

# **The Determinants of Audit Fees for SMEs in Malaysia and Implications of MIA Guidelines**

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## **ABSTRACT**

To date, there has been little work done on developing countries especially issues on auditor independence, audit quality, audit delays, and audit fee determinants. Even more scarce is studies on audit and Small and Medium Enterprises (SMEs). As such, this paper is to address this imbalance by having a closer look on audit fee determination of SMEs in Malaysia. The main objective of this paper is to examine the determinants of audit fees that had been charged to SMEs. Factors that are hypothesized to have significant influences on audit fees are auditee's size, auditee's complexity, auditee's risk, auditee's profitability, and auditor's busy period. Furthermore, this study also seeks to determine whether audit firms are following the benchmark that has been set by Malaysian Institute of Accountants (MIA) in charging their clients. Multiple regression analysis was used to analyze data from annual reports of 70 SMEs in Malaysia for the years 2001 and 2002. The main finding of this study is that only auditee's size has a significant impact in the determination of audit fees for SMEs organizations for the both years studied. There was no strong evidence to support auditee's risk, auditee's complexity, auditee's profitability, and seasonality having any relationship with audit fees. In addition, results also show that only one-third of auditors charged their clients lower than the minimum charges recommended by MIA. This paper extends the theory of audit fee determination by providing further insight into the factors that determine audit fees charged to SMEs. In addition, this study also contributes to practitioners such as audit firms, firms, and regulatory bodies in gauging whether MIA benchmarks have been adhered to by audit firms.

## **ABSTRAK**

Sehingga kini, kajian berkenaan faktor penentu yuran audit amat sedikit dilakukan di negara-negara sedang membangun. Tambahan lagi, kajian berkaitan dengan audit dan Syarikat Kecil dan Sederhana (SME) adalah amat jarang. Oleh itu kajian ini diharapkan agar dapat memberikan sedikit panduan mengenai faktor-faktor penentu yuran audit bagi SME di Malaysia. Tujuan utama kajian ini adalah untuk mengenalpasti faktor penentu bagi kadar yuran yang dikenakan kepada SME. Terdapat lima faktor yang dijangka memberi kesan ke atas pengenaan kadar yuran audit iaitu saiz syarikat, kesukaran mengaudit sesebuah syarikat, tahap risiko syarikat, tahap keberuntungan syarikat dan juga tahap kesibukan juruaudit. Selain itu, kajian ini juga bertujuan melihat sama ada pengenaan yuran audit ke atas SME oleh firma-firma audit adalah mengikut garis panduan yang telah dikeluarkan oleh Institut Akauntan Malaysia (IAM) atau tidak. Data dari laporan tahunan 70 buah syarikat SME bagi tahun 2001 dan 2002 telah digunakan dalam kajian ini. Keputusan yang diperolehi menunjukkan hanya satu faktor sahaja, iaitu saiz syarikat yang mempengaruhi yuran audit yang dikenakan. Faktor-faktor lain didapati tidak mempengaruhi kadar yuran audit yang dikenakan. Hasil kajian juga menunjukkan bahawa satu per tiga dari yuran audit yang dikenakan kepada SME adalah di bawah tahap minimum yang ditetapkan oleh IAM. Kajian ini dapat mengembangkan teori berkaitan yuran audit dengan memberikan petunjuk berkaitan faktor-faktor penentu yuran audit yang dikenakan kepada SME. Dari segi praktikal, kajian ini menyumbang kepada firma-firma audit, syarikat-syarikat SME, dan IAM yang bertindak sebagai agensi pengawalan dalam penentuan yuran audit yang adil dan bukan di bawah paras minimum yang disyorkan oleh pihak IAM.

## Chapter 1

### INTRODUCTION

#### 1.1 Introduction

The running of a firm is very much based on trust relationships. In many cases, the owners of the corporation would have to rely on management in running the business. Hence, the owners put their trust on management in the hope that management would act in their best interests, which is to increase their wealth and preserving the continuity of the business. This phenomenon is usually referred to as agency theory and is defined as:

*“a contract under which one party (the principal) engages another party (the agent) to perform some service on the principal’s behalf”* (Jensen & Meckling, 1976 in Godfrey, Hodgson, Holmes, & Kam, 1992, p. 236-237).

Nevertheless, this owner-agent trust relationship might be broken as management might act in their own best interests instead of the owners who have deployed their capital into the business (Madura, 2003). This is formally known as the agency problem (Godfrey et. al., 1992). This agency problem gives rise to three agency costs but we are only interested in one which is the monitoring costs (Jensen & Meckling, 1976 in Godfrey et. al., 1992). These monitoring costs refer to costs associated with monitoring the agent’s behavior (Godfrey et. al., 1992).

Thus, this raises the issue for an external party to keep management in check and to ensure that procedures and policies are in place to protect the interest of the owners. Inadvertently, this is exactly why auditors are employed by their clients. Corporate governance, a formal term in ensuring that the running of the business is at par to a normal organization in terms of integrity and transparency, is the very underpinning of audits and the existence of audit firms.

The understanding of audit fee determination is pertinent to suppliers and customers of the audit services industry (Che-Ahmad & Houghton, 1996). Furthermore, the pricing of these fees is also important to market regulators as previous studies have shown audit services might not be priced competitively due to high concentration of the number of accounting firms (Che-Ahmad & Houghton, 1996). Nevertheless, it cannot be denied that for a competitive pricing of audit fees, these charges should be closely related to audit quality which refers to the quality of audit service being provided to customers (Che-Ahmad & Houghton, 1996). However, Malaysian Institute of Accountants (MIA) through its guidelines (MIA By-Law) has also mentioned that the client should not be charged a fee that is too low as it can impair the quality of the audit performed.

## **1.2 Problem Statement**

Although there have been numerous studies on audit fee determination, most of these have been conducted using data in developed countries (Simon, Teo, & Trompeter, 1992). To date, there has been little work done on developing countries especially issues on auditor independence, audit quality, audit delays, and audit fee determinants (Waresul Karim & Moizer, 1996; Cobbin, 2002). As such, this paper is to address this imbalance by having a closer look on audit fee determination in Malaysia.

More interestingly, this paper targets small and medium-sized enterprises (SMEs) in Malaysia as they play a significant role in the development process of the national economy (Hashim, 2000; Abu Bakar, Smith, & Sapuan, 1997). SMEs contribute in many ways to the national economy such as in terms of business units, employment opportunities, economic output, regional income generation, savings, training, stimulation of competition, aiding large firms, introduction of innovation,

and as a foundation for growth (Hashim, 1999; 2000; Abu Bakar et. al, 1997). Nevertheless, studies involving SMEs are still very limited. As such, this paper hopes to redress this issue and to further emphasize the role of SMEs in Malaysia by looking into the determination of audit fees being charged to SMEs and the compliance to Malaysian Institute of Accountants (MIA) Guidelines. In other words, this study addresses the issue that SMEs are important to the economy and therefore, should be well-managed. Consequently, a regulatory element such as subjecting SMEs to audits and charging audit fees according to proper guidelines is needed.

### **1.3 Research Objectives**

Specifically, this paper aims:

- (1) to examine the amount of audit fees that had been charged by audit firm to SMEs;
- (2) to examine factors that determine the audit fees charged by audit firms;
- (3) to determine whether MIA benchmarks are adhered to in determining audit fees by audit firms (i.e. whether the audit firms are charging audit fee below the MIA benchmark); and
- (4) to examine whether audit fee charges differ according to the factors determined.

### **1.4 Research Questions**

As such, this paper would be able address questions such as:

- (1) What is the range of audit fees charged by audit firms to SMEs in Malaysia?;
- (2) What are the organizational factors that influenced the amount of audit fees for SMEs in Malaysia?;
- (3) Are the determinants consistent with previous research or specific to SMEs?;
- (4) Are the audit firms charging their services (audit fees) to SMEs within the accepted MIA benchmark?;
- (5) Do audit fees differ according to the factors determined?

### **1.5 Definition of Key Terms**

Audit fees can be defined as the amount of fee that had been charged by audit firms for the audit services performed.

### **1.6 Significance of the Study**

This study has theoretical and practical implications. This research will extend theory by providing further insight on the factors that determine audit fees charged to SMEs. Furthermore, this study is able to provide whether audit fees do indeed differ according to the factors determined to affect audit fees.

This paper is able to contribute to practitioners such as audit firms, firms and especially regulatory bodies in gauging whether MIA benchmarks have been adhered to by audit firms.

### **1.7 Organization of Remaining Chapters**

The remaining chapters of this research are organized as follows. Chapter 2 will concentrate on the review of previous studies on the determination of audit fees. This section will outline the theoretical framework, identify the variables, and develop the hypotheses to be tested for this study. Subsequently, Chapter 3 will describe the methodology used in this research which is using secondary data (i.e. annual reports) of SMEs in Malaysia in determining audit fees charged. Chapter 4 will proceed with the analysis of the data and the discussion of the results. Finally, Chapter 5 will recapitulate the findings of the study, implications and limitations of the study, and pose some direction for future research.

## **Chapter 2**

## LITERATURE REVIEW

### 2.1 Introduction

This section will discuss the relevant literature related to the topic at hand and present the theoretical framework for this study. In addition, justifications will be provided for the variables chosen and the relationships between these variables. Furthermore, testing of these variables and relationships are also given in the form of hypotheses for testing.

### 2.2 Review of the Literature

Audit fees can be defined as the price charged for the audit services by audit firms (Che-Ahmad & Houghton, 1996). More specifically, audit fees as defined by the Malaysian Institute of Accountants (MIA):

*“... based upon the degree of responsibilities, risk and skill involved and the time necessarily occupied on the work by the partner and staff in terms of the quality and level of competence required to meet auditing standards and statutory compliance with reference to the size, complexity and technical input expected of the audit assignment”* (p. 33).

MIA By-Laws also provide that audit fee for professional auditing services be based on the actual value of the work that has been done and is measured on four dimensions:

- (1) the level of expertise and the knowledge needed in completing the related task;
- (2) the level of training and experience of the individual engaging in the auditing work;
- (3) period needed by each individual in completing their task; and

- (4) the level of responsibilities and the importance of the auditing work done (By-Law B-6.1, p. 29).

MIA through its By-Law had recommended a basis for practitioners especially audit firms to determine minimum charge-out rates for the audit services that had been performed on their clients :-

a) Gross Turnover or Total Assets Basis

Gross Assets or Turnover for every ringgit (RM) of	Rate (%)
The first 100,000	0.8
The next 150,000	0.35
The next 250,000	0.25
The next 500,000	0.15
The next 1,500,000	0.10
The next 2,500,000	0.08
The next 5,000,000	0.075
The next 10,000,000	Negotiable

b) Total Operating Expenditure Basis

Total Expenditure for every ringgit (RM) of	Rate (%)
The first 50,000	2
The next 150,000	1
The next 800,000	0.5
The next 1,000,000	0.2
Above 2,000,000	0.1

As we can see from those two bases i.e. Gross Turnover or Total Assets, and Total Operating Expenditure, the MIA guideline is applicable for those companies that have gross turnover, total assets and total operating expenditure less than RM10,000,000 as the rate for the amount exceeding RM10, 000,000 is negotiable.

As for small and medium-sized enterprises (SMEs), there is still no universally accepted definition (Hashim & Ahmad, 2001). Nevertheless, in general, SMEs in Malaysia are defined according to fixed quantitative criteria such as a number of employees, amount of capital, amount of assets, and amount of sales turnover (Hashim & Ahmad, 2001). However, a generally accepted definition of SMEs in the Malaysian manufacturing sector is proposed by the Ministry of International Trade and Industry (MITI) as:

- i. A small-scale firm is a company “with less than 50 full time employees, and with an annual turnover of not more than RM10 million.”
- ii. A medium-scale enterprise is a company “with between 51 and 150 employees, and with an annual turnover of between RM10 million and RM25 million.”

As stated previously, an external party such as audit firms is needed to ensure that management is working in the best interests of the owners. Nevertheless, auditors should also be subjected to a set of guiding principles in ensuring that the audit done is of quality and recognized professionally. Hence, accounting and auditing standards of a high and internationally acceptable quality contribute to promoting relevant and reliable financial information useful to a wide range of users for decision-making purposes (A Statement of the Technical Committee of the International Organization of Securities Commissions, 2002). Auditor independence requirements also contribute

to promoting investor confidence in published financial statements, irrespective of whether such requirements are the responsibility of securities regulators in their jurisdictions (A Statement of the Technical Committee of the International Organization of Securities Commissions, 2002). While any consideration of the effectiveness of external audits involves a wide variety of issues, it is fundamental to public confidence in the reliability of financial statements that external auditors operate, and are seen to operate, in an environment that supports objective decision-making on key issues having a material effect on financial statements (A Statement of the Technical Committee of the International Organization of Securities Commissions, 2002). Put differently, the auditors must be independent in both fact and appearance (A Statement of the Technical Committee of the International Organization of Securities Commissions, 2002). Thus, the standards of independence for auditors should be designed to promote an environment in which the auditor is free from any influence, interest, or relationship that might impair professional judgment or objectivity or, in the view of a reasonable investor, might impair professional judgment objectivity (A Statement of the Technical Committee of the International Organization of Securities Commissions, 2002).

Another matter of concern for ensuring that audit fees are charged according to MIA guidelines is the avoidance of low-balling activities which is charging audit fees significantly below cost (Kanodia & Mukherji, 1994; Schatzberg, 1990; Magee & Tseng, 1990). This practice is not supported by regulatory bodies as it has a negative impact on auditor independence and audit quality itself (Kanodia & Mukherji, 1994; Schatzberg, 1990; Magee & Tseng, 1990). Hence, it would be of value to investigate whether audit firms for SMEs are using this “low introductory

pricing” or “predatory pricing” (Lee & Gu, 1998) in their determination of audit fees charged.

Currently, research on developing countries related to determinants of audit fees are scarce, nevertheless, studies on companies being audited such as SMEs are even more rare. As such, it is the aim of this paper to examine further the determination of audit fees for client companies which are SMEs.

### ***2.2.1 Organizational Factors Influencing Audit Fees***

Based on previous research, several organizational factors have been identified in influencing audit fees and each of these variables is discussed separately in the following subsections.

#### ***2.2.1.1 Auditee’s Size***

The most consistent result in all previous research has been that auditee’s size is the most significant explanatory variable in determining audit fees (Waresul Karim & Moizer, 1996; DeAngelo, 1981 in Simon & Taylor, 2002; Curry & Peel, 1998; Davis, Ricchiute, & Trompeter, 1993; Simon & Taylor, 2002; Pong & Whittington, 1994, Joshi & Al-Bastaki, 2000; Chung & Narasimhan, 2002; Ho & Ng, 1996; Wilson, 2003; Ezzamel, Gwilliam, & Holland, 2002; Matthews & Peel, 2003; Zhang & Myrteza, 1996; Barber, Brooks, & Ricks, 1987). Chung and Narasimhan (2002) in their international study on audit fees found that client size accounted as a major determinant in audit fees charged to organizations. Wilson (2003) using samples of energy firms also replicated the result that firm size is positively related to audit fee. More interestingly, a time-series analysis using UK companies on the antecedents of audit fees found that corporate size was the major determinant of audit fees 100 years

ago and still is the key factor of audit fee determination as of today (Matthews & Peel, 2003). The review of five major studies on audit fee determination in the United Kingdom showed that audit size was the most significant variable in explaining audit fees by using either total assets (Simunic, 1980 in Francis, 1984; Taylor & Baker, 1981 in Francis, 1984; Francis, 1984; Simon, 1985 in Simon & Francis, 1988; Simon & Francis, 1988; Butterworth & Houghton, 1995; Davis et al., 1993), sales (Ezzamel et. al, 2002; Taffler & Ramalingam, 1982 in Matthews & Peel, 2003) or both sales and total assets (Elliot & Korpi, 1978 in Anderson & Zeghal, 1994 ; Firth, 1985 in Butterworth & Houghton, 1995; Chan, Ezzamel & Gwilliam, 1993 in Chung & Narasimhan, 2002) as proxies for auditee size.

In another study, Ho and Ng (1996) in determining factors impacting audit fees in Hong Kong found that size was a major predictor and measure this variable in two measures of assets and sales. The findings of this research were also replicated in a study on municipal audit fees (Rubin, 1988) which found a significant positive relation of organization size and audit fee. Also from a public sector view, Deis and Giroux (1996) found that larger public sector organizations were positively related to both the price of the audit engagement and audit hours. This is because they require more independent audit time due to more financial transactions (Deis & Giroux, 1996). In addition, this study concluded that auditor loss exposure was also a significant audit fee determinant. In another paper on Norwegian companies listed on the Oslo Stock Exchange, audit firm size measured as total assets was found to be the major significant factor in influencing audit fees (Firth, 1997). Hence, this variable is studied in this paper in regards to audit fees for SMEs.

### ***2.2.1.2 Auditee's Complexity***

In addition, another major variable in explaining the variance between audit fee charges was the organizational complexity of the client firm (Davis et al., 1993). Audit fees were shown to vary according to number of subsidiaries (Taylor & Baker, 1981 in Francis, 1984; Francis, 1984; Francis & Stokes, 1986 in Francis & Simon, 1987; Palmrose, 1986 in Francis & Simon, 1987; Francis & Simon, 1987; Simon & Francis, 1988; Butterworth & Houghton, 1995; Pong & Whittington, 1994; Davis et al., 1993; Wilson, 2003; Ezzamel et. al., 2002), the ratio of auditee's receivables and/or inventories to the auditee's total assets (Simunic, 1980 in Francis, 1984; Simon, 1985 in Simon & Francis, 1988; Firth, 1985 in Butterworth & Houghton, 1995; Francis & Stokes, 1986 in Francis & Simon, 1987; Simon & Francis, 1988; Simon & Taylor, 2002), and audit fee diversification (Simunic, 1980 in Francis, 1984; Chan et al, 1993 in Chung & Narasimhan, 2002). In these studies, organizational complexity was found to be positively related to audit fee determination (Curry & Peel, 1998). Nevertheless, Firth (1997) found that organizational complexity was related to audit fees but this relationship was rather weak or insignificant. Still, since this variable was studied rigorously in previous studies, it would be used in this research as well.

### ***2.2.1.3 Auditee's Risk***

In most studies, there was also the variable of auditee's risk that plays a major role in the determination of audit fees (Che-Ahmad & Houghton, 1996; O'Sullivan, 1999; Waresul Karim & Moizer, 1996; Curry & Peel, 1998; Simon & Taylor, 2002). This meant that companies that were making accounting losses could be expected to represent a higher risk because of the implied lack of cash flow and thus, increase the

probable inability to pay the auditing firm (Waresul Karim & Moizer, 1996). The auditee's risk is very much related to another variable that has been separated in some research whereas in some others, this has been grouped as one variable which is auditee profitability. Walker and Casterella (2000) using data from over 3,000 companies in the United States, found that auditors are managing their exposure to audit risk based on the auditee's risk or auditee profitability by adjusting audit fees. However, Davis et al. (1993) used opinion type as a proxy for risk as it measured this variable in terms of the loss that will be incurred if an unqualified audit opinion is issued inappropriately. They further argue that this measure more closely reflects auditors' actual perception of risk but are aware that the assessment of risk in this manner is more subjective in nature compared to more quantitative measures. This variable is also included in this paper as a determining factor of audit fees for SMEs.

#### ***2.2.1.4 Auditee's Profitability***

A study by Che-Ahmad and Houghton (1996) using a matched-pair sampling technique to overcome a serious methodological flaw and found that auditee's size, complexity, and risk were all significant in influencing audit fees. In another paper to establish whether board and audit committee characteristics influenced auditors' pricing decisions, O'Sullivan (1999) found that there was no evidence of this relationship but reaffirmed that audit fees were predominantly influenced by the size, complexity, and risk of the audit client. Yet in another study on audit effort, audit fees and the provision of nonaudit services to audit clients, Davis et al. (1993) replicated previous research results of client size, audit complexity and risk to be correlated with audit fees. A study using Middle Eastern listed companies also found that size, risk, complexity, and profitability of client operations to be significantly associated with

audit fees (Joshi & Al-Bastaki, 2000). Hence, auditor's profitability is another important factor in influencing audit fees and is used in this paper.

#### ***2.2.1.5 Seasonality***

Chan et al. (1993) in Chung and Narasimhan (2002) showed that there is a difference in audit work performed during the "busy season" and "non-busy season". This led to the conclusion that audit firms would charge a premium for the busy season (Waresul Karim & Moizer, 1996). Consequently, it is expected that companies with accounting periods ending during the busy season would be expected to pay a premium for the audit services provided. Hence, this variable is captured in a dummy variable whereby the value of one is the busy season and the value of zero as the non-busy season.

It is argued that this variable is difficult to capture for SMEs as many SMEs are audited by numerous audit firms. This is different for large companies as they are more likely to choose from the Big Four and therefore, the tracking of busy and non-busy season for these audit firms are easily attainable.

However discussion with Ms Lee Phaik Im, Penang Branch Manager for KPMG, Mr. Lok Char Lee, Partner of Tan Chong & partners, and Mr. Ng Swee Weng, partner of KPMG has come to conclusion that a busy period for audit firms normally between November to March. Moreover, Ahmad and Derashid (1996) used the period between November and March as an indicator for busy season for auditors in Malaysia in their research. Consequently, this variable will be used according to the definition of busy season in Che Ahmad and Derashid (1996).

### ***2.2.1.6 Auditor's Size***

An alternative view was postulated by Klein and Leffler (1981) in Deis and Giroux (1996) that brand name development or reputation is very important for assessing audit quality and consequently, audit fees. This point was further emphasized by Simunic and Stein (1987) in Deis and Giroux (1996) who argued that credibility of audit services with external financial statement users which is closely related to an auditor's reputation is among the antecedents of audit quality. A study on 1484 Australian publicly listed companies also found that auditor brand name reputations associated with the Big 8 auditors were positively related to audit fee premium (Craswell, Francis, & Taylor, 1995). Furthermore, Deis and Giroux (1996) in a study on Texas independent school districts found that brand name and industry experience were positively related to audit fees.

Gul (1999) using Hong Kong market data provided evidence in support of bigger and well-established audit firms such as the Big 6 charged higher audit prices compared to non-Big 6 firms because of product differentiation and competition. A study on UK companies also found further support for auditor's size having a positive impact on audit fees (Ezzamel et. al., 2002). This result is replicated using a set of New Zealand companies which showed that Big 5 were receiving fee premiums compared to non-Big 5 or obscure audit firms (Johnson, Walker, & Westergaard, 1995).

Nevertheless, Willekens and Achmadi (2003) using Belgian data for small private cliental showed that there were no price premium charged by large auditing firms compared to smaller auditing firms. This result was also repeated using Korean listed companies whereby Big 6 auditors were found to be not different in audit quality compared to non-Big 6 auditing firms (Jeong & Rho, 2004). Chaney, Jeter,

and Shivakumar (2004) found that for private firms, they do not view the Big 5 auditors as providing superior audit quality and therefore, do not warrant a fee premium for these auditors. Moreover, for SMEs, there are numerous small and medium sized auditors that are doing the audit work for them and consequently, it is difficult to track the size of these auditors. Hence, this variable will not be included in this research because of difficulty in data collection.

#### ***2.2.1.7 Government Ownership***

In developing countries, it is hypothesized that government ownership is the main influence on ownership structures (Waresul Karim & Moizer, 1996). It is argued that companies that are wholly owned by governments have been criticized for not being audited in depth because there is little pressure for higher quality audits (Waresul Karim & Moizer, 1996). Thus, it is hypothesized that companies with higher percentages of government ownership will pay significantly lower amounts of audit fees than companies owned by the private sector (Waresul Karim & Moizer, 1996).

Nevertheless, it is argued that governments are interested in controlling companies that play an extensive role in the national economy and security and therefore, would rather have ownership in large companies in certain industries such as in Malaysia the utilities and telecommunications industries. Hence, since SMEs are small-medium sized in nature, these companies are usually owned by private investors and are thus, highly unlikely to be owned by the government. Consequently, it would not be of importance to investigate the relationship between government ownership and audit fees determination for SMEs as it is irrelevant in this case.

### ***2.2.1.8 Auditor's Size and International Link***

Rubin (1988) using a framework similar to Simunic (1980) in Francis (1984) argued that auditor size can be measured by whether a firm is one of the Big Eight auditing firms. It was further hypothesized that Big Eight firms are found to be associated with significantly higher audit fees. This relationship was supported by Firth (1997) that measured auditor size using the Big Six (formerly the Big Eight) whereby it was shown that the Big Six firms have consistently charged a premium over other accounting firms for both small and large size clients. Waresul Karim and Moizer (1996) provided an explanation for this relationship as the Big Six have access to higher quality staff and use higher quality procedures and so are more likely to detect errors and omissions. In addition, Waresul Karim and Moizer (1996) argued that because of the Big Six's size, they were also better able to withstand pressure from client company management and so are more likely to act in an independent fashion, which consequently, increases the confidence of their auditing quality. Curry and Peel (1998) also argued in their paper using neural networks in predicting the cross-sectional variation in corporate audit fees that the Big Six do charge a superior (differential) for their services compared to their smaller counterparts. In previous research, a binary variable is used to denote whether an auditing firm is one of the Big Six or otherwise (1 = a Big Six firm, 0 = a non-Big Six firm).

However in this case, this relationship will not be tested as more than 90% of the sample has been audited by non Big Six audit firms. Hence, although this relationship can be tested, it is argued that because of the limited size of the sample, this proportion might not be representative for the whole population.

#### ***2.2.1.9 Employment of Qualified Accountant(s)***

It is hypothesized that many companies in developing countries are run by unqualified accountants (Waresul Karim & Moizer, 1996). As such, it is argued that companies with qualified accountants are more likely to have better internal control systems and therefore, produce accounts containing fewer errors than companies with only unqualified accountants (Waresul Karim & Moizer, 1996). Hence, it is expected that companies with qualified accountants be charged a lower audit fee as internal controls are better. This variable was captured through a binary variable whereby the client firm with qualified accountant(s) would be coded as one and those firms without qualified accountant(s) would be coded as zero.

This relationship is again not tested in this study as the information on whether an SME employs a qualified accountant(s) or otherwise is difficult to be ascertained. This is because most of the information on SMEs especially internal information about the companies are very restricted and kept confidential to the respective companies. As such, the attempts to even obtain the financial report directly from the companies have been very unfruitful and thus, any attempts to obtain information such as internal auditors through questionnaires would be seen as more frustrating and more difficult to be attained.

#### ***2.2.1.10 Financial or Non-Financial Company***

It is found that audits of financial companies (banks and insurance companies) are different in nature from those of non-financial companies, as principally both sets of companies present different audit challenges (Waresul Karim & Moizer, 1996). It is difficult to hypothesize whether financial companies would have higher or lower audit fees as financial companies typically have a rather simpler asset structures, but they

tend to have more offices and hence have more elements requiring an audit (Waresul Karim & Moizer, 1996). A dummy variable was used to measure this element with the value of one if the company belonged to the financial sector and zero if otherwise.

Nevertheless, this relationship would not be investigated here as according to the SMIDEC (Small and Medium Industries Development Corporation) database of SMEs, there is no information on SMEs which are in the financial sector. As such, the information of financial SMEs companies is unable to be ascertained.

On a more macro or international view, Taylor and Simon (1999) collected audit fee data from 20 countries and found that increased litigation pressures, institutional traditions of increased disclosure, and increased regulation had a positive relationship with audit fees.

In addition, there has also been research investigating the contract type as an important component audit fees and hours. More specifically, it is found that under fixed fee contracting as opposed to cost-reimbursement, audit fees are lower but audit hours are unaffected with the choice of contracting (Palmrose, 1989).

Nevertheless, from the numerous previous researches, many have stated that there are three key determinations of audit fees which are the auditee's size, organizational complexity of the client firm, and the auditee's risk (Maher, Tiessen, Colson, & Broman, 1992; O'Keefe, Simunic, & Stein, 1994; Zhang & Myrteza, 1996). However, as for seeking the determinants of audit fees in a developing country context, Waresul Karim and Moizer (1996) have added auditee profitability as a separate variable, government ownership, date of year end, auditor size and international link, employment of qualified accountants, active trading, multinationality, financial or non-financial company, language of annual report, and number of languages used in the annual report. Some of these variables have been

discussed above, nevertheless in the context of SMEs, the active trading and multinationality variables would be deleted as these are irrelevant for these small firms. Furthermore, in the Malaysian context, the variables of “language of annual report” and “number of languages used in the annual report” would be irrelevant because nearly all annual reports are reported in both English and Malay languages and thus, these variables would have, if any, an insignificant influence on audit fees.

### 2.3 Theoretical Framework and Hypotheses

This paper seeks to examine the antecedents of audit fees and thus, a model is hypothesized to be able to explain the varying audit fee charges. As discussed in the previous section, the variables and relationships studied in this paper can outline in a model for testing:

$$LNAFee_i = b_0 + b_1Size_i + b_2Complexity_i + b_3Risk_i + b_4Profitability_i + b_5Seasonality_i + \varepsilon$$

where:  $LNAFee_i$  = Audit fees charged to auditee  $i$  (Natural Log transformed)

$Size_i$  = size of auditee  $i$  (Natural log of Total assets)

$Complexity_i$  = complexity of auditee  $i$  (ratio of Inventories and Receivable over Total assets)

$Risk_i$  = risk of auditee  $i$  (Long term debt over total assets)

$Profitability_i$  = profitability of auditee  $i$  (Return on Total asset (ROTA))

$Seasonality_i$  = busy period for auditor or not (coded 0/1)

$\varepsilon$  = error term (assumed to be normally distributed)

This model is very similar to Joshi and al-Bastaki (2000) for their research on determinants of audit fees for companies listed in Bahrain Stock Exchange.

### ***2.3.1 Dependent Variable***

The dependent variable in this study is obviously the audit fees charged by the auditing firms to their clients. This variable is measured in terms of ringgit.

### ***2.3.2 Independent Variables***

As stated, there are five independent variables in this study whereby four are continuous variables and one is a nominal variable. Each variable and their hypothesized relationship with the dependent variable are discussed below.

#### ***2.3.2.1 Auditee's Size***

As stated, the most significant factor in determining audit fees is the client firm's size. The relationship between auditee's size and audit fees is hypothesized to be a positive relationship and total assets will proxy for size.

**H1: The larger the auditee size, the higher the audit fees.**

In addition, a test will also be conducted to examine whether audit fees differ according to audit firm size. This is done by recoding the data on audit firm size and is tested through the following hypothesis:

**H6: Mean of audit fees for small firms differ from the mean of audit fees for large firms.**

#### ***2.3.2.2 Auditee's Complexity***

Curry and Peel (1998) stated that the complexity of the audit is hypothesized to increase the level of the audit work since increased auditee complexity increased the risk of the audit failure. Furthermore, the complexity of the audit may be affected by the organizational characteristics of the auditee (e.g the degree of decentralization);

the degree of diversification; and the difficulty of auditing the assets held by the clients (e.g relatively large values of debtors and stock). Waresul Karim and Moizer (1996) stated that the amount of audit effort expended can be expected to increase with the increased complexity of the audit task which in turn is likely to lead to increased audit fees. Complexity costs will be a reflection of the nature of the business of the auditee, its location, the quality of its internal control and the proportion of unusual transactions. Thus, the relationship between auditee complexity and audit fees are hypothesized to be positive as well.

**H2: The higher the auditee complexity, the higher the audit fees.**

The proportion of total assets represented by inventories and receivables is used as a measure of auditee complexity compared to number of subsidiaries as due to their nature of size, SMEs are not inherently having many subsidiaries.

Furthermore, the means of audit fees for those having high complexity and low complexity will be tested to ascertain whether they differ or otherwise.

**H7: Mean of audit fees for low complexity firms differ from the mean of audit fees for high complexity firms.**

**2.3.2.3 Auditee's Risk**

Curry and Peel (1998) hypothesized that auditee risk affects the level of audit fees for two reasons. Firstly, increased client risk increases the risk of audit failure and therefore a higher level of audit testing will be required. Secondly, the auditor will charge a higher fee, commensurate with the perceived risk (of audit failure) associated with the audit and/or to cover the cost of higher indemnity insurance against audit failure. Five measurements for audit risk have been identified in previous research such as the ratios total liabilities to total assets, long-term debt to total assets, working

capital to total assets, current assets to current liabilities, and current assets less stock to current liabilities. Thus, auditee risk is hypothesized to have a positive relationship with audit fees.

Most of the previous researcher used long-term debt to total assets ratio as a measure for risk (Chaney et. al., 2004; Craswell et. al., 1995; Curry & Peel, 1998; Firth, 1997; Gul, 1999; Joshi & Al-Bastaki, 2000; O'Sullivan, 1999; Wilson, 2003). Therefore, a long-term debt to total assets ratio will be used as proxies for auditee risk as most of the previous researcher used this measure for the proxy of risk.

**H3: The higher the auditee risk, the higher the audit fees.**

It is also interesting to test whether high risk firms do indeed are charged with different fees compared to low risk firms. This can be examine through the testing of this hypothesis:

**H8: Mean of audit fees for low risk firms differ from the mean of audit fees for high risk firms.**

**2.3.2.4 Auditee's Profitability**

Curry and Peel (1998) stated that the auditee's 'ability to pay' might influence the amount auditors' charge; that is; higher corporate profitability (ability to pay) may be positively correlated audit fees. There were 3 measures that always been used to measure audit profitability: Return on Capital employed (ROCE), return on Total assets (ROTA), and return on sales (ROSAL).

According to Waresul Karim and Moizer (1996), the effect of auditee profitability is hard to assess because there are two possible opposite effects. Greater profitability could mean that the company is less concerned with individual overheads and hence the audit fee could be higher. Alternatively, low profitability could be

associated with financial pressure which could require increased audit work to verify the value of assets and to confirm that the company was a going concern. Hence, low profitability could also be associated with higher fees. Thus, due to the conflicting nature of the relationship between auditee profitability and audit fee, the relationship hypothesized is that there is an association between auditee profitability and audit fee. ROTA will be use as a proxy for this variable.

**H4: Auditee profitability is related to audit fees.**

Another test relating to profitability is ascertaining whether high profitability firms are charged different audit fees compared to low profitability firms. This is tested by comparing the means of the two groups.

**H9: Mean of audit fees for low profitability firms differ from the mean of audit fees for high profitability firms.**

**2.3.2.5 Seasonality (Date of Year End)**

It is believed that busy and non-busy season influence auditors in charging the audit fees. Date of financial year end for auditee (coded 1 for busy and 0 for non busy) will be proxies for seasonality.

**H5: Higher audit fees during busy season compared to non-busy season.**

Seasonality is also tested to see whether audit fees differ according to the season that they are audited. Specifically, this is tested through this hypothesis:

**H10: Mean of audit fees for busy season differ from the mean of audit fees for non-busy season.**