THE PROVISION OF NON-AUDIT SERVICES, AUDIT FEES AND AUDITOR INDEPENDENCE

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ABSTRACT

The objectives of this study are to examine the effect of non-audit services on audit fees, to investigate the relationship between non-audit fees and the issuance of qualified audit opinion, and to analyse the proportion of non-audit fees to total fees paid by a client to its auditor. The regression analysis reveals a significant positive relationship between audit fees and non-audit fees, which is contrary to the theory available in the literature. Further tests are done and alternative explanations are provided. The results obtained from the t-test suggest a significant relationship between non-audit fees and qualified audit opinions. The outcomes indicate that on average audit opinions are dependent on the amount of non-audit fees. Finally, the descriptive analysis presents a worrying development about the ratio of non-audit fees to total fees. The study suggests ways to improve the independence issues in Malaysia.

Keywords: non-audit services, audit fees, auditor independence, audit opinion

INTRODUCTION

The year 2002 had seen the biggest corporate collapses in the United States history that subsequently raised lots of questions regarding auditors independence. Arthur Andersen, being the auditor of the three biggest bankruptcies, Enron, WorldCom and Global Crossing, was heavily criticised for

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the collapses. Andersen was allegedly stressing more on non-audit services (NAS) than the audit itself. In the year 2000, Andersen earned US$25 million in audit fee from Enron and another US$27 million from consulting services (Kandiah, 2003a). In 1998, Andersen's total worldwide revenue from non-audit services was US$3,216.8 million as compared to US$2,876.6 million only that came from audit fees (Andersen, 1998). Andersen's total worldwide revenue had grown by about 13% annually since 1990 (Andersen, 1998). Andersen cites the growth in their NAS sector as the reason for the increase in revenue. This is supported by a study done by the University of Illinois in the United States (US) which found that on average for every dollar of audit fees, clients paid their independent auditors US$2.69 for non-audit consultation (Kandiah, 2003b).

Following the collapses, auditing profession as a whole has been badly blamed and changes were being proposed to ensure that audit firms reduce their over-reliance on NAS (*The Star*, 2002). In order to ensure the independence of auditors and to protect the interest of investors, the accounting profession in most countries has come up with a code of ethics that spells out guidelines for auditors competency and independence. In Malaysia, the Malaysian Institute of Accountant (MIA) By-Laws (on Professional Conduct and Ethics) (revised 2002) suggests that audit firms should not accept any appointment if they are also providing NAS to a client; whereby the provision of NAS would create a significant threat to their professional independence, integrity and objectivity. On top of that, Bursa Malaysia (previously known as Kuala Lumpur Stock Exchange or KLSE) requires all listed companies to disclose non-audit fees in their annual reports effective June 1, 2001. The aims are to protect shareholders' interests and to increase corporate transparency. This is consistent with the practices in other Commonwealth countries such as Australia and the United Kingdom (UK), which have made it a requirement that non-audit fees of listed companies be disclosed in the annual report. Before 2001, the regulators in Malaysia emphasized only on the disclosure of audit fees in the companies' annual reports, as required by the Companies Act 1965.

This study examines the effect of non-audit fees on audit fees in public listed companies (hereinafter PLCs) in Malaysia; analyses the effects of non-audit fees on the issuance of qualified audit opinion; and investigates the proportion of NAS fees to total audit fees. The study utilizes the well-established model of audit pricing developed by Simunic (1980) that had been extended by other researchers (e.g. Simunic, 1984; Palmrose, 1986a & 1986b; Francis & Stokes, 1986; Francis & Simon, 1987). Two variables, FOREIGN and CHINESE, representing the types of companies in Malaysia, are added to take into account the Malaysian environment. In light of the introduction of the Sarbanes-Oxley Act 2002 (SOX 2002) in the US, this study also provides descriptive evidence on the ratio of NAS fees to total audit remuneration for the

listed companies in Malaysia. The results could be used by the MIA, which is still studying the implications of the SOX 2002 before introducing a similar rule in Malaysia. The SOX 2002 states that NAS provided to a client should not be more than 5% of the total auditor's remuneration; otherwise, the client must obtain pre-approval from its audit committee, as non-audit fees paid in excess of this percentage would deem the auditor as not being independent. In Malaysia, under MIA rules that become effective January 15, 2002, professional independence is considered impaired if total fees arising from provision of NAS to a client is 20% or more of the audit firm's total annual fees received for two or more consecutive years[1]. The regulators must give emphasis on the impact of NAS to the audit fees especially if there is a negative relationship between NAS and audit fees that is due to a "loss leader" theory. The positive relationship between NAS fee and the issuance of clean audit opinion should also be of concern to the regulators as it could affect independence.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

In general, audit firms provide various NAS such as tax consultancy, system consultancy, management advice, international business advice, human resource management, and financial and investment consultancies (Firth, 1997). Teoh and Lim (1996) in their interview of senior partners from two of the Big Six firms found that consultancy fees made up to 20 to 30% of their total revenues and the trend is likely to be on the increase. In 1990, the then MIA president, Hanifah Noordin, mentions the need to control and monitor the non-audit services performed by auditors. A number of studies have been done that address the issues relating to audit fees and its determinants in various settings (Firth, 1997). Simunic (1980) begins the studies on audit fees by developing a model that includes factors representing client size, complexities and risk that explains for the variation in audit fees. Subsequently, he found that auditee size, complexity and risk are positively related to audit fees, and no relationship exists between audit fees and the Big Eight auditors in both large and small auditee markets (Simunic, 1980). Later, similar studies are carried out in countries such as the UK (e.g. Chan, Ezamel & Gwilliam, 1993) and Australia (Butterworth & Houghton, 1995; Craswell, Taylor & Francis, 1995). These studies use archival data and employ regression analyses.

Non-Audit Fees and Audit Fees

Simunic (1984) argues that a negative relationship between audit fees and NAS fees would happen due to the trade off between audit fees and NAS fees as

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[1] See MIA By-Laws (on Professional Conduct and Ethics) B-1.4 (ii-g).

explained by the "knowledge spillover theory", in which auditors utilise the knowledge obtained from the non-audit works into their audit works. The benefits from the knowledge spillover effects may be passed on to the companies by reducing the audit fees. Another explanation is that the audit is used as a "loss leader" to obtain the more lucrative consultancy works. The effect reduces the audit fees and the "loss" is captured by increasing NAS fees (Hillison & Kennelley, 1988). This would also occur if the audit firms avoid a dismissal by reducing the audit fees and then try to recoup the loss by increasing the NAS fees.

Hence, a negative relationship between audit fees and non-audit fees would prevail. Based on this reasoning, it is hypothesized that (in null form),

$H_0 1$: There is no significant relationship between audit fees and non-audit fees paid by the client companies.

Despite these theories, many empirical studies found that the non-audit fees are positively and significantly related to the audit fees (see e.g. Simunic, 1984; Firth, 1999). Firth (2002) explains that the contradictory findings might be due to specific events in the company that generated a demand for consultancy services as well as requiring additional audit efforts. Examples of specific events are like mergers and acquisitions, share issues, implementation of new accounting and information systems, appointment of new Chief Executive Officers (CEOs), and corporate restructures. Abbott, Parker, Peters and Raghunandan (2003) also found a significantly-positive association between those two fees. In contrast, Butterworth and Houghton (1995), Mohd Atef and Ayoib (2000), and Ayoib (2001) found no statistically significant relationship between audit fees and non-audit fees. In Malaysia, Rohami, Ayoib and Azham (2003) is the only one that found negative relationship between audit fees and non-audit fees in the highly regulated banking sector. The results, however, cannot be generalized to other sectors. Teoh and Lim (1996) found that the disclosure on non-audit fees would influence and impair audit independence. A survey done by Gul and Teoh (1986) in Malaysia, suggests that the provision of NAS reduces public confidence in auditors independence.

Other Factors Affecting Audit Fees

Auditee Size

The most important factor that influences audit fees is the auditee size, which is usually measured by total assets. The size of auditee has a direct impact on the auditors' work and numerous literatures have asserted that a positive relationship between audit fees and auditee size exists (Simunic, 1980; Low, Tan & Koh,

1990; Chan et al., 1993). Similarly in Malaysia, it was found that a positive and significant relationship exists between auditee size and audit fees (see Rose, 1999; Ayoib, 2001; Mohd Atef & Ayoib, 2000).

Complexity

It is argued that the more complex the auditee, the longer time and the more manpower needed to complete the audit. These would determine the audit fees charged to the clients (Simunic, 1980; Low, Tan & Koh, 1990; Chan et al., 1993; Firth, 1997; Butterworth & Houghton, 1995; Mohd Atef & Ayoib, 2000). Therefore, just as the auditee size, auditee complexity also bears a positive correlation with the audit fees.

Leverage

In addition, the company's leverage has significant impact to audit fees. Studies by Francis and Stokes (1986), and Low et al. (1990) found positive relationship between audit fee and debt ratio, which is proxy of company risk. However, Ayoib (2001) found a significant negative relationship between debt ratio and audit fees. The reason given by Ayoib (2001) was due to particular local conditions whereby many companies in Malaysia are likely to be supported by the government. In addition, the Malaysian legal environment has not witnessed any major lawsuits against public accounting firms, thus the level of leverage is not priced in the same direction to that which is conventional in the West.

Audit Risks

Audit risks also have a significant positive relationship with audit fees as the auditors need to do more works to reduce any potential litigation against the auditors. Palmrose (1986a), and Francis and Simon (1987) found that auditor's opinion has a positive effect on the audit fees.

Auditor Size

Brand name and higher audit quality are among the reasons why clients would pay more to the international Big Five firms as compared to non-Big Five (Palmrose, 1986a; Francis & Simon, 1987; Butterworth & Houghton, 1995). In addition, the Big Five are the biggest audit firms in the world and this gives advantage to them to provide higher quality audit due to their financial strength and expertise that they have.

Foreign Companies

In Malaysia, studies by Rose (1999) and Ayoib (2001) shows multinational firms or foreign controlled companies are charged with higher audit fees than local firms.

NAS and Audit Opinion

The negative relationship between audit fee and non-audit fee does not provide clear evidence of impairment of auditor independence. In fact, the knowledge spillover effect is beneficial to both the auditor and client as it increases auditor's efficiency and reduces the audit fee. However, the loss-leader effect might be construed as auditor compromising its independence in order to retain its client. Unfortunately, we might not be able to distinguish between the two competing explanations for the inverse relationship between audit and non-audit fees based on the audit-pricing model. Nevertheless, the auditor can be interpreted to compromise its independence if the provision of NAS is significantly tied to the issuance of clean audit opinion. Various studies have been done in foreign settings to see whether the provision of NAS affects auditors' reporting decision. However, the results are conflicting. Wines (1994) found that the auditors of those companies that received clean reports over the period derived a significantly higher proportion of their remuneration from NAS fees than the auditors of companies that received at least one audit qualification. This finding suggests that auditors are less likely to give qualified reports to clients' financial statements when high levels of NAS fees are involved. Craswell (1999) and DeFond, Raghunandan and Subramanyam (2002) found that auditors' decision to qualify their opinion is not affected by the provision of NAS. Contrary to this, Firth (2002) found that companies that have relatively high consultancy fees are more likely to receive a clean audit opinion due to the non-audit work clearing up problem areas at the client company; or it might be due to high consultancy fees, thus impairing auditor independence. However, it is not possible to distinguish between these two reasons. Other studies such as Frankel, Johnson and Nelson (2002) reveal that companies in the US, which purchased NAS, are more likely to report earnings that just met or exceeded analysts' earnings forecast.

As mentioned earlier, auditors can be interpreted to compromise their independence if the provision of NAS is significantly tied to the issuance of clean audit opinion. Wines (1994) and Firth (2002) found that auditors are less likely to qualify their audit opinion when high levels of NAS are carried out to the clients. Another concern regarding the provision of NAS is that the consulting nature of many NAS could create inherent conflicts that potentially threatening auditors' objectivity (DeFond et al., 2002). Hence, it is hypothesized (in null form),

H$_0$2: There is no significant relationship between non-audit fees and the issuance of clean audit reports to the client companies.

Note that while auditor independence may have been compromised if it is found that there is an association between consultancy fees and clean audit reports, there is also an alternative explanation for the association. The positive association could be due to the improvement in client's internal control or operation as a result of consultancy works which may then increase the probability of unqualified opinions.

METHODOLOGY

The subjects for this study are composed of the entire population of PLCs of Main Board, Second Board and Mesdaq, which totaled to 868 companies. Data are from 2002 annual reports. As mentioned earlier, companies are required by Bursa Malaysia to disclose their NAS fees in their annual reports effective 1 June 2001. Therefore, the year 2002 is chosen as all PLCs are expected to disclose the NAS fees, if any, in their annual report. This would make the data more accurate and reliable. Prior to that companies are required to disclose their audit fees. After excluding annual reports that are not available or with missing data, the final sample is 819. Table 1 shows the details of the sample selection process.

TABLE 1
SAMPLE SELECTION: BURSA MALAYSIA LISTED COMPANIES
(MAIN, SECOND BOARD AND MESDAQ) – FINANCIAL YEAR ENDING IN 2002

Main board companies	562
Second board companies	294
Mesdaq companies	12
Total number of listed companies	868
Less	
Annual Report not available on Bursa Malaysia Announcement website	24
Annual Report not for 12 month period	24
Annual Report without auditor report	1
Total sample	**819**
Companies that purchased NAS	512
Companies that did not purchase NAS and disclose it in the annual reports	167
Companies that are silent on NAS (assumed did not purchase NAS)	140
Total sample	**819**

For the testing of the first hypothesis (H1), this study replicates and extends the audit-pricing model from Simunic (1980) and uses the Ordinary Least Squares model to analyse the data. The model has been used extensively in the audit pricing literature (see e.g. Simunic, 1984; Palmrose, 1986a & 1986b; Francis & Stokes, 1986; Francis & Simon, 1987). In our study, two additional variables are introduced, representing the types of companies in Malaysia, to take into account the Malaysian environment. The variables are FOREIGN and CHINESE.

The research model is as follows:

$$
\begin{aligned}
\text{LOGFEE} \ = \ & \beta_0 + \beta_1\text{LOGNAS} + \beta_2\text{LOGASSETS} + \beta_3\text{LOGSUBS} + \\
& \beta_4\text{INVREC} + \beta_5\text{LEVERAGE} + \beta_6\text{OPINION} + \\
& \beta_7\text{AUDITOR} + \beta_8\text{FOREIGN} + \beta_9\text{CHINESE} + e
\end{aligned}
$$

The measurements of the variables are as follows:

Dependent Variable Measurement

LOGFEE = Natural log of total audit fees of group level

Experimental Variable

LOGNAS = Natural log of the NAS fees

Independent Control Variables Measurement

LOGASSETS	=	Log_{10} of total assets
LOGSUBS	=	Log_{10} of the number of consolidated subsidiaries
INVREC	=	Total inventories and account receivables to total assets
LEVERAGE	=	Total long-term debt (excluding deferred tax) to total equity
OPINION	=	Indicator variable having a value of 1 if the firm receives a qualified audit opinion and 0 if otherwise
AUDITOR	=	Indicator variable having a value of 1 if the auditor is the Big Five firm and 0 if otherwise
FOREIGN	=	Total foreign directors to total directors
CHINESE	=	Total ethnic Chinese directors to total directors
e	=	Error term
β_i	=	constant (i = 0), regression coefficients (i = 1, 2, 3, …, 9)

Explanation and Measurement of Variables

Audit Fees

Audit fees are measured by the dollar value of audit fees paid by the company to the auditor; transformed to logarithmic data to correct for non-normality in the distribution of the data.

Non-Audit Services Fees

Measured by dollar value of NAS fees paid to the auditor by the company and transformed due to its non-linear relationship with audit fees.

Auditee Size

Measured by total assets; transformed to logarithmic data.

Auditee Complexity

Two variables are used as proxies for auditee's complexity; the numbers of subsidiaries measured by logarithmic transformation of total subsidiaries plus holding company; and the ratio of total inventories and account receivables to total assets. This is due to two distinct forms of complexity that are relevant to auditors in performing auditing works.

Leverage

Francis and Stokes (1986), and Low et al. (1990) found a positive and significant relationship between audit fees and leverage. Leverage is the proxy of the company risk.

Opinion

Many studies found audit opinion to have a significant positive relationship with the audit fees (Palmrose, 1986a; Francis & Simon, 1987). This variable is a proxy for audit risk.

Auditor

Previous studies in the US (e.g. Palmrose, 1986a; Francis & Simon, 1987) as well as in the Malaysian market (Rose, 1999; Ayoib, 2001) show positive relationship between the Big Five firms and audit fees. This is due to the effect of the Big Five's reputation.

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Foreign

Foreign companies that 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).

Chinese

Ayoib (2001) suggests that audit pricing is affected by ethnic business practice of the client companies. Local Chinese controlled and/or owned companies paid the lowest audit fees as compared with Bumiputera and foreign owned companies. The reasons are due to the ordering of audit quality demanded being closely related to the segmental capital formation because of the differences in levels of agency conflicts and risks associated with these companies.

RESULTS AND DISCUSSION

Descriptive and Univariate Analyses

Most of the annual reports disclose the NAS fees under the Statement of Corporate Governance Report (23%). Other disclosures are found in the Notes to the Account (16%), Additional Compliance Information (14%), and Other Information (9%). A hundred and forty companies (17%) do not report NAS fees in any location in the annual reports. Given the disclosure is mandatory under the new rule, they are assumed to be companies that did not purchase NAS in the year 2002. Various different terms are used to describe NAS fee in the annual reports. Majority of the companies (78%) use "Non-audit services fees" description, and 12% use the term "Other audit fees." Other terms used include "Non Statutory Audit" and "Special Audit".

Table 2 displays the descriptive statistics of proportion of NAS fees to total fees and the frequency of NAS fee ratio for the total sample of 819 companies and 512 companies that purchased NAS.

As shown in Panel A, the minimum proportion of NAS fee is 1% whilst the maximum is 99% of total auditor remuneration. Panel B shows that almost 90% of the NAS-purchased companies have NAS fee ratio of more than 5%. If the SOX 2002 (i.e. the requirement that NAS fee should not be more than 5% of the total auditor's remuneration for one particular client) is used as the benchmark, 90% of the auditors of NAS-purchased companies in Malaysia in 2002 are not independent in providing the auditing service. The MIA rule is silent on the proportion of NAS fee over total auditor remuneration for *a particular*

client that can be considered to impair auditor independence. Additionally, the rule related to NAS fee in the MIA By-Laws is not comparable to the SOX 2002. It is very liberal and is not client specific[2]. The SOX 2002 does not only putting a threshold on NAS fee percentage, but also prohibit incumbent auditors from providing certain types of NAS to their audit clients. The services include bookkeeping, financial information systems design and implementation, internal audit outsourcing, and management or human resource functions. To our surprise, 21% of the auditors had NAS fee ratio of 60% or more. This is obviously more than what the auditor of Enron earned from the NAS fee and should be a cause for concern.

TABLE 2
PROPORTION OF NAS FEES TO TOTAL FEES AND FREQUENCY OF NAS FEE (FOR THE TOTAL SAMPLE OF 819 COMPANIES AND 512 COMPANIES THAT PURCHASED NAS)

Panel A. Proportion of NAS fees

NAS Fee	N = 819	N = 512
Minimum	0.00	0.01
Maximum	0.99	0.99
Mean	0.23250	0.37190
Standard Deviation	0.26466	0.24530

Panel B. Frequency of NAS Fees Ratio

Percentage of NAS fees (%)	N = 819	Percent	N = 512	Percent
0	307	37.5	0	0.0
0.1–05	53	6.5	53	10.4
06–19	95	11.6	95	18.6
20–39	138	16.8	138	27.0
40–59	118	14.4	118	23.0
60–79	78	9.5	78	15.2
80–99	30	3.7	30	5.8
Total	**819**	**100.0**	**512**	**100.0**

We also found that the Big Five auditors dominates the market in the year 2002 having market share of more than 70%; with KPMG holding 18% of total clients, Ernst and Young 17%, Arthur Andersen 16%, Price WaterhouseCoopers 15% and Deloitte Touche Tohmatsu at 7%. In addition, the Big Five also dominates the market for all industrial sectors with more than 50% market share in each sector.

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[2] For example, the independence of the auditor is considered impaired only if total NAS fee is more than 20% of audit firm's *total annual fees*. On top of that, the condition has to be at least for two consecutive years. The rule does not compare the NAS and audit fees for a particular client, but emphasis on the NAS fee for a particular client with total annual fees for all clients.

The average total assets of the total sample are valued at about RM1.8 billion. On average, one PLC has 18 subsidiaries. Total audit fees of the full sample is averaged at RM194,960 while the average total non-audit fees for the sample is RM127,460. For NAS-purchased companies, the average audit fees amounted to RM241,940, with the NAS fee averaging RM203,890. In other words, for every dollar of audit fees in the year 2002, the clients pay their auditors 84 cents for other services.

Univariate tests are also done and they are consistent with the multivariate analysis. However, the main conclusion of the study is based on the multivariate results. Table 3 presents the descriptive statistics for the continuous and dichotomous variables for the full sample of 819 companies; consisting of 512 companies that paid their non-audit service fees and 307 companies that did not purchase non audit service for the study period 2002. It also shows the means and standard deviations of the variables that are used to test the hypotheses. The Big Five audit firms audit about 73% of the PLCs and about 7.3% of the 819 companies receive qualified opinions. The descriptive data is similar to previous studies of the Malaysian audit market (Ayoib, 2001).

Overall, the results in Table 3 shows that companies that purchased NAS are likely to be different from companies that did not purchase NAS. The t-test and Mann-Whitney U results suggest that all variables of the two groups (except for INVREC) are statistically significant. On average, companies that purchased NAS tend to be larger, have more subsidiaries, with greater leverage, dominated by foreign directors and are audited by the Big Five. In addition, they are less likely to be Chinese-controlled companies. Interestingly, the Mann-Whitney U result shows that the audit opinion of the two groups of companies are statistically different. The Z statistics for OPINION is significant at 1% level indicating that, on average, companies that purchased NAS are likely to have less qualified opinions. This is consistent with the theory proposed earlier.

Table 4 exhibits a matrix of correlations for the variables for both parametric and non-parametric statistics. Some of the correlations among independent variables used in the model are significant. However, the coefficients are less than 0.50 and are not expected to pose a serious problem of multicollinearity in the regression. This issue is examined further in the multivariate analysis.

TABLE 3
DESCRIPTIVE STATISTICS FOR DEPENDENT AND INDEPENDENT VARIABLES FOR
TOTAL SAMPLE OF 819 COMPANIES, 512 NAS-PURCHASED COMPANIES,
307 NON NAS-PURCHASED COMPANIES AND *T*-TEST AND MANN-WHITNEY U
RESULTS BETWEEN NAS/NON-NAS-PURCHASED COMPANIES

Continuous variables	Total sample (N = 819)	NAS purchased-companies (N = 512)	Non-NAS purchased-companies (N = 307)	
Variable	Mean (SD)	Mean (SD)	Mean (SD)	*t*-value
LOGFEE	1.9857 (0.44683)	2.0654 (0.45829)	1.8527 (0.39321)	6.772[**]
LOGNAS	1.0858 (1.00964)	1.7369 (0.70622)	0.0000 (0.00000)	43.082[**]
LOGASSETS	5.4750 (0.69390)	5.6065 (0.71926)	5.2557 (0.58824)	7.221[**]
LOGSUBS	1.0601 (0.44430)	1.1002 (0.46436)	0.9932 (0.40054)	3.358[**]
INVREC	0.7700 (13.48656)	0.2861 (0.26571)	1.5771 (22.02404)	−1.327
LEVERAGE	0.5306 (1.49837)	0.6872 (1.81882)	0.2696 (0.60660)	3.895[**]
FOREIGN	0.0707 (0.14525)	0.0827 (0.15130)	0.0508 (0.13242)	3.053[**]
CHINESE	0.4704 (0.27761)	0.4497 (0.27810)	0.5048 (0.7379)	−2.759[**]
Dichotomous variables	Frequency distribution: (%)	Frequency distribution: (%)	Frequency distribution: (%)	Mann-Whitney U
OPINION Qualified Audit Opinion	60 (7.3)	28 (5.5)	32 (10.4)	
Clean opinion	759 (92.7)	484 (94.5)	275 (89.6)	−2.633[**]
AUDITOR Big Five Firm	598 (73)	389 (76)	209 (68.1)	
Non Big Five Firm	221 (27)	123 (24)	98 (31.9)	−2.464[**]

** Significant at the 0.01 level (2-tailed)
 * Significant at the 0.05 level (2-tailed)

Variable description:

LOGFEE	=	Log_{10} total audit fees	FOREIGN =	Total foreign directors to total directors
LOGNAS	=	Log_{10} of the non-audit services fees	CHINESE =	Total Chinese directors to total directors
LOGASSETS	=	Log_{10} of total assets	OPINION =	Indicator variable having a value of 1 if the firm receives a qualified audit opinion and 0 if otherwise
LOGSUBS	=	Log_{10} of the number of consolidated subsidiaries		
INVREC	=	Total inventories and account receivables to total assets	AUDITOR =	Indicator variable having a value of 1 if the auditor is the Big Five firm and 0 if otherwise
LEVERAGE	=	Total long-term debt (excluding deferred tax) to total equity	SD =	Standard deviation

TABLE 4
RESULT OF CORRELATIONS BETWEEN DEPENDENT AND INDEPENDENT VARIABLES

	LOGFEE	LOGNAS	LOGASSETS	LOGSUBS	INVREC	LEVERAGE	FOREIGN	CHINESE	OPINION	AUDITOR
LOGFEE	1.000	0.392**	0.682**	0.735**	0.015	0.213**	−0.051	−0.117**	−0.030	0.094**
LOGNAS	0.359**	1.000	0.366**	0.224**	−0.040	0.216**	0.060	−0.148**	−0.053	0.157**
LOGASSETS	0.683**	0.339**	1.000	0.443**	−0.147**	0.325**	0.038	−0.211**	−0.108**	0.147**
LOGSUBS	0.734**	0.210**	0.476**	1.000	0.035	0.118**	−0.271**	0.062	0.055	−0.031
INVREC	−0.105**	−0.113**	−0.382**	−0.132**	1.000	−0.007	−0.017	0.002	−0.009	0.018
LEVERAGE	0.374**	0.234**	0.379**	0.346**	−0.058	1.000	−0.015	−0.124**	−0.050	0.018
FOREIGN	0.011	0.092**	0.111**	−0.189**	−0.010	−0.117**	1.000	−0.252**	−0.033	0.117**
CHINESE	−0.156**	−0.140**	−0.239**	0.034	0.215**	−0.005	−0.254**	1.000	−0.014	−0.152**
OPINION	−0.017	−0.053	−0.097**	0.056	0.040	−0.092**	−0.056	−0.023	1.000	−0.051
AUDITOR	0.095**	0.157**	0.152**	−0.019	−0.129**	−0.007	0.119**	−0.149**	−0.051	1.000

Note. Pearson Correlation is at diagonal up and Spearman Correlation is at diagonal down.
** Correlation is significant at the 0.01 level (2-tailed)
* Correlation is significant at the 0.05 level (2-tailed)

Multivariate Regression Analysis

The regression analysis (i.e. the first model) tests Hypothesis H1. The results are presented in Table 5. The results contain both the OLS regressions for the full sample and for NAS-purchased companies. Both models are well specified as evidenced by high F statistics. The R^2 of both equations are in excess of 70% and they are consistent with prior studies. Further, the results are similar for both samples. More importantly, the hypothesis variable LOGNAS is significant at 1% level for both regressions. However, the sign of the coefficient is in the opposite direction of the theory proposed earlier. There is a significant positive relationship between audit fees and NAS fees. The explanation to this finding of the hypothesis variable is provided in the discussion section.

TABLE 5
REGRESSION RESULTS USING THE FULL SAMPLES (N = 819) AND
NAS FEE INCURRED COMPANIES (N = 512)

Variables[+]	Expected sign	N = 819		N = 512	
		Coefficient	*t*-statistic	Coefficient	*t*-statistic
LOGNAS	–	0.051	5.284**	0.098	5.988**
LOGASSETS	+	0.251	12.407**	0.274	14.597**
LOGSUBS	+	0.560	18.606**	0.533	19.773**
INVREC	+	0.002	10.246**	0.214	5.104**
LEVERAGE	+	–0.002	–0.453	–0.003	–0.511
FOREIGN	+	0.208	3.718**	0.231	3.093**
CHINESE	–	–0.053	–1.624*	–0.078	–1.937*
OPINION	+	–0.015	–0.531	–0.047	–1.028
AUDITOR	+	0.022	1.214	0.036	1.451#
Constant	+/–	–0.044	–0.454	–0.293	–2.875**
Adjusted R^2		0.720		0.739	
F ratio		198.73		161.68	
Prob > F (Two-tailed test)		0.000		0.000	

[+] See Table 3 for variable definitions
**Significant at 1% (one-tailed)
* Significant at 5% (one-tailed)
# Significant at 10% (one-tailed)

Other explanatory variables that are significant in both regressions are LOGASSET, LOGSUBS, INVREC, FOREIGN and CHINESE. The variables are significant at 1% level in the predicted directions. The results are consistent with previous studies done in Malaysia and elsewhere (see e.g. Ayoib, 2001; Rose, 1999). As expected, company size and complexities are the main determinants of audit fees. Similarly, foreign investors are likely to demand higher quality audit and this is reflected in higher audit fee. Unique to the Malaysian audit market, Chinese controlled companies pay lower audit fees than other companies due to the Chinese business practice discussed earlier. However, the variable AUDITOR is not significant for the analysis of all companies and only (weakly) significant when the sample of NAS-purchased companies is utilised. Hence, the evidence of brand name premium is not conclusive.

The variance inflation factors (VIF) in both regressions indicate that the presence of multicollinearity is not serious as VIF does not exceed 2.0 for any of the explanatory variables in the regression (a level of 10 is generally regarded as indicating a significant problem).

T-test Analysis of NAS Fee and Audit Opinions

A comparison of group means for NAS fee between qualified and unqualified audit opinion is provided in Table 6. The t-test result indicates a (weak) significant different in the means of NAS fee implying the inequality of the

sample means between the two groups. In other words, the result shows an evidence of auditors compromising its independence when the clients pay high levels of NAS from the auditors. These univariate result reported in Table 6 is comparable with previous research in other countries (Wines, 1994 in Australia; Firth, 2002 in UK).

TABLE 6
TEST BETWEEN QUALIFIED OPINION AND
UNQUALIFIED OPINION (N = 819)

	Qualified	Unqualified	t-value	Sig.[*]
Means	0.89	1.10	−1.524	0.0640
(Standard Deviation)	(1.08)	(1.00)		

[*] one-tailed test

Further analysis shows that the results of the audit fee model reported above are not sensitive to different sub samples. However, interesting findings are found when the t-test of audit opinion between NAS- and non-NAS-purchased companies is carried out for Big Five and non-Big Five auditees. The mean of LOGNAS between companies that received qualified opinions and companies that received clean opinions is statistically significant at 5% level when a sample of non-Big Five auditees is used. The result is not statistically significant when a group of the Big Five auditees is used as a sample. The outcome suggests non-Big Five auditors are less independent when issuing audit reports for NAS purchased companies. This is also consistent with the preposition that large auditors are more independent than smaller auditors (DeAngelo, 1981).

DISCUSSIONS

The study finds a significant positive relationship between audit fees and non-audit fees. This result does not support the theory proposed in the study but it is consistent with previous studies done by Simunic (1984), Palmrose (1986b), Ezzamel et al. (1996), Firth (1999), Abbott et al. (2003), and again by Firth (2002). This means that the result does not support the two theories explained by Simunic (1984); Hillison and Kennelley (1988), which are "knowledge spillover effect", and "loss leader" theories. As argued by Firth (2002), the contradictory findings might be due to specific events in the company that generated a demand for consultancy services as well as requiring additional audit efforts.

With regards to the second objective of the study, the results obtained from the t-test suggest a significant relationship between NAS fees and qualified audit opinions. The results imply that audit opinion is dependent on the amount

of NAS fee. Further tests reveal that the difference is more prevalent among non-Big Five auditees. It could be argued that small auditors could not resist against management pressure when issuing qualified opinion. Similarly, the non-parametric tests also reveal that companies that purchased NAS tend to have less qualified opinions. This is perhaps an interesting finding because one of the rules in SOX 2002 limits the provision of NAS as it seems to be impairing auditors' independence. Similarly, the MIA By-Laws (on Professional Conduct and Ethics) (revised 2002) calls for audit firms not to accept an appointment if the provision of NAS would create a significant threat to the professional independence, integrity and objectivity of the audit firms.

With regards to the final objective of the paper, the study found that about 63% or 512 out of 819 listed companies in 2002 purchased NAS. However, the proportion of NAS fee to total auditor remuneration is worrying. Almost 90% of the NAS-purchased companies have NAS fee ratio of 5% or more. As noted earlier, if the SOX 2002 is used as the benchmark, 90% of the auditors in Malaysia are not independent in providing the auditing service. In Malaysia, under the MIA rules, professional independence is considered impaired if total fees arising from NAS to a client is 20% or more of the audit firm's *total annual fees* received for two or more consecutive years. However, unlike the SOX 2002, the rule is silent with regards to the proportion of NAS fees to total fees (audit and NAS fees) for *a particular client*. Study by Gul and Teoh (1986) reports that the Malaysian public confidence in the financial reports drops if the NAS is also provided by the incumbent auditors. Further, Teoh and Lim (1996) report that even the accountants themselves are skeptical if the NAS ratio is more than 50%. This study documents that 21% of the auditors of NAS-purchased companies have more than 60% NAS ratio. It seems that auditors in Malaysia are very dependent on NAS as a major source of revenue.

Taken together, the results of the regression analysis and the t-test results suggest no market wide full-blown problems with regard to auditor independence in the Malaysian market for audit and NAS. However, the findings of positive relationship between NAS fees and clean audit opinions as well as high proportion of NAS fee to total fees are a cause for concerns.

IMPLICATION AND CONCLUDING REMARKS

This study is expected to contribute to the body of knowledge on current situations of non-audit fees and audit fees especially in the developing market. It adds to the small but growing literature on studies of audit pricing and auditors' independence in Malaysia. It also highlights the present situations in Malaysian accounting profession regarding the issue of audit pricing and non-audit fees as

well as NAS fee and audit opinion and its implication on auditors' independence. Consistent with prior studies, the present study finds a positive and significant relationship between audit and non-audit fees contrary to the theory available in the literature. Whilst explanations are provided for this discrepancy, further in-depth studies are needed to corroborate these explanations. Perhaps, a longitudinal study could provide a more meaningful analysis in view of phenomenal increase in NAS fee recently.

The study is also expected to help regulators to formulate rules and guidelines in order to improve auditors' independence. For example, the NAS disclosure requirement should specify the location of disclosure as well as the accepted term for the description of non-audit service fee. The disclosure should be made mandatory even if the company does not purchase NAS. It is also recommended that the NAS fee is segregated between recurring NAS and non-recurring NAS. It could be argued that recurring NAS might affect auditor independence more than a single or one time NAS. Similarly, the MIA by laws should be amended to provide a clear guideline on NAS by limiting the NAS based on certain threshold as originated in the US's SOX 2002. The excessive reliance on NAS fees by some auditors as discussed earlier should not be taken for granted. There could be another Enron in the making but the nation cannot afford to have the "Malaysian made Enron" to happen. Whilst independence in-fact is a state of mind of the auditors, the recommendations suggested by this paper might improve the perceptions of users towards auditors' independence. Hopefully, this study will provide a catalyst for all interested parties to work on for the betterment of the accounting profession in Malaysia.

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