

THE EFFECT OF ABNORMAL ACCRUAL ON FUTURE AUDIT TENURE

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Abstract

Increase the auditor independence issue leads to increase the importance of audit rotation phenomenon in accounting researches. Auditors change almost lead to decrease the confidence of investors about reliability of financial statements, special if audit change include negative signals, bad news and doubt about new auditors. Auditors change can be either discretionary or mandatory. If the quality of financial reporting is not suitable, auditors terminate the audit engagement.

Otherwise if auditor disagree with owner about current accounting principles and standards, owner change the auditor. So, the main goal of current research is to investigate the effect of abnormal accrual on life expectancy of audit engagements.

The population of research is all listed firms in Tehran stock exchange. Finally a sample of 100 listed firms was chosen by systematic method. Time-period of research is from 2004-2011. Logit multiple regression was utilized to test hypotheses. Statistical methods used consist of Hausmar-Lamshu statistic, adjusted R square and t- statistic.

Finding indicates that income-decreasing accruals decrease the life expectancy of audit engagement. Findings also indicate that income-decreasing accruals decrease the life expectancy of audit engagement. In other words, by increasing the level of income-increasing accrual and income-decreasing accrual the probability of terminating the audit engagement and dismissal the auditor increase too and lead to decreasing the future tenure.

Key words: Income-Increasing Accrual, Income-Decreasing Accrual, Audit Engagement, Audit Tenure

Introduction

Although the main responsibility preparation of financial statements is responsible of managers following the financial scandals decades ago worldwide and incidence concerns about ability of reliance on the financial statements, all accusation was towards auditors, so that generally these events be mentioned as a failure audit. It seemed lack of Independence and the poor quality of the audit be causing the occurrence of such events. These concerns about the independence of auditors be caused surveillance workgroup related securities markets be follow think about solutions. For example, commission American Securities and Market established board of standards related to independence in 2000 and also formulated limiting laws that formulating the services type a audit firm can propose to their clients. (U.S. Securities Exchange and Market Commission)

In addition, law mandatory rotation of auditors and limiting their tenure was approved in some countries. For example, we can point out to approval Sarbinz – Axeli law in July 2002.

Section 203 of this law, forcing audit firm that have change their partners and managers after five years consecutive audit work for a client. Requirements the Securities and Exchange Organization of Tehran to change firms' audit surely is due to concerns capital market directors and officers about the independence, audit quality. According to, Clause 2, Article 10 instructions of audit institutions trustee Exchange Organization approved 8 July 2007 the Stock Supreme Council, audit institutions is not allowed after four years again accept independent auditor and the Company's statutory auditor (Law Capital Market). On the other hand, audit has claims there isn't any evidence based on reduced auditor independence and the consequences of such restrictive laws is cost increases for clients and investors. Since auditors are considered as controlling the quality of client's financial reporting distorting of their independence be weakened effective control on the quality of financial reporting. At a time when managers and auditors have intent create new contract audit both sides are aware from motivation and willingness of the other side. Auditor in accepting new clients signed an explicit contract based on quality of financial reporting by client in the coming years, and the other hand, also client in acceptance new accounting will be given to process quality of financial reporting in the coming years.

Theoretical Foundations and Research Previous

In each community one of the functions be defined for accounting is provide useful and helpful information for investors for determining the value of exchange and to help make informed decisions for investors. Among accounting information, accounting profit is as the most important source of information about assessment potential profitable and future cash flows. (Haghighat & Bakhtiari 2011)

In accounting interest be identified and report based on accruals. Usually, using the accrual basis will be causes be different amount of reported operating profit with net cash flows from operations and reporting set of accruals in the financial statements. Profit in accounting is divisible to both components cash and accrual (Saghafi & Hashemi 2004).

As was mentioned in process income measurement used from accrual accounting system in which accruals adjusted cash flow during that adjusted figures better measured performance of economic units. Mentioned accruals are based on estimates that if these estimates be wrong, should be modified next period in future accruals and future profits. The estimated error and its next modification decrease from to be useful accruals (accruals quality). In terms of Decho and Dichov (2002) accruals quality reduced with increasing accruals estimated error rate. (Dastgir & Rastgar 2011)

Generally it can be said firm's accruals are divided two categories normal accruals (involuntary) abnormal accruals (optional). Abnormal accruals have been controlled by manager and are considered as a tool for earnings management. On the other, increasing firm's abnormal accruals been make increases information asymmetry. For this reason be used the auditor as a tool to reduce information asymmetry. Generally, he purpose of auditors is protect the interests of shareholders against importance falsification and false available at financial statements. Auditors are followed increase audit quality in order to maintain their professional reputation and avoid litigation against own. Also managers' motivates in order to acts of self-interest in the quality of earnings is barrier reach of auditors to their goals.

Generally, it can be said there is a conflict between managers and auditors' motivated on type and amount of firms' accruals. Managers' motivates is the use of accounting principles and methods which be leads to creation increasingly benefit accruals, against auditors' motivates is towards reducing benefit accruals. Auditors known suspects more due to excessive expression of interest and are prosecuted less profit smaller. Risk of lawsuits against auditors been makes they pressed their customers and adopted ways that reduction benefit. Therefore, it can be said accruals that be handled in the financial statements are result choice of

accounting method by managers finally, have been assessments by the auditor. (Lustgarten and Shon 2012)

Manager is demanding increasing profit accrual report but report this item increases risk of lawsuits against the auditor. Therefore, there is a conflict between directors and auditors. Such a contradiction been leads to reduction contract audit expected remaining term. So, as long as managers despite auditors have ability increasing profit accrual report, increases likelihood of auditor resignations continuing audit. Conversely, when an auditors serves in the an environment having high legal risk and political pressures, created for them an incentive enter more pressure the manager that use reducing interest accruals. But manager is demanding using increase benefit accruals.

So, as long as auditors affected on the decisions of managers and report reducing benefit accruals, then increases likelihood of auditor dismissal and also breach of contract audit by client. (Lustgarten and Shon 2012)

Supporters of the auditor change believe that in the event forced change, auditors will be position that would be able to have resistance against the pressures and demands of managers and also apply a more impartial judicial. Long-term presence of auditor along with the employer will be cause creation the tendency of client comments maintain, a situation is hurt independence and impartiality. (Rahabi 2006)

Also they auditors tend to maintain client through support them pose other reason to pass limiting legislation, because, auditor in the early years of activity for new clients has the initial cost that in order to compensate them has tends to keep your clients. (Davis Et al. 2000)

In contrast, the opponents of mandatory auditor change have other opinion. They believed the other factors prompted auditors to maintain independence. For example, effort that auditors are used in order to maintain the reputation or fear of risk of lawsuits scheme against them is structures that be barrier inappropriate behaviors of auditors. They believe that auditors over time earned better understanding of the activity client and more experience, and thus their ability increases about suitability or non-suitability of accounting and reporting procedures. Therefore, long term relationship auditor and client could improve audit quality (Chen Et al. 2005). They believe change of auditor will cause to reduced of investor confidence to reliability of financial statements, and hence be reduced reputation audit. On the other, audit costs will increase for both auditor and client.

Research Hypotheses

H₁: Increasing profits abnormal accruals reduce expected time of audit contract.

H₂: Reducing profits abnormal accruals reduce expected time of audit contract.

Methodology

In this study to obtained data analysis used both descriptive and inferential. Descriptive level to describe the characteristics the community used statistical features such as frequency, mean, standard deviation and maxima and minima. Regression model used to test the hypothesis is the following model:

$$\text{Model 1:} \quad Y = \beta_0 + \beta_1 \text{LASTYR} + \beta_2 \text{POS_abnacc} + \beta_3 \text{NEG_abnacc} + \beta_4 \text{SIZE} + \beta_5 \text{LEV} + \beta_6 \text{ROA} + \beta_7 \text{BMT} + \beta_8 \text{INDUSTRY} + \beta_9 \text{REGION} + \beta_{10} \text{COUNTRY} + \beta_{11} \text{YEAR} + \epsilon$$

LASTYR: It is a dummy variable. If *t* year be last year contract audit number 1, and otherwise 0.

POS_abnacc: Positive abnormal accruals (Increase Profit). If abnormal accruals be positive number 1, and otherwise 0. Abnormal accruals will be calculated Jones sectional regression model.

NEG_abnacc: Negative abnormal accruals (Reduce Profit). If abnormal accruals be negative number 1, and otherwise 0.

In order to hypotheses was used test from z statistic and coefficients significant, In this case, if the coefficient of the variable **POS_ABNACC** be negative and significant (Significance level of less than 5%) the first hypothesis will be confirm, and otherwise will be rejected. Also about second hypothesis, If the coefficient of the variable **NEG_ABNACC** be negative and significant (Significance level of less than 5%) second hypothesis will be confirm, and otherwise will be rejected.

Research Variables

The dependent variable is expected time contract audit (Forthcoming tenure of the audit). It is a dummy variable. For measuring the dependent variable, if current year be last year audit contract, number 1, and otherwise 0. if **t** year be last year contract audit, auditor and client is work terminated. Therefore, in this case prospective audit tenure be reduced. This variable be mined through firm's financial statements reported.

Independent Variables

Pos_abnacc: Positive abnormal accruals (Increase Profit).

Neg_abnacc: Negative abnormal accruals (Reduce Profit).

Abnormal accruals (Optional) been based on the modified Jones model (1991) and the amount residue Cross-sectional regression model is following model:

$$\text{Model 2: } \frac{TA_{it}}{A_{t-1}} = 0 \left(\frac{1}{A_{it-1}} \right) + b_1 \left(\frac{\Delta REV - \Delta REC}{A_{it-1}} \right) + b_2 \left(\frac{PPE}{A_{it-1}} \right) + \varepsilon_{it}$$

TA_{it}: Accruals of firm **i** in year **t**

A_{it-1}: Book value of total assets of firm **i** in year ago

ΔREV: Changes sales revenue of firm **i** in year **t**

ΔREC: Changes in accounts receivable of firm **i** in year **t**

PPE: Gross tangible fixed assets of firm **i** in year **t**

: Residue regression model and equivalent to abnormal accruals (optional) each firm per year.

After model fitting and coefficients calculate, model residue the total difference between accruals and normal accruals. After calculating residuals, per year they shared on its firm's total accruals in the related year. Obtained percentage has arranged respectively from small to large. The first quartile is reducing benefit abnormal accruals, and the last quarter is increasing benefit accruals. In order to better specify regression models were use series of effective variables (control) on the expected term of the contract audit as follows:

Auditor tenure (TENURE): The length of time auditor until year **t** is working in the company.

ROA: It is equal to operating profit divided by average assets.

Changes leverage (DLEVERAGE): Change in the ratio of debt to book value current year's total assets than the previous year.

Changes current ratio (DCRATIO): Change in the ratio of current assets current liabilities in year **t** than the previous year

Firm size (SIZE): Natural logarithm of the book value of total assets

MTB: Ratio market value to book value equity firms in the year ago.

Type of audit institution (BIG_N): It is dummy variable. If the auditor be audited organization, Number 1, and otherwise 0.

AGE: Experience (life) presence of firm in the stock the year **t**.

Type of auditor's report (QUALIFIED): is dummy variable. If the auditor to issue condition report number 1, and otherwise 0.

The Statistical Population and Sampling

In this study, for select a statistical sample was used removal methods cohesiveness. For this purpose, all companies have following conditions choice as sample in this study and others removal:

1. The surveyed companies are accepted before 2002 in Tehran Stock Exchange that were components listed companies until the end of 2012 in Tehran Stock Exchange.
2. Due to the increased availability of comparisons financial year firms under study be the end of March.
3. During the time domain has not changed financial year.
4. They have stop trading more than three months.
5. Their desired data be available
6. They may not component of investment companies, financial intermediation and leasing

According to the above conditions and limitations between listed companies in the Tehran Stock Exchange were selected 100 firms.

Methods and Tools for Data Collection

For data collection about explained research topic Bibliography was used library method and also, in order to achieving the required information for testing the hypothesis was used from method of analysis documents. Thus, the required information extracted financial statements, reports to the board, other reports of listed companies in the Tehran stock market, Tehran Securities Market website and available software packages as Tadbir Pardaz softwar and Rah Avard Novin software.

Findings

Considering that type of data is combined data, in order to between panel data and compilation methods is used test F Limer. Significance level reporting this test showed that panel data approach is more appropriate. Since panel data approach was selected in order to select between fixed and random effects method was used Hausman test. Significance level of Hausman test shown that random effected is more appropriate. Summary of test results F Limer and Hausman as following table (1):

Table 1: Test the model estimation using combining data

F Limer			Hausman		
F limer	Probability	Result	Chi-Square	Probability	Result
3.60	0.000	Panel	10.30	0.50	Random Effects

Before estimating regression model on the data is necessary be check stationary of each of variables, because if variables were non-stationary will be cause occurrence spurious regression problem. In This study, to investigate stationary of variables for the combined data was used fisher-ADF test. The amount of p-value Fisher-ADF test for all variables was less than 0.05 ($p\text{-value} \leq 0.05$). As a result, the null hypothesis is rejected and variables are stationary (Static) summary of test results table (2) is shown.

Table 2: Stationary test results of model variables

Variable Amount	AGE	DCRATIO	DLEVERAGE	MTB	ROA	SIZE	TENURE
ADF-Fisher Chi-Square	463.9	691.0	785.0	437.4	387.7	542.2	713.6
p-value	0.000	0.000	0.000	0.000	0.000	0.000	0.000

For testing goodness of fit in this study has used Hausmer - Lemsho test. The null hypothesis is good test of model fit. The following table shows Hausmer-Lemsho statistics for this

model. According to amount of p-value that is equal to 0.25, and it is more than error level of 0.05, the null hypothesis is accepted and as result model is fitted well.

Table 3: Hausmer-Lamsho Test

H-L	p-value
10.25	0.25

The following table shows accuracy of predictions Logit fitted model. According to table Logit model prediction accuracy for companies that their auditor has not been last year their contract and companies that their auditor has been last year their contract, is respectively 41% and 70%, that it shows model determined properly 70% of companies that their auditor has not been last year their contract and 41% of companies that their auditor has been last year their contract.

Table 4: The accuracy of the model prediction

	LASTYR=0	LASTYR=1	Total
The Accuracy of Predictions	70.0	41.0	56.2

Chi-square is in order to determination degree of influence of independent variables on the dependent variable and generally, overall fit of the model and also comparable with F-statistic ordinary regression analysis. Given the amount of obtained p-value for the chi-square statistic which equals 0 ($p\text{-value} \leq 0.05$), the null hypothesis is rejected, and this suggests that regression equation is significant, generally.

Table 5: Significance regression

Chi-square	Pseudo R-squared	Prob (F-statistic)
44.7	0.33	0.000

The research hypotheses were tested use Logit regression model. In the regression models according to p-value amounts be decision than accept or reject null hypothesis. If the p-value be less than significance level of 0/05, the null hypothesis will be reject, and otherwise, the null hypothesis is accepted.

Table 6: Results of Data Analysis in order to Test the Hypotheses

Variable	Coefficient	Standard deviation	Z	p-value
<i>C</i>	2.45	1.17	2.10	0.04
<i>ROA</i>	-0.11	0.48	-0.24	0.81
<i>MtB</i>	-0.001	0.001	-1.07	0.28
<i>Neq_abnacc</i>	-2.40	0.76	-3.17	0.000
<i>Pos_abnacc</i>	-1.56	0.76	-2.05	0.04
<i>TENURE</i>	0.01	0.04	0.29	0.77
<i>DLEVERAGE</i>	-0.02	0.23	-0.11	0.92
<i>DCRATIO</i>	-0.13	0.23	-0.56	0.58
<i>SIZE</i>	-0.14	0.14	-0.96	0.34
<i>BIG_N</i>	0.24	0.18	1.35	0.18
<i>QUALIFIED</i>	-0.47	0.18	-2.66	0.01
<i>AGE</i>	-0.01	0.01	-1.07	0.28
Chi-Square		447	Pseudo R-Squared	0.33
Prob(F-statistic)		0.000		

According to Table (6) and amount of the p-value, Z-statistic for variable increasing benefit accruals (Pos_abnacc) is equal to 0.04 and it is less than level of error 0.05, so, the null hypothesis (Lack of relation between increasing benefit accruals and future audit tenure) be rejected and therefore there is a significant relationship between increasing benefit accruals and future audit tenure. Also coefficient variable of increasing benefit accruals is negative and equal to 1.56 that show increasing benefit accruals has negative impact on the future audit tenure and it reduce future audit tenure. Consequently, the first hypothesis of the study is accepted.

Also according to Table (6) and amount of the p-value, Z-statistic for variable reducing benefit accruals (Neg_abnacc) is equal to 0 and it is less than level of error 0.05, so, the null hypothesis (Lack of relation between reducing benefit accruals and future audit tenure) be rejected and therefore there is a significant relationship between reducing benefit accruals and future audit tenure. Also coefficient variable of reducing benefit accruals is negative and equal to 2.40 that show reducing benefit accruals has negative impact on the future audit tenure and it reduce future audit tenure. Consequently, the first hypothesis of the study is accepted.

According to Table (6) and amount of the p-value, Z-statistic for others variables this amount only for variable type of the Auditor's Report (QUALIFIED) under error level 0.05 that show among the control variables variable type of audit report is significant and it has relationship with future audit tenure. The coefficient of this variable is negative and equal to 0.47 that is represents the negative impact of this variable on the future audit tenure. Others variables aren't significant.

Amount of R2 Pseudo equivalent of determination coefficient in conventional regression model is equal to 0.33 that indicates 33% changes dependent variable be explained by the independent variables. Variables were significant be enter Logit model and done Wald test for goodness of model fitting.

Table 7: Results of data analysis for testing hypotheses

Variable	Coefficient	Standard deviation	Z	p-value
C	1.59	0.77	2.06	0.04
Neg_abnacc	-2.42	0.75	-3.22	0.000
Pos_abnacc	-1.57	0.75	-2.08	0.04
QUALIFIED	0.45	0.17	-2.55	0.01
Chi-Square		40.2	Pseudo R-Squared	0.32
Prob(F-statistic)		0.000		

Results of model fitting show three variables entered in the model are significant. For testing goodness of model fitting (three variables entered) be done the Wald test. It can be seen amount of p-value is equal to 0 that is represents goodness of model fitting.

Table 8: The Wald test

Wald	p-value
6.05	0.000

Discussion and Conclusions

According to theoretical foundations in the first hypothesis stated that increasing profits abnormal accruals reduce expected time of audit contract. Mentioned hypothesis were tested in the level of combined data. Results and statistical analysis showed there is a significant relationship between increasing profits abnormal accruals and future audit tenure. Also variable coefficient of increasing profits abnormal accruals is negative that show increasing profits abnormal accruals has negative impact on the future audit tenure and increasing profits abnormal accruals reduce the future audit tenure. As a result, the first hypothesis was accepted. In other words, increasing profits abnormal accruals makes increased probability of audit termination and reduced continuity of audit contract.

One of the reasons confirm this hypothesis firms that take action to earnings manipulation through increasing profits abnormal accruals will encounter pressures from auditors. Auditors' fear from risk legal claims against them and their debate about report accruals makes they apply to terminate the audit contract. Therefore, be lead to reduced future audit tenure. The results of this hypothesis is compatible with findings Lustgarten and Shon (2012) directly, and also findings of KashaniPoor et al. (2012), Karami Et al. (2011) and Karami and BazrAfshan (2009) indirectly.

According to theoretical foundations in the second hypothesis stated that reducing profits abnormal accruals reduce expected time of audit contract. Mentioned hypothesis were tested in the level of combined data. Results and statistical analysis showed there is a significant relationship between reducing profits abnormal accruals and future audit tenure. Also variable coefficient of reducing profits abnormal accruals is negative that show reducing profits abnormal accruals has negative impact on the future audit tenure and reducing profits abnormal accruals reduce the future audit tenure. As a result, the second hypothesis was accepted. In other words, reducing profits abnormal accruals makes increased probability of audit termination and reduced continuity of audit contract.

One of the reasons confirm this hypothesis when auditors entered pressed to employers reported of reducing profits abnormal accruals employers opposed with the demands of auditors and it be leads to increase likelihood of auditor resignations and completion of audit work. In other words, it will be leads to reduce the time of contract audit continuity. The results of this hypothesis is compatible with findings Lustgarten and Shon (2012) directly, and also findings of KashaniPoor et al. (2012), Karami Et al. (2011) and Karami and BazrAfshan (2009) indirectly.

Limitations of the Study

1. Given that, used historical information of financial statements and extracted figures are not adjusted in terms of Inflation, therefore, the results and findings is affected accuracy of extracted historical information.
2. Given that, on the present study used from some listed companies in Tehran Stock Exchange for a period of 9 years, therefore, for generalization of the results to other time periods and other industries should be act cautious.
3. Given that, for measuring abnormal accruals used modified method Jones, therefore, it is possible use other methods be achieved different results from results of the current study.

Practical Suggestions

1. According to research findings recommended to Stock Exchange of Tehran have more attention to phenomenon mandatory rotation of auditors, because useful and effective use phenomenon of rotation auditors has important in order to increase the transparency of information and market efficiency.

2. It is recommended to auditor time accepting new employers take assessment the financial situation of the company, operations continuing, and quality of financial reporting.
3. It is recommended to investors at the time of investment in firms' stock have special according to situation of rotation auditors.

Suggestions for Future Research

1. Effect of audit report on the expected period of the contract audit
2. Effect company strategic system mechanisms on the auditor tenure
3. The effect of firm size, financial crisis on the expected duration contract audit

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