The Effect of audit adjustments on earning quality in firms enlisted in Tehran Stock Exchange

Razieh Alikhani[1], Marjan Alipour[2]

1. Department of Accounting, Chalous Branch, Islamic Azad University, Chalous, Iran
2. Department of Accounting ,MA student of Shafagh, Tonekabon, Iran E-mail

Corresponding Author email :marjanalipour109@yahoo.com

Abstract: The goal of the present study is to investigate about how audit adjustments at the end of the year affect earning quality measures. This is mainly utilized in financial accounting and auditing literature and includes leveling and earning consistency, accruals' quality, marked accruals, and stop and lack of continuance of the earning distribution around zero. The statistical population for the present study includes all firms enlisted in Tehran Stock Exchange. Regarding the conditions considered to select our sample, 90 firms were selected for the time period between 2009 and 2014. To test the hypotheses we used a multiple variable regression method and an independent t test. Results showed that first audit adjustments led to more earning smoothening but it reduces earning consistency. Second, audit adjustments lead to audited accruals to have a higher quality. Third, audit adjustments do not have any effects on marked and absolute accruals. Fourth, audit adjustments reduce inconsistency in dividend on zero axes.

Keywords: *Audit adjustments, Earning quality.*

INTRODUCTION

Managers, financial analysts, and investors notice earnings reported by the firms the most. To assess the earnings gained in an accounting process we use a concept called 'earning quality'. Earning quality refers to usefulness of earnings for making decisions and its relationship with economic profit. In other words, high earning quality shows the usefulness of earning data for decision making by the users and its higher adjustment with Hicksion economic profits. The earning for an institution and the ratios extracted from it are usually borrowed for different contracts like rewards and loans. Contracts based on unreal earning quality and without the content will lead to transfer the wealth unwontedly. For example, earnings overstated are considered as a factor in managements' performance assessment and lead to appropriating more rewards to the manager while he does not deserve such a reward. Similarly overstated earnings lead to hide the fact that a firm is encountering bankruptcy and thus this will lead to make inappropriate credit policies against the firm by the creditors. But, regarding investment perspective, low earning quality will lead to unsuitable appropriation of capital. Firms that show their earning quality high in an unreal way can supply capital with lower capital cost and in this way hurt the economic growth of the country (Noravesh & Majidi, 2005).

Recent financial scandals in international level such as Leman Brothers, Satiam, Anglo-Irish Bank, Aneron, Worldcom, Telecom, … have created some concerns regarding earning quality. An independent auditor plays a principle role in financial reporting process and its validity. Meanwhile, firm management is responsible to supply financial statements. But, following these scandals the auditors were accused too. For example, in Aneron scandal in addition to firm's top management, the auditor (Arthur Anderson Institution) was also accused due to the lack of the discovery of fraudulent activities. Regarding this there is a consensus that lack of independence and weak audit quality lead to such scandals. Following such incidents, the legislators and the devisers of accounting and auditing standards have tried to find strategies to improve auditors' independence and auditing quality (Pierre & et al, 2005).

Theoretical foundations

The investors are the major elements in markets and financial institutions and always seek the data through the use of which they can make appropriate decisions. A requirement of appropriate decision making is the presence of transparent and proper data. Accounting earning is one of the most comprehensive data sources that the investors notice most often. But the main issue in the present study is that earning is affected by internal and external factors (Karami & Eftekhari, 2013). Barth and et al (2005) believe that the application of estimations in financial statements affect earnings and may lead to a different earning regarding the result of the real performance of a business unit. Anyway, accruals are always based on estimates and if such estimates are wrong, future accruals and future earnings should be revised. Estimation error and later corrections reduce the usefulness of accruals. Earning quality is a concept related with earning management but it does not mean exactly the same. The concepts of earning quality and earning management have a common feature and it

refers to the fact that none of them is defined well. Earning management can affect earning quality (Noravesh & et al, 2009). There is not any consensus regarding a definition for earning quality. Earning quality is a relative concept depending on the relationship between attitudes and perspectives and if there is not any absolute criterion to assess it, there are several factors that should be taken into consideration in assessing earning quality (Zariffard, 1999). Earning quality assessment helps the users of financial statements to judge about the current earning trust and to forecast the future (Deloitte & Touche, 2004).

Based on agency theory (Watts & Zimmerman, 1986; Jensen & Meckling, 1988), the demand for an independent auditor is due to the contradiction between the benefits of owners (shareholders) and firm managers. The presence of auditing not only identifies the quality of the reported financial data, but also it enhances the quality and it supplies some certain economic advantages for the reporter organization and external members of the organization. On the whole, the value of these advantages is beyond auditing costs and this explains the reason for the permanent demand for auditing services during the time pass and even in free markets (Wallace, 1985). Financial statements' auditing and other financial data are among the most important tools to make sure about information transparency in firms. Independent auditors reduce pollutions from the financial data through crediting financial statements and other data and cause information transparency in firms. Accordingly, financial statements' auditing by independent auditors is considered as one of the major requirements in different Stock Exchanges all over the world (Bulu & et al, 2010).

Many researches try to measure audit quality by using some earning quality measures. This creates some problems because the post-audited earning is affected by the reporting selection of managers and the approaches utilized by the auditors. Additionally, the post-audited earning is severely affected by nondiscretionary factors (such as institutional or principal performance) and real earning management. Accordingly, earning quality metrics utilized in previous researches were indirect and imprecise measures of auditing outcomes (Defond & Zhang, 2014). Non-accounting factors include institutional performance, firms' life cycle, and real earning management which affect non-post-audited earning and post-audited earning (Srivasta, 2014). Post-audited earning has more information content than non-post-audited earning (Valipour & Valipour, 2016). Managers' accounting selections affect non-post-audited earning and managers and auditors' accounting selections affect post-audited earning. Therefore, the difference between these two earning types is related to auditing adjustments (Lennox & et al, 2014). To measure auditing outcomes more directly we deal with comparing audited and non-post-audited earnings. The difference between audited and non-post-audited earnings talks about adjustment during end of the year auditing (Lennox & et al, 2014).

Regarding what was pointed above the major problem in the present research is the investigation of the effect of auditing adjustments through measuring audited and non-post-audited earnings on earning quality to supply financial data with high quality.

Research literature

Carol and et al (2002) studied the relationship between audit independence and earning quality. In this paper all delayed payments and discretionary elements of the delayed payments were used as an agent and earning quality criterion and the amount of fees for non-audit services were utilized as audit independence index. They concluded that firms with high ratios of fees for non-audit services are paid to their independent auditors. They increase earnings through delayed payments and thus have low earning quality. The intrinsic dependence between auditor and the employer may decrease auditors' incentives in avoiding earning management.

Balsam and et al (2003) used accruals' quality to investigate about earning quality. They concluded that the higher quality of accruals will lead to higher earning quality. The results gained were accorded with results by Dichev and Dechow (2002) because they also showed in a research that by increasing accruals' estimation error (reduction of accruals' quality) earning consistency (earning quality) will be reduced.

Bhattacaryya and et al (2011) carried out a research and studied the relationship between earning quality, information asymmetry, and equity cost. Their research utilized the analytic patterns to show the direct and indirect relationships between research criteria. Information asymmetry criteria were inappropriate selection, difference between the proposed purchase and sales price, and the probability of conscious purchase and sales. They selected a big sample of firms from 1993 to 2005 and achieved reliable evidences regarding the direct relationship between information asymmetry and equity costs and a reversed relationship between earning quality and equity costs on the one hand and earning quality and information asymmetry on the other hand.

Lennox and et al (2014) studied about how auditing adjustment at the end of the year affects earning quality. Results of their research showed that first auditing adjustments will lead to smoother and more consistent earnings. Second, adjustments lead to increase accruals' quality. Third, auditing adjustments have more negative effects on marked accruals than absolute accruals. Finally, adjustments do not reduce inconsistency in distributing earnings around zero.

Noravesh and et al (2006) carried out a research on accruals' quality emphasizing at the role of accruals' estimation. The results gained showed that high levels of accruals will lead to reduce earning quality and accruals' quality. Therefore, more accruals mean lower quality and less consistency of the earning.

Ahmadpour and Ahmadi (2008) assessed earning quality by using qualitative features of financial data. Results of their research showed that earning reaction coefficient and also price-earning regression identification capability in portfolios of firms with high quality earnings will be high compared to firms with low earning quality meaningfully. Thus, both research hypotheses were approved. In this research it was shown that earning quality can lead to make useful decisions for the investors.

Valipour and Valipour (2016) did a research to study audited and non-post-audited earning effects on stock value comparatively by considering information asymmetry. To select a sample, 214 firms were selected for the time period between 2012 and 2013. Results gained showed that post-audited and pre-audited earnings have had a positive and meaningful effect on stock value. Also findings showed that post-audited earnings have had higher information content than pre-audited earnings. Other evidences gained showed that information asymmetry has had an adjusting role in the relationship between pre-audited earning per share and post-audited earning per share and changes in stock value.

Research hypotheses

To gain the goals set above and regarding the theoretical foundations and previous research literature, the hypotheses devised for the present research are as follows:

First major hypothesis: there is a meaningful difference between audited and pre-audited earning regarding smoothening and consistency.

Second major hypothesis: audited accruals have a higher quality than un-audited accruals.

First minor hypothesis: the number of positive net accruals in audited accounts was less than un-audited accounts.

Second minor hypothesis: the number of un-audited net positive accruals, along with audited negative net accruals has been more than the number of un-audited negative net accruals, and audited net positive accruals.

Third minor hypothesis: the number of audited net negative accruals, along with un-audited accruals has been meaningfully different.

Third major hypothesis: there has been a meaningful difference between low earning frequency (less loss) between pre-audited earning and post-audited earning.

Research method

The present research is applied research regarding the categorization based on the goal. The goal of an applied research is to develop the applied knowledge in a certain field. Also the present study is causal-correlation regarding the nature and method and the data are post incidental (by using previous data). To test the hypotheses we have used a multiple variable regression based on pooled data. In this way, to select between the integrative data and the pooled data, we used F Limer test and to choose from among fixed effects and random effects' methods we used Hausman's test. Then, the meaningfulness of the coefficients of the variables was calculated by using t student statistics. The data collected were calculated by using Excel software and were analyzed through Eviews software and SPSS.

Research variables and their measurement

Dependent variable

It refers to the variable that is observed or measured to identify the effect of the independent variable on it. This variable is predicted through independent variable. In studying correlations, the presence of a dependent variable depends on independent variable. In this research earning quality is used as a dependent variable that includes the following categorizations:

Earning smoothening

One of the most principal issues in accounting is the commitment based through which accruals help temporal fluctuations' smoothening in cash flows (Dechow & et al, 2002). Regarding the previous researches (Dechow & et al, 2002) we investigated about the annual changes in profitability. Moreover, we compared these variables with annual changes in cash flows resulted from operational activities because a firm will tend to have a greater change in profitability when a bigger change happens in cash flows resulted from operational activities.

$$\Pr e\_smooth = \frac{\delta(\Pr e\_ROA)}{\delta(\Pr e\_CFO)}$$

$$Post\_smooth = \frac{\delta(Post\_ROA)}{\delta(Post\_CFO)}$$

Where, the variables are as follows:

$$Pre\_ROA = \frac{Pre\_E_{it}}{Pre\_TA_{it}}$$

$$Post\_ROA = \frac{Post\_E_{it}}{Post\_TA_{it}}$$

$$Pre\_CFO = CFO_{it}/Pre\_TA_{it}$$

$$Post\_CFO = CFO_{it}/Post\_TA_{it}$$

Pre_E_{it} = pre-audited earning
Post_E_{it} = post-audited earning
Pre_TA_{it} = pre-audited total assets
Post_TA_{it} = post-audited total assets
Pre_ROA_{it} = pre-audited return on assets
Post_ROA_{it} = post-audited return on assets
CFO_{it} = cash flows resulted from operating activities

Earning consistency (fixedness)

One of the indexes showing earning quality is accounting earning consistency. Accordingly, the more consistent accounting earning will lead to high quality earning interpreted by the participants in financial markets. Earning consistency is one of important earning indexes and regarding the investors' outlook the more consistent earning would be defined as a high quality earning because more consistent earnings can be used in assessment models and in forecast models (Tomy, 2012). Earning consistency represents permanence and earning resistance. Resistant earnings and fixed earnings are favored by the investors. We will study whether pre-audited earning shows a considerable difference in earning consistency or not.

$$Pre\_ROA_{it+1} = a_0 + a_1 Pre\_ROA_{it} + e_{PRE,it}$$

$$Post\_ROA_{it+1} = b_0 + b_1 Post\_ROA_{it} + e_{POST,it}$$

Accruals' quality

Accruals' quality refers to the amount of transformation (realization) of accruals into future cash flows (Francis & et al, 2004). According to Dechow and Dichev (2002), accruals' quality can be measured by using accruals' model as a function of past, present, and future cash flows:

$$Pre\_Accruals_{it} = a_0 + a_1 Pre\_CFO_{it-1} + a_2 Pre\_CFO_{it} + a_3 Pre\_CFO_{it+1} + u_{PRE,it}$$

$$Post\_Accruals_{it} = b_0 + b_1 Post\_CFO_{it-1} + b_2 Post\_CFO_{it} + b_3 Post\_CFO_{it+1} + u_{POST,it}$$

Where, the variables are:

$$Pre\_CFO = CFO_{it}/Pre\_TA_{it}$$

$$Post\_CFO = CFO_{it}/Post\_TA_{it}$$

$$Pre\_Accruals_{it} = Pre\_ROA_{it} - Pre\_CFO_{it}$$

$$Post\_Accruals_{it} = Post\_ROA_{it} - Post\_CFO_{it}$$

Marked and absolute (certain) accruals

Accounting adjustments lead to change the sign of net accruals. For example, downward adjustment causes positive post-audited net accruals to become negative. Such sign changes are achieved by marked indexes. For example, if pre-audited net accruals is +0.01, post-audited net accruals will be equal to -0.01 and the absolute amount does not change during auditing. Meanwhile, the marked amount is reduced up to 0.02. Accounting adjustment can reduce or increase the absolute amount of net negative accruals. The previous researches show that downward adjustments are more common than upward adjustments (Kinney & Martin, 1994).

$$\Pr e\_Accruals_{it} \succ 0 \& \Pr ost\_Accruals_{it} \prec 0$$

$$\Pr e\_Accruals_{it} \prec 0 \& \Pr ost\_Accruals_{it} \succ 0$$

Non-contiguous quality in earning distribution in zero point

In this part we investigate whether pre-audited small earnings' frequency (small losses) change compared to post-audited earnings?

Independent variable
Auditing adjustments

To measure the output of auditing directly, we compare the pre-audited earnings of managers with post-audited earnings. By doing so a difference is shown between the two earnings and the adjustments during end of the year auditing will be represented in this way (Lennox & et al, 2014). We could express auditing adjustments as follows:

$$\left| ADJUST_{it} \right| = \frac{\left| \Pr e\_E_{it} - Post\_E_{it} \right|}{\left| \Pr e\_E_{it} \right|}$$

Data collection and data processing methods

Since the data required for the present study were real, it is categorized within post-incidental researches. The data for the current study were collected from Rahavard-e-Novin software and the official website of Tehran Stock Exchange and also published financial statements of the firms. After the preliminary processing we used Excel software and the final analyses were done by getting help from Eviews8 software and SPSS.

Population and statistical sample

The statistical population of the present study includes all firms enlisted in Tehran Stock Exchange within a 5 years period from 2009 till 2014. The sampling method in this research was systematic deletion method. In this method some conditions are considered to include firms in the sample to create a homogenous sample and the firms with following characteristics were deleted from the sample:

Pre-audited and post-audited financial data related to each of the firms under investigations should be accessible.

The fiscal year of the firms should end at 19th March.

Firms should not have changes their fiscal year during research period.

The firms selected should have been active in bourse during the time between 2009 and 2014.

Firms selected should not be from among investment and financial intermediary firms.

By applying the constraints above the statistical sample was 90 year-firms from among the firms enlisted in Tehran Stock Exchange.

Research findings
Pre-audited earning, post-audited earning, and auditing adjustments

According to tables (1) and (2), the average post-audited earning has been higher than pre-audited earning average (POST_E, PRE_E), and the variables of return on assets (POST_ROA, PRE_ROA) approved that post-audited profitability has usually been higher than pre-audited profitability.

Table 1. The frequency of auditing adjustments upward and downward

	Upward adjustments $PRE\_E_{it} < POST\_E_{it}$	Without adjustments $PRE\_E_{it} = POST\_E_{it}$	Downward adjustments $PRE\_E_{it} > POST\_E_{it}$
Levels (from 630 to …)	186	301	143

Table2. The effect of auditing adjustments on earning

$\left\| ADJUST_{it} \right\| = \dfrac{\left\| \Pr e\_E_{it} - Post\_E_{it} \right\|}{\left\| \Pr e\_E_{it} \right\|}$	Upward adjustments $PRE\_E_{it} < POST\_E_{it}$	Without adjustments $PRE\_E_{it} = POST\_E_{it}$	Downward adjustments $PRE\_E_{it} > POST\_E_{it}$
Mean	0.14449873	0	0.120175574
Mode	0.020096668	0	0.023710012

Table (2) shows that the average downward adjustments have been less than the average upward adjustments. These results accord with findings by Kinney and Martin in America claiming that auditing adjustments affects earning negatively (Kinney & Martin, 1994).

The regression pattern related to earning consistency
First hypothesis: there is a meaningful difference between post-audited earning and pre-audited earning regarding smoothening and consistency (fixedness).
To test the hypothesis above, four regression patterns below were posed and tested.

The regression patterns related with earning consistency:

$$\Pr e\_ROA_{it+1} = a_0 + a_1 \Pr e\_ROA_{it} + e_{PRE,it}$$

$$\mathrm{P}ost\_ROA_{it+1} = b_0 + b_1 \mathrm{P}ost\_ROA_{it} + e_{POST,it}$$

Before the estimation to select from among panel or cross-sectional data we used F Limer test. The acceptance of null hypothesis means the arrangement of data using cross-sectional method and its rejection means the arrangement of the data using panel method. The result of this test is represented in table (3).

Table 3. Limer and Haussman test

Description		Statistic	Degree of freedom	Probability
First regression pattern	F statistic	2.22	89-449	0.001
	Haussman statistic	0.04	1	0.84
Second regression pattern	F statistic	2.54	89-449	0.001
	Haussman statistic	0.001	1	0.98

Since the amount of F Limer has been less than 0.05, the null hypothesis related to Limer test regarding the use of cross-sectional data was rejected and therefore panel data regression pattern was utilized. Accordingly, after the approval of the research pattern using panel data method we used Haussman test. If the probability of the test statistic was more than 0.1, in a meaningfulness level of 90 percent we could prefer random effects to fixed effects and the results of this test approved it.

Table 4. The estimation of earning consistency pattern

Description		Independent variables		Pattern adjustment goodness				
First regression pattern: 1- The estimation of the pattern of the relationship between pre-audited earning and earning consistency	Variables	Pre-audited assets' return	Latitude from the base	Coefficient identification	Adjusted coefficient identification	F statistic	F statistic probability	Durbin-Watson statistic
	Coefficients	0.79	0.03	0.6	0.6	816.6	0	1.97
	Standard error	0.04	0.01					
	t statistic	17.84	3.23					
	Probability	0.001	0.001					
Second regression pattern: 2- The estimation of the pattern of the relationship between post-audited earning and earning consistency	Variables	Post-audited assets' return	Latitude from the base	Coefficient identification	Adjusted coefficient identification	F statistic	F statistic probability	Durbin-Watson statistic
	Coefficients	0.78	0.03	0.58	0.58	756	0	2
	Standard error	0.04	0.01					
	t statistic	20.47	4.1					
	Probability	0.001	0.001					

Results of earning consistency regression test
Results showed that the coefficient of the variable of pre-audited assets' return (amounting to 0.79) has been greater than coefficient of the variable of post-audited assets' return (amounting to 0.78). Since $a_1 > b_1$ (the coefficient of current year assets' return), the pre-audited earnings are more consistent than the post-audited earnings.

Patterns related to earning smoothening

$$\Pr e\_smooth = \frac{\delta(\Pr e\_ROA)}{\delta(\Pr e\_CFO)}$$

$$Post\_smooth = \frac{\delta(Post\_ROA)}{\delta(Post\_CFO)}$$

The table below represents the result of regression patterns related with earning smoothening.

Table 5. The regression patterns related to earning smoothening

The average changes in profitability	
$\left\|\Delta \mathrm{Pr} e\_ROA_{it}\right\|$	0.672
$\left\|\Delta \mathrm{P} ost\_ROA_{it}\right\|$	0.555
Difference in average	0.1162
t statistic	0.903
$\left\|\Delta \mathrm{Pr} e\_ROA_{it}\right\|/\left\|\Delta \mathrm{Pr} e\_CFO\right\|$	0.42
$\left\|\Delta \mathrm{P} ost\_ROA_{it}\right\|/\left\|\Delta \mathrm{P} ost\_CFO\right\|$	0.05
Difference in average	-0.468
t statistic	-0.664
Standard error in changes in profitability	
$\delta(\Delta \mathrm{Pr} e\_ROA_{it})$	0.9616
$\delta(\Delta \mathrm{P} ost\_ROA_{it})$	0.8815
Difference in average	0.3198
t statistic	-1.24
$\delta(\Delta \mathrm{Pr} e\_ROA_{it})/\delta(\Delta \mathrm{Pr} e\_CFO)$	0.822
$\delta(\Delta \mathrm{P} ost\_ROA_{it})/\delta(\Delta \mathrm{P} ost\_CFO)$	0.786
Difference in average	-0.0361
t statistic	-0.553

Results of earning smoothening test

Regarding the table above it can be understood that earning fluctuations are meaningfully greater in pre-audited accounts than post-audited accounts. Therefore, the evidences clearly show that post-audited earnings are smoother than pre-audited earnings. Results show that inappropriate managerial reporting creates some fluctuations in earnings and auditing adjustments help to reduce these fluctuations with incorrect reporting revision.

Results of testing the first major hypothesis

There has been a meaningful difference between post-audited earnings and pre-audited earnings regarding smoothening and consistency (fixedness). Therefore, regarding the results above it can be stated that auditing adjustments reduce earnings' fluctuations but they do not increase earning consistency.

Second hypothesis: this hypothesis includes one major hypothesis and three minor hypotheses as follows:
Regression patterns related with accruals' quality
Second major hypothesis: post-audited accruals have a higher quality compared to pre-audited accruals.
To test the hypothesis above and to respond the minor presuppositions, we have considered the two regression patterns posed by Dichev and Dechow (2002).

$$\mathrm{Pr} e\_Accruals_{it} = a_0 + a_1 \mathrm{Pr} e\_CFO_{it-1} + a_2 \mathrm{Pr} e\_CFO_{it} + a_3 \mathrm{Pr} e\_CFO_{it+1} + u_{PRE,it}$$

$$Post\_Accruals_{it} = b_0 + b_1 Post\_CFO_{it-1} + b_2 Post\_CFO_{it} + b_3 Post\_CFO_{it+1} + u_{POST,it}$$

Before the estimation to select from among panel or cross-sectional data we used F Limer test. The acceptance of null hypothesis means the arrangement of data using cross-sectional method and its rejection means the arrangement of the data using panel method. The result of this test is represented in table (6).

Table 6. Limer and Haussman test

Description		Statistic	Degree of freedom	Probability
First regression pattern	F statistic	14.6		0.001
	Haussman statistic	36.8	3.0	0.001
Second regression pattern	F statistic	15		0.001
	Haussman statistic	36.65	3.00	0.001

Since the probability of F Limer has been less than 0.05, the null hypothesis related to Limer test regarding the use of cross-sectional data was rejected and therefore panel data regression pattern was utilized. Accordingly, after the approval of the research pattern using panel data method we used Haussman test. Also

test estimation with statistic with a probability of less than 0.05 approved model estimation using fixed effects method. In the regression patterns estimation table below the facts above are represented.

Table 7. The estimation of accruals' quality regression pattern

Description		Independent variables				Pattern adjustment goodness				
First regression pattern: 1- Pre-audited accruals and cash flow	Variables	PRE_CFO(-1)	PRE_CFO	PRE_CFO(1)	C	Coefficient identification	Adjusted coefficient identification	F statistic	F statistic probability	Durbin-Watson statistic
	Coefficients	0.01	-0.87	0.03	0.13	0.88	0.85	29.5	0	2.05
	Standard error	0.02	0.02	0.02	0					
	t statistic	0.26	-40.33	1.65	26.88					
	Probability	0.8	0.001	0.1	0.001					
Second regression pattern: 2- Post-audited accruals and cash flow	Variables	POST_CFO(-1)	POST_CFO	POST_CFO(1)	C	Coefficient identification	Adjusted coefficient identification	F statistic	F statistic probability	Durbin-Watson statistic
	Coefficients	0.01	-0.89	0.02	0.14	0.89	0.86	32.5	0	2.01
	Standard error	0.02	0.02	0.01	0.001					
	t statistic	0.62	-42.98	2.36	29.13					
	Probability	0.54	0.001	0.02	0.001					

Results of Dechow & Dichev model (2002) test

Results of the first regression showed that the variable of cash flow resulted from pre-audited cash activities in the previous year did not have a meaningful effect on post-audited earning quality. The variable of cash flow resulted from pre-audited cash activities have had a negative and meaningful effect on earning quality in a way that by increasing a unit of this variable, the variable of accruals' quality is reduced 0.87 unit. The variable of cash flow resulted from pre-audited cash activities of the future year did not have a meaningful effect on post-audited earning quality.

Also results of the second regression test showed that the variable of cash flow resulted from post-audited cash activities of the previous year did not have a meaningful effect on post-audited earning quality. The variable of cash flow resulted from post-audited cash activities have had a negative and meaningful effect on earning quality in a way that by increasing a unit of this variable, the variable of accruals' quality is reduced 0.89 unit. The variable of cash flow resulted from post-audited cash activities of the future year has had a positive and meaningful effect on post-audited earning quality in a way that by increasing a unit of this variable, the quality of accruals increases 0.14 unit.

Table 8. Average and standard error of accruals' estimation

First regression pattern: pre-audited accruals and earning quality	$\left| u_{PRE,it} \right|$	$\delta(u_{PRE,it})$
	0.0033	0.0597
Second regression pattern: post-audited accruals and earning quality	$\left| u_{POST,it} \right|$	$\delta(u_{POST,it})$
	0.0028	0.0557

According to Dechow and et al (2010), we investigated the average and standard error of estimation error of residual utterances. The absolute value of average utterances of pre-audited leftovers is equal to 0.0033 and the value of average utterances of post-audited leftovers is equal to 0.0028. Also the standard deviation of the pre-audited utterances was equal to 0.0597 and the standard deviation of the post-audited utterances was equal to 0.0557. Since the average value of $\left| u_{POST,it} \right|$ (post-audited utterances in second model) has been smaller than $\left| u_{PRE,it} \right|$ and standard deviation of post-audited utterances has been smaller than pre-audited amount the findings showed that auditing adjustments help to reduce estimation error in accruals.

Testing minor hypotheses of the second major hypothesis
First minor hypothesis: the number of pre-audited positive net accruals along with post-audited negative net accruals has been greater than the number of pre-audited negative net accruals along with post-audited positive net accruals.

The result of difference test in average has been -0.0025 and t statistic has been -0.059 and the probability have been 0.95. Since the probability has been greater than 0.05, this hypothesis is rejected. In other words, a relationship was not observed between pre-audited positive net accruals along with post-audited

negative net accruals and the number of pre-audited negative net accruals along with post-audited positive net accruals and therefore this hypothesis is rejected.

Table 9. Testing the first minor hypothesis

the number of pre-audited positive net accruals along with post-audited negative net accruals has been greater than the number of pre-audited negative net accruals along with post-audited positive net accruals	Statistical presupposition test				
	difference in average	variance	standard error	t statistic	probability
	-0.00252	1.07268	0.04280	-0.059	0.953

Second minor hypothesis: the number of negative net accruals between post-audited accounts and pre-audited accounts are meaningfully different.

The result of difference test in average has been -0.0022 and t statistic has been -0.03 and the probability have been 0.97. Since the probability has been greater than 0.05, this hypothesis is rejected. In other words, a relationship was not observed between negative net accruals in pre-audited and post-audited accounts and therefore this hypothesis is rejected.

Table 10. Testing the second minor hypothesis

testing the meaningfulness of post-audited and pre-audited negative net accruals	Statistical presupposition test				
	difference in average	variance	standard error	t statistic	probability
	-0.00022	0.10396	0.00629	-0.035	0.972

Third minor hypothesis: the number of positive net accruals in post-audited accounts has been less than pre-audited accounts.

The table below deals with the number of positive net accruals in post-audited accounts being less than pre-audited accounts. The result of difference test in average has been -0.004 and t statistic has been -0.06 and the probability have been 0.94. Since the probability has been greater than 0.05, this hypothesis is rejected. In other words, a relationship was not observed between positive net accruals in pre-audited and post-audited accounts and therefore this hypothesis is rejected.

Table 11. Testing the third minor hypothesis

testing the meaningfulness of post-audited and pre-audited positive net accruals	Statistical presupposition test				
	difference in average	variance	standard error	t statistic	probability
	-0.00484	1.42473	0.07562	-0.064	0.949

Testing third major hypothesis
Third major hypothesis: there has been a meaningful difference in low earning (low loss) frequency between pre-audited and post-audited earnings.

The result of difference test in average has been -0.008 and t statistic has been -6.5 and the probability has been 0.001. Since the probability has been less than 0.05, this hypothesis is approved.

Table 12. Testing the third major hypothesis

the difference between low pre-audited and low post-audited earnings	**Statistical presupposition test**				
	difference in average	variance	standard error	t statistic	probability
	-0.0089	0.00131	0.00014	-6.550	0.001

CONCLUSION

Recent financial scandals in international level have created some concerns regarding earning quality. Meanwhile, firm management is responsible to supply financial statements, following these scandals the auditors were accused too. This is due to the fact that independent auditors play a principal role in validation process of financial reports. In the present research and regarding the theoretical foundations presented we were trying to investigate about the effect of accounting adjustments on earning quality in firms enlisted in Tehran Stock Exchange. The research results showed that:

There has been a meaningful relationship between pre-audited earning and post-audited earning regarding earning consistency and smoothening (approval of the first hypothesis). Auditing adjustments reduce earnings' fluctuations but do not increase earning consistency. In this way, earning fluctuations in pre-audited accounts are more than post-audited accounts and this shows that post-audited earnings are smoother than pre-audited earnings. The result of smoothening test in the present research accords with findings by Lennox and et al (2014). Also the results of tests related to earning consistency showed that pre-audited earnings are

more consistent than post-audited earnings and consequently these results contradict with results in the research carried out by Lennox and et al (2014). They found out in their research that post-audited earnings are more consistent than pre-audited earnings.

Post-audited accruals have higher quality compared to pre-audited accruals (approval of the second hypothesis). After applying the model posed by Dechow and Dichev (2002) in estimating accruals' quality before and after auditing and in order to investigate about the effect of auditing adjustments on earning quality we tried to compare average value and standard error of the pre-audited and post-audited leftover utterances. Finally the results showed that auditing adjustments help the reduction of estimation error in accruals. Results of the test of this hypothesis accorded with the results in findings by Lennox and et al (2014).

To study the effect of auditing adjustments on marked and absolute accruals we considered a minor hypothesis. Results of these hypotheses did not show a meaningful relationship between marked and absolute accruals in pre-audited and post-audited accounts. Thus, the results led to the rejection of three minor hypotheses. These results contradicted with findings by Lennox and et al (2014). Their results showed that auditing adjustments have had a greater negative effect on marked accruals compared to absolute accruals.

There has been a meaningful difference in low earning (low loss) frequency between pre-audited and post-audited earnings (the approval of third hypothesis). Results of this hypothesis showed that auditing adjustments reduce earnings and the amount of non-contiguous features in earning distribution around zero. Therefore, there has been a meaningful relationship in low earning (low loss) frequency between pre-audited and post-audited earnings. Results of this hypothesis accorded with results gained by Lennox and et al (2014). They found out that auditing adjustments reduce earnings but the amount or size of non-contiguous features in earning distribution around zero is not reduced.

Suggestions

The fundamental goal of financial reporting is to present useful information for the decision makers. It can be suggested to participants in capital market to consider the content of financial statements regarding pre-audited and post-audited earnings in their economic decisions. Also it can be suggested to the investors and analysts and other beneficiaries to pay more attention to the quality of the data issued specifically the earnings and apply them in their decision making models. As the research results showed there has been a meaningful relationship between pre-audited and post-audited financial statements' data and this means that auditing adjustments affect earning quality. Therefore, it can be suggested to consider auditing adjustments in analyses. To do future researches in the field the following topical issues are suggested:

Future researches to investigate the effect of auditing adjustments on earning quality can be done by the help of using other earning quality criteria.

It is suggested that to make the effect of other factors more transparent on the relationship between auditing adjustments and earning quality, the following researches could be carried out:

The effect of auditing adjustments on earning quality considering information asymmetry feature;

 The effect of auditing adjustments on earning quality considering the amount of managerial ownership.

REFERENCES

Ahmadpour, Ahmad; Ahmadi, Ahmad (2008). Utilizing qualitative features of financial data in assessing earning quality. Quarterly journal of accounting and auditing studies, Year 15, No. 52, PP: 3-16.

Ashrafzadeh, Seyed Hamidreza; Mehreghan, Nader (2008) Panel data economic validation. Tehran University Press.

Bahatacharya, N., Desai, N., and Venkataraman, K. (2010). Earning Quality and Information Asymmetry. Working paper, Retrieved from: http:// www.ssrn.com.

Balsam, S., Krishnan, J., & Yang, J. (2003)." Auditor Industry Specialization and Earning Quality ". Auditing, 22(2), 71-97.

Barth, M. E. (2006). "Including estimates of the future in today's financial statements" Accounting Horizons, 20(3), pp. 271-285.

Bulu, Ghassem; Maham, Keyhan; Ghodarzi, Esmaeil (2010). Independent auditor change and information transparency in firms enlisted in Tehran Stock Exchange, Journal of accounting knowledge, year 1, PP: 111-135.

Carol callaway Dee, A. Lulseged & S.Nowlin , 2002, " Earnings Quality and Auditor independence: an examination using non- audit fee data "

Dechow, P. (1994). Accounting Earnings and Cash Flows as Measures of Firm Performance the Role of Accounting Accruals. Journal of Accounting and Economic, 18 (1), pp 3-42.

Dechow, P. and I .Dichev. (2002). The quality of accruals and earnings: the role of accruas in estimation errors. The Accounting Review, 77, PP. 35-59.

Dechow, P. M. Richardson, S.A. and Sloan, R.G. (2004). The persistence and pricing of the cash component of earnings. working paper, SSRN.

Deloitte & Touche, T. (2002). LLP, Integrity & quality: Quality of Earnings.

Esmaeili, Shahpour (2006). The relationship between earning quality and stock return. MA dissertation, Allameh-Tabatabaei University.

Francies,I.Lafond,R.Olsson,P.Schipper,K.(2005)."the market pricing of accruals quality ", journal of accounting and economics , Vol.39,No.2,pp.295-327.

Francis, j., R. LaFond, p. Olsson, and K. Schipper, (2004), "Cost of Equity and Earnings Attributes", The Accounting Review 79, PP. 967-1010.

Hicks, J., 1939,Value and Cpital. Oxford,UK:University Press.

Jensen, M. C., & Meckling, W. (1976). Theory of the firm: managerial behavior, agency costs and ownership structure. Journal of Financial Economics, 3(2), 305&360.

Karami, Gholamreza; Eftekhari, Vahid (2013). Studying some criteria of accounting earning quality in business cycles. Quarterly journal of accounting and auditing studies, Year 20, No. 52, PP: 93-112.

Kinney,W.R,Martin,R.D. (1994). Dose auditing reduce bais in financial reporting? A review of audit-related adjustment studies. Auditing: A Journal of Practice & Theory 13,149-156.

Lennox C.(1984)."Bankrutey , Auditor Switching and audit Failure. Evidince from the UK 1987-1994".Working Paper.

Lennox, C .Wu , X. and Zhang,T. (2015). The effect of audit adjustments on earnings quality. Journal of Business Finance & Accounting.

Noravesh, Iraj; Majidi, Reza (2005). Studying the relationship between earning quality and capital cost in firms enlisted in Tehran Stock Exchange. Humanities' portal, No. 43.

Noravesh, Iraj; Mashayekhi, Bita; Borghaei, Zahra (2009). Studying the effect of accruals on earning quality in firms enlisted in Tehran Stock Exchange. Journal of financial accounting, PP: 13-35.

Penman , S. Zhang ,X.(2002). accounting conservatism,the quality earnings , and stock returns" ,the accounting review, Vol.77No.2, pp.237-264.

Pierre K. St and Anderson J.A. (1984). An Analysis of the Factors Associated with Lawsuits Against Public Accountants. The Accounting Review, Vol. 59, Issue 2, pp 242-264.

Saghafi, Ali; Kordestani, Gholamreza (2004), Studying and identifying the relationship between earning quality and market reaction to cash earning changes. Quarterly journal of accounting and auditing studies, Year 11, No. 37, PP: 51-72.

Srivasta, A., 2014. Why have measures of earnings quality changed over time? Journal of Accounting and Economics 57, 196–217.

Tomy R.E. (2012). Earnings Persistence over the Business Cycle. Working paper. Stanford University.

Valipour, Hashem; Valipour, Mohammadjavad. (2016). A comparative study of the effect of pre-audited and post-audited earnings on stock value considering feature of information assistance. Quarterly journal of management accounting studies, Year 9, No. 28, PP: 83-95.

Wallace, V. (2002). The economic role of auditing in free markets and controlled markets. Translated by Amir Aslani. Audit Organization Publications, Tehran.

Watts, R. L., & Zimmerman, J. L. (1983). Agency problems, auditing, and the theory of the firm: some evidence. Journal of Law and Economics, 26(3), 613-633.

Zariffard, Ahmad (2008). The recognition and analysis of factors affecting earning quality assessment in business agents in Iran. PhD dissertation, Tehran University, Department of management. Tehran.