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How Partner Characteristics Can Affect Performance of Alliances with Different Time Frames?

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Abstract

Firms increasingly adopt cooperative strategies and form strategic alliances with foreign partners to be prosperous in entering to international market. Most of scholars have typically focused on generic, conceptual models for alliances partner selection, addressing only limited dimensions of the partner characteristics. This paper presents a new empirical framework that considering the effect of partner characteristics on export performance of alliances, in the case of short/medium-term alliances and long-term ones. The study explores the effective partner characteristics for each type of alliances based on a sample of 540 alliances which rooted in East European region and also, have at least one Iranian partner. The findings stress the differences between varied partner characteristics in short/medium-term and long-term alliances. More specifically, results introduce a framework that addresses certain and specific partner characteristics to improve the export performance of alliances, due to the time frame of strategic alliances.

Keywords: *Strategic Alliance, Alliance Partner, Alliance Time Frame, Partner Characteristics, Export Performance.*

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1. Introduction

In the contemporary business world, forming strategic alliances is a reliable strategy for firms to expand the geographic scope from domestic to international markets. Strategic alliances provide firms with opportunities to gain more market power and achieve faster and more effective market entry in the international market (Xia, 2011). Strategic alliances create value through the combination of complementary resources and capabilities beyond firm boundaries (Mindruta, Moeen & Agarwal, 2016); and are particularly effective in helping a firm gain and maintain a competitive advantage in dynamic, volatile and uncertain international environments.

While research on strategic alliance has produced an impressive body of theoretical and empirical work, important limitations exist. In particular, the literature is rich on general studies on partner selection. Many scholars highlighted the importance of appropriate partner selection as a critical parameter in alliance success, since that superior value creation depends on whether partners represent synergies in the relevant characteristics (Shah & Swaminathan, 2008; Mitsuhashi & Greve, 2009; Ahuja, Polidoro, & Mitchell, 2009; Mindruta, Moeen & Agarwal, 2016). But on the other hand, frameworks that addresses when and why managers choose partners with certain, specific characteristics are understudied. In addition, much works on strategic alliances and partner characteristics have been based on developed economies. But, strategic alliances concept is growing in appeal to firms in developing economies and become a strategic choice that firms pursue to gain competitive advantage in international markets. Highly complex, volatile and largely unknown business environment of developing economies raises the risk of any business collaboration (Li & Ferreira, 2008). So, managers of developing economies-based firms should be able to choose a right partner to ally with, particularly in international markets where firms faced with intense competition from developed economies-based firms, MNCs and alliances.

A vast body of literature has investigated the partner attractiveness in general, but limited number of empirical studies existed which define a set of partner characteristics for specific alliances. Against this backdrop, the current research focuses on understanding the most effective partner characteristics for short/medium-term alliances and long-term ones. The assumption here is that time frame may play a determining role in partner selection and in choosing which firm to ally with. To test this assumption, it is needed to assess partner characteristics with alliance performance in both of short/medium-term alliances and long-term ones. Also, as the current study focuses on international strategic alliances, this assumption tied with the performance in international market, namely export performance of alliances. The question thus follows, which partner characteristics affect the export performance of short/medium-term or long-term alliances among developing economies-based firms? This research makes a number of empirical and practical contributions. First and the most important, this study focuses on time

frame of alliances. Previous literature mostly points out the strategic alliances as a short-term relationship. But, issues and attributes of long-term strategic alliances are not the same as short/medium-term ones (Swärd, 2016). Partners involved in short/medium-term alliances exchange resources for a definite time frame in order to achieve a specific objective and the separation phase is arranged at the end of that time period. On the other hand, resources exchange in long-term alliances is happened in indefinite time period and normally, the separation phase is not arranged and alliances are terminated due to problems associated with the alliance (Bignoux, 2006). The current work distinguishes between short/medium-term and long-term alliances, and applied the theory to the case of wholly export-oriented alliances from a developing economy context, and provides empirical evidences about the effects and priorities of partner characteristics on export performance of alliances. Second, it adds significant new empirical knowledge to the international strategic alliance from developing economies context literature and provides a more complete understanding of the impact of alliance partners' characteristics on alliance outcome.

The remainder of this paper is organized as follows: The next section contains a brief literature review about international strategic alliances and partner characteristics. Then the research methodology, including data collection and measures presents in the subsequent section. The paper continues with a presentation of empirical findings and sensitivity analysis, along with the discussion of the findings, limitations, and directions for future researches.

2. Literature review

Strategic alliance plays an important role as a solution for firms to expand to international markets (Nakos, Brouthers & Dimitratos, 2014) and provides firms with resources and knowledge (Yu, Gilbert & Oviatt, 2011), and also legitimacy in market space (Chen & Huang, 2004). Numerous definitions with diverse theoretical viewpoints have been presented for the strategic alliance, but there is a common understanding about some fundamental dimensions of this concept. Strategic alliances are voluntary inter firm cooperative arrangements for value creation through access to reciprocal resources, skills and capabilities (Ahuja, 2000; Zhang, Duysters & Filippov, 2012), and aimed at achieving the objectives of the partners (Das & Teng, 2002). Scholars defined international strategic alliances as a firm's propensity to engage in strategic alliances with foreign partners (Lee & Park, 2006). Indeed, in international markets, strategic alliances provide firms with the resources and capabilities needed to overcome the liability of foreignness (Nakos, Brouthers & Dimitratos, 2014). Although literature has debated vastly on diverse benefits of alliances for engaging firms, these benefits could be summarized in superior competitive position in international markets. Despite the advantages offered by international strategic alliances, however empirical evidence shows few successful alliances (Bierly & Gallagher, 2007; Arranz, Arroyabe, & de Arroyabe, 2016), especially from developing economies context (Li & Ferreira, 2008).

As a body of research stated, inappropriate chosen partners is a key determinant variable of strategic alliances failure (Bierly & Gallagher, 2007), and is a predominant source of internal tension in strategic alliances (Krishnan, Martin & Noorderhaven, 2006). It is supposed that even outstanding strategic alliance management may not be sufficient to overcome poor partner selection (Cummings & Holmberg, 2012). According to Arranz, Arroyabe, and de Arroyabe (2016), the alliance cooperation itself is not a guarantee of successful entry in international markets and searching, choosing and coordinating of partners has a pivotal role in attainment of desired goals.

The partner selection consists of choosing to ally with someone among the various available options who has the resources you need and whom you can induce, via your own stock of resources, to collaborate with you. This choice relates to what capabilities are being combined in an alliance (Ahuja, Polidoro & Mitchell, 2009), and is a key decision alongside decisions about governance structure and alliance scope (Meuleman et al., 2010). The importance of partner selection can be discussed from different theoretical contexts. From the resources based-view, partner selection is a critical decision in pre-agreement phase of strategic alliances formation, because it influences the mix of resources and capabilities which will be available to the alliance (Dong & Glaister, 2006); and thus, arises complementarity (Shah & Swaminathan, 2008; Mindruta, Moeen & Agarwal, 2016).

Undoubtedly, the alliances' outcome is contingents on partner characteristics (Lu & Beamish, 2006). Also, specific characteristics could determine the dynamics of any cooperative activities. According to Shah and Swaminathan (2008) alliance type is a critical consideration in evaluating the importance of specific partner characteristics. There is needed to do studies which examine whether and how partner selection criteria might vary with different types of strategic alliances (Hitt et.al, 2000). So, in the case of developing economies-based international strategic alliances, we need to consider specific characteristics that are relevant and significant to the context.

While debate over partner characteristics received increased attention in the strategic alliance literature (Gomes, Barnes & Mahmood, 2016), scholars pursue different routes to present their findings. Some researches consider the motives for alliances and then present partner characteristics due to the specific motives (Dong & Glaister, 2006). Numerous studies, such as works of Hitt and his colleagues in 2000 and 2004, provide sets of general partner characteristics. Also, there are some researches which focused on few and specific criteria such as trust or reputation (Bierly & Gallagher, 2007). Hence, this variety makes it difficult to do a comprehensive review on partner characteristics and it is needed to limit the theoretical and contextual backgrounds (Hitt et al., 2000). Also, in accordance with Cummings and Holmberg (2012), criteria for choosing someone to ally will change over time and so it is needed to consider time-based limitation in the alliance partner selection.

Table 1 presents the list of partner characteristics for international strategic alliances, and also recent contributors for each item. This list is not limited to indicate ones, but the theoretical, contextual and time-based concerns would ensure that potentially all important partner characteristics for developing economies-based international strategic alliances are extracted from the literature.

Table 1. List of Partner Characteristics and Recent Contributors

Partner Characteristics	Contributors
Access to distribution channels	Dong and Glaister (2006); Chand and Katou (2012); Wu and Barnes (2014)
Financial assets	Hitt et.al (2000); Hitt et.al (2004); Dong and Glaister (2006); Chen, Lee and Wu (2008); Gulati, Lavie and Singh (2009); Solesvik and Westhead (2010); Ahlstrom et.al (2014)
Institutional knowledge	Dong and Glaister (2006); Solesvik and Westhead (2010); Chand and Katou (2012)
Intangible assets (non technological)	Hitt et.al (2000); Hitt et.al (2004); Wu, Shih and Chan (2009); Ahlstrom et.al (2014)
International market knowledge	Hitt et.al (2000); Luo (2002); Hitt et.al (2004); Dong and Glaister (2006); Wu, Shih and Chan (2009); Chand and Katou (2012); Ahlstrom et.al (2014)
Links with buyers and suppliers	Dong and Glaister (2006); Solesvik and Westhead (2010); Chand and Katou (2012)
Managerial capability	Hitt et.al (2000); Luo (2002); Hitt et.al (2004); Wu, Shih and Chan (2009); Ahlstrom et.al (2014); Bakker (2016); Jalali (2017)
Previous alliance experiences	Hitt et.al (2000); Hitt et.al (2004); Hoang and Rothaermel (2005); Dong and Glaister (2006); Gulati, Lavie and Singh (2009); Ahlstrom et.al (2014)
Reputation of the partner	Luo (2002); Dong and Glaister (2006); Nielsen (2007); Solesvik and Westhead (2010); Ding, Dekker and Groot (2014); Gu and Lu (2014)
Technological capability	Hitt et.al (2000); Luo (2002); Chen, Lee and Wu (2008); Wu, Shih and Chan (2009); Gulati, Lavie and Singh (2009); Chand and Katou (2012); Ahlstrom et.al (2014); Badir and O'Connor (2015); Jalali (2017)
Trust representation	Dong and Glaister (2006); Bierly and Gallagher (2007); Nielsen (2007); Shah and Swaminathan (2008); Solesvik and Westhead (2010); Ding, Dekker and Groot (2014)

Regarding the above discussions, a key question arises as to: Which partner characteristics affect the export performance of international strategic alliances? How we could prioritize the importance of varied partner characteristics for different time frame of alliances? Many recent researches posit that strategic alliances' outcome depends on partner characteristics, but limited studies specifically examine the role of various partner characteristics on alliance outcome (Nielsen, 2003; Wyatt, Pathak & Zibarras, 2010; Arranz, Arroyabe, & de Arroyabe, 2016). So, when we talk at the level of international business, the most significant

outcome of international strategic alliance manifested in the performance of alliance, namely, export performance of alliance.

Export performance can be explained as the outcomes from an exporting and thus it is the extent to which the firm achieves its purposes when exporting products or services to international markets (Navarro et al., 2010). Wang and Leastari (2013) referred to financial indicators as the best proxy for export performance. While the export performance in many researches is supposed to be depend on firm competitive position. These different viewpoints made it challenging to reach a consensus over the concept of export performance (Sousa, Martínez-López & Coelho, 2008; Jalali, 2012; Malhotra & Kumari, 2016), and it is needed to consider both of the qualitative and quantitative dimensions of export performance concept (Navarro-García et al., 2016). Hence, a multidimensional approach based on market data is used in this study to provide a better understanding of export performance in international strategic alliances. While numerous researches devoted to the export performance in the firm-level, the export performance of alliances is an issue that has been underexplored, not only in strategic alliance research, but in strategic management research as a whole.

3. Methodology

3.1. Data Collection and Sample

This study aimed to assess the effective partner characteristics for international strategic alliances in both form of short/medium-term alliances and long-term ones. To reach to this aim, current research has focused on empirical findings from analysis of the relationship between partner characteristics and export performance of alliance, and categorizes these findings for short/medium-term alliances versus long-term ones. In order to test the intention of the study, the databases of Iran Ministry of Industry, Mine and Trade (MIMT), Iran Chamber of Commerce, Industries, Mines and Agriculture (ICCIMA) and the Islamic Republic of Iran Customs Administration (IRICA) were used as an initial sampling frame to find strategic alliances between Iranian and Eastern European firms (i.e. Including Belarus, Bulgaria, Czech Republic, Hungary, Moldova, Poland, Romania, Russia, Slovakia and Ukraine, according to the United Nation Statistics Division (UNSD) classification, and also Anderson, 2011). So, the initial sample consisted of international strategic alliances between partners from developing economies-based countries.

For sampling, alliances were categorized in two groups, who have been formed last three years (short/medium-term alliances) and who have endured more than three years (long-term alliances). Then, simple random sampling was used and a sample of 1244 alliances was identified; 61% of the sample is short/medium-term ones and 39% are of long-term alliances. All participants received an identical online questionnaire. Prior to the full-scale study, the questionnaire was presented to several experts of different disciplines in strategy and international business to test

the difficulties, ambiguities, clarity and validity of measures. Then, a revised version of the questionnaire was used in the full-scale study. Data were collected over a period of five months during 2016. The data collection yielded 540 valid surveys (52% of short/medium-term alliances and 48% of long-term alliances), making an available return rate of 43.4%. Nearly half the alliances partners (49.8%) are large firms with more than 250 employees, while 19.4% of firms have fewer than 50 employees, and 30.8% are firms with employees between 50 and 250. Overall, the sample represented 13 different manufacturing industries. Petroleum products, textile product mills and food manufacturing were represented the most with 41.2%, 28.5% and 21.1%, respectively. These alliances are involved in different markets, but majority of them (60.7%) export their products to a target market which is not the origin of any partners, and 23.7% of them are doing business internationally, without focusing on a specific target market.

3.2. Measurement

3.2.1. Independents

The respondents were presented with the list containing of eleven international strategic alliances partner characteristics, as mentioned in the table 1. This list was compiled after thorough review on previous empirical studies about alliances partner characteristics with theoretical, contextual and time-based limitation. The resulting characteristics were then reviewed with academics and executives to ensure that the list was complete and that all partner characteristics were potentially relevant criteria for the content and context of current research. Respondents were first asked to identify their perception of the importance of partner characteristics on each item which was rated on a five-point scale, ranging from "not at all important" (1) to "very important" (5).

3.2.2. Dependents

Dependent variable in the current study is the export performance of alliances. It is obvious that export performance is a multifaceted construct and needs special care to its measurement (Carneiro et al., 2016). Some scholars such as Navarro-García and his colleagues (2016) distinguish between strategic export performance and operational export performance. Strategic export performance or subjective dimension of the construct is concerned with the performance of a company compared to its major competitors (Koksal & Kettaneh, 2011, Jalali, 2012), or relative to its expectations (Mac & Evangelista, 2016). Whereas operational dimension of objective aspect of the export performance was measured using popular criteria of export to total profit ratio (Mac & Evangelista, 2016; Jalali & Soleimani, 2014). Thus, the scale measuring the alliances export performance consisted of two dimensions: export profitability in the objective dimension, and satisfaction about alliance performance in the subjective dimension. Although, due to the scope of this study, the export performance of short/medium-term alliances

(alliances with less than three years age) and the export performance of long-term alliances (alliances endured more than three years) are separated from each other.

3.2.2. Controls

Some variables were used as controls in the analyses because of their potential effect on partner selection. These variables can be categorized in three groups of industry, size and experience. Industry type (natural resources, manufacturing, and services) was controlled in the analyses. Each industry type was transformed into a dummy variable; while the petroleum products, textile product mills and food manufacturing were represented the 90.8% of the sample. Firm size is another control variable which was calculated as the natural logarithm of the total number of employees. International experiences is the third control variable. As firms gain more experiences in international markets, their performance will be improved and they will better respond to the international markets necessitates. Thus, the international experience of the firm, calculated as the total number of years in which the firm had engaged in international markets, was controlled.

4. Results

4.1. Descriptive Statistics

Table 2 and 3 show descriptive statistics and intercorrelations for all variables. Between different variables, the average links with buyers and suppliers measure is 0.86, but the standard deviation of 1.44 indicates that there is substantial variation across alliances. The financial assets have a similar situation with a average of 0.96 and standard deviation of 1.60. Table 3; also provide some valuable insights about the sample, as it shows that the size of partner plays a significant role in formed alliances in natural resources and manufacturing.

4.2. How Partner Characteristics Can Affect Export Performance?

To answer the question about how partner characteristics can affect export performance, the results are presented in models A to D of table 4. Each of the reported estimates is from panel-level regressions allowing for random effects, heteroskedasticity and clustering of the standard errors. Model A and B are relates to short/medium-term alliances, while the results of analyses for long-term alliances are presented in model C and D. Also, models A and C are including only fixed effects (controls), while model B and D including both of fixed effects and random effects.

The results presented in table 4 show that the coefficients for managerial capability are positive and statistically significant in both the short/medium-term alliances and long-term alliances, suggesting that both forms of alliances place emphasis on this criterion as a determinant partners characteristics to reach to a desired level of export performance.

Table 2. Descriptive Statistics and Correlation Matrix

		Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11	12	13
1	Short/Medium-term Alliances	3.21	0.98	1												
2	Long-term Alliances	4.11	1.01	0.53**	1											
3	Links with buyers and suppliers	0.86	1.44	0.09	-0.15	1										
4	Access to distribution channels	1.22	0.78	0.14+	0.13+	0.24**	1									
5	Institutional knowledge	3.29	0.62	0.21*	0.15*	0.19**	0.29**	1								
6	International market knowledge	2.44	1.18	0.18+	0.20*	0.31**	0.30**	0.14+	1							
7	Previous alliance experiences	2.38	1.23	0.30**	0.06	-0.14*	0.14+	0.23**	0.19*	1						
8	Trust representation	3.14	0.84	0.12+	0.35**	-0.11+	0.17*	0.18**	-0.09	0.17*	1					
9	Reputation of the partner	2.12	1.37	0.1	0.29**	0.15*	0.19*	0.25**	0.1	0.36**	0.33**	1				
10	Managerial capability	4.61	0.93	0.27**	0.31**	0.08	0.12+	-0.14+	0.27**	0.22**	0.20**	-0.15*	1			
11	Financial assets	0.96	1.6	0.14*	0.16*	-0.01	0.11	0.09	0.15+	0.13+	0.14+	-0.13+	0.23**	1		
12	Technological capability	2.79	1.37	-0.13	0.18**	-0.19*	-0.06	-0.17*	-0.18*	0.19*	0.07	0.09	0.28**	0.16*	1	
13	Intangible assets	3.01	0.99	0.11	0.14+	0.16*	-0.01	0.19**	-0.14+	0.26**	0.21**	0.18*	0.34**	0.11	0.27**	1

N=540. **p<0.01 level; *p<0.05 level; +p<0.1 level

Table 3. Descriptive Statistics and Correlation Matrix for Control Variables

	Mean	S.D.	1	2	3	4	5
1. Natural Resources	0.98	0.24	1				
2. Manufacturing	0.21	0.13	-0.13	1			
3. Services	0.09	0.17	0.01	0.08	1		
4. Firm Size[a]	3.99	3.03	0.36**	0.21**	0.05	1	
5. International Experiences	5.12	9.11	0.19*	0.10	-0.01	0.16*	1

** p<0.01 level; * p<0.05 level; + p<0.1 level. [a]Logarithmic

Furthermore, the relevant *z* statistic shown in table 4 is positive and statistically significant (*z=3.118; p < 0.01*), indicating that long-term alliances more heavily emphasize this criterion than do short/medium-term ones.

Table 4. Effective Partner Characteristics in Export Performance of Strategic Alliances

	Short/Medium-term Alliances				Long-term Alliances			
	Model A		Model B		Model C		Model D	
Fixed Effects (controls)	β	z-stat	β	z-stat	β	z-stat	β	z-stat
Intercept	0.678	0.359	3.111*	2.177	1.522	0.999	4.257**	3.614
Industry 1 (Natural Resources)	0.188*	1.413	0.165+	1.401	0.177*	1.513	0.173*	1.502
Industry 2 (Manufacturing)	0.144+	1.212	0.121	1.030	0.152*	1.382	1.150+	1.380
Industry 3 (Services)	0.013	0.700	0.011	0.661	0.010	0.510	0.002	0.392
Firm Size	0.170*	1.219	1.157+	1.111	0.191**	1.600	1.163*	1.444
International Experiences	-0.122+	0.982	-0.099	0.740	0.130+	1.096	0.113	0.878
Random Effects								
Links with buyers and suppliers			0.241**	2.230			-0.222	-1.370
Access to distribution channels			0.228**	2.186			-0.190	-1.285
Institutional knowledge			0.204*	2.111			0.295**	2.871
International market knowledge			0.141+	1.317			0.151*	1.459
Previous alliance experiences			-0.056	0.082			0.130	0.988
Trust representation			0.113	1.104			0.198*	1.823
Reputation of the partner			0.100	1.012			0.202**	2.011
Managerial capability			0.355**	2.539			0.414**	3.118
Financial assets			0.299**	2.455			0.112	0.961
Technological capability			-0.410	-1.119			0.311**	2.644
Intangible assets			0.199*	2.012			0.143+	1.313
Observations	284		284		256		256	
Chi-squared statistic	322.2*		471.3*		360.1*		577.9*	
R-squared	0.217		0.238		0.222		0.284	

Results are based on random-effects regressions with controls for heteroskedasticity, autocorrelation, and industry-level clustering. ** p<0.01 level; * p<0.05 level; + p<0.1 level. All significance tests are two-tailed.

The coefficients presented in Table 3 for institutional knowledge, international market knowledge and intangible assets are also positive and significant with different levels for both of short/medium-term alliances and long-term alliances. However, the difference between significant level suggesting that export performance of long-term alliances more determined by institutional knowledge (*β=0.295; z=2.871; p < 0.01*) and international market knowledge (*β=0.151; z=1.459; p < 0.05*) as partner characteristics, while the short/medium-term

alliances place greater emphasize on intangible assets (*ϐ=0.199; z=2.012; p < 0.05*) than do long-term ones.

Along with these common variables, analysis showed that there are some partner characteristics which are determinant in export performance of only short/medium-term alliances or long-term alliances. Table 3 shows that the coefficient and *z* statistic for links with buyers and suppliers (*ϐ=0.241; z=2.230; p < 0.01*), access to distribution channels (*ϐ=0.228; z=2.186; p < 0.01*), and financial assets (*ϐ=0.299; z=2.455; p < 0.01*), are positive and statistically significant in the short/medium-term alliances, but the coefficients for these criteria are not statistically significant in the long-term alliances. Furthermore, the coefficient and *z* statistic of trust representation (*ϐ=0.198; z=1.823; p < 0.05*), reputation of the partner (*ϐ=0.202; z=2.011; p < 0.01*), and technological capability (*ϐ=0.311; z=2.644; p < 0.01*) presented in table 4 are positive and statistically significant for only long-term alliances, suggesting that export performance in long-term alliances affected by these characteristics more strongly than do short/medium-term ones. It is also notable that a previous alliance experience is not statistically significant in both forms of alliances.

Due to the findings, the effective partner characteristics in export performance of short/medium-term alliances and long-term alliances could be summarized as presented in table 5. Partner characteristics are sorted by the β coefficient.

Table 5. Assortment of Effective Partner Characteristics in Export Performance of Alliances

Short/Medium-term Alliances		Long-term Alliances	
Partner Characteristics	**β**	**Partner Characteristics**	**β**
1. Managerial capability	0.355**	1. Managerial capability	0.414**
2. Financial assets	0.299**	2. Technological capability	0.311**
3. Links with buyers and suppliers	0.241**	3. Institutional knowledge	0.295**
4. Access to distribution channels	0.228**	4. Reputation of the partner	0.202**
5. Institutional knowledge	0.204*	5. Trust representation	0.198*
6. Intangible assets	0.199*	6. International market knowledge	0.151*
7. International market knowledge	0.141+	7. Intangible assets	0.143+

** p<0.01 level; * p<0.05 level; + p<0.1

4.2. Sensitivity Analysis

In order to reach to reliable results, two sensitivity tests were carried out. As discussed in methodology section, 52% percent of the sample refers to short/medium-term alliances, while the remaining 48% percent refers to long-term alliances. To see if there are any significant differences between both groups, the analyses were repeated for each set of alliances. In unreported tests, the Driscoll-Kraay estimation were used as an alternative means of ensuring that standard errors are robust to heteroskedasticity, autocorrelation, and cross-sectional dependence (Hoechle, 2007). The sensitivity analysis showed that findings are

strongly robust to this alternative estimation methodology. The second sensitivity tests was also carried out to ascertain whether findings are robust to a closer matching of the time periods for defining alliances (i.e. short/medium-term in less than three years and long-term for more than three years). The alliance time frame measured using data from shorter time spans (i.e. in one year, and for the second time, in two years), which are closer match to the financial outcome of export performance. This sensitivity analysis was find support for findings at the 1 percent significance level.

5. Discussion and Conclusion

Current research contributes to a greater understanding of the alliance performance, regarding of the partner characteristics and alliance's time frame. Indeed, findings of this study provide the following key insight: partner characteristics have different effects on alliances export performance, and the effective characteristics depend on the alliance's time frame, categorized in short/medium-term alliances and long-term alliances.

This study provides several empirical, theoretical, and practical contributions. As empirical contributions, the literature didn't care about strategic alliances from developing economies context. Also, there was no empirical evidence to address the issues of the alliance's time frame. This research extends the literature by focusing on strategic alliances between firms from developing economies context, and also, by suggesting a key role for alliance's time frame in studying the strategic alliances. Data analysis asserts that specific partner characteristics affect the export performance of strategic alliances, and also showed that each partner characteristic has different level of influence on export performance of strategic alliances due to theirs time frame. Hence, there is a contingency-based relationship between partner characteristics and alliance's time frame in performance of alliances, and we couldn't suppose the identical importance for each partner characteristic in decision making about partner selection for strategic alliances.

As discussed in results, while managerial capability plays a vital role as a partner characteristic in both of short/medium-term alliances and long-term ones; different alliances due to their time frame, put a different emphasizes on effective partner characteristics in attaining the desired level of export performance. Whatever strategic alliances endured, emphasizes has changed from financial assets to technological capability. This result stresses the importance of choosing partners based on their technology instead financial status in having more durable, stronger alliances, especially when we talk about long-term prosperous presence in international market. In theoretical aspect, this study shows the critical role of partner characteristics and is in line with the literature (Mindruta, Moeen and Agarwal, 2016). In addition, most of previous researches focused on partner characteristics and present general models that assume the factors that drive partner attractiveness in every alliance types. However, findings of this research

show the importance of studying the alliance time frame, and strongly support the idea that the critical criteria for assessing alliance partner characteristics vary depending on the differential inherent in a short/medium-term strategic alliance and long-term strategic alliances. The current research findings also help executives understand the basis on which partner characteristics affect their alliance outcome, and then, which partner characteristics should have priority on theirs' criteria for decision-making to form alliances due to the intended time frame.

Future researches could identify the way partner characteristics affect alliance outcome from different theoretical and contextual backgrounds, or various time frame. Such studies can extend the literature about partner characteristics in alliance, and more importantly, about differences between various partner characteristics. In addition, the effects examined in this study should be investigated in other countries or regions of the world to determine whether the highly significant results of this study are stable.

References

Ahlstrom, D., Levitas, E., Hitt, M.A., Dacin, M.T. & Zhu, H. (2014). The three faces of China: Strategic alliance partner selection in three ethnic Chinese economies. *Journal of World Business*, *49*(4), 572-585. https://doi.org/10.1016/j.jwb.2013.12.010

Ahuja G. (2000). The duality of collaboration: inducements and opportunities in the formation of interfirm linkages. *Strategic Management Journal, 21*(3), 317-343. https://doi.org/10.1002/(SICI)1097-0266(200003)21:3<317::AID-SMJ90>3.0.CO;2-B

Ahuja, G., Polidoro, F. & Mitchell, W. (2009). Structural homophily or social asymmetry? The formation of alliances by poorly embedded firms. *Strategic Management Journal*, *30*(9), 941-958. https://doi.org/10.1002/smj.774

Anderson, E.E. (2011). Industrial Growth Rates and Instability: An Historical Analysis of the Former Centrally Planned Economies of Eastern Europe. *Eurasian Journal of Business and Economics, 4*(8), 51-70.

Arranz, N., Arroyabe, M.F. & Fdez. de Arroyabe, J.C. (2016). Alliance-building process as inhibiting factor for SME international alliances. *British Journal of Management, 27*(3), 497-515. https://doi.org/10.1111/1467-8551.12159

Badir, Y.F. & O'Connor, G.C. (2015). The formation of tie strength in a strategic alliance's first new product development project: The influence of project and partners' characteristics. *Journal of Product Innovation Management*, *32*(1), 154-169. https://doi.org/10.1111/jpim.12222

Bakker, R.M. (2016). Stepping in and stepping out: Strategic alliance partner reconfiguration and the unplanned termination of complex projects. *Strategic Management Journal, 37*(9), 1919-1941. https://doi.org/10.1002/smj.2429

Bierly, P.E. & Gallagher, S. (2007). Explaining alliance partner selection: Fit, trust and strategic expediency. *Long Range Planning*, *40*(2), 134-153. https://doi.org/10.1016/j.lrp.2007.03.001

Bignoux, S. (2006). Short-term strategic alliances: A social exchange perspective. *Management Decision*, *44*(5), 615-627. https://doi.org/10.1108/00251740610668879

Carneiro, J., Farias, I., da Rocha, A. & da Silva, J. F. (2016). How to measure export performance? Scholars' vs. practitioners' answers. *Journal of Business Research, 69*(2), 410-417. https://doi.org/10.1016/j.jbusres.2015.06.046

Chand, M. & Katou, A.A. (2012). Strategic determinants for the selection of partner alliances in the Indian tour operator industry: A cross-national study. *Journal of World Business*, *47*(2), 167-177. https://doi.org/10.1016/j.jwb.2011.04.003

Chen, H.L. & Huang, Y. (2004). The establishment of global marketing strategic alliances by small and medium enterprises. *Small Business Economics*, *22*(5), 365-377. http://dx.doi.org/10.1023/B:SBEJ.0000022207.90510.46

Chen, S.H., Lee, H.T. & Wu, Y.F. (2008). Applying ANP approach to partner selection for strategic alliance. *Management Decision*, *46*(3), 449-465. https://doi.org/10.1108/00251740810863889

Cummings, J.L. & Holmberg, S.R. (2012). Best-fit alliance partners: The use of critical success factors in a comprehensive partner selection process. *Long Range Planning*, *45*(2), 136-159. http://dx.doi.org/10.1016/j.lrp.2012.01.001

Das, T. K. & Teng, B. S. (2002). The dynamics of alliance conditions in the alliance development process. *Journal of Management Studies*, *39*(5), 725-746. http://dx.doi.org/10.1111/1467-6486.00006

Ding, R., Dekker, H.C. & Groot, T. (2013). Risk, partner selection and contractual control in interfirm relationships. *Management Accounting Research*, *24*(2), 140-155. https://doi.org/10.1108/13552550610667422

Dong, L. & Glaister, K.W. (2006). Motives and partner selection criteria in international strategic alliances: Perspectives of Chinese firms. *International Business Review*, *15*(6), 577-600. http://dx.doi.org/10.1016/j.ibusrev.2006.09.003

Gomes, E., Barnes, B.R. & Mahmood, T. (2016). A 22 year review of strategic alliance research in the leading management journals. *International Business Review*, *25*(1), 15-27. https://doi.org/10.1016/j.ibusrev.2014.03.005

Gu, Q. & Lu, X. (2014). Unraveling the mechanisms of reputation and alliance formation: A study of venture capital syndication in China. *Strategic Management Journal*, *35*(5), 739-750. https://doi.org/10.1002/smj.2117

Gulati, R., Lavie, D. & Singh, H. (2009). The nature of partnering experience and the gains from alliances. *Strategic Management Journal, 30*(11), 1213-1233. https://doi.org/10.1002/smj.786

Hitt, M.A., Ahlstrom, D., Dacin, M.T., Levitas, E. & Svobodina, L. (2004). The institutional effects on strategic alliance partner selection in transition economies: China vs. Russia. *Organization Science*, *15*(2), 173-185. https://doi.org/10.1287/orsc.1030.0045

Hitt, M.A., Dacin, M.T., Levitas, E., Arregle, J.L. & Borza, A. (2000). Partner selection in emerging and developed market contexts: Resource-based and organizational learning perspectives. *Academy of Management Journal*, *43*(3), 449-467. https://doi.org/10.2307/1556404

Hoang, H. & Rothaermel, F.T. (2005). The effect of general and partner-specific alliance experience on joint R&D project performance. *Academy of Management Journal*, *48*(2), 332-345. https://doi.org/10.5465/AMJ.2005.16928417

Hoechle, D. (2007). Robust standard errors for panel regressions with cross-sectional dependence. *Stata Journal*, *7*(3), 281-312. http://EconPapers.repec.org/RePEc:tsj:stataj:v:7:y:2007:i:3:p:281-312

Jalali S.H. (2017). Partner capabilities and alliance time frame: An analysis of international strategic alliances from the CEE. *Journal of Entrepreneurship, Management and Innovation, 13*(2), 59-75. https://doi.org/10.7341/20171323

Jalali, S.H. & Soleimani, M. (2014). An investigation about the impacts of e-commerce adoption on export performance. *International Journal of Modern Management and Foresight*, *1*(3), 129-138.

Jalali, S.H. (2012). The effect of export promotion programmes on export performance: Evidence from Iranian food manufacturers. *International Journal of Business and Globalisation*, *9*(2), 122-133. https://doi.org/10.1504/IJBG.2012.048955

Krishnan, R., Martin, X. & Noorderhaven, N. G. (2006). When does trust matter to alliance performance?. *Academy of Management Journal, 49*(5), 894-917. https://doi.org/10.5465/AMJ.2006.22798171

Lee, H. U. & Park, J. H. (2006). Top team diversity, internationalization and the mediating effect of international alliances. *British Journal of Management*, *17*(3), 195-213. https://doi.org/10.1111/j.1467-8551.2006.00501.x

Li, D. & Ferreira, M.P. (2008). Partner selection for international strategic alliances in emerging economies. *Scandinavian Journal of Management*, *24*(4), 308-319. https://doi.org/10.1016/j.scaman.2008.05.001

Lu, J.W. & Beamish, P.W. (2006). Partnering strategies and performance of SMEs' international joint ventures. *Journal of Business Venturing*, *21*(4), 461-486. https://doi.org/10.1016/j.jbusvent.2005.02.002

Luo, Y. (2002). Partnering with foreign businesses: Perspectives from Chinese firms. *Journal of Business Research, 55*(6), 481-493. https://doi.org/10.1016/S0148-2963(00)00178-8

Mac, L. & Evangelista, F. (2016). The relative impact of market orientation and entrepreneurship on export performance: Do we really know enough?. *Journal of Global Marketing*, *29*(5), 266-281. https://doi.org/10.1080/08911762.2016.1196285

Malhotra, N. & Kumari, D. (2016). Export Performance and Economic Growth in East Asian Economies– Application of Cointegration and Vector Error Correction Model. *Eurasian Journal of Business and Economics, 9*(18), 135-152. https://doi.org/10.17015/ejbe.2016.018.08

Meuleman, M., Lockett, A., Manigart, S. & Wright, M. (2010). Partner selection decisions in interfirm collaborations: The paradox of relational embeddedness. *Journal of Management Studies, 47*(6), 995-1019. https://doi.org/10.1111/j.1467-6486.2009.00897.x

Mindruta, D., Moeen, M. & Agarwal, R. (2016). A two-sided matching approach for partner selection and assessing complementarities in partners' attributes in inter-firm alliances. *Strategic Management Journal*, *37*(1), 206-231. https://doi.org/10.1002/smj.2448

Mitsuhashi, H. & Greve, H.R. (2009). A matching theory of alliance formation and organizational success: Complementarity and compatibility. *Academy of Management Journal*, *52*(5), 975-995. https://doi.org/10.5465/AMJ.2009.44634482

Nakos, G., Brouthers, K.D. & Dimitratos, P. (2014). International alliances with competitors and non-competitors: The disparate impact on SME international performance. *Strategic Entrepreneurship Journal, 8*(2), 167-182. https://doi.org/10.1002/sej.1169

Navarro, A., Losada, F., Ruzo, E. & Díez, J.A. (2010). Implications of perceived competitive advantages, adaptation of marketing tactics and export commitment on export performance. *Journal of World Business*, *45*(1), 49-58. https://doi.org/10.1016/j.jwb.2009.04.004

Navarro-García, A., Arenas-Gaitán, J., Rondán-Cataluña, F. J. & Rey-Moreno, M. (2016). Global model of export performance: Moderator role of export department. *Journal of Business Research*, *69*(5), 1880-1886. https://doi.org/10.1016/j.jbusres.2015.10.073

Nielsen, B.B. (2003). An empirical investigation of the drivers of international strategic alliance formation. *European Management Journal*, *21*(3), 301-322. https://doi.org/10.1016/S0263-2373(03)00043-4

Nielsen, B.B. (2007). Determining international strategic alliance performance: A multidimensional approach. *International Business Review, 16*(3), 337-361. https://doi.org/10.1016/j.ibusrev.2007.02.004

Shah, R.H. & Swaminathan, V. (2008). Factors influencing partner selection in strategic alliances: The moderating role of alliance context. *Strategic Management Journal*, *29*(5), 471-494. https://doi.org/10.1002/smj.656

Solesvik, M.Z. & Westhead, P. (2010). Partner selection for strategic alliances: Case study insights from the maritime industry. *Industrial Management and Data Systems*, *110*(6), 841-860. https://doi.org/10.1108/02635571011055081

Sousa, C.M.P., Martínez-López, F.J. & Coelho, F. (2008). The determinants of export performance: A review of the research in the literature between 1998 and 2005. *International Journal of Management Review*, *10*(4), 343-374. https://doi.org/10.1111/j.1468-2370.2008.00232.x

Swärd, A. (2016). Trust, reciprocity, and actions: The development of trust in temporary inter-organizational relations. *Organization Studies*, *37*(12), 1841-1860. https://doi.org/10.1177/0170840616655488

Wu, C. & Barnes, D. (2014). Partner selection in agile supply chains: A fuzzy intelligent approach. *Production Planning and Control*, *25*(10), 821-839. https://doi.org/10.1080/09537287.2013.766037

Wu, W.Y., Shih, H.A. & Chan, H.C. (2009). The analytic network process for partner selection criteria in strategic alliances. *Expert Systems with Applications*, *36*(3), 4646-4653. https://doi.org/10.1016/j.eswa.2008.06.049

Wyatt, M.R., Pathak, S.B. & Zibarras, L.D. (2010). Advancing selection in an SME: Is best practice methodology applicable?. *International Small Business Journal, 28*(3), 258-273. https://doi.org/10.1177/0266242609350815

Xia, J. (2011). Mutual dependence, partner substitutability, and repeated partnership: the survival of cross-border alliances. *Strategic Management Journal*, *32*(3), 229-253. https://doi.org/10.1002/smj.873

Yu, J., Gilbert, B.A. & Oviatt, B.M. (2011). Effects of alliances, time, and network cohesion on the initiation of foreign sales by new ventures. *Strategic Management Journal, 32*(4), 424-446. https://doi.org/10.1002/smj.884

Zhang, Y., Duysters, G. & Filippov, S. (2012). Chinese firms entering Europe: Internationalization through acquisitions and strategic alliances. *Journal of Science and Technology Policy in China*, *3*(2), 102-123. https://doi.org/10.1108/17585521211256973