

# Effects of Short-Term Accruals on the Pricing of Audit Services

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## Abstract

This study investigates the relationship between short-term accruals and pricing of audit services in the Tehran Stock Exchange during the period 2009-2014 will be discussed. For this study, the 90 companies listed in Tehran Stock Exchange for the period was determined. To test study hypothesis by regression analysis using software integrated in all companies use EViews6 In this study to determine the audit fees were used for short-term accruals.

The dependent variable pricing study audit services to assess which of the four criteria, audit fees, the natural logarithm effort, the natural logarithm of the investment cost of the audit, the natural logarithm was used to increase the selling price. Also in this study, the control variables of the current debt ratio of short-term investments, financial debt ratio, return on assets, long-term financial leverage, the rate of depreciation expense, size, and variable operating loss was ambivalent.

The findings suggest that short-term accruals and effort spent on the remuneration of the auditors' audit and the audit contract gross profit and significant positive impact, but the impact on the auditor's fee when the investment is negative and significant. In this study, the control variables depreciation expense spent on trying the resort's auditors have a positive impact and meaning.

**Keywords:** short-term accruals, pricing of audit services, audit fees, effort, and money invested time auditor.

## 1. Introduction

During the past few decades, there have been tremendous efforts on learning the effects of audit fees on profitability of firms (Fama & French, 1997; Fama & MacBeth, 1973; Dechow et al., 1995; Dechow & Dichev, 2002). Simunic (1980) identified determinants of audit fees and categorized them into three distinct groups: auditee size, operation complexity, and inherent audit risk. He reported that the level of audit fees could increase in client firms' size, operation complexity, and inherent audit risk because more quantity of resources utilized by the auditor in performing the audit examination would be needed and auditors were exposed to larger possible litigation risks when auditing become more complex. After controlling these three groups of fee determinants, subsequent studies explored additional audit fee determinants including auditor size, non-audit services, auditor change, auditor change direction, auditor brand name and industry specialization, client satisfaction, client risks, client bargaining power, audit committee characteristics, internal control quality, SOX passage, crosslisting and country's legal regimes, education requirement for new accountants, and audit market competition (Sohn, 2011; Palmrose 1986a, 1986b; Francis & Simon 1987; Simon & Francis 1988; Craswell et al., 1995; Behn et al., 1999; Craswell & Francis, 1999; Johnstone & Bedard, 2001; Whisenant et al., 2003; Abbott et al., 2003; Ashbaugh et al., 2003; Chaney et al., 2004; Hay et al., 2006; Huang et al., 2007; Hogan & Wilkins, 2008; Huang et al., 2009; Choi et al., 2009; Allen & Woodland, 2010, Hay & Knechel 2010; Fudenberg & Tirole, 1995; Hoitash et al., 2008).

The studies on the relationship between earnings management and audit fees are relatively scarce and only concerned with accrual-based earnings management (AEM). Gul et al. (2003) reported some empirical evidence that the audit fees could increase in the level of unsigned discretionary accruals. They argued this is because, to the extent that discretionary accruals proxy for managerial opportunism, they provide managers with a means of managing reported earnings to their advantage (Healy, 1985), and because accruals are associated with high-risk accounts such as accounts receivable and inventories (Willingham & Wright, 1985; Kreutzfeldt & Wallace, 1986).

Abbott et al. (2006) reported that the effect of discretionary accruals on audit fees was positive in the magnitude of income-increasing but negative in the magnitude of income-decreasing accruals due to the asymmetric litigation risks for auditors. Antle and Gordon (2006) reported a negative relationship between audit fees and their measure of signed discretionary accruals, which is inconsistent with Abbott et al. (2006). However, no study on audit fees thus far investigated whether and how real earnings management (REM) of client firms influences their level of audit fees. Roychowdhury (2006) developed empirical models that allow researchers to separate the normal levels of real operational activities as reflected in cash flows from operations

(CFO), production costs, and discretionary expenditures from their abnormal levels. His analysis shows that managers engage in real activities manipulation to meet certain earnings targets.

Since Roychowdhury's work, subsequent studies dealing with REM issues have provided evidence supporting that, while the expected, normal levels of real activities were associated with optimal operational decisions, their unexpected, abnormal levels capture managerial opportunism to intervene in the financial reporting process. One strand of previous REM research has focused on whether managers use REM as a substitute or complement for AEM when making strategic decisions on the timing and magnitude of earnings manipulation. For instance, Zang (2007) studied AEM and REM, and reported that managers could make REM decisions before making AEM decisions around the end of accounting period. Cohen et al. (2008) examined the effect of the SOX passage on managerial choice between AEM and REM. They documented that firms were heavily involved in AEM in the pre-SOX period, but their involvement in AEM declined significantly after the passage of SOX.

Consistent with Zang (2007), their finding shows that the passage of SOX motivates companies to switch from AEM to REM. This happens for the following reasons: REM is harder for external auditors, regulators, and other stakeholders to detect, compared with AEM. Further, expected legal liability costs associated with AEM increase substantially in the post-SOX environment due to heightened financial reporting regulations and additional certification requirements, while the same costs associated with REM do not. Therefore, REM becomes (relatively) less costly in the post-SOX period than AEM. The above evidence is consistent with the analytical results of Ewert and Wagenhofer (2005) who demonstrated that managers switch from AEM to REM in an environment of tightened accounting standards or more stringent enforcements. Graham et al. (2005) reported that the large majority of managers were willing to delay the timing of new investment projects to meet a certain earnings target even when such a deferment had adverse implications on long-term value. A subsequent study by Cohen and Zarowin (2010) investigates the behaviors of REM and AEM around seasoned equity offerings (SEOs), i.e., during the period in which managers had relatively high incentives to artificially inflate current-period earnings. Consistent with Zang (2007) and Cohen et al. (2008), they also reported that SEO firms had substituted from AEM to REM in the post-SOX period as SOX had made AEM more costly than REM (e.g., increased litigation risk associated with AEM).

The above results, taken as a whole, imply that managers take into account potential costs and benefits associated with their choice between AEM and REM. While the primary concern of the aforementioned studies is with the trade-off relationship between AEM and REM as a means to meet earnings management objectives, the other strand of REM research concentrates on economic consequences of REM. For example, Gunny (2010) reported that REM was inversely associated with future-period earnings and cash flow performance, which is consistent with the view that managers manipulate current-period earnings at the expense of future firm value. Using a sample of SEO firms, Mizik and Jacobson (2007) reported that to temporarily inflate stock prices at the time of SEOs, managers engage in boosting reported earnings via cutting marketing expenses, but in the long run, such managerial myopia leads to a decline in stock market performance.

Kim and Sohn (2010) reported that the cost of equity capital increases with firms' REM activities and that this asset pricing consequence of REM was larger than that of AEM. However, none of the previous studies on REM has investigated whether and how REM of their client firms influences auditors' determination of the level of audit fees. Unlike AEM, the effect of REM on the level of audit fees is *ex ante* not clear. On one hand, REM may have limited effect on the auditing fee level.

Real operation adjustments such as discounting sales prices, granting more lenient credit terms, conducting overproductions, and reducing or deferring R&D and advertising expenditures can be a result of optimal business decisions. Thus, it is difficult for auditors to distinguish opportunistic REM from the operation adjustments based on optimal business decisions. Even when auditors suspect an opportunistic REM, it is usually not their direct jurisdiction. As long as firms comply with the existing GAAP in preparing their financial statements, auditors may have a limited rationale to charge higher audit fees to restrict the detected REM. Then, the extent of the opportunistic REM will not influence on the level of audit fees. On the other hand, there is a possibility that auditors may have incentives to charge higher fees on their client firms engaging in more extensive REM activities.

REM increases the complexity of reported accounting numbers by adding noise to accruals and cash flows and by distorting firms' long-term cash flow generating abilities (Kim & Sohn, 2010). In the process of verifying their client firms' compliance with accounting standards and detecting AEM, auditors require to put more resources to the firms with more extensive REM. It is because the reported earnings are more "contaminated" by different real operation manipulation activities and because the impacts of AEM and REM get entangled in distorting reported earnings. It can be difficult and more resource-consuming to tease out the portion of manipulated earnings through violating GAAP from that through REM. Therefore, auditors need to recover their higher costs in the form of increased audit fees. Another aspect for the auditors' incentives to charge higher audit fees on firms with more intensive REM relate to the shareholder litigation risk. To the extent

that investors fixate on the nominal level of current earnings, stock prices of such firms are overestimated.

However, this temporarily boosted stock prices fall when investors recognize the true status of firms' cash flow generating abilities over time. If stock price is boosted by the upwardly manipulated earnings through AEM and falls subsequently when the firm's real fundamental is disclosed, shareholders may sue the firms' auditors for their losses. If managers use REM in addition to AEM, and the extent of stock price boosting is thus bigger than when they use only AEM, shareholders are more likely to sue auditors by holding them responsible for failing in AEM mitigation. Because auditors know that litigation risk increases due to adding REM to AEM, they have incentives to be extant compensated for this increased litigation risk through higher audit fees. Consistent with this argument, Kim and Park (2009) documented that auditors care about REM in client change. Therefore, it is an empirical question whether REM is positively related to the level of audit fees, especially after controlling for the effects of other audit fee determinants and AEM.

## 2-The hypothesis of study

According to the existing literature and theory and research mentioned in the history of research in the following research hypotheses expressed:

- In constant terms, the auditor in response to increased levels of short-term accruals that could be indicative of earnings management by a customer, higher fees are levied
- Assuming a constant other conditions, audit in response to increased levels of short-term accruals that could be indicative of earnings management by a client, the volumes are used more audit.
- With other conditions constant, auditing, in response to increased levels of short-term accruals that could be indicative of earnings management by a customer, a more experienced personnel / specialist more (expensive) are used.
- With other conditions constant, gross profit contracted by the short-term accruals that could be indicative of earnings management by a client, is placed.

## 3-Method and measure variables

According to the study to evaluate the effect of short-term accruals on pricing and production Tehran's audit services in the securities market, so this study was conducted in terms of correlation among the studies. In this study, the correlation between the variables tested, and then the regression model. In this study, the analysis, the methods, the method of "data combination / fusion" is used. This technique (combination / fusion) that the combined cross-sectional and time series data that is now widely used by researchers. The procedure for cases that cannot be in the form of time series or cross-sectional issues, or when the number of data is low, is used. The integration of cross-sectional and time series data and the need to use it, than to increase the number of observations raise the degree of freedom, reducing Volatility and reduce the time between variables is linear. The variables of this study was to test the hypotheses, the three independent variables, dependent and control, which are calculated as follows.

- **The independent variable:**

The independent variable used in this study, short-term accruals.

- **The dependent variable:**

The dependent variable pricing audit services is based on the following criteria:

Audit fees: the natural logarithm of the product costs / fees  $\times$  hours / day  $\times$  costs

The natural logarithm effort: the amount of effort spent during an audit shows.

The natural logarithm of the investment cost of the audit, the audit revealed that the cost of time invested in it and the effects of more experienced workers / more expensive (eg, labor composition) shows the natural logarithm of the rising cost of sales (gross profit contract auditor) Gross profit (profit margin) or the rising cost of sales (sales margin) the contract reflects.

- **Control variables**

Control variables as other factors affecting pricing audit services include:

- **Ratio of current liabilities:** Current liabilities divided by total assets at the end of the financial year are achieved.
- **The ratio of short-term investments:** Short-term investments divided by total assets at the end of the financial year are achieved.
- **Financial debt:** financial debt divided by total assets at the end of the financial year is achieved.
- **Return on assets:** Net profit divided by total assets at the end of the financial year is achieved.
- **Long-term financial leverage** of non-current liabilities divided by total assets at the end of the financial year is achieved.
- **Rates of depreciation expense,** amortization expense at the end of the fiscal year and the average rate of depreciation expense divided by the total depreciation of fixed assets at the end of the fiscal year are

achieved.

- **Size:** the natural logarithm of assets
- **Ambivalent variable operating losses:** virtual variable and if at the end of the financial company with operating losses, the amount of which is assumed to be 1 and 0 otherwise.

In this study to test the hypothesis of the study, 4 regression models in combination / fusion is estimated as follows:

$$FEE_{it} = \beta_0 + \beta_1 LR_{it} + \beta_2 COL_{it} + \beta_3 STL_{it} + \beta_4 FINL_{it} + \beta_5 ROA_{it} + \beta_6 LEV_{it} + \beta_7 CAP_{it} + \beta_8 SIZE_{it} + \beta_9 LOSS_{it} + \varepsilon_{it}$$

$$HOURS_{it} = \beta_0 + \beta_1 LR_{it} + \beta_2 COL_{it} + \beta_3 STL_{it} + \beta_4 FINL_{it} + \beta_5 ROA_{it} + \beta_6 LEV_{it} + \beta_7 CAP_{it} + \beta_8 SIZE_{it} + \beta_9 LOSS_{it} + \varepsilon_{it}$$

$$COSTHRS_{it} = \beta_0 + \beta_1 LR_{it} + \beta_2 COL_{it} + \beta_3 STL_{it} + \beta_4 FINL_{it} + \beta_5 ROA_{it} + \beta_6 LEV_{it} + \beta_7 CAP_{it} + \beta_8 SIZE_{it} + \beta_9 LOSS_{it} + \varepsilon_{it}$$

$$FEECOST_{it} = \beta_0 + \beta_1 LR_{it} + \beta_2 COL_{it} + \beta_3 STL_{it} + \beta_4 FINL_{it} + \beta_5 ROA_{it} + \beta_6 LEV_{it} + \beta_7 CAP_{it} + \beta_8 SIZE_{it} + \beta_9 LOSS_{it} + \varepsilon_{it}$$

The model we have:

**FEE<sub>it</sub>** : Audit fees (as the natural logarithm of the product costs / fees × time / cost × hours) at the end of the period t for company I.

**HOURSE<sub>it</sub>** : The natural logarithm of the audit effort, the company I at the end of the financial year t.

**COSTHRS<sub>it</sub>** : The natural logarithm of the auditor's fee when the investment firms I at the end of the financial year t

**FEECOST<sub>it</sub>** : The natural logarithm of the rising cost of sales (gross profit contract auditor) of the company I at the end of the financial year t

**LR<sub>it</sub>** : Short-term accruals firm I at the end of the fiscal year t

**COL<sub>it</sub>** : Current debt ratio of firm I at the end of the fiscal year t

**STL<sub>it</sub>** : The ratio of short-term investments Firm I at the end of the fiscal year t

**FINL<sub>it</sub>** : Financial debt of firm I at the end of the fiscal year t

**ROA<sub>it</sub>** : Return on assets of firm I at the end of the financial year t

**LEV<sub>it</sub>** : Long-term financial leverage of firm I at the end of the financial year t

**CAP<sub>it</sub>** : Rates of depreciation expense of firm I at the end of the financial year t

**SIZE<sub>it</sub>** : The size of firm I at the end of the financial year t

**LOSS<sub>it</sub>** : Ambivalent variable operating losses of firm I at the end of the fiscal year t

The pre-estimate regression models to test hypotheses on four case studies, the choice of model for paid regression model. Then, using the F Lymer test integrated data model to the data model combined (fixed effects) will be discussed.

#### 4-Community sample

The population of this research is companies listed in Tehran Stock Exchange. Due to the extent of inconsistency between the population and the presence of some members of the following criteria to select the sample and the sample of the above conditions are:

1. The company's financial year to the end of March each year.
2. During the years 2008 to 2012, the fiscal year has not changed.
3. By the end of fiscal year 2007 the company is listed in the Tehran Stock Exchange.
4. The company's stock trades on the Tehran Stock Exchange is done continuously over a month to stop the trading of the shares is referred to happen.
5. The financial information required in order to extract the required data is available.

In this study, the sample of the population of listed companies in the Tehran Stock Exchange for the period, based on the circumstances and noted that part of the population, are selected. According to the above conditions, as a sample of 90 companies, were selected.

## 5-Hypotheses testing

In this study will be used to analyze data from different tests, including descriptive indicators in the descriptive statistics and statistical methods in inferential statistics. Inferential statistical tests that have been done on the correlation test, t-test and multivariate linear regression well. Using correlation, in addition to testing hypotheses, the relationship between independent variables and the dependent and independent variables influencing factor of the relationship (positive or negative coefficient) also will be estimated. Because of the impact of short-term accruals on pricing and production of audit services in Tehran Help securities deals, so this study was conducted in terms of correlation among the studies. In this study, the correlation between the variables tested, and then the regression model.

In this study, the analysis, the methods, the method of "data combination / fusion" is used. The fan (mix / compilation) of time series data and cross-combined together, it is widely used by researchers to be. If they cannot use this method in the form of time series or cross-sectional issues, or when the number of data is low, is used. The integration of cross-sectional time series data and the need to use it, than to increase the number of observations raise the degree of freedom, reducing Volatility and reduce the time between variables is linear.

### 5-1-The first hypothesis testing study

With other conditions constant, auditing, in response to increased levels of short-term accruals that could be indicative of earnings management by a customer, higher fees are levied. Before testing the hypothesis in the entire company, the choice has been a model for regression model. Then, using the F Lymer test integrated data model to the data model has been mixed. F Lymer test results is presented in Table 1. F Lymer probability statistics in Table 1 below the 5% level of significance, and so, to test hypotheses in the entire company, using consolidated data is sought.

Table 1. Select the combined data from the combined data

<b>model</b>	$FEE_{it} = \beta_0 + \beta_1 LR_{it} + \beta_2 COL_{it} + \beta_3 STI_{it} + \beta_4 FINL_{it} + \beta_5 ROA_{it} + \beta_6 LEV_{it} + \beta_7 CAP_{it} + \beta_8 SIZE_{it} + \beta_9 LOSS_{it} + \varepsilon_{it}$		
<b>Test</b>	<b>P-value</b>	<b>Degree of freedom</b>	<b>Probability of test</b>
<b>F Lymer</b>	<b>7.50</b>	<b>(89,351)</b>	<b>0.0</b>

Because of the lack of integrated data model data in combination to perform Hausman test to select the fixed effects model combines the random effects model has been mixed. Hausman test result is provided in Table 2. Hausman statistic probability in Table 2 below the 5% significance level. Therefore, there is no good reason to reject the fixed effects model and fixed effects model to test the hypothesis of study should be used.

Table 2. Select a fixed effects model against the random effects model

<b>model</b>	$FEE_{it} = \beta_0 + \beta_1 LR_{it} + \beta_2 COL_{it} + \beta_3 STI_{it} + \beta_4 FINL_{it} + \beta_5 ROA_{it} + \beta_6 LEV_{it} + \beta_7 CAP_{it} + \beta_8 SIZE_{it} + \beta_9 LOSS_{it} + \varepsilon_{it}$		
<b>Test</b>	<b>P-value</b>	<b>Degree of freedom</b>	<b>Probability of test</b>
<b>Hausman</b>	<b>17.94</b>	<b>9</b>	<b>0.0360</b>

Fixed effects regression models combined effect of short-term accruals on audit fees during the 5-year study at the level of companies, is presented in Table 3.

The results in Table 3 show that the impact of short-term accruals accounting fees, positive (29/0), but considering the probability statistic t (6098/0) is not significant. This indicates that audit fees are not influenced by short-term accruals. In other words, the fees of independent auditors of the company's client's short-term accruals and short-term accruals, significantly, do not affect the remuneration of the auditors. The results also show that the control variables examined on audit fees, no impact.

Results for F statistics show that the model was significant in general and with regard to Durbin-Watson statistic is no problem of autocorrelation. In addition, the coefficient of determination adjusted results show that about 18% study the total audit fee changes under the influence of short-term accruals and control variables research. The remaining amount of regression model with statistics and probability statistics Jarque Bera of 2.16 to 0.34 which indicates normal regression residues. Given the lack of significant short-term impact of accruals on audit fees, the study hypothesis is not confirmed at the level of companies.

Table 3. Short-term accruals regression model the impact on audit fees

variables	coefficient		t-test		probability
constant	93/19		43/15		0000/0
LR	29/0		51/0		6098/0
COL	78/0		69/0		4899/0
STI	-68/2		-58/1		1153/0
FINL	-32/1		-39/1		1650/0
ROA	-04/0		-18/0		8593/0
LEV	-54/0		-06/1		2910/0
CAP	-51/1		-77/0		4413/0
SIZE	06/0		67/0		5052/0
LOSS	19/0		79/0		4320/0
Durbin-Watson	F test	Jaque Bera probability	Jaque Bera	Adjustment determination of coefficient	Determination of coefficient
2.182	0.0	0.34	2.16	0.180	0.171

### 5-2-Second hypothesis test

With other conditions constant, auditing, in response to increased levels of short-term accruals that can represent a customer-profit management, audit the volume to utilize more. F Lymer test results in Table 4 are presented. F Lymer probability statistics in Table 4 for more than 5% level of significance, and so, to test hypotheses in the companies, using consolidated data is appropriate.

Table 4. Select the data integration data in combination

model	$HOURS_{it} = \beta_0 + \beta_1 LR_{it} + \beta_2 COL_{it} + \beta_3 STI_{it} + \beta_4 FINL_{it} + \beta_5 ROA_{it} + \beta_6 LEV_{it} + \beta_7 CAP_{it} + \beta_8 SIZE_{it} + \beta_9 LOSS_{it} + \varepsilon_{it}$		
Test	P-value	Degree of freedom	Probability of test
F Lymer	0.76	(89,351)	0.9360

Due to the integrated data model combines data Hausman test to select the fixed effects model combines the random effects model combination has been refused. Regression model combined effect of short-term accruals efforts spent by the auditors during the 5-year period at the company's study, is presented in Table 5. The results in Table 5 shows that the effect of short-term accruals efforts spent by auditors as positive (0.23), but considering the probability statistic t (0.2403) is not significant. This suggests that short-term accruals not affect the effort spent by auditors. In other words, the effort spent by auditors independent of short-term corporate client's accruals and short-term accruals; significantly, affect the effort spent by auditors. The results also show that the control variables examined by auditors on effort, not the effect.

Results for F statistics show that the model is not significant in general, but due to the Durbin-Watson statistic is no problem of autocorrelation. In addition, the results of the adjusted coefficient of determination shows that the entire study period, only 0.1% of change efforts spent by auditors under the influence of short-term accruals and control variables research. The remaining amount of regression model with statistics and probability statistics Jarque Bera 0.33 to 2.23 which indicates the normality of regression residuals. Given the lack of significant short-term impact of accruals on the effort spent by auditors, the second hypothesis is not confirmed at the level of companies.

Table 5. The regression model the impact of short-term accruals efforts spent by auditors

variables	coefficient		t-test		probability
constant	5.85		21.69		0.0
LR	0.23		1.18		0.2403
COL	-0.38		-1.29		0.1960
STI	0.46		1.64		0.1024
FINL	-0.12		-0.55		0.5831
ROA	-0.05		-0.59		0.5540
LEV	-0.09		-0.55		0.5845
CAP	-0.48		-0.79		0.4272
SIZE	0.01		0.76		0.4501
LOSS	0.02		0.19		0.8472
Durbin-Watson	F test	Jarque Bera probability	Jarque bera	Adjustment determination of coefficient	Determination of coefficient
2.102	0.4372	0.33	2.23	0.001	0.020

### 5-3-The third hypothesis testing study

With other conditions constant, auditing, in response to increased levels of short-term accruals Results can be indicative of earnings management by a customer, a more experienced personnel / specialist more (expensive) are used.

F lymer test results is presented in Table 6. Lymer probability F statistics in Table 6 more than the 5% level of significance, and so, to test the hypothesis at the level of companies, using consolidated data is appropriate.

Table 6. Selection of panel data from the combined data

model	$COSTHRS_{it} = \beta_0 + \beta_1 LR_{it} + \beta_2 COL_{it} + \beta_3 STI_{it} + \beta_4 FINL_{it} + \beta_5 ROA_{it} + \beta_6 LEV_{it} + \beta_7 CAP_{it} + \beta_8 SIZE_{it} + \beta_9 LOSS_{it} + \varepsilon_{it}$			
	Test	P-value	Degree of freedom	Probability of test
	F Lymer	0.43	(89,351)	1.0

Short-term accruals regression model combined impact on the cost of the time invested by the auditors during the 5-year study at the level of companies, is presented in Table 7. The results in Table 7 show that the effect of short-term accruals over time the cost of investment by auditors, negative (-0.12) but considering the probability statistic t (0.2879) is not significant. This suggests that short-term accruals by the auditors also affect the cost of the investment. In other words, the cost of the investment by auditors independent of short-term corporate clients accruals and short-term accruals, dramatically, the cost of the investment is not affected by auditors. The results also show that the control variables analyzed, depreciation expense of efforts spent by auditors, the impact is significant and positive. Results for F statistics show that the model is not significant in general, but due to the Durbin-Watson statistic is no problem of autocorrelation. In addition, the results show that the coefficient of determination adjusted in the course of study, only 0.1% of the time invested by the auditors under the influence of changes in the cost of short-term accruals and control variables research. The remaining amount of regression models for the Jarque Bera has a statistic and probability of 0.46 to 0.79 for the Jarque Bera statistic that indicates the remaining regression is normal. Given the lack of significant short-term impact on the cost of the investment accruals by auditors predicted in the study also confirmed the companies are not.

Table 7. Short-term accruals regression model the impact on the cost of the time invested by the auditors

variables	coefficient		t-test		probability
constant	8.70		59.33		0.0
LR	-0.12		-1.08		0.2879
COL	0.02		0.10		0.9197
STI	-0.08		-0.52		0.6027
FINL	-0.01		-0.06		0.9557
ROA	-0.05		-1.13		0.2590
LEV	0.02		0.25		0.8009
CAP	0.78		2.37		0.0185
SIZE	0.005		0.55		0.5826
LOSS	-0.02		-0.36		0.7154
<b>Durbin-Watson</b>	<b>F test</b>	<b>Jaque Bera probability</b>	<b>Jaque Bera</b>	<b>Adjustment determination of coefficient</b>	<b>Determination of coefficient</b>
1.952	0.4365	0.79	0.46	0.001	0.020

### 5-4-The fourth hypothesis testing study

With other conditions constant, gross profit is affected by the level of accruals short-term contracts indicative of earnings management by a client can be placed. Then, using the F lymer test integrated data model to the data model has been mixed. F Lymer test results are presented in Table 8. F Lymer probability statistics in Table 8 below the 5% level of significance, and so, to test hypotheses in the entire company, using consolidated data is sought.

Table 8. Select the data integration data in combination

model	$FEECOST_{it} = \beta_0 + \beta_1 LR_{it} + \beta_2 COL_{it} + \beta_3 STI_{it} + \beta_4 FINL_{it} + \beta_5 ROA_{it} + \beta_6 LEV_{it} + \beta_7 CAP_{it} + \beta_8 SIZE_{it} + \beta_9 LOSS_{it} + \varepsilon_{it}$		
	Test	P-value	Degree of freedom
	F Lymer	10.35	(89,351)
			Probability of test
			0.0

Because of the lack of integrated data model data in combination to perform Hausman test to select the fixed effects model combines the random effects model has been mixed. Hausman test result is presented in Table 9. Hausman statistic probability Table 9 more than the significance level of 5%. Therefore, there is no good reason to reject the random effects model and random effects model to test the hypothesis fourth study should be used.

Table 9. Select the model of fixed effects, random effects model

model	$FEECOST_{it} = \beta_0 + \beta_1 LR_{it} + \beta_2 COL_{it} + \beta_3 STI_{it} + \beta_4 FINL_{it} + \beta_5 ROA_{it} + \beta_6 LEV_{it} + \beta_7 CAP_{it} + \beta_8 SIZE_{it} + \beta_9 LOSS_{it} + \varepsilon_{it}$		
	Test	P-value	Degree of freedom
	Hausman	14.64	9
			Probability of test
			0.1014

Random effects regression model combines short-term impact of accrual accounting on gross profit during the 5-year contract in the company's study, is presented in Table 10.

The results in Table 10 show that the short-term impact on gross profit accruals audit contract, positive (0.44), but considering the probability statistic t (0.3496) is not significant. This suggests that short-term accruals accounting effect on gross profit is not a contract. In other words, gross margin contracted independent auditors of the companies clients short-term accruals and short-term accruals, significantly, does not affect gross profit contract auditors. The results also show that the control variables assessed on gross contract auditors, not the effect. Results for F statistics show that the model is not significant in general, but due to the Durbin-Watson statistic is no problem of autocorrelation.

In addition, the results show that the coefficient of determination adjusted in the total study period was about 1% of the gross contract accounting changes under the influence of short-term accruals and control variables research.

The remaining amount of statistical regression model for the Jarque Bera test of 4.31 and likely to remain equal to 0.12 which indicates regression is normal. Given the lack of significant short-term impact on gross profit accruals audit contract, study time in the company's fourth hypothesis cannot be confirmed.

Table 10. Short-term accruals regression model the impact on gross profit audit contract

variables	coefficient	t-test	probability		
constant	5.65	5.90	0.0		
LR	0.44	0.94	0.3496		
COL	0.71	0.81	0.4211		
STI	0.22	0.20	0.8429		
FINL	-0.75	-1.05	0.2948		
ROA	0.24	1.33	0.1830		
LEV	-0.15	-0.36	0.7217		
CAP	-0.33	-0.21	0.8348		
SIZE	-0.003	-0.04	0.9661		
LOSS	0.09	0.43	0.6665		
Durbin-Watson	F test	Jaque Bera probability	Jaque Bera	Adjustment determination of coefficient	Determination of coefficient
1.595	0.8791	0.12	4.31	0.180	0.171

## 6-Conclusion

### 6-1-Conclusion of the first hypothesis study

The first hypothesis study was to follow this issue whether the other conditions constant, auditing, in response to increased levels of short-term accruals that could be indicative of earnings management by a customer, higher fees are levied?

The impact of short-term accruals accounting fees, according to the probability of positive t-statistic is not significant. This indicates that audit fees are not influenced by short-term accruals. In other words, the fees of



independent auditors of the company's client's short-term accruals and short-term accruals, significantly, do not affect the remuneration of the auditors.

The hypothesis concerning the lack of impact on the remuneration of short-term accruals accounting, contrary to previous research results, Gaults, Tsui (1998), Nixon et al. (2005) is.

The assumption about short-term accruals no impact on audit fees, in accordance with the results of previous research.

The results of this hypothesis with the results of the test this hypothesis, suggesting that short-term accruals fee independent auditors of the companies clients and short-term accruals, significantly, does not affect the remuneration of the auditors.

### **6-2-Conclusion of the second hypothesis**

The second hypothesis of the research is to study the issue whether the other conditions constant, auditing, in response to increased levels of short-term accruals that could be indicative of earnings management by a customer, the volume of audit utilize more?

To investigate this hypothesis in the company's short-term impact of accruals on the effort spent by the auditors of the combined regression model was used, according to the results of the F Lymer test. The results of this thesis are summarized as follows. The impact of short-term accruals efforts spent by auditors as positive but not significant considering the possibility of t-statistics. This suggests that short-term accruals not affect the effort spent by auditors.

The assumption about short-term accruals no impact on the effort spent by auditors, contrary to previous research results, Vetsvoy Gol(1998), Nikson and et al (2005), Grifin et al (2009 ) respectively.

The assumption about short-term accruals no impact on the efforts spent by the auditors in accordance with the results of previous research Saymonik (1980), Badri (2000), vice et al. (2003), Rajabi and Khoshoei (2008), respectively.

The results of this hypothesis with the results of the test this hypothesis, suggests that efforts spent by auditors independent of short-term accruals corporate clients and short-term accruals, significantly, does not affect the effort spent by auditors.

### **6-3-The results of the third hypothesis study**

The third hypothesis study was to follow this issue whether the other conditions constant, auditing, in response to increased levels of short-term accruals that could be indicative of earnings management by a customer, a more experienced personnel / specialist more (expensive) are used?

To investigate this hypothesis in the company's short-term impact on cost accruals time invested by the auditors of the combined regression model was used, according to the results of the F Lymer test.

The results of this thesis are summarized as follows:

The impact of short-term accruals time cost invested by the auditors, but the likely negative t-statistic is not significant. This suggests that short-term accruals by the auditors also affect the cost of the investment. In other words, the cost of the investment by auditors independent of short-term accruals corporate clients. The results also show that the control variables analyzed, depreciation expense of efforts spent by auditors, the impact is significant and positive. The result of the test this hypothesis, suggests that the logarithm of the cost of the investment was not a significant variable related accruals. Short-term accruals, dramatically, the cost of the investment is not affected by auditors.

### **6-4-The results of the fourth study hypothesis**

The fourth hypothesis study was to follow this issue whether the other conditions constant, gross profit level of accruals under the influence of short-term contracts that can be indicative of earnings management by a customer, are? To investigate this hypothesis in the entire company, the random effects regression model mix effect on gross profit accruals short-term contract at the level of auditing companies, chose to test the fourth hypothesis. The results of this thesis can be summarized as follows:

Short-term impact on gross profit accruals audit contract, but given the likely positive t-statistic is not significant. This suggests that short-term accruals accounting effect on gross profit is not a contract. In other words, gross margin contracted independent auditors of short-term corporate clients accruals and short-term accruals, significantly, does not affect gross profit contract auditors. The result of the test this hypothesis, suggests that a logarithmic increase in variable selling price (gross contract) with variable accruals (LR) no significant relationship. The fourth hypothesis was not confirmed in this study.

### **7-Discussion, conclusions and suggestions**

The risk associated with higher levels of auditing can benefit accruals which reflect management's efforts to adjust or modify audit fees, the answer. Based on previous research in the field of audit fees and production, has

been a model for audit fees, audit efforts, the composition of the workforce and gross profit has been created to determine whether the activities of an auditor under the impact of changes in short-term accruals sign that may indicate the potential benefits of management is placed. Unlike study (Aschelman and Nechel, 2010) Preliminary results of this study indicate that short-term accruals signed as positive audit fees as well as the whole audit effort, but not significant. These results do not support the H1 and H2. Also according to the same study, in this study the relationship between accruals and the cost per hour (Combined Task Force) or the gross profit analysis found. Overall, the study results showed that the auditing effort and the level of their fees in response to the short-term accruals are independent, but indirect evidence suggests that the auditing even if not the full cost to the customer refused, they may the effort and the level of their fees in response to an increased level of short-term accruals. (At least in the short run). According to the results of Griffin et al., The results also indicated that significant, but opposite effect on the debt audit commission has investigated companies. This means that an increase in the fee of the auditor to the company, the debt will be reduced. Considering the fact that the auditors' fees, a category that concepts such as conservatism, accrual quality, predictability profit, non-smoothing and time is appropriate, we suggest that further studies of the relationship between remuneration auditors and above should be carried out.

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