



Nakos, G., Dimitratos, P. and Elbanna, S.M.M. (2019) The mediating role of alliances in the international market orientation-performance relationship of SMEs. *International Business Review*, 28(3), pp. 603-612. (doi: [10.1016/j.ibusrev.2018.12.005](https://doi.org/10.1016/j.ibusrev.2018.12.005))

There may be differences between this version and the published version. You are advised to consult the publisher's version if you wish to cite from it.

<http://eprints.gla.ac.uk/174994/>

Deposited on 11 December 2018

Enlighten – Research publications by members of the University of Glasgow
<http://eprints.gla.ac.uk>

THE MEDIATING ROLE OF ALLIANCES IN THE INTERNATIONAL MARKET ORIENTATION-PERFORMANCE RELATIONSHIP OF SMES

Enhancing international performance is a critical issue for internationalizing SMEs. Researchers have suggested that firms need to enhance their international market orientation (IMO) in order to increase performance; but the way this association works is rather unexplored. This is important for both theory and practice since its exploration would lead to a better understanding on how SMEs can effectively enhance their international performance. In this paper, we examine whether alliances through which firms access knowledge and resources play a mediating role in the IMO and performance relationship. We investigate our hypothesis on a sample of 94 companies based in the United Arab Emirates. We discovered that alliances mediate the IMO-performance relationship and we extend the knowledge- and resource-based views of the firm.

Key Terms: International alliances; international market orientation; knowledge-based view; resource-based view; small and medium-sized enterprises

THE MEDIATING ROLE OF ALLIANCES IN THE INTERNATIONAL MARKET ORIENTATION-PERFORMANCE RELATIONSHIP OF SMES

Introduction

Researchers in recent years have tried to identify the characteristics or behaviors that allow small and medium-sized enterprises (SMEs) to increase their international performance despite their lack of resources. For example, the impact of entry mode choice (Hollander, Zapkau, and Schwens, 2017), innovation capacity (Oura, Zilber, and Lopes, 2016), and entrepreneurial orientation (Brouthers, Nakos, and Dimitratos, 2015), are a few of a firm's behaviors and strategies that have been suggested as having the ability to potentially influence the performance of an SME.

Other researchers have looked at a firm's market orientation as a potential predictor of its performance (Frösén et al., 2016; Murray, Gao, and Kotabe, 2011; Knight and Kim 2009; Cadogan, Kuivalainen, and Sundqvist, 2009). Market orientation (MO) and international market orientation (IMO) focus on firm activities that gather market intelligence about customer needs and disseminate this information throughout the organization (Frösén et al., 2016). The activities that comprise market orientation have been examined as one construct or have been broken down into three components, namely competitor orientation, customer orientation, and interfunctional orientation (Narver and Slater 1990; Wilson et al., 2014).

Past research has shown that market orientation is not only important for companies operating in their domestic markets but also tends to improve the performance of internationally oriented firms (Alotaibi and Zhang, 2017; He and Wei, 2011). However, the reasons that generate enhanced performance in companies with strong IMO have not been investigated (Cadogan et al., 2009). It may be that instead of a solely direct association that previous research has suggested to

exist, other variables can intervene which moderate or mediate this important relationship (Murray et al., 2011; Murray et al., 2007). If this is the case, it is significant for international business research to investigate other factors that impact the IMO-SME performance relationship. The exploration of the elements that may influence this important relationship has large practical implications for many SMEs that increasingly expand abroad and try to identify the best strategy to increase their performance.

The significance of international strategic alliances and their impact on a firm's performance has also attracted research interest. Most studies have discovered that cooperating with others through strategic alliances can help SMEs succeed in foreign markets (O'Dwyer and Gilmore, 2018; Brouthers et al., 2015). Strategic alliances are agreements between two or more companies to share knowledge and resources (Bos, Faems, and Noseleit, 2017). Participation in strategic alliances leads to enhanced international performance because alliances act as a source of new knowledge or resources and allow SMEs to overcome institutional obstacles inherent in the internal environments of many countries (Khalid and Larimo, 2012).

Although research in these two areas has provided valuable insights about SME international performance, a search of the literature did not reveal any studies that look at how IMO and participation in strategic alliances jointly may influence non-domestic operations. This is surprising because IMO provides a company with superior knowledge about foreign target markets (Frösén et al., 2016). This newfound knowledge can lead to form specific links with external partners if the firm discovers that it lacks the necessary skills and resources required for success in a target market. We suggest, therefore, that a strong connection can exist between IMO, the formation of alliances and performance.

We theorize and test the idea that alliances may actually be a mediating variable that helps to partially explain the influence of IMO on firm performance. A mediating relationship exists when one factor (the independent variable) wholly or partially influences another factor (the dependent variable) through a third factor (the mediating variable). We seek to gain a better understanding of the issues that influence international firm performance through the examination of such a mediating effect.

More specifically, by conceptualizing the relationship between IMO and alliances as a mediating relationship, as opposed to previous research that viewed them as being directly connected with performance, we aim to improve our understanding of how IMO and alliances can be used to improve SME international performance. We use the knowledge-based view (KBV) of the firm, the resource-based view (RBV), and the institutional theory(IT) to explain why IMO provides a company with the knowledge or access to knowledge that impacts SME performance both directly and through the mediation of alliances.

This paper is organized into the following sections. The first section presents the IMO and alliance literatures and explains why firms possessing higher IMO will be expected to engage more intensively in international strategic alliances. We then present our mediating model and develop a set of hypotheses that test the relationships outlined in this model. The next section explains our research methodology and discusses how we tested our three hypotheses. Following the results, the last section reports the key findings of our study, implications for academics and business practitioners and limitations.

THEORY AND HYPOTHESES

Knowledge- Resource-Based Views and Institutional Theory

The theoretical framework on which the model is based originates from the KBV (Grant 1996), the RBV of the firm (Barney 1991), and the IT (North, 1990). The KBV of the firm is related to RBV as it focuses on knowledge being the most important strategic resource for the success of the company. The KBV offers unique perspectives because it looks at the specific aspect of the management of the intangible assets of a company, such as managerial knowledge, proprietary technology and know-how, coordination inside the firm, and the location of decision-making activities.

The importance of knowledge that the KBV theory emphasizes is important in this study because it leads companies possessing high IMO to obtain knowledge about the customer and competitive environment of a foreign target market and then to disseminate this knowledge to the various departments of the firm. However, the advantages of knowledge by themselves are not sufficient if a company does not possess the necessary resources to operate in a target market and ways of overcoming the formal and informal institutional obstacles that may exist there (Chabowski and Mena, 2017). Because SMEs do not possess or do not have the required resources for success and the foreign market may pose formal and informal institutional obstacles, engagement in alliances may allow them to obtain the required resources and provide them with ways of overcoming local institutional barriers.

The fundamental definition of “what is knowledge” has puzzled not only business researchers but also ancient philosophers like Plato and a multitude of modern thinkers. For the purposes of this study, Grant’s (1996) definition of knowledge will be adopted, which defines it as the information needed by the company to accomplish specific tasks. Subsequently, it becomes apparent that many different types of knowledge exist capable of influencing the behavior of the

firm. According to Grant (2002), KBV is a collection of ideas centered on the premise that the role of knowledge is crucial for the success of the company.

Although many different classifications of knowledge have been proposed in the past, most researchers agree that two broad categories exist, *explicit* and *tacit* knowledge. Explicit knowledge is easily transferable both from outside sources and within an organization. It is the knowledge that allows a company to know about facts and information and it is fairly easy to communicate it to other individuals. Tacit knowledge, on the other hand, is usually revealed by applying it and it is almost impossible to codify. While the transfer of explicit knowledge is relatively simple, the transfer of tacit knowledge can be very slow and uncertain (Kogut and Zander, 1992).

In addition to the knowledge required by the firm to successfully operate in a domestic environment, an internationalizing company will require specialized knowledge if it wants to effectively establish itself in foreign markets. When a company decides to move abroad it will need specific knowledge on selecting the markets that offer the highest opportunities, the entry mode that it will use, and the appropriate level of resource commitment (He and Wei, 2011). Other factors requiring the obtainment of specialized knowledge are the cultural, political, social, and economic conditions prevalent in a target market. Some of this knowledge may be explicit and therefore easy to obtain, while other unique characteristics of a market can constitute tacit knowledge, making it almost impossible for a firm to acquire it in a short period of time.

Companies that realize the centrality of knowledge of international markets for their success will most likely utilize an extensive IMO to obtain the required information (Racela et al., 2007). While IMO may provide a company with improved explicit knowledge of a target market, it will not supply the tacit knowledge that in many cases is essential for success. In addition, IMO is likely to make the company realize that it lacks essential resources required for operating in that

market. Many of these resources because they involve tacit knowledge may be impossible to develop internally. For example, specialized distribution systems and knowledge of complex local regulations can be impossible to develop in a short period of time. While a large company has the option of obtaining this specialized knowledge and resources by hiring local employees who possess these skills or by acquiring local companies, an SME usually does not possess the resources to follow this strategy. In order to alleviate this lack of resources and limitations of local tacit knowledge, a firm will probably form alliances with other companies. By doing so, it will be able to access the resources and the specialized knowledge that these partners possess (Khalid and Larimo, 2012).

The RBV has emerged in the past decades as a very influential framework to analyze the sources and sustainability of a firm's competitive advantage. RBV posits that the company's competitive advantage derives from the accumulation of resources that a firm possesses (Penrose, 1959). A firm's competitive advantage is sustainable if it possesses resources that are unique, valuable, inimitable and non-substitutable (Barney 1991). A firm may derive a competitive advantage from different type of resources, both tangible and intangible. For example, the company's physical capital and brand names are unique assets that could provide it with competitive advantage, as well as less tangible assets such as managerial expertise and capabilities (Hollender et al., 2017).

While large multinationals may have the ability to purchase or develop unique resources that can help them sustain or develop a unique competitive advantage, SMEs can engage in strategic alliances to access the required knowledge and resources that will provide them with a sustainable competitive advantage in a foreign market. This allows SMEs to efficiently apply the knowledge and resources of their alliance partners instead of engaging in very costly and uncertain

knowledge exploration and attempt to internally develop necessary resources. An effective IMO mechanism will allow a company to collect useful explicit knowledge about international target markets (Racela et al. 2007).

In addition to resources that a company may not have to successfully operate in a foreign market, firms also face obstacles originating in the institutional environment of a target market. Institutions have been defined as the formal and informal rules that shape the business environment of a target market (North, 1990; Cantwell et al., 2010). The formal rules of a country usually derive from its government and are expressed in the various laws and regulations that may restrict the operations of a foreign company. The informal rules are the norms of behavior and conventions that are common in a particular country. Overall, IT attempts to explain how the external environment impacts the decisions and strategies of a company through the imposition of norms and coercive practices (Chabowski and Mena, 2017). Internationalizing companies in many cases are forced into strategic alliances as the only available option of entering a foreign market.

KBV, RBV and IT provide an explanation of why companies with extensive IMO activities may engage in a higher number of strategic alliances. This is because they realize that success entails access to customer or competitor centric tacit knowledge and resources that are very hard to develop internally. These resources and knowledge could be linked to specific customer relationship techniques, service processes and competitor monitoring processes. In addition, foreign markets may pose formal and informal institutional obstacles that in many cases are impossible for a foreign firm to overcome on its own. The most efficient way of accessing resources and overcoming institutional obstacles is through alliances. The availability of proprietary tacit knowledge, institutional connections and other types of resources of the partner firms will likely result in a higher overall performance as advocated below.

International Market Orientation

It is very critical for SMEs to have thorough knowledge and understanding of their international customers, competitors, and other external market processes (Knight and Kim, 2009). IMO refers to a specific orientation and behavior that a firm is utilizing in order to create superior value for its shareholders when it markets its products abroad (Alotaibi and Zhang, 2017; He and Wei, 2011). IMO provides an SME that ventures abroad with the necessary knowledge of the skills needed to improve its internal organizational structures for successfully operating in that market.

Researchers have identified three main elements of IMO, namely customer orientation, interfunctional coordination, and competitor orientation (Frösén et al., 2016; Narver and Slater 1990). Firms that possess high customer orientation have a very high customer focus, always attempt to increase their knowledge of what is important for their customers and put customer interests above everything else. They constantly try to understand their customers, to measure customer satisfaction, and provide superior service. Interfunctional coordination focuses on the alignment of all resources of the company to coordinate its strategy to create a firm that successfully responds to market turbulence. The company has to effectively absorb the information from the environment and transform it into effective knowledge that will be disseminated throughout the organization. Lastly, a firm that has a high competitor orientation has a thorough understanding of the competencies and the weaknesses of the main competitors in the market. A knowledge of the capabilities of the competition will assist a company to effectively anticipate and respond to their future moves (Wilson et al., 2014; Narver and Slater 1990).

Although conceptually it has been proposed that a strong link exists between international market orientation and performance, surprisingly few studies have examined this relationship empirically (Alotaibi and Zhang, 2017; Racela et al. 2007). This is unexpected because IMO activities can provide a company with essential information about the customer environment, the competitive environment, and the interfunctional coordination needed to successfully align the resources of the company to a foreign target market's needs. Employing these activities allows a company to develop the organizational knowledge to alter its internal functions that will better allow it to respond to the challenges of the environment and increase its overall performance. In addition, an effective IMO system may allow a company to understand its knowledge and resource limitations for successfully operating in a foreign target market. This realization is likely to lead the firm to seek partnerships that will help it access the required knowledge and resources.

The few studies that have examined the relationship between IMO and performance have shown that a strong connection exists both for large multinationals as well as smaller companies. For example, Alotaibi and Zhang (2017) discovered a strong connection of the export market orientation of SMEs based in Saudi Arabia and their international performance. Cadogan and Diamantopoulos (1998) tested the reliability and validity of the market orientation measures proposed by Narver and Slater (1990) and indicated that they are valid and reliable in the international context. Other researchers have examined the IMO and performance relationship in other national and industry contexts. Akyol and Akehurst (2003), for instance, discovered that Turkish textile firms' possession of high export market orientation will have a significant impact on its export performance, while Racela et al. (2007), showed that Thai manufacturing SMEs with high MO tended to internationalize more and had higher performance in their foreign operations. Thus, our first hypothesis states:

Hypothesis 1: SMEs displaying higher levels of IMO will also have higher levels of international performance.

International Market Orientation and Alliances

While SMEs may possess a very successful internal organization to gather international market intelligence, explicit knowledge by itself may not allow them to take advantage of the opportunities presented in a foreign market. In reality, a successful IMO can permit companies to discover their limitations and identify their lack of resources and institutional connections to successfully undertake international operations. In order to alleviate this lack of resources and presence of institutional obstacles, a strong IMO may steer SMEs to engage in alliances in which they can access the required resources that they do not presently possess internally, cannot develop or acquire on their own (O'Dwyer and Gilmore, 2018; Britton, 2004).

Previous studies have shown the significant role that alliances play for SMEs to overcome their limited resources and to decrease their liabilities of foreignness (Brouthers et al., 2015). In their study of Canadian biotechnology companies Wilson et al., (2014) discovered a strong connection between firms with high market orientation and the use of alliances. These partnerships provided the Canadian companies with much needed resources to succeed in the highly competitive biotechnology market. O'Dwyer and Gilmore (2018) showed that the desire of business to business manufacturing SMEs to increase their capabilities and capture value from their international operations, will lead them to form alliances in order to access from the alliance resources that cannot internally generate.

Alliances can provide firms with shared research, manufacturing facilities, or a common distribution network. In addition, alliances will allow SMEs to overcome political and regulatory obstacles that many foreign governments impose by permitting exporting companies to enter a

market by exploiting the political connections of the local partner. Tacit knowledge of the target market, which is necessary for success, can also be provided by partner firms. For example, knowledge of a complex political environment that is necessary for operating in a specific country, is tacit knowledge that may be very difficult to be acquired (Chabowski and Mena, 2017). However, it can be efficiently accessed through an alliance.

Large companies which engage in IMO activities may decide to rectify the lack of resources/capabilities by internally developing new skills, shifting resources from other markets or acquiring other companies which possess specific capabilities. On the other hand, SMEs with limited budgets do not have these options. They, instead, have to rely on alliances that provide them with much needed technological knowhow, distribution, or manufacturing facilities (Street and Cameron, 2007). Brouthers et al., (2015) discovered that entrepreneurial SMEs were able to increase their performance by participating in international marketing and research alliances that allowed them to increase their resources and capabilities in a foreign market.

Previous research has almost totally ignored the relationship between IMO and the tendency to utilize alliances in foreign markets. However, studies that have looked at the impact of similar constructs such as knowledge gathering, or perceived target market environmental complexity have shown that extensive information gathering leads SMEs to form alliances. For example, Britton (2004) in his study of smaller Canadian exporting electronic companies discovered that firms that focused on higher levels of knowledge generation about the internal and external environment, tended to have a higher level of alliances with international partners. A similar behavior was observed in Korean internationalizing SMEs. When the management of the companies perceived an uncertain environment in a foreign target market they resorted to alliances in order to obtain the resources that will allow them to succeed (Tallman and Shenkar 1994). Thus,

based on the findings of previous studies our second hypothesis proposes that companies with high levels of IMO activities will form a higher number of foreign alliances.

Hypothesis 2: Firms displaying higher levels of IMO will also have higher levels of alliances.

The Mediating Role

While scholars during the last forty years have studied extensively internationalizing SMEs in order to understand the factors that influence their performance, no clear picture has emerged. For example, previous research has suggested a multitude of factors may directly influence an SME's international performance such as international experience, internal capabilities, multinationality, the formation of alliances, managerial characteristics, size of firm, age, and IMO (Street and Cameron 2007).

The reason that no clear picture has emerged may be that previous studies have mainly focused on the direct impact of the marketing capabilities that IMO provides on performance and have ignored the existence of possible mediating effects (Wilson et al., 2014). Prior research has looked at the role that an IMO and the formation of alliances play in enhancing international performance independently (Bos, Faems, and Noseleit, 2017; Alotaibi and Zhang, 2017). We posit that these two factors do not act on their own but that the relationship between IMO and performance is mediated through alliance formation. A mediating relationship may exist because a high IMO provides a company with accurate information and knowledge about the needs of their international customers, the limits of their internal organization to meet these needs, and the threat posed by their competitors.

The company may be able to act on the basis on this new knowledge about new markets and reorganize its internal organizational structure to better align itself with the demands of the foreign target market. Not all this knowledge about internal, customer and external characteristics, however, can be confronted with an internal reorganization because SMEs tend to possess limited resources. While certain aspects of explicit knowledge are likely to be easy to obtain, tacit knowledge will be impossible to acquire and internalize. For example, a firm may reach the conclusion that success in a target market requires the development of an expensive distribution system, a resource that the company does not have the capability or the comfort of time to develop.

In other circumstances, especially when trying to establish business relationships with the local government, specialized knowledge of the political system which is very hard to develop for an outsider, may be essential (Chabowski and Mena, 2017). Subsequently, this realization of lack of specialized knowledge and resources provided by IMO leads a company into the formation of alliances, the only way to obtain access to the capabilities required for increased performance (O'Dwyer and Gilmore, 2018; Street and Cameron 2007). The skills that a firm acquires through an alliance may allow it to prosper in international markets without having to incur the high costs necessary had it tried to develop the resources or acquire them by buying other companies (Yu, Gilbert and Oviatt 2011). Hence, our third hypothesis states:

Hypothesis 3: International alliances will mediate the relationship between IMO and international performance such that firms which possess greater IMO and tend to engage in higher number of international alliances will also tend to have higher performance.

Insert Figure 1 about here

METHODOLOGY

We chose a sample from the managers of privately owned firms in the UAE, seeking to avoid the bias that characterizes most business research which has traditionally examined the behavior of firms based in western nations. The UAE stands out as an example of a fairly new emerging nation with a rapidly developing economy. The discovery of oil allowed the UAE to transform itself from an impoverished nation relying on fishing to a regional commercial center and a top tourism destination in a period of less than 40 years. In recent years, the UAE has successfully tried to develop the non-oil sector of its economy with the ultimate goal of eliminating its excessive reliance on the oil industry. Subsequently, it is of paramount importance to study the export behavior of companies located in this small emerging nation as it continues its strategy of diversifying its economy (Country Risk Report, 2017).

The criteria for including companies in our survey were as follows. Initially, they had to be independent, privately owned companies. Moreover, they had to be SMEs, meaning that all companies with more than 250 employees (European Commission, 2018) were ineligible for inclusion in our sample. We decided to use the European Union definition because it is more relevant to smaller national markets. We further stipulated that the companies must be owned by UAE nationals. The main focus of the research, namely the international performance of a company dictated the last criterion of trading abroad for at least three years.

We employed the drop off and pick up technique (Abu Farha and Elbanna, 2018; Elbanna and Fadol, 2016) as more appropriate since we understood that traditional data collection techniques rarely succeed in Arab cultures and new innovative methods were needed to bring in more responses (Zahra, 2011). The drop off and pick up technique has been used extensively in

the past in multiple settings, but its appeal has increased in recent years as researchers have encountered declining response rates in mail, telephone, e-mail, and personal surveys (Jackson-Smith et al., 2016). The questionnaire was composed and administered in English as previous research has shown that it is the most common first or second language of the vast majority of managers in the UAE (Child et al., 2017). Our questionnaire was thus sent to firms based in Jebel Ali Free Zone (JAFZA), Dubai, UAE, which was set up in 1985 and is one of the most rapidly growing free zones that have emerged in the last few decades. It is one of the biggest free zones in the world, containing 6,400 companies from many countries (JAFZA website). We randomly identified 150 private companies that met our criteria and could form a representative sample. Ultimately, the sample responded with 99 questionnaires, although only 94 had completed answers, resulting in a response rate of 63 percent.

In their answers, the respondents were all asked to focus on the firm's 'best seller foreign market', that is on the foreign country in which the firm's sales reached their highest value. This practice was made for several reasons. First, the activities of their firm in smaller markets do not tend to be as well known to respondents as the activities in larger markets. Second, we wanted to find out more about firms engaging in alliances and believed that larger markets would be more prone to forming alliances. Third, we would not be likely to encounter so many differences in international performance if we concentrated on the most profitable market.

The majority of the UAE companies in our sample listed a country in the Gulf Cooperation Council (GCC) as their largest foreign market (59 percent of the total number of companies). The Kingdom of Saudi Arabia was the top export destination with 19.2 percent as the most important country in the GCC, Qatar was second with 16.2 percent, Oman was third with 13.1 percent, and Kuwait fourth with 10.1 percent. Outside the GCC the most important country was India with 9.1

percent, with Russia and Iraq tied in the second place with 5.1 percent. Other Arab and Western countries were the top export destinations of only 1 or 2 of the companies in our sample. The respondent of the survey was in most case the CEO of the company (65 percent of responses) while in some other cases key individuals of the company such as marketing, sales, or financial managers responded to the survey.

Dependent variable

International performance at the firm level was captured through four seven-point Likert-type questions (Brouthers et al. 2009). SMEs are often asked to provide perceptual measures of performance because they need not to disclose objective financial data to the public and generally prefer to keep actual figures confidential (Rauch et al., 2009). However, according to previous research, perceptions of performance are closely correlated with objective findings (Wall *et al.*, 2004; Brouthers et al., 2009; Dess and Robinson, 1984). We asked our respondents to rate their answers (on a scale from 1 – much inferior to 7 – much superior) regarding the performance of their company in the ‘best-seller’ foreign market as compared with that of their direct competitors over the last three years under the headings of (a) sales growth, (b) market share, (c) return on investment, and (d) profitability. Factor analysis showed that the four items loaded in one factor (Cronbach’s alpha=0.90). We created the *international performance* measure by adding together the scores of the four items and dividing by four.

Independent variables

Two independent variables were considered in our study, *IMO* and participation in *alliances*. We used eight questions derived from Frösén et al., (2016), Ward, Girardi, and

Lewandowska (2006), and Nater and Slater (1990) to capture the three components of *IMO*. Three of the questions measured a company's *customer orientation*, three its *inter-functional coordination*, and two its *competitor orientation*. The three questions inquiring of an SME's *customer orientation* asked whether the firm had regular measures of customer service, it was developing products based on good market and customer information, and whether it had a good sense of how customers use the company's products/services.

Inter-functional Coordination was measured by asking whether all of a company's departments contributed to customer value, whether the firm has formal information links established between departments and inquiring whether informal networks exist which provide decision makers with the necessary information for success.

Competitor Orientation was measured by inquiring of the firm's formal and informal processes for collecting information from customers and mechanisms for continuously collecting information about competitors' activities. We used factor analysis to test the eight questions measuring the three components of *IMO* and found that all the questions were loading on one factor. Considering that all questions loaded in one factor and the examples of previous research that had tested the three *IMO* components jointly (Rauch et al. 2009; Cadogan et al., 2009; Knight & Kim, 2009), we decided to create a unidimensional construct by adding the eight items and dividing by eight (Cronbach's alpha=0.92).

The other independent variable reveals how far a company in its 'best seller target' market engages in *alliances*. To determine this, we put three questions taken from Brouthers et al., (2015) and Dollinger and Golden (1992), from which the extent of a firm's participation in marketing, research, and manufacturing alliances in its 'best seller' foreign market can be gauged (Cronbach's alpha=0.87). The scale ranged from 1 – no joint agreements to 7 – heavy use of joint agreements.

Control variables

We included numerous control variables to account for factors that previous research has found relating to SME international performance (Brouthers et al. 2009). We controlled for two aspects of international experience. First, *international experience* presented the number of years spent in international operations by each firm (Brouthers et al. 2009); and, second, the *number of countries* presented the number of foreign countries receiving the company's international sales at the time of the survey. We also included several variables to control for the potential influence of the various industries represented in our sample. We created four dummy variables to represent the 4 main areas International Standard Industrial Classification (ISIC) industries in our sample. Approximately 89 percent of the firms in our sample operated in these four ISIC industry categories. The industry categories were 1 for textiles and other traditional manufacturing (representing ISIC codes 15-18), 2 for paper and chemical manufacturing (representing ISIC codes 20-26), 3 for electronic and transportation manufacturing (representing ISIC codes 27 to 36), and 4 for professional services (representing ISIC code 74). Each industry dummy variable was given a value of one (1) if the firm was operating in that industry and a value of zero (0) if the firm was in another industry.

Our final variables controlled for firm size, firm age, and the environment of the foreign market in question. We measured *firm size* as the total number of employees. We found the *firm age* by asking respondents how many years the firm had been in business. The *target market environment* was included since foreign firms find it more (less) difficult to trade in different market contexts. Three questions captured this variable (Covin and Slevin, 1989): (1) how safe

the environment was in the foreign country; (2) how munificent investment and marketing opportunities in this market were, and (3) how controllable the environment in this foreign country was (1 - not at all to 7 - very much). These three items loaded on one factor (Cronbach's $\alpha=0.71$) and were summed to create our variable.

RESULTS

Mediation hypotheses in management literature have traditionally been tested by the procedures outlined in the seminal work of Baron and Kenny (1986). As Shaver (2005) reports, all 14 articles in the 2001 and 2002 issues of *Academy of Management Journal* and *Journal of Management* that tested for mediation used this procedure. The Baron and Kenny (1986) methodology suggests that a variable act as a mediator if it meets three conditions: (1) the independent variable is significantly associated with the mediator variable, (2) the mediator variable is significantly associated with the dependent variable, and (3) when both the independent and mediator variables are considered together, the value of the independent variable is reduced.

Similar to Baron and Kenny (1986) and Venkatraman (1990), we used a two-step procedure to test for mediation. In the first step we examined the relationship between IMO and alliance formation using multiple regression analysis. The second step involved hierarchical regression analysis and explored the mediating relationship between IMO, alliance formation and performance.

Prior to running any of the analyses, we prepared a table that contains the correlations among the independent, dependent, and control variables (table 1). Based on the information from table 1 and the Variance Inflation Factor (VIF) scores that were generated in the multiple regression ranging from 1 to 2, multicollinearity does not appear to be a problem (Hair, Anderson,

Tatham and Black, 1995). Only 2 of our control variables were highly correlated, namely age of the firm and international experience. It appears that the vast majority of UAE based SMEs, forced by the limitations of the small domestic market, tend to internationalize shortly after their founding. However, even when we dropped one of the two control variables, our results did not change and subsequently decided to keep both variables following the example of past studies (Brouthers et al., 2015).

Insert Tables 1 and 2 about here

We began our analysis by examining the relationship between IMO and alliance formation. Our expectation was that companies with a high IMO will also engage in a large number of alliances. In order to test this expectation, we run a multiple regression (table 2) where we included IMO and control variables that previous research has shown influencing the formation of alliances, notably international experience, age of firm, firm size, industry, and target market institutional environment. The first model of this regression examined the relationship of the control variables and alliance orientation, the second looked at the impact of IMO on the dependent variable and the third model investigated the control and the independent variables. While the regression with just the control variables was not significant, IMO on its own had a significant impact on alliances ($p < .05$).

In the third model, where all the control variables and IMO were included was also significant ($p < .05$) with an adjusted R-square value of .16. The findings show that IMO is a significant predictor of alliances ($p < .05$). Subsequently, these results fulfill the first requirement of a mediating relationship in that the mediator (alliances) must be significantly predicted by the independent variable (IMO). Although to our knowledge, no past studies have examined the

relationship between IMO and alliance formation, Wilson et al., (2014) found similar results in their study of the market orientation of Canadian biotechnology companies and their use of alliances in the domestic market. It is reasonable that SMEs realizing through effective IMO procedures that they lack the knowledge and resources to enter a foreign market will decide to form alliances in order to capitalize on the capabilities that a partner may possess.

A multiple regression was also used to examine the predictive values of IMO and alliances on an SME's performance (Table 3). Model 1 investigated the influence of nine control variables (firm size, international experience, number of countries in which the firm operates, manufacturing ISIC 1, manufacturing ISIC 2 companies, manufacturing ISIC 3 companies, professional services ISIC 4, target market institutional environment, and company age) on international performance. The regression was not significant (adjusted R-square = .04, $p > .05$). Two of the control variables, namely international experience and company age, were significantly ($p < .05$) related to international performance. This is expected in an emerging market where older companies are a relative term. These companies are very different from old established companies in developed countries as many of them did not exist a few years ago. The newer companies tend to be very young and had few forays abroad. Subsequently, company age and international experience in an emerging market may be very different in comparison to a developed economy.

Insert Table 3 about here

In the second model, we included all the control variables plus IMO. Model 2 was significant (adjusted R-square = .15, $p < .01$), the increase in adjusted R-square (.11) was significant, and the variable IMO was also significant ($p < .01$). These results show that IMO significantly influences the international performance of the firm. It also shows that the model

that includes IMO does a better job in predicting international performance. These findings are similar with past studies (Alotaibi and Zhang, 2017, Akyol and Akehurst 2003) which have shown consistently that companies that use IMO tend to perform better in international markets. It makes sense that companies utilizing better mechanisms in collecting information about foreign customers and competitors and can have the ability to effectively disseminate this knowledge among the different departments of the firm will perform better.

The third model contained all the control variables and the mediating variable alliances. However, it did not include the predictor variable IMO. Model 3 was significant (adjusted R-square = .17, $p < .01$), alongside the increase in adjusted R-square (.13) and the variable alliances ($p < .01$). These findings show that alliances have a significant influence on the dependent variable performance. It also suggests that the model that includes the variable alliances has significantly more explanatory value than the model that contains just the control variables. In addition, the second condition of a mediating variable is met, that is the significant association between the mediating variable (alliances) and the dependent variable (international performance). These findings are consistent with past research which has shown the important role that alliances play in increasing a firm's performance (Bos et al., 2017; Brouthers et al., 2015). The knowledge, resources and institutional connections that alliance partners bring can greatly assist SMEs in increasing their financial performance.

Model four investigates the mediating role of alliances on IMO and performance. The regression shows that when both IMO and alliances are added, the results are significant (adjusted R-square = .21, $p < .01$) and the explained variance in performance increases considerably (change in adjusted R-square = .17, $p < .01$). Although we find that both variables – IMO ($p < .05$) and alliances ($p < .01$) – are significantly related to performance, the explanatory value of IMO goes

down when the mediating variable alliances is included in the regression. Subsequently, this supports the third condition for the existence of a partial mediating relationship. A partial mediation exists when the independent variable impacts the dependent variable both directly and through the mediating variable (Baron and Kenny 1986). Overall, the results provide support for all three hypotheses.

Because some studies (e.g., Preacher and Hayes 2004; Shaver 2005) have suggested that Baron and Kenny's (1986), although by far the most popular method to test for mediation, in rare cases may erroneously show that a mediation effect exists when none is present, we decided to use two additional techniques. The Sobel method and bootstrapping methods are used to make certain that mediation exist in our data.

The Sobel test (1982) was recommended as the best single test of the $a*b$ path. The test uses a direct approach that investigates the significance of the $a*b$ path. The impact of the independent variable on the mediating variable represented by "a" and "b" signifies the effect of the mediating variable on the dependent variable (MacKinnon et al. 2002). Although the Sobel method has been shown to accurately predict mediation (Preacher and Hayes 2004; MacKinnon et al., 2002), it is also a very conservative test and its major drawback is that it assumes a symmetrical distribution. This assumption may skew the results, a problem more commonly visible with small samples (Preacher and Hays, 2004). For this reason, we also decided to utilize the bootstrapping technique to ascertain that the proposed mediation exists and to increase the robustness of the findings. Bootstrapping is a non-parametric technique that replaces samples many times and it does not assume of a sample being symmetrical or asymmetrical, which is the major disadvantage of the Sobel test (Preacher and Hayes 2008).

Insert Table 4 about here

Table 4 shows the results of the Sobel test and the bootstrapping method. Both tests showed the existence of a mediation effect and supported the mediation results that we had originally obtained with the Baron and Kenny's (1986) method. The Sobel test shows that 28.2 percent of the total effect of performance, our dependent variable, is the result of our mediation variable. The bootstrapping technique also suggests support of the proposed mediating effect. The results indicate that the indirect effect is in the 95% confidence interval, showing the existence of mediation (Preacher and Hayes, 2004).

CONCLUSION

Previous research indicates that companies which possess higher IMO tend to perform better in international markets (Alotaibi and Zhang, 2017; Akyol and Akehurst 2003). Researchers have also suggested that SMEs that employ strategic alliances in foreign markets tend to increase their performance (O'Dwyer and Gilmore, 2018; Brouthers et al. 2015). What is not clear in previous research is whether IMO activities and alliance formation in foreign target markets impact performance independently or some type of connection exists.

In this study, we have argued that a partial mediating relationship exists, and alliances mediate the association between IMO activities and performance. This is due to the lack of resources, which characterizes many SMEs, and so, a highly aggressive IMO strategy may not be feasible or productive. The knowledge generated by IMO may allow a company to reorganize some of its internal structures but because of the lack of resources it will not allow it to acquire the skills and capabilities needed in the focal market. Therefore, a company can gather great intelligence about foreign markets and identify potential opportunities, but if it does not have the

necessary resources and tacit knowledge to exploit these opportunities, it will not be successful. However, because companies that have good information gathering techniques realize their deficiencies, they will try to engage in strategic alliances to access through other companies the necessary knowledge and resources. Overall, IMO activities are very important for an SME, but they will substantially have an impact on the profitability of a company if the knowledge acquired through IMO leads the firm to realize that it possesses insufficient resources and engages in partnerships with other firms that may provide access to the skills that it lacks.

Our results support our theoretical arguments that strategic alliances mediate the impact of IMO activities on SME international performance. Our findings show that alliances partially mediate the IMO relationship with performance and present a more complex explanation of what contributes to SME international profitability. This result contributes to the market orientation literature that has been oblivious to this association between the two constructs (van Raaij and Stoelhorst, 2008). This is a very important finding to guide future academic research. Researchers in the past have focused on the direct impact of IMO and alliances on SME performance (Alotaibi & Zhang, 2017), without investigating whether another variable may act as a mediator. It is not only the additional knowledge that IMO generates that increase a firm's profitability, but the actions that the company takes based on this information. The formation of alliances to utilize a partner's resources and knowledge is a result of a company's effective IMO strategy.

For researchers, our findings suggest that they need to revisit the IMO and performance relationship to discover whether other variables moderate or mediate this important relationship. Our research shows that alliance use mediates this relationship. Companies that just have a strong IMO may see a small increase in their performance, but they will not realize their full potential unless they also engage in extensive use of alliances. Because we discovered only a partial

mediation of the IMO relationship with performance, future researchers can explore other variables such as commitment to the alliance or how the alliance is managed and examine whether they mediate this very important relationship.

The study provides interesting insights for academics and practitioners. Given that IMO and alliances must coexist to enhance international performance, it follows that the predictive validity of KBV referring to the importance of knowledge capabilities for the success of the firm is confirmed when studied in association with the resource-based view. Unique and sustainable resources like IMO provide valuable knowledge on the network partners that can source further valuable knowledge for the benefit of the firm concerned. This finding extends the tenet of the KBV (Grant 2002; Grant and Baden-Fuller 2004) suggesting that knowledge on alliance partners works better and resides more effectively in 'resource rich' centric firms.

This research further offers very important suggestions for managers of SMEs that already operate or plan to expand in foreign markets. An IMO is necessary for a company that operates internationally. Information on the environmental conditions of the foreign market as well as the competitive environment needs to be collected and successfully disseminated within the company. The SME subsequently needs to adjust its internal organizational structure based on the information and knowledge that it received from IMO activities.

However, even the most successful internal reorganization may not be enough to maximize an SME's performance. Unlike large multinationals, SMEs do not possess sufficient internal resources that can be redeployed to meet the specific needs of the foreign target markets. They also do not have the ability to purchase these resources by acquiring other companies, a common strategy of their larger counterparts. Foreign institutional environments can also pose barriers that

are difficult or impossible to overcome without local partners. The only choice that they have is to try to secure resources by forming alliances with other companies.

Alliances can provide SMEs with much needed resources to succeed in foreign markets. Therefore, IMO is important for SMEs not only because it guides them to alter their internal organizations but because it leads them to recognize their limitations. A company that has the self-knowledge to accept its resource limitations will be more open to partnerships. Governmental agencies and other organizations that try to help smaller companies need to help SMEs to increase their IMO activities and to assist them in finding the right alliance partners that are necessary for success in international markets.

Limitations and Suggestions for Future Research

This study possesses several limitations that future researchers may try to overcome. As with all cross-sectional studies, our results represent the behavior of companies at a point in time. It is possible that the behavior of these firms can be very different in the future when the internal and external environments change. Researchers in the future should undertake longitudinal studies to see whether our results hold true over longer periods.

The results of this study may also be limited because they report findings on a company's "best foreign market". It is possible that in other markets the performance of the company is very different. Future researchers can examine the behavior of SMEs in multiple foreign markets.

Another limitation may originate in our sample selection. In this study, we tried to collect data from a unique political, economic, social, and demographic environment. It is a small emerging market that has experienced a dramatic economic and social transformation in a very short period. Most of the target markets of these companies are either regional or other emerging

markets with unique legal, political, and economic domestic environments. It is possible that other companies based in other more developed countries or larger emerging ones targeting countries with different domestic environments would exhibit totally different behaviors. Researchers in the future can collect samples from other countries that possess dissimilar socio-economic environments to investigate whether our findings hold truth in these locations.

The measurement of our alliance orientation may also be a limitation of this study. As in previous studies (Dollinger and Golden, 1992; Brouthers et al., 2015), we measured the tendency of companies to engage alliances by combining three questions which inquired about their use of manufacturing, research, and promotion alliances. Although the three type of alliances all loaded in the same factor in our study, it is possible that companies may get different benefits by engaging in different forms of alliances. In the future, researchers need to measure the impact of different type of alliances on the international profitability of SMEs.

Finally, researchers in the future may want to investigate the internationalization behavior of SMEs originating in smaller emerging or developed markets. While in the past companies would establish themselves in their local national market before they venture abroad, it appears that SMEs based in smaller emerging markets tend to internationalize themselves immediately following their inception. Of course, researchers in recent years have looked at this phenomenon by observing the behavior or “born global” companies. However, this research has concentrated on companies operating in high technology areas. Most of the companies in our sample are not operating in high technology areas and still tend to display signs of very early internationalization.

Previous research (Sullivan and Weerawardena, 2006) has shown that companies even in in low tech industries that share certain networking abilities and decision maker characteristics will tend to internationalize very early. We suggest that internationalization at least in the regional

level has become a necessity for companies based in smaller national markets. Companies with decision makers with international experience and strong networks will become international from inception, regardless of whether they operate in a high-tech or low-tech environment. Future research needs to investigate the attitudes towards internationalization among emerging country entrepreneurs. Most likely the globalization trends that the world economy has experienced in recent years have made the internationalization patterns that companies were following in the past obsolete.

REFERENCES

- Abu Farha, A., & Elbanna, S. (2018). Do different marketing practices require different frame of references? An exploratory study. *Journal of Business and Industrial Marketing*, 33(3), 337-352.
- Akyol A. & Akehurst, G. (2003). An investigation of export performance variations related to corporate export market orientation. *European Business Review*, 15(1), 5-19.
- Alotaibi, M. B. G., & Zhang, Y. (2017). The relationship between export market orientation and export performance: an empirical study. *Applied Economics*, 49(23), 2253-2258.
- Barney J.B. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120.
- Baron, R.M. & Kenny D.A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173-1182.
- Bos, B., Faems, D., & Noseleit, F. (2017). Alliance concentration in multinational companies: examining alliance portfolios, firm structure, and firm performance. *Strategic Management Journal*, 38(11), 2298-2309.
- Britton, J. N. (2004). High technology localization and extra-regional networks. *Entrepreneurship and Regional Development*, 16(5), 369-390.
- Brouthers, K. D., Nakos, G. & Dimitratos, P. (2015). SME entrepreneurial orientation, international performance, and the moderating role of strategic alliances. *Entrepreneurship Theory and Practice*, 39(5), 1161-1187.
- Brouthers, L., Nakos, G., Hadjimarcou, J. & Brouthers, K.D. (2009). Key factors for successful export performance for small firms, *Journal of International Marketing*, 17(3), 21-38.
- Cadogan, J. W., Kuivalainen, O., & Sundqvist, S. (2009). Export market-oriented behavior and export performance: Quadratic and moderating effects under differing degrees of market dynamism and internationalization. *Journal of International Marketing*, 17(4), 71-89.
- Cadogan, J.W. & Diamantopoulos, A. (1998). Measuring market orientation in an export context: some preliminary evidence. *The strategy and organization of international business*, 75-88.
- Cantwell, J., Dunning, J. H., & Lundan, S. M. (2010). An evolutionary approach to understanding international business activity: The co-evolution of MNEs and the institutional environment. *Journal of International Business Studies*, 41(4), 567-586.
- Chabowski, B. & Mena, J. (2017). A review of global competitiveness research: Past advances and future directions. *Journal of International Marketing*, 25(4), 1-24.

Child, J., Hsieh, L., Elbanna, S., Karmowska, J., Marinova, S., Puthusserry, P., Tsai, T., Narooz, R., & Zhang, Y. (2017). SME international business models: The role of context and experience. *Journal of World Business*, 52(5): 664–679.

Country Risk Report 2017. *United Arab Emirates*. No. 4: 1-43.

Covin, J. & Slevin, D. (1989). Strategic management of small firms in hostile and benign environments. *Strategic Management Journal*, 10(1), 75-87.

Dess, G. and Robinson, R. (1984). 'Measuring organizational performance in the absence of objective measures: The case of the privately-held firm and conglomerate business unit,' *Strategic Management Journal*, 5(3), 265-273.

Dollinger, M. & Golden, P. (1992). Interorganizational and collective strategies in small firms: Environmental effects and performance. *Journal of Management*, 18(4), 695-715.

Elbanna, S., & Fadol, Y. (2016). An analysis of the comprehensive implementation of strategic plans in emerging economies: The United Arab Emirates as a case study. *European Management Review*, 13(2): 75-89.

European Commission (2018). 'What is an SME: [Obtained from http://ec.europa.eu/growth/smes/business-friendly-environment/sme-definition_en on February 12, 2018 :]

Frösén, J., Luoma, J., Jaakkola, M., Tikkanen, H., & Aspara, J. (2016). What counts versus what can be counted: The complex interplay of market orientation and marketing performance measurement. *Journal of Marketing*, 80(3), 60-78

Grant, R.M. (1996). Toward a knowledge-based theory of the firm. *Strategic Management Journal* 17(S2), 109-122.

Grant, R.M. (2002). The knowledge-based view of the firm, In C.W. Choo & N. Bontis (eds), *The Strategic Management of Intellectual Capital and Organizational Knowledge*, Oxford: Oxford University Press, pp. 133-148.

Grant, R. M. & Baden-Fuller, C. (2004). A knowledge assessing theory of strategic alliances. *Journal of Management Studies*, 41(1), 61-84.

Hair, J.F. Jr., Anderson, R.E., Tatham R.L. & Black W.C. (1995) *Multivariate Data Analysis: With Readings*. (4th ed.). New Jersey: Prentice Hall.

He, X., & Wei, Y. (2011). Linking market orientation to international market selection and international performance. *International Business Review*, 20(5), 535-546.

- Hollender, L., Zapkau, F.B. & Schwens, C. 2017. SME foreign market entry mode choice and foreign venture performance: The moderating effect of international experience and product adaptation. *International Business Review*, 26(2), 250-263.
- Jackson-Smith, D., Flint, C. G., Dolan, M., Trentelman, C. K., Holyoak, G., Thomas, B., & Ma, G. (2016). Effectiveness of the Drop-off/Pick Up Survey Methodology in Different Neighborhood Types. *Journal of Rural Social Sciences*, 31(3), 35-67.
- JAFZA website obtained from <http://www.jafza.ae/en/about-us/jafza-facts-at-a-glance.html> on January 12, 2013.
- Khalid, S., & Larimo, J. (2012). Affects of alliance entrepreneurship on common vision, alliance capability and alliance performance. *International Business Review*, 21(5), 891-905
- Knight, G. & Kim, D. (2009). International business competence and the contemporary firm, *Journal of International Business Studies*, 40(2), 255-273.
- Kogut, B., & Zander, U. (1992). Knowledge of the firm, combinative capabilities, and the replication of technology. *Organization science*, 3(3), 383-397.
- MacKinnon, D., Lockwood, C., Hoffman, J., West, S. & Sheets, V. (2002). A comparison of methods to test mediation and other intervening variable effects. *Psychological Methods*, 7(1), 83-104.
- Murray, J., Gao, G., & Kotabe, M. (2011). Market orientation and performance of export ventures: The process through marketing capabilities and competitive advantages. *Journal of the Academy of Marketing Science*, 39(2), 252-269.
- Narver, J. & Slater, S. (1990). The effect of a market orientation on business profitability. *Journal of Marketing*, 54 (October), 1-16.
- North, D. C. 1990. *Institutions, institutional change and economic performance*. Cambridge: Cambridge University Press.
- O'Dwyer, M., & Gilmore, A. (2018). Value and alliance capability and the formation of strategic alliances in SMEs: The impact of customer orientation and resource optimisation. *Journal of Business Research*, 87, 58-68.
- Oura, M. M., Zilber, S. N., & Lopes, E. L. (2016). Innovation capacity, international experience and export performance of SMEs in Brazil. *International Business Review*, 25(4), 921-932
- Penrose, E.T. (1959) *The Theory of the Growth of the Firm*. Oxford: Basil Blackwell.
- Preacher K.J. & Hayes, A.F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, and Computers*, 36(4), 717-731.

- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40(3), 879-891.
- Racela, O. C., Chaikittisilpa, C., & Thoumrungroje, A. (2007). Market orientation, international business relationships and perceived export performance. *International Marketing Review*, 24(2), 144-163.
- Rauch, A., Wiklund, J., Lumpkin, G.T. & Frese, M. (2009), Entrepreneurial orientation and business performance: An assessment of past research and suggestions for the future. *Entrepreneurship Theory and Practice*, 33(3), 761-787.
- Shaver, M. (2005). Testing for mediational variables in management research: Concerns, implications, and alternative strategies. *Journal of Management*, 31(3), 330-353.
- Slater, S. F. & Narver, J. C. (1994). Does competitive environment moderate the market orientation-performance relationship? *Journal of Marketing*, 58(1), 46-55.
- Sobel, M. E. (1982). Asymptotic Confidence Intervals for Indirect Effects in Structural Equation Models. In S. Leinhardt (Ed.), *Sociological Methodology* (pp. 290-312). San Francisco: Jossey-Bass.
- Street, C. T., & Cameron, A. (2007). External relationships and the small business: A review of small business alliance and network research. *Journal of Small Business Management*, 45(2), 239-262.
- Sullivan Mort, G., & Weerawardena, J. (2006). Networking capability and international entrepreneurship: How networks function in Australian born global firms. *International Marketing Review*, 23(5), 549-572.
- Tallman, S. B. & Shenkar, O. (1994). A managerial decision model of international cooperative venture formation. *Journal of International Business Studies*, 25(1), 91-113.
- Yu, J., Gilbert, B. & Oviatt, B. (2011). Effects of alliances, time and network cohesion on the initiation of foreign sales by new ventures. *Strategic Management Journal*, 32(4), 424-446.
- Van Raaij, E.M & Stoelhorst, J.W. (2008). The implementation of a market orientation: A review and integration of the contributions to date. *European Journal of Marketing*, 42(11/12), 1265-1293
- Venkatraman, M.P. (1990). Opinion leadership, enduring involvement and characteristics of opinion leaders: A moderating or mediating relationship? *Advances in Consumer Research*, 17(1), 60-67.

Wall, T. D., Michie, J., Patterson, M., Wood, S. J., Sheehan, M., Clegg, C. W., & West, M. (2004). On the validity of subjective measures of company performance. *Personnel Psychology*, 57(1), 95-118.

Wilson, G. A., Perepelkin, J., Zhang, D. D., & Vachon, M. (2014). Market orientation, alliance orientation, and business performance in the biotechnology industry. *Journal of Commercial Biotechnology*, 20(2), 32-40.

Zahra, S. (2011). Doing research in the (new) Middle East: Sailing with the wind. *Academy of Management Perspectives*, 25(4), 6-21.

Figure 1

Mediation of Alliances on the IMO-Performance Relationship

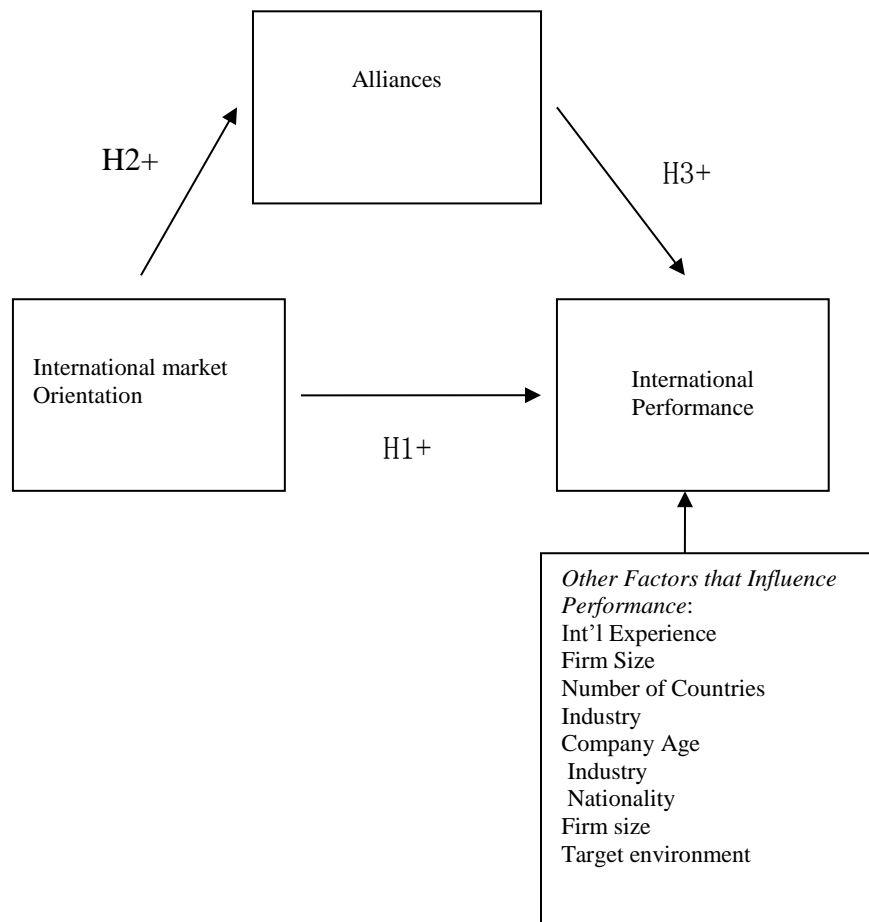


TABLE 1
Correlation Table and Descriptive Statistics

Variable	1	2	3	4	5	6	7	8	9	10	11	12
Mean	13.5	9.9	184	.16	.04	.64	.04	4.5	15.9	5.3	5.3	3.7
S.D.	8.7	9.7	368	.36	.19	.48	.19	1.3	10.8	.79	1.3	.65
Minimum	1	1	50	0	0	0	0	1	1	3	1	3.25
Maximum	49	60	250	1	1	1	1	7	60	7	7	7
1. Int'l Experience	1											
2. Number of countries	.36*	1										
3. Firm size	.35*	.22	1									
4. Manufacturing ISIC 1	-.09	.19	-.03	1								
5. Manufacturing ISIC 2	-.04	-.04	-.05	-.09	1							
6. Manufacturing ISIC 3	.13	-.06	-.11	-.59*	-.28*	1						
7. Professional ISIC 4	-.07	-.12	-.05	-.09	-.04	-.28	1					
8. Target environ	.01	-.05	.06	.07	-.15	.09	-.04	1				
9. Company Age	.91*	.28*	.36*	-.09	-.06	.15	-.03	.04	1			
10. IMO	.26*	.25	.22	-.06	-.04	.04	-.08	.07	.22	1		
11. Alliances	.27	-.05	.15	-.07	-.13	.07	-.10	.25	.13	.29*	1	
12. Performance	.12	.15	.04	-.17	-.04	.02	.08	.04	.02	.35*	.39*	.1

*p.<.01

TABLE 2
Regression Analysis: Determinants of Alliance Orientation

	Model 1	Model 2	Model 3
International Market Orientation		.69* (5.0)	.62* (2.2)
Control variables:			
International Experience	.01 (.06)		-.01 (-.04)
Number of Countries	-.01 (-.38)		-.02 (-1.1)
Manufacturer ISIC 1	-.56 (-.98)		-.59 (-1.1)
Manufacturer ISIC 2	.01 (.01)		-.50 (-.53)
Manufacturer ISIC 3	-.21 (-.43)		-.35 (-.79)
Professional Services ISIC 4	-.81 (-1.0)		-.70 (-.97)
Firm Size	.01 (.30)		.001 (-.01)
Company Age	.02 (.69)		.03 (.78)
Target market environment	.18 (1.6)		.11 (1.0)
Constant	4.4** (6.2)	1.7* (2.3)	1.8* (1.9)
Adjusted R square	.007	.21	.16
F/significance	1.1	25.6**	2.6*

*p<.05; **p<.01; Unstandardized Betas reported; t-statistics in parentheses

TABLE 3
Regression Analysis: Performance

	1	2	3	4
Constant	22.1** (10.3)	14.1** (4.6)	16.1** (6.3)	12.4** (4.1)
International Experience	.34* (2.8)	.25* (2.1)	.29* (2.5)	.26* (2.3)
Number of Countries	.03 (.57)	.01 (.19)	.05 (1.0)	.02 (.53)
Size of Firm	.01 (-.21)	-.01 (-.44)	-.01 (-.40)	- 0.01 (-.46)
Manufacturing ISIC 1	-2.8 (-1.6)	-3.1 (-1.8)	-2.4 (-1.4)	-2.5 (-1.5)
Manufacturing ISIC 2	1.4 (.46)	.03 (.01)	-1.4 (.47)	.49 (.17)
Manufacturing ISIC 3	-1.0 (-.69)	-1.3 (-.95)	-.72 (-.49)	-1.1 (-.75)
Professional Services ISIC 4	4.3 (1.6)	1.5 (.62)	2.1 (.87)	2.1 (.93)
Target Market Environ	-.14 (-.39)	-.01 (-.40)	-.04 (-.12)	-.10 (-.32)
Company Age	-.24* (-2.3)	-.19 (-1.8)	-.24* (-2.3)	-.22* (-2.2)
International Market Orientation		1.7** (3.3)		1.1* (2.1)
Alliances			1.2** (3.6)	.84** (2.6)
Adjusted R square	.04	.15	.17	.21
Change in adj R square		.11	.13	.17
F change/significance	1.4	10.6**	13.3**	6.6*

*p<.05; **p<.01; Unstandardized Betas reported; t-statistics in parentheses

TABLE 4
Further Tests of the Mediating Influence of Alliance Orientation
On the International Market Orientation and Performance Relationship

Panel 1. The Sobel Method

	International Performance		
Formula: $S_{ab} = \sqrt{b^2 s_a^2 + a^2 s_b^2 + s_a^2 s_b^2}$	Coeff	s.e.	Sig(two)
a = unstandardized regression coefficient for the relationship between IV and MV	0.63	0.11	0.00
b = unstandardized regression coefficient for the relationship between MV and DV	1.11	0.16	0.00
Sobel test		4.34*	
Percentage of the total effect that is mediated		28.2	
Ratio of the indirect to the direct effect		.39	
Goodman test		4.3*	

*p<.05; **p<.01

PANEL 2. BOOTSTRAP RESULTS

	Coeff	se	t	
IV to Mediators (a paths)	.69	.14	5.0*	
Direct effects of mediators on DV (b paths)	.93	.32	2.9*	
Total effect of IV on DV (c path)	1.3	.47	2.7*	
Indirect Effects of IV on DV through proposed mediators (ab paths)	Effect	Boot	LL	UP
	.639	.261	.181	1.17

SAMPLE SIZE: 94, NUMBER OF BOOTSTRAP RESAMPLES: 1000

LL 95 CI – lower limit 95% Confidence interval UL 95 CI – upper limit 95% Confidence interval
 *p<.05; **p<.01

APPENDIX: Measurement Items Used for Model Testing

International Market Orientation, (seven-point scales, 1= “very strongly disagree,” and 7= “very strongly agree”)

With regard to the activities of my firm in this foreign country ...

Customer Orientation

1. We have routine or regular measures of customer service
2. Our product or service development is based on good market and customer information
3. We have a good sense of how our customers value our products/services

Interfunctional Coordination

4. All departments or functions of my firm contribute to customer value
5. We have formal information links established between departments/functions
6. We have informal networks that ensure decision makers generally have the information they need

In its activities in this foreign country, my firm has formal or informal **processes** ...

Competitor Orientation

1. For continuously collecting information from customers
2. For continuously collecting information about competitors’ activities

International Alliances, (seven-point scales, 1= “not at all,” and 7= “very much”)

In this foreign country, my firm cooperates/participates in alliances with partners, distributors, suppliers, clients, firms of other sectors, government in ...

1. Joint manufacturing agreements
2. Joint research
3. Joint advertising and marketing

International Performance, (seven-point scales, 1= “much inferior,” and 7= “much superior”)

In relation to the following measures, my firm’s performance **in this foreign country compared with my direct competitors** over the **past 3 years** is ...

1. Sales growth
2. Market share
3. Return on investment
4. Profitability