

## The impact of marketing and communication infrastructures on export

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**Abstract.** The main purpose of this article is to study and highlight the important role of governmental support in promoting and developing export companies. This paper studies the impact of environmental factors on companies' exporting status in Iran. This research is conducted by using questionnaires as its tool. They are completed by exporting firms. Sample size is calculated based on Cochran formula. Based on the questionnaires two hypotheses are introduced. Validity of the questionnaires is achieved by consulting with research experts and reliability of it is measured by using Cronbach's Alpha coefficient ( $\alpha=0.84$ ). Finally the results are evaluated descriptively and analytically. Regarding Cronbach's Alpha of 0.84, it is confirmed that Communication and Marketing infrastructure had a great influence on companies' export status.

**Keywords:** environmental factors, exports, development, infrastructures

### 1. Introduction

As a result of the increasing tendency towards a global economy and the interdependence of countries for resources, goods and commercial services, international business involvement is becoming particularly relevant both in terms of national prosperity and for individual organizations. Exporting constitutes the most popular, quickest and easiest way for many small firms to internationalize [1]. To overcome the difficulties experienced by firms in their attempt to expand beyond home markets, Samiee and Roth [2] advise firms to develop effective global strategies in their endeavors to achieve sustainable competitive advantage in international markets. Despite the calls for an increased research focus on export pricing, little tangible development has been made. Two possible reasons for this neglect are cited: the complex nature of international pricing and the reluctance of managers to discuss the issue. The second one refers to the absence of suitable international pricing theories [3]. Today, no country can live in complete separation from other countries [4]. In sum, exporting may assume an important role within the firm as a means of reducing production costs, stabilizing cyclical demand, reaching new markets and gaining experience for other forms of internationalization [5] & [6]. Export is introduced as an essential strategy to guaranty the growth and the survival of companies [4]. This continuity is caused by environmental changes and instability in market conditions that create the need to modify the price. Since price is one the main factors affecting consumers' decision on buying a product, choosing inappropriate price may have irreparable impact on companies and may lead to reduction in profit, market share and firms' credits. McKinsey's consulting firm reported that in 2462 companies that they have explored just 1 percent improvement in prices can increase profit up to 11.1% [7]. In our country, since there is no specific strategy for export development, Iran's presence in the target markets is limited. According to the analysis, if this country shares in the world trade, it will earn around 180 billion dollars on exports by year 2022. To reach this goal, it is required to have a comprehensive

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development on the factors affecting export in Iran. Therefore, the purpose of this study is to identify the factors that have impact on the companies' exporting status in Iran.

## 2. Environmental Factors

Today, the marketing environment is changing and evolving constantly and is going toward more instability and complexity. The microenvironment comprises the company's suppliers, customers, marketing intermediaries and competitors. The macroenvironment is made up of wider forces that affect on microenvironment. These forces include demographics, economics, nature, technology, politics and culture. The microenvironment can be separated into the internal environment and the external environment [8]. External environment is including aspects of economical, social, cultural, political and physical which affect management, behavior and performance of companies' exports. Studies of the various researchers on export performance have showed that, foreign market characteristics, such as industrial and economic development, marketing and communication infrastructure, technical requirements and legal regulations have great effects on export performance [9], [10], [11] and [12] in their studies reported that environmental differences between markets, influence strategy and export performance.

## 3. Export

Exporting can be done in two ways:

Direct export - In this way the investment risk is higher, but the profit is also higher. Indirect exports – this method is common among most of the companies that have just started exporting. In this type of export less capital is needed and the risk is less. The purpose of the export development programs are the strengthening of export activity with improved capabilities, resources and strategies and making the market competitive, which presents the improvement of the export performance[13]. Based on [14], [11], [15] and [21] there are four factors which effect the export performance, genuine characteristics of the company, the variables associated with exporting perception, commitment to export and export sales. Zou et. al [16] in their study titled, "Standardization of international marketing strategies in developing countries", have reported the negative effect of price adjustment on export performance.

## 4. The Conceptual model of this study

From the total reviews that have been discussed above the effect of environmental factors on export is clear. The set of environmental factors include: marketing infrastructure, communications infrastructure, technical requirements, legal regulations and development industrial / economic research that the first two factors are going to be evaluated in this study.

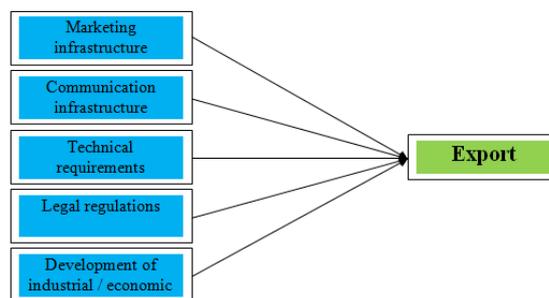


Fig 1: Proposed research model

### 4.1 Hypotheses

Given the above theoretical model, to achieve the research objectives, the following hypotheses can be raised include:

- There is a relationship between exports and marketing infrastructure.
- There is a relationship between exports and communication infrastructure.

## 5. Data analysis and findings

## 5.1 Methods and data collection

The purpose of this study is developmental and practical. The relationship between variables in the research (marketing infrastructure, communications infrastructure) was obtained from the literature then tested. Required information for identifying the export companies is gained from the Customs Department of East Azerbaijan province. In simple random sampling to determine the sample size, first a pre-sampling from 15 companies (11 percent of the total population which was 135 companies) was performed and according to the standard deviation of these samples (which is 0.284) and population size which is 135, the sample size is calculated 65 which is shown here:

$$n = \frac{N \left( \frac{z_{\alpha}}{2} \right)^2 * \delta^2}{e^2 * (N - 1) + \left( \frac{z_{\alpha}}{2} \right)^2 * \delta^2} = \frac{135 * (1.96)^2 * (.284)^2}{(.05)^2 * (135 - 1) + (1.96)^2 * (.284)^2} = 65$$

N: population size      n: sample size      e: coefficient of error      δ: SD prototype  
 $Z_{\alpha} / 2 = Z_{.025} = 1.96$ : the standard normal random variable amount

For this study the data is collected from different sources such as Internet, library studies and questionnaires. The questionnaire that has been used is a standard questionnaire, the research questions are for foreign countries (from the questionnaire study, [3] and [22]) and based on the conditions, necessary adjustments are made and the questionnaire was localized. The variables are measured by Likert five-point scale. Seventy questionnaires were distributed and 66 questionnaires were returned and the analysis was done. Internal consistency can be measured by Cronbach's alpha coefficient [17]. This is the method which is being used in most of the researches [18] although the minimum acceptable amount for this ratio should be 70 percent, but values of 60 percent and 55 percent are also acceptable [19] & [20]. This presented research is also reliable because the calculated Cronbach's alpha is 84%.

## 5.2 Data analysis

Data from this research, after gathering the samples through questionnaires, is analyzed by using SPSS.Ver.16 statistical software. Tools for data analysis are:

- Frequency distribution tables for respondents' individual and organizational variables.
- Frequency distribution tables for the questionnaires' answers to the questionnaires.
- Cronbach's Alpha to study the reliability of the questionnaire.
- Pearson correlation coefficient test to study the relation between variables of the research.
- t-test
- Regression test to study the simultaneous impact of independent variables on dependent variable.

In the first part, for prioritizing the factors affecting export Friedman test was used. In the second part the test t, and Pearson correlation coefficient were used.

## 5.3 Testing hypotheses

Table (1) represents the results of descriptive statistics and table (2) presents the results of inferential statistics.

Table (1) The environmental factors

Descriptive Statistics								
	N	Minimum	Maximum	Mean	Std. Deviation	Variance	Skewness	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
Marketing infrastructure	66	3.33	5.00	4.3788	.53553	.287	-.344	.295
Communication infrastructure	66	3.00	5.00	4.1477	.52984	.281	-.320	.295
Valid N (listwise)	66							

Table (2) Mean rating of factors influencing export

<i>Mean rating of factors influencing export</i>	
Marketing infrastructure	3.63
Communication infrastructure	2.75

Table 2 shows the degree of importance of environmental factors that influence the level of exports, from the viewpoint of managers of the export companies based in the city of Tabriz. Table 3 presents the meaningfulness of the achieved test. Since the significant level (Asymp. Sig.) is 0.000 which is lower than the alpha level 0.05, so we can say that the average rating obtained from the Friedman test in Table (2) is correct.

Table (3) Friedman test

<i>Friedman test</i>	
N	66
Chi-Square	55.779
df	4
Asymp. Sig.	.000

Table (4) t-test and Pearson correlation

Variable	$\alpha$	(sig)	df	t value	Pearson Correlation
Marketing infrastructure	0.05	0.000	65	5.747	0.421
Communication infrastructure	0.05	0.027	65	2.265	0.388

Results of the t-test analysis illustrate that due to the significance (sig) variables gained for marketing infrastructure, communications infrastructure are lower than level of the test ( $\alpha = 0.05$ ) so with the 95 percent confidence we can say that the variables of marketing infrastructure and communication infrastructure can effect on exports directly. This means that if managers of export firms apply these factors in their activities, they will receive a significant increase in their exports.

## 5.4 Research Findings

Research hypotheses	Meaningfulness level	Hypotheses status
H <sub>1</sub> : There is a relationship between exports and marketing infrastructure.	0.000	confirmed
H <sub>2</sub> : There is a relationship between exports and communication infrastructure.	0.027	confirmed

## 6. Conclusion

Our findings further indicate that the manager's international experience is important in explaining pricing decisions as well as explaining the export performance of the firms. Managers that have considerable international experience are more likely to follow a standardization approach in setting prices in foreign markets.

From testing the hypothesis, it is understood that the variables such as communication infrastructure and marketing infrastructure have great impact on exports. Thus, the following suggestions are recommended:

Companies should pay more attention to factors such as personal interactions and communications with foreign importing companies. Noticing consumers' taste and preferences in the target and applying them in the quality of products will increase exports.

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