

Organizational Preparedness for Corporate Entrepreneurship and Performance in Iranian Food Industry

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ABSTRACT

While scholars have recently started to connect organizational factors in preparing a firm for corporate entrepreneurship to organizational outputs such as financial and innovative performance, there is less understanding of the mechanisms explaining these connections and their boundary conditions. In this vein, this study theorizes how and when Organizational Preparedness for Corporate Entrepreneurship (OPCE) enhances corporate financial and innovative performance. Our observation of 256 firms in the food industry of Iran indicates that OPCE promotes financial and innovative performance through the mediating role of entrepreneurial orientation. Moreover, the relationship between OPCE and organizational outputs is stronger when firms perceive their business environment more dynamic. This provides a better understanding of the way firms can enhance their performance, in particular in the novel context of Iran as a developing country.

Keywords: Entrepreneurial orientation, Environmental dynamism, Financial performance, Innovative performance.

INTRODUCTION

In developing countries like Iran, organizations encounter with increasing competition from international businesses. In such situations, firms are endeavoring to survive and grow through Corporate Entrepreneurial (CE) activities (Shinkle and McCann, 2014, Sakhdari *et al.*, 2017). CE simply means entrepreneurial behaviors by established firms (Simsek, 2007). In a more technical and process-oriented definition, corporate entrepreneurship is defined as ‘a vision-directed, organization-vast dependence on entrepreneurial behavior that deliberately and persistently re-energizes the organization and forms the domain of its activities via the identification and utilization of entrepreneurial chance’ (Ireland *et al.*, 2009). In this vein, corporate

entrepreneurship is considered as a strategy through which firms attempt to develop new products and services and enter new businesses and markets (Shankar and Shepherd, 2018). CE also represents itself as transforming the business scope or main competitive strategies for providing new positions in the market to penetrate the organization’s different performance results (Simsek *et al.*, 2009; Sharma and Chrisman, 2007). Studies indicate that CE can be a valid path to enhancing firms’ performance and profitability (Phan *et al.*, 2009; Zahra, 1996). As such, scholars are seeking to explain the way firms can promote their corporate entrepreneurial activities. This is in particular important for companies operating in the context of developing countries accompanied by institutional voids reducing firms’ incentives to enhance their

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CE activities (Sakhdari *et al.*, 2017). For example, the Global Entrepreneurship Monitor (GEM) report of Iran in 2018 indicates that the innovation rate of this country is much less than the global average (GEM, 2018).

Prior studies on CE have mainly confirmed that top management team characteristics and actions (Heavey and Simsek, 2013; Ling *et al.*, 2008; Simsek, 2007), structural factors (Burgers *et al.*, 2009; Burgers and Covin, 2014), and business environment (Simsek *et al.*, 2007; Zahra, 1993) affect a firm's intensity of engagement in corporate entrepreneurship (for a complete review, see Sakhdari, 2016). Attempting to theorize key organizational factors stimulating CE activities, Kuratko *et al.* (2014) have lately introduced an instrument measuring a firm's preparedness for corporate entrepreneurship. The so-called 'Organizational Preparedness for Corporate Entrepreneurship' (OPCE) comprises five dimensions of top management support, work discretion/autonomy, rewards/reinforcement, time availability, and organizational boundaries. These dimensions are supposed to be essential for an internal environment desirable for the emergence of CE behavior (Hughes and Mustafa, 2017).

While OPCE is conceptualized as a framework for enhancing organizational outputs such as innovative and financial performance, there is less empirical evidence confirming this connection, in particular in the context of developing countries. More importantly, less is known about how and when OPCE can influence organizational performance. This negligence is unfortunate as more recent studies on corporate entrepreneurship call for contextualizing models and theories conceptualized in more developed countries (Zahra and Wright, 2011; Zahra, 2007). Moreover, the literature of entrepreneurship has given less attention to the mechanisms explaining the connection between antecedents and organizational outputs (Sakhdari, 2016).

Building on the knowledge-based view and the exploratory-based view of entrepreneurship (Grant, 1996; Zahra, 2015), suggesting innovative activities are essentially a function of developing new knowledge in firms, we argue that OPCE can promote innovative and financial performance though promoting exploration and knowledge-creation behaviors in the firm (Gibson and Birkinshaw, 2004; Sakhdari *et al.*, 2017). Furthermore, providing the time and resource along with supportive environment, altogether introduced as the OPCE, can assist the firm develop a strategic posture orienting the entire firm towards innovativeness, risk-taking, and proactiveness, or the so-called entrepreneurial orientation (Rauch *et al.*, 2009, Gupta and Wales, 2017), as the entrepreneurial orientation is mainly a resource-consuming strategy (Wiklund and Shepherd, 2005). As such, we posit that OPCE can influence organizational performance through developing the firm's entrepreneurial orientation. Indeed, entrepreneurial orientation mediates the connection between OPCE and financial and innovation performance. Finally, we argue that the more managers and employees in the firm perceive their business environment as a dynamic environment, the more their efforts to utilize the privileges provided by their supportive environment for organizational outputs, which means that perceived environmental dynamism positively moderates the link between OPCE and innovation and financial performance. The hypothesized connections are tested by conducting a survey of firms in the food industry of Iran, which is one of the most competitive and dynamic sections in the country and the Middle East.

Our findings would contribute to the entrepreneurship literature by demonstrating the importance of OPCE for enhancing innovation and financial performance. Moreover, revealing the mediating role of entrepreneurial orientation in the OPCE-performance, we provide a better explanation on how and why OPCE can

stimulate organizational outputs. Testing the moderating impact of perceived environmental dynamism on the link between OPCE and performance, we also provide the boundary conditions of this connection and explain how OPCE can lead to more organizational outputs. Finally, testing the model in the novel context of Iran, heeds attention to recent calls for contextualizing theories and models in the entrepreneurship literature (Zahra and Wright, 2011).

Theoretical Background and Hypothesis Development

One of the most important questions raised in the literature of business management and entrepreneurship is how companies can accomplish and maintain superior financial and innovation performance. Until the 1990s, the dominant paradigm in this field was the competitive forces approach, proposed by Porter (1980), providing an external delineation for a company's competitive advantage and performance (Teece *et al.*, 1997). According to this perspective (Porter, 1980 and 2008), the structure of an industry includes five forces of entry barriers, threat of substitution, bargaining power of buyers, bargaining power of supplier, and rivalry among firms. This structure determines a firm's behavior and, accordingly, performance. A paradigm shift, however, has been formed since then, and the literature focuses more on firm-specific capabilities and assets as the determining factors of a firm's performance. This perspective completes the traditional view and adopts more an internal-external view (Henderson and Cockburn, 1994).

Knowledge-Based View (Grant, 1996), considered as an extension of the Resource-Based View (Barney, 1991), considers knowledge as the most significant resource of a firm, resulting in competitive advantage and superior performance. According to this approach, those companies can survive and grow that are able to create, integrate, and

apply their unique knowledge base (Kogut and Zander, 1992). Indeed, this theory places priority on knowledge as the most valuable and strategic resource of a firm and argues that innovative activities and hence superior performance in firms are mainly a function of the firm's capability to acquire and combine knowledge resources (Zhou and Li, 2012). The literature of corporate entrepreneurship similarly argues that an entrepreneurial activity mainly relies on new knowledge for doing things differently, or doing different things (Zahra, 2015). This new knowledge essentially results from exploratory learning while doing exploitative and core business activities (Sakhdari and Burgers, 2018).

Drawing on this literature, Hornsby *et al.* (2013) have recently conceptualized OPCE, as a framework comprising five dimensions that are assumed to facilitate exploratory and, hence, innovative activities in firms.

The first dimension is support of the top management referring to the extent to which top managers support innovative and entrepreneurial activities. The second dimension is work autonomy dealing with the extent to which employees have discretion in behaviors and decisions. It also captures rewards pointing to whether employees are compensated for exploratory and innovative activities, and time availability referring to whether employees are provided with enough time for exploratory learning. The final dimension is organizational boundaries highlighting the importance of developing flexible organizational boundaries for coordinating resources throughout the firm (Kuratko *et al.*, 2014).

Building on the knowledge-based view and the exploratory-based view of entrepreneurship (Grant, 1996; Zahra, 2015), we argue that OPCE can promote innovative and financial performance though promoting exploration and knowledge-creation behaviors in the firm (Gibson and Birkinshaw, 2004; Sakhdari *et al.*, 2017). Furthermore, we posit that OPCE promotes financial and innovative performance

through the mediating role of entrepreneurial orientation. Moreover, the relationship between OPCE and organizational outputs is stronger when firms perceive more environmental dynamism. Our Conceptual Research Model is depicted in Figure 1. The mechanisms explaining these connections will be discussed in more details in the hypothesis development section.

OPCE and Performance

We argue that OPCE positively affects a firm's financial and innovation performance. As innovative activities within firms are essentially based on developing new knowledge (Grant, 1996), OPCE can provide a supportive environment for exploratory learning and hence developing new knowledge (Zahra, 2015). Such a supportive context enables employees to devote their attention, time, and efforts to exploratory actions leading to corporate entrepreneurial outputs (Behrens and Patzelt, 2015) and hence better financial performance (Yiu and Lau, 2008). The literature of resource slack also confirms the greater availability of resources as an antecedent to growth and corporate entrepreneurial outputs (Bradley *et al.*, 2011). A context filled with required resources and information, autonomy and

risk taking encourage and enable employees to develop new knowledge and capabilities underlying corporate entrepreneurship (Zahra *et al.*, 2009). In his seminal study, Burgelman (1983) indicates that venturing activities mainly result from autonomous bottom-up activities (versus induced up-down planned strategy) undertaken by employees at the operational level. This highlights the importance of the organizational context in which such autonomous actions happen (Sakhdari and Bidakhavidi, 2016). The lack of a supportive environment for bottom-up activities may attend employees' attention to other alternative behaviours or doing nothing (Kuratko *et al.*, 2005). As such, the following hypotheses can be developed:

H1a: OPCE positively affects innovation performance.

H1b: OPCE positively affects financial performance.

The Mediation Role of Entrepreneurial Orientation

We also posit that OPCE aid firms develop a strategic posture orienting the whole firm towards innovativeness, risk-taking, and proactiveness, or the so-called entrepreneurial orientation (Rauch *et al.*, 2009, Gupta and Wales, 2017) and entrepreneurial

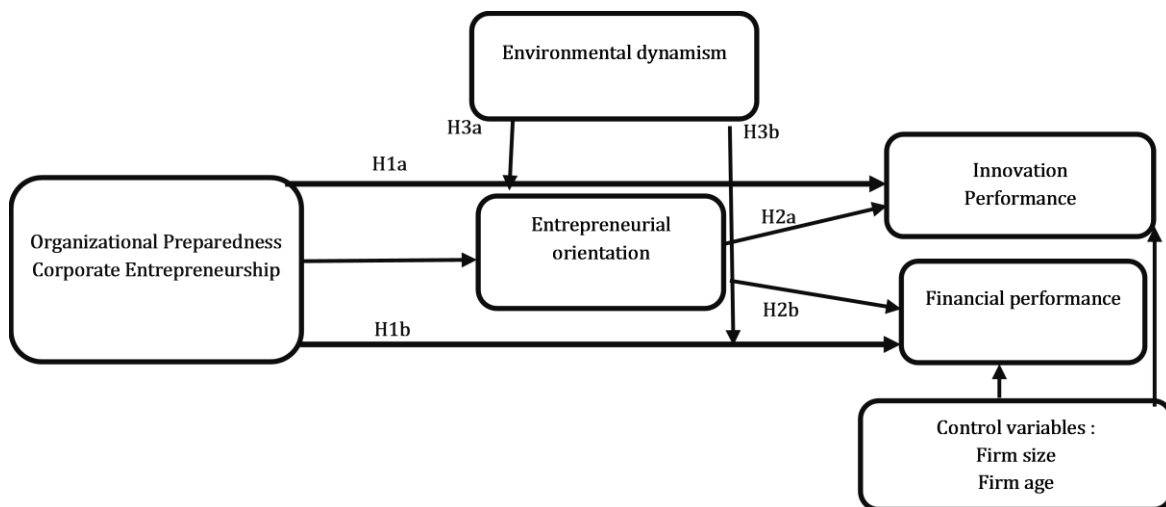


Figure 1. The conceptual model

orientation through increasing a firm's adaptability to the changing environment can increase the firm's performance (Wales, 2016). In this vein, Wiklund and Sheperd (2005) argue that entrepreneurial orientation is a resource-consuming strategy and firms need to devote lots of resources and expenses for the firm as a whole to orient towards entrepreneurial activities. This is in line with the attention-based view (Ocasio, 1997 and 2011) considering organisational attention as the main reason behind a firm's performance. This theory suggests a firm's context channel organisational attention towards desired outcomes, which is influenced by the availability, salience, legitimacy, value and relevance of issues and answers for employees and decision makers in the firms (Barnett, 2008; Barreto and Patient, 2013). We posit that OPCE is similarly conceptualized as an organizational context aiming to channel employees' attention to innovative, risk-taking and proactive activities, and through these behaviours, firms enhance their innovative and financial performances (Wiklund and Shepherd, 2005). Indeed, entrepreneurial and innovative outputs stimulated by a higher level of entrepreneurial orientation can increase the firm's performance through generating products and services more adapted to the changing entrepreneurial opportunities (Bierwerth *et al.*, 2015). This is supported by the portfolio theory (Markowitz, 1991) suggesting that the above-normal investment returns mainly result from differences in a firm's markets outputs such as innovation in products and services and entering new businesses. Similarly, Wales *et al.* (2015) indicate that a firm's entrepreneurial orientation through launching new market entries enhance the firm's performance. Thus, the following hypotheses are proposed:

H2a: Entrepreneurial orientation mediates the link between OPCE and innovation performance.

H2b: Entrepreneurial orientation mediates the link between OPCE and financial performance.

The Moderating Role of Perceived Environmental Dynamism

We finally argue that firms perceiving their business environment more dynamic can more effectively utilize the privileges provided by their supportive environment for organizational outputs, which means that perceived environmental dynamism positively moderates the link between OPCE and innovation and financial performance. Indeed, the presence of the supportive context for exploratory activities does not suffice for innovative activities to realize. Jansen *et al.* (2005) argue that exploratory learning without exploitative activities leads firms to investing too much on exploratory activities without achieving decent market results from the investments. As such, supportive social context should be complemented with exploitative activities to promote innovative and financial performance (Sakhdari *et al.*, 2017). As the business environment dynamisms increases, firms are more encouraged and forced to invest in their exploratory outcomes for more tangible market results such as innovation in products and services, enhancing the firm's performance (Bierwerth *et al.*, 2015). Accordingly, we expect that the impact of OPCE on both innovation and financial performance to be stronger in more dynamic environments. As such, the following hypotheses can be proposed:

H3a: Environmental dynamism moderates the link between OPCE and innovation performance.

H3b: Environmental dynamism moderates the link between OPCE and financial performance.

MATERIALS AND METHODS

Sample and Data Collection

The research sample was small and medium enterprises operating in the food



industry of Iran. The reason why this sector was selected is that the food industry is one of the most dynamic industries in Iran and innovative activities more happen in such contexts (Zahra, 1991). Table 1 demonstrates the descriptive statistics of the sample. In this research, senior managers were chosen for filling out the questionnaires. The questionnaires were sent by e-mail along with a cover letter describing the aim of the research, emphasizing confidentiality of respondents' identity and their responses. As it is common in countries like Iran, to enhance the response rate, we also personally delivered the questionnaires to some firms in industrial zones. Our focus was the province of Tehran where most of SMEs are operating or have headquarters. Finally, we received 256 useable responses.

The age of respondents ranged from 20 to 59 years. The majority of them (85%) were men. 32.5% had obtained a Master's degree, followed by 30.8, Bachelor's degree, 18.9% Associate degree; 10.1% Doctoral degree, and 7.7% had High school diploma. The mean age and size of their organization were 30 and 50, respectively (Table 1).

Measures

OPCE was measured using 48 items according to Hornsby *et al.* (2002; 2013).

This scale measures five specific dimensions of a firm's preparedness for corporate entrepreneurship entailing management support, organizational structure, taking risks and available time, reward, and the availability of resources. The dimensions were measured using Likert-type scales with 1 demonstrating strongly disagree to 5 demonstrating strongly agree.

Innovation performance contains two aspects of administrative and product-related innovativeness.

Administrative innovativeness was assessed using 4-items adopted from West and Anderson (1996). Answers to these items were made on a five-point Likert scale, where point 1 means 'strongly disagree' and point 5 means 'strongly agree'. Product-related innovation was also measured with 3-items adopted from Hooley *et al.* (1998) using a five-point Likert scale. These scales are widely used in organizational studies (Luk *et al.*, 2008).

Financial performance was measured using 4-items adopted from Burgers *et al.* (2009) Rezaei *et al.* (2017), and Akbari *et al.* (2019). The respondents were asked to compare their relative performance with competitors in the industry. Answers to these items were made on a five-point Likert scale, where point 1 represented 'much worse' and point 5 represented 'much better'.

Entrepreneurial Orientation (EO) captures the three dimensions of innovativeness,

Table 1. Respondents and firms' demographics.

Gender	Percentage (%)	Age	Percentage (%)	Education level	Percentage (%)
Female	15.6	20-30	11	High school diploma	7.7
		30-40	34	Associate degree	18.9
Male	84.4	40-50	32.4	Bachelor's degree	30.8
		Above 50	22.6	Master's degree	32.5
				Doctoral degree	10.1
Organization's age	Percentage (%)	Organization's size	Percentage (%)		
0-10	18	1-4	28.9		
11-20	34	5-19	32.4		
21-50	32.4	20-199	24.6		
> 51	15.6	> 200	14.1		

risks-taking, pro-activeness. It was measured as a meta-construct adopting the scale developed by Covin and Slevin (1989). This scale has been widely utilized in previous EO studies (Lumpkin *et al.*, 2009). Answers to these items were made on a five-point Likert scale, where point 1 meant 'strongly disagree' and the point 5 meant 'strongly agree'.

Environmental dynamism measures the extent to which respondents perceive their business environments a dynamic setting. It was measured using 4 items based on Jansen *et al.*, (2005) scale. Answers to these items were made on a five-point Likert scale, with point 1 representing 'strongly disagree' and point 5 representing 'strongly agree'.

A number of variables were contained in this research as the control variables to control extraneous variation. We first controlled for the firm's size, as larger organizations are believed to have more resources for corporate entrepreneurship (Burgers and Covin, 2016). The size of the organization was measured using a categorical scale (Sakhdari and Burgers, 2018). The age of a firm was also controlled as it could influence innovative activities in firms (Pinchot, 1985; Zahra, 1991). The number of years a firm was in operation was applied for measuring its age.

RESULTS

Structural Equation Modeling (SEM) was used to analyze the data utilizing Smart PLS 2.0 software. Partial Least Square (PLS) is the most established variance-based SEM

approach and was used in this study (Hair *et al.*, 2011). A structural equation model contains two parts: measurement and structural models. The bootstrapping technique was used to test the mediating effects (Preacher and Hayes, 2008). In this technique, the current sample is treated as a pseudo-population, and test statistics such as standard errors for indirect effects are calculated based on random sampling from the existing data set (Hayes, 2013). Table 2 provides descriptive statistics and the correlations between the main constructs. As it can be seen, all the main constructs are significantly correlated.

Measurement Validation

Content validity of the questionnaire was confirmed by six managers who had five years of work experience and eight university professors in entrepreneurship context. The questionnaire was slightly revised according to their comments.

Convergent validity means "the consistency that multiple factors exhibit in calculating the same construct." The factor loadings of the confirmatory factor analysis (CFA) confirm convergent validity as all factors load sufficiently high on the corresponding structures. We also assessed convergent validity by utilizing "Average Variance Extracted" (AVE), which should exceed 0.50 (Fornel and Larcker, 1981). As shown in Table 3, all

Table 2. Descriptive statistics and Correlation matrix of main constructs.

	Constructs	M	SD	Ca	1	2	3	4	5
1	OPCE	3.648	1.52	0.86	1				
2	Entrepreneurial orientation	2.098	1.90	0.75	0.29**	1			
3	Environmental dynamism	3.553	1.46	0.79	0.34**	0.16**	1		
4	Financial performance	3.915	1.22	0.81	0.12*	0.22**	0.19**	1	
5	Innovation performance	2.649	1.8	0.73	0.10**	0.31**	0.24**	0.21**	1

N= 256. ** Correlation is significant at the 0.01 level (2-tailed), * Correlation is significant at the 0.05 level (2-tailed).

Table 3. Average Variance Extracted (AVE), Composite Reliability (CR) and square root of AVE and correlations of all constructs.

Construct	CR	AVE	OPCE	Entrepreneurial orientation	Environmental dynamism	Financial performance	Innovation performance
OPCE	0.826	0.574	0.772 ^a				
Entrepreneurial orientation	0.853	0.526	0.533	0.745 ^a			
Environmental dynamism	0.796	0.550	0.764	0.604	0.754 ^a		
Financial performance	0.847	0.571	0.622	0.615	0.626	0.767 ^a	
Innovation performance	0.722	0.586	0.560	0.558	0.508	0.678	0.729 ^a

^a The grey area indicates the square root of average variance extracted of the construct.

indicator factor loadings exceed the threshold value of 0.50 proposed by Peterson (2000). AVE ranged from 0.71 to 0.76.

For discriminant validity, the square root of the AVE of each construct should be more than its connections with other constructs and should be at least 0.50 (Fornel and Larcker, 1981). Table 3 shows the relation between constructs, with the square root of the AVE on the diagonal. All constructs adequately pass the test, as the square root of the AVE (on the diagonal) is more than the cross correlations with other constructs. Therefore, the convergent and discriminant validities of the constructs of the study are acceptable (Table 3).

Measurement Reliability

Cronbach’s Alpha coefficient was utilized to test the reliability of the variables. Cronbach’s alpha values for the individual constructs were more than 0.7 (Table 2).

The measurement model was also assessed based on the Composite Reliability (CR). Fornell and Larcker (1981) propose that the CR values should be more than 0.6. The values of composite reliability are presented in Table 3, all of which are acceptable.

Structural Equation Modeling

Structural models were used to test the correlation between constructs and the overall theoretical models (Hair *et al.*, 2013). As presented in Table 4, OPCE was significantly correlated with both IP ($\beta= 0.490, P< 0.001$), and FP ($\beta= 0.510, P< 0.001$), supporting H1a, H1b. This research aims at examining whether EO plays a mediating role in the relationship between OPCE and performance. The obtained results from the implementation of the Bootstrapping method indicates that the sum of indirect effect of OPCE on IP and FP through the variable of EO is significant ($\beta= 0.327, P\text{-value}= 0.000$ for IP) and ($\beta= 0.378,$

Table 4. Summary of hypotheses testing.

Hypothesis	Content	B Values	T Values	Support
The direct hypothesis tests summary				
H1a	OPCE → IP	0.490	5.982**	Yes
H1b	OPCE → FP	0.510	7.056**	Yes
The indirect (mediation) hypothesis tests summary				
H2a	OPCE → EO → IP	0.327	3.949**	Yes
H2b	OPCE → EO → FP	0.378	4.238**	Yes
The indirect (moderation) hypothesis tests summary				
	Path coefficients	Path _(High ED) –Path _(low ED)	t value	Supported
	(High ED) (low ED)			
H3a: OPCE → IP	0.48 0.27	0.29*	2.04**	Yes
H3b: OPCE → FP	0.73 0.36	0.38*	2.53**	Yes
Controls				
Firm size → IP		0.06	0.65	
Firm size → FP		0.08	0.48	
Firm age → IP		0.2	0.39	
Firm age → FP		0.4	0.84	
		(R ²)	(f ²)	(Q ²)
EO		0.376	-	0.321
OPCE → EO		-	0.415	-
IP		0.762		0.284
OPCE → IP		-	0.231	-
EO → IP			0.502	-
FP		0.501		0.231
OPCE → FP		-	0.226	-
EO → FP		-	0.208	-

* P= 0.05, $t(0.05, 132) = 1.98$, ** P= 0.01, $t(0.01, 132) = 2.61$.

P-value= 0.000 for FP). Thus, the H2a, H2b is confirmed (see Table 4).

According to findings, the significance coefficients associated with the path of research variables were all above 1.96 (standard limit), therefore, the research model had a desirable level of significance and the fitting of the auxiliary structural was ratified. As indicated by Thompson *et al.* (1995), R² was computed for measuring the predictive power of model. R² shows the degree of variance that is accounted for by exogenous variables.

The moderating effect is examined using a t-test with pooled standard errors (Table 4). This method is described as the parametric approach (Henseler, 2007). This is a one-tailed t-Student distribution with (m+n –2) degrees of freedom, where sp is the pooled estimator for the variance, m is the number of cases in the sample of firms with high environmental dynamics, n is the number of

cases in the sample of organizations with low environmental dynamics, and SE is the standard error for the path provided by the PLS Graph in the bootstrap technique.

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

The findings support H3a. The proposed connection between OPCE and IP is significantly more intense for the firms with higher perceived environmental dynamism (Path_{high ED} > Path_{low ED}, P < 0.05) and, therefore, an increase in environmental dynamism appears to increase the positive influence of OPCE on IP. The results also support that the influence of OPCE on FP is greater in firms with higher perceived environmental dynamism (Path_{high ED} > Path_{low ED}, P < 0.01). This supports H3b.



Test

The Sobel test was used to test whether the mediating effect is statistically significant or not. As the Z-values obtained from the Sobel test were 7.05 and 8.6 for the mediation impact of EO on the OPCE-FP and OPCE-IP, respectively, the mediating impact of EO is confirmed.

GOF Criterion

The Goodness Of Fit (GOF) criterion was used to examine the general fit of the structural model and derives from the following formula:

$$GOF = \sqrt{Com} \times \sqrt{R^2} = \sqrt{0.587 \times 0.546} = 0.566$$

Given that the three values of 0.01, 0.25, and 0.36 are considered as, respectively, weak, moderate, and strong values for GOF, the GOF value of 0.566 in this research confirms a strong overall model fit.

DISCUSSION

As the relationship between OPCE and organizational outputs, such as financial and innovative performance, and the mechanisms explaining and moderating this connection are less argued in the literature, this research was designed to address these missing links in prior studies. We hypothesized that OPCE is positively associated with both financial and innovative performance, mediated by EO and moderated by the perceived environmental dynamism.

Our findings indicate that OPCE positively affects both financial and innovative performance. This means that the presence of supportive top management, work autonomy, rewards, time availability and finally flexible organizational boundaries (Kuratko *et al.*, 2014) can increase firms' innovative and financial performance. This supports prior argumentation in the literature

that internal contexts for exploratory activities can promote innovative activities in firms (Burgers and Covin, 2016; Sakhdari *et al.*, 2017). These results extend the literatures of corporate entrepreneurship and business management by theorizing the way OPCE can lead to better firm innovative and financial performance.

The findings also support that EO can be considered as the intermediary mechanism between OPCE and performance. This implies that OPCE can generate a strategic posture orienting the whole firm towards innovativeness, risk-taking and proactiveness (Gupta and Wales, 2017) and through this mechanism OPCE influences organizational performance. This amplifies the attention-based view's proposition that a firm's context can orient employees' attention towards desired strategic orientations (Ocasio, 2011). These results can add to the literature by shedding light on the mechanism explaining connection between the internal context- entrepreneurial performance link (Burgers *et al.*, 2009; Cucculelli and Bettinelli, 2015; Kotabe, Jiang, and Murray, 2017). It also extends the EO literature by showing the way firms can promote EO, less argued in the literature (Rauch *et al.*, 2009).

The results finally confirm that the link between OPCE and performance is stronger for firms with more perceived environmental dynamism. This supports the argumentation that environmental dynamism encourages firm to get more involved with exploitative activities, complementary to exploratory for enhancing entrepreneurial activities (An *et al.*, 2018). The results extend the literature by showing that the impact of a supportive environment for innovative behaviors and organizational performance is subject to the firm's perceived environmental dynamism. This echoes the notification of contingency models in the literature emphasizing the non-universality of entrepreneurship theoretical suggestions (Burgers and Covin, 2016; Wiklund and Shepherd, 2005; Zahra, Wright and Abdelgawad, 2014).

Our findings also provide practical insights for managers and practitioners. Firms aiming to enhance their innovative and financial performance need to develop a supportive environment where employees have access to resources and time and flexible structures for exploratory activities, and also receive sufficient rewards for such behaviors. The supportive context is in particular important for firms in more dynamic sectors. The supportive context can orient the firm towards innovative, risk-taking and proactive behaviors, necessary for realizing organizational outputs.

Overall, this research as one of the very first research theorizing the OPCE-performance connection in the novel context of Iran opens new avenues for more context-oriented studies in the corporate entrepreneurship and business management literatures.

REFERENCES

1. Akbari, M., Danesh, M. Dolatshah, P. and Khosravani, A. 2019. Moderating Role of International Environmental Hostility between International Corporate Entrepreneurship and Performance in Halal Food Industry. *J. Agr. Sci. Tech.* **21(3)**: 545-560.
2. An, W., Zhao, X., Cao, Z., Zhang, J. and Liu, H. 2018. How Bricolage Drives Corporate Entrepreneurship: The Roles of Opportunity Identification and Learning Orientation. *J. Prod. Innov. Manag.*, **35(1)**: 49-65.
3. Bagozzi, R. P. and Yi, Y. 1988. On the Evaluation of Structural Equation Models. *J. Acad. Market. Sci.*, **16(1)**: 74-94.
4. Bagozzi, R. P., Yi, Y. and Phillips. L. W. 1991. Assessing Construct Validity in Organizational Research. *Adm. Sci. Q.*, **36(3)**: 421-58.
5. Barnett, M. L. 2008. An Attention-Based View of Real Options Reasoning. *Acad. Manag. Rev.*, **33(3)**: 606-628.
6. Barney, J. 1991. Firm Resources and Sustained Competitive Advantage. *J. Manag.*, **17(1)**: 99-120.
7. Barreto, I. and Patient, D. L. 2013. Toward a Theory of Intraorganizational Attention Based on Desirability and Feasibility Factors. *Strateg. Manag. J.*, **34(6)**: 687-703.
8. Behrens, J. and Patzelt, H. 2015. Corporate Entrepreneurship Managers' Project Terminations: Integrating Portfolio-Level, Individual-Level, and Firm-Level Effects. *Entrepreneursh. Theory Pract.*, **40(4)**: 815-842.
9. Bierwerth, M., Schwens, C., Isidor, R. and Kabst, R. 2015. Corporate Entrepreneurship and Performance: A Meta-Analysis. *Small Bus. Econ.*, **45(2)**: 255-278.
10. Bradley, S. W., Wiklund, J. and Shepherd, D. A. 2011. Swinging a Double-Edged Sword: The Effect of Slack on Entrepreneurial Management and Growth. *J. Bus. Ventur.*, **26(5)**: 537-554.
11. Burgelman, R. A. 1983. A Process Model of Internal Corporate Venturing in the Diversified Major Firm. *Adm. Sci. Q.*, **28(2)**: 223-244.
12. Burgers, H. and Covin, J. G. 2014. Organizing for Corporate Entrepreneurship: A Contingency View. *Acad. Manag. Proc.*, **1**: 11940.
13. Burgers, J. H. and Covin, J. G. 2016. The Contingent Effects of Differentiation and Integration on Corporate Entrepreneurship. *Strateg. Manag. J.*, **37(3)**: 521-540.
14. Burgers, J. H., Jansen, J. J., Van den Bosch, F. A. and Volberda, H. W. 2009. Structural Differentiation and Corporate Venturing: The Moderating Role of Formal and Informal Integration Mechanisms. *J. Bus. Ventur.*, **24(3)**: 206-220.
15. Chin, W. W. 1998. The Partial Least Squares Approach to Structural Equation Modeling. In: "Modern Methods for Business Research", (Ed.): Marcoulides, G. A., Mahwah, NJ: Lawrence Erlbaum Associates, pp. 295-358.
16. Covin, J. G. and Slevin, D. P. 1989. Strategic Management of Small Firms in Hostile and Benign Environments. *Strateg. Manag. J.*, **10(1)**: 75-87.
17. Cucculelli, M. and Bettinelli, C. 2015. Business Models, Intangibles and Firm Performance: Evidence on Corporate Entrepreneurship from Italian Manufacturing SMEs. *Small Bus. Econ.*, **45(2)**: 329-350.
18. Fornell, C. and Larcker. D. F. 1981. Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *J. Mark. Res.*, **18(1)**: 39-50.



19. Geisser, S. 1975. The Predictive Sample Reuses Method with Applications. *J. Am. Stat. Assoc.*, **70(350)**: 320–28.
20. Gibson, C. B. and Birkinshaw, J. 2004. The Antecedents, Consequences, and Mediating Role of Organizational Ambidexterity. *Acad. Manag. J.*, **47(2)**: 209–226.
21. Global Entrepreneurship Monitor (GEM). 2018. Entrepreneurship in Iran.
22. Grant, R. M. 1996. Toward a Knowledge-Based Theory of the Firm. *Strateg. Manag. J.*, **17(2)**: 109–122.
23. Gupta, V. K. and Wales, W. J. 2017. Assessing Organizational Performance within Entrepreneurial Orientation Research: Where Have We Been and Where Can We Go from Here? *J. Entrepreneursh.*, **26(1)**: 51-76.
24. Hair, J. F., Anderson, R. E., Babin, B. J., and Black, W. C. (2010). *Multivariate Data Analysis: A Global Perspective* (Vol. 7).
25. Hair, J. F., Ringle, C. M. and Sarstedt, M. 2011. PLS-SEM: Indeed, a Silver Bullet. *J. Mark. Theory Pract.*, **19(2)**: 139–52.
26. Hair, J. F., Ringle, C. M. and Sarstedt, M. 2013. Partial Least Squares Structural Equation Modeling: Rigorous Applications, Better Results and Higher Acceptance. *Long Range Plan.*, **46(1–2)**: 1–12.
27. Hayes, A. 2013. *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*. Guilford Press, New York.
28. Heavey, C. and Simsek, Z. 2013. Top Management Compositional Effects on Corporate Entrepreneurship: The Moderating Role of Perceived Technological Uncertainty. *J. Prod. Innov. Manag.*, **46(8)**: 1289–1314.
29. Henderson, R. and Cockburn, I. 1994. Measuring Competence? Exploring Firm Effects in Pharmaceutical Research. *Strateg. Manag. J.*, **15(S1)**: 63-84.
30. Henseler, J. 2007. A New and Simple Approach to Multi-Group Analysis in Partial Least Squares Path Modeling. In: “*PLS’07: The 5th International Symposium on PLS and Related Methods*”, (Eds.): Martens, H., Næs, T. and Martens, M. 5–7 September, Ås, Norway, PP. 104–107.
31. Hong, T. S. and Ghobakhloo, M. 2013. IT Investments and Product Development Effectiveness: Iranian SBs. *Ind. Manag. Data Syst.*, **113(2)**: 265–93.
32. Hooley, G., Broderick, A. and Möller, K. 1998. Competitive Positioning and the Resource-Based View of the Firm. *J. Strateg. Mark.*, **6(2)**: 97-116.
33. Hornsby, J. S., Kuratko, D. F. and Zahra, S. 2002. “Middle Managers’ Perception of the Internal Environment for Corporate Entrepreneurship: Assessing a Measurement Scale”. *J. Bus. Ventur.*, **17(3)**: 253–273.
34. Hornsby, J. S., Kuratko, D. F., Holt, D. T. and Wales, W. J. 2013. Assessing a Measurement of Organizational Preparedness for Corporate Entrepreneurship. *J. Prod. Innov. Manag.*, **30(5)**: 937-955.
35. Hughes, M. and Mustafa, M. 2017. Antecedents of Corporate Entrepreneurship in SMEs: Evidence from an Emerging Economy. *J. Small Bus. Manag.*, **55(S1)**: 115-140.
36. Ireland, R. D., Covin, J. G. and Kuratko, D. F. 2009. Conceptualizing Corporate Entrepreneurship Strategy. *Entrepreneursh. Theory Pract.*, **33(1)**: 19-46.
37. Jansen, J. J., Van Den Bosch, F. A. and Volberda, H. W. 2005. Managing Potential and Realized Absorptive Capacity: How Do Organizational Antecedents Matter? *Acad. Manag. J.*, **48(6)**: 999–1015.
38. Kogut, B. and Zander, U. 1992. Knowledge of the Firm, Combinative Capabilities, and the Replication of Technology. *Organ. Sci.*, **3(3)**: 383–397.
39. Kotabe, M., Jiang, C. X. and Murray, J. Y. 2017. Examining the Complementary Effect of Political Networking Capability with Absorptive Capacity on the Innovative Performance of Emerging-Market Firms. *J. Manag.*, **43(4)**: 1131-1156.
40. Kuratko, D. F., Hornsby, J. S. and Bishop, J. W. 2005. Managers’ Corporate Entrepreneurial Actions and Job Satisfaction. *Int. Entrepreneursh. Manag. J.*, **1(3)**: 275-291.
41. Kuratko, D. F., Hornsby, J. S. and Covin, J. G. 2014. Diagnosing a Firm's Internal Environment for Corporate Entrepreneurship. *Bus. Horizons*, **57(1)**: 37-47.
42. Kuratko, D. F., Ireland, R. D., Covin, J. G. and Hornsby, J. S. 2005. A Model of Middle-Level Managers’ Entrepreneurial Behavior. *Entrepreneursh. Theory Pract.*, **29(6)**: 699-716.

43. Kuratko, D. F., Montagno, R. V. and Hornsby, J. S. 1990. Developing an Entrepreneurial Assessment Instrument for an Effective Corporate Entrepreneurial Environment. *Strateg. Manag. J.*, **11**: 49-58.
44. Ling, Y., Simsek, Z., Lubatkin, M. H. and Veiga, J. F. 2008. Transformational Leadership's Role in Promoting Corporate Entrepreneurship: Examining the CEO-TMT Interface. *Acad. Manag. J.*, **51(3)**: 557-576.
45. Lowry, P. B. and Gaskin, J. 2014. Partial Least Squares (PLS) Structural Equation Modeling (SEM) for Building and Testing Behavioral Causal Theory: When to Choose it and How to Use It. *IEEE Trans. Prof. Commun.*, **57(2)**: 123-46.
46. Luk, C. L., Yau, O. H., Sin, L. Y., Alan, C. B., Chow, R. P. and Lee, J. S. 2008. The Effects of Social Capital and Organizational Innovativeness in Different Institutional Contexts. *J. Int. Bus. Stud.*, **39(4)**: 589-612.
47. Lumpkin, G. T., Cogliser, C. C. and Schneider, D. R. 2009. Understanding and Measuring Autonomy: An Entrepreneurial Orientation Perspective. *Entrepreneursh. Theory Pract.*, **33(1)**: 47-69.
48. Markowitz, H. M. 1991. Foundations of Portfolio Theory. *J. Finance.*, **46(2)**: 469-477.
49. Mauerhoefer, T., Strese, S. and Brettel, M. 2017. The Impact of Information Technology on New Product Development Performance. *J. Prod. Innov. Manag.*, **34(6)**: 719-738.
50. Mustafa, M. 2015. Providing Organizational Support for Corporate Entrepreneurship: Evidence from a Malaysian Family Firm. *Int. J. Entrepreneursh. Small Bus.*, **25(4)**: 414-441.
51. Ocasio, W. 1997. Towards an Attention-Based View of the Firm. *Strateg. Manag. J.*, **18(S1)**: 187-206.
52. Ocasio, W. 2011. Attention to Attention. *Organ. Sci.*, **22(5)**: 1286-1296.
53. Pavlou, P. and Sawy, O. E. 2006. From IT Leveraging Competence to Competitive Advantage in Turbulent Environments: The Case of New Product Development. *Inf. Syst. Res.*, **17(3)**: 198-227.
54. Peterson, R. A. 2000. A Meta-analysis of Variance Accounted for and Factor Loadings in Exploratory Factor Analysis. *Mark. Lett.*, **11(3)**: 261-275.
55. Phan, P. H., Wright, M., Ucbasaran, D. and Tan, W. L. 2009. Corporate Entrepreneurship: Current Research and Future Directions. *J. Bus. Ventur.*, **24(3)**: 197-205.
56. Pinchot III, G. 1985. Intrapreneuring: Why You Don't Have to Leave the Corporation to Become an Entrepreneur. University of Illinois at Urbana-Champaign's Academy for Entrepreneurial Leadership Historical Research Reference in Entrepreneurship.
57. Porter, M. E. 1980. *Competitive Strategy*. New York: Free Press
58. Porter, M. E. 2008. *Competitive Advantage: Creating and Sustaining Superior Performance*. Free Press, NY.
59. Preacher, L. and Hayes, A. 2008. Asymptotic and Resampling Strategies for Assessing and Comparing Indirect Effects in Multiple Mediator Models. *Behav. Res. Methods.*, **40(3)**: 879-891
60. Rauch, A., Wiklund, J., Lumpkin, G. T. and Frese, M. 2009. Entrepreneurial Orientation and Business Performance: An Assessment of Past Research and Suggestions for the Future. *Entrepreneursh. Theory Pract.*, **33(3)**: 761-787.
61. Rezaei, R., Karimi, A., Mangeli, N. and Safa, L. 2017. Effect of Entrepreneurial Orientation and Marketing Capabilities on Greenhouse Businesses Performance in Jiroft County, Iran. *J. Agr. Sci. Tech.*, **19(4)**: 771-783.
62. Sakhdari, K. 2016. Corporate Entrepreneurship: A Review and Future Research Agenda. *Technol. Innov. Manag. Rev.*, **6(8)**: 5-12.
63. Sakhdari, K. and Bidakhavidi, E. J. 2016. Underground Innovation: How to Encourage Bootlegging Employees to Disclose Their Good Ideas. *Technol. Innov. Manag. Rev.*, **6(3)**: 5-12.
64. Sakhdari, K. and Burgers, J. H. 2018. The Moderating Role of Entrepreneurial Management in the Relationship between Absorptive Capacity and Corporate Entrepreneurship: An Attention-Based View. *Int. Entrepreneursh. Manag. J.*, **14(4)**: 927-950.
65. Sakhdari, K., Burgers, H., Yadollahi Farsi, J. and Rostamnezhad, S. 2017. Shaping the Organisational Context for Corporate Entrepreneurship and Performance in Iran: the Interplay between Social Context and Performance Management, *Int. J. Hum. Resour. Manag.*, DOI: 10.1080/09585192.2017.1396547.



66. Shankar, R. K. and Shepherd, D. A. 2018. Accelerating Strategic Fit or Venture Emergence: Different Paths Adopted by Corporate Accelerators. *J. Bus. Ventur.*, <https://doi.org/10.1016/j.jbusvent.2018.06.004>
67. Sharma, P. and Chrisman, S. J. J. 2007. Toward a Reconciliation of the Definitional Issues in the Field of Corporate Entrepreneurship. In: "Entrepreneurship". Springer, Berlin, Heidelberg.
68. Shinkle, G. A. and McCann, B. T. 2014. New Product Deployment: The Moderating Influence of Economic Institutional Context. *Strateg. Manag. J.*, **35(7)**: 1090–1101.
69. Simsek, Z. 2007. CEO Tenure and Organizational Performance: An Intervening Model. *Strateg. Manag. J.*, **28(6)**: 653–662.
70. Simsek, Z., Lubatkin, M. H., Veiga, J. F. and Dino, R. N. 2009. The Role of an Entrepreneurially Alert Information System in Promoting Corporate Entrepreneurship. *J. Bus. Res.*, **62(8)**: 810–817.
71. Simsek, Z., Veiga, J. F. and Lubatkin, M. H. 2007. The Impact of Managerial Environmental Perceptions on Corporate Entrepreneurship: Towards Understanding Discretionary Slack's Pivotal Role. *J. Manag. Stud.*, **44(8)**: 1398–1424.
72. Simsek, Z., Veiga, J. F. and Lubatkin, M. H. 2007. The Impact of Managerial Environmental Perceptions on Corporate Entrepreneurship: Towards Understanding Discretionary Slack's Pivotal Role. *J. Manag. Stud.*, **44(8)**: 1398–1424.
73. Stone, M. 1974. Cross-Validatory Choice and Assessment of Statistical Predictions. *J. Royal Stat. Soc.*, **36(2)**: 111–47.
74. Teece, D. J., Pisano, G. and Shuen, A. 1997. Dynamic Capabilities and Strategic Management. *Strateg. Manag. J.*, **18(7)**: 509–533.
75. Thompson, R., Barclay, D. W., and Higgins, C. A., 1995. The Partial Least Squares Approach to Causal Modeling: Personal Computer Adoption and Use as an Illustration. *Technology Studies: Special Issue on Research Methodology*, **2(2)**: 284–324.
76. Wales, W. J. 2016. Entrepreneurial Orientation: A Review and Synthesis of Promising Research Directions. *Int. Small Bus. J.*, **34(1)**: 3–15.
77. Wales, W., Wiklund, J. and McKelvie, A. 2015. What about New Entry? Examining the Theorized Role of New Entry in the Entrepreneurial Orientation–Performance Relationship. *Int. Small Bus. J.*, **33(4)**: 351–373.
78. West, M. A. and Anderson, N. R. 1996. Innovation in Top Management Teams. *J. Appl. Psychol.*, **81(6)**: 680–693.
79. Wiklund, J. and Shepherd, D. 2005. Entrepreneurial Orientation and Small Business Performance: A Configurational Approach. *J. Bus. Ventur.*, **20(1)**: 71–91.
80. Wood, C. C., Holt, D. T., Reed, T. S. and Hudgens, B. J. 2008. Perceptions of Corporate Entrepreneurship in Air Force Organizations: Antecedents and Outcomes. *J. Small Bus. Entrepreneursh.*, **21(1)**: 117–131.
81. Yiu, D. W. and Lau, C. M. 2008. Corporate Entrepreneurship as Resource Capital Configuration in Emerging Market Firms. *Entrepreneursh. Theory Pract.*, **32(1)**: 37–57.
82. Zahra, S. A. 1996. Governance, Ownership, and Corporate Entrepreneurship: The Moderating Impact of Industry Technological Opportunities. *Acad. Manag. J.*, **39(6)**: 1713–1735.
83. Zahra, S. A. 2015. Corporate Entrepreneurship as Knowledge Creation and Conversion: The Role of Entrepreneurial Hubs. *Small Bus. Econ.*, **44(4)**: 727–735.
84. Zahra, S. A. and Wright, M. 2011. Entrepreneurship's Next Act. *Acad. Manag. Perspect.*, **25(4)**: 67–83.
85. Zahra, S. A., Filatotchev, I. and Wright, M. 2009. How Do Threshold Firms Sustain Corporate Entrepreneurship? The Role of Boards and Absorptive Capacity. *J. Bus. Ventur.*, **24(3)**: 248–260.
86. Zahra, S. A., Wright, M. and Abdelgawad, S. G. 2014. Contextualization and the Advancement of Entrepreneurship Research. *Int. Small Bus. J.*, **32(5)**: 479–500.
87. Zahra, S.A. 2007. Contextualizing Theory Building in Entrepreneurship Research, *J. Bus. Ventur.*, **22**: 443–452.
88. Zhou, K. Z. and Li, C. B. 2012. How Knowledge Affects Radical Innovation: Knowledge Base, Market Knowledge Acquisition, and Internal Knowledge Sharing. *Strateg. Manag. J.*, **33(9)**: 1090–1102.

آمادگی سازمانی برای کارآفرینی سازمانی و عملکرد سازمان در صنایع غذایی ایران

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چکیده

در حالی که دانشمندان به تازگی شروع به بررسی عوامل سازمانی آمادگی یک سازمان برای کارآفرینی سازمانی و ارتباط آن با عملکرد سازمانی، همانند عملکرد مالی و عملکرد نوآوری کرده‌اند، ولی درک کمتری از مکانیزم‌های توضیح این ارتباطات و شرایط مرزی آنها وجود دارد. در این راستا این مطالعه به بررسی تأثیر آمادگی سازمانی برای کارآفرینی سازمانی بر بهبود عملکرد مالی و نوآوری سازمان می‌پردازد. نتایج بررسی بر روی ۲۵۶ شرکت در صنایع غذایی ایران نشان می‌دهد که آمادگی سازمانی برای کارآفرینی سازمانی، عملکرد مالی و نوآوری را از طریق نقش میانجی گرایش کارآفرینانه ارتقا می‌دهد. علاوه بر این، رابطه بین آمادگی سازمانی برای کارآفرینی سازمانی و عملکرد سازمان، زمانی که سازمان محیط پویای کسب و کار خود را درک کند، قوی‌تر خواهد بود. همچنین درک بهتری از شیوه‌ای که سازمان‌ها می‌توانند عملکرد خود را به ویژه در عرصه‌های جدید در ایران به عنوان کشوری در حال توسعه افزایش دهند فراهم می‌کند.