



Research Article

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Investigating the Appropriate Strategy to Enter the International Market of Organic Agricultural Products

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Abstract

The increasing concern of consumers about the quality and safety of agricultural products all over the world has caused organic products to become one of the most popular options for healthy. The increasing trend and consumption of organic agricultural products has led to the increasing growth of the market of these products in the last two decades. Due to the importance of entering and gaining a share of this growing market, this study investigates the factors affecting the international organic products market entry and determines the appropriate strategy for entering it using structural equation modeling. The data of this study was obtained by collecting 90 questionnaires from producers of organic saffron, pistachio, and raisin products in the year 2021 with available sampling method in Khorasan Razavi province. The obtained results indicate that the variables of risk and motivation to enter the international market directly and the production and marketing ownership indirectly and through influencing the motivation to enter the international market, influence the international market entry strategy. Based on this, the appropriate strategy for entering the international market of organic products, indirect, cooperative and non-attendance strategies such as indirect export, contract production and joint investment was obtained. Therefore, it is suggested that the government should remove or reduce the risks caused by sanctions and obstacles to enter the market for the direct presence of organic product producers in international markets.

Keywords: Entry strategy, Motivation, Organic, Ownership, Risk



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Introduction

In recent years, consumers around the world have become increasingly concerned about the quality and safety of agricultural and food products. Therefore, the need for a healthy diet has been created in them (Hansmann *et al.*, 2020; Wang *et al.*, 2023). Since, no chemical pesticides, chemical fertilizers, sewage, irradiation or any artificial flavors, colors and preservatives have been used in the production and processing of organic products (Akter *et al.*, 2023), these products are one of the most popular options for sustainable consumption among consumers (Rizzo *et al.*, 2020; Iqbal *et al.*, 2021). In such a way that 38% of Chinese consumers (students) are consumers of organic products and drinks and 27% of them are buyers of organic fruits and vegetables (Ali *et al.*, 2021). 55.6% of American consumers buy organic products (Gundala & Singh, 2021) and 66.4% of consumers in western Poland buy organic food (Kulyk & Dubicki, 2019). The increasing tendency and consumption of organic products in different countries has caused the growth of the market of these products. So that, in the last two decades, the global sales of organic food and beverages have increased from around 13 billion euros in 2000 to 125 billion euros in 2021 (Willer *et al.*,

2023). The efforts of different countries to produce organic products and enter the international markets have led to the formation of markets in Asia, Latin America and Africa, and the global share of the United States, the European Union and China in the sale of organic food has decreased (Willer *et al.*, 2021).

Iran has about 7 thousand hectares of organic land and produces crops such as saffron, pistachios and raisins organically (Willer *et al.*, 2023; Iran Organic Association, 2020). Iran also has about 7 thousand hectares of organic land and produces organic products such as saffron, pistachio and raisins and is trying to enter this market. But entering the international markets and choosing the right strategy for its entry is considered a strategic decision for (organic) producers in the countries. Because, the level of commitment to the international market determines the risks they bear and the level of control they have over their production and marketing in the international market. An appropriate entry strategy can increase the performance of the producer, and on the other hand, choosing an inappropriate entry strategy can be very costly and irreparable (Lin & Ho, 2019). Therefore, the strategy of entering the global organic market and the factors affecting it are very important.

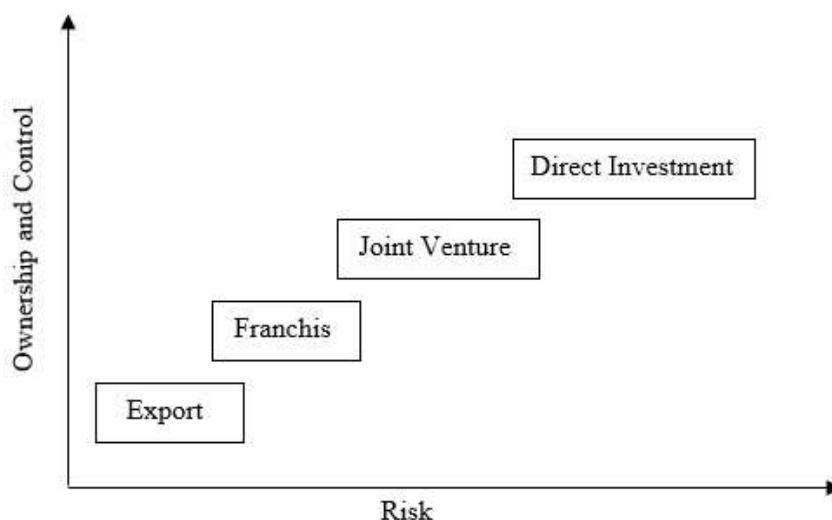


Figure 1- International market entry strategies

In general, strategies for entering the international market include a wide range from export to investment, each of which has its own level of risk, control and ownership over production and marketing operations (Albaum & Duerr, 2008; Lu *et al.*, 2011). In this range, according to Fig. 1, entry strategies through indirect exports are among the least risky with the least control and ownership over production and marketing, and the foreign direct investment strategy is the most risky with the most control over production and marketing operations (Skarmeas *et al.*, 2016; Masum *et al.*, 2020).

Several factors affect the strategy of entering international markets. International studies found factors such as types of risk (Tang & Buckley, 2020), access to resources, innovation, product characteristics, marketing and type of industry, market development, technology development, locational advantage (Nisar *et al.*, 2012), motivation (Zekiri, 2016), demand uncertainty, market size and growth, direct and indirect trade barriers, laws, the regulations of the competitive market (Ravelomanana *et al.*, 2015) and the ownership of production and marketing (Xu *et al.*, 2011) to be effective on the strategy of entering the international market. Iranian studies also include competition, marketing mix, laws and regulations of the country of origin, international experience and government support (Tahernejad *et al.*, 2021), company size, management characteristics, tariff barriers, geographic distance, cultural distance, product type and non-tariff barriers (Pashazadeh & Adel, 2019), export experience, export risks, sanctions, marketing mixes, research and development, variety of export destinations, reliable brand and attractiveness of the place (Mohammadzadeh *et al.*, 2018), core capabilities (Mirahmadi & Hamidzadeh, 2018) and macroeconomic factors, business and market factors, financial and credit factors, technical and specialized factors, and exchange process factors (Nejatianpour & Esmaeili, 2016) have evaluated the strategy of entering the international market as effective.

Each of these studies have addressed some factors affecting the strategy of entering the international market. The sum of these factors can be classified or aggregated in different ways. This study, recognizing the potential for categorizing strategies for entering the international market based on risk and ownership, as well as the significance of evaluating the motivation behind market entry, categorizes these factors into three components: motivation to enter the market, international market risk, and ownership or control over production and marketing. It assesses their impact on entry into the international organic products market and determines the most suitable strategy accordingly. Hollensen (2008) has divided the motives for entering the international market to proactive and reactive motives. Proactive motives are based on producers' internal decisions and their interests and include profit and growth goals, management goals, foreign market opportunities, economies of scale and tax benefits. Meanwhile, the reactive motives reflect the passive behavior of the producer, which comes from the pressure or threats in the domestic or foreign markets, as well as from the pressure in the internal production environment, and includes competitive pressures, small and saturated domestic market, orders foreign is the development of sales of seasonal products and proximity to international customers or psychological distance (Kubickova *et al.*, 2014). Nisar *et al.*, (2012) have found the effects of the motivation of Norwegian companies' managers to be positive and significant and without influence depending on the type of strategy to enter the international market. Zekiri (2016) has evaluated these effects positively in Macedonia. In Iran, considering the smallness of the domestic market of organic products, the existence of orders and foreign market opportunities of the organic products, it seems that the motivation to enter the international market of organic products has a positive effect on the cooperative and indirect strategies of entering the international market.

When risk is studied as a multidimensional

concept, it gives a better understanding of its effect on the company's entry strategy (Ismail, 2017). According to studies, the most important dimensions of risk are: political risk, economic risk, social risk, demand risk and competitive risk (Hauger, 2006; Pehrsson, 2008; Anggara, 2011; Rafat & Farahani, 2019). Studies show that the various risks, in addition to the strategy of entering the international market, have a significant effect on the ownership of production and marketing and the motivation to enter the international market. As risk increases, producers choose indirect entry methods such as indirect export with less ownership and control over production, and their motivation to enter the international market decreases (Tang & Buckley, 2020; Aguzzoli *et al.*, 2021). Ownership or control is the power that the producer exerts on the systems, methods and decisions of the foreign business unit. Based on this, ownership or control over production and marketing operations indicates the power and ability of the producer to carry out production and marketing operations (Brookes & Roper, 2010). Decisions related to full or little control over production and marketing operations are based on factors such as language differences, market attractiveness, industry competition intensity (Golalizadeh *et al.*, 2014). Studies show that the increase in cultural differences makes companies prefer joint investment to full ownership. However, when there is a language difference, the local partner adds to the problems caused by uncertainty and companies prefer to use the methods that bring full control and ownership (López-Duarte & Vidal-Suárez, 2010). Market attractiveness including market size, market growth, market stability, people's income, labor cost, infrastructure, welfare level, lack of entry barriers and the number of competing companies is another factor that affects production ownership (Miecinskienea *et al.*, 2014; Almgren, 2014; Dehghan Shabani, 2017). In addition, the industry competition intensity, which shows the competitive relationship between small, medium and large companies, has an effect on company ownership and entering the market. So that in

industries where the competition intensity is less, companies prefer to use the methods that bring full control. At the same time, when the competition intensifies, companies may prefer not to enter fully cooperative strategies. Because participation reduces their decisiveness in quick response to competitors (Tsang, 2005; Koch *et al.*, 2020). Studies have shown that production and marketing ownership has a significant effect on the motivation and entry of producers into the international market. So that private and small producers use cooperative methods more than large producers (Xu *et al.*, 2011; Ahsan *et al.*, 2020).

According to what was mentioned, the following hypotheses can be expressed based on the relationships between the three mentioned factors:

- Hypothesis 1: Production and marketing ownership has a positive and significant effect on the motivation to enter the international market of organic products.
- Hypothesis 2: Risk has a negative and significant effect on production and marketing ownership.
- Hypothesis 3: Risk has a negative and significant effect on the motivation to enter the international organic products market.
- Hypothesis 4: Production and marketing ownership has a positive and significant effect on the strategy of entering the international organic products market.
- Hypothesis 5: Risk has a positive and significant effect on the strategy of entering the international organic products market.
- Hypothesis 6: The motivation to enter the international market has a positive and significant effect on the strategy of entering the international organic products market.

This study has targeted three organic products of saffron, pistachio and raisin in Khorasan Razavi province. These three products are the main organic products of Khorasan Razavi province. According to the statistics and information of the Agricultural Jihad Organization of the province, the cities of Gonabad, Zaveh and Fariman have 450, 235 and 4.5 hectares of organic saffron with an

average yield of 4 kg per hectare, respectively. In 2018, this crop received an organic certificate from Pars Gawah Gostar Company, which is the representative of BCS in Germany, and managed to capture more than 40% of the country's organic saffron cultivation area. Qochan city with 575 hectares of organic grape and yield of 3 tons per hectare in 1997 has more than 40% share of the country's organic grape cultivation area. Fayzabad city in the province with 120 hectares of organic pistachio (20% of the country's organic pistachio cultivation area) and a yield of 500 kg per hectare also has an organic certificate from the German BCS company (Agricultural Jihad Organization of Khorasan Razavi, 2020).

In order to achieve the purpose of the study, structural equation modeling has been used. This study used the formative-reflective measurement model and confirmatory composite analysis. This model is the simultaneous presence of the formative measurement model and the reflective measurement model in the modeling, which distinguishes it from other studies in this field.

Materials and Methods

Measurement model

In this paper, we used Structural Equation Modeling (SEM), which includes two measurement and structural models. The relationships between the latent variables and the observed variables are examined through the measurement model, and the relationships between the latent variables, which enable the testing of statistical hypotheses for the study, are evaluated through the structural model (Byrne, 2010). Based on the causal relationships between observed and latent variables, there are two types of reflective and formative measurement models. So, if the observed variables have a high correlation and the direction of causality is from the latent variables to the observed variables, then the measurement model is reflective (Hair *et al.*, 2013), and if the observed variables are the cause of the latent variables, the measurement model is formative (Petter *et al.*, 2007). To examine the measurement model, it is used confirmatory composite analysis (CCA) method that was suggested by Rigdon (2014), Sarstedt *et al.* (2014) and Henseler *et al.* (2014) in variance-based structural equation modeling. According to this method, the evaluation process of reflective and formative measurement models is shown in Table 1 (Goetz *et al.*, 2013; Howard, 2018).

Table 1- Evaluation Steps of Formative and Reflective Measurement Models Using Confirmatory Composite Analysis (CCA)

Reflective Measurement Model	Formative Measurement Models
1- Estimating of loadings and significance and also, reliability of observed variables	1- Assessing convergent validity – redundancy
2- Assessing reliability of latent variables using Cronbach's α and composite reliability	2- Assessing observed variables multicollinearity using VIF (variance inflation factor)
3- Assessing convergence validity of latent variables using Average Variance Extracted (AVE)	3- Assessing size and significance of observed variables weights
	4- Assessing size & significance of loadings

Source: Hair *et al.*, 2020

After evaluating and confirming the measurement model using the CCA method, the structural model is examined based on evaluation of structural model collinearity, examination of size and significance of path coefficients, and f^2 effect size (in-sample prediction).

These steps are explained as below (Hair *et al.*, 2020):

Evaluation of structural model collinearity

The collinearity of the latent variables is evaluated. Structural models with high collinearity can increase or decrease coefficients and weights or change their signs. For this purpose, the VIF values should be examined. If these values are less than 3, multicollinearity is unlikely to be a problem.

Examination of size and significance of path coefficients

This step includes checking the size and significance of path coefficients. This process enables the researcher to evaluate hypothesized relationships between latent variables. Path coefficients are standardized values that may range from -1 to +1, but rarely approach -1 or +1. The closer the values of the path coefficients are to 0, the weaker they are in predicting the dependent latent variables, and the closer the values are to the absolute value of 1, the stronger they are in predictions.

f² effect size

The measure used to predict the structural model is the f² effect size, which provides an estimate of the predictive ability of each independent latent variable in the model. To calculate this value, every predictive latent variable is systematically removed from the model by SmartPLS software, and a new R² is calculated without that variable. Then, R² with the presence of that variable in the model is compared with R² without that variable, and the difference between these two values determines whether the investigated latent variable is a significant predictor of the dependent latent variable or not (Hair *et al.*, 2017). The effect size, which is called f², is rated as small, medium and large. Values between 0.02 and 0.15 are small, values between 0.15 and 0.35 are medium, and values 0.35 and above have large effects (Cohen, 1988).

Research conceptual model

The studied variables, i.e. motivation to enter the international market, production and marketing ownership, risk and international market entry strategy are measured through a

set of observed variables shown in Fig. 2. Therefore, these four variables are considered as latent variables. Since the observed variables of gain profit, management experience, market opportunity, excess production over demand, close to customers and the existence of foreign orders are the reasons for the variable of motivation to enter the international market. Also, the variables of technical knowledge, marketing skills, competition intensity, market size, market growth, and language difference are the causes of the production and marketing ownership variable, and the variables of sanctions, administrative corruption, differences in economic structure, labor laws, demand, competitors' activities, and variation in prices of competing products are the cause of the risk variable, the measurement model to investigate the relationship between the variables of motivation to enter the international market, production and marketing ownership, risk and the observed variables will be of a formative type according to Fig. 2. But because the latent variable of the international market entry strategy is the cause of the observed variables, its measurement model will be reflective in order to investigate the relationship between the observed and latent variables (Fig. 2).

To gather data for the study, the researcher utilized a questionnaire. The questionnaire comprised questions related to the variables of motivation to enter the international market, ownership of production and marketing, and risk, measured on a five-point Likert scale ranging from "completely disagree" to "completely agree." The validity of the questionnaire was checked and confirmed by experts. The reliability coefficient was obtained by Cronbach's alpha method (0.78), which indicates the validity of the questionnaire.

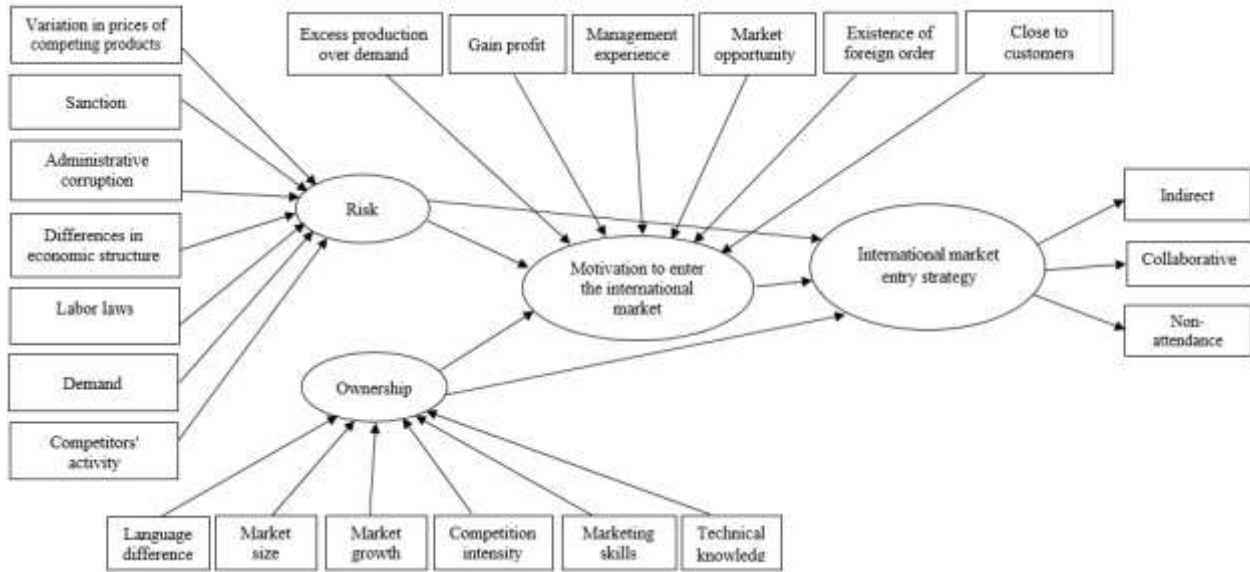


Figure 2- Research conceptual model

Questionnaires were completed in person from organic producers of saffron, pistachio and raisin products in Khorasan Razavi province. According to the information obtained from the Agricultural Jihad Organization of Razavi Khorasan province in 1400, the producers of raisins (grapes), saffron and pistachios in the province are 757, 875 and 8 people, respectively. To determine the sample size in the PLS method, two rules of 10 times the maximum observed variables of the measurement model among the measurement models and the maximum relationships of the structural model in the study were used (Hair *et al.*, 2017). Based on this rule, by multiplying the number 10 by the maximum number of observed variables in the measurement model, which is equal to 7, the number of samples required for the study is 70. However, in order to achieve better results, 90 samples (producers) with a ratio of 41, 41 and 8 people

from the producers of raisins (grapes) in Qochan, saffron in Zaveh and pistachios in Fayzabad, respectively were selected through available sampling and were interviewed.

Results and Discussion

Statistical description of the studied sample

The characteristics of organic producers are shown in Table 2. As can be seen, the producers of all three products have received an organic certificate from Pars Gavah Company. Grape producers in Qochan have an average area under cultivation and production per hectare of 0.86 hectares and 2.97 tons. Saffron producers in Zaveh have an average of 0.79 hectares and 4 kg of yield per hectare, and pistachio producers in Fayzabad have a cultivated area of 15 hectares and an amount of 500 kg per hectare.

Table 2- Specifications of sample producers

Number of producers	Product Name	City name	Cultivated area (hectares)	Production amount (tons)	The company providing the organic certificate
41	Soltani grape variety	Quchan	35	102	Pars Gawah Gostar representative of BCS
41	Saffron	Zaveh	41	0.16	Pars Gawah Gostar representative of BCS
8	Pistachio	Fayzabad	120	60	Pars Gawah Gostar representative of BCS

Source: Agricultural Jihad Organization of Khorasan Razavi

Structural equation modeling results

Structural equation modeling has been used to investigate the effect of three variables of motivation to enter the international market, production and marketing ownership, and risk on the international market entry strategy. Based on this, in the first step of modeling, the measurement model that expresses the relationship between the latent and observed variables is evaluated.

Measurement model results

In this study, the measurement model is of the formative-reflective type. So, for the latent variables of motivation to enter the international market, production and marketing ownership, and risk, the measurement model is of a formative type, and for the latent variable of international market entry strategy, the measurement model is of a reflective type. The evaluation results of these two models are shown in [Table 3](#). In the formative measurement model, in the first step, the convergent validity or redundancy analysis, which indicates the degree of correlation of each latent variable with the observed variables reflecting the same latent variable, is checked. The results of this step are shown in the last column of [Table 3](#) and it shows that these coefficients are greater than 0.7 and significant. Therefore, the model has good convergent validity. In the second step, the collinearity of the observed variables was evaluated through the VIF index, and its results in the fifth column of the table indicate that the values of the VIF index for all the observed variables are less than 3. Therefore, there is no problem of multicollinearity in model.

In the third step, the relative contribution of each formative observed variables in the formation of the latent variable is checked. The results in the third column of [Table 3](#) indicate that among the observed formative variables that form the latent variable of motivation to enter the international market, gain profit, management experience and the existence of foreign order, have the largest contribution in the formation of the motivation of organic

product producers to enter international markets, respectively. As for the latent variable of risk, the variables of sanctions, administrative corruption and differences in economic structure have the largest contribution in the formation of this variable, respectively. Regarding the variable of production and marketing ownership, technical knowledge, market size and marketing skill have the largest share in the formation of this variable, respectively.

In the fourth step, the absolute contribution (outer loading) of the observed variables in the formation of latent variables is evaluated. Its results in column 4 of [Table 3](#) show that among the observed variables, the latent variable of motivation to enter the international market, gain profit, management experience and excess production over demand have the highest share, respectively. Regarding the latent variable of risk, sanctions, differences in economic structure, and administrative corruption have the largest contribution in the formation of this variable, respectively. Regarding the variable of production and marketing ownership, marketing skill, market size and competition intensity have the largest contribution in the formation of this variable, respectively.

In the reflective measurement model, the outer loadings and validation of the observed variables are checked in the first step. The results of this model in the third column of the second part in [Table 3](#) indicate that the observed variables reflect their latent variables well. In other words, the observed variables have the necessary accuracy to measure the latent variables of the study. In the second step, validation of latent variables is evaluated using Cronbach's alpha coefficient and composite reliability coefficient. In columns 4 and 5 of [Table 3](#), the results of this validation show that the value of both coefficients is greater than 0.7, therefore, the measurement model under investigation and the latent variable of international market entry strategy have adequate validity.

Table 3- Evaluation results of the formative-reflective measurement model

Latent variables	Observed variables	Outer weight of observed variables	Outer loading	Collinearity (VIF)	Convergent Validity (Redundancy Analysis)
Motivation to enter the international market	gain profit	0.491***	0.798***	2.087	0.71***
	Management experience	0.469***	0.716***	1.558	
	market opportunity	0.241***	0.562***	1.191	
	Excess production over demand	0.249***	0.687***	1.450	
	Close to customers	0.115	0.565***	1.713	
	Existence of foreign order	0.346***	0.661***	1.278	
Risk	Sanction	0.511***	0.813***	1.502	0.75***
	Administrative corruption	0.446***	0.430***	1.114	
	Differences in economic structure	0.327***	0.633***	1.703	
	Labor laws	0.211*	0.322***	1.195	
	Demand	0.110	0.424***	1.685	
	Competitors' activity	0.215*	0.347***	1.543	
	Variation in prices of competing products	0.20**	0.344***	1.372	
Production and marketing ownership	Technical knowledge	0.387***	0.631***	1.247	0.73***
	Marketing skills	0.339***	0.699***	1.279	
	Competition intensity	0.223**	0.645***	1.541	
	Market size	0.367***	0.683***	1.361	
	Market growth	0.310**	0.625***	1.441	
	Language difference	0.098	0.298***	1.089	
		Outer loading	Cronbach's α	Composite reliability	Average Variance Extracted (AVE)
International market entry strategy	- Indirect	0.817***	0.71	0.71	0.55
	- Collaborative	0.787***			
	- Non-attendance	0.784***			

Source: Research findings (***, **, * statistically significant at the 1, 5, 10 percent level, respectively)

In the third step, the convergence validity of latent variables is evaluated using average variance extracted (AVE), the results of which are presented in the last column of Table 3. Based on this, considering that this index is greater than 0.5, it can be said that there is a high correlation between the latent variable and the observed variables.

Structural model results

The second step of structural modeling is assessing the structural model. In other words, after confirming the measurement model using the CCA method, the structural model is examined based on the following steps:

In the first step, the collinearity of the latent variables of the structural model is evaluated. For this purpose, VIF values were used, the

results of which are shown in Table 4. As can be seen, these values are less than 3 and there is no multicollinearity problem in the structural model. In the second step, in order to evaluate the hypothetical relationships between the latent variables, the size and significance of the path coefficients are checked. Based on the results of these values in Table 4, the variable production and marketing ownership is a good (positive) and significant predictor of the motivation to enter the international market. This means that the ability to own production and marketing increases the motivation of producers to enter the international market.

Based on the results of Table 4, the latent risk variable is a strong (negative) and significant predictor of production and marketing ownership and the motivation to enter the international market. It means that

different risks reduce the willingness of producers to own the production and marketing of their products, as well as their motivation to enter the market. In addition, the risk variable is a good (positive) and significant predictor of the international market entry strategy. In such a way that the existence of different risks increases entering the market through cooperative and indirect methods. The variable of motivation to enter the international market is another variable that is a strong (positive) and significant predictor of entering the international market strategy. In other words, producers are motivated to use cooperative and indirect strategies to enter the international market of organic products. Therefore, from 6 hypotheses considered in the study, 5 hypotheses are confirmed.

Table 4- Structural model result

Hypothesis	Path	Path coefficient	P-value	Inner VIF	Effect size f^2
1	Production and marketing ownership → Motivation to enter the international market	0.59	0.00	1.22	0.78
2	Risk → Production and marketing ownership	-0.43	0.00	1.00	0.22
3	Risk → Motivation to enter the international market	-0.33	0.00	1.22	0.24
4	Production and marketing ownership → International market entry strategy	0.20	0.09	2.18	0.15
5	Risk → International market entry strategy	0.53	0.00	1.52	0.71
6	Motivation to enter the international market → International market entry strategy	0.29	0.00	2.72	0.21

Source: Research findings

In the third step, the predictive ability of the structural model is examined. For this purpose, the f^2 effect size index, which is an estimate of the model's prediction ability or the size of the effect of one latent variable on another latent variable, has been used. The values of this index are reported in Table 4. Since values between 0.15 and 0.35 and values of 0.35 and above show moderate and high predictive power or effect size, respectively (Cohen, 1988), it can be said that predictive power and effect Two

models 1 and 5 are high and the rest are average. In other words, the effect of production and marketing ownership on the motivation to enter the international market, as well as the effect of risk on international market entry strategy is high and the rest is medium.

Conclusions and Suggestions

Increasing concern of consumers about the quality and safety of agricultural and food products around the world has caused them to

tend to organic products and food as an alternative to conventional agricultural products and foods. The increase in trend and consumption of organic products has caused the growth of the market of these products, so that the global sales of organic food and beverages have grown about 9 times in the last two decades. Therefore, different countries are trying to enter this market and gain a share of it. Iran also produces major export products such as saffron, pistachios and raisins organically, and it is necessary to adopt a suitable strategy to enter the international market of organic products. Due to the importance of this issue, this study has investigated the influencing factors on the strategy of entering saffron, pistachio and raisin products into the international market of organic products and determining appropriate strategies. For this purpose, the factors affecting the strategy of entering the international organic market were analyzed and investigated in a new category under the three factors of motivation to enter the market, international market risk, and production and marketing ownership or control. The data of the study was collected through available sampling method and interviews with about 90 producers of these products in Khorasan Razavi province.

In order to achieve the aim of this study, structural equation modeling was used. In this study, unlike most studies in the field of structural equation modeling, a formative-reflective measurement model was employed in the initial stage of modeling. In other words, to explore the relationship between observed variables and latent variables, both reflective and formative measurement models were utilized. This approach was adopted because some latent variables are the cause of the observed variables, while others are the result. In other words, the latent variable of the International market entry strategy is the cause of the observed variables, including the indirect, collaborative and non-attendance strategy, and it is the opposite for the latent variables of risk, production and marketing ownership, and the motivation to enter the international market. It means that the observed

variables include sanctions, administrative corruption, differences in economic structure, labor laws, demand, competitors' activities, and variation in prices of competing products are the cause of the risk variable. The variables of technical knowledge, marketing skills, competition intensity, market size, market growth, and language difference are the cause of the variable production and marketing ownership, and the variables of gain profit, management experience, market opportunity, excess production over demand, close to customers and the existence of foreign orders are the cause for the variable motivation to enter the international market. Therefore, due to the presence of two types of measurement models in the study, the analysis of the results was slightly different from the studies based on a reflective measurement model.

The results of the formative measurement model showed that the model has good convergent validity based on redundancy analysis. The collinearity evaluation of the observed variables through the VIF index indicates that there is no multicollinearity problem in the formative measurement model. The relative contribution of each of the formative observed variables in the formation of the latent variables indicates that among the formative observed variables that form the latent variables, gain profit, sanctions and technical knowledge have the largest share in the formation of the motivation to enter the international market, risk and production and marketing ownership, respectively. In evaluating the absolute share of the observed variables in the formation of latent variables, gain profit, sanctions and marketing skills have the largest share in the formation of the latent variables of motivation to enter the international market, risk and production and marketing ownership, respectively. In essence, the primary factor shaping the motivation to enter the international market of organic products is the profit gained by producers. The predominant factor influencing risk is the sanctions imposed on the country, while the principal factor shaping production and marketing ownership is technical knowledge

relative to marketing skills in absolute terms. The results of the reflective measurement model indicate that based on outer loadings, the observed variables, including indirect, collaborative and non-attendance strategies, well reflect the latent variable of the international market entry strategies and they have the accuracy required for measuring the latent variable of the international market entry strategy. Validation of the latent variable using Cronbach's alpha coefficient and composite reliability coefficient also confirms the appropriate validity of the measurement model under investigation and the latent variable of the international market entry strategy. In addition, the convergence validity of the latent variables using the average variance extracted (AVE) showed that there is a high correlation between the latent variable of the international market entry strategies and the observed variables.

The results of the second step of structural modeling, which is the examination of the structural model using the CCA method, show that there is no internal collinearity problem of the latent variables of the structural model. The evaluation of hypothetical relationships between latent variables, size and significance of path coefficients also showed that 5 of the hypotheses of the study are confirmed. So that the variable of production and marketing ownership has the biggest effect on the motivation of producers to enter the international market. In fact, the ability to own the production and marketing of agricultural products increases the power of producers and increases their motivation to enter the international markets of these products. This result is in line with the findings of [Ahsan et al. \(2020\)](#)'s study ([Ahsan et al., 2020](#)). Based on this, it is suggested that institutions such as the Ministry of Jihad Agriculture hold training programs to increase the ability of producers in the field of organic product production and marketing. In addition, risk reduces production and marketing ownership and the motivation to enter the international market. It means that different risks reduce the ability of producers to own the production and marketing of their

products and the motivation to enter the market. In other words, despite the various risks in international markets, producers have problems in having full ownership of their production and marketing operations, and with a sense of risk, their motivation to enter the international market decreases. The findings of [Tang & Buckley, \(2020\)](#) also confirm this influence. On the other hand, the positive effect of risk on the international market entry strategy indicates that the presence of various risks increases the strategy of entering the market through cooperative and indirect methods, and in other words, direct entry strategies. This finding is in line with the findings of [Aguzzoli et al. \(2021\)](#). Therefore, for the direct presence of organic producers in international markets, the government should try to eliminate or reduce some risk factors such as sanctions.

Finally, the positive effect of the variable of motivation to enter the international market on the strategy of entering the international market of organic products shows that the tendency of producers is to use cooperative and indirect strategies to enter this market. The results of Zekiri's study [Zekiri \(2016\)](#) and [Nisar et al. \(2012\)](#) also confirm this finding. Based on the results, the hypothesis of the effect of production and marketing ownership variable on the strategy of entering the international market was rejected. Although this means that the production and marketing ownership does not have a significant effect on the strategy of entering the international market, but this variable indirectly has a positive effect on the international market entry strategies through a strong effect on the motivation to enter the international market and indirectly increases the international market entry strategy through cooperative and indirect methods.

From all the hypotheses of the study, it can be concluded that due to the positive and significant direct effect of risk and the motivation to enter the international market on the international market entry strategy, as well as the positive and significant indirect effect of production and marketing ownership on the international organic products market entry strategy, the best strategy to enter the

international market of organic products is indirect, cooperative and non-attendance strategies such as indirect export, contract production and joint investment.

References

1. Agricultural Jihad Organization of Khorasan Razavi. (2020).
2. Aguzzoli, R., Lengler, J., Sousa, C.M.P., & Benito, G.R.G. (2021). Here we go again: A case study on Re-entering a Foreign Market. *British Journal of Management*, 32, 416–434. <https://doi.org/10.1111/1467-8551.12407>
3. Ahsan, F.M., Sinha, A., & Srinivasan, R. (2020). Exploring firm-level antecedents that drive motives of internationalization: A study of knowledge intensive Indian firms. *Management and Organization Review*, 16(4), 867-906. <https://doi.org/10.1017/mor.2020.3>
4. Akter, S., Ali, S., Fekete-Farkas, M., Fogarassy, C., & Lakner, Z. (2023). Why organic food? Factors influence the organic food purchase intension in an emerging country (Study from Northern part of Bangladesh). *Resources*, 12, 1-5. <https://doi.org/10.3390/resources12010005>
5. Albaum, G. & Duerr, E. (2008). *International marketing and export management*. Prentice Hall, London.
6. Almgren, K. (2014). The four factors for targeting an attractive market. *International Journal of Humanities and Social Science*, 4(9), 71-76.
7. Ali, Hazem, Min Li, & Yunhong Hao. (2021). Purchasing behavior of organic food among Chinese University students. *Sustainability*, 13(10), 2-17. <https://doi.org/10.3390/su13105464>
8. Anggara, R.A. (2011). *Implementation of risk management framework in supply chain: A tale from a biofuel company in Indonesia*. Manchester Business School Working Paper, University of Manchester.
9. Brookes, M., & Roper, A. (2010). The impact of entry modes on the organizational design of international hotel chains. *The Service Industries Journal*, 30(9), 1499–1512. <https://doi.org/10.1080/02642060802626857>
10. Byrne, B.M. (2010). *Structural equation modeling with AMOS*. Routledge, New York.
11. Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. Lawrence Erlbaum Associates, Hillsdale.
12. Dehghan Shabani, Z., Samadi, A.H., & Zare, A. (2017). Does market potential matter? Evidence on the impact of market potential on economic growth in Iranian provinces. *Iranian Economic Review*, 21(4), 847-863. <https://doi.org/10.22059/IER.2017.64084>
13. Esposito Vinzi, V., Trinchera, L., & Amato, S. (2010). *PLS path modeling: From foundations to recent developments and open issues for model assessment and improvement*. p. 47-82. In: Esposito Vinzi, V., Chin, W., Henseler, J., Wang, H. (eds) *Handbook of Partial Least Squares*, Springer, Berlin, Heidelberg.
14. Goetz, C., Coste, J., Lemetayer, F., Rat, A.C., Montel, S., Recchia, S., & Guillemin, F. (2013). Item reduction based on rigorous methodological guidelines is necessary to maintain validity when shortening composite measurement scales. *Journal of Clinical Epidemiology*, 66(7), 710–718. <https://doi.org/10.1016/j.jclinepi.2012.12.015>
15. Gotalizadeh, F., Rezvani, H., & Talebnejad, A. (2014). Factors affecting the tendency of food exporters to control their international activities in foreign markets: Case of food exporters in Mazandaran province, Iran. *Management and Development Process*, 26(4), 135-150. (In Persian with English abstract)
16. Gundala, R.R., & Singh, A. (2021). What motivates consumers to buy organic foods? Results of an empirical study in the United States. *PLoS One*, 16(9), 1-17. <https://doi.org/10.1371/journal.pone.0257288>

17. Hair, J.F., Howard, M.C., & Nitzl, C. (2020). Assessing measurement model quality in PLS-SEM using confirmatory composite analysis. *Journal of Business Research*, 109, 101–110. <https://doi.org/10.1016/j.jbusres.2019.11.069>
18. Hair, J.F., Matthews, L.M., Matthews, R.L., & Sarstedt, M. (2017). PLS-SEM or CB-SEM: Updated guidelines on which method to use. *International Journal of Multivariate Data Analysis*, 1(2), 107–123. <https://doi.org/10.1504/IJMDA.2017.087624>
19. Hair, J.F., Hult, G.T.M., Ringle, C.M., & Sarstedt, M. (2013). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Thousand Oaks, Sage.
20. Hansmann, R., Baur, I., & Binder, C.R. (2020). Increasing organic food consumption: An integrating model of drivers and barriers. *Journal of Cleaner Production*, 275, 123058. <https://doi.org/10.1016/j.jclepro.2020.123058>
21. Hauger, P. (2006). *An analysis of transfer risk in comparison to Sovereign risk*. M.Sc. Thesis. Frankfurt School of Finance & Management, Munich.
22. Henseler, J., Dijkstra, T.K., Sarstedt, M., Ringle, C.M., Diamantopoulos, A., Straub, D.W., & Calantone, R.J. (2014). Common beliefs and reality about PLS: Comments on Rönkkö & Evermann. *Organizational Research Methods*, 17(2), 182–209. <https://doi.org/10.1177/1094428114526928>
23. Hollensen, S. (2008). *Essentials of global marketing*. Pearson Education, England.
24. Hwang, H., Malhotra, N.K., Kim, Y., Tomiuk, M.A., & Hong, S. (2010). A comparative study on parameter recovery of three approaches to structural equation modeling. *Journal of Marketing Research*, 47, 699–712. <https://doi.org/10.2307/20751534>
25. Howard, M.C. (2018). Scale pretesting. *Practical Assessment, Research & Evaluation*, 23(5), 1–14. <https://doi.org/10.7275/hwpz-jx61>
26. Iran Organic Association. (2020). Available at: <https://iranorganicproducts.com>.
27. Iqbal, J., Yu, D., Zubair, M., Rasheed, M.I., Khizar, H.M.U., & Imran, M. (2021). Health consciousness, food safety concern, and consumer purchase intentions toward organic food: The role of consumer involvement and ecological motives. *SAGE Open*, 11(2), 1–14. <https://doi.org/10.1177/21582440211015727>
28. Ismail, I.I. (2017). An empirical study on country risk as a predictor of market entry decisions: Impact of political, economic and financial risks on FDI Inflows of Horn of Africa and Middle East North Africa Region (MENA). *Journal of International Business Research and Marketing*, 2(5), 24–32. <https://doi.org/10.18775/jibrm.1849-8558.2015.25.3004>
29. Koch, A., Panayides, M., & Thomas, S. (2020). Common ownership and competition in product markets. *Journal of Financial Economics*, 139(1), 109–137. <https://doi.org/10.1016/j.jfineco.2020.07.007>
30. Kubickova, L., Votoupalova, M., & Toulova, M. (2014). Key motives for internationalization process of small and medium-sized enterprises. *Procedia Economics and Finance*, 12, 319–328. [https://doi.org/10.1016/S2212-5671\(14\)00351-7](https://doi.org/10.1016/S2212-5671(14)00351-7)
31. Kulyk, P. & Dubicki, P. (2019). Determinants of consumer behavior on the organic food market. *Problems of World Agriculture*, 19(34), 79–87. <https://doi.org/10.22004/ag.econ.288520>
32. Lin, F.J., & Ho, C.W. (2019). The knowledge of entry mode decision for small and medium enterprises. *Journal of Innovation & Knowledge*, 4(1), 32–37. <https://doi.org/10.1016/j.jik.2018.02.001>
33. López-Duarte, C., & Vidal-Suárez, M.M. (2010). External uncertainty and entry mode choice: cultural distance, political risk and language diversity. *International Business Review*, 19(6), 575–588. <https://doi.org/10.1016/j.ibusrev.2010.03.007>
34. Lu, Y., Karpova, E.E., & Fiore, A.M. (2011). Factors influencing international fashion retailers' entry mode choice. *Journal of Fashion Marketing and Management*, 15(1), 58–75. <https://doi.org/10.1108/13612021111112340>

35. Masum, M., Mohammadkazemi, R., & Zarei, B. (2020). Identification and prioritization of international market entry ways (Case study: organic fertilizer). *Commercial Surveys*, 18(100), 77-90. (In Persian with English abstract)
36. Miecinskienea, A., Stasytytea, V., & Kazlauskaitė, J. (2014). Reasoning of export market selection. *Procedia-Social and Behavioral Sciences*, 110(24), 1166-1175. <https://doi.org/10.1016/j.sbspro.2013.12.963>
37. Mirahmadi, A., & Hamidzadeh, M. (2018). The core capabilities food firms's impact on their readiness to enter international markets. *Strategic Management Studies*, 9(35), 53-75.
38. Mohammadzadeh, S.H., Karbasi, A.R., & Mohammadi, H. (2018). Factors affecting the selection of strategies for entering the foreign market of medicinal plants. *Journal of Agricultural Economics and Development*, 32(2), 185-197. (In Persian with English abstract)
39. Nejatianpour, A., & Esmaeili, A. (2016). Analysis of the factors affecting the export of food industry products: Rural development approaches. *Rural Development Strategies*, 3(3), 335-353.
40. Nisar, S., Boateng, A., Wu, J., & Leung, M. (2012). Understanding the motives for SMEs entry choice of international entry mode. *Marketing Intelligence & Planning*, 30(7), 717-739. <https://doi.org/10.1108/02634501211273823>
41. Pashazadeh, Y., & Adel, Z. (2019). An analysis of how specific factors and barriers affect the strategy of companies to enter international markets using the method of structural equation modeling: A case study of companies trading in dried fruits. *Journal of Business Administration Researches*, 11(21), 141-161.
42. Pehrsson, A. (2008). Strategy antecedents of modes of entry into foreign markets. *Journal of Business Research*, 61(2), 132-140. <https://doi.org/10.1016/j.jbusres.2006.09.032>
43. Petter, S., Straub, D., & Rai, A. (2007). Specifying formative constructs in information systems research. *MIS Quarterly*, 31(4), 623-656.
44. Rafat, M., & Farahani, M. (2019). The country risks and foreign direct investment (FDI). *Iranian Economic Review*, 23(1), 235-260.
45. Ravelomanana, F., Yan, L., Mahazomanana, C., & Miarisoa, L.P. (2015). The external and internal factors that influence the choice of foreign entry modes at Wuhan iron and Steel Corporation. *Open Journal of Business and Management*, 3(1), 1-9. <https://doi.org/10.4236/ojbm.2015.31003>
46. Rigdon, E.E. (2014). Rethinking partial least squares path modeling: Breaking chains and forging ahead. *Long Range Planning*, 47(3), 161-167. <https://doi.org/10.1016/j.lrp.2014.02.003>
47. Rizzo, G., Borrello, M., Dara Guccione, G., Schifani, G., & Cembalo, L. (2020). Organic food consumption: The relevance of the health attribute. *Sustainability*, 12, 595. <https://doi.org/10.3390/su12020595>
48. Sarstedt, M., Ringle, C.M., Henseler, J., & Hair, J.F. (2014). On the emancipation of PLS-SEM: A commentary on Rigdon. *Long Range Planning*, 47(3), 154-160. <https://doi.org/10.1016/j.lrp.2014.02.007>
49. Skarmeas, D., Lisboa, A., & Saridakis, C. (2016). Export performance as a function of market learning capabilities and intrapreneurship: SEM and FsQCA findings. *Journal of Business Research*, 69(11), 5342-5347. <https://doi.org/10.1016/j.jbusres.2016.04.135>
50. Tahernejad, K., Rangriz, H. & Mozafari, M.M. (2021). Designing a causal model of strategies for entering international markets. *Journal of International Business Administration*, 4(3), 23-43.
51. Tang, R.W., & Buckley, P.J. (2020). Host country risk and foreign ownership strategy: Meta-analysis and theory on the moderating role of home country institutions. *International Business Review*, 29(4), 1-15. <https://doi.org/10.1016/j.ibusrev.2020.101666>
52. Tsang, E.W.K. (2005). Influences on foreign ownership level and entry mode choice in Vietnam. *International Business Review*, 14(4), 441-463. <https://doi.org/10.1016/j.ibusrev.2005.03.001>
53. Wang, J., Xue, Y., & Liu, T. (2023). Consumer motivation for organic food consumption: Health

- consciousness or herd mentality. *Front Public Health*, 10, 1042535. <https://doi.org/10.3389/fpubh.2022.1042535>
54. Willer, H., Schlatter, B., & Trávníček, J. (2023). The world of organic agriculture statistics and emerging trends 2023. Research Institute of Organic Agriculture FiBL, Frick, and IFOAM (International Federation of Organic Agriculture Movements), Bonn, Switzerland.
55. Willer, H., Travnicek, J., Meier, C., & Schlatter, B. (2021). The world of organic agriculture statistics and emerging trends 2021. Research Institute of Organic Agriculture FiBL, Frick, and IFOAM (International Federation of Organic Agriculture Movements), Bonn, Switzerland.
56. Wong, K.K. (2013). Partial least squares structural equation modeling (PLS-SEM) techniques using SmartPLS. *Marketing Bulletin*, 24, 1-32.
57. Xu, Y., Hu, S., & Fan, X. (2011). Entry mode choice of Chinese enterprises: The impacts of country risk, cultural distance and their interactions. *Frontiers of Business Research in China*, 5(1), 63–78. <https://doi.org/10.1007/s11782-011-0121-8>
58. Zekiri, J. (2016). Motivating factors and the modes of entry in other markets. *Ecoforum*, 5, 9-18.
59. Zekiri, J. (2016). The motivating factors for entering into foreign markets- The case of Republic of Macedonia. *Fascicle of the Faculty of Economics and Public Administration*, 5, 182-191.

مقاله پژوهشی

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بررسی راهبرد مناسب ورود به بازار بین‌المللی محصولات کشاورزی ارگانیک

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چکیده

افزایش نگرانی مصرف‌کنندگان از کیفیت و ایمنی محصولات کشاورزی در سراسر جهان سبب شده است تا محصولات ارگانیک به یکی از محبوب‌ترین گزینه‌های مصرف سالم و پایدار تبدیل شوند. گرایش و مصرف روزافزون محصولات کشاورزی ارگانیک، رشد فزاینده بازار این محصولات را در دو دهه اخیر به همراه داشته است. به دلیل اهمیت ورود و کسب سهمی از این بازار رو به رشد، این مطالعه به بررسی عوامل مؤثر بر راهبرد ورود به بازار بین‌المللی محصولات ارگانیک و تعیین راهبرد مناسب برای ورود به آن با استفاده مدل سازی معادلات ساختاری می‌پردازد. داده‌های این مطالعه با جمع‌آوری ۹۰ پرسشنامه از تولیدکنندگان محصولات زعفران، پسته و کشمش ارگانیک در سال ۱۴۰۰ با روش نمونه‌گیری در دسترس در استان خراسان رضوی به‌دست آمده است. نتایج به‌دست آمده حاکی از آن است که متغیرهای ریسک و انگیزه ورود به بازار بین‌المللی به طور مستقیم و متغیر مالکیت بر تولید و بازاریابی به‌طور غیرمستقیم و از طریق اثرگذاری بر انگیزه ورود به بازار بین‌المللی، بر راهبرد ورود به بازار بین‌المللی اثر مثبت و معنادار دارند. ضمن این‌که ریسک اثر کاهنده و معنادار بر انگیزه ورود به بازار بین‌المللی محصولات ارگانیک دارد. بر این اساس، راهبرد مناسب برای ورود به بازار بین‌المللی محصولات ارگانیک، راهبردهای غیرمستقیم، مشارکتی و غیرحضوری مانند صادرات غیرمستقیم، تولید قراردادی و سرمایه‌گذاری مشترک به‌دست آمد. از این‌رو، پیشنهاد می‌شود دولت برای حضور مستقیم تولیدکنندگان محصولات ارگانیک در بازارهای بین‌المللی، ریسک‌های ناشی از تحریم و موانع انگیزه‌ای برای ورود به بازار را رفع نموده یا کاهش دهد.

واژه‌های کلیدی: انگیزه، ریسک، مالکیت بر تولید و بازاریابی، محصولات ارگانیک، ورود به بازار

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