

An Investigation on the Effect of Type of Auditor on the Incidence and Magnitude of Expectations Management: Evidence from Tehran Stock Exchange

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Abstract

Background/Objectives: To investigate the effect of type of auditor on the incidence and magnitude of expectations management in Tehran Stock Exchange listed companies. **Methods/Statistical Analysis:** In order to examine the hypothesis, a sample of 174 firms was collected using systematic sampling method from the spring of 2012 to the winter of 2013 and was examined quarterly. Furthermore we have examined the hypothesis by employing logistic regression and estimated generalized least squares method. **Findings:** Our results indicate that there is a negative significant relationship between type of auditor and both the incidence and magnitude of expectations management as the two aspects of expectations management. In other words by increasing the type of auditor (which is done by Audit Organization), both the incidence and magnitude of expectations management will reduce. **Applications/Improvements:** Based on our results companies are recommended to utilize Audit Organization in order to perform their auditing task so that they can reduce and better manage the incidence of earnings per share volatility and the magnitude of the difference of earnings per share forecasts over a year.

Keywords: Earnings per Share, Incidence of Expectations Management, Magnitude of Expectations Management, Tehran Stock Exchange, Type of Auditor

1. Introduction

Transparent and reliable financial information is the upshot of a comprehensive and suitable reporting system, which is a key pillar of the evaluation of a company's situation and performance and decision-making on the exchange of securities issued by it. In the modern professional societies from the perspective of users, information is reliable when an independent organization monitors companies' reporting process and especially financial statements. An example of such independent organizations is audit firm that monitor and examine the internal control structure of the reporting unit and financial statement as the final product of the internal control system, chiefly in commercial units.

Financial statements audited by larger audit firms are more valid and reliable to users, in that the selection of larger audit firms (with better quality) compared to smaller audit firms can take on extremely high importance to users of companies' financial information. If auditing is performed with low quality, it will escalate conflicts of interests, increase investment risk, reduce transparency and reduce quality of financial reporting. At the same time, manager can heighten his expectations of income due to his poor control, use shareholders' interest to his benefit, reduce firm value and increase risk. For the above reason, the selection of auditor type is very important to corporate auditing. Auditing performed by audit organizations can increase demand for audit services, non-audit

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services, improve audit efficiency and quality of financial reporting. It is likely that expectation management constrains if larger firms and organizations so as to perform auditing.

Even though expectations management is merely a firm's reporting strategy and does not directly follow from the quality of financial reporting, prior research suggests that opportunistic expectations management yields negative consequences to the markets¹. In this research, drawing on Reference¹, two aspects of management expectation namely the incidence of expectations management and the magnitude of expectations management and its link with the selection of auditor type was examined in Tehran Stock Exchange listed companies.

2. Theoretical Foundations and Research Background

Typically management is faced with three choices in order to achieve its desired level of profit, which are deceptive accounting, discretionary accruals management and actual earnings management (in the form of actual activity manipulation). Deceptive accounting is associated with the selection of accounting procedures contrary to accepted accounting principles. In discretionary accruals management, accounting procedures are based on accepted accounting principles, but it is attempted to obscure actual economic function. Actual earnings management is achieved when managers with the aim of reporting higher earnings engage in activities that make them deviate from desired performance². In¹ stated that corporate governance accounting expertise on the audit committee not only mitigates earnings management, but also constrains expectation management through monitoring firm disclosure. In³ documented that managers use both upward earnings management and downward expectations management to avoid missing analysts' expectations.

Expectations management, however, is merely a reporting strategy and does not directly impact the quality of financial reporting. Expectations management typically starts with optimistic forecasts that analysts issue early in the forecasting period, followed by a downward revision to a meetable or beatable level as the earnings announcement approaches. From the standpoint of the information environment, expectations management can be viewed as managers' influence on the analysts' forecasting process by

manipulating firms' financial disclosures¹. So in our research the two dimensions, incidence and magnitude, were considered as the aspects of expectations management.

After stating some points about expectation management, it seems imperative to discuss about the type of auditor and audit firms. Management is one of the stakeholders who need to take advantage of verified information by the auditors. Therefore, there are mutual benefits, so it is wise to think that there is no conflict of interests between manager and auditor at all. However, it is likely for the conflict to happen in a short term; under certain circumstances, a manager may feel that deceiving an auditor can be beneficial to himself, organization or company that is being audited at the end of the day, which is why auditors should be fully aware of such potential events.

Large audit firms offer services with better quality to their certain clients than smaller firms because economic dependence on client is less important to larger firms; at the same time, large audit firms may lose more credits than smaller firms when it comes to auditing failures⁴.

Reference⁵ argued that auditors of the Big 4 auditing firms have advantages over their counterparts in other firms with respect to all issues relating to credit. They came up with some reasons in order to justify their results; first, auditors of the Big 4 auditing firms are more able to resist management pressure in unorganized situations; second, auditors of the Big 4 auditing firms work effectively when it comes to discovering activities affecting the continuity of client activities; third, auditors of the Big 4 auditing firms are more risk averse and in consequence, they are less willing to participate in massive scandal and audit failure; at the end, big audit firms are more independent than smaller firms.

Audit organization in Iran as a state auditing firm engages in offering professional auditing services and it has larger volume of clients than other audit firms. In addition to this, due to its state structure, the organization has a margin of safety for taking order and determining professional service fee, which is why it has a special position compared to other non-governmental firms in competition arena. It is therefore expected that the organization can earn more than its rivals in auditing service market in Iran, as with Big 4 benefitting from professional service fees compared to other rivals in international arena. For the above reason, if Iran's Audit Organization audited a company included in the samples of the research, we give number 1 to it as an advantage or it will be given number zero. Having stated the above items, some examples of the most important related research are presented as follows:

Reference⁶ in a comparative study in the U.S. and China, explored the relationship between audit firm size and Earnings Response Coefficient (ERC). The results of their study indicated that the ERC of companies audited by large audit firms is greater than that of other firms in the U.S.; though this result was poorer in China.

Reference¹ investigated whether accounting expertise on audit committees curtails expectations management to avoid negative earnings surprises. Their findings showed that firms with an accounting expert serving on the audit committee exhibit: 1. Less expectations management to avoid negative earnings surprises; 2. Less nonnegative earnings surprises through expectations management; and 3. More nonnegative earnings surprises that are less susceptible to manipulations of both realized earnings and earnings expectations. They also indicated that the inclusion of an accounting expert on the audit committee curtails expectations management only in the interim quarters.

Reference⁷ examined a significant difference between the qualities of auditing offered by Big 4 and other audit firms in the U.S. Their statistical sample consisted of 6568 firm-years between 2003 and 2005. The results of the study indicated that bigger audit firms are more willing to provide high quality auditing reports. The results also showed that the firms have more tendencies to issue reports with an activity continuity clause.

Reference⁸ identify that upward earnings management and downward expectations management are tactics that managers use as substitutes to avoid missing analysts' expectations. Specifically, they find that managers engage in greater downward expectations management for annual reporting than for quarterly reporting, as managers' ability to manage earnings upward is constrained with the greater scrutiny associated with annual reporting.

Reference⁹ investigated security analysts' reactions to public management guidance and assesses whether managers successfully guide analysts toward beatable earnings targets from 1995 to 2001. Their results indicate that guidance is more likely when analysts' initial forecasts are optimistic and after controlling for the level of this optimism, when analysts' forecast dispersion is low. They also suggested that public management guidance plays an important role in leading analysts toward achievable earnings targets.

Despite few studies in other countries, no research has been carried out up to now in Iran, which directly

deals with expectations management and type of auditor relationship; however, in one of the most important studies, Reference¹⁰ examined how the type of auditor (big and small auditing firms) and type of audit report (acceptable and non acceptable audit) are related to earnings management index. Their study population consisted of 53 Tehran Stock Exchange listed companies in six industries for the period 2003-2009. The results of the research indicated that type of auditor is not significantly related to earnings management in any of the industries; at the same time, type of auditor report is significantly and negatively related to earnings management index in automotive, basic metals and pharmaceutical products and materials industries.

Also, the Reference¹¹ showed that for which time periods the simple moving average is more effective in predicting the stock prices in the Tehran Stock Exchange. Their results show that five 5, 25, 48, 50 and 89 day simple moving averages are more appropriate to predict stock prices in the Tehran Stock Exchange. Their results also suggest that using the five selective simple moving averages are more accurate for predicting stock prices.

3. Research Method

Considering the classification of research method, the present research is descriptive and correlation in terms of method and it is an applied research by purpose. As for the research literature, library method was used to collect the necessary information and the financial statements of Tehran Stock Exchange listed companies were used to derive information on the research variables. Moreover, the study population consisted of all Tehran Stock Exchange listed companies for the period 2012 to 2013 and it was conducted in a quarterly. In this research, systematic sampling was used to select study samples; according to this sampling, the information of the main research variables should have been available in the sample companies and their fiscal year should end in March every year. Type of company activity was manufacturing, so financial institutions, investment firms and banks were excluded from the sample, due to their different nature. Companies should have had a maximum of three-month trading pause; moreover, since the data of the research were measured in a quarterly, there should have not been a three-month pause for a quarter in a year. For the above reasons, a number of 174 companies and 1392 observations for each variable in total were selected as sample

during the study period and then necessary financial data were extracted. Having data collected, some computations of variables were conducted using Excel and the final analysis was performed to test the research hypotheses using Eviews version 7.

3.1 Research Hypotheses

According to the theoretical foundations and the literature, the research hypotheses are as follows:

H1. There is a significant relationship between the incidence of expectations management and type of auditor.

H2. There is a significant relationship between the magnitude of expectations management and type of auditor.

3.2 Research Models and Variables

In the present research, in order to test the first and second hypotheses of the research, the following multivariate regression models were used:

$$EXM = \beta_0 + \beta_1 TYP_{AUD} + \beta_2 MVE + \beta_3 MTB + \beta_4 FE + \beta_5 LOSS + \varepsilon \quad (1)$$

$$WLKDN = \beta_0 + \beta_1 TYP_{AUD} + \beta_2 MVE + \beta_3 MTB + \beta_4 FE + \beta_5 LOSS + \varepsilon \quad (2)$$

Where:

3.2.1 EXM

The incidence of expectations management is a dummy variable. According to Reference¹, is set to one if the analysts' first forecast for the current quarter after previous quarter's earnings announcement is greater than actual Earnings per Share (EPS) and the last forecast before current quarter's earnings announcement is less than actual Earnings per Share for the current quarter, otherwise zero.

As for the first dependent variable of the research, EXM, it is necessary to point out that in Iran a company forecast its EPS for a year in February of each year, an actual EPS of each quarter available on the stock exchange is collected; in the end, if the forecasted EPS is less than actual EPS, number 1 will be given to the relevant company, which suggests the company is good. However, if the forecasted EPS is greater than actual EPS, number zero is given to related company, which suggests the weakness of the company.

3.2.2 WLKDN

The second dependent variable of the research, i.e. the magnitude of expectations management, based on Reference¹ is the analysts' first forecast minus last forecast for the quarter, scaled by total assets at the beginning of the quarter and multiplied by 1000.

Earnings per share suggest profit that accrues to each common share and often is used for profitability evaluation and risk of earnings, as well as judging stock price. Companies' managers proclaim their forecast on the next year earnings as per their performance status in the past years and the programs decided on in the next year. Afterward, at some points in a quarter and a year, given their performance status and events happening, they review the forecasts of earnings per share in that year. All the information is treated to be "forecasted", given the fact that company's fiscal year has not ended yet; after the end of the company's fiscal year and realization of the real performance in that year, actual earnings per share will be announced.

3.2.3 TYP_AUD

Type of auditor, the independent variable has been defined in that if companies under study were audited by Iran's Audit Organization during the research period, code 1 would be given and if they were audited by other audit firms, code 0 is given. In the following, how the control variables of the research are measured is expressed.

3.2.4 MVE

Is the natural logarithm of market value of equity at the beginning of the quarter. The market value of equity is obtained by multiplying the number of company's share by price of per share. It is necessary to note that ten days after four-month legal opportunity from the beginning of fiscal year in Iran, we can offer a better picture of market value of equity in order to close accounts and establish assembly.

3.2.5 MTB

Is the firm's market-to-book ratio at the beginning of the quarter. The second ratio taken into consideration in the class of market value ratios is market-to-book value per share. Since book value per share is an accounting number and it generally reflects the historical cost; therefore market-to-book value ratio actually compares market

value of company's investment with cost of making the investments. If the ratio is smaller than 1, it means that company failed to bring value to shareholders.

3.2.6 FE

Is the absolute value of forecast error, measured by analysts' first forecast minus actual earnings per share for the quarter, scaled by the stock price at the beginning of the quarter. Since companies' assembly is held in July in Tehran Stock Exchange and financial statements audited are presented to the public in the same date, a profit is taken as forecasted profit for the measurement of the foregoing variable, which has presented to the public before July. Decomposing profit into accrual and cash would reduce the mean of accounting profit forecast error. Dividing the accrual part of a profit will also reduce forecast error.

3.2.7 LOSS

Is set to one if the firm reported a loss in the prior quarter, otherwise zero.

4. Results

Table 1 shows the descriptive statistics of the research variables.

In our study 174 companies were studied for 8 quarters (spring of 2012 to the winter of 2013) and 1392 (year-observations) were achieved. Given the accessibility of the necessary information for the research, the number of observations for all the variables is the same 1392 observations. In regard to preliminary statistical tests, we used Variance Inflation Factor (VIF) to identify collinearity between independent and control variables. The results of the obtained index showed a number below 10 for all

variables; this suggests there is non-collinearity between variables.

Moreover, the output of Chow test indicated that we need to use pooled data for the second research model. In the first research model, as mentioned earlier, given the dummy variable namely the incidence of the expectations management, logistic regression was used. Therefore, statistical tests such as Chow were not utilized. At the same time, prior to testing hypothesis, in order to ensure test results and authenticity of relationships with respect to regression and significance of variables, we performed stationary test and the calculation of the unit root of the research variables. The foregoing test was performed using EvIEWS and Levin, Lin and Chou (LLC), Im, Pesaran and Shin (IPS), Augmented Dickey-Fuller (ADF), and Phillips-Peron (PP).

Given the probability of the statistic obtained less than 0.05 for all methods, the results indicate the absence of a unit root in the time series included in the model and stationary of all the research variables. In the following, the results of the research hypotheses tests are presented.

Table 2 shows the results of the first research hypothesis test by logistic regression model.

The variable type of auditor has a negative coefficient; in other words, this shows that there is a negative relationship between type of auditor and the incidence of expectations management, but at the same time, given (P-value), there is a significant relationship. The results of LR statistic indicate that the regression model is significant in general. Moreover, the results of McFadden determination coefficient demonstrate that 32.8 percent of the changes in the dependent variable can be expressed by an explanatory variable. Therefore, given the results,

Table 1. Descriptive statistics

	No. of obs.	Min	Max	Mean	Median	Std. dev.	Skewness	Kurtosis
EXM	1392	0.000	1.000	0.461	0.000	0.498	0.155	1.024
WLKDN	1392	0.000	8.480	3.031	3.530	2.676	0.044	1.452
TYP_AUD	1392	0.000	1.000	0.287	0.000	0.452	0.939	1.883
MVE	1392	6.839	28.206	19.330	19.806	3.204	-0.680	3.626
MTB	1392	2.719	19.827	8.300	7.824	2.690	0.963	4.334
FE	1392	0.000	8.880	5.460	5.630	1.608	-0.681	3.537
LOSS	1392	0.000	1.000	0.066	0.000	0.248	3.493	13.201

Table 2. First hypothesis regression results

	Coefficient	z-Statistic	P-value
Constant	-0.616	-1.751	0.079
TYP_AUD	-0.176	-1.439	0.006
MVE	0.019	1.065	0.286
MTB	2.24E-10	0.067	0.156
FE	0.0002	6.690	0.000
LOSS	-0.626	-2.671	0.007
McFadden R-squared	0.328		
LR statistic	35.065		
Prob (LR statistic)	0.000		

Table 3. Second hypothesis regression results

	Coefficient	t-Statistic	P-value
Constant	-6.693	-0.417	0.676
TYP_AUD	-11.518	-1.602	0.009
MVE	0.058	0.071	0.943
MTB	-4.69E-08	-0.234	0.814
FE	-0.089	-9.940	0.000
LOSS	-4.535	-0.385	0.700
Adj.R ²	0.427		
DW	1.887		
F-statistic	21.217		
Prob (F-statistic)	0.000		

the first research hypothesis is confirmed and it can be said that there is a significant relationship between the incidence of expectations management and type of auditor.

Table 3 shows the results of the second research hypothesis test by the regression model, Estimation Generalized Least Squares (EGLS).

The variable type of auditor has a negative coefficient; in other words, this implies that there is a negative relationship between type of auditor and the magnitude of expectations management, but at the same time, given (P-value), there is a significant relationship. The results of F-statistic indicate that the regression model was significant in general and it has no problem with autocorrelation considering Durbin-Watson statistic (1.887). Additionally, the results of the adjusted coefficient of determination indicate that 42.7 percent of the changes in the dependent variable can be explained by an explanatory variable. Therefore, given the results, the second hypothesis of the research is confirmed; it can be said that there is a significant relationship between the magnitude of expectations management and type of auditor.

5. Conclusion

In this paper, we addressed the effect of type of auditor on the two dimensions of expectations management namely the incidence and magnitude of expectations management in a sample comprising of 174 Tehran Stock Exchange listed companies during the period 2012-2013. The research is important because quite few studies have been conducted regarding type of auditor in auditing

companies; particularly, the relationship between type of auditor and expectations management which has not been studied until now in Iran.

Generally, our findings suggest that there is a negative and significant relationship between incidence and magnitude of expectations management and type of auditor. We found that it is less likely that managers contribute to expectations management in order to prevent negative earnings when companies tap into Audit Organization which has a higher quality than other audit firms in order to carry out their auditing task. For the above reasons, based on the results of the research hypotheses, companies are recommended to utilize Audit Organization in order to perform their auditing task so that they can reduce and better manage the incidence of earnings per share volatility and the magnitude of the difference of earnings per share forecasts over a year; in other words, they should reduce the incidence and magnitude of expectations management.

Furthermore, future researchers interested in this are recommended to examine the effect of other factors such as complexity of operation, audit fees, specialty of auditing committee members and duration of auditor's collaboration on the incidence and magnitude of expectations management.

6. References

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