# THE USE OF ANALYTICAL PROCEDURES IN AFFILIATED AND NON-AFFILIATED AUDIT FIRMS



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# **Declaration of Originality**

I, Siti Aisyah Fitria, hereby declare that this thesis is real and accurate to be my own work, especially written for partial requirement to complete Undergraduate Program of Accounting, and has not been presented in any other occasion before. I bear full responsibility for my undergraduate thesis.

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### MOTTO AND DEDICATION

"Allah desireth for you ease, He desireth not hardship for you.."

(Suras Al-Baqara [2]:185)

"And when My servants question thee concerning Me, then surely I am nigh. I answer the prayer of the suppliant when he crieth unto Me. So let them hear My call and let them trust in Me.." (Suras Al-Baqara [2]:186)

"...When cometh Allah's help? Now surely Allah's help is nigh."

(Suras Al-Baqara [2]:214)

Life is like riding a bicycle. To keep your balance, you must "keep moving".

(Albert Einstein)

When you having exam, don't ever crossed in your mind Allah SWT is not love you, but actually He love you. You need more trusting and more close to Allah SWT and asking He's help, because we need Allah.

Every motivation word is beauty, but for me the most beauty motivation word is "Ya Rabbi... I believe I can do it".

I dedicate this final thesis for:
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My beloving superman, my Dad, Winoto Djokosaroso
My beloving Grandmother, Siti Amalia
My dearest Uncle, Achi Emantoro
My dearest love siblings, Muhammad Akmal Putera
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Whom always will be my reasons for the need to come back home.

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## **ABSTRACT**

The aim of the research was to investigate the allocated time and the frequency of the use of analytical procedures in affiliated and non-affiliated audit firms, and to examine the frequency the effectiveness of various types of analytical techniques by difference type of audit firms. Data were collected using questionnaires distributed to 230 auditors in Semarang and Jakarta. Data analysis was performed using software of IBM SPSS statistic 22. The result of the study showed that the majority of the auditors from affiliated audit firms found allocated time to the extent of use analytical procedures in audits that similar greater to non-affiliated audit firms. There was no significant difference in using analytical procedures in all audit stages between auditors working in affiliated and non-affiliated audit firms. Comparative test showed that there was no significant different on the frequency the effectiveness of all analytical techniques between auditors working in affiliated and non-affiliated audit firms. In addition, most of the auditors working in affiliated and non-affiliated audit firms preferred to use simple analytical techniques than sophisticated analytical techniques in practice of audits. Therefore, the implication of the research that there was no significant difference the use analytical procedures between affiliated and non-affiliated audit firms in audit practices.

Keywords: Analytical procedures, audit firms, affiliated audit firms, non-affiliated audit firms.

## **ABSTRAK**

Tujuan dari penelitian ini adalah untuk menginyestigasi waktu yang dialokasi dan frekuensi penggunaan prosedur analitis di KAP (Kantor Akuntan Publik) berafiliasi dan tidak berafiliasi, dan untuk menguji frekuensi dan efektifitas berbagai teknik perhitungan (perbandingan) analitis dengan perbedaan jenis KAP. Pengumpulan data dilakukan melalui penyebaran kuesioner kepada 230 auditor di Semarang dan Jakarta. Analisis data dilakukan dengan menggunakan software IBM SPSS statistic 22. Hasil penelitian menunjukkan bahwa mayoritas auditor dari KAP berafiliasi menemukan waktu yang dialokasikan untuk luas penggunaan prosedur analitis dalam audit yang serupa dengan KAP tidak berafiliasi. Tidak ada perbedaan yang signifikan frekuensi dalam menggunakan prosedur analitis di semua tahap audit diantara auditor yang bekerja KAP berafiliasi dan tidak berafiliasi. Uji komparatif menunjukkan bahwa tidak ada perbedaan yang signifikan frekuensi dan efektifitas semua teknik perbandingan analitis diantara auditor yang bekerja di KAP berafiliasi dan tidak berafiliasi. Selain itu, sebagian besar auditor yang bekerja di KAP berafiliasi dan tidak berafiliasi lebih memilih untuk menggunakan teknik perbandingan analitis yang sederhana dibandingkan teknik perbandingan analitis yang canggih di praktik audit. Oleh sebab itu, implikasi penelitian ini adalah tidak ada perbedaan yang signifikan penggunaan prosedur analitis diantara KAP berafiliasi dan tidak berafiliasi di praktik audit.

Kata kunci: Prosedur analitis, kantor akuntan publik (KAP), KAP berafiliasi, KAP tidak berafiliasi.

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## **CHAPTER I**

## **INTRODUCTION**

## 1.1 Background

The majority of auditors will face many challenges in performing their duties, one of which is a conflict of interest between public users of financial statements and public accountant in audit firms. Liggio in Lin and Chen (2004) argued that this even is called "expectation gap" because of the differences in expectation among societies on auditors' performance with financial statement audited. Lin and Chen (2004) define expectation gap as audit related issues of independence, development of auditing standard, and audit practice.

The existence of the expectation gap will encourage audit firms to manipulate financial statement. As a result, public users of financial statements are less or difficult to believe in the financial statement that has been audited, because of the expectation gap. Moreover, public may also assume that auditor has worked together with audit firms' client to perform fraud of the financial statement. Therefore, a technique to prevent the manipulation of the financial statement and reduce the expectation gap is to improve more effective or better audit standard (Lin and Chen, 2004).

In 2013, Indonesian Institute of Certified Public Accountants (IICPA) has adopted International Standards on Auditing (ISA) (Tuanakotta, 2014) to replace the previous auditing standards of Standards on Auditing (SA) based on US-

GASS used by Indonesia. Sari (2016) argued that ISA adoption in Indonesia is a mandatory to fulfill their obligations as a member of IFAC (The International Federation of Accountants). The obligation of IICPA to apply ISA is based on the Statement of Membership Obligations (SMO) No.3 (Sari, 2016).

One of fundamental changes in ISA adoption is risk based audit (Tuanakotta, 2014). ISA 315 on "Identifying and Accessing the Risks of Material Misstatement" No.25 states that the auditor should identify and assess the risk of material misstatement in the financial statements. Therefore, the mandatory in the use of audit procedures are to assess and identify the risk or misstatement of financial statements. Some audit procedures that the auditor may perform are analytical procedures, tests of detail balance or detail testing, substantive procedures, and control tests.

Pinho (2014) argued that one of audit procedures that is capable of detecting and identifying high-risk misstatements of financial statements is analytical procedures. However, in some audit cases, the use of analytical procedures may not be able to detect and identify fraud in financial statements, for example, comparing the amount of salary costs to the number of company employees in which the auditor requires more use detail testing than analytical procedures to find material misstatements (Boyton, 2003). It means that the analytical procedures are called effective and efficient, if the auditor is able to detect the risk of misstatement in financial statements before the use of detail testing.

The analytical procedure is a procedure that attracts most researchers in different countries compared to other audit procedures (Sahama and Hegazy, 2010). One of the reasons the analytical procedure is interesting is that the audit procedure is the most inexpensive one (Boyton, 2003). That opinion complies with Mahathevan's in Sahama and Hegazy (2010) who reported that analytical procedures can reduce audit costs without reducing high quality of audit services.

A number of previous studies also found that analytical procedures can control audit costs, audit time, and audit scope (Cho and Lew, 2000), and analytical procedures are also capable of finding unexpected fluctuations (Sahama and Hegazy, 2010). Therefore, it could be summarize that analytical procedures are unique procedures, because analytical procedures are more efficient at cost and time aspects of audit, maintaining high audit quality services, and uncovering unexpected fluctuations (unusual event) in audit objects.

Furthermore, ISA 520 on "Analytical Procedures" expects the auditor use homogeneous analytical procedures at all phases of the audit (Pinho, 2014). Analytical procedures are important audit procedures that can be used at all stages of the audit from planning, fieldwork to final review audit stage (Pinho, 2014). ISA 520 presents the definition of analytical procedures as an audit procedure that has plausible relationship among financial data and non-financial data by comparison techniques of both data. Therefore, the auditor should use analytical procedures at all stages of the audit, because analytical procedures can relate and compare financial data and non-financial data.

There are different various types of analytical comparison techniques that auditors may use in audit practice (Koskivaara, 2006), from simple techniques to sophisticated ones in carrying out their duties (Colbert, 1994; Mulligan and Inkster, 1999). Meanwhile, Tuanakotta (2014) argued that sophisticated analytical techniques are good in providing reliable conclusions on the financial statement having been audited.

Audit firms' size and auditor experiences are factors that differentiate the use of analytical procedures in audit practice (Kritzinger, 2015; Abdin and Baabbad, 2015), as the different audit firms' size can influence the allocated time and frequency of use analytical procedures in audit practices (Sahama and Hegazy, 2010). In this case, Cho and Lew (2000); Lin and Fraser (2003) identified that large audit firms tend to be more allocated time and more frequent using analytical procedures than small audit firms.

Sahama and Hegazy (2010) proposed that different audit firm sizes may influence the use of analytical techniques. Their finding suggests that larger audit firms prefer to use more sophisticated analytical techniques (i.e. regression analysis) than simple (unsophisticated) analytical techniques. Therefore, large audit firms are more effective in finding misstatements of financial statements than small audit firms.

Furthermore, Hirst and Koonce (1996) reported that large audit firms or multinational (affiliated) audit firms should use greater analytical procedures, because large audit firms often due audit in large or multinational client companies. Large client companies typically have strong internal controls, low inherent risk, large transaction volumes, intensive physical location recording, and high business complexity (Hirst and Koonce, 1996). Therefore, clients of large audit firms will be increasingly more allocated time and high frequency of implementation analytical procedures than clients of small audit firms.

The audit firm's clients perceived that large audit firms or multinational audit firms have high audit quality compared to small audit firms (DeAngelo quoted Nindita and Siregar, 2012). This means, affiliated audit firms have a better quality of audit possibilities than non-affiliated audit firms. Affiliated audit firms may prefer sophisticated analytical comparison techniques, because sophisticated analytical techniques provide a higher audit quality that is a reliable in audit conclusion (Tuanakotta, 2014). Therefore, large audit firms are expected to be more structured and more allocated time in using analytical procedures than small or national audit firms (Sahama and Hegazy, 2010).

Investigation of the use of analytical procedures between audit firm sizes is not really the latest issue among academics and researchers in international studies. However, this study needs to be discussed further because of the adoption of the ISA. Therefore, this research will discuss the relationship between audit company types that is affiliated and non-affiliate audit firms using analytical procedure in audit practice.

The public's perception indicates that affiliated audit firms more skillful and more excellent than non-affiliated audit firms and is it valid, if that public's

assumption related to the use of analytical procedures in practice audit. Affiliated audit firms are estimated to use larger and better analytical procedures than non-affiliated audit firms. The affiliated audit firms as sample in this study are multinational audit firms located in Semarang and Jakarta or audit firms in collaboration with foreign audit firms such as the Big 4 audit firm. Whereas, non-affiliated audit firms are local audit firms that do not cooperate with foreign audit firms.

The audit process in Indonesia is developing and this is evidenced by the development of audit standard, which is ISA 520 about analytical procedures. Thus, the focus location of this study is in Indonesia. The proximate locations of questionnaire distribution in this research are Semarang and Jakarta. Most audit firms in Semarang only have a local network; however, the majority of audit firms in Jakarta have global networks with foreign audit firms and all larger audit firms (i.e. the Big4 firms) are located in Jakarta. Therefore, the most non-affiliated audit firms are located in Semarang and the majority of affiliated audit firms are located in Jakarta.

Given this situation, analyze and comparing whether there will be different the allocated time, the frequency and the effectiveness of use analytical procedures and analytical techniques used in audit practice between affiliated and non-affiliated audit firms are conducted. Furthermore, this study analyzes whether affiliated audit firms using better, more effective, more often, and more allocated time analytical procedures than non-affiliated audit firms. Therefore, the appropriate title in this study is "The Use of Analytical Procedures in Affiliated and Non-Affiliated Audit Firms".

#### 1.2 Problem Statement

The problem statement for this study base on the background, as follows:

- 1. Is there any difference in the percentages of the allocated time to analytical procedure used during auditing with audit firms' types (affiliated versus non-affiliated audit firms)?
- 2. Is there any difference in the frequency to use analytical procedures during audit stages with audit firms' types (affiliated versus non-affiliated audit firms)?
- 3. Is there any difference in the frequencies to use analytical techniques in audits with audit firms' types (affiliated versus non-affiliated audit firms)?
- 4. Is there any difference in the effectiveness to use analytical techniques in audits with audit firms' types (affiliated versus non-affiliated audit firms)?

## 1.3 Research Purpose and Contribution

### 1.3.1 Research Purpose

The purpose for this study base on the problem statements, as follows:

 To investigate the difference in the percentages of the allocated time to analytical procedure used during auditing with audit firms' types (affiliated versus non-affiliated audit firms).

- 2. To investigate the difference in the frequency to use analytical procedures during audit stages with audit firms' types (affiliated versus non-affiliated audit firms).
- 3. To examine the difference in the frequencies to use analytical techniques in audits with audit firms' types (affiliated versus non-affiliated audit firms).
- 4. To examine the difference in the effectiveness to use analytical techniques in audits with audit firms' types (affiliated versus non-affiliated audit firms).

#### 1.3.2 Research Contribution

This study is expected to provide several research contributions:

#### 1. For academic

From the findings of this study, it is expected that accounting students are encourage to increase their knowledge of the use of analytical procedures in practice. Besides, they also may get information about differences allocated time, frequency, and effectiveness of use analytical procedures between affiliated and non-affiliated audit firms.

#### 2. For external auditors in audit firms

From the result in this study, external auditors in audit firms could have information about differences of the use of analytical procedures between affiliated and non-affiliated audit firms. Auditors could be

more selective to choose analytical techniques, so they could be more

efficient in audit process.

3. For scientist

The scientists could have information about differences of use

analytical procedures between affiliated and non-affiliated audit firms,

so they could improve a further research with different variables.

4. For regulator

From the result in this study, the regulator could have information of

use analytical procedures between affiliated and non-affiliated audit

firms, so they could improve standard audit about analytical procedures.

1.4 **Outline of the Research** 

The outline of this research, as follows:

CHAPTER I: INTRODUCTION

This chapter describes the reason why researcher chooses topic about the use of

analytical procedures in affiliated and non-affiliated audit firms. This chapter

also explains problem statement, research purpose, research contribution and

outline in this study.

CHAPTER II: LITERATURE REVIEW

This chapter discusses of underlying theories in this study about postulate of

auditing. And it also explains the concept of analytical procedures, ISA 520,

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allocated time and frequency of the use of analytical procedures, types of

analytical techniques, affiliated and non-affiliated audit firms. The section of

study also consist the previous research, research framework, and hypothesis

development.

CHAPTER III: RESEARCH METHODS

This chapter describes research variable and operational definition, population

and sample, type and data resources, data collection method with using

questionnaires form, and data analysis method for the next section.

CHAPTER IV: RESEARCH FINDINGS AND DISCUSSION

This chapter describes the description of research object, analysis of data with

using IBM SPSS statistics 22, and discussion of research findings.

CHAPTER V : CONCLUSION AND SUGGESTION

This chapter consist conclusion from research findings, limitation of this

research and suggestion of further study.