AUDIT FEES, NONAUDIT FEES, AND AUDITOR QUALITY: AN ANALYSIS FROM THE INDIAN PERSPECTIVE

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Abstract

The purpose of this paper is to extend the work done by Simon et al. (1995) in two ways: (1) To determine whether there is a Big Four audit fee premium in the audit market in India; and (2) To determine whether there is significant association between audit fees and nonaudit fees in India. This study has important implications for audit markets in developing countries. The results are consistent with our expectations and prior research. Consistent with prior research, we find a positive association between nonaudit services and audit services due to possible knowledge spillovers from one to the other. Local Indian audit firms might want to think of pricing strategies to either maintain or increase their market share in

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the audit market. They might also consider increasing the scope of nonaudit services offered to their present clients to take advantage of the knowledge spillover effect; evidenced in the present study.

INTRODUCTION

The market for audit services has been studied extensively in the developed countries including United States of America (Simunic 1980), United Kingdom (Taylor and Baker 1981), and in New Zealand (Firth 1985). However, little work has been done in developing countries on the determinants of audit fees except for Simon, Ramanan and Dugar (1995) and Karim and Moizer (1996). Karim and Moizer (1996) analyzed the determinants of audit fees in Bangladesh, whereas Simon et al. (1995) examined the determinants of audit fees for public sector companies in India and compared the fees for these companies with fees for private sector companies in the same market. Since 1995, the market share of the Big Four firms in India has grown considerably (The New Indian Express, 2002).

The purpose of this paper is to extend the work done by Simon and Francis (1988) in two ways:

(1) To determine whether there is a Big Four audit fee premium in the audit market in India; and
(2) To determine whether there is significant association between audit fees and nonaudit fees in India.

First, India is a unique market to study because, before 1991, the presence of the Big Four firms in India was negligible (The New Indian Express 2002). The Chartered Accountants Action Committee for level playing field (CAAC) in 2002 authored *The White Paper*. This report presents information about the influence of Multinational accounting firms in India, specially the Big Four audit firms; it also informed about the impact on the Indian public accounting profession. *The White Paper* offers very useful insights about the wide difference between – "how the Big Four firms are perceived in the West and India". *The White Paper* states that in

the west, the Big Four firms are treated more as a necessity and as a "tool to serve the western agenda in the rest of the world"(*The White Paper* on Multinational firms operating in India (2002)). On the other hand, in India, the corporate and finance sectors and also the Government and policy maker implicitly trust the Big Four firms and their professed competence and ethical standards. The reasons forwarded by the white paper are inadequate awareness about the Big Four firms and "a type of colonial hangover" (The White Paper on Multinational firms operating in India (2002)) which leads to high perceptions about western institutions. Further, two provisions of the Indian Companies' Act (1956) have significant influence on audit fees:

Section 227(4A): requires the auditor to report to the shareholders on the adequacy of the company's internal control system, requiring management to enforce such procedures

Section 227(2): require companies that have stockholders equity in excess of 2.5 million rupees to maintain an internal audit staff.

The above provisions would probably have the effect of reducing audit effort and consequently audit fees. In light of the above provisions, it would be interesting to see whether the Big Four firms would enjoy a considerably higher premium in India than in the developed countries.

Second, prior studies report a significant association between audit fees and nonaudit fees (Simunic 1984, Palmrose 1986) suggesting that knowledge spillovers occur from one service to the other. Simunic (1984) examined whether client specific knowledge spillovers occurred using test variables that represent the purchase of nonaudit services from the incumbent auditor, which included a scaled measure of nonaudit fees deflated by the square root of total assets. The findings revealed that the cost functions of audit and nonaudit services are not independent, and there was significant positive association between the two types of services. Palmrose (1986) further documented that audit fees are higher when the client purchases nonaudit services from the incumbent auditor. Among the more recent studies, Davis et al.

(1993) and Bell, Landsman, and Shackelford (2001) found significant association between nonaudit fees and audit fees using U.S data. Butterworth and Houghton (1995) and Craswell and Francis (1999) also found that nonaudit fees significantly influence audit fees using Australian data. In India, most companies purchase nonaudit services from the incumbent auditor and this paper examines whether nonaudit fees lead to higher audit fees being charged by the incumbent auditor.

This paper continues with Section II, which discusses the research design and the sample, followed by Section III that presents the results, and conclusions offered in Section IV.

SAMPLE AND RESEARCH METHODOLOGY

The Indian audit market is mainly comprised of small and medium sized local firms, the number of firms with 5 or more partners being only 375 in 2001 out of 42,339 firms (CAAC 2001). Per the provisions of the Indian Companies Act (1956), all public companies are required to disclose audit fees and nonaudit fees in the annual reports. Therefore, our sample consists of annual reports of 60 Indian companies for the financial year of 2003. In the randomly selected sample, all the companies obtained nonaudit services from the incumbent auditor. Financial companies and Banks were excluded from the sample selection process, as it has been established before that most of the financial ratios used in the model cannot be determined in case of financial companies (Simunic 1980). The required disclosure of audit fees not only facilitates data collection but also eliminates the possibility of nonresponse bias.[2]

The basic research approach is based on earlier studies, which employed cross-sectional regressions of audit fees on a set of explanatory variables, which are related to audit fees. The

[2] At the time of our data collection the companies in India are allowed to provide audit as well as nonaudit services. At the current time there is no provision by SEBI and other authorities have not disallowed audit firms from providing audit as well as nonaudit services.

specific form of the audit fee regression model is the one used in Simunic (1980):

$$LOGAUD = \alpha + \beta_1 LOGASSETS + \beta_2 SQSUBS + \beta_3 INVREC + \beta_4 BIGFOUR + \beta_5 LOGNONAUD + \mu$$

Where,

LOGAUD	=	natural logarithm of audit fees
LOGASSETS	=	natural logarithm of total assets
SQSUBS	=	square root of the number of related parties
INVREC	=	the proportion of total assets as represented by inventories and receivables
BIGFOUR	=	an indicator variable which has a value of 1 if the company is audited by a Big Four audit firm or the Indian affiliate of a Big Four audit firm
LOGNONAUD	=	natural logarithm of nonaudit fees
μ	=	a residual error term, assumed to be distributed normally with zero mean and constant standard deviation

The first explanatory variable (LOGASSETS) is a proxy for auditee size and the next two (SQSUBS and INVREC) are related to audit risk and complexity of the client. It will be much more difficult to audit companies with a greater number of subsidiaries and a greater proportion of assets such as Inventories and Receivables. The indicator variable of BIGFOUR was included to test whether the Big Four audit firms enjoyed a fee premium over other firms, as found in the developed countries. Further, the indicator variable of LOGNONAUD was also included to examine the association between audit fees and

nonaudit fees. The independent variables and their predicted signs are summarized in Table 1.

RESULTS

Table 2 presents descriptive statistics for the variables used in the regression model and Table 3 presents the correlation matrix and the Variance Inflation Factor (VIF) factors for the variables used in the regression model. The audit fees are 5697 thousand rupees (approximately 123,234.24 USD as of September 1st, 2011) on average and average assets are 6008 million rupees. It can be seen that the standard deviation of audit fees is about 18268000, which is due to the huge premium enjoyed by the Big Four firm in the Indian audit market. The average nonaudit fees are 718 thousand rupees. The large proportion of receivable and inventories (0.43) indicates the dominant presence of manufacturing companies in the sample. The correlations between the variables are moderate, as is evident from the VIF factors.

Overall, Adjusted R-square was moderately high at 0.40, indicating that the linear composite of the independent variables entered into the regression procedure predicted 40% of the variation in the dependent criterion, which is the audit fees. The beta weights for all the independent variables, except for INVENREC were statistically significant. The reason for INVENRECV variable not being significant could be due to two reasons. One reason could be that auditors do not perceive themselves to be held responsible for the losses that might be incurred by the client and therefore do not charge a risk premium for their services. Another reason could be that the risk of litigation faced by auditors in the Indian environment is low. Simon et al. (1995) used the LOSS variable as proxy for auditee risk and found that the LOSS variable was insignificant and therefore their finding is consistent with the second explanation.

The coefficient on the variable of BIGFOUR was positive and highly significant ($p<0.001$), indicating that in India, the Big Four auditors charge much higher fees than the other auditors in the audit market. As can be seen from the results, the Big Four firms charge a 40% premium for their services in the Indian audit market. Prior studies indicate that the Big Four fee premium, on average, is about 16% in America and Australia (Simon and Francis 1988; Craswell et al. 1995) and about 63% in Hong Kong (Defond, Francis and Wong 2000). The premium in the Indian market is much higher than the developed markets such as the US and Australia, but lower than that found in Hong Kong. The reason is that although the audit market conditions in India and Hong Kong are very similar, there are no large non Big Four audit firms in Hong Kong and so the comparison is between Big Four firms and small firms. However, in India, the audit market has medium as well as small local audit firms and therefore, the premium is significantly lower in India as compared to Hong Kong but still higher than the developed nations due to the high perceptions about western institutions and companies in India. Another reason for the significant premium enjoyed by the Big Four firms in India could be due to the fact that the Big Four firms have strategically targeted the largest firms in India, the so called "big players".

The second variable of interest, which is the LOGNONAUD variable, is also significant ($p<0.05$), indicating that there is a positive association between nonaudit services and audit services in the Indian audit market as found in earlier studies in the developed nations. As stated earlier, all the companies in the sample purchased nonaudit services from the incumbent auditor, which is usually the case in Indian companies.

Therefore there seems to be an effect of knowledge spillover from nonaudit services to audit services and vice versa.

CONCLUSIONS AND FUTURE RESEARCH

This paper extends previous research on audit fees in the Indian audit market by (1) Examining the audit fee premium enjoyed by the Big Four firms in the market for audit services; and (2) Examining the association between nonaudit services and audit services in the Indian audit market.

The results are consistent with our expectations and prior research in that audit fees charged by Big Four firms are significantly higher than the audit fees charged by the local audit firms in India. While the premium enjoyed by the Big Four firms in India is considerably higher than the Big Four premium found in the developed countries, it is still lower than the premium found in similar audit markets such as Hong Kong.

Consistent with prior research, we found a positive association between nonaudit services and audit services due to possible knowledge spillovers from one to the other. One caveat necessary to mention here is that we used a single-equation specification for the audit fee model with nonaudit fees as an indicator variable. Whisenant et al. (2003) found that single equation specifications of audit fee models suffer from a statistical misspecification, or simultaneous equation bias, that can make coefficient estimates unreliable. They concluded that audit fees and nonaudit fees are jointly determined and that they are related indirectly through the parameters determining each fee. However, it is difficult to argue for a complete absence of knowledge spillovers from one type of service to the other, given the high level of correlation between nonaudit and audit services.

This study has important implications for audit markets in developing countries. Local Indian audit firms might want to think of pricing strategies to either maintain or increase their market share in the audit market. This study also shows some benefits of knowledge spillover available in the Indian market; it is important to note that unlike the U.S. market, India is an emerging market and hence the importance and impact of

knowledge spillover due to nonaudit services might be different in both countries

Future research efforts could include studying the competitive reaction of the Indian local firms to the entry of Big Four firms in the Indian audit market. There is a reasonable expectation that the medium as well as small audit local firms would try a discounting strategy in order to retain their client in the face of competition from the established Big Four firms. It is also possible that the small firm might prefer to be bought over by the Big Four firms instead of facing the prospects of complete extinction, while the medium sized firms might prefer to stand their ground and offer competition to the Big Four firms. However, one major limitation to this study is that the sample used is small and not very generalizable. This is mainly due to the lack of publicly available data for conducting this research.

TABLE 1
Independent variables and their predicted signs

Determinant	**Name**	**Predicted sign**
Size	LOGASSETS	+
Complexity	SQSUBS	+
Audit Risk	INVENRECV	+
Indicator variable-Premium for Big Four firms	BIGFOUR	+
Indicator variable-Nonaudit	LOGNONAUD	+

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TABLE 2
Descriptive statistics

Variable	Mean	Standard Deviation
Total Assets (millions)	6008	12919
Audit fees (thousands)	5697	18268
INVREC	0.43	0.30
Nonaudit fees (thousands)	718	1109

TABLE 3
Panel A. Correlation matrix of independent variables

	LOGAUD	BIGFOUR	LOGASSETS	INVENRECV	SQSUBS	LOGNONAUD
LOGAUD	1.000	.469	.426	.140	.370	.351
BIGFOUR	.469	1.000	.099	.026	.176	.075
LOGASSETS	.426	.099	1.000	.151	.312	.319
INVENRECV	.140	.026	.151	1.000	.472	.169
SQSUBS	.370	.176	.312	.472	1.000	.269
LOGNONAUD	.351	.075	.319	.169	.269	1.000

Panel B. Variance Inflation Factor (VIF)

VARIABLE	VIF
BIGFOUR	1.039
LOGASSETS	1.188
INVENRECV	1.296
SQSUBS	1.463
LOGNONAUD	1.158

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TABLE 4
Regression results

$$LOGAUD = \alpha + \beta_1 LOGASSETS + \beta_2 SQSUBS + \beta_3 INVREC + \beta_4 BIGFOUR + \beta_5 LOGNONAUD + \mu$$

	Predicted sign	Coefficient	t-statistic	Prob.
INTERCEPT			2.122	.036
BIG FOUR	+	.397	5.509	.000
LOGASSETS	+	.275	3.571	.001
INVENRECV	+	-.027	-.333	.739
SQSUBS	+	.176	2.060	.042
LOGNONAUD	+	.191	2.512	.013

F-Statistic: 17.301
Prob (F): 0.000
Adj R-square: 40%

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