

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

In this chapter, the methodology used to examine the factors of external auditors' reliance on internal auditors from the perspectives of external auditors in Indonesia is explained. This chapter will include description of variables, theoretical framework, research design, data collection, data analysis, research timeframe, research limitation.

3.2 Description of Variables

This study intends to investigate the external auditors in Indonesia regarding with their reliance decision on internal auditors' work. To address that, this research utilised the following variables:

3.2.1 Dependent *variable*

In auditing, the term reliance is generally refers to the use of the work and/or personnel of a client's internal audit department (Barrett, 1989) quoted by Campbell (1994, p.110). Reliance is to mean the reliance decision of external auditors on internal auditors' work. This is a legally definable term and the extent of reliance can be differ depends on the judgment of the external auditors. Thus, the dependent variable in this research is the extent of external auditors' reliance on internal auditors.

3.2.1 Independent *variables*

Following the assessment criteria suggested by auditing standard and prior research, this study is utilize internal auditors' competence, objectivity and work performance as

independent variables to be tested. The explanations of independent variables are as follows:

- (1) *Internal auditors' competence.* For internal auditors competence is refers to the educational level and professional experience and other factors related competence. Literally, it's defined as a member who accepts a professional engagement and implies that he has the necessary technical knowledge to complete the engagement (Arens and Loebbecke, 1991). For internal audit function, the level of competence criteria is depending on the competence of the company and its internal audit function's operation, process and procedures as well as the quality and quantity of supervision available in the internal audit department (SAS No. 65 par. 9).

- (2) *Internal auditors' objectivity.* It's a state of mind, a quality that lends value to a member's service (Haron, 2004). For internal auditors, objectivity is a distinguishing feature of the profession that formed the organizational status of internal audit function. In principle, objectivity imposes internal auditors to be intellectually honest, impartial in obligation, and free from conflicts of interest (Carmichael et al., 1996). The auditing standard (SAS No. 65) mentioned that the extent of objectivity depends on independency level and the stage to which the internal audit functions reports (p. 258).

- (3) *Internal auditors' work performance.* In internal auditing the work performance is refers to the actions in performing the internal control, risk assessment and substantive procedures (Desai et al., 2010b, p. 538). SAS No. 65 has specified that the quality and effectiveness of work performed by the internal audit function

depends on several factors such as the proportion of work performed, adequate scope of work and the total time consumed to finish the work.

3.3 Measurement of Variables

The study intends to rank the order of importance of the three primary internal audit evaluation factors for external auditors in Indonesia and to identify its weighted figure. This study also intends to uncover the role of professional judgment as well as the importance of internal auditor's objectivity. To measure the assigned variables in this research, a set of questionnaire has been prepared. The questionnaire attached as *Appendix 1* consisted of 29 questions and can be separated into 4 groups of questions; internal auditors' competence, objectivity, work-performance and opinions on professional judgments/the rank of objectivity factor. Originally, all questions in the questionnaire utilized in this study are replicated from the questions in external auditors' decision aid model introduced by [Schneider \(2010\)](#).

To measure the external auditors' reliance, five-point of Likert scale is employed with the purpose of indicating attitude of the respondents towards reliance by selecting one of the five available responses. Likert scale is commonly used in explanatory studies because it enables researchers provides a suitable range for this particular field of study. Prior researches by [Mihret & Admassu \(2011\)](#) and [Suwaidan & Qasim \(2010\)](#) applied this five-point of Likert scale to measure feedback from participants and to provide suitable data for their statistical analyses. Following is the list of score and meanings of score from five-point Likert scale:

- Score 1 represent “strongly disagree”;
- Score 2 represent “disagree”;

- Score 3 represent “moderately agree”;
- Score 4 represent “agree”; and
- Score 5 represent “strongly agree”.

The questions proposed in this study are based on the Schneider's decision aid to evaluate internal audit competence, objectivity and work performance which parts of decision aid model introduced by Schneider (2010). The questions used to measure the variables are as follows:

A. Questions to measure the independent variable - Internal Auditors' Competency:

1. Internal auditors should have adequate backgrounds.
2. Satisfactory practises for hiring and training internal auditors are crucial.
3. To provide with continuing education is important for internal auditors.
4. Internal auditors should have adequate professional experience.
5. To have professional certification is important for external auditors.
6. Internal audit function should have appropriate policies, program, and procedures.
7. Internal auditors should be adequately instructed and supervised.
8. Internal auditors should know the company's operations, processes, and procedures.
9. Internal audit function should have effective and efficient assignment practises.
10. Internal auditors should receive performance evaluations from their superiors.

B. Questions to measure the independent variable - Internal Auditors' Objectivity:

1. Internal auditors should have unrestricted access to all auditing areas.
2. Chief of internal auditors should have direct and unrestricted access to the audit committee.

3. Internal audit reports should free of censorship by management.
4. Internal auditors should have complete access to documents and individuals.
5. Top Management support is important for the internal audit function.
6. Internal audit staff members should periodically rotate.
7. Policies for compensation arrangements are important for internal auditors.

C. Questions to measure the independent variable - Internal Auditors' Work Performance:

1. Effective internal audit work plan is important.
2. Internal auditors' test should well-designed in order to address the test objectives.
3. The extent of the tests should sufficient in term of sample sizes, locations covered, etc.
4. The timing and the period covered by the tests should appropriate.
5. The tests perform should be as planned and expanded where necessary.
6. Appropriate conclusions are important for internal auditors.
7. Internal auditors' conclusions should be supported with adequate working paper documentations.
8. The internal audit reports should thorough and of high quality.
9. Internal audit reports should consistent with the work performed.
10. Internal auditors' work should be adequately reviewed and supervised.

D. Questions to gather the opinions on professional judgments and the rank of objectivity factor:

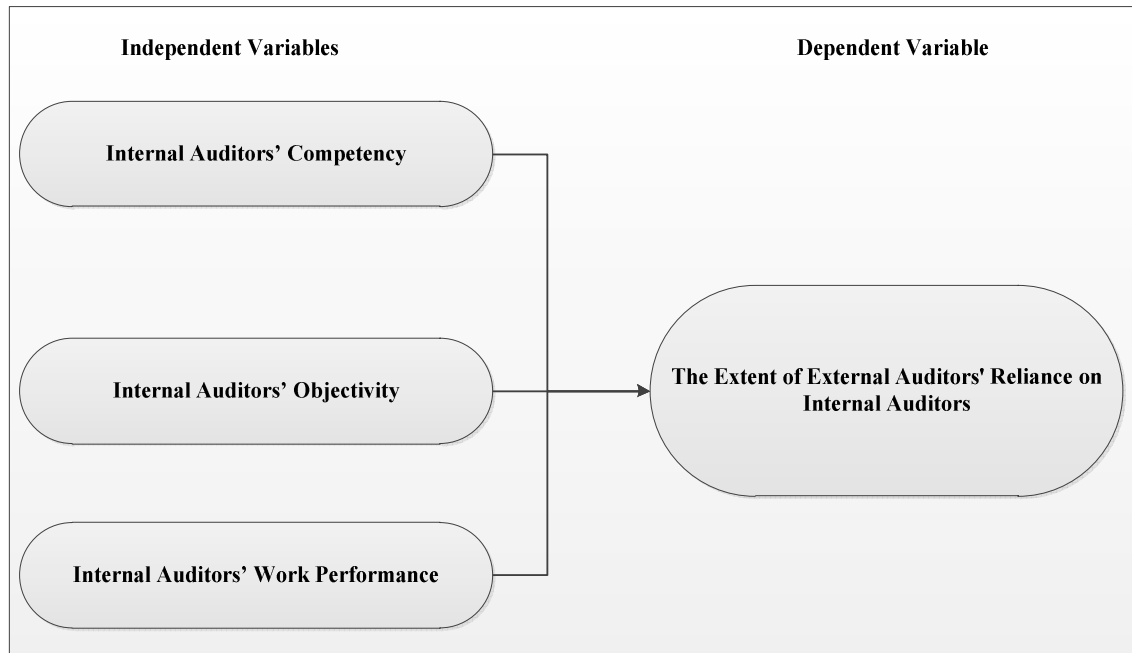
1. Professional judgment is important for external auditors.
2. Internal auditor's objectivity is the most important factor in evaluating the strength of client's internal audit function.

In the last part of the questionnaire, the respondents are required to fill the demographic information such as gender, nationality, age, education, professional qualification, working experience and number of clients with internal audit function. These are expected to be useful for the study to identify characteristic of the respondents, classifying the difference between persons and mainly to paint a clear picture of the data by analysing the background of the respondents that researcher try to understand.

3.4 Theoretical framework

The theoretical framework of the research is illustrated in *Figure 1*. It utilised the three premier external auditors' reliance factors identified in professional standards. The Internal Auditors' Competence, Internal Auditors' Objectivity and Internal Auditors' Work Performance are the independent variables and The Extent of External Auditors' Reliance on Internal Auditors is the dependent variable. The development of the theoretical framework will enable researcher to indicate the preferences of external auditors on the importance level of each reliance factors. It will identify whether the internal auditors' competence, objectivity or work performance suggested as the most important factor. The theoretical framework also enable researcher to explain the external auditors judgment whether they rely or not on internal auditors' work.

Figure I: Theoretical framework



3.5 Research Design and Methodology

This study is applying a quantitative method to gather the data. A large number of group participants are obtained from the population in order to reach sufficient respondents. The questionnaires set are employed with both closed-ended and open ended questions and designed with direct and clear instruction followed by questions in several segments. The questionnaires are sent out by email and also distributed directly by hand in hardcopy.

3.6 Sample Selection

As the study is conducted in Indonesia, the selected samples are external auditors from international audit firms in Indonesia. The term international audit firm in this study is refers to local audit firm in Indonesia who have professional association with foreign audit firm. Before getting associated with foreign audit firms, local audit firms are required to obtained approval from the Finance Minister as regulated under the Law of

The Republic of Indonesia No. 5 of 2011, “Public Accountant” and under the Decree of Minister of Finance No.17/PMK.01, “Public Accountant Services”.

The sample focus consisted of externals auditors in various levels from junior auditor up to manager level and the researcher had aimed the data from 150 individual respondents. Researcher has listed 44 international audit firms registered in Indonesia (included 40 mid-sized audit firms and the Big 4 audit firms) and short-listed the candidates list into a half (22 selected audit firms) based on location of head offices with the intention to ease the data collection process. In order to gain permission to distribute the questionnaire, researcher directly asked the Human Resource managers from each selected audit firms. In result, not all the selected audit firms are willing to get involved with the study due to confidentiality/privacy matters. Moreover, some of selected candidates also refused to contribute due to their busy schedules. Finally, 12 mid-sized international audit firms are agreed to get involved with the study.

3.7 Pilot Test

The questionnaires was pilot tested before distributes to the actual respondents. The researcher had designed a set of online questionnaire using Google Docs application to enable researcher send the questionnaires via email and manage the feedbacks electronically. Initially, the paperless online questionnaire was designed to gain effective and efficient survey since the actual respondents in this study will be the external auditors located in Indonesia. However, before distributing the pilot test questionnaires, researcher was required to personally call and text the selected candidates to ask their favour to participate and also to give inputs and comments regarding the presentation of the questionnaire.

Twenty one sets of pilot test questionnaires were sent out to participants' email addresses. Researcher had selected 4 academicians from the Faculty of Business and Accountancy in University of Malaya and 17 auditors/ex-auditors from international audit firms located in Malaysia and Indonesia. In result, 14 candidates of the pilot test consisted of 2 academicians from University of Malaya, 5 Malaysian auditors/ex-auditors and 7 Indonesian auditors/ex-auditors were giving feedbacks.

From the Table 3 it can be seen that 10 out of 14 of pilot test responders are in the age range from 25 to 34 and the rest responders are in the age range from 35 to 44. It also can be seen that 8 participants of the pilot test questionnaires has degree certificate, while 6 others are from post graduate educational level. From the pilot test sample, it was recorded that one sample qualified as Certified Public Accountant (CPA), four samples has accountant certification from The Association of Chartered Certified Accountants (ACCA), 8 responders has no qualification and one respondent in "others" category qualified as Chartered Financial Analyst (CFA).

Table 3: Demographic characteristics of pilot test respondents ($n = 14$)

Descriptions	Characteristics				
	Male		Female		
Gender	7		7		
Age	Below 25	25 to 34	35 to 44	45 and Above	
	-	10	4	-	
Education	Diploma	Degree	Graduate	Others	
	-	8	6	-	
Professional Qualification	None	ACCA	CPA	CIA	Others
	8	4	1	-	1
Work Experience	Below 3	3 to 6	7 to 10	11 and Above	
	4	8	2	-	
Number of Clients with IA Function	None	Below 5	5 to 10	11 and Above	
	1	3	6	4	

All respondents were has experience worked as external auditor. Accounted 8 participants has 3 to 6 years of working experience, 4 participants has under 3 years working as external auditors, 2 responders has 7 to 10 years of experience and none of the pilot test sample has experience more than 10 years. From all participants, only one sample never had clients with internal audit function. 10 responders were recorded has more than 5 clients with internal audit function and the rest 3 sample has experience work with less than 5 clients with internal audit function.

From the inputs and comments part, researcher noted that most of the pilot test participants felt that the questionnaire considered clear, straight to the point and easily understandable since the questionnaire presented with proper flow and used short questions. Somehow, researcher also recorded several inputs as follows:

- “My only comment is that all your questions are in "positive" phrases, meaning the answers are always either “Agree” or “Strongly Agree”. I personally think it's good to have the variety, so that the respondents are more careful when answering, so they won't simply tick “Strongly Agree” for all questions and distort your result. Perhaps you can vary the way you structure the questions, so some of them have the answer “Disagree” or “Strongly Disagree”.”
- “Overall there was nothing in my concern, but since you doing the survey online, make sure there is no broken link problem before you distribute it.”
- “Most of the questions were too obvious, most people would choose between “Agree” & “Strongly Agree”.”
- “Tried the questionnaire, looks good but just 2 suggestions for improvement: First, I could find how many pages I need to fill in, putting pages 2 of 3 for example might help the respondents estimate how much more time they need to spend on the questionnaire. Second, in the Demographic section, when I need to skip the

questions, I could still fill in the questions I need to skip. Control that aspect will be much better, in my experience; some respondents just fill everything in without reading thoroughly.”

After analysing the result (including inputs and comments) of the pilot test questionnaire, researcher has decided to proceed the questionnaire for actual survey. However, to improve the feasibility of the questionnaire, minor refinements were made before final distributions.

It should be noted that in actual survey, the online questionnaire model is not conducted in this study. Researcher had tried to run this method to actual samples by sending emails to several audit firms in Indonesia through their human resource managers. Unfortunately, none of the selected samples responded. Therefore, researcher has concluded that the online survey method is not suitable for this particular study. Most of human resource managers in audit firms were not familiar with the online method and also had concerned with the confidentiality of the data since it required them to forward the questionnaire to their auditors email addresses. Thus, hard copies of this research questionnaire were prepared and sent by hand personally to human resource managers of selected audit firms.