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Published version

TAJEDDINI, Kayhan and RATTEN, Vanessa (2017). The moderating effect of brand orientation on inter-firm market orientation and performance. *Journal of Strategic Marketing*, 194-224.

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**THE MODERATING EFFECT OF BRAND ORIENTATION ON
INTER-FIRM MARKET AND PERFORMANCE**

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JOURNAL OF STRATEGIC MARKETING

2020, Vol. 28, No. 3, 194–224

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ABSTRACT

While prior research has shown that market and brand orientation are key contributors to successful business performance, research to date has not fully explored how inter firm collaboration for these two key orientations can enhance business performance. The purpose of the paper is to investigate the relationship between inter-firm market and performance; to test for the moderating role of brand orientation in that relationship. A total of 169 completed pairs of surveys were collected of small and medium enterprises (SMEs) operating internationally in a variety of industries in Switzerland. The results show that inter-firm market and brand orientation are two antecedents of marketing and financial performance. The impact of inter-firm market on marketing and financial performance is significant when the brand orientation is favorable. This study extends previous research by examining the moderating role of brand orientation. Further research is indicated, to identify the key moderators of the driving force of inter-firm market in relation to business performance.

Keywords: *SMEs, inter-firm market orientation, brand orientation, international firms, Switzerland*

Introduction

The increasingly rapid rate of technological change, globalization aided by turbulent markets, is changing the basis of competition. Indeed, these profound changes have recently challenged many organizations to seek out new ways to balance competition and cooperation among partners and suppliers to sustain their competitive advantage momentum (Chesbrough & Teece, 2002; Hyvonen, & Tuominen, 2007). It is no longer a firm's ownership of resources and

capabilities that matters but rather to form collaborative relationships with their channel partners (Gottfredson, Puryear, & Phillips, 2005). Scholars in marketing and strategic management argue that firms seek to integrate resources and capabilities core, that SMEs may lack, beyond their organizational boundaries to their ability to develop novel products and services (Perks & Jeffery, 2006; Un, Cuervo-Cazurra, & Asakawa, 2010). Although resource based view (RBV) guides organizational behavior (e.g., experiential knowledge from the firm's ongoing operations in the market) (Åkerman, 2015), essential resources, predominantly knowledge, normally reside in a network environment and not in the organization alone (Afuah, 2000). Silicon Valley can be considered as a prominent example of the importance of inter-firm collaboration (see Saxenian, 1994). Prior research (Anderson, Håkansson, & Johanson, 1994; Jarillo, 1988; Morgan & Hunt, 1994) have mainly discussed how organizations can establish beneficial, long-term relationships based upon trust, commitment and mutually shared norms. An emerging body of research recognizes the benefits of inter-firm collaboration on knowledge creation, knowledge sharing and knowledge maintenance, exchange experience, skills and technological developments (Perks, 2000), and long term strategic contribution to the innovation process (Perks & Jeffery, 2006).

Academics have also argued how companies become increasingly dependent on developing inter-organizational relationships, and how their internationalization experiences are developed to some extent through such relationships (Forsgren, 2002; Shekshnia, 2001). Research has explored how different capabilities can enhance the overall performance and profitability (Hult, Hurley, & Knight, 2004; Sandvik, Duhan, & Sandvik, 2014; Tajeddini, Elg, & Trueman, 2013). While there is a growing field in innovation management which discusses about how ideas and knowledge from external sources are exploited and utilized to develop new products through a balance of value capture and creation (Chesbrough & Appelyard, 2007; Jespersen, 2010;

Lazzarotti, & Manzini, 2009), in the marketing field, inter-firm collaboration has been conceived new ways for strengthening the marketing capabilities.

Although recent marketing and organizational studies on inter-firm collaboration and networks have yielded important findings (e.g., Cambra-Fierro, Florin, Perez, & Whitelock, 2011; Lechner & Dowling, 2003; Lechner, Dowling, & Welppe, 2006; Judge & Dooley, 2006), this research has failed to advance our understanding about how SMEs operating internationally can further enhance performance by collaborating with trusted business partners when developing their market orientation and building a strong brand. Despite some shortcomings (see Lazzarotti, & Manzini, 2009), it is generally agreed that inter-firm collaboration contributes to business performance. Nevertheless, relatively little is known about inter-firm marketing collaboration, in particular inter-firm market orientation (IFMO) and brand orientation (BO) as a part of relationship marketing and how those orientations operate collectively influence business performance. This paper thus discusses the nature of inter-firm market orientation (IFMO) and brand orientation (BO) and examines their influence on business performance. To address these issues, using a sample of Swiss firms operating internationally is investigated to determine (1) the effect of BO on IFMO, (2) the hypothesized effect of IFMO and on business performance, and (3) the role of BO in moderating the IFMO-business performance relationship. This research intends to shed new and important light on these concepts and the interrelationships among them. Specifically, we devise a theoretical model that links these constructs together. We then conduct a survey-based study of Swiss firms operating internationally to evaluate the validity of linkages posited in the model. Findings can help marketing managers to better understand the collaboration impact in market and brand orientation and also to recognize what type of orientations should be encouraged with a view to increasing the level of financial and marketing return. The first section of this paper provides a conceptual background to IFMO and BO and

presents a theoretical framework of the constructs. The second section examines the relationship between IFMO and BO and the moderating effect of BO on IFMO-business performance relationship. Following this, the research methodology is discussed and empirical evidence analyzed. Conclusions are drawn and insights provided to guide firms operating internationally in focusing their business efforts in the future.

Theoretical Background

Market orientation (MO) was originally developed in order to operationalize and test the marketing concept empirically (Houston, 1986; Kohli & Jaworski, 1990; Narver & Slater, 1990; Webster, 1988). It has been conceptualized as a philosophy or way of thinking that places the highest priority on the creation of superior customer value in the marketplace. Kohli and Jaworski (1990), for example, presented MO as a construct based upon three components; intelligence generation, intelligence dissemination and responsiveness. Several authors stress that there is very little knowledge on whether and how firms cooperate within business relationships in order to strengthen their MO (Frazier, 1999; Hernandez-Espallardo & Arcas-Lario, 2003; Hunt & Lambe, 2000). As suggested by Elg (2007), IFMO will refer to cooperative efforts performed together by different firms in order to respond to market forces. Based upon the conceptualization by Kohli and Jaworski (1990), we consider inter-firm intelligence generation, dissemination of market intelligence between the partners, and their possible joint responsiveness to market requirements.

Another stream of research on marketing, largely distinct from the strategic marketing literature, has emphasized the role of brand orientation as the processes of the organization revolve around the creation, development and protection of brand identity in an ongoing interaction with target customers (Urde, 1999). The importance of developing and managing a strong brand has been

stressed in the literature for a long time (Aaker, 2002; Keller, 1993). However, brand orientation (BO) has been conceptualized as a critical culture-level variable that emphasizes ongoing development of competitive advantages through offering relatively constant, consistent, relevant mark of distinction to the customer and clearly differentiated from the competition (Baumgarth, 2010; Bridson & Evans, 2004). Evans, Bridson, and Rentschler, (2012) observe BO as a fusion of the brand concept derived from the resource based view (RBV) in which implies to an integrative device that aligns the organization's resources. Wong and Merrilees (2007) view BO as a basis for a firm's international marketing activities. This study develops the notion of BO by arguing that interactions with business partners and inter- firm activities may further develop and protect brand identity. Recent studies have also illustrated how a firm's brand can govern inter-firm collaboration and support external relationships (Altshuler & Tarnovskaya, 2010; Baumgarth, 2010). In this research, we thus introduce BO as interactions with business partners governed by the SMEs branding and aiming to strengthen brand identity. It is thus a concept for capturing how an SME can improve its brand and gain support for the different brand values through collaborations with business partners. Figure 1 illustrates our theoretical framework. It thus proposes a positive, direct relationship between IFMO and firm performance as well as between BO and firm performance. In addition, we argue that BO has a moderating effect upon the relationship between IFMO and performance, based on the idea that collaborative efforts that focus on MO aspects will be more efficient if they are supported by joint activities that aims at promoting the brand.

Insert Figure 1 about here

Inter-Firm Market Orientation

Numerous marketing scholars have discussed how MO can be a source of competitive advantage (e.g., Cambra-Fierro, Florin, Perez & Whitelock, 2011; Kumar, Jones, Venkatesan & Leone, 2011; Ngo & O'Cass, 2012). This assumption underlies the work of marketing scholars who have examined the impact of MO on performance in different contexts (Baker & Sinkula, 1999; Deshpandé & Farley, 2004; Narver, Jacobson, & Slater 1993). Using some meta-analytic reviews in the manufacturing sectors, marketing scholars (e.g., Ellis, 2006, Kirca, Jayachandran, & Bearden, 2005; Cano, Carrillat, & Jaramillo, 2004) further advance our understanding of the link between MO and organizational performance. Pelham (2000) found MO had the strongest impact on SMEs performance when compared to strategy selection, firm size and industry characteristics. Baker and Sinkula (2009) found the positive significant effect of MO and entrepreneurial orientation on profitability in small firms. Research into the export activities on an MO approach has fuelled the well-established debate over development models of implementation in the international marketing literature (Akyol & Akehurst 2003; Murray, Gao, Kotabe, & Zhou, 2007). However, Cadogan, Kuivalainen, and Sundqvist, (2009) propose an inverted unshaped relationship between MO and firm performance. They argue that the increase in exporting firm's degree of internationalization was primarily due to increases in the optimal value of export MO. He and Wei (2011) found that organizations with a fit between MO and international market selection tend to perform better internationally than those without such a fit. Regarding SMEs, Armario, Ruiz, and Armario, (2008) also found a significant direct relationship between MO and foreign market performance.

Within the realm of global marketing strategy, MO has been studied in a business relationship context. In this regard, MO is not only viewed as a phenomenon within the boundaries of a

single firm, but rather as a critical part of the whole network inter-organizational relationships (Helfert, Ritter, & Walter, 2002; Renko, Carsrud, Brännback, & Jalkanen, 2005; Elg, 2001). Helfert and coworkers (2002) argue that MO could be more effective if the overall MO is translated into a business relationship with partners. Renko et al. (2005) note that business relationship with partners is more evident in small entrepreneurial firms which establish relationship with their partners through social relations and social contacts to gain information. For example, local knowledge spillovers benefits from swift diffusion of new information and knowledge through close inter-firm interactions with their partners (Caniëls, 2000). More recently, inter-firm marketing collaboration has been conceptualized as "a firm cooperating with business partners in carrying out different marketing activities aimed at influencing customer value and/or perceptions" (Tajeddini, Elg, & Ghauri, 2015, p. 111). Elg (2007) observed inter-firm market orientation (IFMO) as activities performed in cooperation between independent companies in order to respond to market forces. Notably, this capability can embrace a considerable number of different courses of action, from operational activities (e.g. offering price cuts to consumers) to more long-term objectives and planning (e.g. new product development; foreign market entry). Indeed, Tajeddini et al. (2015) further conceptualized IFMO based upon the original scaffold had developed by Kohli and Jaworski (1990), but made an attempt to adapt it into an inter-firm level. In other words, the notion of IFMO is useful to predict how an SME interact with business partners in terms of generating market intelligence, sharing market intelligence, analyzing and deciding how to respond to different market forces. Past research shows close interaction and collaboration among partners facilitates the flow of information, fosters innovativeness of high-technology firms features prominently (Romijn, & Albaladejo, 2002), and engenders the building up trust and personal relations (Dicken, Forsgren, & Malmberg, 1994; Saxenian, 1994). Some researchers (Brüderl & Preisendörfer, 1998; Renko et

al., 2005) suggest that networks might presumably provide exclusive, useful, reliable and sometimes less redundant information on market conditions and opportunities which contribute to the internal absorption and integration of new knowledge and eventually stimulate firm success. Similarly, Lai, Pai, Yang, and Lin, (2009) find that MO has a positive effect on relationship learning. While Siguaw, Simpson, and Baker, (1998) find that a supplier's MO can influence a distributor in terms of trust, commitment and satisfaction with financial performance, Tuominen, Rajala, and Möller, (2004) observe that a firm's degree of MO is strongly related to customer intimacy in B2B relationships. Langerak (2001) suggests that relationship properties have a positive impact on a firm's degree of internal MO. A comparison study of relationship between MO and business performance in the context of Hong Kong and Mainland China showed that MO had a significant effect on performance in Hong Kong whereas relationship MO had a positive impact on both China and Hong Kong markets (see for detail, Sin, Tse, Yau, Chow, Lee, & Lau, 2005). More recently, Racela and Thoumrungroje (2014) found that highly export market-oriented firms would engage in higher levels of communication frequency and quality and that inter-firm cooperation will, in turn, positively influence their performance.

Numerous studies have stressed that there is a connection between MO and inter-firm relationships. Yet, few (e.g., Elg, 2007) have actually studied whether firms collaborate when performing MO activities and to what extent this collaboration might influence their competitive advantages. Elg (2007) has investigated IFMO in a value chain setting and in terms of how firms perform activities related to the three main MO components and scales introduced by Kohli et al. (1993). This was conceptualized as inter-firm intelligence generation, intelligence dissemination and responsiveness. Using a qualitative case study design, and based on Elg's conceptual model (2007), Cambra-Fierro, Florin, Perez, and Whitelock (2011) found that IFMO was linked to certain aspects of a firm's market performance. Consequently, the previous research indicates

that the collaboration with partners may strengthen the MO and enhance the business performance of the firm. Nevertheless, while several scholars have discussed the possible relationship between IFMO and performance (Baker, Simpson, & Siguaw, 1999; Elg 2008; Helfert et al., 2002; Hunt & Lambe, 2000), few, if any, have tested this relationship statistically. With substantial evidence indicating that MO has a positive impact on performance, and the idea that firms compete through networks offering resources and supportive collaborations with other firms, we hypothesize,

H₁: *The magnitude of IFMO in international SMEs is positively related to the magnitude of (a) market performance and (b) financial performance.*

Brand Orientation (BO)

In the last two decades, brand management has generated much interest in both academic and business circles and branding strategy has been widely recognized as a source of sustainable competitive advantage (Aaker, 2002; Kapferer, 2008; Keller, 2008; Wong & Merrilees, 2007). Wong and Merrilees (2007) note that a brand represents the synergistic effect of all marketing efforts which gradually but firmly establishes an image in customers' minds. Yovovich (1988) observes brand as an asset which contributes to the success of an organization by generating strong cash flow and margins as well as creating higher values for shareowners. While market orientation requires a market research on the current and future customers' needs and wants in order to adapt constant change in consumer behavior, brand orientation puts more emphasis on the creation, development and protection of brand identity with the aim of reinforcing distinctiveness (Merrilees, Rundle-Thiele, & Lye, 2011; Urde, 1999; Wong & Merrilees, 2005). In a brand orientation approach, the marketing strategy and activities are centered on the brand and brand identity and it does not "fickle to variations in consumer needs" (Wong & Merrilees, 2005). Literature shows that the brand has a positive impact on perceived customer

attractiveness, product support and investor confidence (Balmer & Gray 2003), and should, therefore, be taken as a part of organizational core values and processes anchored in the entire organization (Balmer & Gray 2003; Hatch & Schultz 2001; Simões & Dibb 2001). Compared to the market orientation area, however, relatively few studies have attempted to examine the link between different brand characteristics and business performance (e.g., Reijonen, Laukkanen, & Tuominen, 2012). For example, some authors (e.g., Baldauf, Cravens, & Binder, 2003; Huang & Sarigöllü, 2012; Kim & Kim, 2005; Verbeeten & Vijn, 2010) have found that various brand equity elements (e.g., brand loyalty, brand awareness, perceived quality, customer value) have considerable impacts on firm performance. Similarly, Homburg, Klarmann, and Schmitt, (2010) find that customer brand awareness plays as an important driver of market performance. In the business-to-business sector, Baumgarth (2010) proposed a testable model linking the relationships between BO and performance and found a significant positive effect of BO on both market and business performance. A recent research conducted on 500 largest Swedish firms revealed a clear link between BO and profitability (Gromark & Melin, 2011).

Branding has also been studied from an international marketing perspective. For example, a large number of scholars have investigated how brands perform within different cultural contexts and country-of-origin aspects (e.g., Balabanis & Diamantopoulos, 2011; Becker-Olsen, et al., 2011; Douglas et al., 2001; Eisingerich & Rubera, 2010; Xie, 2012) and attitudes to global brands (Guo, 2013). Wong and Merrilees (2007) developed an approach for examining how different brand aspects are related to various international marketing aspects and found that BO was a positive determinant to both financial performance and international marketing strategy. While some authors have made attempts to examine how brands can compel the development of SMEs in a broad sense (e.g., Abimbola & Vallaster 2007; Merrilees 2007; Hirvonen & Laukkanen 2013; Mitchell et al. 2013; Spence & Essoussi 2010), only few studies have been able to capture

how branding aspects may influence performance in small (e.g., Craig et al., 2008) and medium firms. For example Craig et al. (2008) found that a family-based brand identity had a positive impact on small family businesses performance. According to Agostini et al. (2014), corporate brands are positively related to SMEs' performance in the fashion industry, while Eggers, O'Dwyer, Kraus, Vallaster, & Guldenberg (2013) find that brand authenticity is a significant driver of SME growth. Hirvonen and Laukkanen (2013) also identified an indirect link between BO and performance, mediated by brand identity. Few authors have studied how inter-firm relationships relate to the branding. While Baumgarth (2010) stresses the relevance of branding in business relationships, there has been no attempt to empirically investigate to what extent firms collaborate in their branding activities. Despite the fact that some scholars have also stressed how industrial branding can increase competitiveness and the quality of relationships (e.g., Jalkala & Keränen, 2014; Marquardt, 2013; Rahman & Areni, 2014), there are some qualitative and conceptual studies suggesting that inter-firm collaboration is a relevant aspect of BO. For example, Altshuler and Tarnovskaya (2010) find branding capability to be critical for born global firms to establish collaborative relationships with large Multi-National Enterprise partners. The international IKEA's marketing strategies demonstrate how this Swedish firm bases its global supplier relationships on the corporate brand values in order to develop a powerful international sourcing network (Elg et al. 2012; Tarnovskaya et al. 2008). These studies evidently show how the corporate brand values are internalized in the collaboration with the suppliers and how these values guide the inter-firm relationships. Elg et al. (2012) further illustrate this idea and explain how IKEA educates suppliers on the identity of the IKEA brand, and how to adapt their internal process so that the products and services offered by global suppliers are in line with the IKEA brand values. While the brand equity approach is mainly based on different internal, organizational characteristics and cultural factors, the BO, as

presented in the literature, (Baumgarth, 2010; Napoli, 2006; Urde, 1999; Wong & Merrilees, 2007) has stronger emphasis on behavior and activities. It also makes it more applicable to an inter-firm context. Although the apparent lack of literature on BO and its operationalization into firm marketing strategy, previous studies have shown that BO and performance are related. The current study attempts to operationalize and adapt the concept of BO to an inter-firm setting. Drawing upon the more general view within marketing channels and strategic network relationships, we assume that BO enhances a firm's competitiveness, thus,

H₂: *The magnitude of BO in international SMEs is positively related to the magnitude of (a) market performance and (b) financial performance.*

Interaction Effects Between IFMO And BO

While numerous studies exist examining the impact of MO and BO on performance (e.g., Gromark, & Melin, 2013; Urde, Baumgarth, & Merrilees, 2013), few studies have examined the interaction of MO and BO. From the point of a corporate brand, Gromark and Melin (2013) identify some differences between MO and BO (e.g., philosophical foundation, integrity, extended stakeholder perspective). In contrast, Urde and coworkers (2013) explore the interaction between brand orientation and market orientation. Using multiple case studies, they note BO as an inside-out, identity-driven approach that views brands as a hub for an organization and its strategy whereas market orientation is an outside-in, image-driven approach. They further argue that the market demands not only require balance between MO and BO, but also these two orientations could be seen as a hybrid (Urde et al., 2013).

Since both MO and BO influence business performance, international marketing managers who intend to choose among strategic options, they may need to understand if and how these two orientations interact and whether it is preferable to focus on either one. This is also relevant when it comes to inter-firm collaboration. The existing literature indicates that firms can increase

both the level of MO and the level of BO by mobilizing support from business partners in the value chain. For example, Reid, Luxton, and Mavondo (2005) argue that MO represents the culture of the organization and conceived as being foundational to BO. On the other hand, BO is conceived to provide a foundation for brand strategies though creating functional and symbolic values for stakeholders to build profitable relationships (Reid et al., 2005). Similarly, Urde et al. (2013) argue that MO is an outside-in process while BO goes in the opposite direction. In addition, Reid and coworkers (2005) note that "the principal link between MO and BO is the customer, since BO provides a means of translating the long-term objectives of MO into an actionable set of activities" (p.17). Reijonen, Párdányi, Tuominen, Laukkanen, and Komppula (2014) find SMEs with higher levels of both BO and MO enjoying higher levels of growth in their business performance. Further they stress the relevance and importance of both these strategic marketing factors the SMEs performance.

In line with Urde et al. (2013), this study suggests that MO and BO can be regarded as complementary processes in the inter-firm collaboration. In other words, firms that collaborate in their MO efforts are likely to be more successful if the collaboration also includes branding aspects. As noted above, it can thus be argued that international firms that emphasize IFMO are more likely to enhance business performance via BO. This suggestion is in the line with (Urde, 1999) who argues that because MO is more uncomplicated, short-term, and fundamental factor, firms should be brand oriented to enjoy a positive long term impact. Therefore on the basis of the reviewed literature, we hypothesize the following:

H3: *BO will moderate the relationship between IFMO and firm performance measured by (a) market performance, (b) financial performance.*

Research methods

Sample and data collection

To test these hypotheses, we conducted a field study using mailed questionnaires to collect our data in a cross-sectional design. This approach was chosen because it allows us to evaluate organizational processes in the settings where the researcher has minimal intrusion (McGrath, 1982). Burgelman (1983) suggests that determining organizational orientations requires gauging the resource allocations that support these activities. However, we were not able to access secondary source data which provided adequate details to accurately estimate constructs pertaining to different strategic orientations and to reflect the theoretical concepts we are employing. Despite some shortcomings, prior research (see Covin & Slevin, 1989; Naman & Slevin, 1993) indicates perceptual measures have high correlation with objective measures and facilitate comparisons among firms in different industries (Zahra, 1993, Zahra & Covin, 1993). A pool of items was generated for measuring each of the constructs using in depth relevant literature search. A questionnaire was designed to ask various managers and owners for their perceptions on a range of organizational variables including the nature of inter-firm market collaboration and the link with business performance. This information was collected using a seven-point scale (1= strongly disagree to 7= strongly agree) in response to statements about these variables.

We informed respondents that there were no right and wrong answers and that they should answer questions as forthrightly and honestly as possible. In order to reduce the evaluation apprehension and made the subjects less likely to edit their responses to be more lenient, socially desirable, and consistent with how they think the researchers wanted them to respond (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003), we did in a fashion similar to that used by Akgün, Keskin, and Byrne (2009) and developed a cover story to make it appear that the

measurement of the predictor variable was not connected with or related to the measures of the criterion variable. The questionnaire was first pre-tested using three academics in order to ensure that the survey content and measurement scales were clear and appropriate. Following some minor modifications, and to make sure that all the questions were relevant for respondents, a second pre-test was carried out with ten business managers. Senior executives (or CEOs), top managers and marketing managers were the target group of our study because of their knowledge and experience (see Auh & Menguc, 2005). In this regard the respondents were asked to evaluate the contents and meaningfulness of each item. The sample frame was created by a list of 900 firms operating in a variety of industries in Switzerland. This list was purchased from a leading market research/databank company. Since industry-specific effects might limit the generalizability of effect sizes, and to facilitate external validity, we extended this line of research to include industries that vary in regulatory processes (e.g., chemical industry, international pharmaceutical markets, nonprescription drug markets, various unregulated markets), innovation cycles (e.g., semiconductors, electronics, paint), or concentration (e.g., auto manufacturing, optic manufacture). We deleted the 10 CEOs/senior executives whom we contacted for pre-testing from the master list. We then used the remaining firms (a total of 890 firms) for data collection. Over a period of several months a direct-mail questionnaire including three questionnaires were sent to the sample of 890 companies in three waves. An initial mailing along with three cover letters, three postcard reminders along with three fresh questionnaires were sent out in the first two waves. No explicit incentive was provided. One cover letter was used to explain the firms' CEOs regarding the aim of the study.

Of the total mailings, nine questionnaires were non-deliverable and twenty-six questionnaires were ineligible for reasons including: company policy of non-participation in survey, company liquidation, and inadequate completion of the survey instrument which have been removed. As a

result, a total of 169 completed pairs of surveys were received resulting in a response rate of 19.81 percent, after accounting for undeliverable surveys.

We made a series of 20 phone calls to respondents and conducted additional mail surveys to assure key informant quality. Additionally, we incorporated one informant competency dimension to the survey which assessed the respondent's knowledge/ information to evaluate the firm's relationships and firm's performance. The results indicated that they all of the respondents were active in international business. Tests of bias due to non-response were conducted using a comparison of early to late respondents (Armstrong and Overton, 1977). Although we found a significant difference ($p < 0.05$) between the first and third quartiles of the respondents for firm age (with early respondents firms' averaging 16 years and late respondents averaging 43 years), the results of independent samples *t tests* showed no significant differences between these two groups ($p > 0.05$) on several variables, including inter- firm market orientation dimensions, brand orientation, firm size, and years of experience. Thus, non-response bias is unlikely to be an inhibitor in our analysis. Given the lack of bias, the rank of the respondent, the length and difficulty of the questionnaire, and comparable response rates in similar studies (e.g., Baker & Sinkula, 2007), the sample was judged to be adequate. The questionnaires were completed by managers who were CEOs or by those with an equivalent position (titles such as owner, marketing managers, strategic managers) from multiple industries (e.g., chemical products, watch industry, paper industry, optic industry, steel industry, automobile industry, household appliances, packaged products, machinery and equipment, textiles, chocolates, construction materials, machinery in mining, electronic).

Measures

In order to build a reliable survey instrument, we relied upon well-established scales for measuring MO and BO. While adopting the original scales, the items were carefully and deliberately altered to use for inter-firm collaboration. *Market orientation* is a second-order scale that consists of three dimensions reflecting the behavioral components of firms' market intelligence generation, information dissemination, and information responsiveness. We thus used the MARKOR scale of Kohli, Jaworski and Kumar (1993). This scale was adopted because it captures collaborative behavioral activities reflecting the three dimensions of the construct. Of these items, six pertain to market intelligence generation, five to intelligence dissemination, and nine to responsiveness at the business unit level. Items tapping the three components are interwoven with issues related to inter-firm marketing collaboration. Sample items for the three components are: "We do a lot of market research in-house in collaboration with our business partners", and "We get together periodically with business partners to plan a response to changes taking place in our business environment", and "Collaborations with our business partners make us slow to detect fundamental shifts in our industry (e.g. competition, technology, regulation)" (reverse scored). *Brand orientation* was measured using the scale of six items developed by Wong and Merrilees (2005) but items were changed to tap the international business and are mingled with issues related to inter-firm collaboration. This scale reflects the mindset that ensures that the brand will be recognized, featured and favored in the marketing strategy (Wong & Merrilees, 2007). Items tapping the three components are merged with issues related to inter-firm collaboration. Sample items are: "Branding aspects influence all marketing activities that we perform with business partners", "Branding is an essential aspect when we choose what business partners to cooperate with", "Our business partners understand that branding our product/service is a top priority for our firm", and "Our business partners are an important factor for our long

term brand positioning". On the other hand *company performance* was captured with self-reported perceptual measures derived from previous research (e.g., Baker & Sinkula, 1999; Powell, 1995; Kirca, Jayachandran, & Bearden, 2005). For example financial measures included profit goal achievement, sales goal achievement, and ROI; whereas marketing performance examined customer retention, service quality, and customer satisfaction over the last three years. Each respondent was asked to evaluate performance in relation to primary competitors, using a seven-point Likert scale from 1='strongly disagree', 5= 'neither disagree nor agree' to 7= 'strongly agree' over the past three years. In this respect previous academics note that objective performance measures, certified by a third-party, are virtually impossible to obtain at the business unit level, and subjective measures can correlate to objective measures (Baker & Sinkula, 1999; Chen, Chen, & Zhou, 2014; Sin, Tse, Heung, & Yim, 2005; Tajeddini, 2015).

To avoid non causal relationships between IFMO, BO and business performance, company size, age, type, and the years of experience of the respondent and the participant's background, were included as measurement controls. *Firm size* was measured as the logarithm of the total number of employees to prevent skewness. *Firm age* was measured as the logarithm of the number of years since the formation or incorporation of the firm. Similarly *manufacturing firms* are coded as a dummy variable "type 1", while service and other enterprises as "type 0". The years of experience of the respondent were measured as the logarithm of the number of years since the respondent was working with the firm and the participant's background (0: marketing/sales; 1: other) as controls.

Common method variance

Despite our best proactive attempts to minimize any potential common method variance (CMV), a common method bias might occur since the information of the constructs was collected from

the same respondents (Podsakoff *et al.*, 2003). Different procedural remedies to control for potential *CMV* and one statistical remedy to evaluate this problem were employed (see Chang, Witteloostuijn, & Eden, 2010). In doing so, on the one hand, the scale items were carefully evaluated by defining unfamiliar terms, avoiding vague concepts and double-barreled items. We keep the items simple, specific, and concise, using mixed order of the questions (*ex ante*) and on the other hand, in the cover letter it was guaranteed that the respondents' anonymity would be preserved to reduce evaluation apprehension (Chang *et al.*, 2010; Tsai & Yang, 2014). For the statistical remedy, after the scale purification, all the variables used in the current study were entered into an unrotated factor analysis to determine the number of factors. If a single factor emerged from the factor analysis, that result would indicate that the data suffered from a common method variance problem. A Harman's *ex post* one-factor test was conducted to provide an additional check for common method variance (Podsakoff & Organ, 1986). In the current study, factor analysis resulted in four factors with eigenvalues greater than 1.0, which accounted for 54.58% of the total variance; and Factor 1 accounted for 19.37% of the variance. Because a single factor did not emerge and Factor 1 did not explain most of the variance, common method bias is unlikely to be a concern in our data (Liu, Luo & Shi, 2002; Tsai & Yang, 2013). In addition, a one-factor model was provided to compare with the measurement model, yielding a $\chi^2 = 545.27$ with 212 degrees of freedom, and indicates that common method variance is not a serious threat. Further we evaluated *CMV* through the Marker-Variable Technique (see Lindell & Whitney, 2001). In this approach we take advantage of a special marker-variable which is theoretically unrelated to the research variables and deliberately incorporated into a survey questionnaire along with the research variables of interest (Malhotra, Kim, & Patil, 2006; Yee, Yeung, & Cheng, 2008). In doing so, we included two marker-variables by embracing two questions that asked respondents their perception on seizing risky growth opportunities together

with business partners and whether to invest in high risk projects which have the chance of very high returns". The results showed there was no relationship between these two items (i.e. marker-variable) and the research variables (Malhotra *et al.*, 2006). Finally, in order to capture the common variance among all observed variables we employed a common latent factor (*CLF*). To do this, we added a latent factor to our AMOS CFA model by connecting it to all observed items in the model. Then, we compared the standardized regression weights from this model to the standardized regression weights of a model without the *CLF*. The results show that the *CLF value* = 0.5923 for all variables and their *t-value* indicates significance. The common method variance is the square of that value, $(0.5923)^2 = 0.3508$. Therefore, the Common Latent Factor technique suggests that there is no significant common method bias in this data since the calculated variance (35.0%) is below the threshold of 50%.

The dimensions of IFMO

Gerbing and Anderson (1988) suggested a procedure entitled "updated paradigm for scale development" and recommended to employ exploratory factor analysis (*EFA*), followed by confirmatory factory analysis (*CFA*) and eventually to use the scale construction and reliability assessment. Therefore, each multi-item measure was evaluated for its dimensionality utilizing principal axis factoring (*PAF*) with an oblique rotation (direct oblimin) to examine the discriminant and convergent relationships among a set of related multi-item scale items. Oblique rotation was conducted on the reflective IFMO latent factors because the initial goal was not to reduce the number of variables, but to derive theoretically meaningful constructs. In addition, the oblique rotation allows factors to be correlated; it was used because the dimensions of IFMO are theoretically expected to correlate with one another (see Hair et al., 1998). However, for comparison, we also performed a varimax (orthogonal) rotation, which produced similar factor

structure, albeit the factor loadings were not as sharply patterned as those of the direct oblimin. The pattern matrix of factor loadings is shown in Table 1. All items with a factor loading value below 0.5 or cross-loaded on two factors with factor loadings greater than 0.4 were excluded (i.e., the underlined and italic items), and factors with eigenvalues equal to or greater than 1.0 were extracted. The remaining items were factor-analyzed again to ensure that the factors were extracted appropriately. After this, three factors were extracted ($KMO = 0.860$, $p < 0.001$), explaining 64.112% of the variance. The curve of Scree Plot also shows that it begins to tail off after three factors which could justify retaining three factors extracted from the IFMO measurement (see Table 1). Since most of the items were adapted by rewording items from existing scales of MO, the internal scale reliability of items comprising each factor was calculated using Cronbach's α -coefficient. The first factor is recognized as the intelligence generation dimension composed of eight items. The second and third factors could be recognized as the intelligence dissemination dimension and the responsiveness dimension composed of five items each (Table1). These values ranged 0.862-0.893 for IFMO dimensions reflecting a high level of reliability with a value greater than the suggested cut-off level of 0.7 (Churchill, 1979). Each of these dimensions consists of a number of attributes or components which can be summed to give a representation of the degree to which the IFMO is pursued. For the six-item BO scale, the analyses showed the scale was unidimensional for the total sample, with loadings ranging from 0.612 to 0.779. Internal consistency was acceptable (coefficient alpha = .842) (Table2).

Composite reliabilities (CR) were used to assess the degree of consistency between multiple measurements of a construct (Hair, Black, Babin & Anderson, 2005). Average variance extracted (AVE) was used to measure the convergent validity (Anderson & Gerbing, 1988). By using Exploratory Factor Analysis (EFA), two distinct factors: 'financial performance' and 'marketing

performance' were found to have eigenvalues greater than unity (see Table 3). An average of the three objective measures of financial performance represents a firm's overall measure of financial performance and an average of the five marketing outcomes measures of performance represents a firm's overall measure of marketing performance.

Insert Table 3 here

The *CR* of marketing and financial performance constructs was 0.94 and 0.88 respectively, exceeding 0.70, which is the acceptable level suggested by Bagozzi and Yi (1988). The value for average variance extracted of marketing and financial performance constructs were 0.81 and 0.71 respectively, which also exceeds the threshold level (0.50) suggested by Bagozzi, Yi, and Phillips (1991). All item loadings ranging from 0.63 to 0.99 are significant at the 5% significance level, indicating convergent validity (Bagozzi *et al.*, 1991).

After exploratory factor analysis, a confirmatory factor analysis was used to validate the scales (Comparative Fit Index [CFI] = .98, Incremental Fit Index [IFI]=.98, Root Mean Square Error of Approximation [RMSEA]=.08, Tucker-Lewis Index [TLI]=.96; Normed Fit Index [NFI]= .97, $\chi^2_{(14)} = 29.54$, $\chi^2/df=2.11$) with adequate validity and reliability for financial performance ($\alpha = .81$) and marketing performance ($\alpha=.93$) showing appropriate measures for inter-firm market collaboration performance. All factor loadings were large and highly significant (*t values* ranging from 2.45 to 14.11).

Despite some earlier criticisms (see Matsuno, Mentzer, & Rentz, 2005; Oczkowski & Farrell, 1998) regarding the reliability and validity of MARKOR, this scale has been well established and accepted to measure MO (Baker & Sinkula, 2004). However, in addition to composite reliability, we tested a first-order CFA with three dimensions (intelligence generation, intelligence dissemination, and responsiveness) to make sure that it is useable for inter-firm

collaboration. After dropping one item due to the low factor loading (Anderson & Gerbing, 1982), the CFA model resulted in an relatively adequate overall model fit (CFI= .91, IFI=.91, RMSEA=.08, $\chi^2_{(132)} = 291.51$, $\chi^2/df = 2.21$). As expected, all factor loadings were significant (t-values ranging from 5.74 to 11.66) (see Table 4). In addition, contrary to previous research (see for example Jaworski & Kohli, 1993; Kara, Spillan, & Deshields, 2005), we found a strong correlation between the three MARKOR components suggesting that it is possible to converge them to a common construct. These findings are consistent with previous research (see for example, Baker & Sinkula, 2004, 2007) proposing that it is possible to operationalize the scale as a summate. Furthermore, we conducted a CFA for the validity of three IFMO dimensions and BO in a first-order measurement model. Results of the CFA suggest that the hypothesized model fits the data well ($\chi^2_{(183)} = 247.18$, $\chi^2/df = 1.35$, CFI = .96, IFI=.95, RMSEA=.06, TLI=.85; RNI = .96) (see Table 4).

Insert Table 4 here

Finally, discriminant validity for the constructs was assessed by conducting a series of two-factor CFA models for each of all possible pairs of constructs (Anderson, 1987; Bagozzi & Phillips, 1982). In accordance with accepted practice (Anderson, 1987; Churchill, 1979; Gerbing & Anderson, 1988), we performed a chi-difference test in each model. In doing so, the *phi coefficient* was constrained to unity and then freed. In all cases, the model with the free parameter was found to be superior, providing evidence of the discriminant validity of the constructs. Moreover, we calculated the shared variance between all possible pairs of constructs to determine if they were lower than the average variance extracted for the individual constructs. The shared variances for the scales used in the study ranged from a low of 9% to a high of 19%, with the average variances extracted ranging between 56% and 81%, indicating further support

to discriminant validity (because the average variance extracted is much higher than its highest shared variance with other constructs) (Fornell & Larcker, 1981). We present the basic statistics and correlations of the measures in Table 5.

Insert Table 5 here

Analyses and Results

Previous studies (Elg, 2008; Kohli & Jaworski, 1990; Kohli, Jaworski & Kumar, 1993; Jaworski & Kohli, 1993) provide theoretical foundation and empirical justification to create a summated index of market orientation based on the three dimensions of intelligence generation, intelligence dissemination and responsiveness, with each construct weighted at one-third. Likewise, within the regression testing, brand orientation (Wong & Merrilees, 2005; 2007) was created as a summated index. In order to mitigate the potential threats of this issue, after the mean-centering technique, the condition index (*CI*) and the variance inflation factor (*VIF*) tests have been made. The results indicate that the *CI*s (< 21:993) are well below the critical values suggested by Hair, Black, Babin and Anderson (2010) and the variance inflation factor (*VIF*) was well below the suggested critical limit (< 2:448) (Hair et al., 2010). Based on these results, multicollinearity was concluded to have no substantive impact on the mean-centered regression coefficients.

A single hierarchical moderated regression analysis would typically be used to test for interactive effects between *BO* and each of the two independent study variables in predicting marketing and financial performance. We established two separate series of 3 regression models, evaluated the change in the amount of variance explained (ΔR^2) to test the interaction effects (Cohen, Cohen, West, & Aiken, 2003), and conducted overall and incremental *F* tests of statistical significance. We conducted moderated regressions to test the hypothesis 3. Regression was chosen rather than

a structural equations approach because our model contains interactive relationships (Atuahene-Gima, 2005; Chen, Chen, & Zhou, 2014). To construct the interaction terms, we used the mean-centering technique for the independent and moderating variables to mitigate the potential threats of multicollinearity (Aiken & West 1991; Chen *et al.*, 2014). After using the mean-centering technique, the variance inflation factor estimated for all variables in the full models and the largest variance inflation factor was 2.25 suggesting that multicollinearity did not pose a serious problem (Barringer & Bluedorn, 1999). To assess the explanatory power of each set of variables, we first regressed marketing and financial performance against the control variables only in the first step in Model 1 and Model 4 respectively; then subsequently added IFMO, BO and moderating variable in Model 2 and Model 5; last, we incorporated all the interaction terms in Model 3 and Model 6 in Table 6. Table 5 also indicates that *R*-square (R^2) increases significantly for both marketing performance (Model 2 and Model 3) and financial performance (Model 5 and Model 6), suggesting the significance of the main effects and interaction terms. The variance in marketing performance explained by the third model, including set of control variables and the interaction effects involving ΔMS , explains a significant amount of variance (*adjusted* $R^2 = 0.304$, $F = 10.106$, $p < .001$). The sixth model, as shown in Table 6, is also highly significant (*adjusted* $R^2 = .407$, $F = 15.352$, $p < .001$), explaining explains a significant amount of variance in financial performance. Because we included the moderating effect in hypothesis 3, two simple slope tests were included to create further insights into the interactive relationships (Aiken & West, 1991). With regards to H1, we have hypothesized that the magnitude of IFMO is positively associated with the magnitude of performance measured by: (a) marketing performance; and (b) financial performance. The results of Table 6 show that after controlling for the effects of firm age, years of experience of the respondents, and firm size, IFMO has positive and significant association with marketing performance (Model 2: Unstandardized coefficients = .254, $p < .01$) and financial

performance (Model 5: Unstandardized coefficients= .232, $p < .001$) in support of H1a and H1b. This indicates that our assumption which underlies the positive impact of IFMO on superior performance was confirmed. Hypothesis 2 proposes BO is positively associated with the magnitude of performance measured by: (a) marketing performance; and (b) financial performance. The results of Table 6 show that after controlling for the effects of firm age, years of experience of the respondents, and firm size, IFBO has positive and significant association with marketing performance (Model 2: Unstandardized coefficients= .296, $p < .001$) and financial performance (Model 5: Unstandardized coefficients= .351, $p < .001$) in support of H2a and H2b. Hypothesis 3 proposes a moderating effect of BO on the relationship between IFMO and (a) marketing performance and (b) financial return. As shown in Model 3 of Table 6, as expected, the results indicate that interaction between IFBO and marketing performance is significant. The significant effect of IFMO and BO interaction on marketing performance regression ($B = .101$, $SE = .037$, $p < 0.05$) indicated that BO is an overall moderator of the IFMO-marketing performance relationship. Similarly, a significance effect ($B = .134$, $SE = .042$; $p < 0.05$) was found between the interaction impact of IFMO and BO on the financial performance regression. Overall, these findings support both H3a and H3b.

Insert Table 6 here

For further investigation, we plotted the prediction for each outcome based on simple slope analysis (using a simple regression equation) and at high and low levels of BO (i.e., one standard deviation above and below mean) and tested whether each simple slope was significantly different from zero (two-tailed tests) (Aiken & West, 1991; Cohen et al., 2003; Curran, Bauer, & Willoughby, 2004). The results of the slope tests indicated that the financial performance effect of IFMO was significant under high (*simple slope* = $-.77$, *t-value* = -4.28 , $p < 0.01$) and low level of IFBO (*simple slope* = $-.63$, *t-value* = -2.52 , $p < 0.05$). However, the slope tests showed that the

marketing performance effect of IFMO was insignificant under high (*simple slope* = +.07, *t-value* = .38, *p*=0.70) and low level of BO (*simple slope* = -.02, *t-value* = -.08, *p*= 0.93).

Figures 2–3, produced from the simple slope and intercept data in the regression output. The results as shown in Figure 2 high BO is associated with higher performance and an increase in BO strengthens the positive relationship between IFMO and financial performance. This implies that an increase in BO actually strengthen the positive effect of IFMO on finance performance. Figure 3 shows that high BO is associated with stronger marketing performance and an increase in BO strengthens the positive relationship between IFMO and marketing performance. This suggests an increase in BO actually strengthen the positive effect of IFMO on marketing performance. This implies that the strength of the relationship between IFMO and marketing performance would be strengthen as BO increased. Thus, it is possible that companies with higher BO are more reliant on IFMO as an critical avenue to increase finance and marketing performance.

Discussion and Conclusion

Our conceptual framework and results extend previous theories about market and brand orientation as well as organizational performance by investigating relationship marketing and external collaboration among firms which operate internationally. We thereby fill a significant gap in the understanding of IFMO and BO in the firms operating internationally, the nature of relationships between IFMO and BO, the moderating effect of BO on IFMO and organizational performance. The results provide an initial benchmark for organizational strategy attributes apparent in conjunction with certain contingencies in a firm's operating environment. Several contributions to various research streams are noteworthy.

First, previous attempts to consolidate research findings in IFMO include primarily qualitative reviews (Elg, 2001, 2007). The primary contribution of this research is that it validates new

IFMO and BO scales. First, we reviewed the extant past relevant literature, operationalized inter-firm market and brand orientation. For the purposes of the current study, we altered the original semantic anchors of the scales to be consistent with inter-firm collaboration procedures for configuration analysis. This effort yields IFMO is a three dimensional construct that confirmed by a factor analysis. The three-factor solution explains 64.112 percent of the variation, while a one-factor solution only explains 35.482 percent of variation. The results confirm that IFMO is a multi-dimensional construct. The validity of the BO scale was also supported by a factor analysis, which suggests that BO is a unidimensional construct. The analyses of dimensionality, reliability, and convergent, discriminant, and predictive validity of the IFMO and BO scales are satisfactory. This is an important point, in that few studies (e.g., Tajeddini et al., 2015) to date have operationalized and tested these two capabilities.

Next, the theory-testing approach pursued in this research is consistent with other research on the subject (Akyol & Akehurst 2003; Baker & Sinkula, 2009; Merrilees, Rundle-Thiele, & Lye, 2011; Wong & Merrilees, 2007). Hypotheses were scrutinized by regressing organization performance against the two orientation variables, the interaction between them, and the control variables. The results advance our knowledge concerning a company's international marketplace effectiveness, collaboration with trusted partners and, ultimately, competitive advantage. Empirical findings confirm IFMO and BO as two important determinants of organizations operating internationally. We have specifically found that inter-firm market orientation positively affects financial (profit goal achievement, sales goal achievement, and ROI) and market performance (customer retention, service quality, and customer satisfaction). This implies that collaboration with trusted partners are generally important to the success of the organizations. In particular, this reflects that in order to enhance financial return and fulfill market objectives, international firms should work and collaborate with business partners to

make them aware of the relevance of business engagement to enhance and enrich the delivery of products and services, and put resources into working with trusted partners. Our results suggest that such collaboration should involve partners in the process of generating ideas, allowing secure data sharing, formulating and developing business strategies and how act upon market intelligence and trends quickly. These findings also show that the collaboration may raise the firm's awareness to realize that customers do not purchase the core products but the augmented values that they perceive (e.g., Baker & Sinkula, 1999; Elg, 2008; Kohli & Jaworski, 1990; Narver & Slater, 1990). Additionally, the results support the prior research (e.g., Cambra-Fierro et al., 2011; Elg, 2007) regarding the possible link between inter-firm market orientation and the firm's market performance. Our outcomes also reinforce the argument of Morgan and Hunt (1999) who note that inter-firm relationships, coupled with different types of resources, are the main prescriptions for creating a sustainable competitive advantage and thereby leading to higher performance. In general, the findings of the current research indicate that international firms are required to consistently modify and update their portfolio mix to enhance their relational capabilities and network competences to meet the changing needs and wants of their target market segments in order to achieve a sustainable competitive advantage, particularly if they intend to operate globally (see for example, Freeman, Edwards, & Schroder, 2006; Gummesson,1998).

In addition, in the earlier literature there are only a few empirical studies examining the effect of brand orientation on organizational performance or brand performance (e.g., Napoli, 2006; Wong and Merrilees, 2008). Brand orientation is conceived to encompass both a mindset and a process of creating, developing, and protecting brand identity in an ongoing interaction with target groups (Balmer, Greyser, & Urde, 2006) and can be applied among partners. Although previous studies (e.g., Cano, Carrillat, & Jaramillo, 2004; Shoham, Vigoda-Gadot, Ruvio, &

Schwabsky, 2006) have not highlighted brand orientation explicitly as an approach for achieving higher business performance, the results of this research show that finance and marketing performance are driven by BO in different international firms. Indeed, these findings suggest that brand orientation -as a mindset- ensures the brand is recognized, featured and favored in the marketing strategy (Wong & Merrilees, 2008) in international firms.

The main effect of IFMO and BO on both marketing and financial performance are significant and positive. As earlier noted the current research stresses that each of these two orientations individually is critical for the success of international firms. In other words, either the firm takes an outside-in approach, with brand image as a primary concept (market orientation) or takes an inside-out approach, with brand identity as a key concept (brand orientation) (Urde et al., 2013), the results also confirm that these both orientations contribute to an improved business performance. This finding is an important extension of recent views of the role of higher order market and brand orientation on building competitive advantage (see for example, Pelham, 2000; He & Wei, 2011; Wong & Merrilees, 2005). On the other hand, it can be argued that both inter firm market orientation and inter firm brand orientation are capable of delivering superior value in terms of market and financial performance (see for example, Ewing & Napoli, 2005; Napoli, 2006).

Furthermore, some scholars (e.g., Reid, Luxton, and Mavondo, 2005; Gromark, & Melin, 2013) argue that a brand can be well developed only through a deep understanding of the customers' preferences and therefore customer orientation can be conceived as a central part of both market orientation and brand orientation. Earlier empirical research (Mulyanegara, 2011; O'Cass & Voola, 2011) shows that there is a connection between IFMO and BO. Indeed, Wong and Merrilees, (2007) have further underscored the assumption that brand orientation can be built on

the foundations of market orientation. We theorized that BO is a critical strategic hub that can increase the effect of IFMO while harnessing the benefits of such relationship. BO is expected to enhance salient the fullest potential of IFMO. Our results were generally supportive of the role IFBO was expected to play in explaining the relationship between IFMO and marketing and financial performance. The results indicates that as BO increases, the effects of e IFMO on marketing and financial performance were positive and significant. This suggests that IFMO led to marketing and financial performance only under situations where BO was high. Our simple slope analysis supported this finding; the effect of IFMO on marketing and financial performance increased as BO increased. Although market orientation and brand orientation can be seen from two different strategic orientations (see for detail Gromark, & Melin, 2013; Urde, Baumgarth, & Merrilees, 2013), these results reminiscent of the Urde's (1999) view on market orientation and brand orientation. He notes that market orientation can be seen as a more uncomplicated, short-term, and fundamental level which discusses about products and markets, whereas brand orientation is an additional degree of sophistication and in fact to be brand oriented is market orientation 'plus'." (Urde, 1999, p. 118). Such contributions are important as they delineate the differences between inter firm marker orientation versus inter firm brand orientation.

Managerial Implications

This study has important managerial implications for international firms. First, firms operating internationally could pursue market or brand orientation to enhance profit goal, sales goal, and ROI (i.e., financial return) as well as customer retention, service quality, and customer satisfaction (i.e., market performance). With a brand orientation, international firms can leverage their distinctiveness identity through brand creation, development and protection and introduce image and experience offerings with advanced high quality promising products to local markets,

distinguishing them from the competition. With a market orientation, international firms can monitor customer preferences closely and constantly and then introduce offerings that uniquely fit local customer tastes in a timely manner (see Chen, Chen, & Zhou, 2014). Managers of international firms must understand the contingency value of strategic orientations on their relationship with their partners. Brand-oriented international firms should cultivate a cooperative culture that embraces the supervision of collaboration with trusted partners. This collaboration could enable international companies to allocate adequate attention to learning and applying new knowledge transferred from their trusted partners, facilitating the building of international differentiation capability. Market oriented international firms may find it uneasy to dedicate serious attention to market-oriented practices when collaborative partners exert tight operational control. One possibility would be to negotiate with their trusted partners for less operational control and more autonomy (see Chen et al., 2014). Without such attempts, market orientation is hardly effective for these international firms to develop their differentiation capability. In addition, international firms managers should be aware that market orientation is ineffective when trusted collaborative partners control is low. Thus, this study strongly suggests that they take the initiative to build more communication opportunities with their trusted partners. From the viewpoint of strategic trusted partners, they must consider the specific strategic orientation of their relationship and adjust their strategic modes accordingly. If international firms employ a brand orientation, trusted partners could consider increasing their equity shares or exerting strong operational control to build and protect their differentiation capability. For market-oriented international firms, collaborative partners should rely less on operation control; instead, they should take more inter-functional coordination control to communicate with the trusted partners to better understand their market-oriented practices and supply them appropriate and suitable support.

Limitations and further research

We started this article by arguing that clarification of the conceptualization market and brand inter-firm collaboration as two strategic orientation constructs necessary and even urgent in our field. Prior research using the notion of market and brand are published on a regular basis. Most often these articles do not provide much theoretical or empirical foundation for the constructs of market and brand inter-firm collaboration. With this article we hope to provide a basis for further investigation. Future researchers should advance and discuss how to conceptualize and measure market and brand inter-firm collaboration. Prior research has not clearly discussed these two critical concepts. Often it is not clear if market and brand inter-firm collaboration are defined from the perspective of the international firms or their partners. The different conceptualizations and measurements of IFMO and BO in prior research may have led to inconclusive findings. The findings in this article imply that depending on how researchers define and measure the IFMO and BO concepts, they will obtain interesting results.

Our study should be viewed as an important first step in the examination of the role of IFMO and BO on marketing and financial performance and offers several exciting possibilities for future studies. First, it is important to note that readers should be cautious when generalization the results to different cultural contexts. This research stream would benefit from broader empirical support using different cultures and countries. Our research was empirically supported in a specific context of SMEs operating internationally in Switzerland. However, the role of dynamism is relevant to many other manufacturing and service firms as well as industries across the globe. Second, a cross-sectional approach was used in this study with subjective measures. Future research should focus on triangulating perceptual measures with other measures such as expert opinion and secondary data as well as using a longitudinal temporal base to assess the impact of the variables examined herein across time. Finally, we assessed performance by

marketing and financial measures, while there is evidence that performance is a much broader construct that includes extra-role dimensions (Avlonitis & Panagopoulos, 2005). Future studies might use objective measures for firm performance to strengthen the research design. Finally, further research may consider replicating this study using a multi-level approach to help establish the validity of theory being put forward in this study.

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Figure 1. Theoretical framework

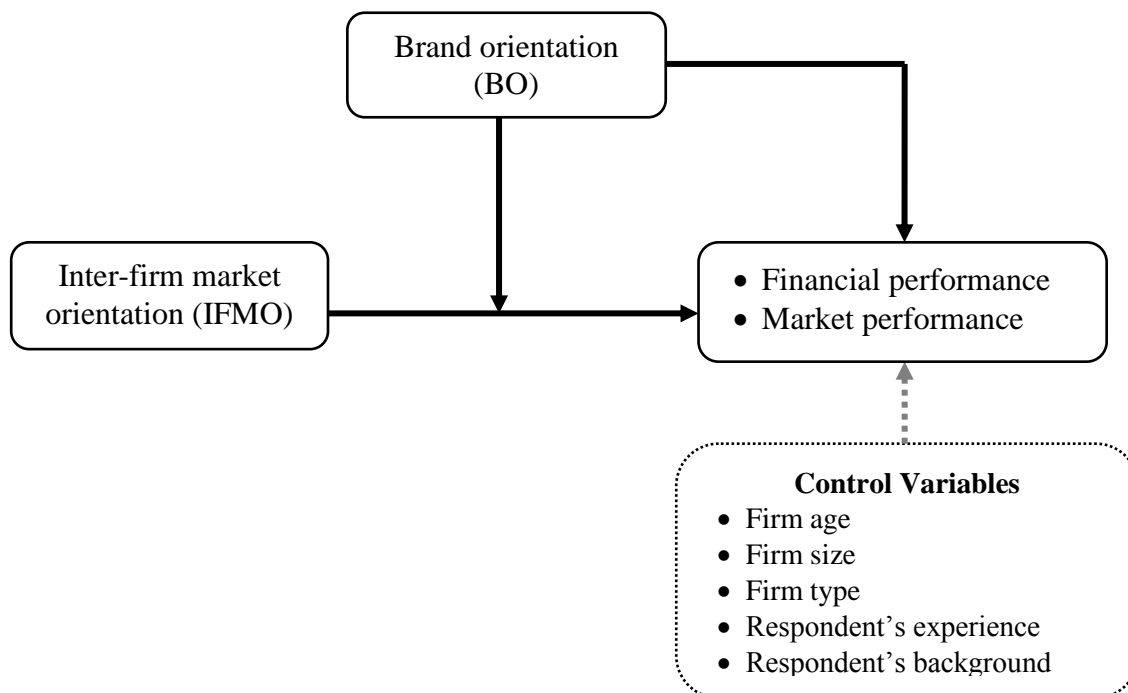


Figure 2: The Moderating Role of BO on the IFMO– Marketing Firm Performance Relationship

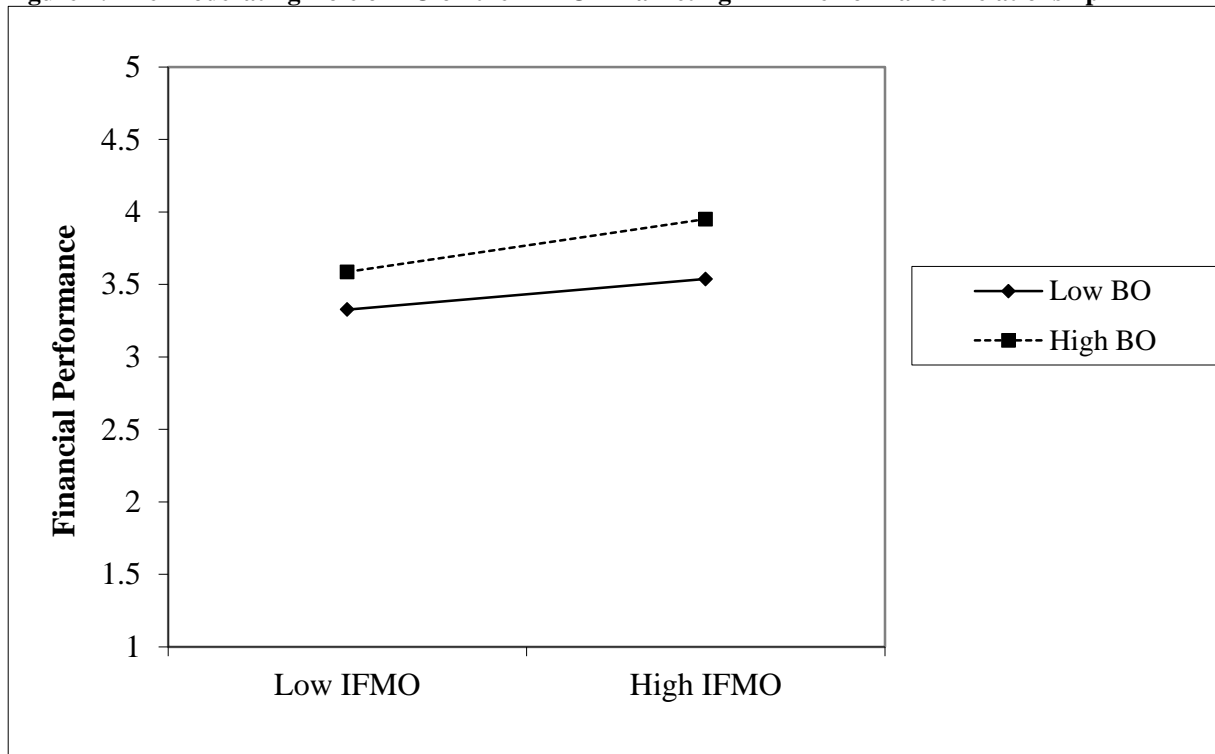


Figure 3: The Moderating Role of BO on the IFMO– Marketing Firm Performance Relationship

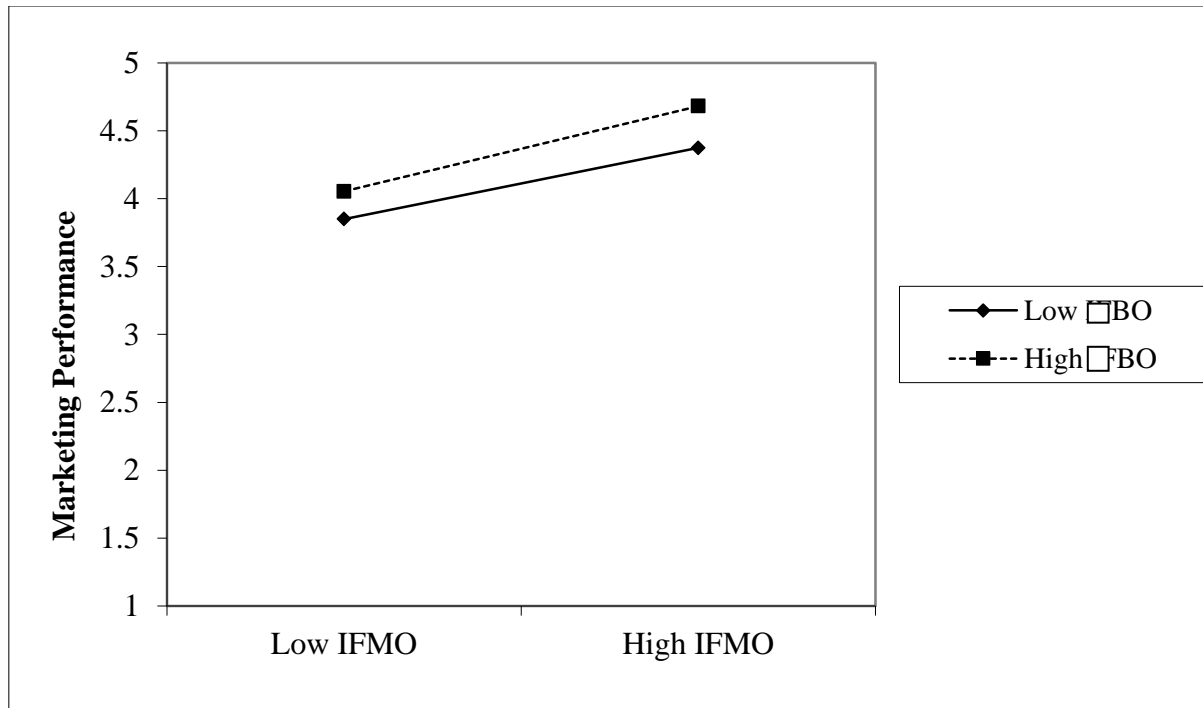


Table 1. Measurements and factor loadings of IFMO dimensions

| Items | Factor loading | | |
|---|----------------|--------|--------|
| | IG | ID | RS |
| IFMO: Intelligence Generation | | | |
| 1. We collaborate with our business partners in collecting information about what products or services our customers will need in the future. | .801 | -.081 | .506 |
| 2. Individuals from our business partners interact directly with customers to learn how to serve their needs better. | .629 | -.022 | .322 |
| 3. We do a lot of market research in-house in collaboration with our business partners. | .813 | -.023 | .377 |
| 4. Collaborations with our business partners make us slow in detecting changes in our customers' product preferences. | .799 | -.021 | .466 |
| 5. We often talk with or survey those who can influence our end users' purchases (e.g., retailers, distributors). | .729 | .076 | .405 |
| 6. We collect industry information by informal means (e.g., lunch with industry friends, talk with trade partners). | .806 | .000 | .368 |
| 7. Collaborations with our business partners make us slow to detect fundamental shifts in our industry (e.g. competition, technology, regulation). | .729 | .008 | .465 |
| 8. Our business partners help us to review the likely effect of changes in our business environment (e.g., regulation, technology) on customers. | .765 | -.081 | .506 |
| 9. Marketing personnel in our company spend time discussing customers' future needs with business partners. | .286 | .220 | .165 |
| 10. We periodically circulate documents (e.g., reports, and newsletters) to our business partners that provide information on our customers. | .301 | .216 | -.026 |
| IFMO: Intelligence Dissemination | | | |
| 1. When something important happens to our major customer or market, our business partners know about it within a short period. | .110 | .888 | .068 |
| 2. It takes us forever to coordinate with business partners when we respond to our competitor's price changes. | .042 | .674 | .029 |
| 3. For one reason or another we tend to ignore changes in our customer's product/service needs when we collaborate with business partners. | .038 | .544 | -.027 |
| 4. We get together periodically with business partners to plan a response to changes taking place in our business environment. | -.083 | .915 | -.152 |
| 5. The product/service lines we market depend more on external politics than real market needs. | -.100 | .845 | -.190 |
| IFMO: Responsiveness | | | |
| 1. If a major competitor were to launch an intensive campaign targeted at our customers, our business partners would help us to implement a response immediately. | .453 | .052 | .840 |
| 2. Customer complaints fall on deaf ears among our business units and our partners. | .396 | -.158 | .803 |
| 3. Even if we came up with a great marketing plan, our business partners would probably be able to implement it. | .431 | -.073 | .878 |
| 4. Our business partners help us to be quick to respond to significant changes in our competitors' pricing structures. | .502 | -.018 | .826 |
| 5. When we find out that customers are unhappy with the quality of our service, our business partners help us to take corrective action immediately. | .487 | -.187 | .843 |
| 6. When we find that customers would like us to modify a product or service, our business partners help us to do so. | -.157 | .411 | .022 |
| % Variance explained | 35.482 | 18.615 | 10.014 |
| % Cumulative Variance explained | 35.482 | 54.097 | 64.112 |
| Cronbach's Alpha | .878 | .893 | .862 |

Note: IG= Intelligence Generation, ID= Intelligence Dissemination, RS= Responsiveness

Table 2. Measurements and factor loadings of BO dimensions

| | Factor loading |
|---|----------------|
| <i>BO items:</i> | |
| 1. Branding aspects influence all marketing activities that we perform with business partners. | .631 |
| 2. Branding is an essential aspect when we choose what business partners to cooperate with. | .612 |
| 3. Our brand is an asset that helps us to establish relationships with strong business partners. | .779 |
| 4. We instruct new business partners about the positioning of our brand. | .652 |
| 5. Our business partners understand that branding our product/service is a top priority for our firm. | .770 |
| 6. Our business partners are an important factor for our long term brand positioning. | .674 |
| % Variance explained | 56.142 |
| % Cumulative Variance explained | 56.142 |
| Cronbach's Alpha | .842 |

Table 3: Single-factor test for business performance (dependent variables)

| Variables | Marketing performance loading | Financial performance loading |
|-----------------------------------|-------------------------------|-------------------------------|
| Reputation | .79 ^a | |
| Customer satisfaction | .77 | |
| Customer retention | .78 | |
| Customer loyalty | .93 | |
| Quality | .99 | |
| Return on investment (ROI) | | .94 ^a |
| Profit goal | | .90 |
| Sales goal | | .63 |
| Eigenvalue | 4.331 | 1.961 |
| Variance (%) explained | 54.141 | 24.518 |
| Cumulative variance (%) explained | 54.141 | 78.660 |
| Cronbach's alpha | .93 | .81 |
| Composite Reliability (CR) | .94 | .88 |
| Average Variance Extracted (AVE) | .81 | .71 |

Model fit: CFI = .96, IFI=.98, RMSEA=.09, TLI=.90; RNI= .96, $\chi^2_{(8)}= 15.42$, $\chi^2/df=1.93$

Notes: KMO test= 0.808, Bartlett test of sphericity= 431.316, Significance= 0.000

^aLoading fixed to 1 for identification purposes.

Table 4: Summary Statistics of the Measurement Analysis (n = 169)^a

| Model/variable | Mean | SD | AVE | CR | Reliability | Coefficients | χ^2 | df | χ^2/df | p | CFI | RNI |
|------------------------------|------|------|-----|-----|-------------|--------------|----------|-----|-------------|-----|-----|-----|
| Exogenous | | | | | | | 247.18 | 183 | 1.35 | .00 | .96 | .96 |
| Inter-firm MO | | | | | | | | | | | | |
| - Intelligence Generation | 5.49 | 1.07 | .57 | .93 | .878 | .62-.82 | | | | | | |
| - Intelligence Dissemination | 5.25 | 1.15 | .70 | .92 | .893 | .51-.96 | | | | | | |
| - Responsiveness | 4.64 | 1.15 | .52 | .87 | .862 | .74-.85 | | | | | | |
| BO | 5.64 | 1.02 | .56 | .88 | .849 | .65-.78 | | | | | | |
| Endogenous | | | | | | | 15.42 | 8 | 1.93 | .05 | .96 | .96 |
| Financial performance | 4.67 | .64 | .71 | .94 | .93 | .63-.94 | | | | | | |
| Market performance | 4.32 | .77 | .81 | .88 | .81 | .77-.99 | | | | | | |

^a Exogenous (Drivers)= Inter-firm MO (Intelligence Generation, Intelligence Dissemination, Responsiveness), BO, Endogenous (Performance) = financial performance and market performance.

Table 5: Descriptive Statistics of Study Variables

| Study Constructs | Mean | Standard Deviation | Correlation Matrix | | | | | | | |
|--------------------------|-------|--------------------|--------------------|--------|--------|-------|-------|-------|-------|---|
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | |
| 1. IFMO | 4.822 | .807 | 1 | .09 | .09 | .11 | | | | |
| 2. BO | 4.429 | .828 | .308** | 1 | .10 | .16 | | | | |
| 3. Financial performance | 4.514 | .709 | .300** | .320** | 1 | .19 | | | | |
| 4. Market performance | 4.651 | .681 | .343** | .397** | .435** | 1 | | | | |
| 5. Firm size (log) | 1.823 | .200 | .023 | .029 | -.019 | .120 | 1 | | | |
| 6. Firm age (log) | 1.616 | .205 | -.016 | .065 | .057 | -.013 | .044 | 1 | | |
| 7. Firm Type | .633 | .483 | .085 | -.003 | .081 | .065 | -.025 | .018 | 1 | |
| 8. Experience | 1.247 | .163 | -.165* | -.152* | -.082 | -.124 | -.057 | -.028 | .095 | 1 |
| 9. Background | .633 | .483 | -.013 | -.008 | .008 | .040 | .044 | .003 | -.019 | |

* $p < .05$.

** $p < .01$.

Sample size = 169

Notes: Two-tailed tests of significance.

Table 6: Hierarchical Moderated Regression Analysis, Sample size = 169

| Independent Variables | Dependent Variables | | | | | | | | | | | |
|--------------------------------|-----------------------|-----------------|--------------|-----------------|--------------|-----------------|-----------------------|-----------------|--------------|-----------------|--------------|-----------------|
| | Marketing Performance | | | | | | Financial Performance | | | | | |
| | Model 1 | | Model 2 | | Model 3 | | Model 4 | | Model 5 | | Model 6 | |
| | <i>B</i> | <i>t</i> -value | <i>B</i> | <i>t</i> -value | <i>B</i> | <i>t</i> -value | <i>B</i> | <i>t</i> -value | <i>B</i> | <i>t</i> -value | <i>B</i> | <i>t</i> -value |
| Controls | | | | | | | | | | | | |
| Firm age (log) | .186 (.268) | .696 | .143 (.225) | .634 | .172 (.226) | .762 | -.077 (.255) | -.303 | -.120 (.200) | -.036 | -.081 (.200) | -.406 |
| Yrs of experience (log) | -.390 (.339) | -1.150 | .055 (.288) | .190 | .063 (.287) | .221 | -.519 (.323) | -1.606 | -.053 (.256) | -.013 | -.041 (.254) | -.163 |
| Firm size (log) | -.086 (.275) | -.312 | -.127 (.229) | -.553 | -.122 (.229) | -.534 | .390 (.262) | 1.489 | .344 (.204) | .102 | .350 (.202) | 1.730 |
| Firm type | .129 (.114) | 1.130 | .080 (.096) | .831 | .070 (.096) | .730 | .114 (.109) | 1.046 | .063 (.086) | .045 | .050 (.085) | .589 |
| Participant's background | .010 (.114) | .089 | .025 (.095) | .261 | .042 (.096) | .437 | .044 (.109) | .404 | .055 (.085) | .039 | .078 (.085) | .916 |
| Direct Effects | | | | | | | | | | | | |
| IFMO | | | .254 (.073) | 3.504** | .013 (.204) | .063 | | | .232 (.065) | 3.601*** | -.089 (.180) | -.493 |
| BO | | | .296 (.071) | 4.194*** | -.010 (.251) | -.039 | | | .351 (.063) | 5.594*** | -.056 (.222) | -.251 |
| Interaction | | | | | | | | | | | | |
| IFMO × BO | | | | | .134 (.042) | 2.068* | | | | | .101 (.037) | 1.996* |
| <i>R</i> ² | .018 | | .330 | | .337 | | .036 | | .423 | | .436 | |
| Adjusted <i>R</i> ² | -.012 | | .301 | | .304 | | .007 | | .398 | | .407 | |
| ΔR^2 | ---- | | | | | | ----- | | | | | |
| <i>F</i> -value | .601 | | 11.277*** | | 10.106*** | | 1.220 | | 16.748*** | | 15.352*** | |

Note: Unstandardized coefficients (*B*) are displayed in the table with standard errors in parentheses.

IFMO= Inter-firm market orientation, BO= brand orientation,

**p* < 0.05,

** *p* < 0.01,

****p* < 0.001,