ABSTRACT

The issue of audit fees and non-audit fees charged by the audit firms has been discussed regularly in accounting and auditing literature. Recently, due to the corporate scandals in United States, the issue is discussed together with a host of revelations about audit failures that led to the companies’ demise. The auditing profession is being badly blamed and some suggest that this could be due to the audit firm’s reliance more on non-audit services rather than the audit itself. Therefore, this study attempts to probe the situation in Malaysia using the banking sector as the subject of interest. Specifically, it tries to examine the impact of non-audit services conducted by audit firms to these banks on audit fees. The results showed that the variable of non-audit fees is statistically significant in determining audit fees as predicted. Further sensitivity analysis showed that the results are robust to different measurements and company size.

Keywords: Audit fees; non-audit fees; banking sector.
perbankan sebagai tumpuan kajian. Secara spesifik, kajian ini cuba untuk mengenal pasti kesan perkhidmatan bukan audit yang dijalankan oleh firma audit di bank ini ke atas yuran audit. Dapatan kajian menunjukkan bahawa pemboleh ubah yuran bukan audit secara statistiknya memberi kesan yang signifikan ke atas yuran audit. Selanjutnya dalam analisis sensitiviti didapati bahawa dapatan kajian adalah konsisten bagi pengukuran dan saiz syarikat yang berbeza.

Kata kunci: Yuran audit; yuran bukan audit; sektor perbankan.

INTRODUCTION

Research on non-audit fees is becoming important given its potential effect on audit independence (Firth, 1997a). Recently, the Enron scandal in the United States had bristled with a host of revelations about the auditing, which led to its demise. Arthur Andersen, the auditor of Enron was heavily criticised for the collapse, as it was alleged that they concentrated more on non-audit services (hereafter, NAS) rather than the audit itself. In 1998, Arthur Andersen’s total worldwide revenue for NAS was US$ 3216.8 million as compared with US$ 2,876.6 million only for audit services (Arthur Andersen, 1998). The total worldwide revenue had grown by about 13 %t annually since 1990. One of the reasons given by them was the growth in new services they provided other than audit services.

In the United States, the challenge faced by the audit firms nowadays is the increasing reluctance of their clients to purchase both consulting and audit services from the same firms (The Star, 2002, February 7). In addition, they have to deal with an onslaught of new laws heaped on them by regulators, which among other things, discourage them from selling NAS to the clients they audit. Auditors have also been criticised by the public in the Enron scandal because of the lack of independence in auditing their clients due to its long tenure. For that reason, the Monetary Authority of Singapore (MAS) has requisitioned all banks incorporated in Singapore to change their audit firms every five years under a revised ruling. The new audit requirement is one of a series of control measures on corporate governance introduced by the Singaporean authorities (The Star, 2002, March 14). In Malaysia, however, there is no regulation for the banks to change the audit firms within a certain period.

Auditors are agents of the shareholders whose interests are considered different to those of the managers of the companies audited (Jensen & Meckling, 1976). That is why there was a suggestion for the disclosure...
of non-audit fees in published accounts in Malaysia to protect shareholders’ interests (Teoh & Lim, 1996). It is one of the tools to minimise agency cost between managers and shareholders. Many British Commonwealth countries have made it a requirement that audit fees of listed companies be disclosed, and in Australia and the UK, consultancy fees paid to the auditor for non-audit work must also be published in the annual report (Firth, 1997a).

The purpose of this paper is to add to the empirical literature on audit pricing by examining audit fees and non-audit fees paid to audit firms in the banking sector in Malaysia. This study investigates the banking sector because most of the studies in audit pricing exclude this sector (Fields, Fraser & Wilkins, 2004). Whilst there are studies that investigated the perception of the shareholders, managers and auditors of the effect of NAS fees on auditor independence (Gul & Teoh, 1986; Teoh & Lim, 1996), none has specifically examined the relationship between NAS fees and audit fees. This relationship needs to be examined because it was alleged that this resulted in auditors compromising their independence in order to protect the lucrative NAS income. The audit firms would charge lower audit fees to retain their clients and then charge higher fees on NAS fees to recover the loss, thus it would affect the auditor independence (Hillison & Kennelley, 1988). In fact, this is one of the factors that was raised by the regulator in the United States and a new rule was introduced to protect the independence of the auditors by restricting the NAS fees as reflected in the Sarbanes-Oxley Act.

Background of Banking Sector

In Malaysia, a “bank” means an establishment that is engaged, among others, in the business of receiving deposits on current accounts, deposit accounts, savings accounts or other similar accounts, and paying or collecting cheques drawn by or paid in by customers. The banking sector plays a very important role in the development of the Malaysian economy, since a strong banking sector is a prerequisite for sustainable economic growth. This sector is given a lot of incentives in taking part in the development of the economy. However, due to the economic crisis that began in the third quarter of 1997, the government has instructed that only ten anchor banks are to be established in the ensuing years. The consolidation of domestic banking institutions into ten banking groups was supposed to strengthen the nation’s banking sector.

The banking sector is highly regulated and most of the local banks, especially commercial banks are listed on the Main Board of the Bursa
Malaysia (formerly known as Kuala Lumpur Stock Exchange or KLSE before 2004). All banks operating in Malaysia, either local or foreign, are governed by the Central Bank of Malaysia. All banks also have to comply with the Banking and Financial Institutions Act (BAFIA) of 1989 to ensure efficiency and effectiveness. In addition, they have to comply with the Company Act of 1965 and have to submit annual reports to the Registrar of Companies and Bursa Malaysia.

Background of Non-Audit Services (NAS) in Malaysia

In general, audit firms provide NAS such as tax consultancy, systems consultancy, management advice, international business advice, human resources management, and financial and investment consultancies (Firth, 1997a). In addition, in the banking sector, they provide due diligence and restructuring consultation necessitated by mergers or acquisitions.

Teoh and Lim (1996) in their interview of senior partners from two of the Big Six firms have found that consultancy fees made up 20% to 30% of their total revenues and the trend is likely to be on the increase. In 1990, then President of the Malaysian Institute of Accountants, Haji Hanifah Noordin, mentioned the need to control and monitor the NAS performed by auditors (Hanifah, 1990). After the Enron scandal in the United States, the issue of NAS is given much attention by the regulators as well as by commentators from the accounting profession. This issue had directly affected the accounting profession in Malaysia as well.

Previously, the regulators do not stress on the disclosure of NAS fees. This is in contrast to the amount paid as audit fees, which must be disclosed in the annual reports as required by the Company Act of 1965. However, the recent amendment to the Bursa Malaysia Listing Requirement Regarding Transparency, which came into force in 2001, has required all listed companies to disclose the amount of non-audit fees paid to external auditors in their annual reports. The effective date to the disclosure of non-audit fees in annual report was 1 June 2001. However, this new requirement, with respect non-audit fees, does not specify the manner of the disclosure (Refer to Chapter 9 under Paragraph 9.25 of Appendix 9c in Part A number 17 of the Bursa Malaysia Listing Requirement).

The Objective of the Study

Only two Malaysian studies had examined the relationship between non-audit fees and audit fees (Mohd Atef & Ayoib, 2000; Ayoib, 2001),
while other studies (see Gul & Teoh, 1986; Teoh & Lim, 1996) are concerned about the perception of the stakeholders regarding the NAS fees issue. However, Mohd Atef and Ayoib (2000) and Ayoib (2001) had not found significant relationships between NAS fees and audit fees. This might be due to the fact that their studies did not specifically examine NAS fees and the voluntary disclosure requirement of NAS fees in Bursa Malaysia listed companies. Thus, the objective of this study is to examine NAS and its relationships with audit fees in the banking sector using archived data.

The remainder of the study is organised as follows. The next section highlights the motivation of the study while Section 3 discusses relevant literature on audit fees. Section 4 provides the theoretical rationale and develops the hypothesis. Section 5 describes the research design and sample selection. Section 6 reports and discusses the results and finally, Section 7 concludes the research and provides implications and limitations of the study.

THE MOTIVATION OF THE STUDY

The most important factor that motivated this study is the recent corporate scandals in the developed countries in which the audit profession is heavily criticised by the public. The public has accused the auditors of lacking of independence, given by the fact that auditors provided services other than audits to their clients. This gives rise to a controversial issue whether an auditor should provide NAS to their audit clients (Firth, 2002). The argument is that the auditor is likely to give bias judgment since the auditor is also the consultant of their audit clients (Hillison & Kennelley, 1988). In Malaysia, the Malaysian Institute of Accountants (MIA) has issued guidelines with respect to this matter (Malaysian Institute of Accountants by Laws, 2002a). Other studies have revealed that non-audit fees positively and significantly determined audit fees but these studies are conducted in foreign settings (Simunic, 1984; Palmrose, 1986a; Firth, 1997a, 1997b). Moreover, the results in those studies were not consistent with the theory of negative relationships between NAS fees and audit fees.

In the present study, we examine this issue in the local setting namely Malaysian banks. To date, very few empirical studies in Malaysia have examined the effect of NAS fees on audit fees except for a couple of studies as previously mentioned (Mohd Atef & Ayoib, 2000; Ayoib, 2001). However, these prior studies did not specifically focus on non-audit fees. Instead, they used non-audit fees only as one of the control variables in the audit fee model, where the amounts that were not
disclosed in the annual reports were also included in the analysis. This results in an inaccurate analysis on non-audit fees because some companies had voluntary disclosed the NAS fees while others did not. For the present study, we do not treat the amount of non-audit fees that are not disclosed in the annual reports as zero. Instead, these amounts were obtained directly from the respective banks.

This study is expected to provide a better understanding about the relationships between NAS fees and audit fees in Malaysia.

**LITERATURE REVIEW**

There are a number of previous studies addressing the issue of audit fees and determinants of audit fees including non-audit fees. Previous researchers used various settings in investigating determinants of audit fees (Firth, 1997a). Simunic (1980) began the studies on audit fees by developing a model that includes factors representing client size, complexities and risks, which explains for the variation in audit fees. In the regression analysis, it was found that auditee size, complexity and risk were related to audit fees. In addition, no relationships existed between audit fees and the Big Eight auditors in both large and small audit markets. In other words, the Big Eight auditors did not charge higher audit fees than Non-Big Eight auditors in both markets. Later, similar studies were undertaken in countries such as the United Kingdom (Chan, Ezamel, & Gwilliam, 1993; Pong & Whittington, 1994) and Australia (Butterworth & Houghton, 1995; Craswell, Taylor & Francis, 1995). These studies found that auditee size, complexity and risk are the robust determinants of audit fees. These studies used archival data and regression analyses were employed. However most of them excluded the finance companies especially the banks despite their importance to the economy. This might be due to the fact that the banks are the highly regulated companies and very different from other types of companies.

**Factors Affecting Audit Fee**

The following section discusses factors affecting audit fee as examined in previous studies. The relationship between NAS fee and audit fee is discussed in the last section before the hypothesis development.

**Auditee Size**

The most determinant factor of audit fees is the auditee size, which is usually measured by total assets. In addition, Pong and Whittington
(1994) also found that the total sales are relevant to measure audit fees. The size of auditee has a direct impact on the auditors’ work and numerous studies have asserted a positive relationship between audit fees and auditee size (Firth, 1985; Simunic, 1980; Francis, 1984; Low, Tan & Koh, 1990; Chan et al., 1993; Pong & Whittington, 1994; and Gerrard, Houghton & Woodliff, 1994).

Similarly, studies by Mohd Atef and Ayoib (2000) and Ayoib (2001) in Malaysia have also found positive and significant relationships between auditee size and audit fees. Auditors would invariably need more time to audit larger companies therefore charge more audit fees on such companies. They used the Bursa Malaysia listed companies’ annual reports from 1993 to 1995 and analysed the data using Generalised Least Squares and Ordinary Least Squares. Both studies had used data before the financial crisis in 1997.

**Complexity**

The complexity of the auditee also influences the audit fees in that the auditors need longer time and more man power to complete their audits (Firth, 1985; Simunic, 1980; Francis, 1984; Simon, 1985; Low et al., 1990; Chan et al., 1993; Pong & Whittington, 1994; Gerrard et al., 1994; Firth, 1997a; Butterworth & Houghton, 1995; Mohd Atef & Ayoib, 2000). Therefore, just as the auditee size, auditee complexity also bears a positive relationship with the audit fees. Normally two proxies are used; firstly the proportion of inventory and total receivables to total assets and secondly, the number of subsidiaries are used for measurement of audit complexity. For that reason, the present study also uses both proxies in the determination of complexity.

Furthermore, long-term trend analysis has also been done on audit fees. Menon and William (2001) analysed long-term trend of audit fees and found that complexity (which was proxied by total receivables to total assets and number of subsidiaries) had been significantly positive to audit fees. They analysed the trends in audit fees from 1980 through 1997, adjusting for changes in client size, complexity, and risk in US. They modified the Simon and Francis (1988) model in their analyses. Sample of companies were from the voluntarily disclosed audit fees data in SEC filings, chiefly the proxy statements.

**Audit Risks**

Audit risks also have a significantly positive relationship with audit fees due to the fact that the auditors need to do more work to eliminate
any potential litigation against the auditors. Palmrose (1986a), Francis and Simon (1987) and Houghton and Jubb (1999) found that the auditor’s opinion as a proxy of audit risks has a positive effect on the audit fees. Palmrose analysed the association between audit risks and audit fees in the United States corporations, while Francis and Simon examined a small United States corporations, and Houghton and Jubb investigated Western Australia companies. They all used data from annual reports and found a positive relationship between audit risks and audit fees.

Auditor Size/Industry Specialisation

Similarly, for auditor size, the Big Five auditors always charged more than non-Big Five due to several reasons such as the brand name achieved by the Big Five and higher audit quality (Palmrose, 1986a; Francis & Simon, 1987; Simon & Francis, 1988; Butterworth & Houghton, 1995). The stiff competition between the auditors gives opportunities for the Big Five auditors to gain higher quality work because they have more strength and expertise than the non-Big Five. Hence, the auditee has to pay a larger premium to the Big Five for the higher audit quality (Firth, 1993).

Craswell and Taylor (1991) found evidence of industry specialisation among Australian audit firms. This occurred when many contractual influences such as reputation, similarities of client create a demand for a specific set of skills, which enhances auditor competence. They suggested that product differentiation among auditors represents a significant part in explaining the market structure of auditing. Therefore, audit quality is not based only on the brand name of the auditors, which is defined by De Angelo (1981) as the ability to discover a breach and the independence to report the breach. However, it also consists of multiple attributes such as audit specialisation to add the value of audit quality. Craswell and Taylor used the audit fees data for companies listed on Australian Stock Exchanges during the period 1982 to 1987. The study adopted two approaches related to some specified absolute market share and relative to the share of other companies. Further investigation by Craswell et al. (1995) using 1,484 Australian public listed companies found that, on the average, the Big Eight auditors which are industry specialists earn a 34% premium over non-specialist Big Eight auditors, and the Big Eight brand name premium over non-Big Eight auditors averaged around 30%.

Furthermore, Defond, Francis, and Wong (2000) indicated that there were premiums for both general brand name and for industry
specialisation in the Big Six in Hong Kong. They examined the audit fees for the year 1992 public listed companies (excluding the finance industry) from data in annual reports using regression analyses. The results suggested that the Big Six brand name reputation is a necessary foundation in which to achieve higher priced quality-differentiated audits based on industry specialisation.

In Malaysia, the results showed that the Big Six audit firms acquire more than 60% of the audit market of public listed companies and none of them specialises in only one industry (Takiah, Ruhanita & Aini, 2000). They utilised 10% of the total industry clients as a specialist as suggested by Craswell and Taylor (1991) and Craswell et al. (1995).

**Foreign Companies**

Studies by Rose (1999) and Ayoib (2001) in the Malaysian market showed that foreign companies were charged higher fees than local firms. Rose investigated audit fee determinants in Malaysia and Hong Kong. She used the audit fee models developed in prior literature such as Simunic (1980). The models were analysed by means of Ordinary Least Squares regression and run separately for each country. The sample was collected from Worldscope Compact Disclosure, Moody’s Companies International and the Lexis/Nexis database for the year 1995. Similarly, Ayoib (2001) used the percentage of foreign ownership and found the variable to be highly significant in explaining the variability of audit fees.

**Non-Audit Fees**

It was argued that a negative relationship between audit fees and non-audit fees would happen due to the trade off between audit and NAS works (Simunic, 1984). This stems from the knowledge spillover effects whereby the benefits from the NAS may subsequently be passed on to the companies by reducing the audit fees. Another explanation of this negative relationship is that the audit is used as a *loss leader* to obtain the more lucrative consultancy works. The effect of loss leader reduces the audit fees and subsequently audit firms increase the NAS fees to capture the loss (Hillison & Kennelley, 1988). This would also occur if audit firms expect to avoid a dismissal by reducing the audit fees and then recoup the loss by increasing the NAS fees. To our knowledge the studies that only found a negative relationship between audit fees and NAS fees were those by Clatworthy, Mellett and Peel (2002) and Fields et al. (2004). Clatworthy et al. (2002) investigated public sector organisations in the United Kingdom while Fields et al. (2004) examined banks in the United States.
Despite these theories, many empirical studies found that the non-audit fees were positively and significantly related to the audit fees (Palmrose, 1986b; Simunic, 1984; Ezzamel, Gwilliam & Holland, 1996; Firth, 1997a, 1997b; 1999). Similarly, Firth (2002) found that there is positive association between consultancy fees and audit fees using the United Kingdom sample. He used data from a sample of 314 UK quoted companies and replicated his model in 1997a. He explained that this might be due to specific events in the company that generate a demand for consultancy services as well as requiring additional audit effort. Examples of specific events are mergers and acquisitions, share issues, implementation of new accounting and information systems, appointment of new CEOs, and corporate restructures.

The study by Firth (2002) also proved that in the United Kingdom, non-audit fees have rocketed over the past five years. Since 1997 they have risen from Sterling £266 million to Sterling £636 million. At the same time ordinary audit remuneration had gone up from Sterling £186 million to Sterling £212 million (Cliff, 2002). This trend confirms that clients are purchasing NAS at an increasing rate along with the audit services. This revealed that while the non-audit fees increased, the audit fees also marginally increased, therefore a positive relationship between audit fees and non-audit fees would be observed.

The reason for positive relationship between audit fees and non-audit fees might be due to the fact that the demand for auditing is highly elastic (Beck, Frecka & Solomon, 1988). Further explanation of this phenomenon is that the cheaper per unit price of auditing resulting from the joint provision of services (audit and non-audit services) would lead clients to purchase a greater quantity of auditing such that the overall total audit fees increases (Firth, 2002). Another explanation for the positive association is that NAS fees are proxying for size attributes or organisational changes, which increase both audit and NAS, where they are not well controlled in the audit fee model (Simunic, 1984; Palmrose, 1986b; Clatworthy et al., 2002).

In contrast, Butterworth and Houghton (1995) found no statistically significant relationships between audit fees and non-audit fees in the Australian market. They used cross sectional data in 1987 and 1988 and regressed the audit fees model using the Ordinary Least Squares procedure. The data came from a computerised database of annual reports of 433 Western Australia-headquartered companies. Similarly, in Malaysia, Mohd Atef and Ayoib (2000) and Ayoib (2001) also found no statistically significant relationships between non-audit fees and audit fees.
However, Teoh and Lim (1996) in their experimental Malaysian study found that the audit committees, disclosure on non-audit fees and rotation of audit firms would influence and impair audit independence. Their subjects were 100 accountants from public accounting firms and 100 accountants from the industry, randomly selected from the Membership Directory of the Malaysia Institute of Accountants. Their results show that inadequate disclosure of non-audit fees, management consultancy service fees in excess of 50% of total audit fees and retention of auditors for over five years will reflect lower independence. A survey done by Gul and Teoh (1986) in Malaysia suggested that non-audit services reduce the public’s confidence in auditors’ independence. 73% of the respondents indicated that expansions by audit firms into non-audit services lessened the confidence in auditor’s independence.

Moreover the NAS fees also influence auditor opinion, subsequently auditor independence is perceived to be impaired. For example, Wines (1994) investigated the link between audit qualification and non-audit fees using the audit reports for a sample of public listed companies over the period of 1980 to 1989 in Australia. The results of the analysis indicated that the auditors of companies, which received clean reports over the period, derived a significantly higher proportion of their remuneration from non-audit services fees than the auditors of companies receiving at least one audit qualification. These findings suggest that auditors were less likely to give qualified reports to clients’ financial statements when high levels of non-audit services fees are involved. Furthermore, Frankel, Johnson and Nelson (2002) revealed a negative relationship between stock market reaction to the public disclosure of non-audit fees. They suggested that it might be due to investors’ belief that the provision of non-audit services compromises the auditor independence.

In general, researchers found that, for non-finance listed companies, there is a positive relationship between audit fees and NAS fees even after controlling for client size (Firth, 2002). However, recent studies by Clatworthy et al. (2002) & Fields et al. (2004) found a negative association between audit fees and NAS fees of public sector and finance institutions, respectively. Both markets have unique characteristics, very different when compared to non-finance listed companies and rarely studied by auditing researchers (Firth, 1997a; Clatworthy et al., 2002; and Fields et al., 2004). A further study should be done in other settings using the unique type of companies to provide a rigorous result of the relationship between NAS fees and audit fees, since prior studies are shown to have inconsistent results. Hence the present study is to address this issue by focusing on the relationship...
between the audit fees and non-audit fees in the Malaysian Banking Sector.

**HYPOTHESIS DEVELOPMENT**

Simunic (1984) argued that a negative relationship between audit fees and non-audit fees would occur due to the trade off between audit fees and non-audit fees as a consequence of the knowledge spillover effects. According to Clatworthy et al. (2002), knowledge spillover is:

Where the auditor also provides NAS fees, any concomitant increase in client knowledge may ‘spill over’ from one service to another, leading to cost reductions, which may be passed on to the audittee via lower audit fees. (p. 1412)

Thus, the knowledge spillover effect results in costs saving. The knowledge and skills acquired when doing consultancy services will be used in auditing works resulting in cost and time savings. In other words, knowledge spillover benefits the audit clients by reducing total costs which they have to bear because the total costs of one audit firm which provides both audit and non audit services are less than the total costs when both services are performed by separate audit firms.

Another explanation with respect to the negative relationship between audit fees and NAS fees, is due to the loss leader effect. The increasing competition in audit services makes the audit market less attractive (Hillison & Kennelley, 1988). However, the NAS sector arguably has a higher profit margin than audit services because of rapid growth in the consulting industry worldwide (Hillison & Kennelley, 1988; Firth, 2002). Hence, audit firms today view NAS as the better choice to increase their revenue, have better prospects for their audit firm, and growth opportunities.

Audit services may in fact be loss leaders used to get a foot in the door in terms of offering NAS (Hillison & Kennelley, 1988). In other words, the audit firms would use the lower audit fees to retain their clients and then charge higher fees on non-audit fees to recover the loss by earning ‘excess’ returns from NAS (Firth, 1997a). Both theories of knowledge spillover and loss leader effect would yield a negative relationship between audit fees and non-audit fees.

Therefore, the derived hypothesis is as follows (in alternative form):
\[ H_0 = \text{There is a significant negative relationship between audit fees and non-audit fees.} \]

**Other Factors**

In addition to NAS, there are other factors that may influence audit fees. These factors have already been discussed in the literature review earlier and also discussed in the research design section as part of the development of the control variables in the model to be used to test the hypothesis.

**RESEARCH DESIGN AND SAMPLE SELECTION**

**Sample and Data**

The population of the study is all banks registered in Malaysia identified from the “Bankers Directory 2000”. The data was extracted from the respective year 1999 annual reports and used for analysis. 1999 represents the year after the Asian economic crisis in mid 1997. The researchers personally visited the banks that did not disclose NAS fees in the annual reports in order to obtain them. Only ten banks provided NAS fees data and banks without NAS fees data were omitted from the analysis (see Table 1). Thus, the final sample for this analysis is 31 banks; 21 banks that had disclosed the non-audit fees in their annual reports plus ten banks that provided the NAS fee data after interviewing them.

Note that sample sizes of around 30 to 500 are appropriate for most research (Sekaran, 2000, p. 296). For the present study, the sample represents 66% of the total banks in Malaysia.

**Table 1**

<table>
<thead>
<tr>
<th>Sample Selection Characteristics</th>
<th>Number Of Banks</th>
<th>% Of Banks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total banks in Malaysia in 1999</td>
<td>47</td>
<td>100</td>
</tr>
<tr>
<td>based on Bankers Directory 2000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>and Bursa Malaysia listed banks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>in the main board.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of banks that did not</td>
<td>(16)</td>
<td>(34)</td>
</tr>
<tr>
<td>disclose the non-audit fees.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total final sample</td>
<td>31</td>
<td>66</td>
</tr>
</tbody>
</table>
Explanation of the Model

This study is replicated from the previous studies in audit fees (see, Butterworth & Houghton, 1995; Mohd Atef & Ayoib, 2000; Ayoib; 2001) and extended to accommodate the Malaysian environment and in particular the Malaysian banking sector. As mentioned before, we use the Ordinary Least Squares to analyse the data.

The research model is as follows:

\[
\text{LOGFEE} = \beta_0 + \beta_1 \text{LOGASSETS} + \beta_2 \text{SQSUBS} + \beta_3 \text{ARTA} + \\
\beta_4 \text{OPINION} + \beta_5 \text{AUDITOR} + \beta_6 \text{LOGNAS} + \\
\beta_7 \text{FOREIGN} + \beta_8 \text{COM} + e
\]

The measurements of the variables are as follows:

**Dependent Variable**
- LOGFEE = Natural log of total audit fees

**Independent Variable**
- LOGNAS = Natural log of the non-audit services fees

**Independent Control Variables**
- LOGASSETS = Natural log of total assets
- SQSUBS = Square root of the number of consolidated subsidiaries
- ARTA = Account receivables to total assets (%)
- OPINION = Indicator variable having a value of 1 if the firm receives a “subject to” audit opinion, or 0 if otherwise
- AUDITOR = Indicator variable having a value of 1 if the auditor is the Big Five firm, or 0 if otherwise
- FOREIGN = Indicator variable having a value of 1 if the bank is a foreign bank, or 0 if otherwise
- COM = Indicator variable having a value of 1 if the bank is a commercial bank, or 0 if merchant bank
- \( e \) = Error term assumed to be normally distributed
- \( \beta_i \) = Regression Coefficients
Explanation and Measurement of Variables

Dependent Variable

Audit Fee

Audit fee is the dependent variable. Under the Company Act of 1965, the audit fee is required to be disclosed in the annual reports. It is measured by the dollar value of audit fees paid by the bank to the auditor. Logarithmic transformation is used for analysis due to the fact that audit fees increase at a reducing rate with size.8

Independent Variable

Non-Audit Services Fees

This is the hypothesis variable. NAS fees charged to auditees are measured by the dollar value of NAS paid to the auditor by the bank. As mentioned before, it is not mandatory for Bursa Malaysia listed companies to disclose the amount of NAS fees in annual reports prior to the year 2001. Similar to audit fees, NAS fees are also transformed to correct non-normality in the distribution of data.

Control Variables

Auditee Size

There are many of studies, which prove that auditee size has a significant impact on the audit fees. In fact, it may be said that auditee size has been found to be the most significant independent variable in determining audit fees. In all studies of audit pricing, a positive relationship has been discovered between audit fees and auditee size. Total assets are used in the present study due to it being consistent before and after the 1997 crisis when compared to total revenues.9 In addition, most of the previous studies used total assets to measure the auditee size to be consistent with other studies, it is transformed to logarithmic data. It is expected that a positive relationship between this independent variable and audit fees will take place.

Complexity

Complexity of the auditees influences the auditors’ job due to more time required to do the audit, i.e the more complex the banks are as a whole, the higher the audit fees charged by the auditors. For the present study, two variables are used as the proxy of the auditees’ complexity
– firstly, the number of subsidiaries measured by the square root of the subsidiaries and secondly, the ratio of account receivables to total assets. Two proxies are needed to measure the complexity due to differences in measurement. Receivables are used instead of inventories because of the distinct nature of banks, which do not generally have any inventories (Rose, 1999). Specifically, in the present study, items of loan and advances, which are measured within one year, are used for receivables as the proxy of complexity.

**Audit Opinion**

Many studies have found that audit opinion has a significantly positive relationship with the audit fees (Palmrose, 1986a; Francis & Simon, 1987; Houghton & Jubb, 1999). In the present study, this variable is a proxy for audit risk and it is assumed that the sign for the relationship between auditor opinion and audit fees is positive.

**Auditor**

Studies have shown a positive correlation between Big Five firms and audit fees (Palmrose, 1986a; Francis & Simon, 1987) in the United States market as well as in the Malaysian market (Rose, 1999; Ayoib, 2001). This is due to the reputation effect of the Big Five, where a positive relationship between audit fees and auditor is expected.

**Foreign**

In Malaysia, two studies found that foreign companies were charged higher audit fees than other firms (Rose, 1999; & Ayoib, 2001). Foreign banks, which are multinational companies demand high levels of audit quality to satisfy international investors and place more value on the international reputations of the Big Six auditors than do domestic firms (Rose, 1999). Therefore, it is predicted that foreign banks are positively correlated with audit fees.

**Commercial**

This new variable is introduced because banks are categorised into two types, which are commercial and merchant banks. We argue that commercial banks pay more audit fees than merchant banks with other things being equal. There are three reasons for this, firstly, the commercial banks in Malaysia have many branches, so the auditor needs comparatively more time to audit the banks. Secondly the total assets of the commercial banks are likely to be more than that of merchant banks. However, this aspect is already controlled by the size
measure in the model. Thirdly, the transactions taking place in the commercial banks are likely to be more complex because it involves companies as well as individuals, while merchant banks usually deal with companies only.

RESULTS

Descriptive Statistics

Table 2 demonstrates the descriptive statistics for the variables.\(^{10}\)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Median</th>
<th>Min.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audit fees</td>
<td>190,612</td>
<td>100,000</td>
<td>8,000</td>
<td>1,785,000</td>
</tr>
<tr>
<td>NAS fees</td>
<td>233,049</td>
<td>22,000</td>
<td>1,000</td>
<td>5,500,000</td>
</tr>
<tr>
<td>Assets</td>
<td>11,700,000,000</td>
<td>79,900,000,000</td>
<td>50,500,000,000</td>
<td>57,700,000,000</td>
</tr>
<tr>
<td>Subs</td>
<td>7.3</td>
<td>3</td>
<td>0</td>
<td>40</td>
</tr>
<tr>
<td>ARTA</td>
<td>0.37</td>
<td>0.39</td>
<td>0.02</td>
<td>0.71</td>
</tr>
<tr>
<td>Opinion(^a)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Auditor</td>
<td>0.97</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Foreign</td>
<td>0.32</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Commercial</td>
<td>0.81</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

\(^a\) Cannot be computed because all banks in the sample received unqualified audit opinion.

Variable Description

Audit fees - Total of audit fees
NAS fees - Total of non-audit services fees
Assets - Total assets
Subs - Number of subsidiaries
ARTA - Ratio of total receivables to total assets
Opinion - Indicator variable having a value of 1 if the firm receive a "subject to" audit opinion and 0 otherwise
Auditor - Indicator variable having a value of 1 if the auditor is the Big Five firm, and 0 otherwise
Foreign - Indicator variable having a value of 1 if the bank is the foreign bank, and 0 otherwise
Commercial - Indicator variable having a value of 1 if the bank is the Commercial bank, and 0 merchant banks.
The mean of total audit fees for the sample was RM190,612 as compared with mean for NAS fees of RM233,049. For the number of subsidiaries and total receivables to total assets, the averages were 7.3 and 0.37, respectively.

There are no banks that received qualified opinion. All the banks were audited by the Big-Five firms, except for the BSN Commercial Bank Berhad, which hired Salleh, Leong, Azlan & Co. as its auditor.

The audit fees ranged from RM8,000 to RM1,785,000. However, the non-audit fees ranged from RM1,000 to RM5,500,000. This shows that the non-audit fees range is larger than audit fees, which means that the NAS offered by the auditors are quite diverse depending on the needs of the individual bankers. For OPINION, no computation had been carried out because all the banks received unqualified opinion.

In addition, Pearson correlation coefficients ($r$) are also computed to determine the correlation between the independent variables. Correlations among the independent variables could possibly confound interpretation of the regressions (Firth, 1997a). The results in Table 3 suggest that the largest absolute value is 0.668 between NAS and ASSETS, with a significance level of 0.01. The high correlation is due to the fact that large firms tend to have large monetary attributes, not that there is direct causal relationship between the variables (Pong & Whittington, 1994). Therefore, the Pearson correlation coefficients are acceptable in all cases. Note that the omission of size variable did not change the results. Furthermore, the largest Variance Inflation Factor (VIF) is 2.336 and the mean of all VIFs is 1.430. It shows that multicollinearity does not pose a serious problem for the regression analysis.11

<table>
<thead>
<tr>
<th>Variables</th>
<th>NAS</th>
<th>ASSETS</th>
<th>SUBS</th>
<th>ARTA</th>
<th>OPINION</th>
<th>AUDITOR</th>
<th>FOREIGN</th>
<th>COM</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAS</td>
<td>1</td>
<td>0.668**</td>
<td>0.561**</td>
<td>-0.102</td>
<td>a</td>
<td>0.039</td>
<td>-0.146</td>
<td>0.106</td>
</tr>
<tr>
<td>ASSETS</td>
<td>0.668**</td>
<td>1</td>
<td>0.644**</td>
<td>-0.144</td>
<td>a</td>
<td>0.126</td>
<td>-0.212</td>
<td>0.207</td>
</tr>
<tr>
<td>SUBS</td>
<td>0.561**</td>
<td>0.644**</td>
<td>1</td>
<td>-0.153</td>
<td>a</td>
<td>0.101</td>
<td>-3.52*</td>
<td>0.133</td>
</tr>
<tr>
<td>ARTA</td>
<td>-0.102</td>
<td>-0.144</td>
<td>-0.153</td>
<td>1</td>
<td>a</td>
<td>0.049</td>
<td>-0.014</td>
<td>0.099</td>
</tr>
<tr>
<td>OPINION</td>
<td>a</td>
<td>a</td>
<td>a</td>
<td>a</td>
<td>a</td>
<td>a</td>
<td>a</td>
<td>a</td>
</tr>
<tr>
<td>AUDITOR</td>
<td>0.039</td>
<td>0.126</td>
<td>0.101</td>
<td>0.049</td>
<td>a</td>
<td>1</td>
<td>0.126</td>
<td>0.373*</td>
</tr>
<tr>
<td>FOREIGN</td>
<td>-0.146</td>
<td>-0.212</td>
<td>-0.352</td>
<td>-0.014</td>
<td>a</td>
<td>0.126</td>
<td>1</td>
<td>0.338*</td>
</tr>
<tr>
<td>COM</td>
<td>0.106</td>
<td>0.207</td>
<td>0.133</td>
<td>0.099</td>
<td>a</td>
<td>0.373*</td>
<td>0.338*</td>
<td>1</td>
</tr>
</tbody>
</table>

a. The OPINION variable is deleted from the analysis due to constant value (i.e. all values are 0’s).

** Correlation is significant at the 0.01 level (1-tailed)
* Correlation is significant at the 0.05 level (1-tailed)
REGRESSION ANALYSIS AND DISCUSSIONS

In Table 4, the adjusted R² for the audit fee model is 0.589 with the F value of 7.151 and it is significant at p < 0.0001. This reveals that 58.9% of the variance is significantly explained by the independent variables. However, it was lower than other studies, such as the ones by Francis and Simon (1987), Butterworth and Houghton (1995), Firth (1997a), Mohd Atef and Ayoib (2000), and Ayoib (2001). This might be due to the higher number of independent variables used by those studies, and the fact that the present study only uses banks in the sample.

We also performed diagnostic tests related to two assumptions. The tests were carried out to determine whether there is homoskedasticity in the Ordinary Least Squares analysis and if autocorrelation is present in the Ordinary Least Squares regression results. Two analyses were employed, which are the Goldfield and Quandt analysis for the detection of heteroscedasticity, and the Durbin-Watson Model. The results showed that there are no heteroscedasticity and autocorrelation problems in the Ordinary Least Squares analysis.

Table 4
Summary of Ordinary Least Squares Regression for Audit Fees, N = 31

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Predicted Signs</th>
<th>Coefficients (Beta)</th>
<th>t-statistics</th>
<th>Significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOGNAS</td>
<td>-</td>
<td>-0.255</td>
<td>-1.675</td>
<td>0.050**</td>
</tr>
<tr>
<td>LOGASSETS</td>
<td>+</td>
<td>0.695</td>
<td>3.547</td>
<td>0.001****</td>
</tr>
<tr>
<td>SQSUBS</td>
<td>+</td>
<td>0.311</td>
<td>1.822</td>
<td>0.040**</td>
</tr>
<tr>
<td>ARTA</td>
<td>+</td>
<td>0.072</td>
<td>0.573</td>
<td>0.286</td>
</tr>
<tr>
<td>AUDITOR</td>
<td>+</td>
<td>0.095</td>
<td>-0.737</td>
<td>0.235</td>
</tr>
<tr>
<td>FOREIGN</td>
<td>+</td>
<td>0.274</td>
<td>1.813</td>
<td>0.042**</td>
</tr>
<tr>
<td>COM</td>
<td>+</td>
<td>0.172</td>
<td>1.204</td>
<td>0.121</td>
</tr>
<tr>
<td>Constant</td>
<td>+/-</td>
<td>+/-</td>
<td>-0.565</td>
<td>0.169</td>
</tr>
</tbody>
</table>

Adjusted R² 0.589
F- Ratio 7.151
Significant F 0.000b

Notes:
a. Dependent Variable: LOGFEE
b. Predictors: LOGNAS, LOGASSETS, SQSUBS, ARTA, AUDITOR, FOREIGN, COM Constant. The OPINION variable is deleted from the analysis due to constant value (i.e. all values are 0’s).
**** significant at 0.001 level (1-tailed)
** significant at 0.05 level (1-tailed)
The result for LOGNAS is negative and significant at 0.05 levels. Therefore, the alternative hypothesis is supported, i.e. the audit fees are negatively related to NAS fee. This is consistent with the theories regarding knowledge spillover and trade off between audit fees and other fees (loss leader) as discussed earlier. Also, the results were not sensitive to different measurements and sampling (for example by excluding merger data).

Whilst there are two explanations for the negative relationship, it cannot be ascertained as to which preposition might influence the results. If it is due to the knowledge spillover effect, it may be concluded that the performance of NAS by the auditors has led to cost saving. However, if the negative relationship is caused by audit acting as a loss leader, there would be much doubt as to the independence of the auditor in conducting the audit. It is suggested that future research look into whether the relationship is due to the phenomenon of knowledge spillover or that of the loss leader.

To our knowledge, this is the first study that has found a significant negative relationship between audit and non-audit fees, similar to Clatworthy et al. (2002) and Fields et al. (2004) but in Malaysian setting. Moreover, this study is consistent with Fields et al. (2004), which shows that the banking sector has unique characteristics as compared to non-finance companies.

CONCLUSIONS, IMPLICATIONS AND LIMITATIONS

The present study sought to look into the relationship between non-audit fees and audit fees in the Malaysian banking sector. Banks are vital to the operation of emerging countries such as Malaysia, as depository institutions and lenders to both companies and individuals. This study is relevant because auditors are vitally important to the Malaysian banking system. For example, Malaysian Approved Auditing Standard (MASA) 1004 clearly stated that the role of external auditors in banking sectors is to assure the integrity of the banks’ management, the fairness of financial statements and ultimately the integrity of the financial markets. The auditor’s opinion lends credibility to financial statements and thereby assists in promoting confidence in the banking system (Refer to MASA 1004, para, 1). Therefore, auditor independence appears to be essential and a “prime ingredient” for a healthy banking sector.

However, auditor independence might be compromised if the auditor provided NAS to the banks. This is because the auditors are paid other
Lucrative fees rather than the core audit service itself, hence conflicting interest would be prevailed. Subsequently, the auditors are not able to provide strong, valid and reliable assurance to prudently monitor the operation systems and procedures of the banks. This would not only have an adverse impact on the banking system but, also the Malaysian economy as a whole.

In general, the study reveals that non-audit fees have a strong negative relationship with audit fees. This is consistent with Fields et al. (2004) who also utilised the banking sector in their analysis. In fact, prior studies found that the negative relationship between NAS fees and audit fees only occurred in highly regulated, very important and unique sectors compared to other types of companies such as non-finance companies (Clatworthy et al., 2002; Fields et al., 2004). This negative relationship might be due to either knowledge spillover effect or loss leader effect. If it is due to the knowledge spillover effect, it would benefit the banks in which the auditors utilise the knowledge obtained from the non-audit works in their audit works, which would result in cost saving. However, for the loss leader effect, the audit firms would use the audit works as a loss leader to obtain a more lucrative consultancy work. The effect reduces the audit fees and the auditors captures the loss by increasing NAS fees (Hillison & Kenneley, 1988). This would also occur if the audit firms would charge lower audit fees to retain their clients and then charge higher fees on NAS to recover the loss. A low priced audit is used to entice companies to stay with the auditor concerned, and the auditor recoups the losses incurred on the audit fees by earning excess returns from NAS fees (Firth, 1997a). The loss leader effect would affect auditor independence.

Some implications from these results should be of concern to policy makers and researchers alike. The results of this study can be used to assist and give feedback to the policy makers and accounting bodies, such as Bank Negara Malaysia, MIA and Malaysia Institute of Certified Public Accountant (MICPA), to formulate rules and guidelines in order to improve auditor independence in Malaysia. This is because the revenue from NAS fees received by auditors is crucial to auditor independence especially if the negative relationship between audit fees and NAS fees is due to the loss leader effect, hence the excessive reliance on NAS fees by the auditor should be emphasised to foster the transparency of auditors. Perhaps, some kind of restriction on NAS fees might be necessary since it was found to have a significantly negative association with the audit fees. For example, the regulators should investigate NAS further, which might impair the auditor independence especially in services, such as providing internal audit services, and designing and implementing financial information.
systems for their audit clients. Moreover, the policy makers should focus more closely on the NAS given by auditors especially if the NAS is recurring every year (more than a single or one time NAS). Therefore, the regulators should make it mandatory for banks to disclose the NAS in the annual reports, even if the bank does not purchase NAS. In fact, it is also recommended that the NAS fee is segregated between recurring NAS and non-recurring NAS, because audit firms may be taking advantage of increasing their income by hiking NAS fees and reducing the audit fees. Future research should be carried out to examine this issue further due to the two contending theories that propose a negative relationship between audit fees and NAS fees as discussed earlier. Whilst independence is in fact a state of mind of the auditors, the recommendations by this paper might improve the perceptions of users towards auditor independence.

Future research studying the relationship between audit fees and non-audit fees should also cover other sectors with the latest data and a larger sample size, as well as cover a longer period of time. In addition, other variables such as return on equity, debt ratio, specialisation of the auditor should be included due to the lower explanatory power found in the model. Finally, comparative studies between countries could also be a good idea to compare the situation in Malaysia vis-à-vis with other countries.

These findings are subjected to several limitations. Firstly, in terms of generalisability, which is due to the small sample size, single-period data and the focus on the banking sector, which might be different from other sectors. Secondly, its low explanatory power as compared to other studies shows that there are other factors that are not captured by the model. Lastly, some of the banks, which did not disclose their NAS fees in annual report, were reluctant to provide the NAS fees. The results will be more complete if the data from all banks were

END NOTES

1 Malaysian Institute Accountant By Law (On Professional Conduct and Ethics) (revised 2002), suggested that audit firms should not accept any appointment if they provide non-audit services, if the provision of non-audit services would create a significant threat to the professional independence, integrity and objectivity of the audit firms.

2 See Section 1 of the Banking and Financial Institutions Act (BAFIA) 1989 for a comprehensive definition of the bank.
Local banks were directed to merge before the end of 2000, however up until 2002; there were still 11 anchor banks in Malaysia.

For companies that not disclose NAS fees, both studies treated the amount as zero in their analyses. However, some of the companies might purchase NAS but did not disclose it since it was not required by the regulators to be disclosed in the annual reports prior to 1 June 2001.

Proxy statements are disclosure statements of fees billed by companies’ financial statement auditors. The disclosed fees are reported in three categories: a) annual audit and quarterly reviews; b) financial information systems design and implementation; and c) all other services.

Malaysia was also involved in the economic crisis. Previous studies had used data before the crisis.

The merger data is included in the main analysis; however it is excluded in the sensitivity analysis following Firth (2002) who found that merger data influenced the significance of the results. The results of the study were similar.

Most of the audit fees studies used the logarithmic transformation in the model of audit fees (see for example, Butterworth & Houghton, 1995; Mohd Atef & Ayoib, 2000; Ayoib, 2001).

For example Affin Bank’s revenue fluctuated from 1996 to 2000 with RM322,721,000, RM414,032,000, RM290,844,000, RM323,202,000, and RM168,480,000, respectively. However, total assets appeared to be more consistent from 1996 to 2000 with RM12,091,215,000, RM15,299,470,000, RM14,385,334,000, RM15,011,699,000, and RM15,643,851,000, respectively.

We include the descriptive statistics in the analysis because other studies in the audit fees and NAS fees also include the descriptive statistics (see for example Firth, 1997a; & Firth, 2002).

Sekaran (2000) suggested that multicollinearity is destructive if correlations between the independent variables are above 0.75. In addition, the largest VIF is not greater than 10 and the mean of all VIFs is not larger than 2 (Neter, Wasserman, & Krutner, 1991).

According to Lewis (1993), heteroskedasticity refers to the situation in which contrary to the assumption of homoscedasticity, the error term in a regression model does not have constant variance.

Lewis (1993) stated that autocorrelation refers to a situation whereby error terms associated with different observations are correlated.
In a Colloquium on Corporate Governance on 23 April 2002, one of the key issues discussed was auditor independence, particularly the restrictions on the provision of non-audit services and Malaysia Securities Commission (SC) had requested Malaysian Institute of Accountant (MIA) and Malaysia Institute of Certified Public Accountants (MICPA) to provide feedback on that matter (MIA, 2002b).

REFERENCES


Associations With Audit Fees and Audit Opinions. *Journal of Business Finance & Accounting*, 29(5) & (6), 661-693.


