A Study on the Effective Factors on the Development of Gypsum and Salt Export in Jenah in Hormozgan Province

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Abstract: This study seeks to study the effective factors on the development of gypsum and salt export in Jenah region of Hormozgan Province. The statistical universe of this research comprises all managers and exporters in the gypsum and salt industry in Hormozgan Province. The studied sample size was estimated 130 by using Cochran formula. To measure export development, Da Silva and Da Rocha 30-item questionnaire was used; this questionnaire has been designed for measuring the effective factors on the development of export from five aspects namely, financial factors, political factors, managerial factors, cultural factors and technological factors. Having examined descriptive statistics of the research variables, validity and reliability of the questionnaire and data normality, the effect of each variable on the development of gypsum and salt export was studied by using t student test and the variables and their indices were prioritized by Friedman ranking. The results revealed that through the lens of respondents and by 99% confidence, technological and managerial factors are the mere obstacles to the development of gypsum and salt export in Hormozgan Province. The most important technological obstacles are namely, warehousing and control of physical goods flow in the destination country, access to the wholesalers or retailers in the destination country, difficulty of employing qualified persons or companies for the export-related activities and the most important managerial obstacles are namely, lack of managerial schedule and lack of export management skills.

Keywords: Effective factors on export, export development, gypsum, salt

INTRODUCTION

Nowadays export quantity is one of the important indices of development in the advanced countries. Iran, as a developing country, cannot play an important role relying upon vulnerable oil economy in the world trade. So to success in the economic development and establish a logical relationship with foreign trade and develop non-oil export, the economy must be quickly adapted to the global developments. Export, as the driving engine of the economy and a key to the survival of the countries in the global markets, plays an important role in the economic arena. On the other hand, export has provided the stage of using global markets for domestic product growth and makes manufacturing enterprises able to be released from local market constraints and target global markets by export development and utilize economic efficiency resulted from more production scale. One of the main concerns of our country is to reduce reliance upon oil incomes. Accordingly, the government must try to support and strengthen production and services sectors, particularly sectors in which it has absolute or comparative advantage by adopting some policies.

By applying active trade strategies, making revolution in the information and communication technology and removing trade obstacles at the international levels, growth of global trade has been increased. So, active presence in the global trade does not need to be justified. Scientific studies have proved that economic growth of the countries is associated with their export to some reasons (Yavari, 2009). Based on the research carried out in the United States, every one billion Dollar increase in exports increases incomes by two billion Dollar and tax revenues by 400 million Dollars and creates about 50 to 70 thousands new jobs (Maleki, 1996).

Therefore this study seeks to identify the effective factors on export development by considering gypsum and salt industry as a case study and then specifies the importance of each identified factor through mathematical and scientific methods so as to create a complete vision for policy makers in export development area (particularly in gypsum and salt industry).

RESEARCH LITERATURE

Theoretical bases: Export means transportation of a product from one country to other countries for sale or

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exchange in which legal requirements are taken into account. In export, ownership advantages are important. These advantages are namely, special assets of the company, international experience of the company and capability of cost reduction or development of distinct products in the value chain (Moghimi and Ramezan, 2011).

Financial factors of export development are namely, lack of adequate exchange rate policies, high insurance and transportation costs, slow payment collection in abroad and so on (Moghimi and Ramezan, 2011).

Political factors of export development are namely, political instability inside and outside the country, instability in the foreign markets, difficulty in selecting a local representative in the foreign markets and so on (Moghimi and Ramezan, 2011).

Managerial factors of export development are namely, increase in the export management sophistication, lack of adequate knowledge in the government supporting plans for export and so on (Moghimi and Ramezan, 2011).

Cultural factors of export development are namely, administrative corruption in the countries, language and cultural differences, administrative corruption in the target market and so on (Moghimi and Ramezan, 2011).

Technological factors of export development are namely, quality requirements in the production technology, necessity of compliance of promotional activities with foreign markets, proper technology for transportation to the target market and so on (Moghimi and Ramezan, 2011).

Research background: With regard to the importance of export issue in the foreign and local sectors and its effect on the country economic cycle, foreign and internal researchers have carried out some research in this regard.

Tesfom and Lutz (2006) state in their research that export internal obstacles in the companies pertain to lack of adequate resources for export marketing, problems related to the access to the quality standards, creation of a proper image for the foreign market, weak organization and lack of qualified employees for managing export activities, financial incapability and lack of sufficient information about foreign markets; and foreign obstacles include quite different performance of foreign customers, unfamiliarity with working procedures and activities, tariff obstacles and laws pertaining to other countries import, competitive forces, inflation rate and restricted supply of some currencies. Bilkey (1978) underscored dynamic nature of export obstacles and showed that the more the companies get engaged in exports, the more they link their problems to lack of proper understanding of foreign trade activities. Durmuşoğlu et al. (2012) studied the effect of export development services and tools designed by the government on 143 small and medium sized companies in Turkey. The model presented by them considers the export performance with a four-dimensional vision and shows that export development plans of the government influence all four dimensions of export performance. These four dimensions are namely:

- Financial performance
- Goals of beneficiaries
- Strategic goals
- Organizational learning goals

Also in this research, tools and services of export development are divided into two major groups:

- Objective knowledge provider
- Empirical knowledge provider

Azad et al. (2013) has studied the empirical research regarding the effective factors on electronic banking for export development. The results reveal that five factors including internet infrastructures, advanced services, usability and design of information are among the effective factors on electronic banking for export development. Gul et al. (2013) have studied the effective factors on Pakistan export demand. This research has been carried out during 1990-2010. The results reveal that export demand is reduced by increase in real effective exchange rate. There was an insignificant relation between Pakistan export demand and export price of nominal variable and exchange rate. Also there was a positive significant relation between Pakistan export demand and global income.

Sharafinejad (2007) in a study titled as "Prioritization of effective factors on export development in small and medium sized industries" indentified 25 indices in 3 groups of low, moderate and high in terms of importance. The most important indices are prioritized as products quality, management strategic attitude, intensity of internal competition, capacity of management knowledge, raw materials, technology utilization, sale promotion, marketing research, lack of unexpected fluctuations, advertisements, enjoying infrastructures, related supporting industries, financial resources, role of government and scientific and research facilities.
A study titled as "A study on the effect of government policies on the company export" try to study the direct and indirect effects of the government export development plans on the companies export performance in a comprehensive model. The results reveal that there is no direct and indirect relation between export development plans and export performance. Saeida Ardakani and Sayadi Turanlu (2012) has analyzed challenges and solutions of non-oil export development. The results indicate that quality of textile products and strategic attitude for presence in the global markets are among the most important effective factors on textile products export development.

MATERIALS AND METHODS

Research model: In this study, gypsum and salt export development is the dependent variable and financial, political, managerial, cultural and technological factors are independent variables.

The operational and proposed model of the present study has been derived from the conceptual model of export development. These criteria have been designed by Da Silva and Da Rocha (2001). Research operational model is shown in Fig. 1.

Research method: This study is regarded as an applied research in terms of objective and a descriptive-analytical research in terms of data collection and processing. Also it is a survey in terms of control manner.

Data collection: As regards the research theoretical bases, library data collection method will be used. At the first stage, the effective factors on export development have been identified by using library studies. At the second stage, data pertaining to the identified factors has been gathered through questionnaire and by referring to the experts of gypsum and salt industry in Hormozgan Province. Da Silva and Da Rocha (2001) 30-item questionnaire has been used to measure export development. This questionnaire has been designed for measuring the effective factors on export development in five dimensions namely, financial factors, political factors, managerial factors, cultural factors and technological factors. It has used five-point scale for answers (fully agree = 1 to fully disagree = 5). To examine validity and reliability of the above questionnaire, factor analysis and Cronbach's alpha coefficient statistical methods have been used.

Statistical universe: Statistical universe of this study comprises all managers and exporters in gypsum and salt industry in Hormozgan Province. With regard to the unknown number of population, sample size can be estimated by using Cochran formula:

\[ n = \left( \frac{Z_{a/2} \times \sigma}{\varepsilon} \right)^2 \]

When we have Likert five-point scale, the value of \( \sigma \) is obtained by below relation:

\[ \sigma = \frac{\text{max} (x_i) - \text{min} (x_i)}{6} = \frac{5-1}{6} = 0.667 \]

So,

If \( \alpha = 0.1 \), then \( Z_{a/2} = 1.645 \) and by considering the probable precision (0.1):

\[ n = \left( \frac{1.645 \times 0.667}{0.1} \right)^2 = 120.388 \cong 121 \]

The number of research sample was estimated 121 by using Cochran formula. It was considered 130 to compensate not replied questionnaires.

In this study, the effective factors on export development have been specified by a number of

![Fig. 1: Research operational model](image-url)
questions in the export development questionnaire. There is 30 five-point questions; the score 30 represents the minimum effect of effective factors on export development and the score 150 indicates the maximum effect.

**Data analysis:** For descriptive statistics, dispersion and central indices with diagrams fitting with tables have been used. Also in deductive statistics and to estimate the hypotheses results and obtain values required for statistical analyses, Kolmogorov-Smirnov test, single-sample t test and Friedman test have been used by SPSS version 18.

In the following, the above mentioned statistical methods are briefly explained.

Two-sample Kolmogorov-Smirnov test is applied when we have two samples and want to compare goodness of fit between those two samples. In the other words, one-sample Smirnov test is used for evaluating goodness of fit of ordinal variables in two samples (independent or dependent) or comparing goodness of fit of distribution of a sample with the distribution assumed for the population.

This test is used when the variables are ordinal and distribution of ordinal variables can be specified in the population. This test is implemented through comparing relative frequency distribution observed in the sample with the relative frequency distribution of the population. This test is non-parametric and without distribution, but variable distribution in the population for each ordinal scale rank must be considered comparatively which is called the expected ratio.

Friedman test is one of the statistical tests used for comparing several groups and determines whether these groups can belong to a population or not.

The scale in this test must be at least ordinal. This test corresponds to F test and it is usually used in ordinal scales instead of F test. In F test, variances homogeneity must exist which is rarely observed in the ordinal scales.

Friedman test is used for two-sided variance analysis (for non-parametric data) and also for comparing ranking mean of different groups.

**Descriptive statistics of the research variables:** The research variables are measured by averaging the

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Median</th>
<th>S.D.</th>
<th>Minimum value</th>
<th>Maximum value</th>
<th>Sum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial factors</td>
<td>2.8436</td>
<td>2.8889</td>
<td>0.42252</td>
<td>1.78</td>
<td>4.22</td>
<td>369.67</td>
</tr>
<tr>
<td>Political factors</td>
<td>1.3897</td>
<td>1.3333</td>
<td>0.33498</td>
<td>1</td>
<td>2.33</td>
<td>180.67</td>
</tr>
<tr>
<td>Technological factors</td>
<td>3.3288</td>
<td>3.375</td>
<td>0.25911</td>
<td>2.63</td>
<td>4.13</td>
<td>432.75</td>
</tr>
<tr>
<td>Managerial factors</td>
<td>3.1523</td>
<td>3.2</td>
<td>0.30173</td>
<td>2.4</td>
<td>4</td>
<td>409.8</td>
</tr>
<tr>
<td>Cultural factors</td>
<td>2.4662</td>
<td>2.4</td>
<td>0.45059</td>
<td>1.4</td>
<td>3.4</td>
<td>320.6</td>
</tr>
</tbody>
</table>

T student test is applied for evaluation of goodness of fit or equality of sample average with the population average when the standard deviation of the population is unknown. Since t distribution in small samples is moderated by using degrees of freedom, this test is used for very small samples. Also this test is used when the standard error of the population is unknown and standard error of the sample is known. To apply this test, the studied variable must be in the distance scale, its distribution form must be normal.

T student test in applied in below states:

- Comparison of a hypothetical number with the population average
- Comparison of two populations averages
- Comparison of a hypothetical ratio with a ratio obtained from the sample
- Comparison of two ratios of two populations

Friedman test is one of the statistical tests used for comparing several groups and determines whether these groups can belong to a population or not.

The scale in this test must be at least ordinal. This test corresponds to F test and it is usually used in ordinal scales instead of F test. In F test, variances homogeneity must exist which is rarely observed in the ordinal scales.

Friedman test is used for two-sided variance analysis (for non-parametric data) and also for comparing ranking mean of different groups.

![Fig. 2: Comparison of the research variables mean](image-url)
related questions out and their descriptive features are presented in Table 1. Also Comparison of the research variables mean is shown in Fig. 2.

As seen in the diagram, technological factors have the maximum prevention and political factors have the minimum prevention for gypsum and salt export development in Hormozgan Province.

Validity and reliability of the questionnaire:

**Questionnaire validity:** To measure the questionnaire validity, professors and experts opinions were used and their probable corrections were exerted. This method helps us to find out to what extent the method and measurement tool can fulfill the research goals, whether the results obtained in pre-test can evaluate hypotheses and answer the research questions or not and finally to what extent this method and these tools measure the reality of the problem. By gaining the opinions of the industrial and academic experts, changing some of the questions and converting them into more understandable questions for the statistical universe and finally removing some indices or questions and adding other important questions, the questionnaire validity was fulfilled.

**Questionnaire reliability:** To identify the questionnaire reliability, Cronbach's alpha coefficient was used. The value of the questionnaire Cronbach's alpha coefficient was estimated 0.737 which is more than 0.70. So, the questionnaire reliability was approved. The output tables of SPSS software are presented in Table 2 and 3.

**Deductive statistics:**

**Data normality test:** Before testing the research hypotheses, data normality must be examined to determine whether parametric tests can be used or not. testing data normality by Kolmogorov-Smirnov test is shown in Table 4.

With regard to the significance level that is more than 0.05 for all five variables, the assumption of normal distribution in the related populations is not rejected at a 95% confidence level. So, parametric tests can be used for testing these variables.

**Research hypotheses test:** To examine the research hypotheses, single sample t test is used and to rank variables, Friedman ranking test is applied. For t test, below hypothesis is raised:

\[
H_0: \mu = 3 \\
H_1: \mu \neq 3 
\]

According to this hypothesis, if null hypothesis \((H_0)\) is rejected and the mean value is more than 3, then the related variable is an obstacle to gypsum and salt export development.

**First hypothesis:** Financial factors of gypsum and salt export development in Jenah region of Hormozgan Province are an obstacle to the gypsum and salt export development.

With regard to the significance level (p-value) in the above table that is less than 0.05 for financial factors variable, null hypothesis is rejected. Since the mean value is less than 3, financial factors are not an obstacle to the gypsum and salt export in Hormozgan Province. So the research first hypothesis is not approved. testing first hypothesis by using t test is shown in Table 5.

**Second hypothesis:** Political factors of gypsum and salt export development in Jenah region of Hormozgan Province are an obstacle to the gypsum and salt export development.

With regard to the significance level (p-value) in the above table that is less than 0.05 for political factors variable, null hypothesis is rejected. Since the mean value is less than 3, political factors are not an obstacle to the gypsum and salt export in Hormozgan Province. So the research second hypothesis is not approved. testing second hypothesis by using t test is shown in Table 6.

**Third hypothesis:** Managerial factors of gypsum and salt export development in Jenah region of Hormozgan Province are an obstacle to the gypsum and salt export development.

With regard to the significance level (p-value) in the above table that is less than 0.05 for managerial factors variable, null hypothesis is rejected. Since the mean value is less than 3, managerial factors are not an obstacle to the gypsum and salt export in Hormozgan Province. So the research third hypothesis is not approved. testing third hypothesis by using t test is shown in Table 7.
Table 5: Testing first hypothesis by using t test

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>S.D.</th>
<th>T statistic</th>
<th>Degree of freedom</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial factors</td>
<td>2.8436</td>
<td>0.42252</td>
<td>-4.221</td>
<td>129</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Table 6: Testing second hypothesis by using t test

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>S.D.</th>
<th>T statistic</th>
<th>Degree of freedom</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Political factors</td>
<td>1.3897</td>
<td>0.33498</td>
<td>-54.809</td>
<td>129</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Table 7: Testing third hypothesis by using t test

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>S.D.</th>
<th>T statistic</th>
<th>Degree of freedom</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managerial factors</td>
<td>3.1523</td>
<td>0.30173</td>
<td>5.755</td>
<td>129</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Table 8: Testing fourth hypothesis by using t test

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>S.D.</th>
<th>T statistic</th>
<th>Degree of freedom</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural factors</td>
<td>2.4662</td>
<td>0.45059</td>
<td>-13.508</td>
<td>129</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Table 9: Testing fifth hypothesis by using t test

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>S.D.</th>
<th>T statistic</th>
<th>Degree of freedom</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technological factors</td>
<td>3.3288</td>
<td>0.25911</td>
<td>14.471</td>
<td>129</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Table 10: The result of Friedman test for obstacles of gypsum and salt export development

<table>
<thead>
<tr>
<th>Variable</th>
<th>Rank mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technological factors</td>
<td>4.50</td>
</tr>
<tr>
<td>Managerial factors</td>
<td>3.93</td>
</tr>
<tr>
<td>Financial factors</td>
<td>3.20</td>
</tr>
<tr>
<td>Cultural factors</td>
<td>2.31</td>
</tr>
<tr>
<td>Political factors</td>
<td>1.07</td>
</tr>
</tbody>
</table>

Province are an obstacle to the gypsum and salt export development.

With regard to the significance level (p-value) in the above table that is less than 0.05 for managerial factors variable, null hypothesis is rejected. Since the mean value is more than 3, managerial factors are an obstacle to the gypsum and salt export in Hormozgan Province. So the research third hypothesis is approved. testing third hypothesis by using t test is shown in Table 7.

**Fourth Hypothesis**: Cultural factors of gypsum and salt export development in Jenah region of Hormozgan Province are an obstacle to the gypsum and salt export development.

With regard to the significance level (p-value) in the above table that is less than 0.05 for cultural factors variable, null hypothesis is rejected. Since the mean value is less than 3, cultural factors are not an obstacle to the gypsum and salt export in Hormozgan Province. So the research fourth hypothesis is not approved. testing fourth hypothesis by using t test is shown in Table 8.

**Fifth hypothesis**: Technological factors of gypsum and salt export development in Jenah region of Hormozgan Province are an obstacle to the gypsum and salt export development.

With regard to the significance level (p-value) in the above table that is less than 0.05 for technological factors variable, null hypothesis is rejected. Since the mean value is more than 3, technological factors are an obstacle to the gypsum and salt export in Hormozgan Province. So the research fifth hypothesis is approved. testing fifth hypothesis by using t test is shown in Table 9.

**Ranking obstacles of export development**: By using Friedman test, obstacles to development of gypsum and salt export in Hormozgan Province are prioritized.

According to the results of Friedman test (Table 10), technological factors (4.50) have the first rank as an obstacle to the development of gypsum and salt export. Then managerial factors (3.93), financial factors (3.20), cultural factors (2.31) and political factors (1.07) have been identified as the next obstacles to the development of gypsum and salt export in Hormozgan Province.

**Ranking indices of financial factors**: According to the results of Friedman test (Table 11), among indices of financial obstacles, costs related to the establishment of company in the foreign country (7.76) have the first rank as a financial obstacle to the development of gypsum and salt export in Hormozgan Province. Finally, inadequate incentives for export (3.63) have the last rank as a financial obstacle to the development of gypsum and salt export in Hormozgan Province.

**Ranking indices of political factors**: According to the results of Friedman test (Table 12), among indices of political obstacles, lack of government supporting plans for export (2.41) has the first rank as a political obstacle to the development of gypsum and salt export in Hormozgan Province and political instability in Iran (1.56) has the last rank as a political obstacle to the development of gypsum and salt export in Hormozgan Province.

**Ranking indices of technological factors**: According to the results of Friedman test (Table 13), among indices of technological obstacles, warehousing and
Table 11: The result of Friedman ranking for financial obstacles

<table>
<thead>
<tr>
<th>Number of question</th>
<th>Index</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Costs related to the establishment of the company in the foreign country</td>
<td>7.67</td>
</tr>
<tr>
<td>9</td>
<td>Lack of financial resources</td>
<td>6.30</td>
</tr>
<tr>
<td>4</td>
<td>Costs of local competitions development</td>
<td>5.84</td>
</tr>
<tr>
<td>6</td>
<td>Non-tariff obstacles for Iranian goods in the destination country</td>
<td>4.59</td>
</tr>
<tr>
<td>2</td>
<td>Lack of adequate exchange rate policies</td>
<td>4.57</td>
</tr>
<tr>
<td>3</td>
<td>Long transportation and insurance costs</td>
<td>4.48</td>
</tr>
<tr>
<td>8</td>
<td>Slow foreign payments process</td>
<td>4.12</td>
</tr>
<tr>
<td>1</td>
<td>Ample international competition in gypsum and salt industry</td>
<td>3.80</td>
</tr>
<tr>
<td>7</td>
<td>Inadequate incentives for export</td>
<td>3.63</td>
</tr>
</tbody>
</table>

Table 12: The results of Friedman test for political obstacles

<table>
<thead>
<tr>
<th>Number of question</th>
<th>Index</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Lack of government supporting plans for export</td>
<td>2.41</td>
</tr>
<tr>
<td>12</td>
<td>Political instability in the foreign market</td>
<td>2.03</td>
</tr>
<tr>
<td>11</td>
<td>Political instability in Iran</td>
<td>1.56</td>
</tr>
</tbody>
</table>

Table 13: The results of Friedman test for technological obstacles

<table>
<thead>
<tr>
<th>Number of question</th>
<th>Index</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>Warehousing and controlling physical products flow in the destination country</td>
<td>6.55</td>
</tr>
<tr>
<td>20</td>
<td>Difficult access to the wholesalers or retailers in the destination country</td>
<td>6.37</td>
</tr>
<tr>
<td>18</td>
<td>Difficulty in employing qualified persons or companies for export-related activities</td>
<td>5.86</td>
</tr>
<tr>
<td>16</td>
<td>Difficulty in finding local representative in the destination country</td>
<td>5.55</td>
</tr>
<tr>
<td>17</td>
<td>Lack of transportation services to the destination country</td>
<td>4.67</td>
</tr>
<tr>
<td>14</td>
<td>Insufficient knowledge in the field of potential markets for gypsum and salt industry</td>
<td>2.60</td>
</tr>
<tr>
<td>15</td>
<td>Insufficient knowledge in the field of required business activities in the destination country</td>
<td>2.37</td>
</tr>
<tr>
<td>13</td>
<td>Quality requirements in gypsum and salt industry</td>
<td>2.04</td>
</tr>
</tbody>
</table>

Table 14: The results of Friedman test for managerial obstacles

<table>
<thead>
<tr>
<th>Number of question</th>
<th>Index</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>Lack of managerial schedule</td>
<td>4.07</td>
</tr>
<tr>
<td>22</td>
<td>Lack of export management skills</td>
<td>3.98</td>
</tr>
<tr>
<td>23</td>
<td>Increase in managerial sophistications</td>
<td>3.95</td>
</tr>
<tr>
<td>25</td>
<td>Cumbersome bureaucracy in other countries</td>
<td>1.60</td>
</tr>
<tr>
<td>24</td>
<td>Cumbersome bureaucracy in Iran</td>
<td>1.41</td>
</tr>
</tbody>
</table>

Table 15: The results of Friedman test for cultural obstacles

<table>
<thead>
<tr>
<th>Number of question</th>
<th>Index</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>29</td>
<td>Difficulties related to the language and culture</td>
<td>4.55</td>
</tr>
<tr>
<td>30</td>
<td>Corruption in the destination country</td>
<td>3.95</td>
</tr>
<tr>
<td>28</td>
<td>Lack of acceptance of Iranian goods in the foreign markets</td>
<td>2.28</td>
</tr>
<tr>
<td>26</td>
<td>Necessity of adapting promotional activities in the foreign markets</td>
<td>2.27</td>
</tr>
<tr>
<td>27</td>
<td>Corruption in Iran</td>
<td>1.95</td>
</tr>
</tbody>
</table>

controlling physical products flow in the destination country (6.55) have the first rank as a technological obstacle to the development of gypsum and salt export in Hormozgan Province. Difficult access to the wholesalers or retailers in the destination country, difficulty in employing qualified persons or companies for export-related activities, difficulty in finding local representative in the destination country and lack of transportation services to the destination country are among the most important technological obstacles to the development of gypsum and salt export in Hormozgan Province. Finally, quality requirements in gypsum and salt industry have the last rank as a technological obstacle to the development of gypsum and salt export in Hormozgan Province.

Ranking indices of managerial factors: According to the results of Friedman test (Table 14), among indices of managerial obstacles, lack of managerial schedule (4.07) has the first rank as a managerial obstacle to the development of gypsum and salt export in Hormozgan Province. Then lack of export management skills and increase in managerial sophistications are among the most important managerial obstacles to the development of gypsum and salt export in Hormozgan Province. Finally cumbersome bureaucracy in Iran (1.41) has the last rank as a managerial obstacle to the development of gypsum and salt export in Hormozgan Province.

Ranking indices of cultural factors: According to the results of Friedman test (Table 15), among indices of cultural obstacles, difficulties related to the language and culture (4.55) have the first rank as a cultural obstacle to the development of gypsum and salt export in Hormozgan Province. And finally corruption in Iran (1.95) has the last rank as a cultural obstacle to the development of gypsum and salt export in Hormozgan Province.
CONCLUSION

Summary of T student test results: To test hypotheses and investigate the effect of each factor as an obstacle to the development of gypsum and salt export, t student test was used and the results revealed that through the lens of respondents and by 99% confidence, only technological and managerial factors are the obstacles to the development of gypsum and salt export in Hormozgan Province.

In t test, for all factors, p-values are less than 5% significance level and even less than 1%, but since only the mean value of technological and managerial factors are higher than test value, i.e., 3, only these two factors are the obstacles to the development of gypsum and salt export in Hormozgan Province.

Summary of factors prioritization results: The results of ranking obstacle revealed that obstacle to the development of gypsum and salt export in Hormozgan Province are ranked as: technological factors, managerial factors, financial factors, cultural factors and political factors.

Summary of indices prioritization results:

- Friedman ranking results showed that financial obstacles to the development of gypsum and salt export in Hormozgan Province are prioritized as:
  - Costs related to the establishment of the company in the foreign country
  - Lack of financial resources
  - Non-tariff obstacles for Iranian goods in the destination country
  - Lack of adequate exchange rate policies
  - Long transportation and insurance costs
  - Slow foreign payments process
  - Ample international competition in gypsum and salt industry
  - Inadequate incentives for export
- Friedman ranking results showed that political obstacles to the development of gypsum and salt export in Hormozgan Province are prioritized as:
  - Lack of government supporting plans for export
  - Political instability in the foreign markets
  - Political instability in Iran
- Friedman ranking results showed that technological obstacles to the development of gypsum and salt export in Hormozgan Province are prioritized as,
  - Warehousing and controlling physical products flow in the destination country
  - Difficult access to the wholesalers or retailers in the destination country
  - Difficulty in employing qualified persons or companies for export-related activities
  - Difficulty in finding local representative in the destination country
  - Lack of transportation services to the destination country
  - Insufficient knowledge in the field of potential markets for gypsum and salt industry
  - Insufficient knowledge in the field of required business activities in the destination country
  - Quality requirements in gypsum and salt industry
- Friedman ranking results showed that managerial obstacles to the development of gypsum and salt export in Hormozgan Province are prioritized as:
  - Lack of managerial schedule
  - Lack of export management skills
  - Increase in managerial sophistications
  - Cumbersome bureaucracy in other countries
  - Cumbersome bureaucracy in Iran
- Friedman ranking results showed that cultural obstacles to the development of gypsum and salt export in Hormozgan Province are prioritized as:
  - Difficulties related to the language and culture
  - Corruption in the destination country
  - Lack of acceptance of Iranian goods in the foreign markets
  - Necessity of adapting promotional activities in the foreign markets
  - Corruption in Iran

SUGGESTIONS FOR FUTURE RESEARCH

In this study, some suggestions for future research are presented:

- Studying the status of gypsum and salt export in Iran and comparing it with international standards based on existing capacities
- Studying the existing standards in the gypsum and salt area in order to modify and adapt them to the country needs
- Studying the status of export and import of gypsum and salt in the potential provinces to measure the export status in the whole country

REFERENCES


