management Journal* 1999; 20:421-444.
- [38] Werner S, Brouthers LE, Brouthers KD. International risk and perceived environmental uncertainty: the internal consistency of Miller's measure. *Journal of International Business Studies* 1996; 27;3:571-87.
- [39] Khandwalla PN. *Design of organizations*, New York:Harcourt Brace Jovanovich; 1997.
- [40] Miller D, Friesen PH. A longitudinal study of the corporate life cycle. *Management Science* 1984; 30:1161-83.
-