

# Investigate the Relationship between Capital Expenditures and Audit Fees in the Companies Listed on the Tehran Stock Exchange

Mansour Nasiri<sup>1</sup>, Mostafa Vaezi Monfared<sup>2,\*</sup>

<sup>1</sup> Master of Accounting, Damghan Branch, Islamic Azad University, Damghan, Iran

<sup>2</sup> Department of Accounting, Damghan Branch, Islamic Azad University, Damghan, Iran

## ABSTRACT

The purpose of this study is to investigate the relationship between capital expenditures and audit fees in listed companies in Tehran Stock Exchange. The statistical population of this study includes all companies accepted in Tehran Stock Exchange and sample of 44 companies listed in Tehran Stock Exchange during the period of 2011-2012. They were selected using systematic elimination. In this research, the excessive trust of managers is measured using the capital expenditure criterion. According to the results of the hypothesis test, the research hypothesis was rejected. As a result, there is no significant relationship between capital expenditures and audit fees in Tehran Stock Exchange companies. The possible reason for this may be due to the lack of determination of auditing fees in Iranian companies based on factors influencing audit work. The fact that the determination of remuneration in Iranian companies is more based on the agreement between the parties to do the work rather than effective and rational factors. This result is opposed to the results of Dolman et al. (2015).

## KEYWORDS

Capital expenditures, Audit fees, Excessive trust of managers, Financial statements.

## INTRODUCTION

Highly self-confident managers are fearless and creative, but at the same time are prone to repeat mistakes. Firms sometimes make mistakes, from small manufacturing errors to a huge mistake such as Fukushima nuclear catastrophe; mistakes can be sudden and very cruel, and this is evident (Leem, 1998). Companies respond differently to this negative reaction. Some rely on a radical overhaul of production processes or alternative investment in R & D, product recall, and sales decline, while some other companies apply only very minor modifications. The final decision on how the company reacts will in fact reflect the reaction of the company's manager, indicating whether that

mistake will be repeated again. Hardcore managers, their mistakes, how to criticize the company and what they need to do to improve. They accept mistakes as valuable lessons and continue on their way. Managers who do not care about feedback, those who do not believe that a mistake is the result of what they should be controlled and that the mistake is the consequence of foreign and random forces are those who repeat the same mistakes repeatedly until damage to that company. To such an extent, the behavior that may be affected by the managers is called excessive managerial trust (Hassas Yeganeh and Alavi Tabari, 2003).

On the other hand, auditing is a distinct product in which customers can choose to some extent audit, scope of audit, and even some aspects of audit quality. Managers often negotiate auditors with auditors. It is important to study the factors affecting audit fees in terms of their impact on audit quality. Audit fees are effective in the planning and implementation of good and high quality financial audit work. The low quality of the audit reduces the trust of the users of the financial statements. This will not only lead to failure to achieve the objectives of the audit but will reduce the credibility of the audit process in large proportions and will prevent the optimal allocation of capital in the securities market and increase the cost of capital and financing (Rajabi, 2004). Determining the factors influencing the cost of the audit will also help the client understand the benefits of the service and understand what this cost is due to. Obviously, knowing this will accelerate and facilitate the work of the audit, and due to the involvement of the client, a higher quality audit will take place (Gist, 1992).

## PROBLEM STATEMENT

The existence of a conflict of interest raises concerns for owners (shareholders) as long as they direct managers to evaluate and evaluate their performance in order to ensure optimal allocation of their resources by managers. Over time, it has been pointed out that some managerial decisions may cause loss of corporate resources and loss of ownership. On the other hand, managers have always been seeking to maximize their interests, to give owners an

\*Corresponding Author: Mostafa Vaezi Monfared

E-mail r:

Telephone Number r:

Fax. Number r:

assurance that the decisions they make are in the interest of the owners (Namazi, 2005). Therefore, due to this problem of representation, a mechanism was introduced as an audit. In fact, the audit was introduced after the separation of ownership from management and in order to overcome the problems and costs of representation (Watts & Zimmerman, 1983).

Indeed, auditing is one of the tools that has been created by the expansion of joint stock companies, followed by the separation of ownership and management, and the representation theory. Audit is a mechanism that has been able to take an unrivaled position due to its accreditation and vision role in evaluating financial reporting processes and providing an appropriate platform for informing economic rational decisions. In fact, the main reason for the existence of the audit profession is the conflict of interests between the owners and managers. In fact, managers are the owners of the owners. Owners of company management are assigned to the directors and pay remuneration to the management of the company. Due to the fact that the interests of owners and managers do not necessarily coincide and that brokers may be harmed by their personal interests in the interests of shareholders, the need for an audit profession has been felt. In fact, the audit was introduced after separation of ownership from management and in order to overcome the problems and costs of representation (Watts & Zimmerman, 1983). Shareholders (landlords) use their audit services and pay fees to control the company's management and board, in addition to controlling the problems and costs of the agency (Mehrani and Jamshidi Ivanakey, 2010). Auditors receive remuneration for the audit work. Audit costs reflect the extent to which auditors devote an audit risk reduction to an acceptable level of assurance in order to make the customer's financial statements free from distortions (Limon et al., 1993).

### BACKGROUND RESEARCH

Dolman et al. (2015) examined the relationship between excessive trust in managers and audit fees. The results of this research showed that there is a negative and significant relationship between excessive trust in directors and audit fees in companies without an internal audit committee. Also, in companies that are highly trusted by their managers, they are usually used by less qualified industry auditors.

Paul et al. (2010) in a study titled Agency Problems and Audit Fees to examine and compare the relationship between free cash and audit fees. The results of their research show that companies with more cash and more are paying more money. There is also a positive relationship between free cash and audit fees.

In a study entitled "Corporate Income and Benefit Policies and Audit Fees", WeiSuki (2010) examined the relationship between the salary and benefits of the board of directors and audit fees. In recent years, researchers have investigated the relationship between corporate rewards and audit fees. Angel, Heis and Wong (2010) were pioneers in this regard. Following on from these studies, Wei Seoki has paid attention to another aspect of these studies, the reward of the

board of directors. His findings indicate that there is a very strong relationship between the salary and benefits of the board of directors and audit fees. It also states that a study on this subject should be carried out in the coming years.

Khodadadi and Hajizadeh (2011) studied the theory of representation and audit fees in their research. In this research, the company's debt level, growth opportunities and cash-flow rates were used as effective variables on agency costs. For this purpose, the data of listed companies in Tehran Stock Exchange for the period of 2006 to 2009 were used as an integrated regression model. The overall results of the research confirm that there is a significant relationship between the cost of representation and audit fees. Also, evidence suggests that there is a positive and significant relationship between the level of debt and audit fees in companies with high cash flow, and there is a negative and significant relationship between future growth prospects and audit fees. In addition, the relationship between cash flow earnings and audit fees in companies with high free cash flow has not been approved.

Mehrani and Jamshidi Ivanakey (2011) investigated the factors influencing audit fees in a study entitled "Effective Factors on Audit Fees". Their research findings show that the quality of the audit, the reputation of the client, industry expertise, time budget, the amount of assets of the company and the history of the audit firms have a positive and significant effect on the remuneration received by the auditors.

### HYPOTHESES OF RESEARCH

There is a meaningful relationship between capital expenditures and corporate audit fees.

### STATISTICAL POPULATION AND RESEARCH SAMPLE

The statistical population of the research is the companies admitted to the Tehran Stock Exchange. The statistical sample is selected by systematic deletion based on the following criteria:

1. To be present in the stock market from 2011-2011.
2. The company has not changed the financial year between 2011 and 1394 and has no operational interruption for more than 6 months.
3. Financial intermediation companies are eliminated due to the specific nature of the activity.
4. All necessary information is available.

#### • Method of doing research and collecting data:

This research is an applied research and is a type of correlation research. The research project is quasi-experimental and uses a retrospective approach (through past information). A back-up method is used when the researcher examines the subject after the occurrence of events. Moreover, it is not possible to manipulate independent variables (Namazi, 2000).

In this research, a library method is used to collect data and information. The information needed for the theoretical part, mainly from the English and Persian specialized journals, and for collecting other required data and

information, mainly from the Tehran Stock Exchange's databases, audited financial statements, explanatory notes, and new software is being used.

### RESEARCH VARIABLES

#### • Independent variable:

The independent variable of this research is the trust index to managers, which will be used to calculate it from the capital expenditure criterion based on the research of Ahmad and Dolman (2012).

(Capital expenditures): The capital expenditure criterion is a virtual variable. If the ratio of investment (net of cash payments for the purchase of fixed assets and other investments in the form of cash flows) on total assets of the previous year in a company and in that year more than the average ratio of the corresponding industry to that company, the value of that variable for that year and for that particular company is equal to 1, otherwise 0 is assumed.

#### • Dependent variable:

The dependent variable in this research is the audit fee that can be deduced directly from the company's financial statements.

#### • Control variables:

SIZE: The size of the company is equal to the natural logarithm of the total assets,

CEO Own: The amount of equity owned by the CEO,

ROA: return on assets, equal to the ratio of net profit to total assets

AR\_INV: Total accounts receivable and inventory divided by total assets,

MTB: The market-to-office ratio,

Leverage: Financial leverage, equal to long-term debt ratio to total assets,

Loss: The virtual loss variable is equal to 1 if the company has lost in one or two years, otherwise it is zero,

Cash: Cash, Equal to Cash Assets,

Finance: Financing is a two-way variable. If a company has a long-term debt issuance or a bond issue of more than 5% of its total assets, it will be numbered 1, otherwise zero will be assigned,

ABS-AA: absolute value of accruals, and

Beta: is a beta factor.

### MODEL OF RESEARCH

To test the research hypothesis, the following model is estimated.

$$\text{Audit Fees}_{i,t} = \beta_0 + \beta_1 \text{Overcon}_{i,t} + \beta_2 \text{SIZE}_{i,t} + \beta_3 \text{CEO Own}_{i,t} + \beta_4 \text{ROA}_{i,t} + \beta_5 \text{AR\_INV}_{i,t} + \beta_6 \text{MTB}_{i,t} + \beta_7 \text{Leverage}_{i,t} + \beta_8 \text{Loss}_{i,t} + \beta_9 \text{Cash}_{i,t} + \beta_{10} \text{Finance}_{i,t} + \beta_{11} \text{ABS-AA}_{i,t} + \beta_{12} \text{Beta}_{i,t} + \varepsilon$$

In the above model,

Audit Fees: Audit Fees,

Overcon: Capital Expenditures.

To test the hypothesis of the research, using the above model, they were first expressed as statistical assumptions and then tested.

### DESCRIPTIVE STATISTICS OF RESEARCH VARIABLES

Table 1 describes the descriptive statistics of the research variables for sample companies.

Tab .1. Descriptive statistics of research variables

Max.	Min.	SD	Mean	No. of observations	Variable
1.967	83	1025.5	641.5	220	Auditing cost
0.498	0.007	0.396	0.274	220	Capital costs
16.26	9.82	1.27	12.97	220	Firm size
0.049	0.00	0.0049	0.0013	220	CEO ownership
0.65	-0.020	0.129	0.133	220	Assets return
0.385	0.0171	0.489	0.229	220	Receivable accounts/invent ory ratio
3.757	-1.908	2.302	2.542	220	Market/office value
1.57	0.12	0.188	0.583	220	Financial leverage
1	0	0.191	0.139	220	losing
14578260	675	16.7037	518794	220	Cash
1	0	0.198	0.146	220	Financing
0.384	0.0049	0.295	0.194	220	Undertaking items
-2.146	-1.49	1.496	0.948	220	Beta factor

The sample of companies surveyed is 44 companies in the period of 5 years from 2011 to 1394, representing a total of 220 observations (company-year). The dependent variable is the audit fee. The minimum amount of remuneration in the companies surveyed is 83 million Rials and the highest amount is 10967 million Rials. The average of this variable equals to 541.5 million Rials. An independent variable equals capital expenditures with an average value of this variable equal to 274/0 of the information on control variables.

### HYPOTHESIS TEST

The results of F lemmer and Hausman tests for selecting the appropriate model are presented in Table 2.

Tab.2. Test results. Selecting a hypothesis model

Model selection	SIG.	Statistic	Test
Fixed effects	0.0027	3.15	F-Limer test
		-	Hausmann

Since the number of variables in the model is equal to 12 variables and more than the years studied, it is 5 years (2011 to 1394), so the Hausman test and the random effects method cannot be done. As a result, the method of fixed effects is selected. The results of estimating the regression model are based on the constant method in Table 3.

Tab.3. Testing the hypothesis

Sig. level	t statistic	Coefficient	Variable
0.2147	-1.241636	-0.000261	Capital costs
0.0000	7.032696	0.040848	Firm size
0.0000	-7.741980	-0.161351	CEO ownership
0.0000	4.618759	0.009744	Assets return
0.1372	-1.487694	-0.057639	Receivable account/inventory ration
0.4956	-0.681789	-0.025077	Market/office value
0.7053	-0.378343	-0.013846	Financial leverage
0.8749	-0.157472	-0.005897	Losing
0.1340	1.499949	0.000349	Cash
0.6776	0.415966	8.63E-05	Financing
0.7465	0.323335	6.71E-05	Undertaking items
0.6947	0.392653	9.24E-05	Beta factor
0.7651	0.298924	0.014709	Model lack of fixedness
F Sig. level: 0.0000		F statistic: 73.83	
Durbin-Watson coefficient: 1.69		Determination coefficient: 0.64	

In a regression equation, if there is no relation between dependent variables and independent variables, then all the coefficients of the independent and controlling variables in the equation must be zero. Therefore, the significance of the regression equation should be tested. This is done using the F statistic. As can be seen in Table 3, the value of the F statistic and the significance level of this statistic is 73/83 and 0,000, which means that the H0 hypothesis, which is the same as the irrelevance of the entire model (zero of all the coefficients), is rejected and the estimated regression model is meaningful in general.

To test the significance of the coefficients and test the hypothesis, the t statistic is also used. If the significance of the independent variable statistic is less than the error level of the test, then the hypothesis is accepted, otherwise, if it is more meaningful than the error level, it will not be accepted. The significance level of the independent variable of capital expenditures is equal to 2147 and more than the level of the error of the test and therefore irrelevant. As a result, the research hypothesis is not accepted.

The coefficient of model designation is equal to 0.44 and suggests that 64 percent of the variation of the dependent variable is explained by the variables entered in the model. The Camera-Watson statistics were also used for self-correlation testing. In general, if this coefficient is between 1.5 and 2.5, we can say that the problem of self-correlation

is not present in the model. The Camcorder-Watson model is 1.69, which means that there is no self-correlation problem in the model.

## DISCUSSION AND CONCLUSION

As discussed earlier, the impact of trusting managers on corporate policies, such as corporate accounting policies and policies, is important because excessive trust can lead to decisions that eliminate the value of a company. On the other hand, the existence of a conflict of interest raises concerns for the owners (shareholders) as long as they direct managers to evaluate their performance in order to ensure optimal allocation of their resources. According to the results of the hypothesis test, the research hypothesis was rejected. As a result, there is no significant relationship between capital expenditures and audit fees in Tehran Stock Exchange companies. The possible reason for this may be due to the lack of determination of auditing fees in Iranian companies based on factors influencing audit work. The fact that the determination of remuneration in Iranian companies is more based on the agreement between the parties to do the work rather than effective and rational factors. This result is opposed to the results of Dolman et al. (2015).

### • Research Limitations:

1. Many companies do not issue audit fees separately in their explanatory notes. Therefore, we were confronted with limiting the data on the variable auditor fees and reducing the number of possible statistical samples.
2. Different definitions of trust in managers can lead to different results. Therefore, the definition itself can be considered as a limitation.

### • Offers for Future Research:

1. In determining the amount of audit fees, the audit firms take into account the level of trust in managers in companies that determine the company's risk value.
2. Excess capital expenditures may, on the one hand, increase future growth of the company and, on the other hand, may lead to higher fixed costs for the company. Therefore, auditors must pay attention to the risk of the company and, consequently, the amount of audit fees.

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