

Research Article

Presenting a Model to Evaluate the Factors Affecting Export Performance in International Marketing

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ABSTRACT

This study aims to present a model to evaluate the factors affecting export performance of export-oriented business clusters in Western Tehran. For this purpose, export performance was measured by the effectiveness of export, export sales, and export intensity. 83 companies are studied in this research. The statistical population consists of 209 managers and experts associated with the export of the companies. Due to the limited number of the statistical population, the total population is considered as a statistical sample. The data are collected through a questionnaire consisting of two parts: The questionnaire of factor analysis with regard to the factors identified in earlier studies and the questionnaire of export performance. The questionnaire is given to the sample after examining its validity and reliability. For statistical data analysis, descriptive and inferential statistical methods are used. Descriptive statistics are used for classifying, summarizing and interpreting statistical data. Inferential statistics are used to assess the export performance based on one sample t test and identify factors affecting export performance. Exploratory and confirmatory factor analysis using SPSS 19 software is used to provide a model. Structural equation modeling using LISREL software is used to confirm the proposed model. Four factors (environmental, technical, strategic export marketing capabilities and international management skills) are categorized. Finally, the model of the factors affecting the export performance of export-oriented marketing business clusters in Western Tehran is designed and confirmed.

Keywords: export performance; international marketing; environmental factors; strategic export marketing capabilities

1. Introduction and Problem Statement

Export is the most common way for companies to start marketing activities abroad. One of the main reasons for this is that export compared to other forms of internationalization requires fewer resources. Export has a positive impact on foreign exchange earnings, industrial development, economic development, improvement of the performance of companies, the sales volume, and market share. By globalization and economic integration among

countries, export is considered as an important international strategy for enterprises and national economies (Koksal & Ozgul, 2010). Managers should be aware of the problems and indicators affecting related export performance to exploit available opportunities in the market (Koksal & Kettaneh, 2013).

Various factors affect the company's performance in the international arena: environmental factors, management factors, resources, technology, and

marketing research. Identifying these factors help companies with an increase in understanding their surroundings and countries that want to communicate with them. Further understanding help the companies with developing more effective programs and strategies and they can have more successful performance in the global business arena (Koksal, 2014).

In Iran, a considerable sum is annually spent on export promotion program. Studies show that Iran has little contribution to international markets in spite of high export potentials. Although Iran's exports have an upward trend since the Third National Development Plan, there is still a large gap with favorable conditions. In addition, the composition of exported goods requires improvement (Mousavi Zadeh, 2014).

Iran's export in comparison with the developed countries is significantly lower. According to many experts, different industries and civil services have capabilities needed to succeed in the export. A significant part of the success of countries such as Malaysia, Singapore, China and South Korea can be attributed to the development of their exports in the past two decades. One of the main problems for the developing countries is the excessive reliance on one or a limited number of their revenues or commodities. The experience of recent years shows that economic reliance on revenues from crude oil sales leads to the instability of export earnings (Ghasemi, 2010). What is certain in Iran is that the oil is a non-renewable resource and finally it comes to an end. Thus, the need for the country towards the development of non-oil exports is inevitable (Najafi, 2008). Considering non-oil exports and effective measures to improve it needs to create a competitive environment to promote it. Therefore, it requires an extensive presence in global markets. Due to the growing importance of export, several researches have been done to investigate the characteristics of companies to succeed in export and gain long-term benefits. However, there is not enough export knowledge

and good market information to pave the way for companies in many countries (Zhou & Lin, 2010). Managers should be aware of the problems and indicators affecting related export performance to exploit available opportunities in the market (Koksal & Kettaneh, 2013). Our country is one of the countries where the lack of such research is evident and clear.

The present study helps the exporters and researchers with increasing their knowledge on the topic of the research. Furthermore, the exporters and researchers can evaluate the influencing factors and focus on influential variables to improve performance. The necessity of the present study is made clearer in accordance with Article 104 of the Fifth Development Plan which the government is obliged to enhance partnerships of firms and increasing the share of organizations, networks, clusters, Union of Companies (consortium), large export companies, funds, facilities, incentives and direct and indirect support in the field of non-oil exports in order that Iran would be less dependent on the import. Moreover, the government is obliged to create alignment with the laws and regulations of the country's business sector as well as laws and regulations of the regional and international unions, including the World Trade Organization in order to develop export performance of the country's economic foundations for membership in the World Trade Organization (WTO) (Mousavi Zadeh, 2014).

Hence, this research seeks the answer to this question: "What factors are affecting export performance of export-oriented business clusters in Western Tehran?"

2. Literature Review

Teimouri Nasab (2011) conducted a study to investigate internal factors affecting export performance in petrochemical trading company from the perspective of experts. The conceptual model used in this study is the model proposed by Suhail Nazat and Nawaz Saleem (2009). This

model was a combination of all available models in this regard. The research method was descriptive. Data were collected through two parts, including library and field studies. For data analysis, Excel software was used for registration and data summarization) and Spss software was used to test hypotheses.

A study conducted by Nategh and Nazila Niyakan (2009) focused on identifying and strengthening export performance variables after identifying the problems and limitations of starting export. The factors affecting export performance include controllable internal factors: export marketing strategies and perceptions and approaches to management; uncontrollable internal factors: management features of companies and attributes and competencies, as well as uncontrollable external factors including characteristics of the industry; foreign market characteristics, and characteristics of the domestic market.

Wilson and Perez (2011) investigated the revision of trade facilitation and its impact on export performance. They classified the factors into both hard and soft infrastructures. Hard infrastructures include physical factors (quality of the ports, airports, roads and railways) and information and communication technologies (having the latest technology in the field of communications and information technology, the use of the Internet, the government's priorities in support of communication and information technology). Soft infrastructures include: business environment (business transparency, level of confidence in the government, the level of corruption in government, etc.) and the efficiency of transportation (the documents for export, the import documents, etc.). The results of this study confirmed the factors affecting the export performance.

Sibanda et al. (2013) investigated the difference between good and poor export performance of developing countries and the factors influencing

these differences. Factors affecting the creation of differences in export performance included implementation of the strategy, experience in international trade, economic factors, cultural factors, the size of the company, strategic orientation, education and legal / political factors. Ibrahim and Ogunyemi (2012) investigated the effect of linkages and information sharing on supply chain and export performance. The results of this study showed that the relationship between suppliers and customers will have a positive impact on export performance and supply chain performance.

Freeman et al. (2012) investigated this issue that "Does firm location make a difference to the export performance of SMEs?" They suggested competitive conditions in the environment, the company's relationships with customers, suppliers and other market forces as well as infrastructure and other services. The results showed that the company's position has a positive impact on the performance of big and small exporters.

Martin and Papadopoulos (2013) suggested the relationship between internationalization and export performance in the form of a model. The dimensions of their model include: international experience, international level and international commitment. The results showed that different levels of internationalization have different effects on export performance.

3. Reviewing the basic concepts of the research

3.1 Export Performance

Export performance is defined by the extent to which companies achieve their objectives in the field of economic (profit, sales, costs, etc.) or strategic (market penetration, expand market share, etc.) in foreign markets (Navarro, Losada, Ruzo, & Diez, 2010). Export performance is measured using a single indicator approach. Internal factors, environmental factors, and factors technology of common indicators are used.

3.2 Factors affecting export performance

3.2.1 Environmental Factors

These factors are largely uncontrollable for manufacturing companies. They are affected by various government policies and other affected countries in some cases. Environmental factors of export markets have been identified as factors that play a deterrent role in the development and export success (Cavugil, 1984). In spite of experimental efforts, some studies have shown that these factors have no significant impact on performance, attitude and behavior of the export (Madsen, 1989; quoted from Norolahi, 2013).

In the present study, environmental indicators are measured by rating scale and using the questionnaire with the confirmed validity and reliability according to variables of falling demand in the domestic market, access to international opportunities.

3.2.2 Technology Changes

Solow as a neoclassical economist did a research to investigate the role of technological change in the period 1904- 1909 as an endogenous factor for economic growth in America. Anas (1962) did empirical studies on oil refinery in America. Technological changes in the alpha phase include new features and involve new technologies and the beta phase includes all the technological changes. Mansfield (1968) defines technological changes as advances in the technology, including new methods, new product design, products with new features and new ways of managing, controlling and organizing (Carolyn et al., 2008). In the present study, changes in technology are based on three criteria, including technical knowledge, the use of nanotechnology and the use of machines.

3.2.3 Strategic export marketing capabilities

Strategic export marketing capabilities are those that companies can positively respond to the pressures of market and thereby to achieve their goals. Many people believe that the company's performance in exports is evaluated through

marketing strategies and its ability to use them. Export Marketing Strategy is usually considered as one of the features for companies. However, we consider strategic capabilities as an independent factor in the present study. Strategic export marketing capabilities include those which are used for compatibility with mixed market (such as product, price, promotion, etc.) as well as to coordinate the strategy of marketing channels such as channel type, their relationship. In this study, three factors are considered as follows: international management skills, organizational factors, and cultural factors.

3.2.4 International Management Skills

Skills required by managers may be classified into three groups, including technical, human and conceptual. Skill is based on the capabilities which are reflected in the performance and survival functions. Skill is considered as the ability to apply knowledge and skills of personal experiences. The main criteria of skill are considered as an effective action and act in changing conditions (Parhizgar et al., 2010). Factors for International Management Skills in this article were selected using factor analysis: International experience, foreign language, residence abroad, an international business and managerial perceptions.

3.3 International Marketing

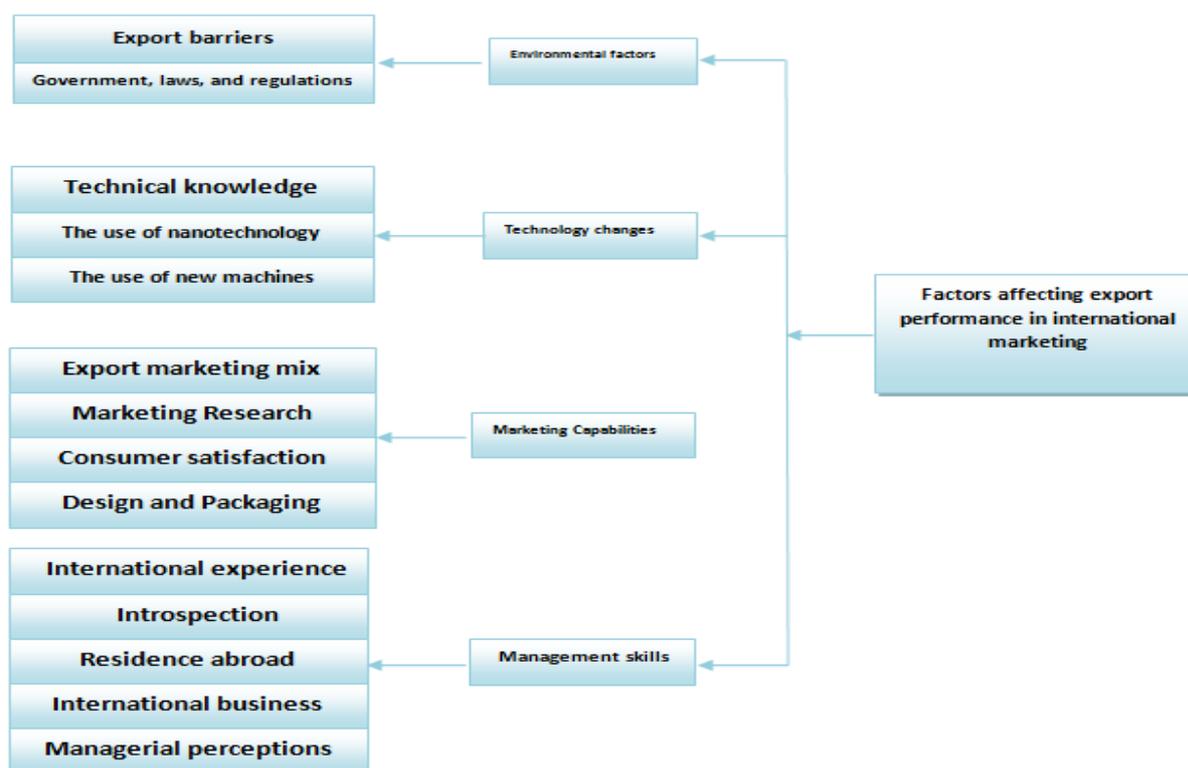
International Marketing can be defined as exchange of goods and services between different national markets involving buyers and sellers. International marketing also includes manufacturing operations and sale of goods and services in more than one country, even if the item passes the borders of a country. For example, Ford Motor Company which its original location is in America exports the car production in Germany to other countries. That's why sometimes international marketing is considered as multinational marketing. It should be noted that the concept and stages of marketing can be performed in all markets and countries. Thus, the distinction between domestic and international

marketing is related to the activities (Babaei et al., 2006; quoted from Norolahi, 2013).

The goal of international marketing is not to be limited by the cost of bringing the goods into markets and doing transactions, but also it tries to create effective competitors. When competition is increasingly dynamic, focused and professional, it seems that marketing operations will continue to focus on market approaches, competitors, products and customers. But we must realize that today we operate in markets that quality is accepted in line with the lower costs (Stanley, 2007).

4. The operational model of factors affecting export performance in international marketing for the studied companies

Concept dimensions indicators



1. Research hypotheses

1- The export performance of export-oriented marketing business clusters in Western Tehran is at a desirable level.

2- Environmental factors of International Marketing are effective in the export performance of export-oriented marketing business clusters in Western Tehran.

3- Factors of technology changes for International Marketing are effective in the export performance of export-oriented marketing business clusters in Western Tehran.

4- Strategic Marketing Capabilities of International Marketing are effective in the export performance of export-oriented marketing business clusters in Western Tehran.

5- International Management Skills of International Marketing are effective in the export performance of export-oriented marketing business clusters in Western Tehran.

6. Methodology

This study is an applied research in terms of the purpose because the purpose of applied research is to obtain evidence or knowledge necessary to determine an instrument whereby the specific

needs are removed. The present study is descriptive and exploratory in terms of the methodology. The statistical population consisted of 209 managers and experts associated with the export of the companies. Due to the limited number of the statistical population, the total population was considered as a statistical sample. The data were collected through a questionnaire consisting of two parts: The questionnaire of factor analysis (14 questions) with regard to the factors identified in earlier studies and the questionnaire of export performance (5 questions). In this study, face validity was used to determine the validity of the instrument of the data collection. Therefore, the initial questionnaire was set and given to faculty members and university experts to receive their opinions on the posed questions. Then, their opinions were applied in the questionnaire and the required changes were performed in the questions. Cronbach's alpha was used to test the reliability of the questionnaire. Using SPSS statistical software, the reliability of questions related to export performance and factors affecting export performance and international marketing was determined by 0.856, 0.890, and 0.789, respectively. For statistical data analysis, descriptive and inferential statistical methods were used. To describe answers to questions for the statistical sample, frequency distribution tables and the percentage of answers to questions were used. Inferential statistics were used to assess the export performance based on one sample t test and identify factors affecting export performance. Exploratory and confirmatory factor analysis using SPSS 19 software was used to provide a model. Structural equation modeling using LISREL software was used to confirm the proposed model.

7. Research Findings

7.1 descriptive findings

The results of descriptive findings showed that about 44.8% of respondents are female and about 55.2% of respondents are male. The average age

and education level of employees in the studied companies show that the highest percentage of people employed in the manufacturing sector has a Bachelor's degree and Master's degree and the highest percentage of people employed in the non-manufacturing sector has a master's degree. The average level of education among the 144 employees was Associate Degree. In addition, the average level of education of people employed in the non-manufacturing sector was Associate Degree. The average age of the company's employees was 36.3. The average level of experience was 10.1. About 26 percent of people in two main categories, including 1 to 5 and 6 to 10 years of experience had the highest percentage of the respondents. 11 to 15 and over 16 years were in the next ranks. The lowest percentage of people with the experience was less than a year, equivalent to 5 %.

7.2 inferential findings

1st hypothesis: The export performance of export-oriented marketing business clusters in Western Tehran is at a desirable level.

One sample t test was used to examine this research question.

Table 1: Descriptive statistics related to the export performance of export-oriented marketing business clusters

	Number	Mean	Standard deviation	standard error
export performance	67	2.46	1.781	0.095

As shown in Table 1, the mean and standard deviation value for the export performance of export-oriented marketing business clusters in Western Tehran is 2.46 and 1.781, respectively.

Table 2: Results of t-test to determine the export performance of export-oriented marketing business clusters

export performance in international marketing	test value = 3					
	T	df	Sig.	Mean difference	Lower	Upper
	234.67	68	0.051	0.671	0.76	0.99

As shown in Table 2, the significance level of one sample t test is 0.051 and it is higher than the minimum level of significance (0.05). For as much as the T value is 234.67, H₀ is confirmed and H₁ is rejected. Hence, the export performance of

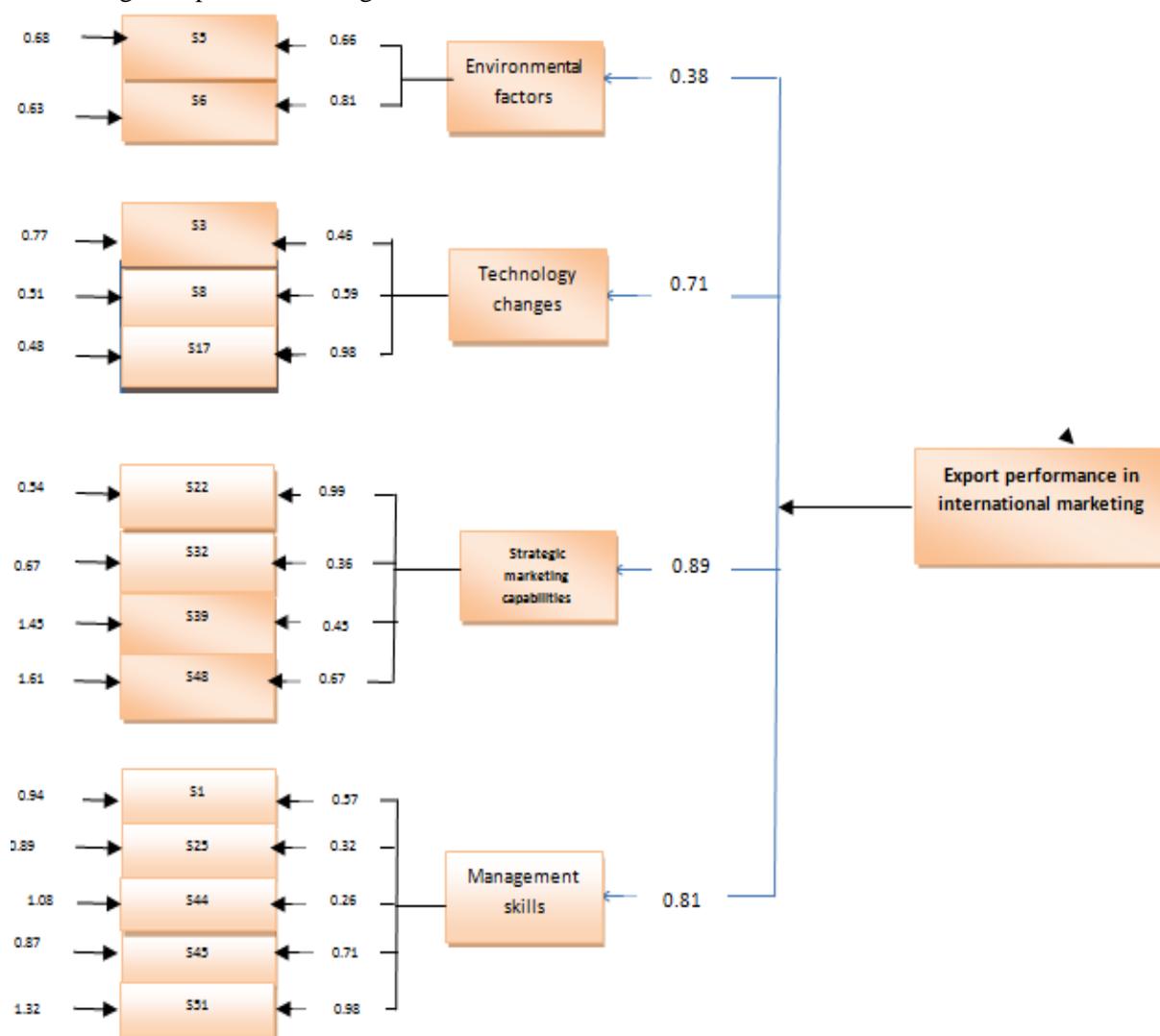
export-oriented marketing business clusters in Western Tehran is lower than the average level.

Factor Analysis

Confirmatory factor analysis using LISREL software was used to answer the hypotheses 2, 3, 4 and 5 that includes the following results:

To confirm the obtained factor structure and the power and significance of test, second order confirmatory factor analysis was performed for the contribution of each variable in the scale of the export performance in international marketing. It is presented in Figures 1 and 2.

marketing for export-oriented marketing business clusters in Western Tehran based on factor loading. Factor loading indicates the correlation between variables. If this correlation is greater than 0.6, it will be considered as high factor loading. If this correlation is greater than 0.3, it will be considered as relatively high factor loading. The results of the above figure show that the correlation of all the above questions is high and the power of the contribution for each variable in the scale of the organizational performance in international marketing for export-oriented marketing business clusters in Western Tehran is



Figures 1: second order confirmatory factor analysis of variable organizational performance in international

at an acceptable and strong level.

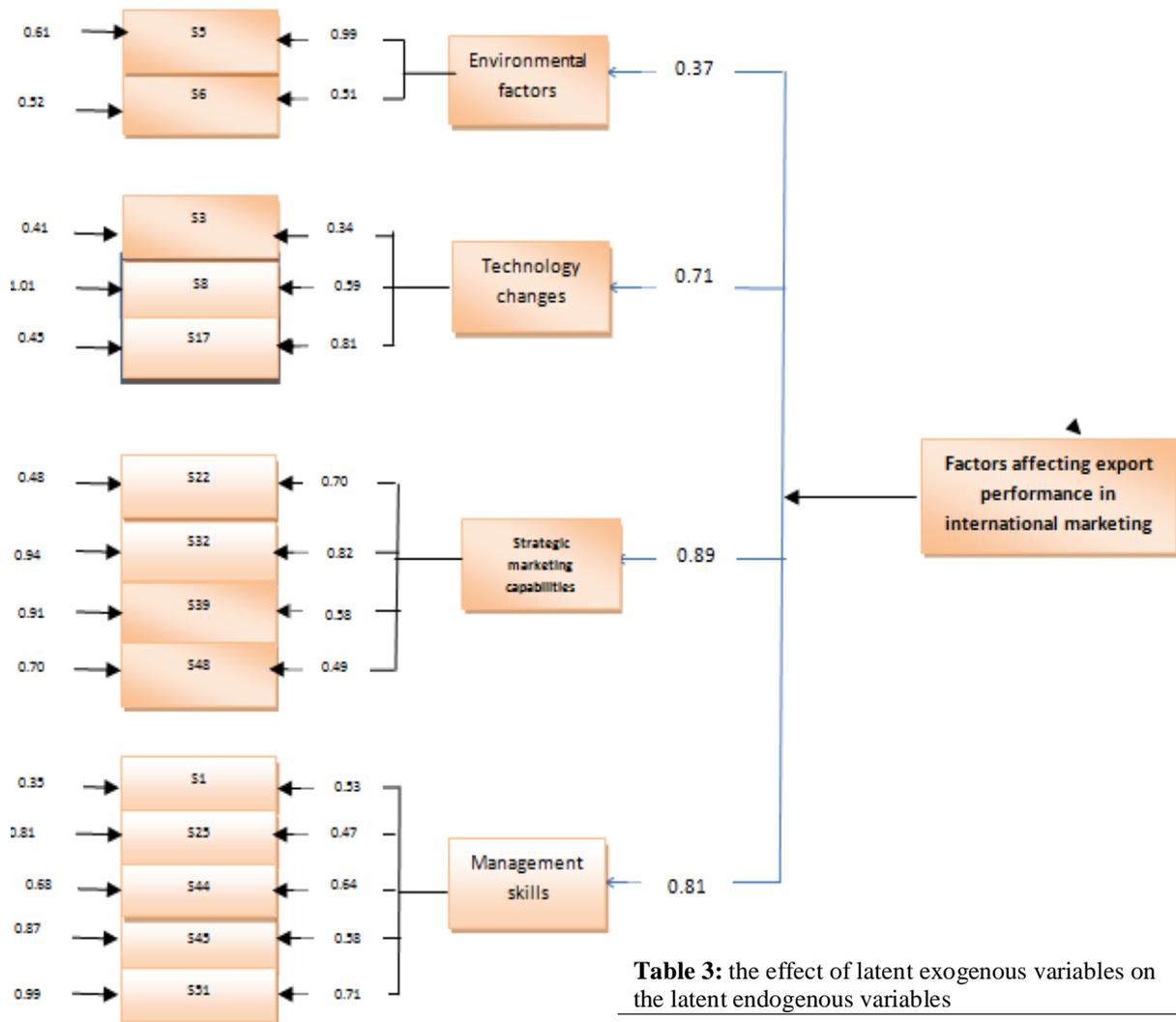


Table 3: the effect of latent exogenous variables on the latent endogenous variables

Path Direction	Parameter estimation	Standardized parameter B	t
Environmental factors → Export Performance	0.56	0.37	5.55
Technology changes → Export Performance	0.95	0.71	7.68
Strategic capabilities → Export Performance	0.65	0.89	6.56
Management skills → Export Performance	0.48	0.81	4.87

T value indicates that the effect of marketing factors, culture, structure, and management skills

Figures 2: second order confirmatory factor analysis of variable export performance in international marketing for export-oriented marketing business clusters in Western Tehran based on significant coefficient

As shown in Figure 1, the estimated coefficients for all paths are significant. Standard parameter values for each variable represent the power of factor loading and t value greater than 1.96 indicates the significance of this contribution. Table 3 shows the effect of latent exogenous variables (Export performance in international marketing) on the latent endogenous variables (Marketing factors, culture, structure and management skills in the international arena).

is significant at a 95% confidence level. Table 4 shows goodness of fit indices of confirmatory factor analysis representing a reasonably good fit to the observed data. In other words, factors affecting export performance are consistent with the data.

Table 4: indicators of goodness of fit for the factors affecting export performance of export-oriented business clusters in Western Tehran

Chi-square test	df	Sig.	Root Mean Square Error of Approximation	Goodness of fit index
2493.4007	67	0.016	0.341	0.87

The most important statistic for goodness of fit is Chi-square test. This statistic measures the difference of the observed and estimated matrix. The lack of significance for this statistic shows the goodness of fit. But the drawback of this statistic is sensitive to sample size. This means that the lack of significance decreases in samples with high volume. The value less than 0.05 for the root mean square error of approximation index and the value higher than 0.9 for goodness of fit index and the adjusted goodness of fit index are considered as the compliance criteria for the observed data. As a result of the findings, the factors affecting export performance of export-oriented business clusters in Western Tehran are confirmed.

8. DISCUSSION AND CONCLUSION

This study began with the premise that the dimensions of this model can identify factors affecting export performance in international marketing and it is an ideal model to do any research on the factors influencing export performance. In addition, the designed questionnaire based on this model is a basic tool for these factors.

The final model was experimentally tested to assess its reliability and the results of which were presented in the findings section. The analysis of the results is presented as follows.

The environmental factor was one of the factors in this study affecting export performance in international marketing. The results of analysis

for the path coefficient and the significant value for the first hypothesis showed that the effect of environmental factors on export performance is positive.

The results of this research related to export barriers are consistent with the results of the studies conducted by Cicic, Patterson, and Shoham (2002), Najafi Majd (2008), Allen and Aldred (2011), Wheeler, Ibeh, and Dimitratos (2008), and Perez and Wilson (2011). In previous studies, environmental factors under the control of the government are considered as negative effects. According to Bourgeois (1980), the environment can be conceptualized as attributes (opposite uncertain, dynamic) or as an activity (such as work or overall environment). The overall conclusion is that export barriers imposed by the government will decrease export success in that country. In addition, Iranian exporters are faced with certain restrictions and the well-known obstacles in the way of export such as international sanctions, sanctions on Central Bank and other banks that receive and pay money are faced with serious problems. The legal problems can solve waste bureaucratic and rising inflation and the government to adopt measures that are supportive of exporting companies.

The effect of technology changes on export performance in international markets was also positive and significant. The results of this research are consistent with the results of the study conducted by Pandza, Wilkins, and Alfoldi (2011). In fact, a drawback for the studied companies from the perspective of managers was that export companies cannot successfully use the technical facilities in their activities. On the other hand, Successful export companies in the world use new technologies such as nanotechnology in the production and packaging of their products. The use of modern innovations and new machines will allow companies to generate new and diverse products with lower wage costs

which are considered as an important competitive advantage for companies.

The results of analysis for the path coefficient and the significant value for the second hypothesis showed that the effect of internal factors on export performance is positive. Results of this study are consistent by the results of the studies conducted by Theingi and Purchase (2011) in terms of marketing, Ibrahim and Ogunyemi (2012) in terms of export marketing mix, marketing research, consumer satisfaction, design, packaging, and suppliers. O'cass A. and Julian, C. (2003) consider export marketing strategy as one of the factors affecting the export performance. The important issue is the choice of adaptation strategies or identical products and services. Other factors affecting export performance include specific features of companies, product attributes and features are export market.

In the last hypothesis, the effect of management features on the export performance was evaluated in international marketing. In explaining this result, we can refer to the analytical model of Leonid et al. (1991), and Ebi and Slater (1989) which consider management factors as the main determinants of export success.

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