THE INVESTIGATION OF RELATION BETWEEN ABNORMAL AUDIT FEES AND CLIENT LOYALTY IN THE COMPANIES LISTED IN TEHRAN STOCK EXCHANGE (TSE)

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Abstract: This research examines the relationship between abnormal audit fees and client loyalty in the companies listed in Tehran stock exchange.It explores the association between audit fees and auditor loyalty. Specifically, it investigates whether clients paying less audit fees relative to other companies in their industries are more likely to be loyal to their auditors. loyal clients to clients that switched audit firms after controlling for factors that are expected to be associated with client loyalty. The question of raised in this study showed a significant relationship with a loyal client auditor's fee is abnormal. The aim of this study was to investigate abnormal auditor fee is client loyalty. To achieve this goal, the research methods used to test hypotheses events multivariate regression method is used. The sample includes 99 companies listed in Tehran Stock Exchange and the research period 2003 to 2012 in the covers. The results suggest that the abnormal audit fees and client loyalty, there is no significant relationship.

Keywords: standard audit fees, the actual audit fees, audit fees abnormal loyalty

INTRODUCTION

The audit market has seen remarkable changes during the last decade. An implicit assumption in the policy of mandatory partner rotation is that such rotation enhances audit quality (Defond and Francis, 2005). Nevertheless, many audit firms kept serving their clients consistently since the beginning of the new millennium. Similarly, many clients continued to be loyal to their audit firms for several years. Several studies investigate switching activities in both dismissals and resignations (Rama and Read, 2006; Ettredge *et al.*, 2007; Grothe and Weirich, 2007). This study examines the other side of dismissals and resignation, which is the stability or loyalty in the auditor-client relationship. It explores the association between audit fees and auditor loyalty. Specifically, it investigates whether clients paying less audit fees relative to other companies in their industries, are more likely to be loyal to their auditors. The study defines clients that stay with their current auditors

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as "loyal clients" and those that change auditors as "switchers." There are many reasons for the client to switch auditors (Ettredge *et al.*, 2007), and such switchers are not necessarily disloyal" clients. The study also investigates the association between the type of auditor hired and the loyalty to the auditor.

LITERATURE REVIEW

Prior research suggests that auditors take actions to control the audit risk[1]when deciding to accept a new client or to retain a current client. Jones and Raghunandan (1998) examined the proportions of certain risky clients audited by big audit firms and other independent audit firms, and whether the relative proportions have changed during a period of increasing litigation. They found that big audit firms were more likely than small audit firms to have clients who were in financial distress and clients who were in high-tech industries. However, over a period of increasing litigation costs, they observed a significant reduction in the likelihood that big audit firms would audit such clients. Johnstone and Bedard (2004) examined client acceptance and client continuance decisions of a large audit firm as a way to provide empirical evidence on the extent and nature of risk avoidance that the audit firm uses to purposefully manage its client portfolio. Their results showed that this audit firm is shedding the riskier clients in its portfolio, consistent with the risk avoidance theory of audit firm portfolio management. Their results also showed that the firm's newly accepted clients are less risky than its continuing clients. They also found that audit risk factors are more important in audit firm portfolio management decisions than are financial risk factors. Hackenbrack and Hogan (2005) investigated the supply-side explanations for auditor/client pairings by examining the relationship between client retention and engagement-level pricing. Their major assumption is that auditors base the clientretention decision partly on engagement realization rates. They found that the difference between realized realization rates and predicted realization rates is positively associated with client retention over a five-year window. The realization rate is the ratio of the audit fee billed to the standard audit fee. These findings suggest that pricing pressure is more than an isolated occurrence, and the incumbent auditor's inability to recover unexpected high labor usage is related to the severing of the auditor-auditee relationship.Owens-Jackson et al. (2008) claimed that in the recent period, the number of auditor resignation and client dismissals has grown significantly, and the trend increased sharply in the period between 2001 and 2004. Carcello and Neal (2003) presented results. Based on these previous findings, we expect clients that realize they pay less audit fees to their auditors when compared to similar companies are more likely stay loyal to their audit firms if their audit fees increase. Using an international framework, Kallunki et al. (2007) investigated whether firms paying relatively high audit fees are more likely to switch auditors. They also investigated whether the legal liability environment affects the propensity

to switch auditors owing to audit fee under- and/or over-pricing. Since firms are expected to purchase auditing services from the least-cost supplier, an auditor switch occurs if the reduction in the audit fee due to the auditor switch exceeds the switching costs. Their results showed that firms paying relatively higher audit fees are more likely to switch auditors. They also documented that the level of audit fees and the ratio of audit fees to sales are positively related to the stringency of the legal environment of the country. Prior research has examined issues related to changes in audit fees for first or initial year audit. DeAngelo (1981), which is one of the early studies in this area, showed that incumbent auditors earn quasi-rents from clients due to the start-up costs accompanying new audits. Such quasi-rents lead to fee cuts (lowballing) in initial year audit fees. However, clients will not switch auditors if switching costs are greater than fee savings.

As described, the present study sought to clarify the auditor's fees abnormal and client loyalty in companies listed on the Stock Exchange in Tehran.

RESEARCH HYPOTHESES

This study seeks to clarify the relation between abnormal auditor's fees and client loyalty in companies listed in the Tehran Stock Exchange.

H_1: There is a relation between the rate of client loyalty and abnormal auditor's fees.

H_2: There is a relation between the rate of client loyalty and the average abnormal auditor's fees.

In this study, the abnormal auditor's fees should be calculated to test the research hypotheses and then its relationship with client loyalty should be examined. In the first stage the following model which is taken from Magdy and Rafik (2011) model is used to calculate the abnormal auditor's fees.

Formula 1:

$$\text{Log (FEE)} = B_0 + B_1 \text{ Size} + B_2 \text{ Investory} + B_3 \text{ Receivable} + B_4 \text{ Leverage} + B_5 \text{ ROA} + B_6 \text{ LOSS} + \varepsilon$$

In which:

Fee: The natural logarithm of the audit fees for the audit of the financial year.

Size: The natural logarithm of the total assets of the financial year.

Inventory: The ratio of product inventory to the assets of the beginning of the fiscal year.

Receivable accounts: the ratio of receivable accounts to the total assets of the financial year.

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Financial leverage: the ratio of debt to total assets for the fiscal year.

Return rate of assets: net income to assets for the fiscal year.

Loss: Indicator variable is equal to 1 if the client has had negative report from the profit during the research period and otherwise it is considered to be zero.

In the above model after conducting the model the disturbing part (the remaining part of regression) is used to calculate the abnormal audit fees. In other words, the abnormal audit fee can be calculated through the difference between the actual fee and the expected fee.

In the second stage, in order to investigate the relationship between the abnormal audit fee and client loyalty the following model which is taken from Magdy and Rafik (2011) model is used.

Loyal (Degree of Loyalty) + B_0 + B_1 FEEABN + B_2 Size + B_3 Loss + B_4 Growth + B_5 Leverage + ε

In which:

Degree of loyalty: the ordinal variables from 1 to 4 are used to determine the loyalty rate of the client. If the client in the intended research period has had no change for his audit, the degree of loyalty is considered 4 and but with the existence of 1 change the degree of loyalty is considered 3 and with 2 change the degree of loyalty is 2 and by having 3 times of change the degree of loyalty is regarded 1.In this study, in order to test the research hypothesis first, the normal audit fees model is implemented annually and in the form of cross-sectional. This estimate is done from 2007 to 2013.In the following, data on client loyalty which is calculated from 2004 to 2013 is used as combined data to test the hypothesis. For example, the degree of client loyalty for year 2007 is calculated as follows:

Table 1
Degree of audit loyalty and their changes

Number of changes of auditor from 2004 to 2007	*Degree of audit loyalty from 2004 to 2007*
1	4
2	3
3	2
4	1

RESULTS AND DISCUSSION

H1:There is a significant relation between abnormal audit fee and the degree of client loyalty.

Table 2
First research hypothesis testing

Significance level	Z statistic	Estimation error	Coefficient value	Variables
0.42	0.81	0.256616	0.2020813	Company growth
0.006	-2.74	0.1036466	-0.442165	Financial leverage of company
0.171	-1.37	0.10836	-0.176937	Company size
0.000	6.64	4.246838	2.44497	Company's auditor type
0.325	-0.98	0.2299167	0.307847	Loss of company
0.633	-0.48	0.164477724	-0.85715	abnormal fee
			–490.38546	The maximum verisimilitude test
				Wald test

In Table 2, the first hypothesis test results on the degree of loyalty of 4 is provided in which the companies growth 0.0202813, financial leverage of company -0.4421657, company size -0.1769377, and corporate loss is -0.3078475 and type of company's auditor has a coefficient of 2.44497, and abnormal fee variable of company has a coefficient of -0.857157.

Results in the error level of 0.05 is achieved as following, abnormal fee 0.633, company growth 0.423, and company loss is 0.647. These variables at reliability level of 0.095 indicates insignificant relationship between the fee and the degree of client loyalty, but in other cases like variable of financial leverage 0.050 and type of company's audit 0.000 show a significant relationship.Generally, results obtained from first hypothesis do not show significant relationship between abnormal fee and the degree of client loyalty. The maximum verisimilitude test (LR) has a chi-square distribution with degrees of freedom equal to the number of explanatory variables that its amount in Table 1 is equal to -490.38546. Therefore, the use of random method has precedence to the consolidated method and wald test is 53.57 which shows that at least one of the regression coefficients is non-zero.Hence, it can be concluded that regression is meaningful totally.

H2: There is a significant relation between the average of the abnormal fee of auditor and the degree of client loyalty.

The difference in the first hypothesis is used to investigate the hypothesis and to analyze the relations of data of each year, but in H_2 it is used to analyze and test the hypotheses from the average fee in the periods.The average audit fee in thedegree of loyalty 4.

Table 3
Second research hypothesis testing

Significance level	Z statistic	Estimation error	Coefficient value	Variables
0.436	0.78	0.276059	0.214837	Company growth
0.006	-2.73	0.1579215	-0.43044	Financial leverage of company
0.195	-1.30	0.1301402	-0.16860	Company size
0.000	6.08	0.3486119	2.11972	Company's auditor type
0.445	-0.76	0.3122594	-0.23824	Loss of company
0.786	-0.27	0.2637074	-0.07144	abnormal fee
				The maximum verisimilitude test
				Wald test

The second hypothesis testing results on the degree of loyalty 4 are presented in Table 2, the companies' growth coefficient 0.0214837, financial leverage of company -0.4304485, company size -0.1686089, and company loss is -0.2382495, and the type of auditor of company has coefficient of 2.119729 and the average abnormal fee of company has coefficient of -0.0714415.

Results at the error level of 0.05% are obtained as the following, the average abnormal fee 0.786, company growth 0.436 and company loss is 0.445. These variables indicate insignificant relationship between the fees and the degree of client loyalty at reliability level of 0.095, but in other cases, such as financial leverage variable 0.050 and the type of auditor of company 0.000 show a significant relationship. Overall, the results of the second hypothesis do not demonstrate significant relationship between the average of abnormal fee and the degree of client loyalty. The maximum likelihood test (LR) has a chi-square distribution with degrees of freedom equal to the number of explanatory variables that its amount is equal to -510.81794 in Table 3, therefore, the utilization of random method is preferable than integrated method and wald test 46.59 which indicates that at least one of the regression coefficients is non-zero and it can be found that the regression is significant generally.

CONCLUSION

The statistical population of the study includes all firms listed in the Tehran Stock Exchange which have been active since the beginning of 2003 until 2013 in Stock Exchange and intended hypotheses are studied and tested in relation to the population. The study sample is selected based on the exclusion and the consideration of characteristics of companies and their compliance with certain conditions of the study. The number of participants was 99 companies and the number of observations is 1089 year- company. The required information is obtained by the notes along with the financial statements, the annual report of

activities of the board to the meetings of shareholders, the summary of decisions of the ordinary general meeting published by the stock exchange organization. The cross-sectional and multivariate regressions are used to test the research hypotheses and statistics F & T is used to the overall significance of regression and each variable. Results of this study show that:

– The size, growth, and loss of the company that are considered as the standard of the independent auditor's fees have no role in degree of loyalty.

– The company growth is not an effective factor in increase of the degree of loyalty and in companies with good financial growth, the criterion of the degree of loyalty is not efficient.

– The company's loss variable has no impact on the degrees of client loyalty in the selection of auditors.

– Also, whatever the company to be big, it has no effect on the degree of client loyalty.

– Mutually, whatever the financial leverage (one of the factors affecting the degree of loyalty) to be at the lower level, it increases the degree of client loyalty.

– The type of company's auditor who is from private institutions or auditor community has considerable influence on the degree of loyalty.

Note

1. Audit risk is defined as the risk that the auditor may unknowingly fail to appropriately modify his/her opinion in financial statements that are materially misstated (AICPA, 1983, AU 312.02).

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