



THE RELATIONSHIP BETWEEN THE TYPE OF THE AUDITOR AND FINANCIAL TURMOIL IN THE COMPANIES LISTED IN TEHRAN STOCK

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Resumen: En este estudio se utilizó un análisis exhaustivo de la relación entre el auditor y la turbulencia financiera en las empresas que cotizan en la Bolsa de Teherán. La población del estudio incluyó a 410 años de empresas (82 empresas durante el período financiero de 5 años, 1390 a 1394), respectivamente. En este estudio el tipo de auditor fue considerado como variable independiente y la variable dependiente fue turbulencia financiera. También hubo algunas variables de control en esta investigación, incluyendo el tamaño de la empresa, el apalancamiento y la proporción actual. El modelo de Kaplan y Zingales se utilizó para medir la variable de la crisis financiera. En este estudio, el software de Excel se utilizó para la clasificación de datos y después de la clasificación de procesamiento de datos y la estimación de datos se realizaron mediante el uso de software EViews. Este estudio incluye una hipótesis, para probar las hipótesis que se utilizó el modelo de regresión logística. En general, los resultados de la prueba de hipótesis indicaron una relación inversa significativa entre el tipo de auditor y turbulencia financiera.

Términos clave: Tipo de auditor, turbulencia financiera, Bolsa de Teherán.

Abstract: In this study, a comprehensive analysis of the relationship between the auditor and the financial turmoil in firms listed in the Tehran Stock Exchange were used. The study population included 410 year-companies (82 companies during the financial period of 5 years, 1390 to 1394) respectively. In this study the type of auditor was considered as independent variable and the dependent variable was financial turmoil. There were also some control variables in this research including firm size, leverage, and the current ratio. Kaplan and Zingales model was used to measure financial turmoil variable. In this study, Excel software was used for data classification and after the classification data processing and data estimation were done by the use of EViews software. This study includes one hypothesis, in order to test the hypotheses the logistic regression model was used. In general, the results of the hypothesis test indicated a meaningful inverse relationship between the type of the auditor and financial turmoil.

Key terms: The auditor type, financial turmoil, Tehran Stock Exchange.

1. INTRODUCTION

Growth and development of joint - stock companies in the passage of time resulted to the emergence and increment of capital owners that have no direct participation in the companies and monitor the companies through the selection of the board of directors. This new development created a new group of professional managers who run Capital-institutions that had no or little equity in them and thus the institutes' managers were separated from their capital ownership. (Shabahang *et al.*, 1998).

The role of financial and capital markets is attracting private sector cash flow in the form of slight or major savings and directing them into productive part. Capital markets as one part of the financial market aims to transfer of funds from providers (lenders and investors) to applicants (manufacturing companies). The position of this market, that gained an increasing importance on monetary and financial system, is playing the role of a connection that on the supply side provides the funds of the investment process and its target is a process called financing. The process of offer and issue equity of firms is responsible to facilitate and speed up transactions and trading funds. With such market companies are confident that by referring to it they can provide their cash. In case of need investors and creditors could convert their securities into cash flow. Tehran Stock Exchange as the capital market and financing institutions, including banks, financial and credit institutions as creditors try to propel and allocate private and public savings to productive and industrial investments. These are the introduction to the movement of production cycle and the development of joint stock companies with the appropriate

financial resources. To implement and fulfill industrial _ Executive projects and meet required working capital, preparing and organizing proper capital resources is necessary and this fact leads to the importance of financing. (Jafarisamimi, 2004, p. 41).

In today's world economic system, transporting and reporting accurate financial information to decision-making centers, is very important. The only way for shareholders who give their holdings in form of capital to the firms, to be aware of the way that the company manages their money and ensure the

accuracy and effectiveness of directors, is to observe the financial statements and annual reports of companies. Independent auditors have a special place in the corporate governance structure and play a critical role in improving the quality of financial reports that can be altered by representing the financial statements which is due to error or manipulation (Hassasyeganeh, Baghomian, 2005). Accordingly independent auditors audit quality can affect the quality of financial reports. Moreover, experimental studies have shown that the characteristics of the auditor, including the audit firm size, auditor type and expertise in the industry, are effective on audit quality. In addition, on the agenda of Stock Exchange trusted audit firms a regular rotation of audit firms for a period of four years is also necessary in order to protect the rights and interests of investors, organization and development of the securities market, with the implicit goal of improving audit quality. Therefore, it can be expected that the auditor characteristics (including auditors' type) can affect financial turmoil by affecting the quality of auditing (Etemadi *et al.*, 2010). Financial turmoil indicates circumstances that the company is unable to meet the obligations and pay debts or to have problems. The financial turmoil also means an increased risk of bankruptcy of the company, in other words the higher degree of corporate financial distress increases the probability of bankruptcy in the following year or years. Financial turmoil has not always led to bankruptcy, but without exception, all companies are facing with financial turmoil before bankruptcy. (Tehrani, Hesarzade, 2009). In various research literature, social and economic costs of financial distress are known to be very important and fundamental. Creditors, managers, and employees are the most important group who are significantly incurred by the financial turmoil. Most of the previous studies in this field show that the managers of troubled companies manipulate their financial data and even their real activities to hide or to postpone financial fragility.

Soeini (1994) found that firms that abruptly dumped into the financial crisis have selected different accountant to increase their level of income during the years before the crisis. . Defond and Jimbalvo (1994) have shown that companies that are in the situation of violating their debt contracts because of financial distress, choose their accounting procedures and policies so that they can increase trust of investors and creditors. However due to issues

raised in this study about the relation between the type of audit on one hand and firms financial turmoil. On the other hand, the question that this study seeks to answer is:

What is relationship between the auditor type and the financial turmoil in firms listed in the Tehran Stock Exchange?

2. REVIEW OF THE RELATED LITERATURE

Environmental changes such as increasing competitiveness of enterprises, is limiting companies achievements to their desired benefits. Therefore, comparing to the past financial decision-making becomes more important and forced the managers to take advantage of advanced techniques and use new methods of controlling managers. The most important topic in the field of financial management is individuals' investment in the private and legal businesses and their certainty to the investors despite the loss of their initial capital. In advanced industrial countries, a lot of researches have been carried out about the process of investment decision making. In our country there is also evident need for such research because among the firms accepted in Tehran Stock Exchange, there are some companies that according to the definition of financial distress in this study are financially turmoil. This fact can be understood by observing their financial statements and auditors' and legal investigators' reports. For example, some of these companies are facing with difficulties in repaying their debts, they don't have enough efficiency to cover costs and are not subjected to Article 141 of the Commercial Code. All of these issues indicate the involvement of these companies with financial distress that this may eventually lead to their bankruptcy and break up. Thus, in these companies, resources that could be invested in profitable and value-creating opportunities are wasted and this will have a negative impact on some macroeconomic indicators. One of the ways that can help the firms to take advantage of suitable investment opportunities and also to avoid resources wasting is to assess the financial turmoil. This can be done first, by providing the necessary warnings that can alert companies to the outbreak of the financial turmoil and according to these warnings companies can take appropriate actions. Second, Investors recognize favorable investment opportunities from unfavorable ones and invest their resources in right opportunities.

Tendeloo and Vanstraelen (2005) concluded that audit quality is negatively associated with abnormal

accruals and Hogan and Jeter (1999) results also showed that audit quality reduces income smoothing.

Fairuzana and Rashidah (2006) discussed the impact of audit firm size (5 large firms) and the audit committee on the accrual items. Their results showed that the size of the accounting firm does not reduce the amount of discretionary accruals. However, the existence of an audit committee in the company reduces this amount. Ming (2007) in research on Chinese companies concluded that ten large audit firm in China reduce earnings management more than other institutions.

Charitou *et al* (2007) in a study examine the impact of the financial turmoil on profit management and by using a sample of firms that were experiencing financial distress, analyzed profit management in the company. The researchers focus on the role of auditors and other oversight organizations to restrict earnings manipulation in the year prior to the turmoil. And they also focus on the relationship between profit manipulation in the year before turmoil and the likelihood of persistence of the activities of these companies in future.

Lara *et al* (2009) in one research examine the effect of the financial turmoil on profit management and by using a large sample of firms that were experiencing financial distress in England found out that the company managers have performed profits positive management four years prior the bankruptcy.

Gul *et al* (2009) focus on the effect of auditor's industry specialization on the relationship between the auditor's retention period and the earnings quality. The results of this study indicated that comparing to other companies, in firms that employ industry specialist auditors the relationship between auditors' short-term retention and the lower quality of profits is weaker.

Kevin Koh *et al* in one research investigated the non-audit services and the quality of their financial reporting. The results of their findings suggested that the quality of income report when auditors provide non-audit services to the business units are interconnected and non-audit services when auditors provide specific information are related to earnings quality. Ahsan Habib *et al* (2013), in the study addressed the financial turmoil, earnings management and market pricing of accruals during the global financial crisis. The results showed that compared to other companies, organizations that are facing with financial distress apply a higher profit management. Ebrahimi and Seyedi (2008) in their

study in the 71 companies listed in the Tehran Stock Exchange examined the effect of type of audit firm (audit organizations and other institutions) and the type of audit opinion in the audit report on their discretionary accruals and came to the conclusion that only type of audit institution is related to with discretionary accruals.

In one study Jabbarzadeh and Kangarlouei *et al* (2009), examines the relationship between income smoothing and financial turmoil. The findings of this study suggested that in various stages of financial distress managers of business units try to use their instrument to smooth income so that they can illustrate the company's financial status and performance in better position.

Sajadi and Arabi (2011), investigated the effect of audit quality on earnings management. In their study they stated that accruals on one hand allow administrators to calculate the profit in a way that reflect the true value of the business unit and on other hand these items let the administrators to abuse the flexibility of methods and generally accepted accounting principles, to distort the information content of earnings. They concluded that detailed by their detailed and high quality concerns auditors can reduce managers' accruals usage and limit earnings management. In one research Pourzamani and pouyanrad (2012) examined the relationship between company earnings management and financial turmoil and came to the conclusion that there is a relatively strong correlation between the real earnings management and financial turmoil.

3. THE PURPOSE OF THE STUDY

The aim of this study is to determine the relationship between the auditor type and the financial turmoil in companies listed in Tehran Stock Exchange to facilitate the investors' and analysts' decisions making process in the community.

3.1. Research Hypothesis

There is a significant relationship between the auditor type and the financial turmoil in companies listed on Tehran Stock Exchange.

3.2. Design

This study is considered as a correlational study because it aimed to find the possible relationship between variables. According to the type and number of data they were analyzed in the form of accumulated data by using data aggregation. The study used archived information of companies, so the study is ex post facto. After that two descriptive and inferential statistics methods are used. The descriptive statistics is used to collect and summarize financial information and then the researcher use the referential statistics to analyze the hypothesis. According to the purpose this study is considered as an applied research, beside this based on the research design it has a correlational ex post facto design. Moreover in relation to the observed environment, it is quasi-experimental.

3.3. Participants and sample

The samples of this research are firms which are listed in the Tehran Stock Exchange from 2011 till 2015. Due to the extension and some heterogeneous members of the research population some conditions were considered in the selection of population members. Conditions including passing at least one year of being listed, the fiscal year ended on March 29, no change in fiscal year, Not belonging to investment firms, holding and broker companies, top stocks number and nonstop trading for more than three months. Hence screening method was used to select 82 companies as statistical sample.

4. DATA COLLECTION AND ANALYSIS

To collect information and data necessary to carry out this study, library method was used. These pieces of information mainly derived from the following sources:

1. Using the new approach to research data mining
2. The resources and books available in the Stock Exchange library and the companies' financial reports

In this study, Microsoft Excel software is used for data classification and after the classification of research data of EViews software version 8 is used for data processing and estimation. Also to test the research

hypothesis the multivariate logistic regression was used.

4.1. Measuring the variables

In this study, the auditor account as the independent variable and the dependent variable is entitled to financial turmoil. There are also some control variables that can affect the dependent variable including firm size, financial leverage, and current ratio. What follows is a brief explanation of measuring the mentioned variables.

Auditor Type (AT) (the independent variable): In this study, if the auditor, is from Comptroller organization number 1 and if it is from other audit firms is considered to be zero.

Financial turmoil (Z) (dependent variable): financial turmoil circumstances indicate that the company is unable to meet the obligations and pay debts. The most explicit and complete definition of the financial turmoil is that companies are facing with financing limits when there is a gap between domestic consumption and foreign spending allocated funds .

To measure the dependent variable Zinglas and Kaplan model which is localized by Tehrani Hesarzadeh (2009) is used.

$$KZ_{IR} = 17.330 - 37.486C - 15.216Div + 3.394Lev - 1.402MTB$$

In the top model respectively: KZ amount to restrictions on the financing of Kaplan and Zinglas, C cash holdings, Div dividend, Lev debt ratio, MTB is the market value to book value. If the value of the variable in above model is more than the median of all other corporations the company is financially turmoil and the given number is 1 and otherwise is zero.

4.2. Control variables:

Firm size (SIZE): In this study firm size is measured by the logarithm of total assets

Leverage (LEV): financial leverage is calculated by dividing the total debt into to total assets.

Current ratio (CR): the current ratio of the company is equal to current assets divided by current liabilities.

5. RESULTS

5.1. Descriptive Statistics

In the descriptive analysis, the researcher use tables and indices of descriptive statistics such as central tendency and dispersion to describe the collected data. This transparency helps to explain research data. The results of the data analysis are presented in table 1.

Before estimating the model in order to ensure the results and not originality and meaningfulness of the relationships in regression variables, Stability and unit root test were applied.

These tests were held by using EViews software and Levin, Lin and Chu test method (2002).Unit root Statistical hypotheses are as follows:

The absence of a single root: H_0

There is a single root: H_1

Table 2. The Results of Variables Unit Root Test

Variable	Levin, Jin & Chut	
	Statistic	Possibility
Auditor Type	847-7.	0.000
Current Ratio	-27.47	0.000
Financial Turmoil dummy variable	-6.877	0.000
Financial leverage	-10.954	0.000
Firm Size	-35.135	0.000

The results of the variable unit root test are available in table 2. According to the results of the table all variables (410 observations) are stable.

5.2. Variables Stability test

Table 1. Descriptive Statistics

	Auditor Type	Financial Turmoil	Financial Turmoil Dummy variable	Firm Size	Leverage	x
	AT	Z	dz	SIZE	LEV	CR
Average	0.26	13.03	0.50	13.92	0.62	1.47
median	0.00	13.61	0.50	13.78	0.63	1.91
Maximum	1.00	51.88	1.00	18.45	1.49	30.77
Minimum	0.00	0.13	0.00	10.03	0.01	0.22
Standard Deviation	0.44	4.75	0.50	1.39	0.21	1.80
Skewness	1.07	-0.90	0.00	0.49	-0.05	11.31
Kurtosis	2.15	13.70	1.00	3.84	4.33	172.5
Jarque-Bera Statistic	91.080	2015.3	68.33	28.90	30.58	499935.1
Jarque-Bera Statistic Possibility	0.00	0.00	0.00	0.00	0.00	0.00
Observation	410	410	410	410	410	410
Number of firms	82	82	82	82	82	82

$$Z_{i,t} = C + \beta_1(AT_{i,t}) + \beta_2(SIZE_{i,t}) + \beta_3(LEV_{i,t}) + \beta_4(CR_{i,t}) + \beta + \varepsilon_{i,t}$$

5.3. Collinearity test

Before estimation of the model, testing the lack of Collinearity relationship between the independent variables is required. To check the presence or absence of a linear relationship between the independent variables the correlation analysis was used. This is done by calculating the Pearson correlation coefficient.

Table 3 shows the Pearson correlation coefficients between independent variables.

Table 3. variables Pearson correlation coefficient

		AT	SIZE	LEV	CR
AT	Correlation	001.			
	Probability	-			
SIZE	Correlation	0.336	1.00		
	Probability	0.000	-		
LEV	Correlation	0.168	1800.	1.00	
	Probability	0.000	0.0003	-	
CR	Correlation	-0.127	-0.086	-0.492	1/00
	Probability	0.009	0.08	0/000	-

According to the results of table 3 there is no linear correlation between independent variables.

5.4. Hypothesis Estimation

The hypothesis suggests a significant relationship between the auditor and financial turmoil.

The research hypotheses are as follows

H₀: There is no significant relationship between the auditor and the financial turmoil.

H₁: There is a significant relationship between the auditor and the financial turmoil.

As the results in Table 4 show, P-value calculated for auditor variables is less than 5% error and its estimated coefficient is negative. So it can be said that there is a significant inverse relationship between the auditor and financial turmoil. In addition, the table can be stated that the current ratio and firm size control variables have inverse relationship and financial leverage has a direct and significant relation with the financial turmoil. The results also show that the determining factor of the mentioned model is the 0.59. This number shows that only 59% of the

financial turmoil dependent variable can be explained by the independent variables. Moreover, considering that the probability of LR statistic is less than 5 percent, we can say that this model is significant at 95% confidence level and it has high reliability. With this interpretation the research hypothesis will be supported at 95% level of certainty.

6. CONCLUSIONS AND INTERPRETATION OF THE RESULTS OF HYPOTHESIS TEST

The results of the research hypothesis test showed a significant inverse relationship between the auditor type and the financial turmoil. Auditor and the client long-term interaction leads to an increase in the use of conservative procedures by the client. Since new auditors (new independent audit firm) usually lack sufficient knowledge about the client's business operations and internal control systems they forced to rely more on the decisions that managers make about financial reporting. Thus there are more likely to agree to managers opportunistic procedures. Given the above, and considering the fact that the auditors of Comptroller organization has are more experience in the profession, we can understand that the result of the hypothesis test also showed that the type of audit and financial turmoil have a significant correlation (inverse). Larger audit firms, provide audit services with higher quality because they are interested in a better reputation in the business market. These institutions are trying to work with high quality because it is thought that such an institution, because of their access to resources and more opportunities for training auditors and conducting different tests, can provide better audit services. The financial turmoil leads to huge losses for investors, creditors, managers, workers, suppliers and the customers. If one understands the causes of the collapse of companies, he can provide plans to save the company from certain death. Therefore, predicting the company's financial turmoil is a prerequisite to avoid bankruptcy. In this case, the researchers studied a lot of information to predict their potential financial turmoil. For example, the ratio selection and analyzing it can show variation points for predicting financial turmoil. Although there are some differences in related ratios among researchers, these differences may be due to the lack of theoretical definition of financial turmoil and providing practical definition of bankruptcy. In practice studies of bankruptcy are unable to offer a complete theory to explain why firms get into bankruptcy. Based on theory, Managers' incompetence, reduced profitability, imposing debt can be a clear

interpretation of the probability of bankruptcy. However, if a person tries to prevent financial turmoil and the collapse of companies, it is necessary to identify the underlying causes of vanishing companies. The results of the research hypothesis also indicated that there is a significant inverse relationship between the auditor and the financial turmoil. Therefore, we can say that if the audit firm is the Comptroller organization it will affect the amount of financial turmoil.

Results showed that there is a significant inverse relationship between auditors and financial turmoil. This result is also consistent to the results of Tendlou and Wansterilan (2005), Hogan and jitter (1999), Faroznaa and Rashideh (2006), Ming (2007), Charitou et al. (2007), Ebrahimi and seyedi (1387) and Sajjadi and Arabi (1390) .

6.1. Recommendations of Research

Recommendations of the study divided into two parts, recommendations based on hypotheses and suggestions for future preceding studies:

6.2. Pedagogical implications

1) Based on the results of this study, choosing the auditor of business units from Comptroller organization or independent audit firms is one of the most important items that should be considered in decision-making; The phenomenon of switching auditors is like a double-edged blade that can either organize the main market of professional services and Can also undermine the philosophy the auditing. In the capital market, this phenomenon is able to send signs of optimism and reform the capital flows in an efficient and effective way, and can also lead to suboptimal allocation of the resources.

2) Managers are always willing to assess their weaknesses and anticipate future threats. One way of assessing financial loopholes and ultimately financial distress in future is applying the models which are based on financial data. Managers can use models presented in this study to determine the financial turmoil and audit firms can also use the results of this study.

3) Considering result of the hypothesis, the auditor type could affect the financial turmoil. Therefore financial decision-makers consider auditor as one of the key variables to identify the financial turmoil and eventually bankruptcy prediction.

4) Investment companies constantly seek suitable conditions for investment. Basically, before

attempting to invest in various industries these industries are evaluated and analyzed in different ways to ensure their profitability. One of the evaluation methods used by the company is evaluating the financial situation. According to the results of this study, investment companies can use the results to evaluate the company's financial distress.

5) The model that is developed by this study can be used by Tehran Stock Exchange to ensure the relative position of the firms' financial situation. Banks and financial institutions can also use this model to determine the companies' financial turmoil in the adoption of the new company and industries that want to use their facilities and to have high amount loans.

6.3. Suggestions for further research

According to this study, in the future the following topics could be considered:

- 1) It is recommended that current research examine in any industry separately and the obtained results in various industries could be compared;
- 2) Researchers can also use other combined methods to evaluate the relationship between financial capabilities and Bankruptcy risk more accurately, deeper, and comprehensive. This study can be performed in other organizations and all companies listed on Tehran Stock Exchange;
- 3) explore other models of financial distress in companies listed in Tehran Stock Exchange;
- 4) examine the relationship between the auditor and the risk of falling stock prices with an emphasis on industry;
- 5) Discovering the effect of re-presentation of the financial statements on the auditors' payment with an emphasis on independent auditors' replacement.

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