

The Impact of Audit on Companies Earnings Quality

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Abstract

This study aims to investigate the impact of audit on earnings quality in companies listed on Tehran Stock Exchange. To test research hypotheses, a regression relationship, SMOTH and PRED, pairwise comparison of audited and unaudited financial statements and SPSS were used. The research population included companies accepted in Tehran Stock Exchange; among them, 152 companies were selected as sample to test research hypotheses. The results showed that there is a significant difference between earnings smoothing, earnings sustainability and earnings predictability in audited and unaudited financial reports.

Keywords: Smoothing, Earning Sustainability, Earning Predictability

Introduction

Financial statements provide useful information to make investment and economic decisions; this information is important for users to assess company's financial status and performance. Hence, audited financial statements are probably the only trusted source of available information. Accuracy and timeliness are two vital indicators for usefulness of company's reports. Usefulness of information disclosed in annual reports will be reduced if audit process (audit report submission) is completed in a long time (Mashayekh & Kazemi, 2014).

Researchers and regulators generally seem to assume (at least implicitly) that the auditor's basis for conservatism financial reporting improves earnings quality. It is observed that while this may be true for creditors, equity holders may not benefit from conservative audit. Therefore, researchers are encouraged to consider issues related to the relationship between auditing and earnings quality.

In a community, it is thought that confirmation of auditing quality by economic environment is crucial for continuity of long-term activity of audit firms, and future of auditing greatly depends on output quality of audit process. It is also claimed that quality is a fundamental component of competition among audit firms (Bertolts, 2012).

The final product of accounting is to provide information to different users; both internal and external, in form of accounting reports. The group of accounting reports provided to meet information needs of users outside the company is considered in field of financial accounting. The final product of financial accounting is reports that are referred as financial statements. On the other hand, measuring earnings process and its outcome play an important role in company's management, and usually users attach great importance to financial statements. Since calculation of firm earnings is influenced by estimation methods of auditing and preparation of financial statements is the responsibility of business unit management, managers may manage earnings for various reasons (Nazemi Ardakani, 2010).

In fact, there is no single definition of earnings quality, and different researchers have provided different definitions in this regard according to their goals. Earning management is defined by choosing accounting policies and procedures to achieve specific goals. These policies are divided into two categories: the choice of accounting methods such as straight line depreciation or FIFO for inventory estimation and etc. The other category relates to discretionary accruals such as estimated costs of product warranties, bad debt reserve, inventory allowance and etc. (Scat & Yu, 2009).

The auditor is expected to report questionable accounting procedures and significant errors and cases. In fact, this highlights the professional competency and independence of the auditor. The probability of detecting categories related to the contract violation by the auditor and probability of reporting such violations respectively relate to the auditor competency and independence. The auditor and actually demand for audit services are supported by market until he is able to detect and report categories related to contract violation (Fainel Baal, 2015).

Auditing quality in audit standards is deduced by issuing a proper audit report on compliance with generally accepted accounting principles by the client. Auditing quality is defined as market assessment of audit capability in identifying significant distortions and reporting them. Earnings quality is used as a symbol of opportunistic management practices and it relates to the relationship between earning quality and audit quality, which is very important for stockholders to ensure auditing adjustments and earning quality. In this regard, based on more studies, auditing adjustments of audit institutions is considered in earning quality.

Theoretical Framework of Research

Accounting earning is one of the most important information stated in financial statements, which has always been considered by various groups of users. Nowadays, companies aim to identify all factors influencing earning in order to achieve their goals. Earning quality is an important factor to evaluate financial health of a business entity (Belouvari et al., 2006).

Both groups (owners and managers) are willing to use independent audit services. Therefore, auditing is considered as an effective way to limit managers' powers in contractual relationships. Financial statements provide a large part of information required by investors and creditors of a company. Based on such a level of trust in the form of financial statements, auditors' role is also critical. Financial statement audit is necessary because audited financial statements can ensure investors and creditors with credible and authentic information; therefore, financial statement audit can create an economic value added for a company. Regarding the importance of audit services and impossibility of direct observation of audit quality, it is essential to find an effective way to control quality of auditing (Nikbakht et al., 2016). Unit under investigation's and auditor's characteristics determine the amount of audit work. The characteristics of unit under investigation, including earning quality and dividend policy can affect auditing (Rajabi & Mohammadi Khoshouei, 2008). Therefore, there is a challenge to examine the relationship between earning quality and audit due to the willingness of managers to show earning amount more than its real one. Earning may be manipulated according to managerial decisions. Since director's reward contracts are often based on reported accounting figures, they may have an impact on reported earnings in order to increase their credit and reward. Managers who have earning-based reward contracts tend to use ways maximizing their earning. Also, managers sometimes use earnings management to increase value of a company. By increasing resources available to management, the number of beneficiaries in relation to the company also increases; therefore, it leads to conflict of interest. As a result, the beneficiaries must be responsible for agency cost to reconcile their interests with others or minimize the effects resulted from conflicts of interest. The manager, who is at the center of this conflict of interest, tries to reduce these costs by providing financial information of the company, but the need to monitor manager's performance raises expertly judgment of independent auditor due to manager's power (Hasas Yegane & Jafari, 2007).

Zhou Dong (2017) has investigated voluntary disclosure, weaknesses of internal control and earning quality. In this research, a sample of 1059 companies which voluntarily presented their internal control report in 2010-2011, was studied. This research aimed to investigate the relationship among voluntarily disclosure, internal control weaknesses (ICWs) and earning quality in Chinese companies. The results have shown that earning quality measured by discretionary accruals is significantly related to voluntary disclosure of ICWs. In addition, the results have shown that related and non-accounting-related ICWs is related to earning quality. This study investigates internal control to disclose ICW and examine the impact of different types of disclosure of ICWs on earning quality. This study has shown that control of non-accounting-related ICWs is critical.

Souse (2016) has investigated the relationship between stock ownership and earning quality. This study examines the impact of ownership concentration on earning quality in Brazilian companies. An analysis of potential explanation for the relationship between ownership structure and earning quality is based on "demand" and "opportunistic behavior". The continuity of timely earning and asymmetric information (conservatism) are two criteria representing earning quality in order to examine relationship. The results

have shown that the quality of accounting figures has been evaluated according to aspects of ownership concentration, and it has had a positive impact on earning quality.

Hee (2016) believes that Chinese Institute of Certified Public Accountants (CICPA) creates regulatory negligence in audit firms. A firm enforcement is imposed on infamous auditors. For example, Chinese regulators rejected the license of 11 audit firms and punished more than 20 auditors in 2005. Finally, auditors suffer from infamous consequences when they are linked to audit fraud.

Lennox et al. (2015) examines the impact of audit adjustments on earning quality. This research examines how earning adjustments during year-end audit are affected by earning quality measures. There are four findings: first, audit adjustments make revenue to become stable. Second, adjustments lead to higher accruals quality. Third, audit adjustments have a more negative effect on absolute level of discretionary accruals. Fourth, income distribution adjustments are not reduced by about zero. These findings are of interest to researchers, which consider earning as a factor for earning and audit quality.

Jahedi (2016) investigated this subject in a research. In this research, there are four key findings; first, audit adjustments lead to more consistent earnings. Second, adjustments lead to higher quality of accruals. Third, audit adjustments have a more negative impact on signed commitments than absolute ones. Fourth, adjustments do not reduce the gap in earning distribution around zero. These findings are of interest to researchers who use earning characteristics as a factor for earning and audit quality. Although it should be noted that these findings were achieved in China, and they may not be generalized to other countries.

Eskandari (2016) has studied earning management and audit quality. Earning management is one of the most popular topics among investors, legislators, analysts and public users of financial statements. According to Fischer, earning management is targeted involvement of managers in external financial reporting process. One way to lessen earning management is improving audit quality because companies that manipulate and manage earnings are more likely to have an unacceptable audit report. This research is based on library studies and Internet archives according to previous studies, and it investigates earning management and its relationship with audit quality.

Research hypotheses

This research aims to investigate the impact of audit on earning quality in newly accepted companies in Tehran Stock Exchange. To determine earning quality, three factors of earning smoothing, earnings sustainability and earnings predictability are applied. In audit reports, accumulated statement has been used. Research hypotheses are as follows:

1. There is a significant difference between audited and non-audited services in companies in regard with earning smoothing.
2. There is a significant difference between audited and non-audited services in companies in regard with earning sustainability.
3. There is a significant difference between audited and non-audited services in companies in regard with earning predictability

Statistical population and research sample

Research population included all companies accepted in Tehran Stock Exchange. Research sample was used using elimination sampling method; therefore, among all companies accepted in Tehran Stock Exchange, companies with following characteristics are considered:

1. Companies which have been accepted in Tehran Stock Exchange since the beginning of 2008.
2. Companies which do not belong to investment intermediaries.
3. Companies with fiscal year ending to March 29.
4. Companies in which their shares are continuously exchanged in Stock Exchange, and company's accumulated loss did not make the company a bankrupted one.

According to Table 1, there are 152 sample companies selected for this research.

Table 1. How to select a sample?

Sample selection criteria	Pharmaceutical products	Auto parts	Cement and plaster	Chemical products	Food, sugar	Metals and minerals	Other industries	All
Number of companies at the end of 2016	63	64	54	78	69	99	111	538
Absence during research time	(11)	(4)	(8)	(20)	(12)	(22)	(4)	(81)
Fiscal year ending to March 29, or change of fiscal year	(14)	(14)	(17)	(16)	(25)	(35)	(7)	(128)
Banks, financial intermediation, investment							(63)	(63)
Companies with trading days less than 100	(7)	(5)	(14)	(25)	(11)	(30)	(22)	(114)
Number of companies selected	31	22	15	17	21	12	34	152
Percentage of sample selected from each industry	20.4%	14.5%	10%	11.2%	13.8 %	7.8%	22.3%	100%

Research methodology

Regarding financial statements of companies accepted in Tehran Stock Exchange, this research investigates and analyzes the impact of auditing on earning quality in companies accepted in Stock Exchange. In this research, the correlation among research variables has been tested. In the case of correlation among research variables, multiple regression models will be estimated. From purpose viewpoint, this is an applied research, and from nature and method viewpoint, this is descriptive-causal.

Method of testing hypotheses and variables

Hypothesis 1: First, earning smoothing in companies with audited financial statements was achieved; earning smoothing in companies with non-audited financial statements was also achieved. Finally, they were compared.

$$\begin{aligned} Smooth_{h_0} : (Smooth)' &= \\ Smooth_{h_1} : (Smooth)' &\neq \end{aligned}$$

$$Smooth = \left(\frac{std\left(\frac{CFO_{it}}{ta_{it-1}}\right)}{std\left(\frac{WC_{it}}{ta_{it-1}}\right)} \right)$$

Hypothesis 2. First, earning sustainability model was obtained for audited and non-audited information using the following formula, and a_1 is achieved in both modes. Finally, they are compared.

$$\begin{aligned} h_0 : (EPS)' &= EPS \\ h_1 : (EPS)' &\neq EPS \end{aligned}$$

$$EPS_{it+1} = a_0 + a_1 EPS_{it} + \varepsilon_{it}$$

Hypothesis 3. Predictability model was applied in both audited and non-audited companies, and ε_{it} is achieved; then the predictability is obtained and compared.

$$\begin{aligned} EPS_{it+1} &= a_0 + a_1 EPS_{it} + \varepsilon_{it} \\ pred_{it} &= 1 - \varepsilon_{it} \end{aligned}$$

In this research, two by two comparison of audited and non-audited financial statements is performed. Accounts of a joint-stock company not only are prepared and investigated by auditors of company, but also are examined and audited by an external audit firm; it means that it is investigated and audited by an independent auditor, otherwise financial statement will be non-audited. In first hypothesis, earning smoothing was investigated in both audited and non-audited financial statements. Regarding second hypothesis, regression was obtained, and regression statistics of both audited and non-audited financial statements were investigated. In third hypothesis, ε_{it} is computed and inserted in predictability model. It was investigated in both audited and non-audited financial statements.

How to measure research variables is presented in Table 2?

Table 2. How to measure variables

No.	Symbol	Name	Definition
1	EPS_{it}	Earning per share	New result
2	CFO	Operating cash flow	Cash flow form that is homogenized by total assets.
3	TA	Total assets	Balance sheet
4	Wc	Working capital	Difference between current assets and debt that is homogenized by total assets.

5	Smooth	Earning smooth	$Mooth = \left(\frac{std \left(\frac{CFO_{it}}{ta_{it-1}} \right)}{std \left(\frac{WC_{it}}{ta_{it-1}} \right)} \right)$
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Research findings

In Table 3, some of descriptive statistics of variables, including mean, median, minimum and maximum observations and standard deviation are presented. The main central index is mean, which represents equilibrium point and distribution center; it is an appropriate index for showing data centrality.

Table 3. Descriptive statistics of research variables

Statistic	Earning smoothing	Earning sustainability	Operating cash flow	Working capital	Predictability
Mean	1.744	12.32	0.0244	0.7037	0.0244
Median	0.211	10	0.0214	0.4541	0.0021
Standard deviation	0.770	6.32	0.0247	0.2016	3.808
Skewness	1.199	-0.56	0.0214	0.45	1.241
Kurtosis	4.84	2.69	3.410	2.021	4.451
Minimum	0.0003	-0.25	0.00025	0.161	0
Maximum	20.32	21.321	0.108	0.9052	0.0244

Regarding variability in measuring scale of research variables, comparison of above indices among research data is not reliable, and only criteria for each variable are reported. According to skewness and kurtosis expressed in the descriptive table, normal data are used. Since skewness is between +3 and -3, and kurtosis is between +5 and -5, this data is normal. The most important central index is mean, which represents equilibrium point and distribution center; it is an appropriate index for showing data centrality. Mean of earning smoothing is 1.8, which indicates that most of data are concentrated around this point. Generally, dispersion parameters are criteria for determining degree of dispersion of each other or their dispersion of mean. Standard deviation is one of the most important parameters of dispersion. First hypothesis states that there is a significant difference between audited and non-audited financial statements in companies in regard with earning smoothing.

$$Smooth_{h_0} : (Smooth)' =$$

$$Smooth_{h_1} : (Smooth)' \neq$$

Table 4. Results obtained from first hypothesis

	Smooth	N	Mean Rank
Smooth/	0	1162	651.35
	1	61	201
	2	20	201
	Total	1243	

In this table, number of individuals in each group and mean rank of each can be compared in both audited and non-audited groups.

Table 5. Content of first hypothesis testing

	Smooth
Chi-square	123.321
Df	4
Asymp. Sig.	0.0000

As shown in this table, it represents chi-square with freedom degree of 4 and significance level and P-value of zero, which indicates rejection of H0. According to above-mentioned output, the final result is that there is a significant difference between audited and non-audited financial statements in companies in regard with earning smoothing.

The second hypothesis states that there is a significant difference between audited and non-audited financial statements in companies in regard with earning sustainability.

$$h_0: (EPS)' = EPS$$

$$h_1: (EPS)' \neq EPS$$

Table 6. Second hypothesis testing

Model	α_1	T	Sig	R	R²
Audited	0.5	84.816	0.000	0.91	0.84
Non-audited	1.68	86.912	0.000	0.862	0.744

Since the value of R has dropped from 0.91 to 0.862; in other words, when approaching from audited to non-audited one, determination coefficient of R decreases, which indicates rejection of H0. Therefore, there is a significant difference between audited and non-audited financial statements in companies in regard with earning sustainability.

Table 7. ANOVA testing of second hypothesis

ANOVA^a					
Model		Df	Mean Square	F	Sig.
Audited	Regression	1	19.100	71.93	0.0000
	Residual	1365	26.55		
	Total	1366			
Non-audited	Regression	1	67.25	10034.78	0.0000
	Residual	1365	6.70		
	Total	1366			

According to the results of ANOVA testing and Sig. value equal to 0.000 (sig<0.05), H0 is rejected. Therefore, there is a significant difference between audited and non-audited financial statements in companies in regard with earning sustainability.

The third hypothesis states that there is a significant difference between audited and non-audited financial statements in companies in regard with earning predictability.

Table 8. Third hypothesis testing

Model	α_1	T	Sig	R	R ²
Audited	0.720	38.308	0.000	0.517	0.268
Non-audited	0.724	38.811	0.000	0.724	0.524

Since the value of R has increased from 0.517 to 0.724; in other words, when approaching from audited to non-audited one, determination coefficient of R increases, which indicates rejection of H0. Therefore, there is a significant difference between audited and non-audited financial statements in companies in regard with earning predictability.

Table 9. ANOVA testing of third hypothesis

ANOVA ^a					
Model		Df	Mean Square	F	Sig.
Audited	Regression	1	11.77	1467.533	0.000
	Residual	1366	80.25		
	Total	1367			
Non-audited	Regression	1	11.95	1506.29	0.000
	Residual	1366	79.17		
	Total	1367			

According to the results of ANOVA testing and Sig. value equal to 0.000 (sig<0.05), H0 is rejected. Therefore, there is a significant difference between audited and non-audited financial statements in companies in regard with earning predictability.

$$pred_{it} = 1 - \epsilon_{it} = 1 - 0.720 = 0.28$$

$$pred_{it}' = 1 - \epsilon_{it} = 1 - 0.724 = 0.276$$

Since the prediction value has dropped from 0.28 to 0.276; in other words, when approaching from audited to non-audited one, prediction value decreases, which indicates rejection of H0. Therefore, there is a significant difference between audited and non-audited financial statements in companies in regard with earning predictability.

Conclusion & Suggestions

Earning smoothing refers to a measure of company's management in anteriority and priority of income and costs accounting or auditing and transferring them to subsequent years, so that the company will have no major changes in earning process in several consecutive fiscal years. Earnings before interest and tax deduction are called company's gross income; regarding this, there should be difference in reports of audited and non-audited statements. This result was achieved in this research. The purpose of financial report is to provide information that is useful for current decisions. Earning sustainability is one of the

qualitative features of accounting earning that is based on accounting information and helps investors assess future earnings and cash flows of company. This help differs between audited and non-audited financial statement reports. Earning predictability refers to prediction of earning achieved in following year compared to the previous year and the year before it. This help differs between audited and non-audited financial statements in regard with earning predictability. This help differs between audited and non-audited financial statement reports. Auditing improves earning quality; therefore, it is recommended that to improve earning quality in regard with smoothing, earning sustainability and predictability should be audited. It is suggested that this research be conducted in other organizations such as banks and financial institutions in order to see results and their difference.

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