Assessment of Transparency Impact of Accounting Information on the Cost of the Audit for each Type of Industry

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ARTICLE INFO

Article history:
Received 05 May 2017
Accepted 09 August 2017

Keywords:
Transparency of accounting information,
Auditing costs,
Type of industry.

ABSTRACT

One of the main instruments of accountability in economic activities is auditing. But despite the extent of audit work, determining the fees for this service in our country is not based on a scientific model and reasonably we cannot claim, according to firm's characteristic and with what cost, the work would be done. In this regard, we have tested the impact of transparency of accounting information on audit fees. This paper statically sample consists of 64 firms that are analysed in period of 2011-2016 which obtaining total 320 firm-years; for data analysis, we used Kolmogorov-Smirnov for normality of the data, Durbin-Watson test for test of errors independence or absence of autocorrelation, and finally with the help of t-statistical tests, calculated probability is judged and assessed for each of the hypothesis. There are five main hypotheses in present study. Testing hypotheses is taken using panel data and for data analysis we used multivariate regression estimation and SPSS19, EXCEL and Eviews7 software. After designing and testing hypotheses for each hypothesis, it was concluded that the relationship between transparency of accounting information and auditing costs is established at all levels of the company and also at the corporate level companies with low financial leverage. If the relation between transparency of accounting information and auditing costs at the corporate level with high financial leverage is high, there is no significant linear relationship between high cash and low cash.

1 Introduction

In the wake of the global financial crisis and corporate scandals, firms are under to improve the level of information to stakeholders. However, the level of information that is not legally required and that is disclosed can vary among companies and countries. Legal requirements do not always satisfy stakeholder demands and there is a huge need for more information. Moreover, it seems clear that high quality financial transparency reduces information asymmetry, increases overall transparency and is associated with positive capital market consequences such as lower cost of equity and debt capital. There are three hypotheses for the need of auditing. These include: agency hypothesis, confidence
hypothesis, validating hypothesis. In the agency theory is mentioned to the audit role in reducing the problems and dangers of ignoring morality issues. According to agency theory, the auditor is an impartible part of the contractual mechanism within the framework of relations between the agent - the owner to control and monitor the executive agency costs [14]. According agency theory with increments in resources management, the stakeholders and the in relevance with the company will increase that consequences of such a situation is conflict of interest. As a result of conflicts of interest, stakeholders to align their interests with others or to minimize the effects of conflict of interest should be incurred agency costs. Manager who is at the centre of this conflict, by providing financial information tries to reduce agency costs. But because of management authority, the need to monitor the performance of managers considers the judgment of independent auditors. To use the audit services has to be paid a fee. This fee is determined by the auditor and according to his assessment of the volume and risk of auditing. Conflicts of interest between managers and owners and discussion of agency theory state the reason of asymmetry of information and the existence of this information asymmetry in the capital market and its consequences lead to incorrect decisions by investors. Transparency of accounting information can be defined as widespread access to relevant and reliable information about the performance, financial condition, investment opportunities, governance and corporate value and risk in the economy. Transparency in financial information in one hand ensures to shareholders that they always would receive reliable information about the value of the company and major shareholders and directors are not in violation of their rights; and the other hand encourages the managers to attempt to increase the company's value rather than short term self-interest follow-up. Full disclosure along transparency of financial reporting can create secure conditions and promote investor confidence. Transparency has a positive impact on corporate performance and also can protect the interests of shareholders. Accordingly, agency costs could theoretically through the increment in risk, size and complexity of the operation have an increasing effect on the pricing of audit services [16].

2 Theoretical Framework and Literature

Transparency of financial information may be defined as widespread access to relevant and reliable information about the performance, financial condition, investment opportunities, governance and cooperate value and risk-taking in economics. Transparency in financial information in one hand ensures to shareholders that they always would receive reliable information about the value of the company and major shareholders and directors are not in violation of their rights; and the other hand encourages the managers to attempt to increase the company's value rather than short term self-interest follow-up; the purpose of accounting information is assess the quality of financial position, financial performance and financial flexibility in an entity, However, this assessment based on the theoretical concepts of financial reporting should be done according to monetary statics or quantitatively, so high quality of these monetary statics would further improve economic decision-makings. In other words, the transparency of financial information affects the quality of investment decisions. Financial Statements provide much of the information required by investors and creditors of a company. Accordingly, this level of trust is essential to the financial statements because the audited financial statements can provide certainty for investors and creditors that credible and reliable information available to them. So audited financial statements can create economic value for a company, considering the importance of auditor services and due to impossibility of direct observation of audit quality it is neces
sary to find an effective way to control the audit quality. One can say the most important aspect of control and audit quality management is audit fee (cost). The cost of audit services is an essential condition to ensure the audit quality and thus transparency of accounting information [17].

Economic benefits in accounting are provided through cost of auditor that pay to auditor and auditing institute by contracting with the clients. Many factors used to estimate the cost of auditing by the auditors that are often descriptive and many researches have been done in this regard in which many of these factors have been identified and assessed. Manager must pay a fee to him. his to use the auditing service. This fee is determined by the auditor with regard to him. his assessment of the work size and risk. Auditor to submit an expert assessment reviews the claims of management in its financial statements. These claims are proven for the auditor and providing reasonable assurance to comment that he. she could assess such claims documentation. Now, if the cost of the audit is not properly determined based on the factors affecting it, being economic of this professional activity do not provide as a necessary condition of audit services and thus also affect the auditor's professional power. By identifying factors affecting audit receivable fees can formulate the appropriate policies for some of the issues facing this profession [16].

Alali [1] examined the relationship between audit fees and non-discretionary accruals for 8187 firms between 2000 and 2006. The results showed that there is a significant positive relationship between non-discretionary accruals and audit fees. Also the audit fee has a negative relation with the firm's profitability. Companies in poor financial condition (loss) expect to pay higher audit fees, leading to increased profitability and reduced risk. Johl and Khan [9], studied the audit fee in 500 Australian firms. Their sample included companies with domestic and foreign control. They found that family firms pay less audit fees than non-family companies. The results revealed that both companies with family- and foreign-owned pay higher audit fee to big auditing organizations.

Desender et al. [5], in examining the relationship between characteristics of corporate governance and audit fee found that audit services and independence of the board are complementary when the ownership is dispersed which refers concentrated ownership and composition of the board are appropriate substitutes in overseeing the management and also concluded that the there is a relationship between composition of the board (independence and CEO duality) and audit fees. Rahman Khan et al. [15], in their paper studied the impact of cooperate ownership concentration on audit fees in emerging economies. Bangladesh is one of the samples used. The results of study the audit fee with the sponsor and the concentration of ownership has a significant negative relationship. This shows that in Bangladesh, when company controlled by sponsors and institutional investors pay less audit fees.

Lifschutz et al. [12], in his article entitled "Characteristics of corporate governance and independence audit fee" concluded that the independence of the Board (the proportion of independent directors on the board to the total directors) and diligence of audit committee (number of meetings) have a positive and significant relationship with audit fees.

Leventis and Dimitropoulos [11] examined the relationship between audit pricing, earnings quality and independence of the Board in 97 Greek companies for five financial years. Their research was done in institutional brokerage with management of excessive profit and corporate governance with poor mechanisms. The results showed that there is a positive relationship between auditor independence and audit pricing. The results showed that also the pricing of accounting has a positive relation-
ship with earnings management for small firms. Karim [10] studied the pricing of audit services and type of accounting in Bangladesh. As a result, the size of the company, the audit risk and type of accounting affect the audit services pricing. Andrade et al. [3] studied the relationship between transparency of financial statements and cost of debt. They found the quality of financial reporting perceived by investors, saving a considerable amount of financial costs and that the transparency of financial statements affects the pricing of debt contracts.

Tanani et al. [18] studied the investors’ understanding of the unusual audit fees and their reaction to these fees. The main objective of this study was to evaluate the reaction of the stock market relative to unusual audit fees. The results indicated that the stock market react positively to unusual audit fees. In other words, from investors prospective, abnormal audit fees make more information communication with stock price which has led to an increase audit quality.

Ghaemi and Alavi [6] in a study entitled the relationship between transparency of accounting information and cash inventory in Tehran Stock Exchange during the years 2004 to 2010. Their findings showed that there is a significant negative relationship between transparency of information and cash holding. In other words, companies have higher information transparency hold less cash. Mehrani et al. [13] done a research entitled factors influencing the audit fees. The results indicated that audit quality, the reputation of the client, industry expertise, budget and time spent on the audit process, the amount of the balance sheet, total assets of the companies and institutions history of the audit have positive and significant effect on the receivable fees for auditors.

Alavi Tabari et al. [1] investigated the relationship between governance and an independent audit fees. Their findings showed that the type of auditor and public and quasi-public ownership percentage have a significant relationship with independent audit fees. So that the percentage of shares in the hands of government and quasi-government is more, the higher audit fee is greater.

Hesarzadeh et al. [8] examined the aspects of accounting earning transparency and its relationship with the company attributes in the Tehran Stock Exchange. The results indicated that the impaired companies have less transparency than profitable companies. In this area, significant correlation between earnings and operating cash flow fluctuations of a later period was not confirmed.

3 The Proposed Methodology

According to the researcher's questions mentioned in problem statement section and causes the selection of research topics, the hypothesis of this study was developed in 5 hypotheses as follows:

First hypothesis: there is a significant relationship between transparency of accounting information and auditing costs.

Second hypothesis: there is a significant relationship between transparency of accounting information and audit costs in companies with high financial leverage.

Third hypothesis: there is a significant relationship between transparency of accounting information and audit costs in companies with low financial leverage.

Fourth hypothesis: there is a significant relationship between transparency of accounting information and audit costs in companies with high cash level.

Fifth hypothesis: there is a significant relationship between transparency of accounting information
and audit costs in companies with low cash level.

The aim of this study is to determine the relationship between variables. For this purpose, appropriate measures have to be adopted based on scale of variables measurement. The scale of measuring the information is a relative scale. Relative scales provide the highest and most accurate level of measurements. The research method is inductive in which theoretical foundation and research background are collected through libraries, articles and internet and to refute or substantiate the research hypothesis using appropriate statistical methods, the deductive reasoning has been used in generalizing the results. Because the purpose of research is to study the correlation between the transparency of information and audit costs, then the type of survey is correlation. The population in this research is all companies listed on Tehran Stock Exchange in which 66 companies were selected as examples of systematic research and for each variable in this study was calculated 320 data-years to test the statistical hypotheses. The research period is 5-year and since the beginning of 2011 to the end of 2016. For data analysis Kolmogorov-Smirnov test for normality of the data, Durbin-Watson test for test of errors independence or absence of autocorrelation are used and finally with the help of t-statistical tests, calculated probability is judged and assessed for each of the hypothesis. There are five main hypotheses in present study. Testing hypotheses is taken using panel data and for data analysis we used multivariate regression estimation and SPSS19, EXCEL and Eviews7 software.

4 Variables

Five hypotheses have been considered in this study. First hypothesis: there is a significant relationship between transparency of accounting information and auditing costs.

To calculate the transparency of accounting information on the cost of the audit is used of the Simonic model.

\[
\ln(\text{Fee}_i) = \alpha + \beta_1 \text{TAR}_i + \beta_2 \text{SI}_i + \beta_3 \text{QR}_i + \beta_4 \text{DE}_i + \beta_5 \text{IN}_i + \beta_7 \text{Loi} + \epsilon_i \tag{1}
\]

\(\ln(\text{Fee}_i)\): natural log of audit fees

\(\text{TAR}_i\): Transparency Index of Accounting Reporting

\(\text{SI}_i\): Size of the firm

\(\text{QR}_i\): Current Ratio

\(\text{DE}_i\): Debt of investors

\(\text{IN}_i\): book value of inventory and get on the property

\(\text{ROI}_i\): return on investment

\(\text{Loi}\): is dummy variable and if the firm has not losses within five years will be zero, but if has even a year loss will be one.

Second hypothesis: there is a significant relationship between transparency of accounting information and audit costs in companies with high financial leverage. To test this hypothesis, first have to sort the firms on the basis of financial leverage, descending to ascending. We then by property of median have to divide companies into two categories and select the second category that their financial
leverage is higher than the middle and then estimate the following regression model in companies with high financial leverage:

\[ \text{LnFee}_i = \alpha + \beta_1 \text{TAR}_i + \beta_2 \text{Sli}_i + \beta_3 \text{QR}_i + \beta_4 \text{DE}_i + \beta_5 \text{IN}_i + \beta_6 \text{ROIi} + \beta_7 \text{Loi} + \epsilon_i \] (2)

Third hypothesis: there is a significant relationship between transparency of accounting information and audit costs in companies with low financial leverage.

To test this hypothesis, first have to sort the firms on the basis of financial leverage, descending to ascending. We then by property of median have to divide companies into two categories and select the category that their financial leverage is less than the middle and then estimate the following regression model in companies with low financial leverage:

\[ \text{LnFee}_i = \alpha + \beta_1 \text{TAR}_i + \beta_2 \text{Sli}_i + \beta_3 \text{QR}_i + \beta_4 \text{DE}_i + \beta_5 \text{IN}_i + \beta_6 \text{ROIi} + \beta_7 \text{Loi} + \epsilon_i \] (3)

Fourth hypothesis: there is a significant relationship between transparency of accounting information and audit costs in companies with high cash level. To test this hypothesis, first have to sort the firms on the basis of cash, descending to ascending. We then by property of median have to divide companies into two categories and select the category that their cash is higher than the middle and then estimate the following regression model in companies with high cash:

\[ \text{LnFee}_i = \alpha + \beta_1 \text{TAR}_i + \beta_2 \text{Sli}_i + \beta_3 \text{QR}_i + \beta_4 \text{DE}_i + \beta_5 \text{IN}_i + \beta_6 \text{ROIi} + \beta_7 \text{Loi} + \epsilon_i \] (4)

Fifth hypothesis: there is a significant relationship between transparency of accounting information and audit costs in companies with low cash level. To test this hypothesis, first have to sort the firms on the basis of cash, descending to ascending. We then by property of median have to divide companies into two categories and select the category that their cash is less than the middle and then estimate the following regression model in companies with low cash:

\[ \text{LnFee}_i = \alpha + \beta_1 \text{TAR}_i + \beta_2 \text{Sli}_i + \beta_3 \text{QR}_i + \beta_4 \text{DE}_i + \beta_5 \text{IN}_i + \beta_6 \text{ROIi} + \beta_7 \text{Loi} + \epsilon_i \] (5)

Also, the variables are categorized as follows:

The dependent variable: the cost of audit (LnFee)

An audit fee is equal to the natural logarithm of fees paid by the company for external audit services during the year.

\[ \text{LnFee}_i = \text{LN} (\text{Fee paid}) \] (6)

\text{LnFee}_i: \text{audit fee}

\text{Fee paid}: \text{fees paid by firms for audit services}

Independent variables: the transparency of accounting information (TAR)

In this study, to define the transparency of accounting information (accounting earning transparency) Barth et al. model [4] has been used. This model introduces transparency with the changing earnings and stock returns. The index measures the brightness of profit is an R2 that can be achieved from regression of stock returns against profits and its changes. The index is interpreted as profit transparency, since the profit and change in profitability show the changes in economic conditions that measure by the stock returns. The following model is estimated to measure transparency [7]
\[ R_{it} = \alpha_0 + \alpha_1 \frac{\text{EPS}_{it}}{\text{Pi}_{t-1}} + \alpha_2 \frac{\Delta\text{EPS}_{it}}{\text{Pi}_{t-1}} + \epsilon_t \] (7)

\( R_{i,t} = \) annual stock return in year \( t \)

\( \text{EPS}_{i,t} = \) earnings per share before unusual items company \( i \) in year \( t \)

\( P_{i, t-1} = \) Stock price at the end of the year \( t-1 \)

\( \Delta\text{EPS}_{i, t} = \) Change in earning per share before unusual items

To calculate the annual stock return of the company following formula is used:

\[ R_{lt} = \frac{P_t(1 + \alpha + \beta) - (P_{t-1} + C \alpha) + D_t}{P_{t-1} + c \alpha} \] (8)

\( P_t: \) stock price at end of period

\( P_{t-1}: \) stock price at the beginning of the period

\( D_t: \) dividend payment in year

\( A: \) the percentage of capital increase of receivables and cash

\( B: \) the percentage of capital increase of reserves

\( C: \) nominal amount paid by the investor for the capital increase of the cash

Control variables:

1) Size of company: the natural logarithm of total assets

Six control variables are considered in this study, that are listed as follows:

\( \text{SIZE}_{i} = \ln (\text{ASSET}) \) (9)

Where

\( \text{SIZE}_{i} = \) size of the company

\( \text{ASSET}_{i} = \) total assets of the company

2) Quick ratio (QR): can be obtained from dividing current assets (excluding inventory) on the current debt.

\( \text{QR}_{i} = \) Current assets. Current liabilities

QR: quick ratio

Current assets: Current assets

Current liabilities: Current liabilities

3) The book value of inventory and receivable on total assets (IN): is calculated by dividing the book value of inventory and receivable on the assets.

\( \text{IN}_{i} = \) Book value. Total Assets

(11)
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IN: book value of inventory and receiving on the assets
Book value: book value of inventory and receiving
Total Assets: Total assets

4) Capital owners’ debt (DE): is equal to the amount of total debt at the end of the period.

5) Return on investment (ROI): is calculated by dividing the profit before extraordinary items placed on the total assets.

\[ \text{ROI}_i = \frac{\text{Profit}}{\text{Total Assets}} \]  \hspace{1cm} (12)

ROI: Return On Investment
Profit: Profit before extraordinary items
Total Assets: Total assets

6) Profit (loss) (LO): is calculated through profit (loss) at the end of the year. If the company does not have any losses in five years of will be zero, otherwise the company has even a year loss will be one.

Moderating variable:
Two moderating variables are considered as follows:

1) Financial leverage (LEV): is now calculated by dividing the company's total debt to total assets.

\[ \text{LEV}_i = \frac{\text{Total liabilities}}{\text{Total Assets}} \]  \hspace{1cm} (13)

LEV: Financial Leverage
Total liabilities: total liabilities
Total Assets: Total Assets

2) The level of cash holding (CLI): equal to the cash held in the company at the end of the fiscal year that is directly derived the cash flow statement.

5 Results of Implementing the Methodology

5.1 Testing the First Hypothesis

The first main hypothesis: "There is a significant relationship between transparency of accounting information and auditing costs."

According to the results of Table (1), since a significant level of t for the variables of book value of receiving and inventory on total assets, return on investment and company size is less than 0.05 percent. So, equality test of these three variable regression coefficients equal zero is rejected that shows these variables are significant at the 95% confidence level, therefore variables book value of inventory and receiving on total assets, return on investment and the size of the company remain in the linear regression model, Independent variable of transparency of accounting information, according to its
significance level (less than 10.0) with a confidence level of 90% is significant.

Table 1: Estimated regression for relationship between transparency of accounting information and auditing costs

<table>
<thead>
<tr>
<th>Variable</th>
<th>Abbreviation</th>
<th>Coefficient</th>
<th>t-statics</th>
<th>probability</th>
<th>Modified-2 R</th>
<th>Durbin-Watson</th>
<th>F-statics (F-prob)</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant coefficient</td>
<td>β0</td>
<td>0.142036</td>
<td>0.612076</td>
<td>0.5406</td>
<td>0.530581</td>
<td>1.984453</td>
<td>259.1910</td>
<td>320</td>
</tr>
<tr>
<td>Transparency of accounting information</td>
<td>TAR</td>
<td>-0.346096</td>
<td>-1.654118</td>
<td>0.0983</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The company's debt</td>
<td>DE</td>
<td>0.073614</td>
<td>0.915324</td>
<td>0.3602</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The book value of inventory and receiving on total assets</td>
<td>IN</td>
<td>5.06E-08</td>
<td>5.104611</td>
<td>0.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quick ratio</td>
<td>QR</td>
<td>-0.031106</td>
<td>-1.209493</td>
<td>0.2267</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Return on investment</td>
<td>ROI</td>
<td>0.257603</td>
<td>1.982528</td>
<td>0.0476</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size of the firm</td>
<td>SI</td>
<td>0.476868</td>
<td>28.26565</td>
<td>0.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Profit (loss) of Company</td>
<td>LO</td>
<td>-0.045472</td>
<td>-1.139996</td>
<td>0.2545</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The model that emerged for the first hypothesis is as follows:

\[
\ln(\text{Fee}) = 0.142 - 0.346TAR + \beta_2SI - 0.0311QR + 0.0736DE + 5.06E-08IN + 0.258ROI - 0.0455LO + \varepsilon_t \tag{14}
\]

Coefficient of model adjusted determination coefficient (0.530) indicates a relatively high explanatory power of the model to describe the dependent variable. This means that about 53% of audit fee changes is explained by the model, the regression F-statistic is equal to 259.1910which according to the probability related to the F-statistic (0000.0), results indicate that the explanatory power of the model is high. So regression models with a confidence level of 90% are generally significant. The Durbin-Watson statistics also indicate that the observed values of the disturbing elements have no correlation, because these values are 1.5 to 2.5. Therefore, there is a significant linear relationship between transparency of accounting information and accounting cost and then first hypothesis is accepted.

5.2 Testing the Second Hypothesis

The main second hypothesis: "There is a significant relationship between transparency of information data and accounting costs in companies with high financial leverage."
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Table 2: Estimated regression to the relationship between transparency of accounting information and audit cost in companies with high financial leverage

<table>
<thead>
<tr>
<th>Variable</th>
<th>Abbreviation</th>
<th>Coefficient</th>
<th>t-statics</th>
<th>Modified-R²</th>
<th>Durbin-Watson</th>
<th>F-statics (F-prob)</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant coefficient</td>
<td>β₀</td>
<td>-0.1223</td>
<td>-0.2304</td>
<td>0.8180</td>
<td>0.6007</td>
<td>2.1957</td>
<td>40.542</td>
</tr>
<tr>
<td>Transparency of accounting information</td>
<td>TAR</td>
<td>-0.0893</td>
<td>-0.1669</td>
<td>0.8676</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The company’s debt</td>
<td>DE</td>
<td>0.1095</td>
<td>0.6409</td>
<td>0.5224</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The book value of inventory and receiving on total assets</td>
<td>IN</td>
<td>5.50E-10</td>
<td>0.0181</td>
<td>0.9856</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quick ratio</td>
<td>QR</td>
<td>0.3192</td>
<td>2.2149</td>
<td>0.0280</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Return on investment</td>
<td>ROI</td>
<td>-1.4619</td>
<td>-5.8418</td>
<td>0.0000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size of the firm</td>
<td>SI</td>
<td>0.4633</td>
<td>11.28</td>
<td>0.0000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Profit (loss) of Company</td>
<td>LO</td>
<td>0.4058</td>
<td>-4.6802</td>
<td>0.0000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to calculated t values for quick ratio, company profit (loss), return on investment and firm size and also likelihood of them, the four variable regression coefficients equal zero is rejected, it shows that these variables are significant at the 95% confidence level, So variables quick ratio, profit (loss) of the company, return on investment and the size of company remain in the linear regression model, and other variables such as the independent variable of transparency of accounting information, according to its significance level is not significant at 95% confidence level. The model that emerged for the second hypothesis is as follows:

\[ \text{LnFee}_i = -0.122 - 0.09 \text{TAR} + 0.463 \text{SI} + 0.319 \text{QR} + 0.1096 \text{DE} + 5.50 \text{E-10 IN} - 1.462 \text{ROI} + 0.406 \text{LO} \]  \hspace{2cm} (15)

Coefficient of adjusted determination model (0.006) represents the explanatory power of the model to describe the dependent variable. This means that about 60% of variance explained by the model audit costs-statics of regression is equal to 40.54195 that given to the results of possibility of F-statics (0000.0) indicate the explanatory power of the model. So regression models in 95% level of confidence totally are significant. The Durbin-Watson statistics indicates that there is no correlation between the disturbing elements of the model, because these values are 1.5 to 2.5. Therefore, there is no significant linear relationship between transparency of accounting information and audit costs in
companies with high financial leverage, and the second hypothesis is not accepted.

Testing the third hypothesis

The third main hypothesis: "There is no significant relationship between transparency of accounting information and audit costs in companies with low financial leverage."

Table 3: Estimated regression to the relationship between transparency of accounting information and audit cost in firm with low financial leverage

<table>
<thead>
<tr>
<th>Variable</th>
<th>Abbreviation</th>
<th>Coefficient</th>
<th>t-statics</th>
<th>Probability</th>
<th>Modified-R2</th>
<th>Durbin-Watson (F-prob)</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant coefficient</td>
<td>$\beta_0$</td>
<td>-0.904120</td>
<td>-3.060022</td>
<td>0.0023</td>
<td>0.7096</td>
<td>1.9439</td>
<td>279.96</td>
</tr>
<tr>
<td>Transparency of accounting information</td>
<td>TA</td>
<td>-0.556738</td>
<td>-2.246221</td>
<td>0.0250</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The company's debt</td>
<td>DE</td>
<td>0.603216</td>
<td>5.190913</td>
<td>0.0000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The book value of inventory and receiving on total assets</td>
<td>IN</td>
<td>1.27E-07</td>
<td>8.230761</td>
<td>0.0000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quick ratio</td>
<td>QR</td>
<td>-0.043725</td>
<td>-1.742055</td>
<td>0.0819</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Return on investment</td>
<td>ROI</td>
<td>0.177578</td>
<td>1.160513</td>
<td>0.2462</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size of the firm</td>
<td>SI</td>
<td>0.525904</td>
<td>24.03825</td>
<td>0.0000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to the results of Table 3, t-values for the variables constant, the transparency of accounting information, the company's debt, the book value of inventory and receiving on the total assets and size of the company are less than 0.05 percent. So, this five-variable regression coefficients equal zero is rejected that it shows that these variables are significant at the 95% confidence level, therefore constant variables, the transparency of accounting information, the company's debt, the book value of inventory and receiving on total assets and the size of the company will remain in the linear regression model and other variables are not significant at 95% confidence level. The result for the third hypothesis is as follows:

$$\ln(\text{Feei}) = -0.904120 + 0.556738 TAR_i + 0.525904 SI_i + 0.603216 DE_i + 1.27E-07 IN_i$$  \hspace{1cm} (17)

And also according to the results obtained from adjusted determination coefficient (0.709) represents the explanatory power of the model to describe the dependent variable. This means that about 70.9% of variance explained by the model audit fees, the amount of regression F-statistic is equal to 279.9640 which according to probability related to F-statistics (0.0000), results indicate the explanatory power of the model because calculated F-value is significant at 0.05 error level. So regression
models are significant at 95% level of confidence. The Durbin-Watson statistic consideration indicates that there is no correlation between the disturbing elements, because these values are in range of 1.5 to 2.5. Therefore, there is a significant inverse linear relationship between transparency of accounting information and audit costs in companies with low financial leverage and then the third hypothesis is accepted.

### 5.3 Testing the Fourth Hypothesis

The main fourth hypothesis: "There is a significant relationship between transparency of accounting information and audit cost in companies with high cash level."

According to the results of Table 4, t-values for the variables constant, the transparency of accounting information, the company's debt, the book value of inventory and receiving on the total assets and size of the company, so this four-variable regression coefficients equal zero is rejected that it shows that these variables are significant at the 95% confidence level, therefore constant variables, the transparency of accounting information, the company's debt, the book value of inventory and receiving on total assets and the size of the company will remain in the linear regression model and other variables are not significant at 95% confidence level.

The result for the fourth hypothesis is as follows:

$$\ln(\text{Fee}_i) = -1.168 - 0.059 \text{TA}_i + 0.5627 \text{SI}_i + 0.319 \text{DE}_i + 2.05 \text{IN}_i + 0.653 \text{ROI}_i + 0.028 \text{LO}_i$$  \hspace{1cm} (18)

**Table 4:** Estimated regression for relationship between transparency of accounting information and audit costs in firms with high cash levels

<table>
<thead>
<tr>
<th>Variable</th>
<th>Abbreviation</th>
<th>Coefficient</th>
<th>t-value</th>
<th>Probability</th>
<th>$\tilde{R}^2$</th>
<th>Durbin-Watson</th>
<th>F-statistic (F-prob)</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant coefficient</td>
<td>$\beta_0$</td>
<td>-1.1683</td>
<td>-2.549</td>
<td>0.01</td>
<td>0.5015</td>
<td>1.7625</td>
<td>115.828 (0.0000)</td>
<td>160</td>
</tr>
<tr>
<td>Transparency of accounting information</td>
<td>$\text{TA}$</td>
<td>-0.0589</td>
<td>-0.196</td>
<td>0.84</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The company's debt</td>
<td>$\text{DE}$</td>
<td>0.319</td>
<td>2.6271</td>
<td>0.009</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The book value of inventory and receiving on total assets</td>
<td>$\text{IN}$</td>
<td>2.05E-08</td>
<td>1.6352</td>
<td>0.102</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quick ratio</td>
<td>$\text{QR}$</td>
<td>-0.0284</td>
<td>-0.9083</td>
<td>0.364</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Return on investment</td>
<td>$\text{ROI}$</td>
<td>0.6528</td>
<td>3.5666</td>
<td>0.0004</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size of the firm</td>
<td>$\text{SI}$</td>
<td>0.5627</td>
<td>16.989</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Profit (loss) of Company</td>
<td>$\text{LO}$</td>
<td>-0.028</td>
<td>-0.3504</td>
<td>0.727</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Coefficient of model adjusted determination (0.501) represents an appropriate explanatory power of the model to describe the dependent variable. This means that about 50.1% of variance explained by the model audit fees, the amount of regression F-statistic is equal to 115.8281 which according to probability related to F-statistics (0.0000), results indicate the explanatory power of the model and
being significant at the 95% confidence level. The Durbin-Watson statistic consideration indicates that there is no correlation between the disturbing elements. Therefore, there is no significant linear relationship between transparency of accounting information and audit costs in companies with high cash level, then forth hypothesis cannot be accepted.

5.4 Testing the Fifth Hypothesis

The main fifth hypothesis: "There is a significant relationship between transparency of accounting information and auditing costs in companies with low cash level."

According to the t-values for the variables constant coefficient, the size of the company and their probability, since t significant level are for these are 0.05 percent, so, the variables constant coefficient and the size of the company will remain in the linear regression model and other variables such as transparency of accounting information due to its significant level (more than 5%) are not significant at 95% confidence level. The result for the fifth hypothesis is as follows:

\[
\text{LnFee}_i = 1.395 - 0.4436TAR + 0.384328SI - 0.049725QR - 0.1761DE + 1.37E-07IN - 0.3302ROI + 0.1323LO_i
\]

Coefficient of model adjusted determination (0.383) represents a low explanatory power of the model to describe the dependent variable. This means that about 38.3% of variance explained by the model audit fees, the amount of regression F-statistic is equal to 72.05992 which according to probability related to F-statistics (0.0000), results indicate the explanatory power of the model because calculated F-values are significant at error level of 0.05. So regression model at confidence level of 95% is generally significant. The Durbin-Watson statistic also indicates that there is no correlation between the disturbing elements. Therefore, there is no significant linear relationship between transparency of accounting information and audit costs in companies with low cash level, and then forth hypothesis cannot be accepted.

Table 5: Estimated regression for transparency of accounting information and auditing costs in companies with low cash levels.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Abbreviation</th>
<th>Coefficient</th>
<th>t-statics</th>
<th>probability</th>
<th>Modified-R2</th>
<th>Durbin-Watson</th>
<th>F-statics (F-prob)</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant coefficient</td>
<td>β0</td>
<td>1.395242</td>
<td>3.031445</td>
<td>0.0025</td>
<td>0.383687</td>
<td>2.208100</td>
<td>72.05992</td>
<td>160</td>
</tr>
<tr>
<td>Transparency of accounting information</td>
<td>TA</td>
<td>-0.443618</td>
<td>-1.546699</td>
<td>0.1223</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The company's debt</td>
<td>DE</td>
<td>-0.176154</td>
<td>-1.686040</td>
<td>0.0922</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The book value of inventory and receiving on total assets</td>
<td>IN</td>
<td>1.37E-07</td>
<td>1.088563</td>
<td>0.2767</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quick ratio</td>
<td>QR</td>
<td>-0.049725</td>
<td>-1.108217</td>
<td>0.2681</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Return on investment</td>
<td>ROI</td>
<td>-0.330272</td>
<td>-1.670580</td>
<td>0.0952</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Size of the firm</td>
<td>SI</td>
<td>0.384328</td>
<td>9.912005</td>
<td>0.0000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Profit (loss) of Company</td>
<td>LO</td>
<td>0.132324</td>
<td>1.666681</td>
<td>0.0960</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
6 Conclusion

After testing the hypothesis that was done for each main hypothesis separately, it was concluded that the relationship between transparency of accounting information and audit costs at all levels of the company and also at the corporate level with low financial leverage is established. In fact, there is no significant linear relationship between transparency of accounting information and audit costs at the corporate level with high financial leverage, high cash and low cash. The results obtained from research of Mehrani et al. [13], indicate that the quality of the audit report, the reputation of the client, industry expertise, budget and time spent on the audit process, the amount of the balance sheet, total assets of the company and history of audit institutions has significant influence on the receivable fees from the auditor, that are consistent with the results of this study. In the study found no link between transparency and audit costs.

Griffin et al. [7] showed that increasing debt levels in companies with high free cash flows reduced the amount of audit fees. That is not consistent with the results of this research. According to the findings seem the conflict of interest between managers and owners and discussion of agency theory could not explain the existence of information asymmetry. Tsui et al. [19] assessed the Jensen hypothesis in the context of the audit and investigated this issue whether the agency problem of free cash flow make changes in the level of audit risk and auditor efforts reflected in audit fees. These researchers by testing the companies with high free cash flows and low growth opportunities, observed a significant positive correlation between agency problem resulting from cash flows and audit fees that is not consistent with the results of this research.

References


