MAGNT Research Report (ISSN. 1444-8939) Vol.2 (Special Issue) PP: 119--132

The Effect of Economic Factors (Interest Rate, Inflation Rate, Exchange Rate) on Shareholder Value in Different Industries of Tehran Stock Exchange during 2005-2011

***Seyedeh Fatemeh HoseiniZadeh Ardali[1] and Dr. Saeid Aghasi[2]**

[1, 2] Department of Management, Dehaghan Branch, Islamic Azad University, Isfahan, Iran

Abstract

In the present study, the affectability of shareholder value of different industries in Tehran Stock Markets from economic factors (interest rate, inflation rate, exchange rate) is investigated. The present study is an applied one conducted using a descriptive method and employing a survey study. The research data was collected using panel data of the stock, the data of the Central Bank of Iran and Bank Melli Iran during the time period from 2005 to 2011. The population of the study included all companies listed on Tehran Stock Exchange and the sample was obtained using the screening method based on assets turnover ratio and accessibility of shareholder value in the website Iranian Center for Financial Information Processing. The ration of assets turnover ratio was obtained using Sales revenue/ Total Assets and those companies were accepted for which this ratio is higher than 1 in 2011, which 79 companies were qualified. Among these 79 companies, the information related to the shareholder value of 40 companies active in 13 industries of rubber and plastics, basic metals, food products except sugar, machinery and equipment, other non-metallic mineral products, agriculture and animal husbandry and related services, coke petroleum products and nuclear fuel, pharmaceutical products, chemical products, sugar, transportation and warehousing and communication, automotive and metal industries was selected as the sample size. The macro economic variables are as follows: interest rate, inflation rate, and exchange rate. The model used for testing hypotheses is linear regression and the obtained results of the hypothesis 1 confirms the difference of affectability of shareholder values from economic factors in different industries. The results obtained from the second hypothesis indicate that the degree of the affectability of shareholder value from the interest rate is different and the industries influenced by interest rates are sugar, manufacture of metal products, drugs, basic metals, and food product except sugar. The degree of affectability of shareholder value from the exchange rate is different in different industries and the exchange rate is effective on the shareholder value of sugar, agriculture, and rubber and plastics industries. The degree of affectability of shareholder value form the inflation rate is different in different industries and inflation rate is effective on the shareholder value in transportation, automotive, manufacture of metal products, other non-metallic mineral products, drugs, and chemical products industries.

Key words: interest rate, exchange rate, inflation rate, shareholder value.

1. Introduction

Since there are different industries in the stock exchange and each of these industries includes several companies, and in the present age, regarding the unreliability of the environment around different industries and consequently companies, this unreliability may be considered as opportunities or threats. If this unreliability results in creativity and innovation, it is considered as an opportunity and if it upsets the balance of a company, it is a threat. As a result, the environment should be known and

(DOI: dx.doi.org/14.9831/1444-8939.2014/2-SI/MAGNT.16)

investigated. Particularly the variables of macroeconomic environment of companies and industries can influence the performance of companies, and at last shareholder value of them.

Each country is covered by two kinds of environment:

1. Social environment: economic factors, technological factors, political and legal factors, social-cultural factors and forces
2. Task environment: a set of factors and elements or groups which influences directly on companies and are influenced by companies as well such as competitors, customers and etc. in fact, task environment of a company is the industry in which the company is active (Wheelen and Hunger, 2010: 121). And one of the most important environments for stock companies is their economic environment and this environment has many variables which in a single study cannot be investigated. In the present study, the affectability of shareholder value of different companies form economic factors. However, the variables of economic environments of companies are divers, but in terms of the scope of the topic, the variables of exchange rates, inflation rates, and interest rates were selected among different economic factors.

Stock exchange means both a market consisting of capital in which buying and selling shares of companies or government bonds or those of private accredited institutions are conducted under certain rules and regulations. In general, the factors affecting stock prices can be divided into two internal factors including dividend policy, capital structure, financial data quality, foreign dependence, industry and etc. and external factors affecting stock prices including economic factors (inflation, monetary and fiscal policy, foreign debt, changes in exchange rates, interest rates and etc.), socio-cultural factors, political factors, technical factors and the performance of stock exchanges.

Since the environmental conditions are diverse and ever-changing, one of the factors affecting companies is their environment and environmental conditions are diverse and ever-changing. Economic environmental is one of the environment covering companies and is considered one of the most important environments for companies. The factors available in economic environment are effective on profit, stock prices, DPS and etc. analyzing shareholder value is one of the methods from which is used as the alternative of traditional criteria of evaluating business. This method calculates the value of a company through the profit which it provides for shareholders; then, factors affecting shareholder value should be identified to persuade shareholders so than they invest in stock changes and improve the economic development of countries.

Changes in the volume of money and liquidity and the degree of efficiency of capital markets are influenced by changes in interest rate and these changes result in the empowerment or failure of capital markets. Regarding that domestic production depends on capital, capital displacement provides the paths of changing in production and the degree of employment through changing interest rate from banks into stocks and stocks into banks.

Inflation is one of the most obvious economic phenomena of the present age. The range of inflation is so expansive from which no country cannot be safe and Iran is among the five inflated countries. Economic stability is among the most important factors affecting investment in each country and inflation is one of the variables affecting the return of shares and investment. Since the productive firms and companies have significant roles in economic flourishing; therefore, recognizing factors

(DOI: dx.doi.org/14.9831/1444-8939.2014/2-SI/MAGNT.16)

which cause the development of these companies is important.

2. Stock

From the perspective of macro-economic theories, real physical capital accumulation is the necessary but not sufficient condition for developing national economy. Adam Smith, the founder of classical economics, considers capital as the main and determining factor of the number of suitable labor forces. It means that hiring labor forces in the process of production depends the degree of available capital and capital accumulation has a determining role in the degree of increasing the total output and output per workforce and is consistent with the degree of investment in workforces (Davani, 2011: 9).

Stock exchange means both a market consisting of capital in which buying and selling shares of companies or government bonds or those of private accredited institutions are conducted under certain rules and regulations. The main feature of stock exchanges is the protection of the law from owners of stagnating savings and investments and regulatory requirements for the applicants for capital (Davani, 2011: 32).

2.1. Stock types

Commodity exchange, metal exchange, agriculture exchange, stock exchange, treasury bonds exchange.

In exchanges, real and legal response persons do business by their agents and in them, the buyer and the seller can be a person or a company.

2.2. Classification of Financial Markets

Financial markets can be classified in different methods:

1. **Based on financial right:** such as Debt or bond markets and Stock markets
2. **Based on organizational structure:** a market may be an auction market or a market outside stock exchanges or a Market through intermediaries. Capital market is a place or mechanism which supplies long or medium-term needs of economic firms. Therefore, a capital market is only the resource of long-term financial supply with maturities of over one year. Financial tools used in the market include different modes of stocks, bonds and other long-term securities with maturities of over one year.
3. **Valuation:** valuation refers to estimation of the value of an asset based on the comparison of it with similar assets or based on current valuation of variables on which future asset return depends (Bakhshaei and Raei, 2008: 13).

In economy, value of a car depends on its general performance not the value of each of its parts. In an economic unit or a company, the value of a unit refers to a set of assets and debts. But because in a more expansive space, the human force includes management and workforces, and workforces are the most important elements of success of an institute, the value of the whole institute or company is more than its assets or debts. Regarding the mentioned issues, value is not an objective concept and also not a totally subjective one, but it is a combination of both. Therefore, value is a very fluid and dynamic concept which is different based on time, space and individuals. In other words, shareholder value cannot be declared in an abstract or complete concept, but it should be evaluated in its own particular spatial, temporal and contextual conditions.

Here, three main and fundamental concepts and four implicit concepts of value are investigated:

3.1. Main and fundamental value

(DOI: dx.doi.org/14.9831/1444-8939.2014/2-SI/MAGNT.16)

1. Value for ownership: value for ownership is a concept is a concept which simply is related to the rights of assets and is not related to ownerships and covers everyone who has ownership interests to assets (Davani, 2011: 103-104).
2. Market value: market value is a price by which stocks can be sold and the basis of market value is that if a similar stock is exchanged with a certain prices, that stock will have a price similar to it (Davani, 2011: 25).
3. Fair value: fair value of the exchange price is an asset, if neither buyers nor sellers have any obligation for selling or buying (Bakhshiani and Raei, 2008: 25).

3.2. Implicit concepts of value

1. Investment value: investment value is not an independent concept such as the concept of market value or value for ownership, but it implies the value for certain purpose, i.e. investment in the portfolio. Stock prices in stock exchanges indicate market value of a set of small stocks which usually indicates investment value (Davani, 2011: 106).
2. Liquidation value: liquidation value, such as investment value does not enjoy a fundamental concept and refers to determining value based on the assumption of the company's liquidation, and liquidation value of a company is the value of assets sales of the company separately (Davani, 2011: 106).
3. Value with the assumption of continuation: it (Going concern value) is the value of a company with the assumption that the company can continue its activities in a predictable future (Bakhshiani and Raei, 2008: 25).
4. Real value: this expression has different definitions for different individuals. The definition of intrinsic value refers to the value which a stock should have to an investor. The difference between the current market value and intrinsic value mostly is based on decisions related to selling and buying. A newer definition of intrinsic value refers to the best estimation of the value of a stock concerning the total information available and this value can be called "real stock value" or theoretical value.

In long term, the asset prices will be converging toward its value, but in short-term, inappropriate pricing is possible (Bakhshaei and Raei, 2008: 25).

3.3. Price or value

The price of stocks is mostly in randomly fluctuating all over the day of exchanging. Then, in the day of the next exchange, the price of the same stocks may continuously go up all over the day. Sometimes, the price of stocks consistently reduces or fluctuate inadvertently.

4. Money and interest rate

Before the Great Economic Crisis in 1930, the definition presented of money was that firstly money is a tool for facilitating exchanges, secondly, it is a tool for measuring economic values, thirdly, and it is a tool for saving values. After the great crisis, and engendering the ideas of Keynes, the definition of money became more complete and nowadays, in the definition of money, in addition to the mentioned triple tasks, money as a tool for payments causes the minimalizing costs of doing exchanges of goods and services and money as the unit of measurement of economic values causes the reduction of exchange costs through the possibility to measure and record inventory and economic flows homogeneously. Fourthly,

(DOI: dx.doi.org/14.9831/1444-8939.2014/2-SI/MAGNT.16)

money as the savior of purchasing power causes the reduction of exchange costs through doing economic activities during time. The activities which are the creators of monetary income, do not take place with consuming decisions which are usually concurrent. Therefore, a company accept to receive payments in cash per their productive activities to be able to make decision about the way of spending it. Fifthly, it should be noted that before the crisis of 1930, money was introduced as a neutral factor ineffective on real economic indices.

In fact Keynes, by presenting his own ideas regarding the reasons of crisis and solutions for exiting it rejected this theory for the first time and indicated that money is not a neutral factor in economic activities and can influence it (Ruzbahan, 2009: 162).

The rate which firms should pay banks per receiving debts is called interest rate. Keynes believed that changes in decisions of managers of economic firms about the profitability of future projects of investment is the main reason of instability of investment.

Expected rate of return is the expected interest rate which is declared based on a percentage of costs. Then, managers of firms compare the expected rate of return with market interest rate for evaluating the profitability of a particular investment project. Market interest rate is an interest rate which the firm should pay banks per receiving debts. If the rate of return is bigger than interest rate, investment is profitable. In case of decreasing interest rate consistently, more projects will be profitable. Therefore, Keynes believed that investment level is correlated with interest rate reversely (Tghavi, 2013: 45).

4.1. Interest rate

Now, in Iran, banks have three types of ownership; firstly, a group of banks which are totally state-run such as Sepah Bank and Bank Melli Iran, secondly, a group of banks which are semi state-run or in a combined form, such as Mellat Bank and thirdly, banks with private ownership such as Parsian Bank and Pasargad Bank.

In analyzing Iran's capital market, paying attention to this issue is necessary that about 20 percent of the value of Iran's capital market is assigned to banking industry. Changes in interest rate causes changes in demands of shares of banks listed on the stock exchange and this changes in demands in stock exchanges result in increasing or decreasing the price of the shares of banks, and this issue influence the indices of Tehran Stock Exchanges.

5. Inflation

Simply, inflation refers to the increase in general level of prices. The criterion of measuring inflation is inflation rate which refers to annual percentage change in the price index.

In some cases, in a more accurate definition of inflation, after the expression of the increase in general level of prices, words such as" unbridled" and " continuous" are used. In other words, it means that increase in general level of prices in low amount and infrequently cannot be considered as inflation. Therefore, the definition is as "increasing the general level of prices in an unbridled and continuous way".

5.1. Reasons of inflation

Inflation may have different reasons in different conditions and times in different societies. Economists have declared some reasons for inflation as follows:

- Inflation caused by demand exceeds aggregate supply

When the demand of the total society is more than its total supply, and the total supply is not attractive, in such a situation, the excess of demand over supply results in increasing prices without having great influenced on total supply or production of the whole society.

(DOI: dx.doi.org/14.9831/1444-8939.2014/2-SI/MAGNT.16)

- Inflation due to costs

This type of inflation is created due to increasing prices of production factors. Increasing prices of each of production factors results in increasing production costs and consequently increasing prices. One of the reasons of inflation in western countries after 1973 is considered the increase in oil prices.

- Sectoral inflation

Sectoral inflation means that if prices increase in one of the main sections of economy, it results the increase of prices in other sections. It seems that if in one section, prices increase, they should be reduced in other sections. In general, inflation does not occurred, but it is said that due to" price-stickiness", such event may occur. By price-stickiness, it means that prices do not tend upwardly and stick.

- Institutional or structural inflation

This inflation is particular for developing countries, an inflation which is due to the economic structures of these countries. This inflation is due to cultural issues, transportation facilities, monopoly, very bad distribution of income, administrative bureaucracy, imported inflation due to heavy economic dependence, Expansion of the service sectors and in some cases the selection of inappropriate development strategies. It should be noted that the expectation of inflation in the future can result in intensification of inflation in all mentioned cases (Ruzbehan, 2009: 241-246).

6. Foreign exchange

Definition of foreign exchange: it means the value, price, and rate of commercial documents whose value is determined by foreign currencies and foreign exchange refers to foreign currencies. In other words, in a country, the currencies of other countries are referred to foreign exchange. Foreign exchange mean foreign currencies and addition of the word of foreign is not necessary to the expression. Foreign exchange is not only limited to foreign coins and banknotes and it convers bank checks, remittances, travel checks, promissory notes and bills of exchange as well.

In Iran's bank system, according to paragraphs "a" and "g" of Article 7 of the Monetary and Banking Act approved in July 1972, all foreign exchanges are not tradable. Therefore, foreign exchanges are divided into two groups: 1. Tradable exchanges and untradeable exchanges.

Tradable exchange refers to the exchange which for Central Bank of the Islamic Republic of Iran, foreign exchange branches of banks are allowed to buy or sell. Those foreign exchanges which are not allowed to be sold or bought are referred to as untradeable.

Exchange rate in terms of form can be illustrated in four forms. In other words, now, in the world foreign exchange market, exchange rate are exposed to customers for being exchanged as follows:

1. Direct method: in this method of announcing the exchange rate which most of banks follow and act according to, the constant currency unit and local currency change.
2. Indirect method: in this method of announcing the exchange rate which banks such as India and Britain follow, the currency prices of these countries are announced based on the currency (foreign exchange) of other countries. In other words, Indian rupee or sterling pound are base currency and foreign exchanges are variable currencies.
3. Dollar-based method: in this method of announcing exchange rate, in fact, the same indirect method of announcing exchange rate is employed with this difference that the base currency is US dollar. Except for London, Australia and New Zealand, most countries use this method.

(DOI: dx.doi.org/14.9831/1444-8939.2014/2-SI/MAGNT.16)

4. Crossover method: in this method of announcing exchange rate, the value of an exchange unit is announced based on another exchange. In other words, the Base Exchange is not fixed. This method is employed by currency dealers.

However, other than the fact that in which way exchange rate are announced by banks and currency dealers, banks and dealers announce two rates: one is the rate of buying exchanges and the rate of selling exchanges.

Exchange rate announcement by the Central Bank of the Islamic Republic of Iran

Exchange rate announcement by the Central Bank of the Islamic Republic of Iran is a direct method. Now, International Department of the Central Bank of IR releases the exchange rate table every working day of banks at 10 o'clock.

Reference exchange rate is in fact the mean buying and selling currencies rates. Banks of Iran, such as Bank Melli Iran, Saderat Bank, and etc. start to prepare and release the exchange rate table containing buying and selling rates.

Foreign Exchange Market

The foreign exchange market or forex market, is a market in which suppliers, dealers, and demanders buy and sell currencies. The foreign exchange market should not be considered as a local one, but it should be considered as a mechanism which makes buyer and sellers of currencies close to each other to do foreign exchanges.

The main task of the foreign exchange market is o transfer of purchase power from one country to another. In general, banks, companies, agencies, dealers, smugglers of foreign exchanges are the members of the foreign exchange market which are in consistent contact with each other with telephone, telegraph, telex, SWIFT or post. Therefore, foreign exchange market is a global one and is not related to a particular place.

Determining exchange rates

Currently, in general, all countries of the world are divided into two main groups in terms of their currency systems: in one group of countries, free currency system is dominant; in these countries, the currency entry and exit is free. The government and the central banks do not intervene in the exchange market. The exchange market of these countries construct a world foreign exchange market. In contrast, in the other group, the exchange control system is dominant. In this group of countries, currency entry and exit are controlled by the government and the central banks; the exchange market is strongly controlled by political and officials and those responsible for foreign exchange of countries. Consequently, there is no free relations with world exchange market. However, it should be noted that the intensity of the intervention of governments and controls over exchange markets is not the same in different countries.

Exchange rates in counties with free exchange systems are determined in a floating way and this type is called floating exchange rate. In countries with the exchange control system, exchange rates are determined by governments and the central banks and they are imposed to markets. This type is called fixed exchange rate (Zamani Farahani, 2009: 174).

Literature review

Pourfaraj and Alizadeh (2012) investigated the evaluation of the degree of concentration of credits in Islamic contracts and its effect on economic growth in Iran. This research evaluated and ranked the degree of concentration of bank contracts using the data of the years from 1984 to 2007 by Herfindahl-Hirschman Index. The results indicated that concentration in credits tends more toward exchange contracts with fixed rates and participatory contracts are in the second rank.

(DOI: dx.doi.org/14.9831/1444-8939.2014/2-SI/MAGNT.16)

Sajjadi, Farazmand and Badpa (2011), in a research investigated the application of the arbitrage pricing theory using macroeconomic variables including inflation rate, money supply, exchange rates, oil prices, periodic structure of interest rates and industrial productions to expected return of each stock in Tehran Stock Exchange. The required data were analyzed periodically and for a time period from 1997 to 2007 using the seemingly unrelated regressions. The results indicated that the risk related to unpredicted variations of variables of money supply, exchange rate, periodic structure of interest rates and industrial productions are significant at error level 0.05, and limitations of the arbitrage pricing theory are applied to the unbounded linear model.

Kandblo and Lebisbigo (2011) investigated the effect of the fluctuation of exchange rate in industrial pricing in Colombia using panel data regression with the generalized method of moments. Their study indicated that the fluctuations of exchange rate in investment in industrial sectors has negative effects. This negative effect gets smaller by increasing export share, and gets bigger by increasing the reliance on importing raw material.

Research hypotheses

Hypothesis 1: the degree of affectability of shareholder value from economic factors is different in different industries of Tehran Stock Exchange.

Hypothesis 2: the degree of affectability of shareholder value from interest rate is different in different industries of Tehran Stock Exchange.

Hypothesis 3: the degree of affectability of shareholder value from exchange rate is different in different industries of Tehran Stock Exchange.

Hypothesis 4: the degree of affectability of shareholder value from inflation rate is different in different industries of Tehran Stock Exchange.

In hypotheses of exchange rate, interest rate, and inflation rate are independent variables and shareholder value of different industries is take as the dependent variable.

Method

Regarding the topic of the research which is the investigation of affectability of shareholder value form economic factors (interest rate, inflation rate, and exchange rate), and which the research was conducted using the results of the statistics and experiments of previous studies, it can be said that the present study is among a applied researches and it is a survey using descriptive method.

Research population

The population of the present study consists of all companies listed on Tehran Stock Exchange including 500 companies in the form of 38 classified industries.

Sampling method and sample size

Among 500 companies listed on Tehran Stock Exchange, which were classified in 38 industries, the ratios of asset circulations were calculated for 500 companies in 2011 and among the obtained ratios, those companies were selected whose the ratio of net sales to their assets is bigger than 1. Among these 500 companies, 79 companies were selected and the shareholder values of these 79 companies were observed the website Iranian Center for Financial Information Processing. Again, among these 79 companies, those whose shareholder values were accessible were selected and the rest were deleted. In general, 40 companies were selected among 79 companies in the form of 12 companies. It should be noted that shareholder values are analyzed monthly which by averaging of available figures, daily values are obtained.

(DOI: dx.doi.org/14.9831/1444-8939.2014/2-SI/MAGNT.16)

Methods and instruments of data collection

In the present study, to collect theoretical and literature of the research, library research was used (books, theses, article, etc.) and to receive available data in the stock exchange, document analysis method of financial statements was used. To receive the values of variables of interest rate and inflation rate, the website of the Central bank of Iran was employed. To collect data of exchange rate, the website of the Central Bank of Iran was used. To analyze the data, SPSS, version 18 and EXCEL software programs were employed.

Data analysis

The data analysis method of the present study was conducted in two descriptive and inferential statistics levels. In descriptive level, using statistical indices such as mode, sd, variance, and etc. the data were analyzed. And in inferential level, proportionate to the level of evaluating data and statistical assumptions, Kruskal – Wallis test and linear regression were employed.

Descriptive data analysis method

The findings of the descriptive variables employed in the research for different industries listed on Tehran Stock Exchange are as follows:

Table 1: Descriptive statistics of the data

	Exchange rate	Inflation rate	Interest rate	Shareholder value
Mean	9828.83333	1.37143	13.3029	3.1396 E6
Mode	9725.50000	1.30000	13.0000	2.3632 E6
sd	735.047	0.888422	1.57200	2.81621 E6
Variance	5.403 E5	0.879	2.471	7.931 E12
Max.	12260.000	3.900	16.12	4.04 E7
Min.	8903.000	0.00	11.50	0.00

Analyzing hypotheses

Hypothesis 1: the degree of affectability of shareholder value from economic factors is different in different industries of Tehran Stock Exchange.

To investigate the hypothesis, Kruskal – Wallis test which is a non-parametric one is used and regarding the following table, the value of sig. which is zero, H_0 which is the equality of shareholder values I different industries is rejected.

H_0: affectability of shareholder value from economic factors is different in different industries is equal.

H_1: affectability of shareholder value from economic factors is different in different industries is not equal.

(DOI: dx.doi.org/14.9831/1444-8939.2014/2-SI/MAGNT.16)

Table 2: the results of Kruskal – Wallis test

Shareholder value	
53.860	Chi- square
12	df
0.00	Sig.

Resource: research results

The value sig. in the above table is smaller than the error level 0.05; therefore, the null hypothesis is rejected and H_1 is confirmed.

Hypothesis 2: the degree of affectability of shareholder value from interest rate is different in different industries of Tehran Stock Exchange.

Regarding the fitted regression models for different industries, the degree of the effect of interest rate on shareholder value was obtained as the following figures: -0.311, -0.237, 0.375, -0.246, -0.446, and -0.236, which respectively were related to metal products, oil, basic metals, and drugs, food products except sugar, and sugar. The interest rate was ineffective on shareholder values of other industries. Therefore, the above hypothesis is confirmed.

Hypothesis 3: the degree of affectability of shareholder value from exchange rate is different in different industries of Tehran Stock Exchange.

Regarding the fitted regression models for different industries, the degree of the effect of exchange rate on shareholder value was obtained as the following figures: 0.237, 0.328, -0.296, and 0.322, which respectively were related to industries of agriculture, husbandry, plastics and rubber, and sugar. The exchange rate was ineffective on shareholder values of other industries. Therefore, the above hypothesis is confirmed.

Hypothesis 4: the degree of affectability of shareholder value from inflation rate is different in different industries of Tehran Stock Exchange.

Regarding the fitted regression models for different industries, the degree of the effect of inflation rate on shareholder value was obtained as the following figures: -0.231, -0.286, -0.217, -0.292, and 0.291 which respectively were related to industries of transportation, automotive, metal industries, non-metallic mineral products, drugs, and chemical products. The inflation rate was ineffective on shareholder values of other industries. Therefore, the above hypothesis is confirmed.

Discussion and results of the hypotheses

1-Discussion and conclusion of the hypothesis

To test this hypothesis, the non-parametric Kruskal – Wallis test was used. Regarding the following table, the value of sig. which is zero, H0 which is the equality of shareholder values I different industries is rejected.

The results of data analysis by using linear regression in transportation industry indicated that in this industry, the effective economic variable is inflation rate. Inflation rate with sig. 0.039 and the beta value -0.231 is effective on the shareholder value of transportation industry and this affectability is reverse. Other economic factors were ineffective on this industry.

- In automotive industry, the effective factor is inflation rate. Inflation rate with sig. 0.011 and the beta value -0.286 is effective on the shareholder value of automotive industry and this affectability is reverse. Other economic factors were ineffective on this industry.

(DOI: dx.doi.org/14.9831/1444-8939.2014/2-SI/MAGNT.16)

- In the industry of construction of metal products, inflation rate and interest rate are the effective factors and exchange rate is ineffective on this industry. Inflation rate with sig. 0.047 and the beta value -0.227 and interest rate with sig. 0.008 and beta value -0.0311 are effective on the shareholder value of this industry and this affectability is reverse. Other economic factors were ineffective on this industry.
- In agriculture and husbandry industry, the effective factor is exchange rate. Exchange rate with sig. 0.005 and the beta value 0.328 is effective on the shareholder value of automotive industry and this affectability is direct. Other economic factors were ineffective on this industry.
- In automotive industry, the effective factor is inflation rate. Inflation rate with sig. 0.011 and the beta value -0.286 is effective on the shareholder value of automotive industry and this affectability is reverse. Other economic factors were ineffective on this industry.
- In other non-metallic mineral products industry, the effective factor is inflation rate. Inflation rate with sig. 0.050 and the beta value -0.217 is effective on the shareholder value of automotive industry and this affectability is reverse. Other economic factors were ineffective on this industry.
- In the industry of basic metals, the effective factor is interest rate. Interest rate with sig. 0.002 and the beta value 0.357 is effective on the shareholder value of this industry and this affectability is direct. It means that by increasing the interest rate, the shareholder value of this industry increases, and by decreasing the interest rate, the shareholder value of this industry decreases. Other economic factors were ineffective on this industry.
- In rubber and plastics industry, the effective factor is interest rate. Interest rate with sig. 0.010 and the beta value -0.296 is effective on the shareholder value of automotive industry and this affectability is reverse. It means that by increasing the interest rate, the shareholder value of this industry decreases, and by decreasing the interest rate, the shareholder value of this industry increases. Other economic factors were ineffective on this industry.
- In machinery and equipment industry, no economic factor (inflation rate, exchange rate, and interest rate) is effective on the shareholder value of this industry.
- In pharmaceutical products industry, the effective factors are inflation rate and interest rate and exchange rate is ineffective. Inflation rate with sig. 0.011 and the beta value -0.286 is effective on the shareholder value of this industry and this affectability is reverse. And interest value with sig. 0.038 and the beta value -0.158 is effective on the shareholder value of this industry and this effect is direct.
- In oil industry, the effective factor is interest rate. Interest rate with sig. 0.043 and the beta value -0.237 is effective on the shareholder value of this industry and this affectability is reverse. Other economic factors were ineffective on this industry.
- In chemical products industry, the effective factor is inflation rate. Inflation rate with sig. 0.010 and the beta value 0.291 is effective on the shareholder value of this industry and this affectability is direct. Other

(DOI: dx.doi.org/14.9831/1444-8939.2014/2-SI/MAGNT.16)

economic factors were ineffective on this industry.

- In food products except sugar industry, the effective factor is interest rate. Interest rate with sig. 0.00 and the beta value -0.446 is effective on the shareholder value of this industry and this affectability is reverse. Other economic factors were ineffective on this industry.
- In sugar industry, economic factors of exchange rate, and interest rate are effective on the shareholder value of this industry.

The exchange rate with sig. 0.005 and beta value 0.322 has a direct effect on the shareholder value of this industry and interest rate with sig. 0.036 and the beta value -0.236 has a reverse effect on the shareholder value of this industry.

Regarding the different degrees of the affectability in different industries from economic factors, the first hypothesis is confirmed.

2-Discussion and conclusion of hypothesis

The degree of affectability of shareholder value from interest rate I different industries is different.

Shareholder values in industries such as construction of metal products, oil, basic metals, drugs, food industries except sugar and sugar are influenced by interest rate. In construction of metal product industry, interest rate with sig. 0.008 and the beta value -0.311 are reversely effective on the shareholder value of this industry. By increasing interest rate, the shareholder value of this industry decreases as 0.311 and by decreasing the interest rate, the shareholder value of this industry increases as 0.311.

The effect of interest rate in oil industry with sig. 0.043 and the beta value -0.237 reversely and it is effective on the shareholder value of this industry. The effect of interest rate in basic metal industry with sig. 0.002 and the beta value 0.375 directly and it is effective on the shareholder value of this industry. The effect of interest rate in drugs industry with sig. 0.038 and the beta value -0.246 reversely and it is effective on the shareholder value of this industry. The effect of interest rate in food products except sugar industry with sig. 0.00 and the beta value -0.446 reversely and it is effective on the shareholder value of this industry. The effect of interest rate in sugar industry with sig. 0.036 and the beta value -0.236 reversely and it is effective on the shareholder value of this industry.

Regarding the different degrees of the affectability in different industries from interest rate, the second hypothesis is confirmed.

3-Discussion and conclusion of hypothesis

The degree of affectability of shareholder value from exchange rate in different industries.

The results obtained from the affectability of shareholder value from exchange rate in different industries indicated that in agriculture industry, the beta value 0.328 and sig. 0.005 was significant and it can be said that by increasing exchange rate, shareholder value in this industry increases as 0.328 and by decreasing exchange rate, shareholder value in this industry decreases as 0.328.

In rubber and plastics industry, the beta value -0.296 and sig. 0.010 was significant and it can be said that by decreasing exchange rate, shareholder value in this industry increases as 0. 296 and by increasing exchange rate, shareholder value in this industry decreases as 0. 296.

in sugar industry, the beta value 0.322 and sig. 0.005 was significant and it can be said that by increasing exchange rate, shareholder value in this industry increases as 0.322 and by decreasing exchange rate, shareholder value in this industry decreases as 0.322.

(DOI: dx.doi.org/14.9831/1444-8939.2014/2-SI/MAGNT.16)

The effectible industries from exchange rate are the industries of agriculture and husbandry, rubber and plastics, and sugar. The shareholder values of other industries are not influenced by interest rate; therefore, the third hypothesis is confirmed.

4-Discussion and conclusion of hypothesis

The degree of affectability of shareholder value from inflation rate in different industries.

The results obtained from the affectability of shareholder value from inflation rate in different industries indicated that in transportation industry, the beta value -0.231 and sig. 0.039 was significant and it can be said that by increasing inflation rate, shareholder value in this industry increases as 0.231 and by decreasing inflation rate, shareholder value in this industry decreases as 0.231.

In automotive industry, the beta value -0.286 and sig. 0.011 was significant and it can be said that by increasing inflation rate, shareholder value in this industry increases as 0.286 and by decreasing inflation rate, shareholder value in this industry decreases as 0.286.

In automotive industry, the beta value -0.286 and sig. 0.011 was significant and it can be said that by increasing inflation rate, shareholder value in this industry increases as 0.286 and by decreasing inflation rate, shareholder value in this industry decreases as 0.286.

In construction of metal products industry, the beta value -0.227 and sig. 0.047 was significant and it can be said that by increasing inflation rate, shareholder value in this industry increases as 0.227 and by decreasing inflation rate, shareholder value in this industry decreases as 0.227.

In other non-metallic mineral products industry, the beta value -0.217 and sig. 0.011 was significant and it can be said that by increasing inflation rate, shareholder value in this industry increases as 0.217 and by decreasing inflation rate, shareholder value in this industry decreases as 0.217.

In drug products industry, the beta value -0.292 and sig. 0.013 was significant and it can be said that by increasing inflation rate, shareholder value in this industry increases as 0.292 and by decreasing inflation rate, shareholder value in this industry decreases as 0.292.

In chemical products industry, the degree of affectability of shareholder value from inflation rate is 0.291 with sig. 0.00. it means that the effect is direct and by increasing inflation rate, the shareholder value of this industry increases as 0.291 and by decreasing inflation rate, the shareholder value of this industry decreases as 0.291.

Therefore, effectible industries are transportation, automotive, construction of metal products, other non-metallic mineral products, drug products, and chemical products. Regarding the difference of the degree of the affectability of shareholder value from inflation rate indifferent industries, hypothesis 4 is confirmed.

Suggestions based on research results

Regarding the results obtained from the present study, inflation cannot be considered as a positive factor for attaining more return in stock exchanges. Therefore, the government should control inflation at the level which it causes economic growth and the increase in production.

- One of the strategies which the government can apply for decreasing inflation is to reinforce and motivate real and legal investors to invest in stock exchanges because when liquidity is flowed towards the capital market, inflation is moderated to some extent and when investors invest in stock exchanges, it causes growth of the company,

(DOI: dx.doi.org/14.9831/1444-8939.2014/2-SI/MAGNT.16)

employment, the increase in production, more exportation and at last it results in inflation moderation and economic growth.

- In spite of high oil incomes in these years, high economic growth has not been obtained and this injection of oil incomes has resulted in internal inflation and more dependency of productions to oil exchange incomes. Therefore, it should be considered that no wealth is permanent and oil will be finished one day. Therefore, Iran's dependency to oil incomes should be less and less and other exchange incomes should replace it.
- By decreasing interest rate, in addition to increasing the tendency to investment, new job opportunities will be created.

References:

Ala, A. (2006). Principles of investment management in stock exchanges. Tehran: Golshan.

Bakhshiani, A. and Raei, R. (2008). Valuating stocks and analyzing markets. Tehran: Publication of Industrial Management.

Davani, Gh. (2011). Stocks and shares. Tehran: Nokhostin.

Hafeznia, M. (2001). An introduction to research method in humanities (third edition). Tehran: SAMT.

Pourfaraj, A. and Alizadeh, V. (2012). The evaluation of the degree of concentration of credits in Islamic contracts and its effect on economic growth in Iran. Economic Research Journal. 47 (98). 1-21.

Ruzbahan, M. (2008). Macro-economic theories 1. Tehran: Taban.

Sajjadi, H., Farazmand, H. and Badpa, B. (2011). Applying arbitrage pricing theory using the variables of macro-economics in Tehran Stock Market. Economic Research Journal. 46 (94). 45-66.

Taghavi, M. (2000). Principles of Economics 2. Tehran: SAMT.

Taghavi, M. (2013). The relationship between interest rates and output in the economy. Tehran: Negaran Nashr.

Weelen, L. T. and Hanger, J. D. (2010). Strategic management and business policy. M. Arabi and H. Aghabeik Zadeh (Trans.). Tehran: Cultural Researches Center.

Zamani Farahani, M. (2009). Money, currency and banking. Tehran: Termeh.

(DOI: dx.doi.org/14.9831/1444-8939.2014/2-SI/MAGNT.16)