Identifying the Effect of Money Stock, Inflation Rate and Exchange Rate on the Stock Price Index in Iran During 2001-2008

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Abstract
This applied research study was conducted with the aim of examining the effect of money stock, inflation rate and exchange rate on stock price index in Iran during 2001-08. For this purpose, a model was presented along with three hypotheses through library studies in order to explore the relationships between research constructs. Research hypotheses about the effect of money stock, inflation rate and exchange rate on stock price index were then tested through field research and monthly market data. Collected data was analyzed by using Microfit software and Eviews6 software as well as statistical methods of co-integration test and unit root tests, vector auto regression model (VAR), implicit response function, and analysis of variance. The findings indicated that money stock has a direct relationship with stock price; inflation rate has a reverse relationship with stock price; and exchange rate has a reverse relationship with stock price. These findings were then interpreted and explained, and eventually, based on the findings, some suggestions were proposed in order to develop the findings related from the model to other researchers.

Key words: stock price, inflation rate, exchange rate, liquidity, unit root test

Introduction
Financial market is among the fundamental and economically influencing markets in any country. One of the important elements of financial market is stock exchange, and recession or boom in this market affects not only national economy but also global economy because there is a significant relationship between stock exchange developments, and recession and boom in economy. This market is considered one of the most dynamic financial institutions in economy because it undergoes important and influencing changes against the changes and developments in some rival markets such as gold coin and foreign currency as well as macroeconomic variables such as industrial production index, the ratio of the price level abroad and the domestic price level and money supply. Stock exchange is considered an independent self-controlled market and its main instrument i.e. securities are traded by brokers or traders as per the regulations of stock exchange, and investment in countries is developed through this (Islam & Sultana, 2015). In review of the performance of stock exchange, the stock price index is usually considered the full-length mirror of the stock exchange, because it is regarded as the basic variable in many economic studies. Thus this variable plays a major role in this variable. As it was mentioned, stock exchange changes and economic situation have a close relationship with each other. Correspondingly, macroeconomic policymaking and particularly monetary and foreign currency policymaking also affect the stock exchange. Determining such relationship can help the policymakers in orientation of monetary and foreign currency policymaking and the effect of such policies on stock exchange market can be revealed. Since macro variable changes, particularly affect monetary variables of stock exchange, explaining the relationship between stock exchange performance index and macroeconomic monetary variables can be helpful in better policymaking. Specifying the degree and the way monetary variables affect stock price index
can be useful in many acts of macroeconomic policymaking, so that policymaking authorities can cause stock exchange boom and as a result, cause economic boom and growth by executing appropriate monetary and foreign currency policies. Suitable monetary and foreign currency policies cause the interest rates to become appropriate and consequently, the money market to be in order and the state of inflation to improve and economic recession to be passed (Kiymaz, 2013). On the other hand, study of theoretical literature reveals that there is an important gap in theoretical principles about the study of the effect of monetary and foreign currency variables on stock price. Therefore, in order to remove these gaps, the aim of the present study has been to review the long-term relationship between Tehran stock exchange price index and macro monetary variables by using portfolio theory and Fisher’s basic theory in the period of 2001 to 2008. For this purpose, selected variables are stock exchange price index, liquidity, exchange rate and amount of liquidity; these variables were on a monthly basis. In the present study, important theories are investigated, e.g. the quantity theory of money which predicts the strong long-term correlation between money supply (liquidity) and inflation; it means that continuous excessive supply of the amount of money in economy can cause inflation. In addition, portfolio theory examines the relationship between capital market and monetary variables and expresses an alternative among stocks and other financial assets including foreign currency, bank deposit, gold, housing, etc. Besides, Fisher theory has been also examined based on which true rate of interest is resulted from the difference between nominal interest rate and inflation rate. Fisher’s basic theory proposes the relationship between stock price and monetary variables including amount of liquidity, interest rate and inflation rate.

**Review of Related Literature**

Review of related literature reveals that at the macro level in free economy, different types of markets are introduced, among which commodity market, labor market, capital market and money market can be mentioned. Today, capital market, as one of the most important markets, is one of the critical parts of the economy of countries, and this market has gained a higher status as a result of economic growth and development. In recent decades, the role of capital market and development of financial markets have had a rather high relationship with the economic growth of countries. Advanced countries have made great use of these financial markets for economic development and growth (Naceur & Ghazouani, 2007). In Iran, as in many other developing countries, money market dominates capital market, and Tehran stock exchange which is the main part of the capital market, has not been able to play a role in enhancing the efficiency and effectiveness of capital. In a similar vein, the need for developing stock exchange market as the constituent part of Iran’s capital market for the purpose of development of the country is something which has become particularly important among politicians and economists (Javadpour, 2006). In review of capital market, the important role of money market cannot be ignored. Money market is a market for trading money and other financial assets which are close alternative to money and are due in less than a year. Besides, money market can be considered to be as the market of short-term financial instruments with low risk of non-payment, high liquidity and nominal value. The focus of the activity of this market is on using instruments which allow commercial firms and individuals to desirably raise their liquidity. Comparing money and capital markets in developed countries indicates that capital market has a high degree of importance in meeting financial needs of economic activities (Shohadayi, 2006). Theoretical principles of capital market are full of different concepts in investment decision-making, and risk and return are considered to have high importance. Return is usually composed of two sections of earnings (a profit in the form of periodical cash flows of investment which can be in the form of interest or dividends) and capital gain which is specific to common stock but also applies to long-term bonds and other fixed-income securities. Risk is the possibility that predictions may fail and includes two cases: first, investment risk can be greatly reduced by precise and accurate prediction, and second,
investment always comes with a degree of risk, so the investor, particularly in markets such as stock exchange, should be able to accept risks because the predictions will not be essentially based on full reality (Kerste et al., 2015). Regarding the stock exchange (= bourse) background in world and in Iran, it should be said that the word ‘bourse’ was derived from the last name of someone named Vander Bourse who lived in Bruges, Belgium in early 15th century. Consequently, the first unofficial stock exchange was founded in Anvers, Belgium in 1460, and afterwards, the world’s first official stock exchange was founded in Amsterdam in early 17th century which was an introduction to the world’s second major stock exchange in London which started working since 1801. The case for establishing stock exchange in Iran was seriously pursued through actions taken by Chamber of Industry and Mines, Central Bank and Commerce Ministry in 1962 by forming a commission, and the laws and regulations for the establishment of Tehran stock exchange were prepared and presented to the Parliament and then were passed (Shohadayi, 2006). Stock price index is the focal point of the present study and the most common starting point for investors at the time of buying stock is to review the stock price changes trend. The importance of this index lies in the fact that the return on investment in this market can be compared to investment in other assets such as bonds, gold and foreign currency, etc. by reviewing its process of changes. Besides, the performance of different manufacturing firms and investment companies can be evaluated and compared by means of it. In addition, stock price often reflects the market expectations of the company’s economic state (Ghalibaf Asl, 2006). London stock exchange index and Tokyo stock exchange index are among the most important indexes of world’s stock exchange. Stock exchange index in Iran goes back to 70s which showed share price changes, ten banks and 10 industrial corporation, and was being published during Nov. 1976 to early 1996 (financial report of Tehran stock exchange). But basis date of Tehran index is March 21, 1999 and the calculation of Tehran stock exchange index based on the average price of traded shares practically started in the last three months of 1989 and the first three months of 1990, and the basis for devising the formula was changed from the number of shares traded into the number of shares offered in early 1992. Inflation rate is introduced in the current study as one of the variables influencing stock price index, and it means the amount of increase in the general level of countries’ money supply, their monetary income and/or direct increase in prices. According to this definition, inflation means disproportionate and normative increase of general level of prices which is followed by irregular increase in prices in the economy (McCown & Shaw, 2015). Besides, foreign currency is defined as the value, worth, price and rate or exchange rate of domestic money and foreign money, and foreign currency is used in today commercial and economic conversations to mean the circulating foreign money. In this regard, exchange rate is a number indicating the value of a country’s money in terms of the currency of a foreign country at a certain time. In addition to the two foregoing concepts, liquidity is also an important variable which is, in general, related to the increase of governments and private sector’s debt to the banking system. Sometimes, governments and private sectors resort to banking system in order to make their immediate payments and this causes the system to supply more money. In this way, the amount of liquidity of the community is raised. The impact of exchange rate changes on the level of prices and inflation which causes inadequate liquidity, is affected by macroeconomic policies of the country. If the increase of exchange rate is accompanied by implementing fiscal and monetary expansionary policies, it intensifies the inflation, and if increase of exchange rate is accompanied by fiscal austerity policies, it does not have a considerable impact on inflation and the general level of prices (Najjarzadeh et al., 1988). Regarding the background of the present study, we can mention important domestic and foreign studies as follows. Javadpour (1996), in review of the relationship between macroeconomic variables changes and stock price changes in Tehran stock exchange, found important results; one of the results suggest that changes in amount of liquidity to current and fixed prices, industrial raw materials price index and composite indicator cannot predict and explain future changes in stock price. Barzandeh (1997), in review of the effect of macroeconomic variables on the stock price index, found that price index for vehicles and
exchange rate are the Granger causality for stock price index; but housing price index is not the cause of stock price index. Ghalibaf Asl (2002) studied the relationship between stock exchange rate of stock return and market exchange rate; the results indicated that increase of exchange rate increases companies’ stock price, and this positive effect is particularly for exporting companies. Sinae (2002) studied the correlation between goods wholesale price index and stock price index of the companies admitted to the Tehran stock exchange and concluded that there is positive and direct correlation between goods wholesale price index and stock total price index, but it is not strong. On the other hand, research results indicate that inflation does not have a major impact on stock price of the admitted companies. Mohammadtabar (2003), in a study of the relationship between macroeconomic variable and stock return, concluded that wholesale prices indexes and liquidity cannot be considered to be systematic risk factors. But stock price index is recognized as a variable affecting average monthly return of each portfolio. Garkaz et al. (2011), by identifying factors affecting abnormal return of initial offering of shares of the newly admitted companies in Tehran stock exchange, found that from among the six independent variables of company size, type of ownership, earnings per share forecast error, return on equity, net profit margin-to-equity ratio and debt-to-equity ratio, the variables of debt-to-equity ratio (directly) and return on equity (reversely) have a significant relationship with abnormal return. But, in general, multiple regression analysis showed that all the six independent variables can simultaneously justify 13.7 percent of the abnormal return. Finally, Kianian and Shams (2013) analyzed the situation of electric energy stock market and concluded that the productivity of electricity industry is lower than expected. Therefore, in order to improve productivity, it was suggested to give more importance to privatization of industry and development of electric energy stock market, and to pave the way for the development of Iran’s electric energy stock market. Foreign studies have also been conducted on topics similar to the present study's topic. Yakob (2000) studied the relationship between monetary uncertainty and stock prices (the case of Malaysia), and confirmed the causal relationship between moving standard deviation for monetary growth and moving average of standard deviation for stock price. But the results of causality based on vector error correction model does not define this one-way causal relationship and states that the two variables are independent of each other which means that Malaysian stock exchange is a consistent market. Moradaghlo and Orghass (2001) studied the long-term relationship between Istanbul’s stock exchange price index and monetary variables (banknote and coins, money stock, liquidity) and four foreign currencies (dollar, mark, yen, sterling). Their research results indicated that for the whole research period, stock price index is not integrated with none of the variables. But for the period of 1988-1989, when the variables (dollar, money stock, interest rate) were inserted in the model, stock price index was integrated with these group of variables. For the period of 1990-1993, there has been a long-term equilibrium relationship between stock price index and monetary variable. Finally, for the period of 1993-1995, there has been a weak equilibrium relationship between stock price index and monetary variables. Kanas (2002) tried to find out if stock return changes affect exchange rate. His research results indicated that increase in stock return changes causes exchange rate changes. Mostafa and Kucukkale (2002) studied the long-run relationships between stock market returns and macroeconomic variables in Turkey’s economy. Their research results indicated that there is a direct and long-run equilibrium relationship between stock return and macroeconomic variables including money supply, exchange rate, industrial productions index. Pradhan et al. (2013) tested the relationship between financial development and economic growth by applying a correlation method. They used main components analysis and confirmed that there is a two-way and simultaneous relationship between financial development and economic growth. Bayar et al. (2014) conducted a similar study and studied the relationship between financial development of capital markets and economic growth in Turkey during 1999-2013 by applying causality test based on VaR. their findings suggested that there is a long-term relationship between financial development of capital markets and economic growth. Stosic et
al. (2015) studied the effect of price fluctuations and stock volume on acceptance and offering of companies’ shares. According to their results, time series for stock price changes are much more complicated than for stock volume changes, and thus reviewing stock volume changes is considered a better criterion for predicting stock market behavior in future. Therefore, in this study, after reviewing the related literature, we intend to find out if stock price index in Iran is affected by macroeconomic variables such as inflation rate, money stock and exchange rate. For this purpose, the following hypotheses are formulated:

1. There is a reverse relationship between money stock and stock price.
2. There is reverse relationship between stock price index and inflation rate.
3. There is a reverse relationship between stock price and exchange rate.

**Research Methodology**

The methodology adopted in this study is applied and descriptive-correlational in terms of purpose and data collection respectively. Besides, it is quantitative based on the collected data, and in this regard, monthly data was collected from Iran stock exchange. Statistical population of the study has been stock price index, inflation rate, exchange rate and liquidity; this information is related to stock exchange and economic reports published by Statistical Center of Iran and Central Bank during 2001-08. Therefore, data collection method in this study has been through economic reports of Statistical Center of Iran and Bureau of Economic Studies of Stock Exchange Organization; data collection method is considered to be library method. In order to analyze the data, Microfits software and Eviews6 software as well as unit root tests, vector auto regression model (VAR) have been used.

**Research Findings**

In order to analyze data, different statistical tests were used. Firstly, the correlation coefficient was measured for the stock price index with variables of consumer price index, amount of liquidity and exchange rate, and the coefficients of 0.84, 0.78 and 0.75 were obtained. Further results indicated that correlation coefficients of growth rate of stock price index with inflation and exchange rate growth are positive and equal to 0.11 and 0.02 respectively. Besides, coefficient of correlation between stock price index growth and liquidity growth is -0.05. Afterwards, unit root tests including Dickey–Fuller test and augmented Dickey–Fuller test (ADF) have been adopted; the results indicated that all the variables under study are at an unstable level. Given the instability of the variables’ logarithms, unit root test has been carried out for the first order difference of the variables. The results presented in the following table indicate that the forgoing variables are stable.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Statistic</th>
<th>Critical value at the level of 1%</th>
<th>Critical value at the level of 5%</th>
<th>Critical value at the level of 10%</th>
<th>Minimum significance level</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>RP</td>
<td>-3.32</td>
<td>-3.22</td>
<td>-2.79</td>
<td>-2.51</td>
<td>0.01</td>
<td>Stable</td>
</tr>
<tr>
<td>RER</td>
<td>-3.32</td>
<td>-3.32</td>
<td>-2.79</td>
<td>-2.51</td>
<td>0.01</td>
<td>Stable</td>
</tr>
<tr>
<td>RM</td>
<td>-3.32</td>
<td>-3.32</td>
<td>-2.79</td>
<td>-2.51</td>
<td>0.02</td>
<td>Stable</td>
</tr>
<tr>
<td>INF</td>
<td>-3.32</td>
<td>-3.32</td>
<td>-2.79</td>
<td>-2.51</td>
<td>0.01</td>
<td>Stable</td>
</tr>
</tbody>
</table>

In addition to the above tests, vector auto regression (VAR) model was adopted and the result of determining optimal degree of the model is presented in the following figure.
Table 2: Results of determining optimal degree of the model

<table>
<thead>
<tr>
<th>Laq</th>
<th>LogL</th>
<th>LR</th>
<th>FPE</th>
<th>AIC</th>
<th>SC</th>
<th>HQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>893.5471</td>
<td>NA</td>
<td>0.0342</td>
<td>7.978196</td>
<td>8.038927</td>
<td>8.002708</td>
</tr>
<tr>
<td>1</td>
<td>953.9182</td>
<td>55.01797</td>
<td>2.02E-09</td>
<td>-8.301495</td>
<td>-7.997842</td>
<td>-8.178939</td>
</tr>
<tr>
<td>2</td>
<td>982.5734</td>
<td>55.01797</td>
<td>2.61E-09</td>
<td>-8.413986</td>
<td>-7.867410</td>
<td>-8.193858</td>
</tr>
<tr>
<td>3</td>
<td>1005.071</td>
<td>42.39540</td>
<td>2.46E-09</td>
<td>-8.471742</td>
<td>-7.868224</td>
<td>-8.178939</td>
</tr>
<tr>
<td>4</td>
<td>1019.558</td>
<td>26.78497</td>
<td>55.01797</td>
<td>2.02E-09</td>
<td>-8.458293</td>
<td>-7.868224</td>
</tr>
<tr>
<td>5</td>
<td>1038.443</td>
<td>1049.903</td>
<td>2.50E-09</td>
<td>-8.458293</td>
<td>-7.682243</td>
<td>-8.178939</td>
</tr>
<tr>
<td>6</td>
<td>1071.603</td>
<td>1071.603</td>
<td>2.42E-09</td>
<td>-8.494250</td>
<td>-7.730610</td>
<td>-7.783427</td>
</tr>
<tr>
<td>7</td>
<td>1088.298</td>
<td>28.49181*</td>
<td>2.41E-09</td>
<td>-8.500423</td>
<td>-6.925310</td>
<td>-7.783427</td>
</tr>
<tr>
<td>8</td>
<td>1093.5471</td>
<td>1093.5471</td>
<td>2.41E-09</td>
<td>-8.500423</td>
<td>-6.496310</td>
<td>-7.691555</td>
</tr>
</tbody>
</table>

In order to review the stability of the model, the results presented in the following table show that none of the roots are not outside the unit circle, the stability condition of the model (VAR) is established.

Table 3: Root of characteristic polynomials of the model (VAR)

<table>
<thead>
<tr>
<th>Root</th>
<th>Modulus</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.998598</td>
<td>0.998598</td>
</tr>
<tr>
<td>0.983654+0.008193i</td>
<td>0.983688</td>
</tr>
<tr>
<td>0.983654-0.008193i</td>
<td>0.983688</td>
</tr>
<tr>
<td>0.415631</td>
<td>0.415631</td>
</tr>
</tbody>
</table>

After the above-mentioned tests, statistical tests were adopted to investigate the research hypotheses; the results are as follows.

Testing first hypothesis: there is a reverse relationship between money stock and stock price.
H₀ hypothesis: there is no reverse hypothesis between money stock and stock price (H₀: M≤0).
H₁ hypothesis: there is a reverse hypothesis between money stock and stock price (H₁: M>0).
According to the software output, liquidity coefficient is -0.17. As a result, H₀ is rejected and H₁ is accepted, i.e. money stock has a direct relationship with stock price.

Table 4: Testing first hypothesis

<table>
<thead>
<tr>
<th>Variable</th>
<th>LP coefficient</th>
<th>LM coefficient</th>
<th>Equilibrium relationship</th>
<th>Type of relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amount of liquidity</td>
<td>-1</td>
<td>-0.17</td>
<td>Exists</td>
<td>Direct</td>
</tr>
</tbody>
</table>

According to the above table, liquidity has a positive effect on stock price index. More exactly, one percent (10 percent) of change in liquidity results in 0.17 percent change in stock price index. If liquidity increases, it is expected that demand for stock will increase and thus, its price will rise. Testing second hypothesis: there is a reverse relationship between inflation rate and stock price.
H₀ hypothesis: there is no reverse hypothesis between inflation rate and stock price (H₀: LCPI≤0).
H₁ hypothesis: there is a reverse hypothesis between inflation rate and stock price (H₁: LCPI>0).
According to the software output, inflation rate coefficient is 0.29. As a result, H₀ is rejected and H₁ is accepted, i.e. inflation rate has a reverse relationship with stock price.

Table 5: testing second hypothesis

<table>
<thead>
<tr>
<th>Variable</th>
<th>LP coefficient</th>
<th>LM coefficient</th>
<th>Equilibrium relationship</th>
<th>Type of relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inflation rate</td>
<td>-1</td>
<td>0.29</td>
<td>Exists</td>
<td>Reverse</td>
</tr>
</tbody>
</table>

According to the above table, inflation rate has a negative effect on stock price index. More exactly, one percentage unit of change in inflation rate results in -0.29 percent change in stock price index. In other words, increase of inflation rate, with the assumption of stability of
return on assets of stock, will result in decrease in demand for stock and thus, price index will decline. *Testing third hypothesis:* there is a reverse relationship between exchange rate and stock price.

$H_0$ hypothesis: there is no reverse hypothesis between exchange rate and stock price ($H_0: M \leq 0$).

$H_1$ hypothesis: there is a reverse hypothesis between exchange rate and stock price ($H_1: M > 0$).

According to the software output, exchange rate coefficient is 0.24. As a result, $H_0$ is rejected and $H_1$ is accepted, i.e. exchange rate has a reverse relationship with stock price.

Table 6: testing third hypothesis

<table>
<thead>
<tr>
<th>Variable</th>
<th>LP coefficient</th>
<th>LM coefficient</th>
<th>Equilibrium relationship</th>
<th>Type of relationship</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exchange rate</td>
<td>-1</td>
<td>0.24</td>
<td>Exists</td>
<td>Reverse</td>
</tr>
</tbody>
</table>

According to the above table, exchange rate has a negative effect on stock price index. More exactly, one percent (10 percent) of change in exchange rate results in -0.24 percent decrease in stock price index. In other words, considering the foreign currency and capital markets as alternative assets, the relationship between exchange rate and stock price has been negative.

**Discussion and Conclusion**

The main purpose of the present study was to examine the long-term relationship between Tehran stock exchange index and macroeconomic monetary variables by using portfolio theory and Fisher’s basic theory. For this purpose, the time period of 2001-08 was reviewed. Data analysis results regarding the three research hypotheses indicted that money stock has a direct relationship with stock price; inflation rate has a reverse relationship with stock price; and exchange rate has a reverse relationship with stock price. These findings are further interpreted as follows.

1) Exchange rate has a negative effect (with coefficient of -0.24) on stock price index. Thus it is seen that decrease in real exchange rate causes people to be oriented towards other financial assets including shares, and this leads to increase in stock price. Ghalibaf stated in his study that increase of exchange rate results in increased stock price. It means that two variables have positive relationship and this finding is in contrary to present research results. Mostafa et al. pointed out the effective relationship between exchange rate and stock price in Pakistan; however, they believed that whether it is positive or negative is periodical.

2) Liquidity has a positive effect (with coefficient of 0.17) on stock price index. If liquidity increases, it is expected that the demand for stock assets raise and as a result, its price index will grow. Apostolos concluded in his study that there is no relationship between money and stock price in the US, while in the present study it was indicated that this relationship in Iran exists and is positive.

3) Inflation has a negative effect (with coefficient of -0.29) on stock price index. Previous studies showed that there has been a negative relationship between inflation and stock price in short-term. And the studies conducted on the Tehran stock exchange confirm the positive relationship between stock price index and inflation in long-term; i.e. stock price increased in parallel to inflation increase. According to the results obtained, inflation has had the highest impact on stock price changes in Iran, and increase in inflation damaged the capital market. Sinaee pointed out the strong relationship between inflation and stock price; but he believed that its positivity or negativity is different in various industries, while in the present study, this relationship is negative in all industries. Based on the results obtained from previous studies as well as the present one, it is seen that macroeconomic variables affect total stock price index. Since the relationship between economic variables and the forgoing index is mainly negative, it is suggested that:
• Economic decision makers and policymakers consider the effects due to their decisions on indexes of stock market and other financial markets at the time of devising fiscal and monetary policies at macro level.
• Since one of the duties of actors of stock exchange is to determine the stock price of admitted corporation and this price should indicate all the factors influencing stock exchange, all the economic factors including price and foreign currency fluctuations should be considered in pricing of shares. So it is suggested to take into account the price and foreign currency fluctuations in pricing of corporate shares.
• Active investors in stock exchange as well as new investors should be aware of the price and foreign currency changes effects in short-term and long-term, and do not base their assessment of profitability and selecting new shares on sudden changes of price index.
• Since continuous increase of inflation results in decrease of corporate stock return and as a result, decrease of stock price as well as decreased demand for that stock, private sector investment in the country's economy may decrease. Therefore, in order to ensure the minimum earning of stockholders, it is needed to consider and implement strategies such as stock coupons, stocks or profitability guarantee, devising modern market making methods, insuring investment and supporting investors on different ways.
• Besides, following suggestion are made for future studies:
• Investigating the effect of macroeconomic variables on corporate price return in stock market.
• Investigating the effect of macroeconomic variables of each sector of the industry on the indexes specific to those industries.
• Testing the validity of Arbitrage Pricing Theory in Iran and measuring the risk of economic factors in stock returns.

References