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Investigating actual and accrual earnings management in companies

Siamak Hajjari Zadeh

Abstract--- *This research examines the relationship between accounting conservatism and earning management. The research population includes the companies listed in Tehran Stock Exchange whose periods are from the beginning of 2010 to the end of 2018. For this purpose, we selected 65 companies as the sample. 19 companies are of political connection and 46 companies are without no political connection. Multiple linear regression models and t-test were used to investigate the research hypotheses. The results show that there is a negative and significant relationship between conservatism and earning management in companies without political connections and companies with political connections. The conservatism in companies with political connections is low compared to other companies and statistically significant. The results also show that the amount of earning management used in companies with political connections is high compared to other companies and statistically significant. There is also no significant difference in earning management and conservatism in politically non-connected and dependent companies.*

Keywords--- *Political Companies, earning Management, Accruals, Optional Accruals, Conservatism.*

I. INTRODUCTION

The purpose of financial reporting is to provide information that helps investors, creditors, and other users make economic decisions. The Accounting Standards Setting Committee of Iran states that financial statements are the primary means of reporting financial information to individuals outside the for-profit entity. The financial information provided by the accounting system can only be useful in the economic decision-making process of users when it meets minimum normative standards as qualitative characteristics of accounting information and can increase the usefulness of information (Accounting standards setting committee, 2007). Accounting Accepted principles and accrual basis allow managers to apply their judgment in financial reporting in order to transfer information. However, the research literature on earning management does not help much to judge the favorable and adverse impacts of earning management on the usefulness of accounting information. Does profit management improve or reduce the quality of accounting information? In most theoretical frameworks, conservatism is described as a precautionary response to uncertainty. In the concepts of financial reporting, the conservatism refers to the non-overestimation of the asset or income or non-underestimation of the debt or the cost (Accounting Standards Setting Committee, 2007). Conservatism is a desirable feature of accounting, and its necessity reflects the optimistic view of management in a company's financial statements. The potential losses from this optimistic outlook can be significant. As a result, accounting with a conservative view of financial events reduces the magnitude of these potential losses (Lyangar, 2010). Basu (1997) looks at conservatism from a time perspective and defines it as a necessity for a higher degree of approval to identify good news than bad news in profit. (Lara et al., 2005).

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II. RESEARCH THEORETICAL FRAMEWORK

As you know, accounting information has qualitative characteristics and these refer to the characteristics that make the information presented in the financial statements useful to users in evaluating the financial position, financial performance and financial flexibility of the trade unit. The qualitative characteristics of accounting information are influenced by various factors that have been studied extensively, but less attention has been paid to the qualitative characteristics of information provided by the politically connected companies. The government as the main economic backer of any country has always played the role of guardian for the economic units in society. The government has always been a major investor in developing countries, including Iran, because of the power of decision-making in companies and the implementation of its macro policies. It should be borne in mind that the companies' reporting and accounting system is influenced by their corporate governance and is affected by the type of corporate ownership. It is argued that government-owned companies incur lower costs due to special conditions (political connection with the government). The costs imposed on companies are a function of their size because smaller ones are less visible and therefore less subject to the political distribution of wealth. Companies have tactics that can be used to reduce these costs. Managing these companies may reduce reported net profits in order to avoid media attention. The logic of this tactic is clear because the media is keen to disseminate information about large companies, such as polluting their products, abnormally increasing profits, salaries and benefits to employees and managers, and so on. Thus, large companies will be motivated to apply some degree of conservatism in their financial reporting. Watts & Zimmermann (1987) confirmed this hypothesis. The amount of companies' conservatism affects the quality of their accounting information. The main question in this research is this: what is the relationship between conservatism and earning management in politically connected companies and companies with no political connection? How much more conservative are companies that are politically connected, and to what extent is their accounting information quality compared to other companies?

Research background

Table 1- Summary of External Researches

Row	Researcher	Year	Country	Summary & result of research
1	García et al	2012	America	Conservatism reduces mostly accrual-based earnings management and increases actual earning management.
2	Abed et al	2012	America	There is a negative relationship between conservatism and company size and earning management.
3	Data et al	2012	India	Political relationships influence the value of a company and cause a fluctuation in the value of companies with political relationships more than market movement can explain.
4	Bliss and Gul	2012	Malaysia	From the point of view of the capital market and audit firms, companies with political connections are at risk more than other ones.
5	Chen et al	2011	China	Companies have faced political pressure from the government during the economic evolution. These companies are turning to earnings management to alleviate these political pressures. They showed that earning management in non-state-owned companies was higher than in other ones.
6	Niessen & Ruenzi	2011	Germany	Members of the Conservative Party and the Liberal Party are more likely to serve companies. They also showed that companies with political connections have financial and accounting performance and market performance better than other ones.
7	Song et al	2011	China	In companies with political connections, earning management is less than other companies. They also found that the form of earning management in companies with political connections was of the type of profit minimization. This has increased the profit reaction coefficient in the capital market.
8	Ballachandran,	2011	America	Conservatism has seen an upward trend over the period under review, while the

	Mohanram			relevance of accounting information to equity, or to the information content of accounting variables has declined.
9	Paul K. Chaney, Mara Faccio, David Parsley	2011	America	The quality of accounting information in companies with political connections is lower than in other companies.
10	Kousenidis et al	2009	Greece	As the level of conservatism increases, the amount of accounting information related to stocks first increases and then declines.
11	Guay, W. and R. Verrecchia	2006	America	Conservatism reduces opportunities for successful accrual-based earning management by identifying real losses and delaying the identification of economic benefits.
12	Fraser, D.R., Zhang, H., Derashid, C.	2006	Malaysia	Companies with political connections in Malaysia generally have higher financial leverage than other companies, and these companies are inherently at risk more than companies without political connections.

Table 2- Summary of Internal Researches

Row	Researcher	Year	Country	Summary & result of research
1			Iran	Earning management, regardless of its direction, enhances conservatism. By the way, companies that manage to reduce profit report their over-conservative profits, which indicates more conservatism. Companies that manage incremental profits through positive accruals are also less conservative in their reporting.
2			Iran	Conservative practices increase information content except profit accrual.
3			Iran	The existence of institutional investing in companies' ownership structure provides honest, relevant and impartial information in a timely manner and the concentration of ownership of institutional investors leads to lower quality of earnings.
4			Iran	Companies that report more conservative profits are lower.
5			Iran	Increasing conservatism reduces dividend distribution and earnings stability.
6			Iran	The quality of accounting information in companies with political connections is lower than in other companies.
7			Iran	Evidence from the statistical test shows that there is a smoothing of profits in companies listed in Tehran Stock Exchange.
8			Iran	There is a positive relationship between voluntary first-year current accruals and long-term stock price performance over the next three years.
9			Iran	Large companies in Iran have also begun to manage earnings, and the incentive to apply it is increasing with increasing debt.

Research hypotheses

Hypothesis 1: There is a significant relationship between earning management and conservatism in politically non-connected companies.

Hypothesis 2: There is a significant relationship between earning management and conservatism in politically connected companies.

Hypothesis 3: There is a significant difference between conservatism applied to politically connected companies and other companies.

Hypothesis 4: There is a significant difference between the earning management in companies with political connections and other companies.

Hypothesis 5: There is a significant difference between the relationship between earning management and conservatism in politically non-connected and connected companies.

III. RESEARCH METHODOLOGY

For gathering information, we used the Tehran Stock Exchange Organization Compact Disc and financial reports of stock companies, information of "Rahavard Novin" software and information of www.Rdis.ir site as well as articles from internal and external research and resources Internet. The research is applied and the research method is correlation and based on regression models which are implemented in time series according to the variables under study and the number of observations. Since the data used is historical and real data, we can categorize it as post-event research. Data analysis

and hypothesis testing were performed according to statistical methods; for this purpose, we used Excel software for Descriptive statistics, and EViews software, mini-tab and SPSS software, linear regression model and t-test for inferential statistics and hypotheses analysis.

Operational definitions of variable and explaining models

- **independent variable**

- Accounting conservatism

Basu (1997) model is used to measure conservatism. The formula to calculate it is as follows:

$$X_{it}/P_{it-1} = \alpha + \beta_1 DR_{it} + \beta_2 R_{it} + \beta_3 (R_{it} \times DR_{it}) + \varepsilon_{it}$$

X_{it}: Net profit of company i in year t.

R_{it}: Company's stock returns i in year t.

DR_{it}: is a virtual variable that has a value of 1 if the stock return is negative, otherwise, it will be zero.

P_{it-1}: Company i share price in year t-1.

Basu (1997) interpreted conservatism as the tendency of accountants to require a higher degree of effectiveness for identifying good news compared to bad ones in financial statements. In fact, he defined conservatism from the perspective of profit and loss and did so based on the asymmetric behavior of profit compared to good and bad news. In order to operationalize and formulate the criterion, he considered positive and negative returns as substitutes for good and bad news, thereby proposed a relationship between earning and stock returns as a criterion of conservatism. In this model, β_1 measures profit sensitivity in relation to good news, while profit sensitivity in relation to bad news comes from a combination of β_2 and β_3. Therefore, the differential reaction of profit to bad news comes from the reaction of β_3 (R_{it} x DR_{it}). B_3 is expected to be positive when based on accounting conservatism the profit has a higher sensitivity to bad news than good news. He called β_3 the temporal asymmetry coefficient of profit, which represents conservatism, and is calculated as $AT=(\beta_{2,it} + \beta_{3,it}/\beta_{2,it})$, which is called the time asymmetry ratio.

- **dependent variable**

-Earning management

In this research, Kotari et al. (2005) model is used to measure accrual management. Its calculation model is as follows:

$$ACC_{it}=\alpha_0+ \alpha_1 \Delta REV_{it}+ \alpha_2 PPE_{it}+ \alpha_3 ROA_{it}+ €_{it}$$

ACC_{it}: Total accruals of a company i in year t.

ΔREV_{it}: change in company income i in year t.

PPE_{it}: Gross value of properties, plant, and equipment

ROA_{it}: Return on Assets for Company i in year t.

$€_{it}$: Residual component of the model (effect of other variables not considered in the model).

It should be noted that all of the above variables are homogenous based on total assets.

• Control variables

1. Size of company

It is equal to the natural logarithm of the company's assets.

2. The book value ratio to the market value of each share of the company

3. Financial leverage

It is the total debt divided by the total assets.

4. Rate of return on assets

It is obtained by dividing net profit by total assets.

• Companies with political connection

Directly as defined in Article 4 of the Law of the General Calculations, "A state-owned company is a specified organizational unit that is established legally or has been nationalized by law or competent court or confiscated and recognized as a state-owned company; more than 50 percent of its capital is government-owned. Any business created through the investment of state-owned companies is considered a state-owned company as long as more than 50% of its shares belong to the state-owned company." In addition, companies whose at least 30% of the voting shares are for the government directly or indirectly, or in the management of the company (CEO, CEO, etc.) President, Minister, Representative of parliament, etc., or a representative on their behalf are present, fall under the definition of politically connected companies (Azadpour et al., 2013). In this research, companies that are state-owned with more than 20% of their shares fall into the category of politically connected companies.

Testing hypotheses

Descriptive statistics include central parameters (mean, minimum and maximum) and dispersion parameters (standard deviation, skewness, and kurtosis) extracted by Eviews software. In the table below, we calculate the minimum, maximum, standard deviation, mean, skewness, and kurtosis of variables used for the two groups of companies (with and without political connection) in the research. We should note that the present research companies (65 companies, 455 data) have been divided into two groups of companies without political connection (19 companies, 133 data) and companies with political connection (46 companies, 322 data).

Table 3- Descriptive statistics of model variables in companies without political connection

Variable	Symbol	Minimum	Maximum	Standard deviation	Mean	Skewness	Kurtosis
accrual earnings management	DA	-1.1632	0.2917	0.0872	0.0005	0.7312	3.1637
Conservatism	Conservatism	-1.43	4.41	1.16	0.78	0.5437	3.6431
Size	Size	10.5654	18.3211	1.4614	13.2896	0.9091	4.0402
Ratio of book value to market value per company share	BM	0.0243	0.6245	0.4901	0.5857	2.8282	18.2796
Leverage	Leverage	0.0063	0.9241	0.1746	0.5883	-0.4487	2.7804
Rate of assets return	ROA	0.1938	62.7399	11.3627	16.8547	0.8438	3.5316

Table 4- Descriptive statistics of model variables in politically connected companies

Variable	Symbol	Minimum	Maximum	Standard deviation	Mean	Skewness	Kurtosis
accrual earnings management	DA	-1.2544	0.4016	0.0985	0.0008	0.5724	3.4325
Conservatism	Conservatism	-1.06	3.78	1.29	0.53	0.4561	3.2512
Size	Size	10.9082	17.9237	1.3989	13.2054	1.4962	5.7245
Ratio of book value to market value per company share	BM	0.0704	0.7698	0.4050	0.6450	0.6895	2.7096
Leverage	Leverage	0.0059	0.9067	0.1554	0.6428	-0.7257	4.0552
Rate of assets return	ROA	0.6181	61.6136	11.5371	14.6250	1.8216	7.1602

The first hypothesis test

The first hypothesis states that there is a significant relationship between earnings management and conservatism in politically non-connected companies.

Table 5- Leamer and Hausman test result (model 1)

	Test	Amount of test	Degree of Freedom	Probability	Result
Model	f-Leamer	17.6545	56745	0.0000	Panel data
	Hausman	78.8324	5	0.0000	Model estimate is based on fixed effects.

Source: research findings

Therefore, because the probability of Leamer statistic is less than 5%, the null hypothesis of the Leamer test to use cross-sectional data is rejected, indicating that our research data is of panel type. We used the Hausman test to determine the type of estimation of the regression model. Rejecting the null hypothesis of this test indicates that the model estimation method in this research is based on the fixed effects.

Table 6- Results of the first hypothesis test

DAit=β0+β1Conservatismit+β2Sizet+β3BMit+β4Leverageit+β5ROAit+ εit					
Variable	Coefficients of variables	T statistic	Level of significance	Result	Inflation index
β0	1.4278	1.52	0.130	Insignificant	4.65
Conservatism	-0.2823	-4.37	0.0000	Significant	4.45
Size	-0.0627	-0.88	0.383	Insignificant	3.54
BM	-0.0051	-0.19	0.852	Insignificant	4.87
Leverage	0.1038	0.23	0.821	Insignificant	5.76
ROA	0.5847	0.61	0.545	Insignificant	3.49
	Value		Test	Value	p-value
R2	0.76		K-S	0.04	0.063
R2 adjusted	0.75		F Fischer	32.5648	0.000
D-W	2.28				

- Investigating the validity of the residual

1. The mean sentence is zero disruption.

The results of the regression model residuals show the mean of 0.0001 for the residuals from the estimation of the first linear regression model, whose difference is very small from zero; so the first assumption of the classical regression model is confirmed.

2. Non-autocorrelation between components of disruption (residuals)

In order to detect the presence or absence of autocorrelation between components of disruption (residual sentences), the Durbin-Watson test method was used. The results of this test show that the residual sentences of the research models are normal. According to the results of the above table, this statistic is 2.28; so there is no autocorrelation in the remaining sentences of this regression model.

3. Normality of residuals: The Kolmogorov-Smirnov test, stem and leaf test, and Anderson Darling test can be used to check the normality of the residuals. In this research, the Kolmogorov-Smirnov test was used to check the normality of the dependent variable and Minitab software was used to convert non-normal data to normal. Since the residuals of the regression model are not normal, we first normalize the data on the dependent variable using Coxbox transforms to avoid false regression. See the results of the Kolmogorov-Smirnov test before and after normalization.

Table 7- Kolmogorov-Smirnov test results to determine the normality of the residuals of the regression model

Mean	Standard deviation	Value of test	Significance level
0.0005	0.0872	0.175	0.01

Since the level of significance for the remainder of the regression model is 0.01 less than 0.05, the null hypothesis of this test for normality of the data is rejected and we conclude that the data related to the dependent variable are not normal. Since the data for the dependent variable is not normal, we normalize the data using Cox-Box transforms and then fit the regression model. The results of the Cox-Box transforms and the Kolmogorov-Smirnov test after these transformations are as follows:

Table 8- Results of Cox-Box transforms

Lower-CL	Upper-CL	Rounded value
0.2	0.38	0.29

Table 9- Kolmogorov-Smirnov test results after Cox-Box transforms

Mean	Standard deviation	Value of test	Significance level
0.0004	0.0319	0.04	0.063

As we can see, since the significance level after normalization transforms (Cox-Box transforms) is greater than 0.05%, so the null hypothesis of the Kolmogorov-Smirnov test is confirmed and the data of the dependent variable are normal. Now, after normalizing the data on the dependent variable, with establishing the other classical test assumptions of the linear regression model, we can fit the regression model.

4. Lack of collinearity between independent variables

Since the value of the variance inflation factor obtained for each variable is less than 10, so there is no problem of collinearity between the independent variables.

5. Lack of variance inconsistency among the residuals of the model

Since the value obtained for the Brush Pagan test is 0.0654 and the significance level of this test is 0.133, the null hypothesis of this test is confirmed; thus there is no problem of variance inconsistency in the residuals sentences.

Result of the first hypothesis Test

Since the coefficient for the conservatism variable in the above table is -0.2823 and the significance level of this coefficient is less than 5%, we can conclude that there is a significant negative relationship between conservatism and accrual earnings management in companies without political connection. Hence the confirmation of the first hypothesis.

The second hypothesis test

The second hypothesis states: There is a significant relationship between earnings management and conservatism in politically connected companies.

Table 10- Leamer and Hausman test result (model 2)

	Test	Amount of test	Degree of Freedom	Probability	Result
Model	f-Leamer	12.3428	34872	0.0000	Panel data
	Hausman	67.9456	5	0.0000	Model estimate is based on fixed effects.

Source: research findings

Therefore, because the probability of F-statistic is less than 5%, the null hypothesis of the Leamer test for cross-sectional data is rejected; this indicates that our research data is of panel type. The Hausman test is used to determine the type of estimation of the regression model. Rejecting the null hypothesis of this test indicates that the model estimation method in this research will be of fixed effects type, the result of which has been presented in Table (10-4).

Table 11- Results of the second hypothesis test

$DAit=\beta0+\beta1Conservatismit+\beta2Sizet+\beta3BMit+\beta4Leverageit+\beta5ROAit+\varepsilon it$					
Variable	Coefficients of variables	T statistic	Level of significance	Result	Inflation index
β0	1.6547	1.64	0.119	Insignificant	5.34
Conservatism	-0.3246	-4.56	0.0000	Significant	4.87
Size	-0.0675	-0.76	0.457	Insignificant	3.54
BM	-0.0062	-0.31	0.917	Insignificant	5.38
Leverage	0.1176	0.37	0.739	Insignificant	5.76
ROA	0.6348	0.74	0.618	Insignificant	4.18
	Value		Test	Value	p-value

R2	0.67	K-S	0.06	0.069
R2 adjusted	0.66	F Fischer	27.5643	0.000
D-W	2.19			

- Investigating the validity of the residual

1. The mean sentence of disruption is zero.

The results of the regression model residuals show an average value of 0.0003 for the residuals from the estimation of the first linear regression model, whose difference is very small from zero; so the first assumption of the classical regression model is confirmed.

2. Non-autocorrelation between components of disruption (residuals)

According to the result of the above table, this statistic is 2.19; so there is no autocorrelation in the remaining sentences of this regression model.

3. Normality of residuals

Since the residuals of the regression model are not normal, we first normalize the data on the dependent variable using Coxbox transforms to avoid false regression. See the results of the Kolmogorov-Smirnov test before and after normalization.

Table 12- Kolmogorov-Smirnov test results to determine the normality of the residuals of the regression model

Mean	Standard deviation	Value of test	Significance level
0.0008	0.0985	0.163	0.03

Since the level of significance for the remainder of the regression model is 0.01 less than 0.05, the null hypothesis of this test for normality of the data is rejected; we conclude that the data related to the dependent variable are not normal. Since the data for the dependent variable is not normal, we normalize the data using Cox-Box transforms and then fit the regression model. The results of the Cox-Box transforms and the Kolmogorov-Smirnov test after these transformations are as follows:

Table 13- Results of Cox-Box transforms

Lower-CL	Upper-CL	Rounded value
0.4	0.64	0.32

Table 14- Kolmogorov-Smirnov test results after Cox-Box transforms

Mean	Standard deviation	Value of test	Significance level
0.0005	0.0436	0.06	0.069

As we can see, since the significance level after normalization transforms (Cox-Box transforms) is greater than 0.05%, so the null hypothesis of the Kolmogorov-Smirnov test is confirmed and the data of the dependent variable are normal. Now, after normalizing the data on the dependent variable, with establishing the other classical test assumptions of the linear regression model, we can fit the regression model.

4. Lack of collinearity between independent variables

Since the value of the variance inflation factor obtained for each variable is less than 10, so there is no problem of collinearity between the independent variables.

5. Lack of variance inconsistency in the residuals of the model

Since the value of the Brush Pagan test is 0.0532 and the significance level of this test is 0.149, so the null hypothesis of this test is confirmed; so there is no problem of variance inconsistency in the remaining sentences (residuals).

Result of the second hypothesis test

Since the coefficient for the conservatism variable in the table above is -0.3246 and its significance level is less than 5%, we can conclude that there is a significant negative relationship between conservatism and accrual earning management in politically connected companies. Hence the confirmation of the second hypothesis.

Test of the third hypothesis

The third hypothesis states: There is a significant difference between conservatism in politically connected companies and other companies.

To test the third hypothesis, we use a comparison of the mean of two populations (groups). If the hypothesis compares the mean of two populations (groups), the test of comparison of the mean of two populations should be used to verify its correctness or incorrectness. To test the equality of the mean of two populations, it is necessary to first check whether the variance of the two populations is equal. In other words, the equality test of variances precedes the equality test of averages. To test the equality of variances we use the Levin test. In this test, the null hypothesis is the equality of the variances of different groups. This test does not require that the data distribution be normal. This test can also be used when the samples are not identical. The Levin test statistic is F Fisher with (K-1) of the degree of freedom for the form and ($n_1 + n_2 + \ldots + n_{k-k}$). We compute the t-statistic for the test of the mean equality of the two populations, in both equality and non-equality of variances of the two populations in question. The result of the t-test consists of two outputs. The first output relates to descriptive statistics, in which the number of data and descriptive indices shows conservatism variable in two groups of politically non-connected and politically connected companies in the descriptive statistics section. The second output that relates to inferential statistics contains the test results and consists of two parts: The first part deals with the test for equality of variance of two populations and the second part presents the results of the test for the mean equality of two populations for both modes equality and non-equality of variance.

Table 15- Test of Independent Samples

Levin test for equality of variances				T-test for equality of mean						
		F	Sig	t	df	Sig(2-tailed)	Mean Difference	Std.Error Difference	95% Confidence Interval Of the Difference	
									Lower	Upper
Conservatism in two groups of companies	The variances are assumed equal	0.880	0.032	-10.945	453	0.000	-15409.86	1407.906	-2.27965	-11.34236
	The variances are not assumed equal			-11.688	243.521	0.000	-15409.86	1318.400	-2.29684	-11.76345

The statistical hypotheses concerning the test for equality of variance of two populations (Levin test) are as follows:

Hypothesis zero: Conservatism variance in companies without political connection = Conservatism variance in politically connected companies

Contrary hypothesis: Conservatism variance in companies without political connection ≠ Conservatism variance in companies with political connection

The significance of the Levin test is 0.032 and is less than the 5% level of significance, thus rejecting the assumption of the equality of variances (assuming zero). We examine the second-row information to conclude about the mean. Sig of the test of equality of mean with assuming the inequality of variance is less than 5%, so the null hypothesis is rejected; the

claim of inequality of mean of earnings management is accepted at the 5% error level in two groups of companies (without political connection and with political connection). (Note that this claim is also accepted at the 1% error level).

Therefore, according to the results, since the values are high (-2.2968) and low (-11.7634), the mean difference between the two populations is less than zero, and the mean of the first population (companies with political connection) is less than the second population (companies without political connection). That is, in companies with political connections, conservatism occurs less than politically non-connected companies. Therefore, there is a significant difference between the conservatism applied in politically connected companies and other companies, and the third hypothesis is confirmed.

Test of the fourth hypothesis

The fourth hypothesis states: There is a significant difference between the earnings management of companies with political connections and other companies.

To test the fourth hypothesis, we use the comparison of the mean of two populations (groups). If the hypothesis compares the mean of the two populations (groups), the comparison of the mean of the two populations should be used to assess its correctness or incorrectness. To test the equality of the mean of two populations, it is necessary to first check whether the variance of the two populations is equal. In other words, the equality test of variances precedes the equality test of averages. All the steps mentioned in the third hypothesis apply to this hypothesis as well.

Table 16- Test of Independent Samples

Levin test for equality of variances				T-test for equality of mean						
		F	Sig	t	df	Sig(2-tailed)	Mean Difference	Std.Error Difference	95% Confidence Interval Of the Difference	
									Lower	Upper
Earning management in two groups of companies	The variances are assumed equal	0.638	0.028	-12.653	453	0.000	-1253.36	-1212.23	4.54345	3.7845
	The variances are not assumed equal			-13.458	243.521	0.000	-1253.36	-1183.67	4.84538	2.33424

The statistical hypotheses concerning the test for equality of variance of two populations (Levin test) are as follows:

Hypothesis zero: variance of earnings management in companies without political connection = variance of earnings management in companies with political connection

Contrary hypothesis: variance of earnings management in companies without political connection≠ variance of earnings management in companies with political connection

The significance of the Levin test is 0.028 and is less than the 5% level of significance, thus rejecting the assumption of the equality of variances (assumption zero). We examine the second-row information to conclude about the mean. Sig of the test of equality of mean with assuming the inequality of variance is less than 5%, so the null hypothesis is rejected; the claim of inequality of mean of earnings management is accepted at the 5% error level in two groups of companies (without political connection and with political connection). (Note that this claim is also accepted at the 1% error level).

Therefore, according to the results, since the values are high (4.84538) and low (2.33424), the mean difference between the two populations is greater than zero, and the mean of the first population (companies with political connection) is larger than the second population (companies without political connection). That is, in companies with political connections, earning management occurs more than companies without political connection. Therefore, there is a significant difference between the earning management applied in politically connected companies and other companies, and the fourth hypothesis is confirmed.

Test of the fifth hypothesis

Hypothesis 5 states: "There is a significant difference between the relationship between earnings management and conservatism in politically non-connected and connected companies".

Test of coefficients Significance (Wald test)

At this stage, to test the fifth hypothesis, on the comparison of the relationship between the two variables of earnings management and conservatism in politically non-connected and connected companies, we use the test of significance of the difference between two coefficients in regression models 1 and 2. This test results in restrictions on the model coefficients. The null hypothesis of this test implies that there is no significant difference between the conservatism coefficient in regression models 1 and 2 and the opposite hypothesis of this test implies that there is a significant difference in the coefficient of the variable in question (conservatism) in the two separate models. The Wald test result for the fifth hypothesis test is as follows:

Table 17- Wald test results

Equation: $\beta1= \beta2$			
Test statistic	Value	Degree of freedom	Significance level
F statistic	89.2372	215	0.1132
Chi-square	89.2372	3	0.0916
Summary of assumption zero			
		Value	Standard error
$\beta1= \beta2$		37.776	66.680
Restriction in coefficients is linear			

As can be seen, the null hypothesis is rejected at the 5% level of significance (with respect to the two statistics F and Chi-square); so, there is no significant difference between the conservatism coefficients in the two separate regression models. The variable coefficient of financial flexibility in the second regression model of the second hypothesis (the relationship between conservatism and earnings management in politically connected companies) is higher than in the first hypothesis regression model (the relation between conservatism and earnings management in companies without political connection). So, there is no statistically significant difference between the variables of conservatism and earnings management in the politically connected and non-connected companies.

The result of the fifth hypothesis

There is no significant difference between conservatism variables and earnings management in politically connected and non-politically connected companies.

IV. CONCLUSION

The purpose of this research was to investigate the relationship between conservatism in accounting and earnings management using accruals and to investigate the difference between these variables and their relation in two groups of politically connected and non-connected companies.

Result of hypothesis 1: There is a negative significant relationship between conservatism in accounting and earnings management using accruals in companies without political connection. This means that with increasing conservatism, earnings management using accruals decreases. The result of this hypothesis is in agreement with the results obtained by Garcia et al. (2012), Abed et al. (2012), Guay, W. and R. Verrecchia (2006) and Etemadi and Farajzadeh (2012).

Result of hypothesis 2: There is a significant negative relationship between conservatism in accounting and earnings management using accruals in politically connected companies. The result of this hypothesis is in agreement with the results obtained by Garcia et al. (2012), Abed et al. (2012), Guay, W. and R. Verrecchia (2006) and Etemadi and Farajzadeh (2012).

Result of hypothesis 3: There is a significant difference between conservatism in politically connected companies and other companies. That is, the conservatism applied to politically connected companies is less and statistically significant compared to other companies. The result of this hypothesis is in agreement with the results obtained by Garcia et al. (2012), Abed et al. (2012), Guay, W. and R. Verrecchia (2006) and Etemadi and Farajzadeh (2012).

Result of hypothesis 4: There is a significant difference between the earning management of companies with political connections and other companies. This means that the earning management in politically connected companies is more and statistically significant compared to other companies. The result of this hypothesis is in agreement with the results obtained by Garcia et al. (2012), Abed et al. (2012), Guay, W. and R. Verrecchia (2006) and Etemadi and Farajzadeh (2012).

Result of hypothesis 5: There is no significant difference between earnings management and conservatism in politically non-connected and connected companies. The result of this hypothesis is in agreement with the results obtained by Garcia et al. (2012), Abed et al. (2012), Guay, W. and R. Verrecchia (2006) and Etemadi and Farajzadeh (2012).

Research limitations

1 -Lack of relevant and sufficient research on the subject.

2. In the calculation of accounting conservatism, Basu model (1997) is used, while we can use other models such as accrual-based conservatism criterion (Ball & Shiva Kumar, 2005), Givoli and Heinz (2005) conservatism model to calculate this variable. Therefore, in comparing the results of this research with the others, we should consider the computational model of conservatism.

3. In the calculation of accrual earning management, we used Kotari et al. (2005) model, while we can use other models such as McNichols & Wilson (1985), Haley (1985), Di Angelo (1986) and Jones (1991) to calculate this variable. Therefore, this point should be considered when comparing the results of this research with others.

4. In calculating the size of the company, we have used the total assets of the company as the criterion for calculating this variable, while there are other criteria such as net sales, number of employees, etc. to calculate the size of the company.

Research Suggestions

Result of hypotheses 1 and 2: There is a negative and significant relationship between conservatism in accounting and earnings management with accruals in companies without political connection. When making financial statements, decision-makers should consider the relationship between two variables obtained by the statistical models. Neither of the two variables of conservatism and earnings management can be directly related because conservatism leads to underestimating good conditions and earnings management leads to overestimating good conditions. There is also an inverse relationship between the two variables of conservatism and earnings management in politically dependent companies.

Result of hypothesis 3: There is a significant difference between conservatism in politically connected companies and the others. That is, the conservatism applied to politically connected companies is less and statistically significant compared to other companies. Users of financial statements in their decisions should pay attention to the status of corporate ownership as many companies have political rent and thus provide financial statements in such a way that in the absence of political rent will never occur.

Result of hypothesis 4: There is a significant difference between the earning management of companies with political connections and other companies. This factor can be used to investigate companies that are politically connected companies have no concern about the area being audited by statutory auditors. Thus, when examining the earnings quality

of companies that have such a political affiliation, we should note that the statistical results show that the earnings management in such companies is more than other ones.

Result of hypothesis 5: There is no significant difference between earnings management and conservatism in politically non-connected and connected companies. In other words, there is no significant difference between conservatism and earnings management in politically non-connected and connected companies. This result means that there is a statistically significant difference because the relationship between these two variables is stronger in companies with political connections, but this difference is not statistically significant. So expert users of financial statements should pay attention to this.

Suggestions for future researches

1. Examining the relationship between accrual management and conservatism in politically connected companies.

2. Examining the relationship between conditional and unconditional conservatism and earnings management in politically connected companies.

3. Investigating corporate governance in companies with political connections.

4. Investigating earning management and conservatism in companies before and after political connection and comparing them with each other.

5. Examining the relationship between earnings management and conservatism before and after political connection and examining their differences.

REFERENCES

[1] Ebrahimi Kordlar, Ali & Arabi, Mohammad Javad, 2010. Ownership Concentration and Earning Quality in Companies Listed in the Tehran Stock Exchange. Financial Accounting Researches, Second Year, No. 2, Issue 4, P. 95-110.

[2] Ebrahimi Kordlar, Ali & Shahriari, Ali Reza (2009). Investigating the Relationship between Political Costs and Conservatism (Political Hypothesis) in Tehran Stock Exchange. Quarterly of Accounting and Auditing Studies, 57: 3-16.

[3] Ebrahimi Kordlar, Ali & Elham Hassani Azar Daryani, 2006, Investigation of Earning Management at Early Release of Public Shares in Companies Listed in Tehran Stock Exchange, Accounting and Auditing Studies, No. 45.

[4] Etemadi, Hussein & Farajzadeh Dehkordi, Hasan (2012). Impact of Earning Management and Capital Structure on Earning Conservatism. Quarterly of Accounting and Auditing Researches, Vol. 4, No. 13, 1-19.

[5] Ghaemi, Mohammad Hussein & Mohammad Hussein Vadiei & Meysam Hajipour (2010). Impact of Conservatism on Earning Stability and Price-to-Earnings Ratio, Journal of Accounting Knowledge, Year 1, No. 2, pp. 53-77.

[6] Kurdistani, Gholamreza & Mehdi Khalili (2011). Effect of conservatism on the differential information content of cash flows and accruals. Journal of Accounting Knowledge, Second Year, No. 4, pp 83-104.

[7] Karimi, Mohsen (2006), Earning Management and its Role in the Capital Market, MSc Thesis, University of Mazandaran, pp. 19-20.

[8] Accounting Standards Setting Committee (2007). Accounting Standards: Theoretical Concepts of Financial Reporting, Audit Organization

[9] Mashayekhi, Bita & Mehdi Mohammad Abadi & Reza Hesarzadeh (2009). Impact of Accounting Conservatism on Earnings Stability and Distribution. Accounting and Auditing Studies, No. 56, pp. 107-124.

[10] Nasrollahi, Zahra & Aref Manesh, Zohreh, 2010. Investigating the Relationship between Ownership and Earnings Quality in Companies Listed in Tehran Stock Exchange, Accounting Knowledge, Vol.1, No. 3, pp. 117-138.

[11] Nourvash, Iraj & Sepasi, Sahar & Nikbakht, Mohammad Reza; (2005); Investigation of Earnings Management in Companies Listed in Tehran Stock Exchange, Journal of Social and Human Sciences, Shiraz University, Vol. 22, No. 2.

[12] Abed. S, Al-Badainah.J, Abu SerdanehThe.J (2012). Level of Conservatism in accounting Policies and Its Effect on Earnings Management, International Journal of Economics and Finance 4:78-85.
[13] basu. S 1997.the conservatism principle and the asymmetric timeliness of earnings, journal of accounting and economics.pp24.337
[14] Bhattacharya U and Daouk H and Welker M.(2001), "The World Price of Earnings Management".Working paper. Indiana University.
[15] Bliss Mark A. and Gul Ferdinand A. (2012) Political connection and leverage: Some Malaysian evidence, Volume 36, Issue 8, August 2012, Pages 2344–2350.
[16] 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.
[17] Chen Donghua, Jieying Li, Shangkun Liang and Guojun Wang(2011) Macroeconomic control, political costs and earnings management: Evidence from Chinese listed real estate companies, China Journal of Accounting Research 4 PP. 91–106.
[18] Datta .D, 2012 Political Connection and Firm Value – Theory and Indian Evidence ... papers.ssrn.com/sol3/papers.cfm.
[19] Fraser, D.R., Zhang, H., Derashid, C., (2006). Capital structure and political patronage: The case of Malaysia. Journal of Banking and Finance, 30(4):1291–1308.
[20] García, J.M, and G.Beatriz and F.Penalva (2012).Accounting conservatism and the limits to earnings management.http://ssrn.com/abstract.
[21] Guay, W. and R. Verrecchia. 2006. Discussion of an economic framework for conservative accounting and Bushman and Piotroski (2006). Journal of Accounting and Economics, 42: 149-16.
[22] Kousenidis, D.V, Ladas, A.C and Negakis, C.I(2009).Value Relevance of conservatism and non-conservatism accounting information . evidence from Greece. The international journal of accounting,44,219-238.
[23] Lafond,R .and Watts, R,L.(2006).THE information role of conservatism. The accounting Review 83,447-478.
[24] Lara, J. M. G., B. G., Osma, and A. Mora. (2005). The Effect of Earnings Management on the Asymmetric. Journal of Business Finance & Accounting, 32(3/4), 691-726.
[25] Iyengar, R. J., and Zampelli, E. M. (2010). Does Accounting Conservatism Pay?. Accounting and Finance, 50, 121–142.
[26] Niessen S. Ruenzi,2012 Political Connectednessand Firm Performance: Evidence From Germany. CFR-Working Paper NO. 07-15.
[27] Paul K. Chaney, Mara Faccio, David Parsley, The quality of accounting information in politically connected firms, Journal of Accounting and Economics 2011; 51: 58-76.
[28] Song Yu, Lina Wang and Zi Yan (2011) Impacts of Political Connections on Earnings Quality of Chinese Private Listed Companies, Advances in Education and Management Communications in Computer and Information Science Volume 211, pp 85-92.
[29] Watts, R.L., and J. Zimmerman, (1986), "Positive Accounting Theory".
[30] Yeh Yin-Hua, Pei-Gi Shu and Shean-Bii Chiu(2013) Political connections, corporate governance and preferential bank loans, Pacific-Basin Finance Journal 21 PP. 1079–1101.