The Relationship between the Export Performance, Average Stock Returns of the Exporting Firms and the Average Stock Return of Non-Exporting Firms in Different Industries in Tehran Stock Exchange between 1373 and 1381

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ABSTRACT

The aim of the present study was to determine the relationship between the export earnings and stock returns. It also aimed to investigate whether the stock returns of non-exporting firms are more than export firms. The current research was done on the export firms and the average stock returns of non-exporting firms in the mining and non-metallic minerals, food and chemical industries listed in the Tehran Stock Exchange between 1373 and 1381. The results of statistical analysis showed a relationship between the exports and stock returns in chemical industries. Also, the analysis indicated no meaningful relationship between the exports and stock returns in food industries and also mining and non-metallic minerals industries. Moreover, the results of statistical analysis showed that the average stock returns of the export firms is higher than non-exporting firms, in the case of mining and non-metallic minerals industries. But, this is the case for chemical and food industries. Therefore, it is suggested that the responsible government organizations help the firms for marketing abroad, reorganization the foreign consumer tastes and sensitivities and existing laws and standards in foreign markets by granting tax breaks and customs.

KEYWORDS: Stock returns, Exports earning, Firms listed in stock exchange.

INTRODUCTION

The users of the firms' financial data consider the information of the firms' stock returns in their decisions. The information related to the firm, its performance and financial condition may influence the stock returns. Several studies have been conducted on the changes of stock returns and stock prices[1]. Various methods were used to examine the behavior of stock returns against the dissemination of the firm information[2]. Since, exports and export earnings may influence the firm and its performance; these factors can be considered by financial analysts[3].

Exports have a significant impact on the enterprises, because the interaction between business management and competitive environment of the global markets will result in growing and flourishing of management entity. Hence, exports are considered as the driving engines of the enterprises for entering the international competition and market development, and thereby enhance the management and increase the firms' earnings[3, 4].

In the absence of complete competition which is the case for the Iran economic conditions, the profits and liquidity of the export firms increases by increasing the exchange rates [5]. In the case of the firm with foreign currency assets, increasing the exchange rates result in increasing the value of assets. On the contrary, increasing the exchange rates will result in increasing the debts of the firms with foreign currency debts[6].

Considering that the exchange rates are constantly raising in the economic situations similar to Iran, the effect of foreign exchange earnings on the enterprises in the Iran economy is completely predictable[5]. In addition to expanding the firm goods market, exports reduce the business risk[7]. Furthermore, the export earnings are in foreign currency which provides a significant part of the required foreign currency for raw materials, machines and equipments[8]. So, paying attention to the comparative advantage in the exports of goods is very important. Considering the above mentioned items, the present study examines the relationship between the exports and stock returns[3, 4].

Exports as a determining factor can help the firms to increase the quality of manufactured goods, use of modern technology and achieving increased profitability[3, 4]. Also, exports result in relative confidence of customers, especially internal customers for in time and long-term providing of their required goods from the firm[9]. This leads to positive view of the customers, which while creating a positive emotional climate will increase the firm's credibility[9].

Increasing the firm's credibility also attracts the investors' attention[10]. Because, the investors invest in places that firstly, their capital does not disappear and secondly, obtain proper and desirable benefits[10]. Good credibility of the firm can give them relative confidence. Besides the above mentioned items, other factors such as cheap labor and energy resources and high quality and cheap raw materials, especially in the case of industries discussed in this paper, give them comparative advantage for production and exports which is very important[11, 12].

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Therefore, the present study examines the relationship between export earnings and stock returns. Also, it investigates the issue whether the stock returns of non-exporting firms are higher than export firms.

1. Statistical Population

The statistical population was all listed firms (in three groups of mining and non-metallic minerals, food and chemical industries) in Tehran Stock Exchange between 1373 and 1381. In order to examine the relationship between export earnings and stock returns, all firms which have export from 1373 to 1380 and their export interruption was less than two years were considered. About 25 firms were from various industries. For the second group, 42 firms have been selected from the same industries.

2. RESEARCH METHODOLOGY

Theoretical data and statistical information were collected using library and field search methods, respectively. The statistical information was analyzed using statistical methods after data collection. Testing and analysis has been done annually and the results have been derived from the statistical analysis.

2.1. Research Hypothesis Testing Method

Two statistical methods have been used to test the research hypotheses. Pearson correlation test was used to investigate the relationship between the exports and stock returns. Comparison of the averages of two statistical populations has been used for comparing the average stock returns of export and non-exporting firms.

2.2. Results of Research Hypotheses Testing Analysis

In the first test, the relationship between exports and stock returns in the firms listed in Tehran Stock Exchange was investigated (See table 1 in Appendix).

3.2.1. Chemical Industries

The calculated correlation coefficient between export earnings and stock returns is 0.771 which indicates positive and relatively strong relationship between these variables. Given the significance level of 0.043 which is less than the error level of a = 5%, it may be concluded that there is a meaningful relationship between these two variables. Therefore, with the confidence of 95%, it can be said that there is a significant relationship between export earnings and stock returns in this group of industries.

3.2.2. Food Industries

The calculated correlation coefficient between export earnings and stock returns is -0.49/0. This indicates the inverse and negative relationship between these two variables. It also shows that the stock returns of these firms decrease as the exports increase. Given the significance level of 0.265 which is higher than the error level of a =5%, the observed relationship is not meaningful. The statistical analysis indicates that there is not any significant relationship between exports and stock returns in food industries. The analysis also shows an inverse and negative relationship between exports and stock returns. The stock returns decreases as the exports increase.

3.2.3. Mining and non-metallic Minerals Industries

The calculated correlation coefficient is 0.564 which indicates a positive relationship between export earnings and stock returns in the mining and non-metallic minerals industries. It also shows that the stock returns increase with increasing the export earnings. Given the significance level of 0.187 which is higher than error level of 5%, no meaningful relationship was observed between the variables. With the confidence of 95%, it can be said that there is no significant relationship between exports and stock returns.

3.2.4. Statistical Analysis of the Second Hypothesis

The second hypothesis examines and compares the average stock returns of the export and non-exporting firms.

H_0: The average stock return of export firms is equal to the average stock return of non-exporting firms: $H_0 : \mu_1 = \mu_0$

H_1: The average stock return of export firms is equal to the average stock return of non-exporting firms:

$$H_1 : \mu_1 \neq \mu_0$$

The statistical results of the performed calculations have been summarized in Table 2.

With the error value of a =5%, the *t* critical value with degree of freedom of 6 is equal to 1.9433 according to the *t* distribution table and the situation will be as the following chart:

3.2.5. Chemical Industries

The average stock returns of the export and non-exporting firms in this group are 64.1633 and 63.0271, respectively. The calculated *t* value with degree of freedom of 6 is equal to -48% which is located in the rejection range of H_0, according to the *t* distribution table. Given the significance level of 0.963 which is higher than the error level of a = 5%, the second hypothesis is not confirmed in this group. In the case of the second hypothesis test, the second

hypothesis was not confirmed in the chemical industries group. However, the average stock returns of the export firms were higher than of non-exporting firms.

3.2.6. Mining and non-Metallic Minerals Industries

The average stock returns of export and non-exporting firms in this group are 59.7764 and 38.4611, respectively. The calculated t value is -2.467 which is located in the rejection range of H_0. Given the significance level of 49% which is less than error value of 5%, with confidence of 95%, it can be said that the average stock returns of the export firms is higher than of non-exporting firms. Therefore, the second hypothesis is confirmed in the mining and non-metallic minerals industries group. Generally, the positive effect of exports on the stock returns in chemical and mining and non-metallic minerals industries is confirmed.

3.2.7. Food Industries

The average stock returns of export and non-exporting firms in this group are 53.7869 and 54.7816, respectively. The calculated t value is 0.106 which is less than 1.9432 and located in the acceptance range of H_0, according to the t distribution table. The significance level is equal to 0.919 which is higher than the error level of a = 5%, therefore the second hypothesis is not confirmed in this group.

3. CONCLUSION

The first hypothesis test showed a systematic and meaningful relationship between the exports and the stock returns. The observed relationship showed different behaviors in various industries. There is a significant relationship between the exports and stock returns in chemical industries. This shows that the exports can be considered as an effective variable on stock returns in these industries. Stock returns will increase with increasing the exports. This can be due to some factors such as proper management of exports, existence of comparative advantage in these industries, profitable abroad markets for the products of this industry, providing the foreign exchange needs through exports, familiarity of financial information users, especially investors with exports and exportability of the products of this group of firms.

This means that the export firms have been able to increase the production of high quality products so they could work in the global competitive area. The results of statistical analysis indicated there is a meaningful relationship between the exports and stock returns in food industries group. The analysis shows an inverse and negative relationship between the exports and stock returns. The stock returns will decrease with increasing the exports. A similar result has been obtained in a research conducted on exports and stock prices in the food industries [13]. This means that the food firms have failed to obtain good returns due to their introspection.

The inverse and negative impact of the exports on stock returns in the food industry may be due to high costs of exports in this sector, lack of comparative advantage, the negligible share of exports in the firms' earning and lack of enough information transparency.

In the case of mining and non-metallic minerals industries, the results show that there is no significant relationship between the exports and stock returns. However, the exports show a positive impact on the stock returns. A similar result was obtained between the exports and stock price in this industrial group during a research conducted by the author [14].

In the case of mining and non-metallic minerals industries, the results of statistical analysis show that the average stock returns of the export firms is higher than the average stock returns of non-exporting firms. But, this is not the case for the chemical and food industries. The second hypothesis is confirmed in non-metallic minerals industries, but it is not approved in the chemical and the food industries. The results of the present study are in good agreement with the results of the Tehran Stock Exchange reports on the performance of firms in 87 and 88.

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Tables

Table 1. The relationship between exports and stock returns in the firms listed in Tehran Stock Exchange

	significance level	Correlation coefficient
Chemical industries	0.043	0.771
Food industries	0.256	-0.490
Mining and non-metallic minerals industries	0.187	0.564

Table 2. Comparison of the average stock returns of the export and non-exporting firms

	Average returns		t	Sig.(2-tailed)
Mining and non-metallic minerals industries	Non-export	38.4611	-2.467	0.049
	Export	59.7764		
Food industries	Non-export	54.7816	0.106	0.919
	Export	53.7869		
Chemical industries	Non-export	63.0271	-0.048	0.963
	Export	64.1633		