Moderating International Environment Hostility between International Corporate Entrepreneurship and Halal Food Industry

M. Akbari1*, M. Danesh2, P. Dolatshah2, and A. Khosravani3

ABSTRACT

The aim of this paper was to evaluate the impacts of International Corporate Entrepreneurship (ICE) on general performance in Halal Food Industry, with moderating part of global environmental hostility. Our data comprised of 250 firms working in Halal Food Industry in Iran and they were studied utilizing the structural equation modeling. According to the results, the firms exploit ICE activities by accomplishing higher general performance in addition to promoting export and financial performance. The results underscore the significance of ICE for organizational achievement, both in general and in foreign markets. Also, the results suggest that the perceived nature of its environmental condition, especially hostility, will affect the link between ICE and performance fundamentally. This study explored the relationship between ICE and firm performance along with the role of hostility at the international environment in this relationship. The findings of this study help bridge the gap in the literature by assessing the impact of ICE on an organization’s general performance with the hostilities at the international scale playing a moderating role in this regard. This paper makes huge contribution to the current works by exploring the connection between ICE, firm performance, and global environmental hostility.


INTRODUCTION

Because of the rapid evolution of technology, fierce competitions among industries, and globalization, Small and Medium-sized Enterprises (SMEs) progressively confront a challenging exterior environment (Brettel and Rottenberger, 2013). In this regard, prior literature highlights the role of Corporate Entrepreneurship (CE) refresh existing business organizations, irrespective of their sizes and nature (Bierwerth et al., 2015). CE is an essential means for successful organizations. Likewise, it is the source of new information that enables organizations to generate capacities to set foot in new markets and accomplish development (Zahra, 2015). While the majority of previous literature commonly indicates a positive influence of CE on performance (Zahra, 1993; Zahra and Covin, 1995), but the current empirical results remain rather indecisive (Bierwerth et al., 2015).

Firms require a global scope to build and leverage their dynamic capabilities. In other words, the organization’s ability to adapt its resource base purposefully contributes to transferring, sharing, and creating knowledge in the international market, which ultimately enhances innovation performance (Teece, 2014). Internationalization leads to a greater breadth and depth of organizational learning about foreign markets, potential customers and competitors, which ultimately enhances firm performance.

1 Department of Corporate Entrepreneurship; Faculty of Entrepreneurship, University of Tehran, Islamic Republic of Iran.
2 Faculty of Management, University of Kashan, Islamic Republic of Iran.
3 Faculty of Management, University of Tehran, Islamic Republic of Iran.
* Corresponding author; e-mail: mortezaakbari@ut.ac.ir
(Zahra et al., 2000; Lee et al., 2017). However, the international entrepreneurial activity of existing firms has been overlooked (Keupp and Gassmann, 2009). Zahra and Garvis (2000), in answer to international entrepreneurial activity, consider ICE as the gist of an organization’s innovation, proactiveness, and risk-taking.

Like the conceptualization of ICE embraced in the existing studies (Naldi et al., 2015), ICE described as an international firm’s expansion into new foreign markets or into existing foreign markets by providing new products/services to existing customers. While researchers highlight the significance of entrepreneurial endeavors in foreign markets and have called for further studies on this issue (Guth and Ginsberg, 1990), there is a paucity of empirical studies exploring ICE (Ortiz-de-Urbina-Criado et al., 2011).

Covin and Slevin (1989) found that in a hostile environment, the entrepreneurial strategic posture of small businesses is positively associated with their performance, while in benign environment the relationship is negative (Yan and Yan, 2017). Environmental hostility, together with a concentrated organizational structure in which proprietors and managers cooperate to advance proactive and innovative conduct (Kuratko and Audretsch, 2013), may invigorate the capacity to make new business plans and allow corporate entrepreneurship (García-Sánchez et al., 2018). By investigating the connection between ICE and a company’s performance in addition to its performance in global operations and further the role of IEH as a moderating factor that affect the ICE-performance relationships, this paper attempts to address the issue of little recognition regarding the impact of ICE on organization’s performance.

Bagheri and Akbari (2019) and Bagheri et al. (2018) found that a robust body of literature investigated different aspects of corporate entrepreneurship in Iran, but few study were conducted in Halal Food Industry. Therefore, this study concentrates on Halal Food Industry. Commercially, the Islamic consumer market is the fastest growing in the world. Owing to two reasons, the halal food market is the fastest growing in the world. First, it can be linked to religious fervor and beliefs that it is cleaner, healthier, and tastier; and second, for the tremendous acceptance of halal food within the global population through the process of assimilation (Alam and Sayuti, 2011). Nowadays, in addition to the 57 Islamic countries, the citizens from other countries have also shown interest in consuming Halal Food. Moreover, with the 30 percent increase in the Muslim population of the world, which is due by 2025, Halal production will be unprecedentedly brought into attention. It is said that Halal Food will comprise 20 percent of the total international food trade in the future (Rezvani et al., 2017). The most prominent prospect for the Iranian Halal Food Industry is to surpass other countries of the region by achieving first place in Halal Food trading by 2025 and to earn a position among the first five member states of the Organization of Islamic Cooperation. However, Iran’s share of Halal brand is now equal only to less than 1 percent of the worlds, while other Arabic and Islamic states of the region have gained a billion dollar profit in this market (Halal Food Supervisory Council, 2018). Therefore, as a country whose entire food production is Halal, Iran has good potential and occasion in the domain of food production. To the best of our knowledge, our research presents some of the first empirical results on the impact of corporate entrepreneurship of Performance of Halal Food Industry in Iran. Furthermore, the study’s second aim was to examine how IEH moderate this relation.

MATERIALS AND METHODS

Theoretical Framework and Hypothesis Development

In the present dynamic business condition, a firm must remain competitive by carefully observing and understanding business performance. There are different and distinctive explanations for performance in management studies; however, a broad definition of performance includes aggregated outcomes of all work activities in a firm (Robbins and Coulter, 2009). Financial performance refers to a company’s capacity to produce new assets from everyday operations over a particular period of time (Lwamba et al., 2014). The multidimensional trait of performance of the organization has been...
revealed in the previous researches (Aktan and Bulut, 2008). With regard to the firm performance, the emphasis is often on the financial side; henceforth it is customarily defined in financial terms. Likewise, investors, shareholders, and different stakeholders are urged to obtain information about the company’s performance conditions regularly. The information on financial performance is the most obvious and reliable information among other dimensions of performance (Zhao et al., 2011).

Export performance of a firm mirrors a firm-specific behavior in utilizing its assets and capabilities in a global setting at a given period of time. Successful export performance lies at the core of the strategic process of decision making for decision makers in both corporate and public policy domains. In the case of organizations, the accomplishment of the export performance demonstrates the degree to which company’s goals, both financial and non-financial, is accomplished in an international setting at a given point of time and mirrors the usefulness of the selected export strategy in reacting effectively to the firm and environmental conditions (Beleska-Spasova, 2014).

Innovation could be a source of noteworthy advance and strong corporate development. In the event that the strategic managers of entrepreneurial firms effectively create and adopt new developments, they can produce competitive edges and achieve a noteworthy source of firm development (Dess and Lumpkin, 2005). Innovative activities include new product, recently developed technologies, techniques and services, and new competitive conditions (Ahmadpour Daryani and Karimi, 2017). Innovation embodies a company’s ability to manufacture new products, present new markets, processes and supply new assets, which are at the core of entrepreneurship (Aktan and Bulut, 2008). A venture-wide entrepreneurial determination to adapt with and derive advantage from quickly changing market conditions would be conceivable just if appropriate creative endeavors are established. At the point where these enterprise activities are upheld and coordinated inside the enterprise, the results will be achieved as maintainable competitive edge through innovation in the form of new products, processes, or a blending of these (Morris and Kuratko, 2002). Therefore, many researchers have reported the relationship between innovation and business performance (Fritsch and Franke, 2004; Lwamba et al., 2014). Innovation additionally expands firm performance by building up a solid face and positive image, which encourages the firm to separate themselves from rivals (Goosen et al., 2002). Innovation may adjust the structure and processes of an organization and generate (or change) products for enhancing performance in current business (Bierwerth et al., 2015). On this premise, the following hypothesis was developed:

H1a, b: Innovation will have a positive effect on (a) Export performance and (b) Financial performance.

Risk-Taking, Export Performance, and Financial Performance

Risk-taking represents the readiness of a company to embrace an risky initiative or put resources into untested technologies that require generous capital investment and its charges of failure is similarly high (Miller and Friesen, 1982; Mohamad et al., 2011). Pitt et al., (1997) contend that risk-taking includes a readiness to seek after opportunities that may involve systematic risk. Venkatraman (1989) posits that risk-taking involves the degree of risk demonstrated in different decisions regarding asset allocation, and the selection of products and markets (Nasution et al., 2011).

Risk-taking is entering into unknown by taking part in calculated business-related projections, such as the orientation of a firm to pursue new initiatives with the goal benefits and performance of the firm (Kreiser et al., 2010; Keh et al., 2002). This is chiefly because besides fiscal risk, it normally involves psychological and social risk as well (Lumpkin and Dess, 1996). Recent studies suggest that entrepreneurs take greater risks than do non-entrepreneurs (Falbe and Larwood, 1995). Entrepreneurs are assumed to take greater risk as they have to deal with a less organized and a more unverifiable set of potential outcomes. In addition, (Morris, 1998) found that entrepreneurs had a tendency to be moderate or take systematic risk. Risk-taking has a positive impact on an organizational
performance to a certain point, beyond which it starts to exert adverse effects on the firm’s outcomes. The impact ends up noticeably negative if the risk assumed is significantly greater than the environmental demands, or appropriate fit between investment and expected advantages is not accomplished (García-Sánchez et al., 2018). Adopting a conservative and risk-averse perspective by a firm will diminish the market share and even lose competitive stance. Indeed, globalization of the rivalry has obliged firms to take new positions to sustain their competitive power (Aktan et al., 2008). Nonetheless, in an enterprise’s genuine activities of manufacturing and operation, while greater tendency for risk-taking can fundamentally raise the fluctuation of corporate performance, many scholars still suggest that daring endeavors and risky practices frequently prompt higher than average performance. That is, greater tendency for risk-taking will translate into higher performance levels in the long run (Jia et al., 2014). Eventually Otieno et al. (2012) noticed the existence of significant positive relationship between risk-taking and performance more importantly considering sales, profitability, and employees’ growth (Lawal et al., 2018). The above discussion suggests the following hypothesis:

**H2a, b:** Risk-taking will have positive effects on (a) Export performance and (b) Financial performance.

**Proactiveness, Export Performance, and Financial Performance**

Proactive companies supervise patterns, recognize the future needs of potential clients, and anticipate changes sought after or rising issues that can prompt new risky opportunities (Dess and Lumpkin, 2005). Proactiveness is a company’s procedure with two phases: (1) Foreseeing changes in environment and (2) Acting upon these changes and future needs (Venkatraman, 1989). Proactiveness is the capacity to act before others in seizing new markets or presenting new products or utilizing new assets. An imperative element of entrepreneurship is that an entrepreneur looks for new opportunities that may not be identified with the existing line of operations (Olson et al., 2005; Narver et al., 2004). These proactive measures are intended to confront, survive, and increase competitive edge in new economic environment. Proactiveness in saturated market entails a firm to be quick and the first by discovering the new demands or presenting new products, which frequently helps assume a new position on the path of sustainable competitive edge (Porter, 1980; Lwamba et al., 2014). Dess and Lumpkin (2005) have discovered a connection between proactiveness and making competitive advantage and others have demonstrated the link between proactiveness and enhanced performance (Karimi and Walter, 2016). The above discussion suggests the following hypothesis:

**H3a, b:** Proactiveness will have positive impacts on (a) Export performance and (b) Financial performance.

**ICE, Export Performance, and Financial Performance**

ICE is a developing notion that is used to refer to the procedure of broadening the company’s scope of competence and relating opportunity set through resource combinations that are produced internally (Burgelman, 1984). Within the global context, it represents ICE as merely international entrepreneurship, which is defined by McDougall and Oviatt (2000) as ‘a blending of creative, proactive, and risk-taking behavior that goes beyond national borders and is supposed to generate value in associations’ (Mac and Evangelista, 2015). ICE can be considered from the subsidiary initiative or from the perspective of innovation, proactiveness, and chance taking points. Such ventures are frequently created in regional settings. From the viewpoint of the firm in general, the real advantage of ICE is abuse of international development chances and upgrade of the company’s competitive edge (Naldi et al., 2015; Zahra and Garvis, 2000).

To be able to participate in ICE, firms have to perceive crucial financial benefits derived from their innovation, risk-taking, and creation of new business. This finding is in line with the results reported in previous studies (Stopford and Baden-Fuller, 1994). In previous studies, the connection between a company’s international activities and firm performance has been
explored (Sullivan, 1994). For instance, researchers have endeavored to discover the source of competitive advantages that companies achieve from internationalization of their operations worldwide. One might say that, when entrepreneurial initiative is adopted in a firm’s global operations, it can give an organization a competitive edge in existing or new markets (Stopford and Baden-Fuller, 1994; Zahra and Covin, 1995).

H4a, b: ICE will positively influence (a) Export Performance and (b) Financial performance.

ICE, IEH, Export Performance, and Financial Performance

Competition’s high intensity, infrequent opportunities, and competition’s hesitancies, markets and products are connected with environmental hostility (Zahra and Covin, 1995). Hostility demonstrates the apparent adverseness of a situation for a company’s mission (Miller and Friesen, 1984). The pursuit of corporate entrepreneurship will elicit environmental hostility. At the point when a firm encounters adverse environmental conditions, it might decide to distinguish its products through escalated marketing and promotional campaign in an attempt to retain customer loyalty or enhance the infiltration of existing segments. And, if hostility is deteriorating the firm’s primary markets, these enterprises will consider new business ideas for supplanting, or they may supply their extra business cores through internal improvements, external shared venturing, or broadening the scale of activities (Zahra, 1991).

A firm may confront uncertainty, when it fails to control dynamic powers that form the new trends in the target market. Either an ideal or a threatening environment might be found in the company’s environment (Pfeffer and Salancik, 1978; Miller, 1993). It is overall maintained that if a firm is engaged in a hostile environment, it will display high corporate entrepreneurship compared to a steady situation (Mohamad et al., 2011). Corporate entrepreneurship is a strategic variable for the survival of companies in exceedingly competitive environments. Firms need to recognize and overcome threats and shortcomings through entrepreneurial activities that allow them to acquire higher development and profits (García-Sánchez et al., 2018). In the face of a hostile environment, global crises, and contracting business opportunities, firms should support entrepreneurial corporate operations that allow managers to pursue creative solutions to lessen or oversee source of instability and threats (Martin-Rojas et al., 2011). A study by Zahra (1993) revealed a strong connection between environmental hostility and specific demonstrations of entrepreneurial operations in companies. The results of a longitudinal study by Zahra and Covin (1995) revealed that corporate entrepreneurship was a better indicator of financial performance among firms operating in a threatening environment compared to firms working in a benign environment.

To decide the link between corporate entrepreneurship and performance, it is proper to analyze the moderation role of external factors such as environmental hostility given that firm works in a distinctive environmental condition (Zahra and Covin, 1995). Environmental hostilities like industries’ radical transformations or contestation’s intensity leads executives following activities of entrepreneurship (Ağca et al., 2012).

It has been shown in the literature that business environment is a moderating variable on the global corporate entrepreneurship with the firm performance relationship endorsing this finding (Zahra, 1993; Mohamad et al., 2011). This discussion suggests the study’s final two hypotheses:

H5a, b: the link between ICE of a company and (a) Export Performance, (b) Financial performance is moderated by IEH.

H5c, d, e: Environmental hostility moderate the relationship between the various dimensions of ICE (c), innovation (d), risk-taking and (e) proactiveness with export performance and financial performance.

Sample and Data Collection

The sample of the study consisted of managers and CEOs of Halal Food companies which had international activities. Since the number of companies active in this industry at the time of research was about 710, by using the Bartlett et al. (2001) table, a sample of 260 companies was
considered as sample and was selected through simple random sampling. The data was obtained using a direct mail survey method to cover all firms over a wide geographic area. In the end, around 250 out of 260 firms responded to the question completely.

**Research Design**

A quantitative research methodology was adopted to test hypotheses based on correlational survey research data. The questions incorporated in the study were derived from previous researches. To ensure the semantic consistency of the items in the questionnaires, back-translation technique was employed. Consequently, first, the questionnaire was translated into Persian by two specialists, and then the items were re-translated into English. The index was translated into Farsi (Persian) using standard back-translation procedures.

**Items Measurement**

The participants were asked to express the degree of their agreement with each statement on a 5-point Likert scale running the gamut from "Strongly disagree" (1) to "Strongly agree" (5). The convergent validity of constructs was assessed using confirmatory factor analysis. ICE was adapted from Aktan and Bulut (2008), and consisted of three measurements i.e. innovation (6 items), risk-taking (7 items), and proactiveness (4 items). An extensive review of literature was made (Barringer and Bluedorn, 1999; Hornsby et al., 2002; Antoncic and Hisrich, 2001; Dess et al., 1997; Naman and Slevin, 1993). Financial performance (4 items) was developed by Burgers et al. (2009), Rezaei et al. (2017); and Sakhdari, (2014) and the export performance (9 items) was presented by Zou et al., (1998) and Ural (2009). The final variable was IEH adapted from Zahra and Garvis (2000) and Miller and Friesen (1984). Composite Reliabilities (CR), Average Variance Extracted (AVE), and Cronbach's alpha coefficient were used to assess the validity and reliability (Table 1).

**Measurement Model**

For the analysis of the theoretical model (Figure 1), Structural Equation Modeling (SEM) was used based on PLS to investigate the reflective and formative constructs of models. Moreover, CR, AVE, and discriminant validity were evaluated to the reflective construct of the model.

As shown in Table 1, all reflective constructs had desirable internal reliability and consistency, as exhibited by the composite reliability values reported above. The reliability of ICE dimensions, IEH, financial performance, and export performance were tested using Cronbach's alpha coefficient (Table 1). All coefficients were higher than the minimum acceptable values and internal consistency for each measure was demonstrated (Burton et al., 1998).

The standardized factor loadings assessed the convergent validity of each construct (Anderson and Gerbing, 1988). The results suggested that the factor loading of each indicator was in the range of 0.540 to 0.911, which was higher than the recommended level (0.50). Given that the factor loading of each construct was higher than 0.50, the convergent validity for each construct was determined, therefore offering evidence for the validity of all the study constructs (Hair et al., 1998). Furthermore, the discriminant validity of all six constructs was calculated using AVE (Hair et al., 1998), with the obtained values being in the range of 0.501 to 0.676 (Table 2).

**Table 1.** Construct validity for reflective and formative scales.

<table>
<thead>
<tr>
<th>Construct</th>
<th>AVE</th>
<th>CR</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Innovation</td>
<td>0.602</td>
<td>0.901</td>
<td>0.866</td>
</tr>
<tr>
<td>Risk-taking</td>
<td>0.592</td>
<td>0.909</td>
<td>0.881</td>
</tr>
<tr>
<td>Proactiveness</td>
<td>0.676</td>
<td>0.891</td>
<td>0.832</td>
</tr>
<tr>
<td>IEH</td>
<td>0.501</td>
<td>0.856</td>
<td>0.809</td>
</tr>
<tr>
<td>Financial performance</td>
<td>0.637</td>
<td>0.875</td>
<td>0.810</td>
</tr>
<tr>
<td>Export performance</td>
<td>0.501</td>
<td>0.879</td>
<td>0.845</td>
</tr>
</tbody>
</table>

---

---
Given that the square root of the AVE for each pair of variables is higher than the estimated correlation between factors. Thus, It confirms the discriminant validity (Hair et al., 1998). According to the cross-loading comparison exhibited in Table 2, the indicator’s loadings are higher than other loadings in each column and row.

**Structural Model**

The proposed hypotheses were assessed using SmartPLS² software. According to findings, the significance coefficients associated with the path of research variables were all above 1.96 (standard limit) and thus the research model had a desirable level of significance and the fitting of the auxiliary structural was ratified. As indicated by Barclay et al. (1995), $R^2$ was computed for measuring the predictive power of the model. $R^2$ shows the degree of variance that is accounted for by exogenous variables. The $t$-test was employed for evaluating the hypothesized relationships by utilizing the bootstrapping technique. It is worth mentioning that the significant role of IEH in the research model was investigated using the intuitive variable (Chen et al., 2003). Table 3 reveals the structural model analysis. Innovations were significantly and positively related with both export performance ($\beta= 0.661, P< 0.001$) and financial performance ($\beta= 0.644, P< 0.001$), supporting H1a and H1b.

**Table 2. Discriminant validity of constructs.**

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Export performance</td>
<td>32.4</td>
<td>7.6</td>
<td><strong>0.71</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Financial performance</td>
<td>13.9</td>
<td>4.3</td>
<td>0.71</td>
<td><strong>0.80</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IEH</td>
<td>22.7</td>
<td>4.7</td>
<td>0.22</td>
<td>0.19</td>
<td><strong>0.71</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Innovation</td>
<td>21.8</td>
<td>5.7</td>
<td>0.70</td>
<td>0.72</td>
<td>0.11</td>
<td><strong>0.78</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proactiveness</td>
<td>14.2</td>
<td>4.3</td>
<td>0.70</td>
<td>0.79</td>
<td>0.23</td>
<td>0.74</td>
<td><strong>0.77</strong></td>
<td></td>
</tr>
<tr>
<td>Risk-taking</td>
<td>25.2</td>
<td>6.8</td>
<td>0.71</td>
<td>0.80</td>
<td>0.17</td>
<td>0.77</td>
<td>0.74</td>
<td><strong>0.82</strong></td>
</tr>
</tbody>
</table>

*Diagonals (Bold values) represent the AVE while the other entries represent the squared correlations.*

---

**Figure 1.** The research model.

---

551
Table 3. Direct and Total Effects on performance.

<table>
<thead>
<tr>
<th></th>
<th>$R^2$</th>
<th>$f^2$</th>
<th>$Q^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Export performance</td>
<td>0.598</td>
<td>-</td>
<td>0.321</td>
</tr>
<tr>
<td>Innovation $\rightarrow$ Export performance</td>
<td>-</td>
<td>0.354</td>
<td>-</td>
</tr>
<tr>
<td>Risk-taking $\rightarrow$ Export performance</td>
<td>-</td>
<td>0.297</td>
<td>-</td>
</tr>
<tr>
<td>Proactiveness $\rightarrow$ Export performance</td>
<td>-</td>
<td>0.331</td>
<td>-</td>
</tr>
<tr>
<td>Financial performance</td>
<td>0.659</td>
<td>-</td>
<td>0.386</td>
</tr>
<tr>
<td>Innovation $\rightarrow$ Financial performance</td>
<td>-</td>
<td>0.425</td>
<td>-</td>
</tr>
<tr>
<td>Risk-taking $\rightarrow$ Financial performance</td>
<td>-</td>
<td>0.357</td>
<td>-</td>
</tr>
<tr>
<td>Proactiveness $\rightarrow$ Financial performance</td>
<td>-</td>
<td>0.233</td>
<td>-</td>
</tr>
</tbody>
</table>

As expected in H2a and H2b, risk-taking was significantly and positively related with export performance ($\beta = 0.443, P < 0.001$) and financial performance ($\beta = 0.439, P < 0.10$). Proactiveness was significantly and positively related with both export performance ($\beta = 0.701, P < 0.001$) and financial performance ($\beta = 0.504, P < 0.001$), supporting H3a and H3b. In support of H4a and H4b, ICE was significantly and positively related with export performance ($\beta = 0.423, P < 0.001$) and financial performance ($\beta = 0.567, P < 0.10$) (see Table 4).

The moderating effect is examined using a t-test with pooled standard errors. This method is described as the parametric approach (Henseler, 2007). This (Equation 1) is a one-tailed t-Student distribution with (m+n−2) degrees of freedom,

$$
t = \frac{\text{Path}(ED\text{ high})-\text{Path}(ED\text{ low})}{\text{sp}\sqrt{1/m+1/n}} \approx t(m + n - 2)
$$

(1)

Where, sp is the pooled estimator for the variance, $m$ is the number of cases in the sample of firms with high international environmental hostility, $n$ is the number of cases in the sample of organizations with low international environmental hostility, and SE is the Standard Error for the path provided by the PLS Graph in the bootstrap technique. The findings support H5a. The influence proposed is significantly more intense for the firms with high IEH than for firms with low IEH (Path$_{\text{high IEH}}$ > Path$_{\text{low IEH}}$, P< 0.05) and, therefore, an increase in IEH appears to increase the positive influence of ICE on export performance. On the other hand, the study verifies that the influence of ICE on financial performance is greater in firms with high IEH than in firms with low IEH (Path$_{\text{high IEH}}$ > Path$_{\text{low IEH}}$, P< 0.01). This is in agreement with H5b. The findings support H5c1 and H5c2 an increase in IEH appears to increase the positive influence of innovation on export and financial performance. In addition, IEH does not modify the relationship between risk-taking and export performance (Path$_{\text{high IEH}}$ < Path$_{\text{low IEH}}$, P< 0.01). Therefore, hypothesis H5d is rejected. The findings support H5d1. Thus an increase in IEH appears to increase the positive influence of risk-taking on financial performance. Also, IEH modifies the relationship between proactiveness and export performance and hypothesis H5e is confirmed. Finally, the moderating role of the IEH is not confirmed in relation to the proactiveness and financial performance and H5e2 is rejected.

**DISCUSSION**

This paper explored the relationship between ICE and company performance, investigating the moderating impact of IEH in Iranian Halal Food Industry. As a response to calls for empirical testing of entrepreneurial activities (Guth and Ginsberg, 1990), the results also illustrated the relationship between ICE and firm performance, as explained in the following paraphrases. H1a, b predicted a positive relationship between innovation with financial performance, and export performance in Halal Foods firms. There are a number of studies on the positive impact on firm performance (Chen et al., 2009; Uzkurt et
Table 4. Summary of hypotheses testing.

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Content</th>
<th>B values</th>
<th>T values</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The direct hypothesis tests summary</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H1a</td>
<td>Innovation→ Export performance</td>
<td>0.661</td>
<td>26.87</td>
<td>Supported</td>
</tr>
<tr>
<td>H1b</td>
<td>Innovation→ Financial performance</td>
<td>0.644</td>
<td>36.44</td>
<td>Supported</td>
</tr>
<tr>
<td>H2a</td>
<td>Risk-taking→ Export performance</td>
<td>0.443</td>
<td>18.24</td>
<td>Supported</td>
</tr>
<tr>
<td>H2b</td>
<td>Risk-taking→ Financial performance</td>
<td>0.439</td>
<td>16.82</td>
<td>Supported</td>
</tr>
<tr>
<td>H3a</td>
<td>Proactiveness→ Export performance</td>
<td>0.701</td>
<td>33.02</td>
<td>Supported</td>
</tr>
<tr>
<td>H3b</td>
<td>Proactiveness→ Financial performance</td>
<td>0.504</td>
<td>20.32</td>
<td>Supported</td>
</tr>
<tr>
<td>H4a</td>
<td>ICE→ Export performance</td>
<td>0.423</td>
<td>13.09</td>
<td>Supported</td>
</tr>
<tr>
<td>H4b</td>
<td>ICE→ Financial performance</td>
<td>0.567</td>
<td>22.61</td>
<td>Supported</td>
</tr>
<tr>
<td><strong>The indirect (moderation) hypothesis tests summary</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H5a: ICE→ performance</td>
<td>Path coefficients (High IEH)</td>
<td>0.73</td>
<td>0.26</td>
<td>0.132</td>
</tr>
<tr>
<td>H5b: ICE→ Financial performance</td>
<td>Path (High IEH)</td>
<td>0.53</td>
<td>0.38</td>
<td>0.361</td>
</tr>
<tr>
<td>H5c1: Innovation→ performance</td>
<td>Path (Low IEH)</td>
<td>0.64</td>
<td>0.33</td>
<td>0.303</td>
</tr>
<tr>
<td>H5c2: Innovation→ Financial performance</td>
<td>Path (Low IEH)</td>
<td>0.48</td>
<td>0.39</td>
<td>0.112</td>
</tr>
<tr>
<td>H5d1: Risk-taking→ performance</td>
<td>Path (High IEH)</td>
<td>0.58</td>
<td>0.71</td>
<td>0.099</td>
</tr>
<tr>
<td>H5d2: Risk-taking→ Financial performance</td>
<td>Path (Low IEH)</td>
<td>0.40</td>
<td>0.29</td>
<td>0.297</td>
</tr>
<tr>
<td>H5e1: Proactiveness→ performance</td>
<td>Path (High IEH)</td>
<td>0.50</td>
<td>0.37</td>
<td>0.153</td>
</tr>
<tr>
<td>H5e2: Proactiveness→ Financial performance</td>
<td>Path (Low IEH)</td>
<td>0.42</td>
<td>0.54</td>
<td>0.091</td>
</tr>
</tbody>
</table>

*p 0.05, t(0.05,132) = 1.98; **p 0.01, t(0.01,132) = 2.61

Recently, it has been increasingly acknowledged that innovation has a critical effect on performance of a firm (Fritsch and Franke, 2004). As the study revealed, organizations of Halal Foods in Iran that are employing innovation and novelty have better financial performance.

However, the findings revealed that innovation significantly affects financial performance and, along these lines, H1b was upheld. The results support H2a, b, showing a positive relationship between risk-taking and performance. Entrepreneurial and non-entrepreneurial behaviors are evidently recognized with the risk-taking qualities of individuals or firms. In this sense, corporate risk-taking can be theorized as the tendency of an organization to apply with the aim of boosting corporate benefits and development by enduring the possible calculated loses (Keh et al., 2002).
Conservative and risk-averse outlook of companies have been shown to diminish the market share and undermine the competitive position (Porter, 1980; Barringer and Bluedorn 1999). Moreover, the globalization of the competition has urged firms to adopt new positions to preserve their competitive power (Aktan and Bulut, 2008). Halal food among other classes of food products in the world is in the stage of quick growth (Abdul-Talib and Abd-Razak, 2013). Because of dynamic and modern economy, Iran is known as a leader in the industry of global halal food. Consequently, organizations of halal foods in Iran that are taking risks in this area have gained more profits and performed better.

Nonetheless, the results suggest that risk-taking has a critical effect on the export performance of Halal Food Industry, which confirms H2a. Also, the results about the significant impact of financial performance on risk raking confirm H2b. The results substantiate H3, revealing a positive connection between proactiveness and financial performance, export performance, especially in emerging economies such as Iran, where it is preferred to be an initiator rather than waiting and observing others’ strategies. Following in the footsteps of rivals may lead to fight over the diminished market-share left from the initiative of the first-mover (Narver et al., 2004; Olson et al., 2005). Instead of operating in a market that is saturated, taking initiative by identifying new demands or presenting new product often helps companies to secure a new position in their path towards sustainable competitive edge (Porter, 1980; Aktan and Bulut, 2008). Evidences revealed that, if Muslims and non-Muslims accept trying halal foods, halal foods’ organizations would have an opportunity to compete in an international market and the competition between halal food organizations is anticipated to grow in the future (Hendijani Fard and Seyyed Amiri, 2018). Thus, organizations of Iranian Halal Foods’ Pro-activeness have a positive influence on performance.

Nevertheless, the results exhibit the significant effect of proactiveness on the export performance in Halal Food firms, which therefore approves H3a. Also, considering the significant impact of proactiveness on financial performance, H3b is also supported in the context of Halal Food Industry.

The results confirm H4, indicating a positive relationship between ICE and the performance of in Halal Food firms in Iran. The findings regarding the positive relationship of ICE with the profits and growth of a firm are consistent with the literature on domestic entrepreneurial activities (e.g., Covin and Slevin, 1991; Zahra, 1991; 1993). The results also broaden the scope of literature, demonstrating that ICE is positively correlated with the growth and profits of foreign operations, which is in line with the previous studies (Dean et al., 1993). Iran as an Islamic country can be more successful in halal food industry’s area, and for entering international market victoriously, ICE practices is needed. Therefore, entrepreneur organizations of halal food in Iran perform better than others. The study suggested that IEH plays a moderating role in the relationship between ICE and firms performance (H5a). The findings also revealed that ICE link with performance was a function of the hostility of a firm’s international markets, which was consistent with the literature on domestic operations (Covin and Slevin, 1989; 1991; Zahra and Covin, 1995). The results show that this moderating effect is also at work for a firm’s ICE activities, which can also affect a firms’ overall and foreign performance in terms of profits and growth. Thus, greater hostility triggers ICE to improve a company performance. Managers may respond to significant international hostility by adopting more conservative alternatives, while the results of study suggest the favorability of a proactive yet calculated risk-taking. Consequences obviously revealed that Halal Food firms in Iran that follow ICE are financially valuable. Specially that hostility in the international environment considered as a significant factor and continued to intensify.

The results also indicate that, with the effect of moderating factor (IEH), some dimensions linked to ICE and performance were supported. This means that IEH do moderate the relationship between risk-taking and financial performance, proactiveness, and export performance, innovation, and export/financial performance in Halal Food
firms in Iran. Thus H5d₂, H5c₁, H5c₂, and H5e₁ were supported. However, the results show that risk-taking has no significant effect on export performance; and proactiveness has no effect on financial performance with moderating IEH and, therefore, H5d₁ and H5e₂ was not supported in Halal Food Industry in Iran.

CONCLUSIONS

The study suggested that the IEH has great impact on ICE and overall performance of Iranian Halal Foods’ firms. Based on the evidences, it is safe to contend that those Halal Food firms in Iran that pursue ICE aggressively might have superior financial performance than firms that adopt limited ICE programs, even when IEH is at the peak. One rationale is that ICE activities may be per se a key source of hostility in the foreign markets of a firm. Some innovative or pioneering activities pursued by firms to grasp market shares and profits, may elevate competitive advantage in markets that used to be benign. Iranian Halal Food firms might be better positioned to handle or even gain profits under intense IEH, if they engage in higher levels of ICE. These firms can empower to exploit shifting environmental conditions with respect to the resources and competencies required for successful innovation and investment. Even in extremely challenging environments, entrepreneurial food companies are more malleable and prompt than their rivals in their interaction with the environments to achieve strategic initiatives. This flexibility allows these companies to accomplish distinction in their global functions, which can improve a company’s performance. Thus, the results of the exhaustive field studies provide guidelines to help managers and entrepreneurs as well as researchers to gain deeper insight about the significance of ICE within Halal Foods’ firms in Iran and its influence on their financial and export performance (Aktan and Bulut, 2008). This study had a number of limitations that need to be emphasized in future studies. First, our study only focused on the impact of ICE without investigating the influence of other variables on performance. The second limitation of the research was that it was limited to only Halal Foods’ firms, which were inquired based on a cross-sectional survey. To increase the generalizability of the results, further researches with different samples are required via longitudinal study to examine the effect of these relations. Moreover, the small sample size may limit the generalizability of the results to the other industries. Future researches are recommended to work on examples that are more significant and to examine this framework in other contexts and industries. Furthermore, a complementary qualitative study is required to deepen our understanding about some contradictory results. Finally, because of inadequate researches in different countries, we had to make more observations and studies in different areas.

REFERENCES


مقدمه
هدف از این مقاله ارزیابی تأثیر کارآفرینی سازمانی بین‌المللی روی عملکرد کلی شرکتهای فعال در صنایع غذاهای حلال جمع‌آوری شده است و با استفاده از مدل‌سازی مسأله ساختارلی مورد تحلیل قرار گرفت. طبق نتایج بدست‌آمده شرکت‌هایی که فعالیت‌های کارآفرینی سازمانی بین‌المللی انجام می‌دهند می‌بایست عملکرد مالی و عملکرد صادراتی بهتری داشته باشند. همچنین نتایج، تأثیر چشمگیر کارآفرینی سازمانی بین‌المللی را روی موفقیت شرکت‌ها در بازار داخلی و خارجی نشان داد. از طرفی

ماهیت ادراک شده محیط به‌خصوص محیط خصمانه روی رابطه کارآفرینی سازمانی بین‌المللی و عملکرد تأثیرگذار بود. نتایج این مقاله با تبیین رابطه کارآفرینی سازمانی بین‌المللی و عملکرد کلی شرکت با در نظر گرفتن نقش تعیین‌گذار محیط خصمانه بین‌المللی به شکاف موجود در ادبیات مربوطه کمک کرده است. در نهایت مقاله حاصل از ارتباط بین‌المللی و همکاری بین‌المللی، عملکرد شرکت و محیط خصمانه بین‌المللی مشارکت گسترده‌ای به پژوهش‌های جاری داشته است.