Political Connection and Earnings Management Methods: Evidence from Tehran Stock Exchange

Alireza Ghonji Feshaki

Ph.D. Student in Accounting, Damavand branch, Islamic Azad University, Damavand, Iran
(Corresponding Author)
aaghonji57@gmail.com

Mohammad Hamed Khanmohammadi
Assistant Professor, Department of Accounting, Damavand Branch, Islamic Azad University, Damavand, Iran
dr.khanmohammadi@yahoo.com

Shohreh Yazdani
Assistant Professor, Department of Accounting, Damavand Branch, Islamic Azad University, Damavand, Iran

ABSTRACT

Governments have always affected the economic environment as a policy maker. On the other hand, the presence of political connection as representatives of governments in companies affects their administrative and decision - making methods.Firms and managers manage them under environmental conditions by applying different approaches to earning management in order to achieve their goals.The government representatives on the board of directors are affected by applying different methods due to political and economic conditions, and thus in this study the effect of political connection on earnings management practices in Tehran stock exchange (2004-2016) has been paid in 16 industry with 271 companies. The purpose of this study is application of correlation analysis. Multivariate regression has been used to test the hypotheses. The results indicate that in the course of the study, companies have managed earning management and at the same time using more than 70 % of companies using Accrual- earnings management method, there is a relationship between political connection and Real earnings management, and the change of the general level of prices and economic indicators affects the relationship. Also, Accrual- earnings management methods was independent of the political connection of companies and the effect of interaction of the general level of prices and macroeconomic indicators due to the establishment of different governments.

Keywords:

Earnings management, Political Connection, Accrual earnings management, Real earnings management.

1. Introduction

Business units have a great tendency to communicate closely with the government to achieve government support. The relationship will benefit long - term and short - term benefits, such as various breaks and tax breaks and easier access to information and credit. Therefore, it can be stated that in economic systems based on relations, governmental relations are an important source of value for the firms with relationships. Companies with governmental relations are more readily available to other sources of capital and other benefits through their communications. In this regard, some managers seek to establish and maintain the relationship between the company and the state with the aim of resolving financial constraints with the lowest cost (Boubakri et al., 2012), one way to work before the government to control the economy, influence in economic units. The government's influence on economic units is created through the relationships of politicians or government - owned companies. The influence and political support of the state can be investigated from two aspects of pros and cons. The government's political support may lead to value creation. For example, firms that have good relationships with the government have more market share and pay less taxes, bank loans are more readily available to them, offering them more readily than other companies (Leuz, Oberholzer-Gee, 2006). Although government support brings advantages such as lower cost of financing for a particular company, on the other hand it may result in deficient performance (Nelly Sari, and Anugerah, 2011). Firms that fail to attract political support appear to be holding less cash. Because managers of such companies can either provide their needs with a higher level of credit that does not require a quick payment of cash, or in the face of the need for financial resources, they will have access to these resources at a shorter time. However, it will go further and that is the presence of the government in the form of institutional investors in many of the companies in the stock market, is seen alongside the political connections. Thus, the political connection with the right to vote resulting from presence as institutional owner can strengthen these effects. The main stakeholders of centralized ownership, using their own right to vote can convince the company to use their methods and strategies to achieve their goals.

The conditions and environment have a significant impact on the financial situation of the firms, and in the literature of financial economics the importance of this issue has been mentioned several times.

The study of Ball, and Brown revealed that the reported profits of companies greatly affect the change in economic conditions.

The statistics also indicate that the stock exchanges are in place in countries with the right economy, which confirms the influence of the companies from the state of the country's economy.

Profit as one of the most important indicators of accounting is always used for different purposes such as stock assessment and performance of companies and some other measures, especially by consumers in Iran. In the last few years, most of the research that has been done in the impact of accounting earnings on price or stock returns have not been very important to earnings management. But in recent years, the bankruptcy of the giant companies, and the previous lack of prior knowledge of the issue, led to the fact that researchers and financial analysts are focusing their emphasis on quality rather than making the profit figure and also identifying ways to discover earning management methods.

The quality of earnings reported for consumers from financial information is vital because of the efficient allocation of resources in the capital market. Investors, financial analysts, institutional investors and legal authorities show a lot of interest in the quality of reported earnings in order to make the decision to evaluate and invest in the companies listed in the capital market. But does the data provided to stakeholders enjoy a desired quality level or the information provided to them has the ability to rely on and predict what is required? Therefore, maintaining public interest, observance of public interest, promotion of information transparency and the necessity of companies to play social responsibilities is one of the most important factors that have been addressed by different regulatory and executive authorities over the past. A fundamental factor in earnings management test in companies is estimating the validity and actions of managers in determining the profit. Review of earnings management literature indicates the existence of different approaches with different identifiers in estimating earnings management, and in many cases the performance related to criteria and related models regarding

earnings management measurement is the question and challengeable.

Earning management is to conduct targeted acts in the process of financial reporting of an external financial reporting process for achieving specific goals. The amount of interest and its volatility are important from the company's shareholders ' point of view and affects the value of the company's stock.

One of the primary objectives of management is to maintain firm reputation as credit makes the company more efficient and dynamic. Finding a suitable position among competitors and the capital market will attract investors and creditors more favorably than the company, and the company will need to spend more on the competition with similar other company and receive less credit and loan costs. The most important motivation for earning management is that firms with a good profit process and their profits do not have significant changes over similar firms.

Financial reporting in economic units indicates the information needs and expectations of different groups of users. Financial statements that need this information in order to estimate their different goals and needs to be able to achieve a level of the quality of information provided. On the other hand, the possibility of manipulating profit due to conflict of interest as well as some of the inherent limitations of accounting (including 1)the difficulties in the process of estimates and future predictions, and (2)the possibility of using the various methods of accounting by profit - for - profit units. Benefits management can take place in a variety of ways. The review of the earnings management process indicates that many accounting scholars seek to know the cause of manipulating the outcome of the company's regular operations and are often looking for how it can be substantially affected by the results of the operation. Most researchers seek to identify ways to discover benefits of earning management offered by companies.

Earning management can also take place in order to achieve different goals due to cases outside the organization, such as state relations and macroeconomic conditions prevailing on the economic market.

The financial reporting environment determines the level of authorization of a single reporter and imposes constraints on corporate reporting. The effectiveness of these constraints has two dimensions: First, this environment must provide a means of detecting when a reporting violation takes place, and secondly, if a violation is recognized, the environment must include an important outcome expected for the offending company. Lack of guidance, supervision, or proper implementation in each of the two dimensions, in the opinion of corporate managers, increases the level of use of reporting powers to achieve.

In the present study, the effect of political connection on financial reporting and the importance of earnings quality has been investigated by investigating the effect of political connection on earnings management practices as an indicator that affects the quality of earnings.

Considering the role of corporate governance and policies applied by the government in annual budgeting to improve capital market transparency information can be effective. On the other hand, applying the policies governing corporate governance rules and the determination of policies needed to reduce the effects associated with the political connection in companies can lead to increasing the quality and transparency of financial reports as a result of corporate economic prosperity.

2. Literature Review
2.1. Theoretical Fundamentals
2.1.1. Earnings Management
When companies are under increasing pressure in an unfavorable economic situation, their directors ask the accounting department to improve the final line of income (loss) statement, that is, earnings; thereby changing its information content. Despite all its flexibility, the accounting profession does not seem to be able to provide useful data for management in such circumstances (Hope and Hope 1996).

The concept of earnings management has been investigated from various angles and different definitions have been proposed. For example, according to Gordon et al., when managers choose a particular method of accounting and reduce the fluctuations in reported earnings, the result is earnings smoothing or management. They also mention that managers have the potential to influence the reported earnings in the limits of their power, which results from the freedom of action in the framework of accepted accounting principles and procedures.

Generally, earnings management is defined as the impact on the earnings of a company, in such a way as

to realize the interests and desires of the company and its managers. There are various hypotheses and incentives for earnings management, some of which are: the mechanical hypothesis and the efficient-market hypothesis, positive theories in earnings management, bonus plan hypothesis, debt covenant hypothesis, political costs hypothesis, incentives related to initial public offering (IPO), tax incentives, and incentives related to management replacement.

2.1.2. Environmental factors of interest management

One of the most influential cases in financial reporting is the environment related to it, as in the development of supervisory standards on the quality of financial reporting, attention is always paid attention to the topic of the reporting environment, in order to identify and control factors affecting the quality of financial reporting

Economic variables and, in particular, macroeconomic variables, as defined in the economic literature, are mirror terms and conditions of a community. In a way that can be seen as the influence of other social and political environmental characteristics. The macroeconomic variables considered could include inflation rates, interest rates, interest rates, gross national and domestic production rates, liquidity volume, gross domestic product, liquidity volume, and many other variables that may be affecting the decisions regarding the selection of the intended finance method and the direction of capital management

Earning management is done in order to achieve different goals due to cases outside the organization such as changing the general level of prices, communication and political and economic conditions prevailing on society. Change of public level is affected by different policies and coincided with the establishment of governments governing the business environment and affects it

2.1.3. Political connection

The theory of political economy came into the world's economic texts from the second half of the 20th century with the influence of the liberalism of liberalism. It is not only about the attention of economists and politicians, but the sociologists have also made works to explain the theory. On the basis of this theory, economics and politics have a mutual influence on one another. This means that action and political decisions have a direct and indirect effect on economic activity. Political relations, in contrast to the company's economic bases, are the main determinant of firm profitability in Eastern and developing countries, he believes that the proceeds of firms with political relations are largely influenced by government decisions, which account for their interests. In companies with access to capital sources, the access to sources of capital depends largely on the reported gains, since political relations lead to easy access to credit and capital resources from banks (Boubakri et al., 2012). The indicators of corporate governance are the existence of members of the government, the parliament, and such as this type of political institutions, or the existence of a major shareholder, with at least ten per cent of voting rights (governmental and quasi - governmental). This variable was done in a variety of ways by examining the notes of the financial statements and board reporting to the General Assembly through identifying the CEO, board members, major stakeholders, individuals and individuals interacting with sample companies. Another criterion that has been used in recent research to measure political connection is the long - term debt criterion (multiple studies)such as van et al. , 2008, Van and Wang 2003)have shown that greater political connection in firms makes firms access to long - term and less expensive resources(Lin et al. , 70: 2015)

2.2. Empirical Studies
2.2.1. Background on Earnings Management Test

During their studies on earnings management by using accruals to explore earnings management, Healy, De Anjelo and Jones (1991) have introduced models that have been tested repeatedly in subsequent studies. Dechow et al. (1995) proposed a model which was called the modified Jones model, and they compared this model with Jones model and the industry model, and concluded that their modified model had a better predictive power.

Mashayekhi et al. (2005) tested earnings management for listed companies in Tehran Stock Exchange through the use of the modified Jones model and concluded that earnings management was used by the selected companies.

Dari Sadeh et al. (2015) have investigated the accruals-based earnings management and real earnings management before and after the approval of Securities Market Act of The Islamic Republic of Iran and concluded that the enforcement of the new laws led to a change in the method of earnings management from accruals-based to normal-items method.

Degeorge et al. (1999) concluded the greatest impact of accruals earnings management and real earnings management results from the harmonic use of both tools. Corporate managers are aware that achieving goals motivates them to understand the benefits of choosing one earnings management strategy among other strategies (Samuelson & Zucker 1988, Barto et al. 2002). In circumstances in which the probability of using both methods of earnings management is equal, previous articles show that in these situations, managers use both accruals-based earnings management and real earnings management alternatively on the basis of their relative costs and benefits (Cohen and Zarowin 2010, Zang 2012).

2.2.2. Economic Variables and Financial Reporting

According to the capital asset pricing model, stock prices are affected by two different set of factors. First, a set of macro factors such as economic growth, inflation rate, interest rate and exchange rate. Second, a set of micro factors that relates to the company internal issues, such as dividends and the company plans (Sharp, 1964). Also, the effect of macroeconomic news on stock prices was examined by Poitras (2004) in the United States and the results indicated that except the discount rate, other economic variables had some explanatory power for changes in the stock price index.In another study, Gan et al. (2006) examined the interactive effects between the New Zealand's stock price index and a set of seven macroeconomic variables. The results showed that there is a long-term relationship between the New Zealand's stock price index and the macroeconomic variables tested. Erman et al. (2008) examined the effect of macroeconomic variables on stock prices in Turkey's stock market, and the findings showed that the economic indicators influence stock prices through inflation.

Bhargawa (2014) tested the impact of corporate fundamental variables, such as total assets and long-term debts, as well as macroeconomic variables such as unemployment rate and interest rate on seasonal prices. The research findings indicated that the fundamental accounting variables and macroeconomic variables considerably predict the stock prices. There is also a mutual relationship between long-term debts and interest rate.

Rahnama Roodposhti et al. (2005) investigated the relationship between stock return of investment companies and macroeconomic variables. The results indicate that non-oil exports and liquidity have a positive effect on stock returns of investment companies, and the consumer price index and imports have a negative effect on its returns.

Abbasian et al. (2008) examined the effect of macroeconomic variables on the total index of Tehran Stock Exchange. Findings showed a long-term and positive effect of the exchange rate and balance of trade on total index, and also a negative effect of inflation, liquidity and interest rate on total index of the stock market.

Baharmoghadam and Quarvei (2012) studied the effect of days and months of the year, and macroeconomic variables such as GDP and inflation on stock returns in Tehran Stock Exchange. Findings showed that there is no significant relationship between macroeconomic variables and seasonal abnormal returns.

Daei Karimzadeh et al. (2013) studied the effect of macroeconomic variables on the stock price index of banks. Based on the findings of this research, the exchange rate and the inflation rate have a negative effect, and the bank interest rate, liquidity, and the GDP have a positive effect on the stock price index of banks.

Mohammadrezae`i et al. (2016) investigated the effect of inflationary recession on real earnings management and accruals earnings management and concluded that there is a positive and significant relationship between inflationary recession and real and accruals earnings management. Also, Baghomiyan et al. (2017) investigated the relation between the economic recession and earnings management in Tehran Stock Exchange. The results demonstrated that there is a direct and significant relationship between the economic recession and earnings management.

Samadi and Bayati (2011) investigated the relationship between macroeconomic variables and stock returns in Tehran Stock Exchange and concluded that the gold price, inflation rate and exchange rate are

factors influencing stock returns and liquidity and oil prices have an impact on returns. The results also showed that there is a leverage effect on the stock market in Tehran.

Seyed Shakari and Factori (2012) examined the relationship between inflation and economic growth, and concluded that there was a negative relationship between them.

Fadaeinejad and Farahani (2017) studied the effects of macroeconomic variables on the total stock market index in the framework of the arbitrage pricing theory. The researchers studied eight macroeconomic variables, including consumer price index, bank interest rate, gold price, industrial production index, oil price, volatility, stock price, exchange rate and money supply as effective variables on Tehran Stock Exchange's Index, and concluded that the change in the growth rate of money had a negative effect on stock returns, and the index of industrial production, oil prices, stock price volatility, and price levels had a positive effect on stock returns. On the other hand, exchange rate and gold price had no significant effect on stock returns.

2.3. Research Hypotheses

In order to explain the research question, the following hypotheses were defined:

Main hypothesis: There is a significant relationship between the Political connection indicators and the earnings management method.

First sub-hypothesis: There is a significant relationship between the Political connection indicators and the real earnings management.

Second sub-hypothesis: There is a significant relationship between the Political connection indicators and the accruals earnings management.

3. Methodology

From the result view, this research is classified in the applied research group and from the view of execution process, it is categorized as quantitative research and the logic of its implementation is a deductive-inductive logic and the purpose of doing it is to perform correlation analysis. From another dimension, this research is a kind of post-event research. In field research, the purpose is to review the cause-and-effect relationships by studying the results and the previous background in order to find causes of the events (Naderi & Seif Naraghi, 1999). In the present study, by using the same approach, the relationship between the Political conection and the methods of earnings management is studied.

3.1. Population and Statistical Sample

The statistical population is all of elements that are at the same time desirable for us and have one or more common attributes (Hafez Nia, 2003).

The statistical population includes all of the listed companies in Tehran Stock Exchange that have the following characteristics:

- In order to homogenize the sample of the research, companies must have been listed in TSE before 2004.
- Their data should be available.
- The number of companies in the relevant industry should have a normal distribution.

With regard to the above mentioned items, the statistical population of this research is all of the listed companies in Tehran Stock Exchange that by defining the above criteria, we have studied 16 industries including 271 companies as our sample.

3.2. Operational Definition of the Variables and their Measurement
3.2.1. Measuring Real Earnings Management

This kind of earnings management is done by influencing the actual activities. That is why it is called real earnings management. Influencing the actual activities is a deviation from normal practices of operations and one of the motives of managers is to mislead the stakeholders, so that they believe that the financial reporting objectives are achieved through normal activities. In this research, in order to show the real earnings management, the modified model of Roychawdhary (2006) is used.

First Model: Operating cash flow

$CFO_t / A_{at} = \beta_0 + \beta_1 1 / A_{at} + \beta_2 Sales_t / A_{at} + \beta_3 \Delta Sales_t / A_{at} + \varepsilon$

In this model, the CFO_t represents the operating cash flow, $Sales_t$ represents total sales revenue and $\Delta Sales_t$ represents the change in sales revenue of the current year compared to the previous year, and ε reflects the errors of the model which is considered as the abnormal cash flows. To balance the data, the

variables of the models are divided by the average assets of the company. Aat represents the average of the assets at the beginning and the end of the year.

Second Model: Production Costs

$CGS_t/Aat = \beta_0 + \beta_1 1/Aat + \beta_2\ Sales_t/Aat + \beta_3\ \Delta Sales_t/Aat + \beta_4\ \Delta Sales_{t-1}/Aat + \varepsilon$

In this model, CGS_t represents the cost of goods or services sold, and $\Delta Sales_{t-1}$ represents changes in the sales revenues of the previous year compared to the two previous years.

Third Model: Operational Costs

$DISE_t / Aat = \beta_0 + \beta_1 1 / Aat + \beta_2\ Sales\ t / Aat + \varepsilon$

In this model, $DISE_t$ represents the sum of operational costs (distribution & sales, and general & administrative).

Following Roychawdhary, other researchers such as Cohen and Zarowin (2010) and Zang (2012), in order to calculate an integrated measure of real earnings management components, added the residuals of all three models with each other. In this research, also this method is done:

$REM_t = -(RM\text{-}CFO_t) + (RM\text{-}CGS_t) - (RM\text{-}DISE_t)$

In this model, REM_t represents real earnings management and $RM\text{-}CFO_t$ represents the residual of net operating cash flow model and $RM\text{-}CGS_t$ represents the residual of production costs model and $RM\text{-}DISE_t$ reflects the residual of operational costs model. In order to calculate the residual of each model, the data is categorized based on the industry and year differentiation in a cross-sectional structure. The higher REM_t, the greater is real earnings management in the company.

3.2.2. Measuring Earnings Management of Accruals

To measure earnings management through accruals, Jones (1991) model is used in the following format:

$TACC_t / Aat = \beta_0 + \beta_1 1 / Aat + \beta_2\ \Delta REV_t / Aat + \beta_3\ PPE_t / Aat + \varepsilon$

$TACC_t = (\Delta CA_t - \Delta Cash_t) - (\Delta CL_t - \Delta STD_t)$

In this model, $TACC_t$ represents total accruals, PPE_t represents gross fixed assets (before depreciation), ΔREV_t represents the change in total sales revenue of the company compared to the previous year, ΔCA_t represents the change in current assets, $\Delta Cash_t$ represents the change in the cash flow of the current year, ΔCL_t indicates change in current liabilities and ΔSTD_t reflects the change in the current portion of long-term debts in current year that are calculated compared to the previous year. The variable AEM_t represents the earnings management through accruals, which is calculated based on the absolute values of the residuals of total accruals.

$AEM_t = |\ RM\text{-}TACC_t\ |$

In this model, $RM\text{-}TACC_t$ is the remainder of the total accruals model that represents discretionary accruals.

3.2.3. Political Connections

The measure of political connections is taken from the article by Faccio (2006). A dummy variable called Connect is created that if during the years 2004 to 2017 the company is politically-connected, its value will be 1, and if the company is not politically connected, the value of the variable will be zero. A company is defined as politically-connected if at least one of its major shareholders (anyone controlling at least 10 percent of the voting shares) or one of its board members is a member of governmental agencies.

3.2.4. Change in General Level of Prices (Inflation)

For the general level of prices, the Inflation variable is used which is based on the general level of prices published by the Central Bank of the Islamic Republic of Iran for each year.

3.2.5. Economic Indicators

The selection of macroeconomic variables in this research is based on relevant studies in this area, including Shu et al. (2013), Stock and Watson (2002), Chen and Ross (1986), Taqavi and Janani (2000).

The following macroeconomic variables are used in this research: government petroleum revenues in million dollar, liquidity, current budget of government, government expenditures, non-oil GDP at current prices, total exports, per capita income at current

prices, economic growth and GDP at current prices, which are collected from the data published by the central bank for each year, and the reliability of the data related to these variables is examined by using the Dickiy Fuller test. In order to balance the economic indicators, the annual ratio of each of the indicators to GDP (at current prices) was used. An integrated economic index derived from the sum of the ratio of economic indicators for each year, which is shown by EcoIndex symbol.

3.2.6. Control Variables

In analyzing the multivariate data, several control variables and random effects are considered at the company level. In order to use the regression models in the panel data structure, in addition to conducting different tests, applying control variables is necessary. So, in order to obtain reliable results, four effective factors of year, industry, government policy and company characteristics are controlled. Since the data in the structure of panel data are affected by political conditions of the economy among different years,

industries and companies, therefore, in order to control the effect of these changes on the relationship among the main variables, these variables are used in the models. The dummy variables Year Control and Industry Control are used to control the specific effects of time and the type of activity.

The following method was used to define the company's control variable (Firm Control):

Debt to asset ratio: $Leverage_t = L_t / A_t$

Where L_t represents the company's debts and A_t represents the assets of the company.

Natural Logarithm of ROA (LNROA):

$LNROA_t = Log (NI_t / Aa_t)$

Where NI_t represents the net income of the company and Aa_t represents the average of the assets at the beginning and the end of the period.

Governmental policy

To illustrate the status of macro politics for the presidential periods, each period is assigned an ordinal scale and is displayed with GPtControl symbol.

Table (1). Model Variables

Row	Variable Name	Variable Type	Variable Symbol
1	Real Earnings Management	Dependent variable	REM_t
2	Accruals Earnings Management	Dependent variable	AEM_t
3	Change in General Level of Prices	Mediator variable	$INFSales_t$
4	Economic Indicators	Mediator variable	$EcoIndex_t$
5	Political Connections	Independent variable	$Connect_t$
6	Company Variable	Control variable	$Firm_{Control}$
7	Year Variable	Control variable	$Year_{control}$
8	Government Policy	Control variable	GP_t
9	Industry Variable	Control variable	$Industry_{Control}$

3.2.7. Hypotheses Testing Model

Since the measurements were repeated at the level of listed companies in Tehran Stock Exchange for the 13-year period, the multi-level regression analysis of the data was used to test the hypotheses. Multivariate analysis is a suitable method to simultaneously take into account the descriptive variables at different levels. In order to test the hypotheses, the following multivariate general regression model was used:

$REMHigh\&AEMLow$ OR $REMLow\&AEMHigh = \beta0+\beta1connect_t + \beta2connect_t \times EcoIndex + \beta3connect \times INF_t + \beta4\ connect_t \times INF_t \times EcoIndex + \beta6Leverage_t + \beta7LNROA+ \beta8YearControl + \beta9GPControl + \beta10IndustryControl + \varepsilon$

4. Results

4.1. Descriptive Statistics of Research Variables

In the descriptive statistics section, data analysis was performed by using measures of central tendency such as mean and measures of dispersion such as standard deviation, skewness, and kurtosis.

The amount of skewness for the dependent variables is (3±), which indicates the normal distribution of data, but for some other variables, the amount of kurtosis is approximately greater than 3, but due to the large size of the sample, we could reference to central limit theorem and we may suppose that the distribution of data is close to the normal distribution and it does not generate any obstacle in testing the hypotheses.

Since there was a high correlation among economic variables, it caused severe multicollinearity; therefore, these variables were entered into the factor analysis and were factorized.

Table (2). Description of Variables of Sample Companies during 2004-2017

Statistical Parameters	Dependent Variables		Mediator Variable		Control Variables	
	Accrual Earnings Management	Real Earnings Management	Economic Indicators	Change in General Level of Prices	Financial Leverage	Ln of ROA
	REM	AEM	EcoIndext	INF	LEV	LNROA
Mean	0.0056	0.0049	5.5871	17.742	0.6136	-0.7144
Median	-0.0047	0.0046	5.5619	14.80	0.6251	-0.8448
Maximum	0.5738	1.1244	6.3650	34.789	1.9410	6.9221
Minimum	-0.6047	-1.2054	4.7363	9.0110	0.0048	-5.0814
Standard Deviation	0.1811	0.3685	0.5116	7.9274	0.2588	0.9330
Skewness	-0.1767	-0.1574	-0.0356	0.9592	0.5721	1.0381
Kurtosis	2.6135	2.2365	1.8895	2.6389	5.0717	6.2161

Table (3). Description of Variables Measuring the Economic Indicators of Sample Companies Studied during 2004-2017

	Economic Indicators								
	Exchange Rate	Total Exports (Million Rial)	Gross Domestic Production Based on Current Prices	Per capita income Based on Current Prices	Liquidity	Current Government Budget	Government Expenditures	Gross Fixed Production 83	Gross Domestic Production Excluding Oil (Current Prices)
Statistical Parameters	MER	MEXPRIAL	MGDP	MPCI	MLIQ	MGOVCURBDG	MGOVEXP	MGDP83	MGDPNOIL
Average	9.655	20.862	15.419	11.114	14.924	13.491	13.736	14.483	15.196
Mean	9.2687	20.876	15.371	11.065	14.896	13.399	13.678	14.514	15.147
Maximum	10.503	21.692	16.358	11.978	16.343	14.543	14.728	14.653	16.227
Minimum	9.0764	19.761	14.265	10.041	13.438	12.354	12.625	14.265	14.015
Standard deviation	0.5845	0.5483	0.6731	0.6270	0.8842	0.6361	0.5887	0.101	0.7183
Skewness	0.4336	-0.2702	-0.1364	-0.1235	0.002	-0.0014	-0.0867	-0.6208	-0.0759
Kurtosis	1.3236	2.2303	1.7545	1.7697	1.8871	2.0231	2.1902	2.8257	1.7462

Table (4). Primary and Extracted Factor Loads according to the Sum of Squares Method

Economic variables	Primary Commonalities	Extracted Commonalities
MLIQ	1	0.965
MGOVCURBDG	1	0.984
MGDP83	1	0.700
MGOVEXP	1	0.979
MEXPRIAL	1	0.951
MGDPNOIL	1	0.9890
MGDP	1	0.988
MPCI	1	0.987
MER	1	0.899

The results of the above table show that all 9 factors have a factor load of above 0.7, and so no variable needs to be eliminated and all variables need to be included in the factor analysis. As a result, no variable was eliminated, and all variables were included in the factor analysis and they were categorized in one factor named (ECOINDEX). This factor explains %93.791 of the total variance of the changes related to the economic indicators which is a considerable amount.

4.2. Correlation of Variables

Correlation test is required to determine if the model has a multicollinearity problem or not. Multicollinearity means that there is a linear relationship among independent variables and mediator variables (change in general level of prices, control policy of government and economic indicators) and control variables (financial leverage and natural logarithm of return on assets). One way of identifying the multicollinearity is to review the correlation of the variables and provide a correlation matrix. If there is not a severe correlation among the variables, it implies that multicollinearity will not exist in the model. In this study, Pearson correlation coefficient was used in order to examine this relationship. The results are displayed in table (5). According to the table, the correlation coefficient among the variables is less than 0.3. This result indicates a weak correlation among the variables of the model. According to the extracted results, we may claim that there is no multicollinearity in the models.

Table (5). Correlation Matrix among Independent and Control Variables

	INF	ECOINDEX	LEV	LNROA	GP
INF	1				
ECOINDEX	-0.2974	1			
LEV	-0.0219	0.0098	1		
LNROA	0.0148	0.0342	0.2038	1	
GP	0.0889	0.235	0.008	0.0439	1

4.3. Reliability of Variables

The reliability of the research variables means that mean and variance of the variables over the time and the covariance of them have been constant among different years. For this purpose, we can use the Fisher, Levin-Lin-Chu, Dicky Fuller and ... tests. In this study, in order to do this analysis, the Levin-Lin-Chu test was used. The results of this test indicate that with regard to the level of significance of the research variables, all variables are reliable by considering the amount of the intercept.

4.4. Results of Testing Earnings Management Methods

In order to distinguish between the use of ordinary items and the accruals, the following two dummy variables have been used.

First, dummy variable RM_DUMMYit: if the REMt of a company in year t is greater than the mean of the industry, number 1 is assigned to it, otherwise zero. Second, dummy variable AM_DUMMYit: if the AEMt is greater than the industry average in the relevant year, it will be one, otherwise it will be zero. According to the previous articles, the mean is used as the threshold of distinguishment. (Cohen et al. 2008, Cohen and Zarrowin 2010). Then, by combining these two variables, another two dummy variables were created.

First, RMHigh&AMLow, which is a dummy variable and its value is 1 if RM_DUMMYit is equal to 1 and the variable AM_DUMMYit is equal to zero; otherwise, the zero number will be assigned to it. This variable represents the companies that have used the high levels of real earnings management. Second, the variable RMLow & AMHigh, is the opposite of this strategy. The results of the analysis of earnings management methods imply that the listed companies of Tehran Stock Exchange perform earnings

management. The method of earnings management for each industry is as follows.

Based on the information extracted from the earnings management test, the method of earnings management

through accruals has been used in more than 70% of the companies in the study period.

Table (6). Earnings Management Methods in TSE Listed Companies

Industry	High Real Earnings Management & Low Accruals Earnings Management	Low Real Earnings Management & High Accruals Earnings Management	Observations	Number of Companies Active in Industry	Percent of High Real Earnings Management	Percent of High Accruals Earnings Management
Metal Ores Extraction	33	71	104	8	32%	68%
Real Estates	29	114	143	11	20%	80%
Cars & Parts	92	311	403	31	23%	77%
Pharmaceuticals	124	240	364	28	34%	66%
Electric Appliances	41	76	117	9	35%	65%
Investments	35	134	169	13	21%	79%
Cement, Lime & Plaster	122	255	377	29	32%	68%
Chemistry	129	209	338	26	38%	62%
Foods Except Sugar	62	237	299	23	21%	79%
Essential Metals	70	216	286	22	24%	76%
Sugar	59	123	182	14	32%	68%
Tiles & Ceramics	25	79	104	8	24%	76%
Non-metal Ores	56	139	195	15	29%	71%
Tires & Plastics	34	109	143	11	24%	76%
Machines & Equipment	46	136	182	14	25%	75%
Metal Products	38	79	117	9	32%	68%
Total	995	2,528	3,523	271	28%	72%

4.5. Results of Statistical Analysis of Research Hypotheses

To determine the efficiency of the method and the way of presenting the data in the estimation of the model, we used the F-Limer test. The results of the F-Limer test showed that the probability of the F statistic is not significant at the alpha level of 0.05, so the zero hypothesis (equality of the intercepts) is not rejected at the confidence level of 0.95. Therefore, the models related to these hypotheses are presented as Pool method.

4.5.1 Results of First Sub-hypothesis

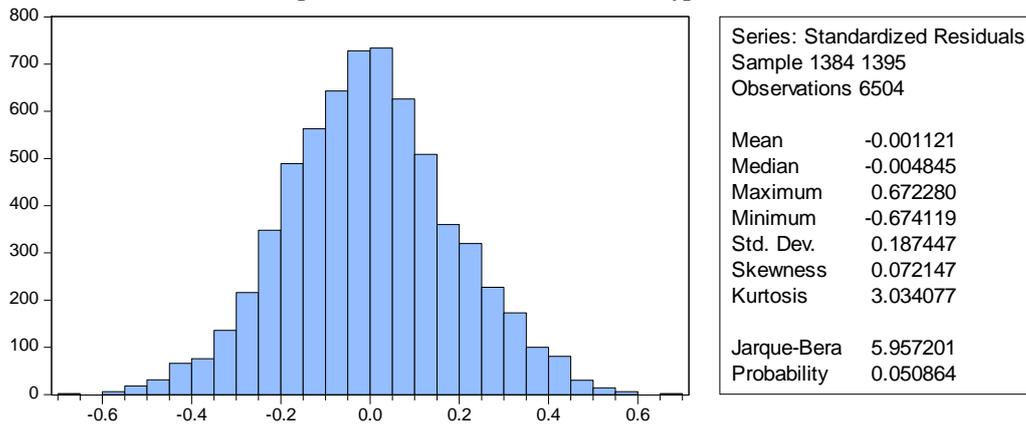There is a significant relationship between Political conection indicators and accrual earnings management .

$AEM_t = \beta_0 + \beta_1 connect_t + \beta_2\ connect_t*EcoIndex_t + \beta_3 connect_t*INF_t + \beta_4 connect_t*\ INF_t*EcoIndex_t*\ + \beta_5 connect_t\ +\ \beta_6 Leverage_t + \beta_7 LNROA +\ \beta_8 Year\ Control + \beta_9 GPControl + \beta_{10} IndustryControl + \varepsilon$

According to the results of table (7), there is no significant relationship between Political conection and accruals earnings management. Moreover, in this hypothesis, none of the interaction effects is statistically significant. As a result, the above hypothesis is rejected. Also, the adjusted R^2 is equal to 0.0804. This level of R^2 indicates that 8.04 percent of the changes in accruals earnings management are explained by the variables within the model, which has a moderate predictive power.

Table (7). The First Sub-hypothesis Test

Dependent Variable : AEMt			Period : 2004-2017		
Variable	**Coefficient**	**Standard Error**	**T**	**Significance Level**	**Result**
CONNECT	0.0251	0.0717	0.3511	0.7255	Not Significant
EcoIndext× CONNECT	-0.0021	0.0119	-0.1814	0.8560	Not Significant
INFt×CONNECT	-0.0006	0.0005	-1.3589	0.1742	Not Significant
LEV	-0.5862	0.0141	-41.3571	0.0001	Significant
GP	-0.0016	0.0061	-0.2738	0.7842	Not Significant
ROA	0.0012	0.0022	0.5324	0.5944	Not Significant
INDUSRTY	0.0129	0.0037	3.4761	0.0005	Significant
C	0.2962	0.0427	6.9234	0.0001	Significant
AR(1)	0.8495	0.0072	116.463	0.0001	Significant
$R^2 = 0.0805$ $Adj.\ R^2 = 0.0804$		F=33.00 Prob= 0.001		DW=1.66 (Durbin & Watson)	

Diagram (1). Standardized resiuals of hypothesis 1

Series: Standardized Residuals
Sample 1384 1395
Observations 6504

Mean	-0.001121
Median	-0.004845
Maximum	0.672280
Minimum	-0.674119
Std. Dev.	0.187447
Skewness	0.072147
Kurtosis	3.034077
Jarque-Bera	5.957201
Probability	0.050864

4.5.2. Results of Second Sub-hypothesis

There is a significant relationship between Politicl conection and Real earnings management

REMt = β0 +β1 connectt + β2 connectt*EcoIndext +β3 connectt * INFt + β4 connectt* INFt*EcoIndext* + β5connectt + β6Leveraget+β7LNROA+ β8Year Control + β9GPControl + β10IndustryControl+ ε

According to the results of table (8), there is a significant relationship among the Political connection and the real earnings management. The effect of interaction between the economic index and with Real earnings management is positive and significant, but the effect of inflation with the real earnings management are not significant. With respect to the significant relation between real earnings management and the Political connection, the above hypothesis is verified.

Also, the adjusted R^2 is equal to 0.3866. This level of R^2 means that 38.66 percent of the changes in real earnings management are explained by the variables within the model, which is a medium predictive power. All in all, with regard to F statistic which is 169.3, the whole model is significant at the alpha level of 0.05. In addition, the Durbin-Watson statistic is 2.09, which implies that there is no autocorrelation among the error terms.

Table (8). The Second Sub-hypothesis Test

Dependent Variable : REMt			Period : 2004-2017		
Variable	**Coefficient**	**Standard Error**	**T**	**Significance Level**	**Result**
CONNECT	0.0418	0.0418	-3.6396	0.0003	Significant
EcoIndext× CONNECT	0.0216	0.0070	3.0719	0.0021	Significant
INFt×CONNECT	0.0002	0.0003	0.05763	0.5644	Not Significant
LEV	0.0744	0.0070	10.993	0.0001	Significant
GP	0.01124	0.0033	3.3538	0.0008	Significant
ROA	-0.0005	0.0015	-0.3629	0.7167	Not Significant
INDUSRTY	-0.0061	0.0007	-7.8105	0.0001	Significant
C	-0.0292	0.0135	-2.1671	0.0303	Not Significant
AR(1)	0.5628	0.0099	56.516	0.0001	Significant
$R^2 = 0.3874$ $Adj.\ R^2 = 0.3866$		F=169.3 Prob= 0.001		DW=2.9 (Durbin & Watson)	

Diagram (2). Standardized resiuals of hypothesis 2
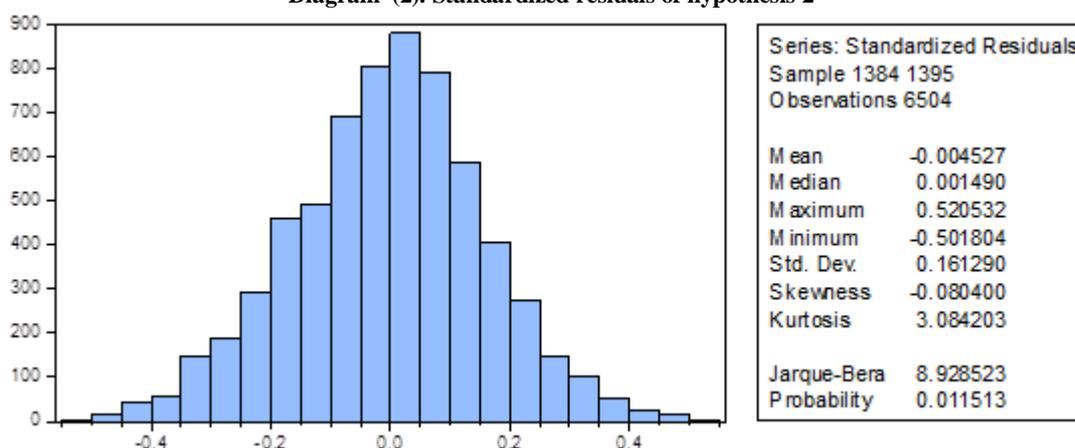
5. Discussion and Conclusions

One of the most influential cases in financial reporting is the environment related to it, as in the development of supervisory standards on the quality of financial reporting, attention is always paid attention to the topic of the reporting environment, in order to identify and control factors affecting the quality of financial reporting.

The economic environment has always been affected by the policies and methods used simultaneously with the establishment of different governments to make different conditions for the companies. Economic variables and, in particular, macroeconomic variables, as defined in the economic literature, are mirror terms and conditions of a community. In one way, the crystallization of the effects of other social and political environmental characteristics can be observed even in it. The conditions and environment have a significant impact on the financial situation of the firms, and in the literature of financial economics the importance of this issue has been mentioned several times.

Companies with state - run relations are more readily available to other sources of capital and other benefits through their communications. In this regard, some managers seek to establish and maintain the relationship between the company and the state with the aim of resolving financial constraints with the lowest cost. One of the way to work with the government is to control the economy, influence in

economic units. The government "s influence on economic units is created through the relationships of politicians or government - owned companies. The influence and political support of the state can be investigated from two aspects of pros and cons. The government's political support may lead to value creation. For example, firms that have a good relationship with the government have less market share, bank loans are more readily available to them, the government helps them in public offering them and benefits less than other company. Although government support brings advantages such as lower cost of financing for a particular company, on the other hand, it may result in deficient performance.

Business units have a tendency to communicate closely with the government to achieve government support. The relationship will benefit long - term and short - term benefits, such as various breaks and tax breaks and easier access to information and credit. Therefore, it can be stated that in economic systems based on relations, public relations are an important source of value for firms with relationships. Earning management is to conduct targeted acts in the process of financial reporting of an external financial reporting process for achieving specific goals. The amount of interest and its volatility are important from the company's shareholders ' point of view and affects the value of the company's stock.

Management of profits can be made due to cases outside the organization such as change in the general level of prices, economic conditions in order to achieve different goals. On the other hand, macroeconomic conditions dominating the economic market also affect consumers ' decisions and financial information consumers. The financial reporting environment determines the level of authorization of a single reporter and imposes constraints on corporate reporting. The effectiveness of these constraints is tow side; first, this environment must provide a means of detecting when a reporting violation takes place, and secondly, if a violation is recognized, the environment must include an important outcome expected for the offending company. Lack of guidance, lack of guidance, supervision or proper implementation of any of these dimensions increases the degree of allowed usage of reporting powers to achieve performance goals.

Abstract attention to macro-economic issues and the determinants of corporate political connection in

annual budgeting to improve capital market Transparency information can be effective. On the other hand, applying the policies governing corporate governance rules and the determination of policies needed to reduce the effects associated with changes in the general level of prices in companies can lead to increasing the quality and transparency of financial reports as a result of corporate economic prosperity.

According to the policies of the government's policy on the economic environment in this study, explanation of the relationship of political relation and earnings management practices in the companies listed in Tehran stock exchange is in a 13 - year period. On the other hand, political connection coincided with the change of governments, strategy and different methods during the tenure of government by them to companies and the results of their operations. According to government and political connection and economic conditions, the companies are using different methods to implement the operations of their economic units.

For this purpose, the relationship between corporate political connection and earnings management practices have been investigated. Earnings management is calculated in two parts of earnings management and real earnings management through the related models and are considered as earning management practices. In order to explain the effect of factors arising from the reporting environment in the results of the methods used by financial reports, political connection has been considered as one of the most important issues affecting the way of earnings management applied by companies. The relationship between variables from economic subjects and accounting output variables, the necessity of attention to environmental factors in financial reporting quality. By considering the dependence of policies used by corporate managers to other economic indicators due to the political conditions of establishment of governments and changing the general price of prices, a mitigation effect is considered in the present study.

The results show that the relationship between the political connection of companies with real earnings management is meaningful and the direction of relationship is positive. According to the relation of this species, there is a significant relationship in state - owned firms, but it is not meaningful in non - governmental companies. As a result, the research hypothesis is approved. The results of moderating the

economic index with the political connection of companies and balancing inflation with the political connection of companies have been significant, suggesting that real earnings management in state enterprises is affected by considering economic indexes and inflation on earnings management. Also, based on analytical data of second sub hypothesis regarding the existence of meaningful relation between political connection of companies and accrual earnings management, the results indicate that the relationship between political connection of companies and accrual earnings management is not meaningful and the interaction of inflation with the economic index is not significant with the political connection of companies and accrual earnings management. As a result, the research hypothesis is rejected. This result indicates that earnings management of accruals in public and non - governmental firms has significant differences.

The results of this study showed that earning management studies have been made and more than 70 % of firms have used accruals - earnings management in the period of study. there is a relationship between political connection and real earnings management and the effect of the interaction of political connection and the change of the general level of prices, the economic indices are meaningful with real earnings management, namely the study of economic indicators and changing the general level of prices between the relationship between firms ' political connection and earnings management. There is also a relationship between the establishment of governments and real earnings management, i.e., the amount of companies usage in the period studied has changed from the method of managing the benefits of real items at the same time with the change of different governments. On the other hand, there is no meaningful relation between state relation and earnings management of accrual items and interactive effect of other variables, which means that earnings management is independent of communication, political and economic conditions in different periods of establishment of governments.

Rahnama Roudposhti and Mohseni (2018) studied political connection, cash gain and stock returns in accepted companies in Tehran stock exchange and concluded that there is a positive and significant relationship between political connection and stock return (2015) regarding real earnings management, accrual management, and political connection, and the existence of relation between variables studied.

Imani Barandagh and Hashemi (2018) studied the effect of political factors on earnings management and concluded that the earnings management conducted in different political periods had a significant difference with each other. That is, earnings management could be affected by political factors in Iran. Also, the results of their research are in line with the results of our study regarding the relationship between government change and the method of earnings management. On the other hand, Braam et al. (2015) studied the relation between real earnings management, accruals earnings management and political connections and explained the relationship between the studied variables.

With regard to the importance of political connections as effective frameworks in financial reporting environment, it seems that further studies by considering other aspects, will help clarify the issue of the impact of political connections on the quality of financial reporting. What is suggested is as follows:

1) Reviewing other effective political connections in financial reporting quality
2) Reviewing the effect of political connections on other areas of financial reporting
3) Investigating the political connections affecting the formulation of standards and requirements in the field of financial reporting
4) More supervision and emphasis by the Securities and Exchange Organization and the Auditing Organization as controlling authorities to regulate supervisory standards to make reported information transparent and to increase the quality of financial reporting.
5) Increasing the awareness of financial statements' users regarding the quality of disclosure of financial statements by related organizations.

The identification of effective variables on the quality of earnings, as well as the usefulness of the information provided by companies have always been an important part of studies carried out over the past years. Therefore, the issue of earnings management is also important. Continuing research in this field can lead to models with lower risk and higher generalizability. According to the findings of this

research, the suggestions of the researcher for further studies are proposed as follows:

1) To carry out this research in the coming years with a different period of time, using the methodology of this research to add to the validity and credibility of the estimating models;
2) Identifying other economic variables that affect the method of earnings management;
3) Comparison of the results of domestic research with foreign studies.

References

1) Abbasian, E., Moradopour Oladi, M. & Abbasian, Vahid. (2008). Determining the effect of macroeconomic variables on total stock market index. Iranian Economic Eesearch, 36, 135-155.
2) Baharmoghadam, M., & Qavarvi, T. (2012). Effect of days and months of the year, macroeconomic variables such as GDP and inflation on stock returns. Accounting Advances, 4 (2), 1-26.
3) Baghoumian, R., Mohammadi, H., & Taheri, M. (2017). Economic downturn and earnings management. Journal of Management Accounting, 32, 29-42.
4) Ball, R., & Brown, P (1968). An empirical evaluation of accounting income numbers. Journal of Accounting Research, 6 (2), PP.159-17.
5) Barto, J., & Simko, P. J. (2002). The balance sheet as an earnings management constraint. The Accounting Review, 77, 1-27.
6) Bhargava, A. (2014). Firms' fundamentals, macroeconomic variables and quarterly stock prices in the U.S. Journal of Econometrics, 183(2), 241-250.
7) Braam, G., Nandy, M., Weitzel, U., & Lodh, S. (2015). Accrual-based and real earnings management and political connections. International Journal of Accounting, 50 (2), 111-141.
8) Boubakri, N., Guedhami, O., Mishra, D., & Saffar, W. (2012). Political connections and the cost of equity capital. Journal of Corporate Finance, 18 (3), 541-559.
9) Chen, N., Roll, R., & Ross, S. (1986). Economic forces and the stock market. Journal of Business, 59, 383-403.
10) Cohen, D., & Zarowin, P. (2008). Economic consequences of real and accrual-based earnings management activity. Working paper, New York University.
11) Cohen, D., & Zarowin, P. (2010). Accrual-based and real earnings management activities around seasoned equity offerings. Journal of Accounting and Economics, 50(1), 2-19.
12) Dai Karimzadeh, S., Sharifiranani, H., & Ghasemian, L. (2013). The effect of large-scale economic variables on banks' price index. Journal of Economic Issues, 13 (11 & 12), 65-90.
13) Dari Sadeh, M., Izadinia, N. & Nargesi, M. (2015). A survey of earnings based on accruals and actual management of earning in the periods before and after the approval of Securities Market Act of The Islamic Republic of Iran. Accounting Knowledge, 21, 57-85.
14) Dechow, P. M., Sloan, R. G., & Sweeney, A. P. (1995). Detecting earnings management. Accounting Review, 70 (2), 193–225.
15) Degeorge, F., Patel, J., & Zeckhauser, R. (1999). Earnings management to exceed threshold. Journal of Business, 72 (1), 1-33.
16) Erman, E., Okuyan, H. A., & Kadioglu, O. (2008). Real macroeconomic variables and stock price: test of proxy hypothesis in Turkey. International Research Conference on Business Strategies, Istanbul, Turkey,13-15.
17) Faccio, M., Masulis, R. W., & McConnell, J. J. (2006). Political connections and corporate bailouts. Journal of Finance, 61 (6), 2597-2635.
18) Fadaeinejad, E. & Farahani, R. (2017). The effects of macroeconomic variables on Tehran Stock Exchange Index. Financial Economics Quarterly, 39, 1-26.
19) Gan, C., Lee, M., Youn, H. H., & Zhang, J. (2006). Macroeconomic variables and stock market interactions: New Zealand evidence. Investment Management and Financial Innovations Journal, 3(4), 89-101.
20) Hafez Nia, M. (2003). An introduction to research methods in human sciences. Samt Publications. Tehran.
21) Hope, T. & Hope, J. (1996). Transforming the bottom line. 2nd Ed. Boston, Harvard Business School Press.

22) Imani Barandagh, M., & Hashemi, T. (2018). The effect of political factors on earnings management. Journal of Audit Science, 71, 77-89.

23) Jones, J. (1991). Earnings management during import relief investigations. Journal of Accounting Research, 29(2), 193–228.

24) Leuz, C., & Oberholzer-Gee, F. (2006). Political relationships, global financing and corporate transparency. Journal of Financial Economics, 81(2), 411–439.

25) Lin, C., Sanders, K., Sun, J., Shipton, H., & Mooi, E. (2015). From customer-oriented strategy to organizational financial performance: the role of human resource management and customer-linking capability, British Journal of Management, 00, 1-17.

26) Mashayekhi, B., Mehrani, S., Mehrani, K., & Karami, Gh. (2005). The role of discretionary accruals in earnings management of listed companies in Tehran Stock Exchange. Accounting and Auditing, 12 (4), 61-74.

27) Mohamadrezae`i, F., Manteghi, Kh., & Abbasi, E. (2016). The effect of economic recession on real and accrual earnings management. Journal of Management Accounting, 33, 123-138.

28) Naderi, E., & Seyf Naraghi, M. (1999). Research methods in human sciences. Badr Publications, Tehran.

29) Nelly Sari, R., & Anugerah, R. (2011). The effect of corporate transparency on firm performance: emperical evidence from Indonesian listed companies. Modern Accounting and Auditing, 7 (8), 773-783.

30) Poitras, M. (2004). The impact of macroeconomic announcements on stock prices: in search of state dependence. Southern Economic Journal, 70 (3), 549-565.

31) Rahnama Roudposhti, F., Simbor, F., & Toutian, S. (2005). The effect of macroeconomic indicators on stock returns of listed companies of TSE. Journal of Economic Research, 17, 209-236.

32) Rahnama Roudposhti, F., & Mohseni, A. (2018). Political connections, dividend and stock return in listed firms on Tehran Stock Exchange. Financial Knowledge of Securities Analysis, 38, 129-144.

33) Roychowdhury, S. (2006). Earnings management through real activities manipulation. Journal of Accounting and Economics, 42, 335-370.

34) Samadi, S., & Bayati, A. (2011). The study of the relationship between macroeconomic variables and stock returns in Tehran Stock Exchange. Financial Economics Quarterly, 16, 91-112.

35) Samuelson, W., & Zeckhauser, R. J. (1988). Status quo bias in decision making. Journal of Risk & Uncertainty, 1, 7-59.

36) Seyed Shakri, K., & Factori, A. (2012). Effect of inflation on economic growth. Financial Economics Quarterly, 18, 139-150.

37) Sharp, W. F. (1964). Capital asset prices: a theory of market equilibrium under conditions of risk. The Journal of Finance, 19(3), 425-442.

38) Shu, Y., Broadstock, D. C., & Xu, B. (2013). The heterogeneous impact of macroeconomic information on firms' earnings forecasts. The British Accounting Review, 45, 311–325.

39) Stock, J. H., & Watson, M. W. (2002). Forecasting using principal components from a large number of predictors. Journal of the American Statistical Association, 97, 1167–1179.

40) Taqavi, M., & Janani, M. (2000). Cointegration relation among TEPIX and Some of the Macroeconomic Variables. Journal of Management Future Research, 12 (1), 77-90.

41) Zang, A. Y. (2012). Evidence on the trade-off between real activities manipulation and accrual-based earnings management. The Accounting Review, 87(2), 675-703