

Does Audit Risk Affect The Audit Fee?

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Abstract: The risk assessment procedure is the most significant procedure in a general audit. Risk assessment is commonly used to assess the risks of any potential material misstatement. In assessing risk, an auditor considers three major components consisting of inherent risk, control risk, and detection risk. This research aims to examine empirically whether these three audit risk components significantly affect the audit fee. The three components of audit risk can be considered by an auditor at a public accountancy firm in performing audit planning, such as determining the time and budget plan, the number of auditors assigned to the fieldwork, and the audit scope to collect relevant audit evidence. Therefore, the auditor at a public accounting firm can determine the audit fee suitable for the job. This study used managers and partners from a public accounting firm in East Java that are registered on the public accounting firm directory published by IICPA. The samples taken for this study are from 86 audit managers and audit partners. This study used inherent risk, control risk, and detection risk as independent variables and the audit fee as the dependent variable. In this research, a T-test was used to identify the effect of independent variables on the dependent variable with the assistance of SmartPLS 3.0 for Windows.

1 INTRODUCTION

Certified public accountants provide assurance services related to management assurance of financial statements and are licensed by the Minister of Finance with the issuance of the Regulation of the Minister of Finance No. 17/PMK.01/2008 and later supported by The Public Accountants Act No. 5 of 2011, which discusses public accountants. A public accountant is required to always follow current information including changes to the general financial accounting standards and professional standards of certified public accountants issued by professional organizations and other official regulations.

As of January 1st, 2013, Indonesia has used International Standards on Auditing (ISA) in determining the professional standards of certified public accountants to be used by Indonesian auditors. The ISA considers risks involved in carrying out the audit fieldwork. Tuanakotta (2013) divides audit risk into three main parts, namely inherent risk, control risk, and detection risk. Inherent risk is the vulnerability of an assertion to a material misstatement. It relates to internal or external events or circumstances arising from the

entity's purpose, the nature of the entity's operations or the scope of the entity's industry, the client's location, and the complexity of the client's business. The control risk emerges from the client's inadequate internal control. The third component is detection risk meaning the material misstatement is not detected by the auditor due to improper selection and implementation of audit procedures.

At the audit planning stage, the auditor identifies audit risks that may occur. A complex audit process may be caused by a high audit risk. Audit risk plays a significant role in the determination of audit fees by public accounting firms. However, the audit risk may not affect the audit fees since the fee determination generally considers other factors such as business competition among public accounting firms.

The Institut Akuntan Publik Indonesia is the official body that regulates Certified Public Accountants (CPA) and legally empowers it to set auditing standards and ethical standards as well as publish the rules regarding audit fees; No. KEP.024/IAPI/VII/2008 was updated on Management Regulation No. 2 in 2016 regarding the determination of audit fees.

There are some researchers who have investigated studies closely related to this research. In a study conducted by Simunic (1980) entitled “The Pricing of Audit Services: Theory and Evidence”, the independent variables used were entity size, audit risk based on the current ratio, quick ratio, debt-to-equity ratio, litigation risk, and audit complexity. Meanwhile, the dependent variable used was the audit fee. The results of this study indicate that entity size, audit risk based on the current ratio, quick ratio, debt-to-equity ratio, litigation risk, and audit complexity have a positive effect on the audit fee.

The second study was conducted by Suharli and Nurlaelah (2008) with the title “Auditor Concentration and Determination of Audit Fee: Investigation at State Enterprise”. This study examined the effect of concentration ratio, size of the public accountancy firm (KAP), auditee size, and subsidiary company against the audit fee. The results obtained from this study indicate that concentration ratio and auditee size have a significant relationship, while the size of the CPA firm and the number of subsidiaries have no significant relationship to the audit fee.

Next, Herawaty (2011) conducted a study entitled “The Influence of Internal Control and the Time Budget of Audit on Audit Fee”. The results obtained from this study reveal that partial internal control has a positive influence on the audit fee.

Another study was conducted by Kusharyanti (2012) with the title “Analysis of the Factors Determining the Audit Fee”. The independent variables used in this study were client size, audit complexity, audit risk, audit committee, client’s financial condition, size of the public accounting firm, audit tenure, and audit specialization, while the dependent variable used was audit fee. The results of this study suggest that client size, audit complexity, audit risk, audit committee, client’s financial condition, and size of the public accounting firm have a significant effect on the determination of the audit fee, while audit tenure and audit specialization do not have any significant effect in determining the audit fee.

Jemada and Yeniarta (2013) conducted a study entitled “Influence of Time Budget Pressure, Complexity of Duties, and Reputation of Auditor to Audit Fee at Public Accounting Firm in Bali”. The results of this study show that time budget pressure, task complexity, and the reputation of the auditor positively and significantly affect the audit fee at a public accounting firm in Bali.

Finally, Akhtarudin et al. (2016) examined internal control deficiencies, opportunity investment, and audit fees. The results show that the increment of audit fee designates a supplemental cost that firms should bear when they are growing and the internal control mechanism is reported ineffectual.

Audit risk consideration is required in international audit standards but the focus of this research is whether components in audit risk such as inherent risk, control risk, and detection risk are respectively the responsibility of the auditor or auditee because there are some risks that are inherent to the auditor, and risks to which the auditee is responsible, therefore, researchers want to discuss this topic.

Therefore, this research intends to find out whether audit risks such as inherent risk, control risk, and detection risk can affect the amount of audit fees offered by CPA firms.

2 THEORETICAL BACKGROUND

2.1 Agency Theory

Agency theory is a theory composed by Jensen and Meckling in 1976 that defines that there is an agency relationship between two parties in which the first party, as the principal, delegates the decision-making authority to the second party, that is, the agent. Agency theory refers to three basic assumptions of humans: self-centeredness, limited thought about the view of the future, and risk aversion (Eisenhardt, 1989).

As Fachriyah (2011) assumes, an auditor is trusted by the community as an independent party who can provide assurance for client’s financial statements. Since companies use the services of auditors through public accounting firms in providing independent opinions on financial statements, there is a monitoring cost in the form of external audit fees.

2.2 Audit Concept

An audit is an accumulation of evaluation activities on evidence and information in determining and reporting the level of conformity between stable information and criteria, and audit procedures are required to be performed by third parties who adhere to the professional code of ethics (Arens et al., 2011).

The general purpose of auditing, according to Boynton and Johnson (2006), is to express an opinion on fairness in all material respects, financial position, and business results in accordance with generally accepted accounting principles. The purpose of the audit is specifically based on the assertions that have been made and signed by the management listed in the financial statements.

In preparing an audit plan, the auditor should consider what audit risks are. Tuanakotta (2015) defines audit risk as the risk of providing an inappropriate audit opinion on mismanaged financial statements.

According to SAS 47 (audit risk and materiality in conducting an audit), audit risk is a risk arising because the auditor unwittingly did not modify his or her opinion properly on a financial statement containing material misstatements.

The audit fee is defined as the amount of the service fee received by the external auditor for the performance of the audit work. The reward is related to the amount of time spent in completing their work.

In Indonesia, the Indonesian Institute of Certified Public Accountants (IAPI) published the rules regarding audit fees, No. KEP.024/IAPI/VII/2008. It is explained that in setting the audit fee, CPA firms must consider client needs, legal duties and responsibilities (statutory duties), independence, level of expertise and responsibilities attached to the work performed, as well as the complexity of the work and the amount of time required by members and staff to complete the work.

2.3 Hypotheses Development

2.3.1 Inherent Risk and Audit Fees

According to Arens (2006), the correlation between inherent risk and audit evidence is directly proportional. The higher the inherent risk that the client's entity has, the more audit evidence it obtains. Accordingly, the fee received by public accounting firms also increases. Simunic (1980) indicates that entity size, audit risk based on the current ratio, quick ratio, debt-to-equity ratio, litigation risk, and audit complexity have a positive effect on audit fee.

H1: High inherent risk is associated with higher audit fees.

2.3.2 Control Risk and Audit Fees

Akhtarudin (2016) suggests that internal control affects the audit fee. Internal control is a component

of assessing control risk. When the control risk obtained by the client's internal control is getting higher, the audit scope becomes more complicated. Therefore, the audit fee obtained by CPA firms should also be higher.

H2: High control risk is associated with higher audit fees.

2.3.3 Detection Risk and Audit Fees

Detection risk is a risk of material misstatement that auditors fail to detect due to improper use of audit procedures. High detection risk can be prevented by adequate planning and supervision and also the implementation of audit engagement in accordance with the professional standards of the CPA. Adequate supervision and implementation of the audit in accordance with the standards of quality control are obtained from internal training and participation in continuous professional training provided by professional organizations and higher costs are paid by CPA firms. Therefore, the audit fee should also be higher.

H3: High detection risk is associated with higher audit fees.

3 RESEARCH METHODOLOGY

The approach in this study is a quantitative descriptive method through associative research. The researcher decided to use the associative research method to find correlations and causal relationships among variables (Sulistyanto et al., 2006). According to Sugiyono (2005), associative research has the ability to discover the relationship between two variables or more.

3.1 Population and Samples

The population used in this study includes auditors working at CPA firms in East Java, Indonesia. Using a purposive sampling method, 86 auditors in manager and partner positions filled and returned a questionnaire so data could be processed further.

3.2 Operational Definitions

3.2.1 Inherent Risk

Inherent risk is the risk of vulnerability to the assertion, including transaction type, account balance, or disclosure of material misstatement before considering related controls (Tuanakotta,

2015). Inherent risk measurement uses a Likert scale of 1–5 to indicate the level of agreement to a statement. We are using a few indicators such as the nature of the client’s business, findings from previous audits, transactions with related parties, non-routine transactions, consideration of some accounts, the client’s financial condition, and client integrity.

3.2.2 Control Risk

Control risk is a risk of vulnerability to the assertion, including transaction type, account balance, or disclosure of material misstatement that is not prevented or detected and corrected by the client’s internal control (Tuanakotta, 2015). Control risk measurement is conducted on a Likert scale of 1–5 to indicate the level of agreement to a statement. Control risk is measured by how far the auditors gain knowledge and understanding of an entity’s internal control and also perform tests of effectiveness on these internal controls.

3.2.3 Detection Risk

Detection risk is a risk of material misstatement that auditors fail to detect due to improper selection and implementation of audit procedures. High detection risk can be prevented by adequate planning, supervision, and implementation of audit engagement in accordance with the CPA’s professional standards (Tuanakotta, 2015). The measurement uses a Likert scale of 1–5 to indicate the level of agreement to a statement. Detection risk is measured by auditors misapplying audit procedures, misinterpreting the audit results, or not picking the testing method properly.

3.2.4 Audit Fees

According to Al-Shammari et al. (as cited in Fachriyah, 2011), the audit fee is defined as a remuneration received by the CPA firm for the audit engaged by the auditor. The audit fees are influenced by several factors including client size, profitability, complexity, client internal control, or auditor factors such as location, size, and auditor’s reputation. The measurement uses a Likert scale of 1–5 to indicate the level of agreement to a statement.

3.3 Data Analysis Method

The researcher proposed a causality model for the data analysis method. To test this model, the researcher used a causality analysis technique, a

structural equation model by using base variance or partial least square (PLS). The researcher used the PLS model because it shows the causality relationship between a dependent variable and three independent variables when one or two of the variables have at least one indicator.

3.4 Outer Model Measurement

In the PLS analysis technique, the measurement uses an outer model and inner model. In this research, outer model measurement was used with a loading factor value for each indicator. The reflective size was correlated when the value was more than 0.7 with the high construct. The researcher used a 0.5 outer loading value for the initial stage of the development of the measurement scale; an outer loading value of 0.50 to 0.60 is considered sufficient by Chin (1998).

3.4.1 Validity Test

A measurement scale is valid if the measurement scale performs what should be performed and measures what should be measured (Kuncoro, 2003). Validity can be assessed by comparing the square root of the average variance extracted (AVE) values for each construct, then the AVE value must be greater than 0.30 (Formel & Larcker, 1981).

3.4.2 Reliability Test

The testing technique is composite reliability, which measures a construct and can be measured by two different sizes: 1) internal consistency, 2) Chronbach’s Alpha (Ghozali, 2006). If the reliability is above 0.70, the statement or indicator can be declared reliable.

3.5 Inner Model Measurement

This testing method defines how big the influence of the independent and dependent variables are. The R-square value (R^2) is used in this measurement.

3.6 Hypothesis Testing

The hypothesis test design proposed by the researcher is based on the research objective of the hypothesis T-test whose function is to assess the influence of independent variables separately. The confidence level used is 95%, so the level of precision or limit of inaccuracy is $\alpha = 5\% = 0.05$ with table value. Hypotheses 0 is accepted and

Hypotheses a is rejected if the p-value is smaller than the α value. On the other hand, Hypotheses 0 is rejected and Hypotheses a is accepted if the p-value is greater or equal to the α value.

4 RESULTS AND DISCUSSION

4.1 Outer Model Measurement Result

4.1.1 Validity Testing

All tested variables had a discriminant validity value greater than 0.30 and a p-value less than the significant level of 0.05. It can be concluded that all variables are valid and reliable.

Table 1: Discriminant validity measurement results.

Variable	Original Sampling	P-values
Inherent Risk	0.405	0.000
Control Risk	0.725	0.000
Detection Risk	0.701	0.000
Audit Fee	0.576	0.000

4.1.2 Reliability Testing

All tested variables had a composite reliability value greater than 0.70 or had a p-value smaller than the significant level of 0.05. Accordingly, it can be concluded that the overall variables tested are reliable for further testing and analysis.

Table 2: Composite reliability measurement results.

Variable	Original Sampling	P-values
Inherent Risk	0.859	0.000
Control Risk	0.888	0.000
Detection Risk	0.874	0.000
Audit Fee	0.890	0.000

4.2 Inner Model Measurement Result

The audit fee variable had an adjusted R^2 value of 0.239. This figure shows that the audit fee service variable can be explained by as much as 23.9% by the independent variables used by the researcher such as inherent risk variable, control risk variable, and detection risk variable.

Table 3: Adjusted R^2 Value

Endogenous Variable	Adjusted R^2 Value
Audit Fee	0.239

4.3 Hypothesis Testing Results and Discussion

Table 4: Statistical Test Results of Inter-Variable Relationships.

Hypothesis	Original Sample (O)	t-statistic (O/STER R)	p-values
H1	0.217	2.292	0.022
H2	0.280	2.526	0.012
H3	0.183	1.687	0.092

In the PLS analysis technique based on the t-statistic test, it can be concluded that the inherent risk variable influences the audit fee based on p-values of 0.022 (which is under 0.05). This result is supported by Simunic's (1980) studies. The second variable tested is the control risk variable. It can be concluded that the control risk affects the audit fee based on p-values of 0.012, which is below the 0.05 significance level. According to the regression coefficient value result of 0.280, it can be concluded that control risk has a positive effect on the audit fee. The same results are also supported by Akhtarudin's (2016) research. The last variable tested is the detection risk variable. It can be stated that detection risk does not affect the audit fee. This is because the p-values are 0.092 (below 0.05). It can be concluded that the detection risk has no effect on the audit fee. This indicates that the third hypothesis that states the detection risk has an effect on the audit fee is not proven.

The results of this study indicate that inherent risk and control risk affect the determination of audit fees. This proves that inherent risk and control risk become crucial factors in determining audit fees. High control risk causes auditors difficulties in detecting material misstatement due to a limitation, that is, the weakness of the client's internal control system. Inadequate internal control implies that the client has a high control risk. Hence, public accounting firms should set a higher fee for a client with higher level of control risk than for a client with a moderate or low level of control risk.

On the other hand, the detection risk does not affect the determination of the audit fee. The detection risk arises from the failure of the auditor to detect a material misstatement. Detection risk is controlled entirely by the auditor. Therefore, the auditor should reduce the detection risk to the reasonable level since the detection risk is the responsibility of the auditor.

5 CONCLUSIONS

The results of this study indicate that inherent risk and control risk affect the determination of audit fees. This proves that inherent risk and control risk become crucial factors in determining audit fees. On the other hand, detection risk does not affect the determination of the audit fee. The detection risk arises from the failure of the auditor to detect a material misstatement.

Meanwhile, this study has several limitations. First of all, the researcher only used samples from CPA firms in East Java, so the results cannot be generalized to other CPA firms. Secondly, not all CPA firms in East Java were willing to fill out the questionnaire. Moreover, the researcher only used inherent risk, control risk, and detection risk as independent variables in determining the audit fee, while there are other factors that may also influence the amount of the audit fee that are not included such as client business risk, time budget pressure, and auditor reputation.

REFERENCES

Akhtarudin, M. and Jonathan, O. (2016). Internal control deficiencies, investment opportunities, and audit fees. *Int. J. Accounting and Finance*. 6 (2).
 Arens et al. (2012). *Auditing and assurance services: An integrated approach*. 14th edn. New Jersey: Pearson – Prentice Hall Inc.

Chin, W. (1995). Partial least square is to LISREL as principal components analysis is to common factor analysis. *Technology Studies*, 2, 315-319.
 Eisenhardt, M. (1989). Agency theory: An assessment and review. *Academy of Management Review*. 14 (1), 57-74.
 Fachriyah, N. (2011). *Faktor-faktor yang Mempengaruhi Penentuan Fee Audit oleh Kantor Akuntan Publik di Malang*. Unpublished thesis. Malang: Universitas Brawijaya.
 Ghozali, I. (2006). *Aplikasi analisis multivariate dengan program SPSS*. Semarang: Badan Penerbit Undip.
 Herawaty, N. (2011). Pengaruh pengendalian intern dan lamanya waktu audit terhadap fee audit (Studi kasus pada KAP Kota Jambi dan Palembang). *Jurnal Penelitian Universitas Jambi Seri Humaniora ISSN 0852-8349*. 13 (1), Januari-Juni 2011, 07-12.
 Jemada, V. and Yaniartha, S. (2013). Pengaruh tekanan anggaran waktu, kompleksitas tugas, dan reputasi auditor terhadap fee audit pada kantor akuntan publik (KAP) di Bali. *E-Jurnal Akuntansi Universitas Udayana ISSN 2302-8556*. 3 (3), 132-146.
 Jensen, C. and Meckling, H. (1976). The theory of the firm: Managerial behavior, agency cost, and ownership structure. *Journal of Financial Economics*. 3(4), 305-360.
Keputusan Institut Akuntan Publik Indonesia Nomor: 024/IAPI/VII/2008 tentang Kebijakan Penentuan Fee Audit. Tanggal 2 Juli 2008.
 Kusharyanti. (2012). Analysis of the factors determining the audit fee. *Journal of Economics, Business, and Accountancy Ventura*. 16 (1), April 2013, 147-160.
 Simunic, A. (1980). The pricing of audit services: Theory and evidence. *Journal of Accounting Research*. 22 (3), 161-190.
 Sugiyono. (2005). *Metode penelitian pendidikan: Pendekatan kuantitatif, kualitatif, dan R&D*. Bandung: ALFABETA.
 Sulistiyanto, S. and Susilawati, C. (2006). *Pedoman penulisan skripsi*. Semarang: Penerbit Universitas Soegijapranata dan Pusat Pengkajian dan Pengembangan Akuntansi.
 Suharli, M. and Nurlaelah. (2008). Konsentrasi auditor dan penetapan fee audit: Investigasi pada BUMN. *JAAI*. 12 (2), Desember 2008, 133-148.
 Tuanakotta, T. (2013). *Audit berbasis ISA*. Jakarta: Salemba Empat.
 Tuanakotta, T. (2015). *Audit kontemporer*. Jakarta: Salemba Empat.