Asian Social Science; Vol. 12, No. 8; 2016
ISSN 1911-2017 E-ISSN 1911-2025
Published by Canadian Center of Science and Education

The Effect of Auditor's Industry Specialization on the Quality of Financial Reporting of the Listed Companies in Tehran Stock Exchange

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Received: February 28, 2016 Accepted: May 4, 2016 Online Published: July 7, 2016

doi:10.5539/ass.v12n8p92 URL: http://dx.doi.org/10.5539/ass.v12n8p92

Abstract

This study examines the effect of auditor's industry specialization on quality of financial reporting of the listed companies in Tehran Stock Exchange during the period of 7 years from 2008 to 2014. It is expected that industry specialist auditors will show more competence and auditing quality in discovering opportunistic behavior in executives and most probably they will report financial statements to maintain their reputation; in other words, it is expected that auditors specialized in industry will have an effective role in corporate governance and improving the quality of financial reporting. In this research, the accurate of predicting future cash flows operations through components of the operation profit was served as a measure for the quality of financial reporting and patters of the market share based on the total audited properties of the company and total auditor income was used as auditor expertise characteristics in that audited unit's industry were used. A total number of 119 companies were selected as samples and using logit regression model, the results were analyzed. The findings suggest that auditor's expertise in the industry, has a direct impact on the quality of corporate financial reporting. In this regard, testing the research's hypotheses showed that the auditor expertise in the industry (on the basis of market share pattern based on auditor's total revenue) has no significant effect on the quality of financial reporting. However, if the auditor expertise in the industry (on the basis of market share pattern based on the sum of the audited assets) was to be measured, it will leave a significant effect on the quality of financial reports. Therefore, it is concluded that the factor of the auditor's expertise in the industry is sensitive in relation with the type of indices used to assess it.

Keywords: Auditor expertise in the industry, quality of financial reporting

1. Introduction

In all history, man has been in need for information to try to understand phenomena and reduce uncertainty about the unknown in a way that the beginning of the human history coincides with his ability to accumulate information and exchange it. In a financial unit, the executive's main task is making decisions and the basis of decision making is being informed, because without reliable information, logical decisions cannot be made (Behmanesh, 2006).

To get on time, correct and reliable information related to financial activities of economic agencies, one of the primary conditions is for people to invest (Zadmhr, 1999; Talanh, 2001). Therefore, information that is provided in financial reporting process, must be in a way to help investors by evaluating executives' efficiency in terms of proper saving and use of resources. Representatives of shareholders –meaning the executives- are regarded as the protectors of the shareholders and investors' national wealth and resources in financial institutions. Therefore, it is necessary for the executives to provide comprehensive reports on the results of their operations and actions which include the financial state and the result of the executive's activities in a correct and clear way for the shareholders at least at the end of each fiscal year (Mojtahedzade & Chytsazan, 2005).

Leading stationary savings towards production units and establishing facilities for public participation in industry development and sharing factories' profits with the public are regarded as some of the goals of the capital market. To reach these goals, the capital market must gain the trust of the investors. This trust can only be achieved in the shade a clear capital market and the clarity of the capital market relies on the financial reporting of the listed

companies with quality in that market. Since financial reporting with quality causes the reduction of inside information and the improvement of market efficiency, it bears great importance.

The quality of financial reporting can be defined as the accuracy of reflecting information related to operations and flow of cash in that financial unit. Based on the theoretical concepts of financial reporting, the primary objective of financial statements is presenting summarized and categorized information regarding the financial state, efficiency and flexibility of that financial unit to help users of financial statements in taking economic decisions. The quality of financial information is analyzed from different perspectives. Therefore, the main factor for the quality of financial information from the perspective of the devisers of the accounting standards are the two features of relevance and reliability and these two aspects make the information useful for the decision makers (Qamary, 2011).

The informational asymmetry between the company and the shareholders causes the shareholders to demand more information that is valid. Independent auditing if effective on the measure of truth and accuracy of financial statements and financial information. Titman and Truman (1988) introduce auditing as a factor increasing the amount of accuracy and truth in information that is presented to the shareholders after auditing.

In fact, according to the representation theory, executives have more information in comparison with the shareholders may make decisions that are not in the interests of the shareholders. The auditing process is considered as one of the important approaches in decreasing representation conflicts and opportunistic behaviors of the executives in manipulating the items in the financial statements. Recent studies show that the superior system of financial reporting reduces capital expenses and improves efficiency (Bushman and Smith, 2001). Further, theoretical rationalizing show that the high quality of financial reports causes the reduction of problems in financial units and also the reduction of expanses of identifying and selecting capital projects. Therefore, the issue that will be addressed in this study is whether the auditor's industry specialization is also effective on the quality of financial reports from the listed companies in Tehran Stock Exchange. In other words, has the existence of the industry specialist auditors provided the grounds for the improvement of the quality of financial reports from listed companies in Tehran Stock Exchange?

2. Review of Literature

2.1 Auditor's Specialty

Special knowledge of one specific industry is used by an auditing institution in order to help reaching a better understanding of what the masters of that industry do and also the risks that they face in auditing (Kend, 2008). Therefore, the expertise of the auditor in the industry is an important distinguishing factor among auditing institutions. The expertise of the auditor is obtained using the following equation:

Specialty auditor: Auditor – Spec

Dunn and Mayhew (2004) believe that auditors specialized in industry have more knowledge and experience in comparison with non-specialist auditors. Recent studies by Dunn and Mayhew (2004) showed that the expertise of the auditors has a direct relation with the quality of the accounting information and the expertise of the auditors plays an important role the supervision over the process of financial reporting. Researchers like Craswell et al. (1995), D. Fund et al. (2000), Balsam et al. (2003), Krishnan (2003), Francis et al. (2005) and Richlet and Wang (2010) have shown that the quality of auditing and the amount of profit in companies that enjoy industry specialist auditors is more.

2.2 Quality of Financial Reporting

Quality of financial reporting can be defined as the amount of accuracy in the financial reporting in reflecting information about operations and flows of cash in financial units. There are two general approaches in assessing the quality of financial reporting: the approach of the users' needs and the approach of supporting investors and shareholders. In the approach of the users' needs, the quality of financial reporting is defined and determined as the usefulness of the financial information (relevance and reliability). In the approach of supporting investors and shareholders, the quality of financial reporting is defined in general based on the full and fair disclosure for shareholders (Qamari, 2011).

2.3 Auditor Industry Specialization and Other Proxies of Financial Reporting Quality

One of the proxies of the quality of financial reporting used by professional analysts is the quality of the voluntary disclosure quality. Theoretical researches suggest more disclosure increases market liquidity and decreases transaction costs and consequently, lead to decreases in capital expenses. Experimental evidences are paradoxical. Dunn and Mayhew (2004) found a direct relation between the auditing institution's specialty in the

industry and the company's disclosure quality but did not consider the role of the value of industry specialized auditors. Further, the relation between the industry specialization of the auditor and the improvement in the quality of disclosure must be tested by the market.

But Peine (2008) did no systematic analyses for the behavior of the voluntary commitment items for companies that have not been able to achieve the analysts' predictions. This is a matter of high importance, because equality or inequality of the real benefit with the analysts' prediction do not indicate the positive effect of the industry specialist auditors in itself. Furthermore, researchers are still unable to answer the question that why should the executives use industry specialized auditors when several indicators show that the market shows a negative response to a profit which is lower than the analysts' predictions? Similar to other proxies, this proxy has also been criticized as a criterion for profit management by researches like Dechow et al. (2003), Durtschi and Easton (2005) and Durtschi and Easton (2009) in terms of its credibility. But, Jacob and Jorgensen (2007) argue that these challenges are misinterpreted.

2.4 Research Background

Krishnan (2003) analyzed the relationship between the auditor's industry specialization and the net value of the client's voluntary commitment items. He reached the conclusion that the clients of the non-specialized auditors, with an average of 1.2 percent higher of their total properties, report their net voluntary commitment items higher than the net voluntary commitment items of the auditors' clients.

Jenkins et al. (2006), studied the impact of the auditor's specialty in the industry on the reduction of the profit quality in the late 1990s. The question was if the industry specialized auditors had any roles in reducing the profit quality in the late 1990s or not. The findings of their research indicated a meaningful increase in the coefficients of the profitability equation, which these findings are viewed as the reduction of the profitability quality in this period. But, the increase in the voluntary commitment items and reduction of coefficients of the profitability equation in companies where industry specialized auditors were utilized was the least among all companies.

Gool et al. (2009) studied the impact of the auditor's specialty in the industry on the relation between the period of the auditor's service and the profitability quality. The results of this study showed that the relation between the short-term period of the auditor's service and lower profitability quality for clients whose work was audited by industry specialized auditor is lower than others.

Shoaeir (2010) analyzed the impact of the auditor's specialty in the industry on the auditing quality. The results of her research indicated that with the use of the measure of the auditor's share in a certain industry, the level of voluntary commitment items in the industry specialists is lower.

In a study entitled "Industry specialty of auditing companies and the profitability quality" Karjalaynn (2011) found out that the specialty in the industry in auditing in Finland has a direct relation with the reported profitability quality. He confirmed that the level of voluntary commitment items in companies that are audited by specialized companies is lower in comparison with other private companies. Therefore, the results indicate that the industry specialization of the auditing company is a source of differentiation in the auditing quality.

In his study, entitled "Auditor's industry specialization and the coefficient in the profitability equation", Bhattacharya (2011) studied the relation between the industry specialized auditors and the profitability equation coefficient of New Zealand companies. The results of this study showed that the auditor's industry specialty did not have any meaningful impact on the profitability equation coefficient of New Zealand companies.

Sun and Liu (2013) studied the interactional impact of the auditor's industry specialization and the independence of the board of executives on the profit management in American production companies. Results showed that the independence of the board of executives on its own cannot reduce the amount of manipulation in the voluntary commitment items. Further, non-serving members of the board of executives in companies who utilized industry specialized auditors can limit the amount of the voluntary commitment items.

Debra and Jeter et al. (2014) studied the impact of the industry specialized auditor on the expenses efficiency in homogenous industries. Results of this research show that the industry specialized auditors can take the costs to the lowest possible levels in industries with homogenous operation and complicated accounting methods and they can also increase the auditing quality in these industries.

Etemadi et al. (2009) in a study entitled "Studying the relationship between the auditor's industry specialization and profitability quality in listed companies in Tehran stock Exchange" showed that companies whose auditor was specialized in the industry had lower level of net voluntary commitment items and higher profitability equation coefficients in comparison with companies whose auditors were not specialized in the industry.

Hasas Yeganeh et al. (2012) analyzed the impact of the auditor's industry specialization on financial reporting and the capital market's reaction. In this research, the coefficient of reaction to profits in companies that were audited by industry specialized auditors was compared to companies who were not audited by industry specialized auditors. Results of this research showed that there is not a significant difference between the informational content of the commitment and cash particles of the profit in companies with industry specialized auditors in comparison with other companies.

Nazemi Ardakani (2012) studied the impacts of the auditor's industry specialization on the different aspects of profit management (in other words, managing commitment items and real profit management) and the future operational efficiency of the listed companies in Tehran Stock Exchange. In this study, the approach of the auditor's market share was used to measure the auditor's specialty yin the industry. Results of this study showed that in Iran, clients who have industry specialized auditors, face limits in managing voluntary commitment items and consequently, switch to real profit management.

Estehmami (2013) analyzed the impact of the auditor's industry specialization and auditing quality on the profitability equation coefficient of the listed companies in Tehran Stock Exchange. Results showed that with the increase in the auditor's specialty, the companies' profitability reaction coefficient increased and the profitability equation coefficient of the companies who had industry specialized auditors was more than the profitability equation coefficient of the companies who do not have industry specialized auditors.

Barzideh and Madanchiha (2014) studied the impact of specialization of the auditing company in the industry on the delay in auditing report. To test the research's hypothesis, the financial and non-financial information of 311 listed companies in Tehran Stock Exchange during the years 2005 to 2013 was analyzed using the multi-factor regression model. Results of the hypothesis test in the first state showed that the auditor's industry specialty has no meaningful impact on the delay in auditing report, but the results of testing the hypothesis in the second state showed that the auditor's specialty in the industry has significant and inverted impact on the delay in the auditing report.

2.5 Research Hypothesis

H1: Auditor's industry specialization has a significant impact on the quality of financial reporting.

H1-1: Auditor's industry specialization (based on the model of market share based on total assets of the audited company) has a significant impact on the quality of financial reporting.

H1-2: Auditor's industry specialization (based on the model of the market share based on total audit fees) has a significant impact on the quality of financial reporting.

2.6 Conceptual Model of the Study

Given that in this study, the effect of auditor's industry specialization on the quality of financial reporting is examined, based on the research's conceptual model in the following way, the impact of the research's independent variable on its dependent variable is evaluated.

Figure 1. Research conceptual model

3. Research Methodology

In terms of its goal, this research should be regarded as a practical study. Practical studies are those that apply theories, laws, principles and technics that are devised in basic studies to solve execution problems. This study is of a homogenous nature and uses the secondary data from the listed companies' financial statements in Tehran

Stock Exchange to analyze the homogeneity relation. Homogeneity studies include researches in which it is tried to discover and determine the relation between different variables using the homogeneity coefficient. In homogeneity researches, the main goal is to determine the type, size and amount of relation between two or more variables. Furthermore, this study is of the comparative- syllogistic nature in terms of its logic. In this type of logic, the movement is from the known to the unknown. In this method, the experiment is analyzed syllogistically and leads to the hypotheses. Then, with a comparative method, the concepts of the hypotheses are tested so that their readability can be evaluated.

3.1 Statistical Population and Sampling Method

Statistical method of this research includes the listed companies in Tehran Stock Exchange. The sample is the sum of sizes from the statistical group that are practically collected during the research and the process of a research can be distinguished as an effort to understand the behavior of the statistical group based on the gained information from the sample. Because collecting information for all the statistical group necessitates great amounts of expense and time. Furthermore, in some cases the information collection from all the members of the statistical group is illogical. Therefore, it is an obligation to extract a sample and on the other hand, it is a common knowledge that sampling causes reduction of certainty and trust of the results. To determine the studied sample, companies from the above mentioned statistical group has been selected that:

1. Their financial information from the study's time period, meaning the years from 2008 to 2014 is available.

2. Their fiscal year ends in March.

3. Companies who were listed in the Stock Exchange until the end of March 2007 and their names in the studied period were not eliminated from the companies that were listed in Tehran Stock Exchange.

4. Companies that have not changed their fiscal term in the studied period.

5. Companies that are not among the financial and investing institution.

Accordingly, after applying the above mentioned restrictions, 119 companies had the above mentioned conditions during the years 2007 to 2013 and with regard to this, sampling was not done and all the companies were selected to be analyzed.

3.2 Data Collection Method

In this study, the library method was used for gathering information in the theoretical department and for research history. The needed information collection method of the research in the stage of devising the library research methodology, searching the internet, studying papers, journals, assertions and other scientific sources is valid and the other part of the data is extracted from the soft-wares available in Tehran Stock Exchange which include information regarding the financial statements of the sample accompanies. The collected data was adjusted and classified using Excel Software. Then, the final analysis is done using Eviews and SPSS soft-wares.

First the Jarque Bera test is done to make sure of the normal state of the used data, then, using the multi standard regression, the hypotheses are tested. Furthermore, in this research, with regard to the type of the data and available analysis methods, the combinational data method is used. Combinational data is from data related to different companies in different years and is considered in the form of company-year observations. These type of data have advantages such as presenting more information, inequality in the limited variance, the lesser level of equality between variances, more freedom ranges and more efficiency.

Research Model

According to the presented hypotheses regarding the impact of the auditor's specialty on the quality of financial reporting, the regression model for testing the hypotheses in this study is as follows:

$$\mathbf{QFR_{i,t}} = \beta_0 + \beta_1 \text{ Auditor} \neg \text{Spec}_{i,t} + \beta_2 \text{ Size}_{i,t} + \beta_3 \text{ Debt}_{i,t} + \beta_4 \text{ Prof}_{i,t} + \varepsilon_{i,t}$$

In the above model:

QRF: Quality Financial Reporting

Auditor-Spec: Auditor Specialty

Size: The size

Debt: Ratio Debt

Prof: Profitability margin

Ɛ: left over

3.3 Research Variables

The independent variable of this study is the auditor's specialty. In the current research, standards based on the market share of the total properties of the audited companies and the total fees for auditors for measuring the specialty of the industry specialized auditing are utilized.

3.3.1 The Use of Market Share Based on Company Size (Total Assets)

The market share with regard to the total assets of the company is calculated in the following method:

$$\frac{\textbf{Total assets of all clients any special audit firm in a particular industry}}{\textbf{Total assets of all employers in the industry}}$$

Only institutions are regarded as industry specialized in this research whose market share (meaning the result of the above equation) is more than [1/2 * (companies in the industry / 1)] is (Palm Rose, 1986).

3.3.2 Using the Market Share of the Auditing Fee

To measure and evaluate the specialty of the auditor in the industry, using the auditor's fee (having the biggest share in the market (majority) for the industry specialized auditor) from the model by Habib and Bouyan (2011), the following equation is applied:

$$Auditor\ Spec_{ik} = \frac{\sum_{j=1}^{Jik} AF_{ijk}}{\sum_{i=1}^{Ik}\sum_{j=1}^{Jik} AF_{ijk}}$$

In the model above, AF (auditing fees) and the numerator represent the sum of the clients' paid fees (Jik) to the auditing company (i) in a certain industry (k) and the denominator represents the sum of the total fees paid by all the clients (Jik) in a certain industry (k) to all the serving auditing companies (Ik) in that industry.

In this study, the dependent variable is the quality of financial reporting and the basis for measuring the quality of financial reporting is the waste obtained from the estimation of the following regression model:

$CFO_{i,t+1} = \alpha_0 + \beta_1 CFO_{i,t} + \beta_2 \Delta AR_{i,t} + \beta_3 \Delta INV_{i,t} + \beta_4 \Delta AP_{i,t} + \beta_5 DEP_{i,t} + \beta_6 OTHER_{i,t} + \varepsilon_{i,t}$

where in:

$CFO_{i,t}$: Cash flow from operations for the company i per year t.

$\Delta AR_{i,t}$: Change in accounts receivable company i per year t.

$\Delta INV_{i,t}$: Changes in inventories company i per year t.

$\Delta AP_{i,t}$: Change in accounts payable and deferred debt company i per year t.

$DEP_{i,t}$: The cost of depreciation of tangible fixed assets and intangible company i per year t.

$OTHER_{i,t}$: Net other accruals which is calculated as follows:

$OP_{i,t}$ - ($CFO_{i,t} + \Delta AR_{i,t} + \Delta INV_{i,t} - \Delta AP_{i,t} - DEP_{i,t}$

$OP_{i,t}$: operating Profit

$\varepsilon_{i,t}$: deal error which is assumed to have zero mean and variance of the is fixed.

Control variables in this study are size, leverage and profit margins whose impacts are controlled to have a more accurate analysis of the impact of the auditor's specialty on financial reporting quality so that the research hypotheses are better tested.

It is expected that a significant relationship should exist between the company size and the financial reporting quality. The operational definition of this variance is as follows:

$\mathbf{SIZE_{i,t} = Ln(N_{i,t} \times P_{i,t})}$

where in:

p: company Stock price

N: The number of shares in the company current

It is also expected that a significant relation should exist between profitability margins and financial reporting quality. The operational definition of this variance is as follows:

$$LEV_{i,t} = TL_{i,t} / TA_{i,t}$$

where in:

TA: Total assets

TL: Total liabilities

Therefore, it is expected that a significant relation should exist between profitability margins and financial reporting quality. The operational definition of this variance is as follows:

$$PROF = (SALE - COGS) / SALE$$

where in:

COGS: Cost of sales

Sales revenues: SALE

3.4 Descriptive Statistics of Variables

Descriptive statistics merely describes the statistical group and its goal is to calculate the society's parameters. In this paper, the statistical indicators of the group for the studied variances are generally calculated. These indicators include central indicators, dispersion indicators and indicators of the distribution form.

Table 1. Descriptive statistics of the research variables

Variable		Average	Middle	Maximum	At least	Standard deviation	Skewness	Elongation
Specialty auditor		0.545	1.000	1.000	0.000	0.498	-0.181	1.032
	According Total assets	0.566	1.000	1.000	0.000	0.495	-0.268	1.072
	Based on the audit fees	0.430	0.000	1.000	0.000	0.495	0.281	1.079
	company size	5.888	5.818	8.032	4.318	0.569	0.746	4.134
	Ratio Debt	0.664	0.673	1.941	0.096	0.187	0.589	7.198
	Profit margin	0.232	0.205	0.830	-0.376	0.167	0.645	5.031

In studying most of the descriptive indicators of the variances it is observed that the average of most variances is bigger (smaller) than the middle amount. The bigger or smaller average than the middle amount indicates the existence of big points in the data, because the average is affected by these amounts. In these cases, the data distribution is skewed to the right or skewed to the left and the skewness range is not located in the range of +2 to -2 which shows that the variance distribution has a great difference with the normal distribution in terms of symmetry. In other words, the remote data from the average, middle and the view is located either on the right or the left of the measure.

3.5 Testing the Normality Distribution of Variables

According to the values of the Jarque Bera indicator and its possibility (the possibility of the indicator for less than an error level of 5 percent), the variances do not have a normal distribution. Although by using a process, the data can be normalized, on the other hand, normalizing data is a type of data manipulation that is not excused in the scientific method process and on the other hand, with regard to the high number of the observations in accordance with the central limit theory, the lack of normality in the research variables does not pose any interventions in the continuance of the analyses.

Table 2. Test of normality distribution of variables

Variables	Statistics Jarek-to	Sig.
Quality financial reporting	162.7104	0.000
Auditor's expertise based on Total assets	162.8789	0.000
Auditor Specialty based on audit fees	162.9218	0.000
Company size	143.0350	0.000
Ratio debt	771.8416	0.000
Margin of profit	105.4677	0.000

3.6 Correlational Analysis

To analyze the correlation between the research's coefficients the Pearson correlation coefficients are used. One of the reasons for studying this is to control the correlation phenomenon between the descriptive variances of the model. From a theoretical perspective, the existence of a strong correlation between descriptive coefficients of the model leads to the formation of the correlation problem. With regard to the pair correlation coefficients and the related probability except for a few items (that are highlighted), a meaningful correlation (indicator probability with an error level less than 5 percent) is observed between pair coefficients, which in some cases the correlation is positive and in some it is negative. But its intensity is not to the extent that would lead to the appearance of correlation. This means that there is a possibility for the research's model to be applied with the simultaneous existence of all the descriptive variances.

Table 3. Correlation coefficients matrix between research explanatory variables

Variables	Quality financial reporting	Auditor's Expertise Based on Total Assets	Auditor Specialty Based on Audit Fees	Company Size	Ratio debt	Margin of profit
Quality financial reporting	1	0.094**	0.186	0.254**	.344	-.198*
		0.000	0.000	0.000	0.085	0.042
auditor's expertise based on Total assets	0.094**	1	0.235**	0.161**	-0.014	0.191**
	0.000		0.000	0.000	0.744	0.000
auditor Specialty based on audit fees	0.186	0.235**	1	0.249**	0.228**	0.184**
	0.121	0.000		0.000	0.000	0.000
company size	0.254**	0.161**	0.249**	1	0.299**	0.110**
	0.000	0.000	0.000		0.000	0.000
Ratio debt	0.344	-0.014	0.228**	0.299**	1	0.141**
	0.085	0.744	0.000	0.000		0.000
Margin of profit	-0.198*	0.191**	0.184**	0.110**	0.141**	1
	0.042	0.000	0.000	0.000	0.000	

* Significant in probability level of 95 %; ** Significant in probability level of 99 %

4. Testing the Model of the Quality of Financial Reporting

To achieve a model of financial reporting quality in this research, the multifold linear regression with the method of Empirical Generalized Least Squares (EGLS) is used. In this method, the inequality of the variances' waste through minimizing the weight sum of the squares of the residuals that indicate the average weight is minimized. First the regression pattern of the models is achieved using the Limer and Hausman F tests, then, to test the meaningfulness of the F indicator and to test the meaningfulness of the regression coefficients, the t indicator is used. To test the application of the classic presuppositions of regression patterns (normality of the distribution of the remaining sizes, lack of correlation between the residuals and lack of a linear connection between independent variances), the drawing method, the Durbin Watson indicator and the indicator of variance increase factors are used respectively. First, with attention to the combinational nature of the research's data, the Limer and Hausman F tests are conducted to determine the type of the regression model pattern for financial reporting quality.

Table 4. Results of F Limer test

Fixed effects	F Statistics	Degrees of freedom	Sig.
Sectional	1.4310	(725.118)	0.0087

Table 5. Hausman test results

Random effects	Statistics chi-sq	Degrees of freedom	Sig.
Sectional	157.7123	6	0.000

As it can be seen in the tables above, the significance level of the F Limer test is less than .5, therefore, to estimate the regression model, the cross-sectional fixed effects model should be used. On the other hand, the significant level of the Hausman test is also less than .5, which indicates that the elevations width of the models above cannot be considered as random phrases. As a result, the regression model of the financial reporting quality is measured in the cross-sectional effects method.

Table 6. Measuring the quality of financial reporting model

Variables	Coefficient Variables	Standard error	Statistics T	VIF	Sig.
Source	21475.02	7020.917	3.8512	-	.0001
Operating cash flow of the current period	.5992	.0512	14.4919	1.712	.0000
Changes in accounts receivable	.1590	.0316	6.4036	1.652	.0000
Changes in accounts payable	.2679	.0482	5.4305	1.498	.0000
Changes in inventory Merchandise	.2856	.0420	4.6793	1.632	.0000
Depreciation expense	.1265	.2027	2.1621	2.038	.0232
Other accruals	.2090	.0231	4.0241	4.101	.0000
coefficient of determination		.7406			
Adjusted coefficient of determination		.7104			
Durbin-Watson statistic		2.3538			
Sig model		.000			

As is stated above, to make sure that there is no correlation between the independent variances (regression presupposition), the variance increase factor VIF was used. In the table above, the sizes of the VIF are less than .5. Therefore, there is no correlation between the independent variances. Results of the table show that with regard to the significance level which is less than .5, the total significance of the regression is affirmed at the confidence level of 95 percent. Therefore, the regression variance coefficients are not zero simultaneously. It is observed in the table that all the variances are in a confidence level of 95 percent in the significance relation with the operational cash flow of the future term. In this way, 71.04 percent of the changes in the operational cash flow of the future term is determined by the input variances in the model above.

4.1 Hypothesis Testing

The purpose of this research was to investigate the impact of auditor's specialty on financial reporting quality of the listed companies in Tehran Stock Exchange. To do the analysis and test the hypotheses, a sample with a total number of 119 listed companies in Tehran Stock Exchange in a period of 7 years (from 2007 to 2013) was examined. In the research's main hypothesis, the impact of auditor's industry specialty on the financial reporting quality was tested.

4.1.1 Results of Testing the First Subsidiary Hypothesis

H_0: There is no meaningful relation between the auditor's industry specialty, based on the pattern of market share based on total audited assets of the company, and financial reporting quality.

H_1: There is a meaningful relation between the auditor's industry specialty, based on the pattern of market share based on total audited assets of the company, and financial reporting quality.

$$\begin{cases} H_0 : \mu = 0 \\ H_1 : \mu \neq 0 \end{cases}$$

4.1.2 Results of Testing Second Subsidiary Hypothesis

H_0: There is no meaningful relation between the auditor's industry specialty, based on the pattern of market share based on total auditor's fees, and financial reporting quality.

H_1: There is a meaningful relation between the auditor's industry specialty, based on the pattern of market share based on total auditor's fees, and financial reporting quality.

$$\begin{cases} H_0 : \mu = 0 \\ H_1 : \mu \neq 0 \end{cases}$$

In each of these assumptions, the quality of financial reporting as the dependent variable, auditor's specialty based on the above mentioned patterns as the independent variable and the variables of company size, debt relation and profit margins were considered as controlling variances in order to control the other possible effective factors. To test the hypotheses, because the research dependent variable has two values (high financial reporting quality with the value of one and low financial reporting quality with the value of zero), the Logit regression model was utilized in the following way.

$$\mathbf{QFR_{i,t} = \beta_0 + \beta_1\ Auditor \neg Spec_{i,t} + \beta_2\ Size_{i,t} + \beta_3\ Debt_{i,t} + \beta_4\ Prof_{i,t} + \varepsilon_{i,t}}$$

In this analyses, items such as the significance of the whole model, the significance of the model's coefficients of descriptive variances and the model's descriptive capacity were analyzed.

Table 7. Results of the model impact, audit expertise on the quality of financial reporting

Description			Model(1)	Model(2)
explanatory variables	Width of Source	Factor	-0.3122	3.1192
		Statistics z	-0.8283	3.0802
		(statistics chance)	0.30	0.00
	Auditor's expertise based on Total assets	Factor	0.0503	0.1280
		Statistics z	3.9865	2.8624
		(statistics chance)	0.00	0.00
	Auditor Specialty based on audit fees	Factor	0.0061	0.0088
		Statistics z	0.0777	0.0901
		(statistics chance)	0.93	0.92
	Company size	Factor		0.0714
		Statistics z	-	2.2305
		(statistics chance)		0.02
	Ratio debt	Factor		0.0966
		Statistics z	-	1.8680
		(statistics chance)		0.06
	Margin of profit	Factor		0.0231
		Statistics z	-	4.8800
		(statistics chance)		0.00
General significant review of model		Statistics lr	16.2900	107.3630
		(statistics chance)	0.00	0.00
Check explanatory power of the model		coefficient of determination	0.0466	0.2214

The results of the study of the research's model, with regard to the z indicator and its probability indicate the significance of the auditor's specialty variance coefficient based on the pattern of the total assets in the financial reporting quality model (indicator probability with an error level of less than .5). Since this coefficient is positive, indicators show that the auditor's specialty has a meaningful and positive impact with the effectiveness level of 0.05 in model 1 and the effectiveness level of 0.128 on the financial reporting quality. This means that the auditor's industry specialty increases the probability for financial reporting with a high quality.

4.2 Discussion

In this study, the main hypothesis states that the auditor's industry specialization has a significant impact on financial reporting quality. Based on the collected observations from the statistical sample and hypothesis tests using the Logit regression analysis, the main hypothesis of the impact of the industry specialized auditor on financial reporting quality was not rejected. With regard to the probabilities' theory, the results can be applied to the statistical group and it can be stated that the amount of the auditor's industry specialty has a direct impact on

financial reporting quality of the companies. This result is in the same direction as the financial and accounting literature. Based on the collected observations from the statistical sample and hypothesis test using the Logit regression analysis, the research's first subsidiary hypothesis of the impact of the auditor's industry specialty (based on the pattern of the market share based on the total audited assets of the company) on financial reporting quality was not rejected. With regard to the results of this hypothesis, it can be stated that the approach of the market share based on the total audited assets of the company introduces an industry specialized auditor as an auditing institution distinguished from other competitors in terms of the total audited assets of the company in a certain industry. Based on the collected observations from the statistical sample and using the Logit regression analysis (based on the pattern of the market share based on the total auditor's fees) on financial reporting quality was rejected.

5. Conclusion

Results of the hypotheses' tests showed that the auditor's industry specialty (based on the pattern of the market share based on the auditor's total fees) has no meaningful impact on the financial reporting quality of the statistical sample companies of this research. But, if the auditor's industry specialty (based on the pattern of the total audited assets of the company) was to be evaluated, it would have a significant impact on financial reporting quality. Therefore, it is concluded that the variance of the auditor's industry specialty is sensitive to the type of the utilized coefficient used to evaluate it. Findings of this research apply with similar researches by Krishnan (2003), Balsam et al. (2003), Karslvonagi (2004), Francis et al. (2004), Jenkins et al. (2006), Almoteiri et al. (2009), Choueiri et al. (2010), Karjalynn (2011), Sun and Liu (2013), Etemadi et al. (2009), Nazemi Ardakani (2012) and Alavi Tabari and Bazrafshan (2013). The results of the researches by the studies above in general state that the industry specialized auditors' clients have lower voluntary commitment items, higher profitability quality and less profit management in comparison with the non-specialized auditors. As a result, it can be deducted that the clients' financial reporting quality which have the advantage of industry specialized auditors is more. Finally, this research contradicts the results from the research done by Hasas Yeganeh et al. (2012). The results of their research showed that there is no significant difference between the informational content of the profit's commitment and financial parts in companies with industry specialized auditors with other companies.

References

Aetemadi, H., Mohammadi, A., & Nazmi Ardekani, M. (2009). Investigating the relationship between auditor industry specialization and the quality of earnings in listed companies in Tehran Stock Exchange. *Research in Financial Accounting,* 1-2.

Ahmed, A. S., Rasmussen, S. J., & Tse, S. (2008). *Audit quality, alternative monitoring mechanisms and cost of capital: An empirical analysis.* Working Paper, Texas A&M University. http://dx.doi.org/10.2139/ssrn.1124082

Almutairi, A. R., Dunn, K. A., & Skantz, T. (2009). Auditor tenure, auditor specialization and information asymmetry. *Managerial Auditing Journal, 24*(7), 600-623. http://dx.doi.org/10.1108/02686900910975341

Arya, A., Glover, J., & Sunder, S. (2003). Are unmanaged earnings always better for shareholders? *Accounting Horizons, 17*, 111-116. http://dx.doi.org/10.2308/acch.2003.17.s-1.111

Ashbaugh-Skaife, H., Collins, D. W., Kinney, W. R., & LaFond, R. (2008). The effect of SOX internal control deficiencies and their remediation on accrual quality. *The Accounting Review, 83*(1), 217-250. http://dx.doi.org/10.2308/accr.2008.83.1.217

Astehmami, M. (2014). *The effect of auditor industry specialization and audit quality on earnings response coefficient companies listed in Tehran Stock Exchange* (Accounting Master Thesis). Islamic Azad University, vineyard.

Asthana, S., Balsam, S., & Kim, S. (2009). The effect of Enron, Andersen, and Sarbanes-Oxley on the US market for audit services. *Accounting Research Journal, 22*(1), 4-26. http://dx.doi.org/10.1108/10309610910975306

Behmanesh, M. R. (2006). The role of the financial statements and information in support of the equity of listed companies. *Economic Exchange, 57*, 37.

Brzydh, F., & Madancheha, M. (2014). The impact of industry expertise, audit firm on the delay in the audit report. *Theory and Practice in Auditing, 1*(1), 1-19.

Ghamari, M. (2011). *The relationship between financial reporting quality and speed of adjustment in stock*

prices (Master Thesis). Faculty of Economics and Accounting, Islamic Azad University, Tehran.

Habib, A., & Bhaiyan, M. B. (2011). Audit firm industry specialization and the audit report lag. *Journal of International Accounting. Auditing and Taxation, 20*, 32-44. http://dx.doi.org/10.1016/j.intaccaudtax.2010.12.004

Hasas Yganeh, Y., & Valizadeh Larijani, A. (2012). The effect of auditor industry expertise over financial reporting and capital market reaction. *Accounting Studies, 1*, 41-55.

Mojtahedzade, V., & Chitsazan, A. (2005). The mid-term review of the adequacy of the information content of financial statements prepared according to accounting standard No. 22 to influence the decisions of users, Knowledge and accounting research. *Journal of Iranian Accounting Association, 2,* 20-29.

Nazmi Ardekani, M., Aeatmadi, H., & Mohammadi, A. (2012). The relationship between auditor industry specialization and the quality of earnings in listed companies in Tehran Stock Exchange. *Research in Financial Accounting, 1*(1), 17-32.

Sun, J., & Liu, G. (2013). Auditor industry specialization, board governance, and earnings management. *Managerial Auditing Journal, 28*(1), 45-64. http://dx.doi.org/10.1108/02686901311282498

Talanh, A. (2001). Poverty and wealth of general purpose, financial reporting. *Accountant, 144*, 82-85.

Zadmhr, H. A., & Mansouri, H. (1999). Businesses in the financial reporting model economic. *Business. Accountant, 135*, 10-15.

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