

LARGE SHAREHOLDER MONITORING OF NONAUDIT SERVICE FEES

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ABSTRACT

The present study examines the empirical relationship between the blockholder percentage stock ownership and the relative level of nonaudit service fees. This is an extension of prior audit research investigating the association between corporate governance and nonaudit service fees. I suggest that the presence of large and sophisticated investors in a firm's shareholder mix determines the effectiveness of stockholder monitoring on corporate affairs including financial reporting and audit management process. If the large shareholders perceive that the relatively high level of nonaudit fees in auditor's fee structure has the potential to create auditor independence problem, they intervene in such a managerial decision and induce firms to decrease the proportion of nonaudit service purchase from their incumbent auditors. By performing cross-sectional regression analysis for 335 New York Stock Exchange listed firms, I find evidence of a significantly negative relationship between blockholder stock ownership and nonaudit fee ratio. This is consistent with the view that blockholders actively monitor managerial decisions to purchase nonaudit service and prevent firms from disproportionately increasing the level of such purchase to preserve external auditor's objectivity in assurance functions. The study's results hold in various specification tests, and are particularly pronounced for the medium-sized firms in the sample.

Keywords

Large shareholder monitoring; Corporate governance; Fee ratio; Blockholder stock ownership; Auditor independence.

INTRODUCTION

In this study, I examine the relationship between blockholder percentage stock ownership and nonaudit fees paid to external auditors. The study is based on the premise that the presence of sophisticated and large shareholders determines the effectiveness of stockholder monitoring on corporate affairs as the large economic stakes in a firm provide greater incentives to such shareholders to monitor management decisions including the its decisions relating to the financial reporting and audit process.

The provision for nonaudit service fees paid to external auditors caused significant regulatory concerns in recent years. The fear expressed by the regulators such as the chairman of the Securities and Exchange Commission (SEC) basically rests on the belief that relatively higher growth of nonaudit consulting fees has the potential to impair auditor independence by increasing the economic bond between auditor and client. In such a situation, an auditor may be forced to acquiesce to the client's demand for using questionable accounting techniques. As a result, the audit will cease to act as a safeguard against fraudulent financial reporting. In order to improve transparency in the process of paying fees for nonaudit services to incumbent auditors, the SEC in its November 2000 rules prohibits certain types of nonaudit services and requires registrants to separately disclose fees paid for audit and nonaudit services to their incumbent auditors in their annual proxy statements submitted on and after February 5, 2001. In a more recent development, the Sarbanes-Oxley Act of 2002, among other things, prohibits nine types of nonaudit consulting services and requires preapproval of

audit committees for audit and nonaudit consulting assignments by client companies. These rules are enforced as a safeguard against possible loss of auditor objectivity in certification functions.

Several prior studies (e.g., Frankel et al., 2002; DeFond et al., 2002; Ashbaugh et al., 2003; Chung and Kallapur et al., 2003; Reynolds et al., 2004) have addressed the regulatory concerns and examined whether nonaudit service fees adversely impact the quality of reported accounting numbers as measured by the level of abnormal accrual adjustments or influence the auditor's opinion formulation process. Those studies have produced mixed evidence as to whether auditors sacrifice their objectivity in exchange for retaining high nonaudit fee-paying clients.

The nonaudit service purchasing decision of a firm seems to be complex in nature. Several compelling factors may interact to influence firms to seek help from their external auditors. On one hand, firms may need to purchase certain consulting services from their auditors because of their specialized knowledge and expertise in the industry. As a result of auditor knowledge spillover, firms may gain from cost efficiency from the joint supply of audit and nonaudit services from the same auditor. On the other hand, the joint performance of audit and nonaudit service may reduce the probability that the auditor truthfully reports a client's financial performance or may increase the chance that auditors sacrifice their objectivity by acquiescing to a client's pressure to use questionable accounting methods. In this backdrop, it is worthwhile to examine whether an influential ownership factor, blockholder percentage shareholding has any impact on the relative level of nonaudit fees especially when such management action brings up the issue of auditor independence to the forefront.

In a recent study, Abbott et al. (2003) have examined whether audit committee characteristics have any bearing on the relative level of nonaudit fees. Their analysis is based on the premise that in view of recent auditor independence regulations (e.g., set forth by the Blue

Ribbon Committee in 1999), an active and independent audit committee not only has incentives to limit nonaudit service (NAS) purchase but also has the decision rights to be a stakeholder in the NAS purchase decisions. The results of Abbott et al. (2003) suggest that the relative level of NAS fees as compared to audit fees is lower for firms having active and independent audit committees.

Following Abbott et al. (2003), I argue that substantial and sophisticated shareholders as a part of corporate governance mechanism can have significant influence on a firm's decision to purchase NAS. Large economic stakes of such shareholders in a corporation induce them to monitor management actions and to be involved in the strategic decision-making process because increased return from their monitoring is sufficient to cover the associated oversight costs. Therefore, when those large shareholders face a situation where purchase of NAS has the potential to create an auditor independence problem, they are most likely to intervene and reduce the relative level of such consulting service purchase from incumbent auditors.

I use the aggregate percentage stock ownership by blockholders (institutional plus noninstitutional shareholders), who individually own 5% or more of outstanding common stock, as the measure of substantial, large shareholding. I find that in the presence of both the firm-specific control factors, and board and audit committee governance variables, such blockholder stock ownership is significantly, negatively related to the ratio of NAS fees to total client fees (a measure of relative NAS fee level). Further analysis reveals that the relationship is pronounced for the sample firms in the second and third quartiles of the total assets. The results suggest that as a part of their governance, a group of sophisticated and substantial shareholders exert proactive influence on the NAS purchase decisions and reduce the relative level of such purchase when they perceive that a high level of NAS has the potential to impair auditor independence in financial reporting process. Such a

large shareholder monitoring effect is, however, restricted to the medium-sized sample firms.

The rest of the paper is organized as follows. The next section discusses background and hypothesis development. This is followed by research design, sample, descriptive data, and results. The paper ends with conclusions.

BACKGROUND AND HYPOTHESES

I. Nonaudit Service Fees

DeAngelo (1981) defines audit quality as the joint probability of detecting and reporting a material misstatement by an external auditor. Firms purchase nonaudit service from incumbent auditors primarily because of the benefit of knowledge spillovers. In general, joint NAS and audit production is likely to be more efficient (Simunic, 1984). However, when NAS fees are relatively high in the fee structure there is a perception that auditors compromise their objectivity in reporting functions. Though it is most likely that NAS would not adversely affect an auditor's ability to objectively report a material misstatement, it is perceived that high-level NAS makes an auditor acquiesce to client pressure for using questionable accounting techniques (Beck et al., 1988a, b). However, Reynolds and Francis (2001) observe that reputation protection and litigation risk dominate an auditor's reporting behavior. Reynolds et al. (2004) further argue that an economically rational auditor would perceive greater fee pressure from high audit fee-paying clients because compared to nonaudit fees, audit fees are more stable and predictable revenue stream from one year to the next. Moreover, Parkash and Venable (1993) and Firth (1997) find evidence that firms with higher agency costs are expected to acquire high-quality audit service and limit NAS purchase from their incumbent auditors to reassure investors and creditors about the integrity of financial statement information.

The Securities and Exchange Commission's (SEC) 2000 rule on auditor independence is based on the notion that any level of certain nonaudit services jeopardizes auditor independence. In its final rule, the SEC stated that when nonaudit fees "become large relative to audit fees, auditor independence may be at risk." Hence, the study on firm-specific governance factors that induce managers to decrease the level of NAS purchase would provide an interesting insight into the area of corporate governance and financial reporting quality. In a recent study, Abbott et al. (2003) have examined the relationship between audit committee characteristics and NAS purchases and observed that audit committees comprised solely of independent directors meeting at least four times a year are significantly, negatively related to the NAS fee ratio. The evidence is consistent with the view that audit committee members perceive a high level of NAS fees negatively and take actions to decrease the level of such purchase. In the present study, I focus on the relationship between ownership sophistication, as measured by the percentage stock ownership of substantial shareholders, and the relative level of NAS fees to examine the impact of such a governance mechanism on management's NAS purchase decision.

II A. Ownership Structure and Nonaudit Service Fees

Ownership structure of a firm determines the level of monitoring and impacts its internal control risk. An important component of such monitoring is involvement in management's strategic decisions, which among other things includes certain key decisions with regard to financial reporting and audit process. Various shareholder groups exert monitoring at different levels depending on their investment objectives and economic stakes in an organization. When the level of stock ownership is low, shareholders may not be engaged in monitoring firm decisions; rather, they would be more interested in making gains from the short-term price movement of their investments. However, when stockownership is concentrated and substantial in nature, the stockholders' economic stakes in a firm increase. As investors

individually make substantial investment in a firm, they usually do so with long investment horizons. As a result, such substantial shareholders become more interested in monitoring management actions to increase firm value in order to proactively preserve and improve the value of their investment portfolios. As a part of their active monitoring, those shareholders induce management to decrease the level of nonaudit service purchase from external auditors if they perceive that the relative level of NAS has the potential to create auditor independence problem.

II B. Blockholder Stock Ownership and Nonaudit Service Fees

Kaplan and Minton (1994) suggest that blockholder stock ownership is one of the major governance mechanisms that help control an agency problem. Jensen (1993) argues that large shareholders, that is, individuals or institutions that simultaneously hold large debt and/or equity positions, tend to actively participate in companies' strategic decisions. Prior studies also suggest that a large shareholder has the incentive to undertake monitoring or other costly control activities (e.g., Grossman and Hart, 1980; Shleifer and Vishny, 1986; Huddart, 1993) because it is more likely that a large shareholder's increased return from monitoring is sufficient to cover the associated monitoring costs (Gillan and Starks, 2000). Moreover, the larger the ownership position of an entity, the greater is the difficulty faced by it to offload its holding in a corporation based on its short-term performance. Instead, the entity prefers to monitor the firm's activities to ensure value-maximizing behavior of managers. Therefore, it is most likely that blockholders of common shares monitor management's strategic decisions including the one involving NAS purchase from incumbent auditor.

Furthermore, substantial investment in a firm makes portfolio governance and its long-term value maximization as the primary concern for blockholders of common shares. Since reported financial statement information provides a major basis for evaluating portfolio performance, fair representation of financial

information in all material respects is of utmost importance for such outside blockholders. As a part of their monitoring, the blockholders are expected to make sure that the financial reporting process is credible and that auditors properly maintain their objectivity in certification roles. If the blockholders perceive any auditor independence problem such as the one that may arise out of the relatively high-level NAS purchase from the incumbent auditor, they will intervene in such managerial decisions and induce firms to reduce the level of NAS purchase. Alternatively, in order to earn the confidence of such large shareholder groups and to mitigate their concern about the relative level of NAS fees, managers may voluntarily reduce the level of NAS purchases from incumbent auditors to preserve the perceived auditor independence in certification functions.¹ In either case, I expect an inverse relationship between the relative NAS fees and blockholder stock ownership. This situation is expressed in terms of the following alternative hypothesis:

H_{a1}: The relative proportion of nonaudit service fees in total client fees is inversely related to the blockholder percentage stock ownership.²

¹ According to Shleifer and Vishny (1986), the outside blockholders may also have representatives on the board of directors or have the potential power to influence the activities of the board of directors. The threat of dismissal of top managers is another method for alleviating the agency problem that arises because of the separation between ownership and control. The fear of antagonizing a few influential blockholders could encourage managers to act in the best interest of shareholders. Shleifer and Vishny (1986) refer to the ability of large shareholders to influence management as “jawboning.”

² I define 5% or more of individual shareholding as substantial stock ownership. The SEC’s Rule 13D and 13G require that any person or group of persons who acquire a beneficial ownership of 5% or more of equity securities must file a schedule 13D or 13G (depending on the category of investors) reporting such acquisition together with certain other information. The 5% threshold level is also used by prior research to define substantial shareholdings (e.g., Core et al., 1999; Eng and Mak, 2003). Therefore, for blockholders of common shares, I consider

RESEARCH DESIGN

Consistent with previous studies (e.g. Firth, 1997; Abbott et al., 2003), I use the following cross-sectional regression to examine the empirical relation between the nonaudit fee ratio and blockholder stock ownership:

$$\begin{aligned} \text{FEERATIO} = & \beta_0 + \beta_1 \text{LTA} + \beta_2 \text{SUB} + \beta_3 \text{ROA} + \beta_4 \text{MB} + \beta_5 \text{FCF} + \\ & \beta_6 \text{ASSETGROW} + \beta_7 \text{AQUIS} + \beta_8 \text{ISSUE} + \beta_9 \text{FOROP} + \beta_{10} \\ & \text{RESTRUC} + \beta_{11} \text{LEV} + \beta_{12} \text{CEOIND} + \beta_{13} \text{BDEXP} + \beta_{14} \text{BDINDP} \\ & + \beta_{15} \text{ACEXP} + \beta_{16} \text{ACIND_DL} + \beta_{17} \text{DINST} + \beta_{18} \text{BLOCK} + \varepsilon \\ & \dots\dots\dots (1) \end{aligned}$$

Variable definitions

FEERATIO = Nonaudit service fees divided by total client fees (audit + nonaudit).

LTA = Natural log of total assets.

SUB = Square root of the number of subsidiaries.

ROA = Return on asset computed as net income divided by average total assets.

MB = Market-to-book ratio computed as equity market value divided by stockholders' equity.

FCF = Free cash flow scaled by total assets. FCF is computed as: operating cash flow - capital expenditures - dividend.

ASSETGROW = Percentage change in total assets as a measure of change in firm size from one year to the next.

AQUIS = A dummy variable of 1 for firms that were involved in merger or acquisition activity; 0 otherwise.

ISSUE = A dummy variable of 1 for firms that issued new debt or equity during the year or in the previous two years; 0 otherwise.

percentage shareholding of both institutional and noninstitutional shareholders who individually own 5% or more of outstanding common stock.

FOROP = Foreign sales divided by total sales.

RESTRUC = A dummy variable of 1 for firms that were involved in restructuring activity during the year or in the previous two years; 0 otherwise.

LEV = Leverage ratio computed as long-term debt divided by total assets.

CEOIND = A dummy variable of 1 if the CEO and chairman are different persons (i.e., board independence of the CEO); 0 otherwise (i.e., CEO dominance).

BDEXP = Number of outside directorships in other firms held by outside nonmanagement board members.

BDINDP = Percentage of nonmanagement outside directors on the board.

ACEXP = A dummy variable of 1 for a firm if the audit committee had at least a member with accounting and financial expertise; 0 otherwise.

ACIND_DL = A dummy variable of 1 if a firm has an audit committee that is comprised solely of independent directors and meets at least four times in a fiscal year; 0 otherwise.

DINST = Aggregate percentage of stock ownership of institutional investors who individually own less than 5% of outstanding common stock.

BLOCK = Aggregate percentage of stock ownership of substantial shareholders (institutional + noninstitutional) who individually own 5% or more of common stock.

The dependent variable, FEERATIO, is the ratio of nonaudit fees to total client fees (audit plus nonaudit fees).³ The independent variable of interest is blockholder percentage stock ownership BLOCK (i.e., aggregate percentage of shareholding of both institutional and

³ I measure fee ratio as nonaudit fees divided by total (audit + nonaudit) fees paid to the incumbent auditor consistent with the SEC's position that the proportion of nonaudit fees is useful to investors in assessing auditor independence (SEC, 2000; section III.c.5). This relative NAS fee measure is consistent with prior studies as well (e.g., Beck et al., 1988b; Parkash and Venable, 1993; Firth, 1997; Frankel et al., 2002; Abbott et al., 2003; Reynolds et al., 2004).

noninstitutional shareholders who individually own 5% or more outstanding common stock). I also include another ownership factor, diffused institutional stock ownership DINST (i.e., aggregate percentage of shareholding of institutional investors who individually own less than 5% of outstanding common shares) as one of the control variables to account for the monitoring effect of institutional investors with small individual shareholdings on the cross-sectional difference in the FEERATIO.

The model also includes several control variables to account for the effect of firm characteristics on the cross-sectional difference in FEERATIO. Moreover, several important governance variables such as board independence of CEO, proportion of independent directors in the board, board expertise, audit committee expertise, and wholly independent audit committee having met at least four times in a year (following Abbott et al., 2003) are additionally included in the analysis to test the incremental effect of the ownership variable of interest on the relative level of NAS fees.

Among the firm-specific controls, LTA is a measure of size and is a proxy for various economic phenomena such as risk, growth, earnings persistence, and information environment, regulatory, and political costs. SUB and FOROP are used as proxies for client complexity. ROA and MB account for the effects of profitability and growth on the cross-sectional FEERATIO difference. FCF controls for the possibility that firms with greater free cash flow have greater ability to pay for nonaudit consulting services. ASSETGROW is used to control the effects of actual change in firm size from one year to the next on the fee ratio (see Reynolds et al., 2004). Following Firth (1997), I include AQUIS, ISSUE, and RESTRUC to control the effects of new acquisition, issuance of securities and restructuring activities on the relative level of nonaudit service fees in the analysis.

SAMPLE AND DESCRIPTIVE DATA

The study's sample comprises nonregulated industrial firms. From the Compustat Research Insight database, I select the firms listed on the New York Stock Exchange (NYSE) that are nonregulated, nonfinancial, and nonservice in nature. In order to use a homogeneous group of firms, I consider only the industrial companies that are engaged in manufacturing and merchandising operations. Moreover, I include firms with the fiscal year end December 31, 2000 to facilitate interpretation of results in the context of the economics of the common period, and firms audited by only the Big Five auditors. Furthermore, the audit opinions received by the sample firms were either "unqualified" or "unqualified with additional language." No sample firm changed auditor in the fiscal year 2000 or in the immediately preceding year. Hence, the final sample comprises firms audited by the Big Five auditors (which is now Big Four after demise of Arthur Andersen in 2002), who did not receive any modified going concern audit opinions. The use of a homogeneous sample of firms provides a uniform basis for interpretation of the results by implicitly controlling the effects of factors extraneous to the study.

For the final sample of 335 firms, I hand-collected the audit and nonaudit fee data from the proxy statements (DEF-14A) submitted by those firms and available in the EDGAR database of the Securities and Exchange Commission (SEC).⁴ The ownership data are collected from the Compact Disclosure database. The data for all other variables used in the analysis were obtained from publicly available sources (e.g., Compustat Research Insight, Compact Disclosure, 10K annual reports, and proxy statements available from

⁴ The SEC's rule (2000) requires that firms submitting their annual proxy statements on or after February 5, 2001 must separately disclose information relating to audit and nonaudit fees paid to their external auditors during the most recent fiscal year.

the SEC's EDGAR database). The details of the sample selection process are summarized in Panel A of Table 1.

Panel B of Table 1 reports industry distribution of sample firms. It is noteworthy that some industries are better represented in the sample than others. I conduct the main analyses by controlling for the effects of heavily represented industries as a part of the robustness check.

Panels A and B of Table 2 provide descriptive data for the variables used in the study. The mean (median) audit fees are \$1.638 million (\$0.665 million) and the mean (median) nonaudit fees are \$4.384 million (\$1.045 million). Out of the total nonaudit fees, the average fee for information system implementation and development (ITFEE) constitutes \$554 thousand (median: 0). Only 15.5% of the sample firms have purchased IT (information system implementation and development) services from their external auditors. For an average sample firm, nonaudit fees comprise 55.68% of total client fees (audit plus nonaudit fees) with the median of 57.02%. It is therefore evident that nonaudit service fees on an average constitute more than half of the auditor's total remuneration.⁵ An average sample firm is large in size with mean (median) total assets of \$8,413 million (median: \$1,885 million), with size substantially varying across firms with minimum total assets of \$102.34 million and maximum total assets of \$437,006 million. The mean (median) diffused institutional stock ownership is 39% (40%) of outstanding common stock while the mean (median) percentage shareholding by blockholders is 40% (37%) indicating almost equal average shareholdings by the two ownership groups.

⁵ I keep the firms that did not purchase nonaudit service in the final sample because we want our sample to be representative of the firm population (see Ashbaugh et al., 2003). The inference drawn from the main results does not change if I exclude the firms that report zero nonaudit service fees. Following the same rationale, I include the firms with no blockholder shareholdings.

The average of nonmanagement board members is 80% (median: 83%). The average number of firms in which outside board members hold directorships is 1.86 (median: 1). Of the sample firms, 31% (103 out of 335 firms) have boards that are independent of their CEOs (i.e., the chairman and CEO are different persons). Of the sample firms, 70% (235 out of 335) have audit committees with at least one member having accounting and financial expertise, while 34% (114 out of 335) of the sample firms have wholly independent audit committees that met at least four times in the fiscal year.

Panel C of Table 2 provides information about the distribution of the test and independent variables across size quartiles based on total assets. From the distribution pattern, it appears that the larger firms have both greater fee ratio with the higher level of both audit and nonaudit fees and greater percentage of blockholder shareholdings compared to the smaller firms. However, diffused institutional investors have greater percentage of shareholdings in the smaller firms compared to the larger sample firms.

Table 3 reports correlation statistics for the variables used in the study. FEERATIO is significantly and positively correlated with DINST (at the 10% level) and negatively correlated with BLOCK (at the 1% level). FEERATIO, DINST, and BLOCK are significantly correlated with the size variable, LTA. Many other variables such as MB, SUB, ASSETGROW, AQUIS, and FOROP are correlated with LTA. As a robustness check, I test whether the main results of the study are driven by the size effects. Furthermore, these statistically significant correlations have not created any serious problem of multicollinearity, as regression diagnostics for the main analysis do not indicate the existence of any such problem.

RESULTS AND DISCUSSIONS

Table 4 reports the results of the cross-sectional regression analysis. The reduced model regresses FEERATIO on the independent variable BLOCK in the presence of other firm-specific control

variables and the ownership variable DINST. BLOCK appears to be significantly negative at the 5% level (coefficient: -0.137; p-value: 0.013), which supports the hypothesis that the relative level of nonaudit fees is inversely related to the blockholder stock ownership. DINST appears to be statistically insignificant (p-value: 0.668). In the full model, FEERATIO is regressed on BLOCK in the presence of DINST, firm-specific controls and the board-related and audit committee governance variables. DINST again appears to be insignificant (coefficient: p-value: 0.549), which indicates that when individual shareholding is at a low level, sophisticated investors such as institutional shareholders do not engage in monitoring management actions including its NAS purchase decisions. The result is consistent with the notion that in case of low individual shareholding, institutional investors do not have necessary ability, resources and incentives to monitor and influence corporate decisions. The coefficient of BLOCK is again significantly negative (coefficient: -0.139; p-value: 0.014). The result suggests that substantial presence of institutional and noninstitutional blockholders in a firm's shareholder mix acts as a deterrent to management's decision to increase the NAS purchase relative to the level of audit fees. We infer that blockholders, among other things, monitor firms' NAS purchase decisions, inducing the firms to decrease the relative level of NAS fees as a safeguard against the auditor independence problem in the certification function. Most of the board-related and audit committee variables including ACIND_DL are statistically insignificant.

The company size, LTA, is correlated with many variables including FEERATIO, DINST, and BLOCK. The situation indicates that the significantly negative relation between FEERATIO and BLOCK might be driven by the size effects. To examine this possibility, I segregate the total sample into quartiles based on total assets (the first quartile has the smallest firms, and the fourth quartile has the largest firms) and estimate the cross-sectional regression of FEERATIO on BLOCK in the presence of DINST, other firm-specific control and board and audit committee governance

variables except LTA for firms in each quartile. The result is reported in Table 5. I observe that in the second and third quartiles, the relation between FEERATIO and BLOCK is significantly negative (with p-values of 0.025 and 0.046, respectively); but in the first and fourth quartiles, such relationship is insignificant (with p-values of 0.427 and 0.635, respectively). The FEERATIO and DINST relation is insignificant across all quartiles. The result supports the main analysis that percentage shareholding of diffused institutional investors has no relationship with the relative level of NAS fees. However, the constraining effect of blockholder monitoring on the FEERATIO as inferred from the main test is largely restricted to firms belonging to the second and third quartiles, i.e., the negative relationship is pronounced for the medium-sized sample firms. No such relationship is evident for the smallest and largest sample firms.⁶

⁶ In order to make sure that the main results are not confounded by firm size, I have also plotted residuals obtained from the main regression on total assets. The plot shows no systematic pattern of error distribution, which suggests that error terms are uncorrelated with firm size. Various diagnostic tests indicate that the model employed in the study is well specified. Variance inflation factors (VIF) and condition indices suggest that the influence of multicollinearity is of inconsequential magnitude. The Durbin-Watson tests of first order autocorrelation indicate that errors are uncorrelated in successive observations. The normal probability plot does not indicate any nonnormality in the data distribution. In general, residual plots do not exhibit any systematic pattern of error distribution. Moreover, the influence statistics, Cook's D and DEFFITS, do not indicate the presence of influential data points that might significantly affect the empirical findings.

ADDITIONAL ANALYSES

Control for Information System Implementation and Development Fee (ITFEE)

Prior studies suggest that installation of new information systems might give rise to additional consulting opportunities for external auditors (Firth, 1997; Abbott et al., 2003). External auditors may need to help clients to get acclimated with the operation of the new system including the generation of financial reports. Hence, it is probable that nonaudit service fees excluding ITFEE have a relation with the level of such information technology fees. To examine the effect of such a situation, I have performed a supplemental regression analysis by including ITFEE as one of the explanatory variables and fee ratio computed by excluding ITFEE as a dependent variable. The result shows that BLOCK is still significant at the 5% level (p-value: 0.040), while DINST appears to be insignificant (p-value: 0.881). The ITFEE variable is positive and highly significant (p-value: 0.002).⁷ The sign and significance of all other variables remain substantially unchanged in the regression.

Control for Industry Effects

Some industries in the sample have greater representation than others. I identified 13 such industries on the basis of two-digit SIC (Standard Industrial Classification) codes. To check whether the study's results are driven by industry-related factors, I include dummy variables to control for the effects of those 13 industries in the main regression model and examine the relationship between the ownership variables and fee ratio. The original results remain insensitive to the inclusion of such industry effects in the analysis.

⁷ Abbott et al. (2003) in a similar analysis have reported ITFEE as positively significant.

Test for Effects of Firms Audited by Particular Big Five Auditors

In order to test whether the study's main results are driven by firms audited by any particular Big Five auditor, I include dummy variables in the analysis to control for the effect of firms audited by particular Big Five auditors on the cross-sectional variation of fee ratio. The results obtained are similar to the ones reported for the main analyses.

CONCLUSIONS

This study examines the empirical relationship between the percentage shareholdings of sophisticated investors and the relative level of nonaudit service fees. The study is relevant in view of increasing regulatory concern about the auditor independence problem that is deemed to be associated with a relatively high proportion of nonaudit consulting fees in the fee structure for external auditors. I suggest that large and sophisticated shareholders are capable of monitoring and influencing the corporate decision-making process, because they have the necessary resources and abilities to intervene in such process. Those shareholders as a group induce managers to reduce the level of NAS purchase when they perceive that such action may impair auditor objectivity in the financial reporting process.

I find a reasonable support to the prediction that blockholders of common stock have a monitoring influence on the relative NAS fee level. The empirical tests demonstrate that the aggregate percentage shareholding of both institutional and noninstitutional block shareholders is significantly, negatively related to the NAS fee ratio. The result is consistent with the view that ownership composition of a firm as a part of its governance has an impact on management's NAS purchase decision. Large and sophisticated shareholders in their effort to maintain effective governance in financial reporting intervene in a firm's NAS purchase process. Those shareholders deter management from disproportionately increasing NAS

purchase if they perceive that any such action may impair auditor objectivity in the certification function. Furthermore, I observe that this large shareholder influence remains significant in the analysis even after controlling the effect of several board and audit committee governance factors. Specifically, following Abbott et al. (2003), I include, as a control factor, a governance variable that captures the effect on fee ratio of the fully independent audit committee that meets at least four times in a fiscal year. In the presence of such controls, I still observe a significantly negative relationship between NAS fee ratio and blockholder percentage stock ownership. This relationship is, however, found to be restricted to the medium-sized sample firms. The study's results largely hold in various specification tests.

This study has several limitations. I have considered only a specific group of December 31 fiscal year end industrial firms (engaged in manufacturing and/or merchandising operations) listed in the NYSE. The sample firms are audited by the Big-Five auditors. To ensure external validity of the study's result, a useful extension would be to test the relationship between the ownership constructs and fee ratio for firms with non-December 31 fiscal year end, firms engaged in financial and service industries, firms that are audited by non Big-Five auditors and firms who received going-concern audit opinions. In addition, the study should be extended to firms listed in other stock exchanges like NASDAQ.

The study uses data relating to pre-Sarbanes Oxley period. The Sarbanes-Oxley Act of 2002 (SOX) has caused a dramatic change in the environment surrounding audit and financial reporting process. SOX has introduced a series of mandatory requirements, which, among other things, involve auditor independence and prohibition of certain types of nonaudit consulting jobs, audit partner rotation, greater oversight role for audit committee, financial statement certification by corporate executives, company as well as auditor certification of the effectiveness of internal control surrounding financial reporting process, and creation of Public

Company Accounting Oversight Board with the sole authority to establish standards for auditing, quality control, ethics, independence and related activities. Those regulations have direct impact on the effectiveness of corporate governance. Hence, the changed regulatory environment has the potential to affect the relationship between ownership characteristics and the relative level of nonaudit consulting fees. Therefore, it is worthwhile to perform a similar analysis using the post SOX data to see whether the relationship as demonstrated by the present study remains valid in the post-SOX era, or whether such an empirical research has any relevance at all in the changes regulatory environment. Some serious consideration needs to be given to this aspect because almost all public accounting firms including the Big 4 audit firms (in the sample period it was Big 5) already disposed of their consulting practices at various points in time in the past. These actions were taken partly due to independence concerns and restrictions placed on consulting practices (prohibiting nine types of consulting services by incumbent auditors). So, audit firms can provide audit, audit related and tax services to their clients in the post-SOA periods. But incumbent auditors can provide any non-prohibited nonaudit services only with the pre-approval of the client's audit committee. In such a situation, it may be an interesting endeavor to investigate the relationship between the level of audit and other nonaudit fees, and ownership characteristics of firms in the post Sarbanes-Oxley regime because, in my opinion, both the audit fees and total client fees can still potentially influence auditor objectivity in certification functions.

REFERENCES

Abbott, L., S. Parker, G. Peters and K. Raghunandan. 2003. An empirical investigation of audit fees, non-audit fees and audit committees. *Contemporary Accounting Research* 20 (2): 215-234.

Ashbaugh, H., R. LaFond and B.W. Mayhew. 2003. Do non-audit services compromise auditor independence? *The Accounting Review* 78 (3): 611-639.

Beck, P.J., T.J. Frecka and I. Solomon. 1988a. A model of the market for MAS and audit services: Knowledge spillovers and auditor-auditee bonding. *Journal of Accounting Literature* 7: 50-64.

Beck, P.J., T.J. Frecka and I. Solomon. 1988b. An empirical analysis of the relationship between MAS involvement and auditor tenure: Implications for auditor independence. *Journal of Accounting Literature* 7: 65-84.

Chung, H., and S. Kallapur. 2003. Client importance, non-audit services and abnormal accruals. *The Accounting Review* 78 (4): 931-955.

Core, J.E., R.W. Holthausen and D.F. Larcker. 1999. Corporate governance, chief executive officer compensation and firm performance. *Journal of Financial Economics* 51: 371-406.

DeAngelo, L. 1981. Auditor size and audit quality. *Journal of Accounting and Economics* 3: 183-199.

DeFond, M.L., K. Raghunandan and K.R. Subramanyam. 2002. Do non-audit service fees impair auditor independence? Evidence from going concern audit opinion. *Journal of Accounting Research* 40 (4): 1247-1274.

Eng, L.L., and Y.T. Mak. 2003. Corporate governance and voluntary disclosure. *Journal of Accounting and Public Policy* 22: 325-345.

Firth, M. 1997. The provision of non-audit services by accounting firms to their audit clients. *Contemporary Accounting Research* 14 (2): 1-21.

Frankel, R.M., M.F. Johnson and K.K. Nelson. 2002. The relation between auditors' fees for non-audit services and earnings management. *The Accounting Review* 77 (Supplement): 71-105.

Gillan, S.L., and L.T. Starks. 2000. Corporate governance proposals and shareholder activism: The role of institutional investors. *Journal of Financial Economics* 57: 275-305.

Grossman, S., and O. Hart. 1980. Takeover bids, the free rider problem, and the theory of the corporations. *Bell Journal of Economics* 11: 42-64.

Huddart, S. 1993. The effect of a large shareholder on corporate value. *Management Science* 39: 1407-1421.

Jensen, M. 1993. The modern industrial revolution, exit and failure of internal control systems. *Journal of Finance* 48: 831-880.

Kaplan, S.N. and, B. Minton. 1994. Appointments of outsiders to Japanese boards: determinants and implications for managers. *Journal of Financial Economics* 36: 225-257.

Parkash, M., and C. Venable. 1993. Auditee incentives for auditor independence: The case of non-audit services. *The Accounting Review* 68: 113-133.

Reynolds, J.R., D.R. Deis and J.R. Francis. 2004. Professional service fees and auditor objectivity. *Auditing: A Journal of Practice and Theory* 23 (1): 29-52.

Reynolds, K., and J. Francis. 2001. Does size matter? The influence of large clients on office-level auditor reporting decisions. *Journal of Accounting and Economics* 30: 375-400.

Shleifer, A., and R. Vishny. 1986. Large shareholders and corporate control. *Journal of Political Economy* 94: 461-468.

Simunic, D. 1984. Auditing, consulting and auditor independence.
Journal of Accounting Research 22 (2): 679-702.

Table 1: Sample Selection and Industry Distribution of Sample Firms

Panel A: Sample Selection

Total number of firms listed on NYSE (per Compustat Research Insight year 2000 database)	2,593
Less: Firms with non-December 31 fiscal year end	<u>(860)</u>
Firms with December 31 fiscal year end	1,733
Less: Number of firms in financial industry	(581)
Number of firms in regulated industry	(276)
Number of firms in service industry	<u>(154)</u>
Number of nonregulated industrial firms	722
Less: Firms with incomplete data for regression variables for the sample time period	(250)
Firms with incomplete ownership data for analysis in Compact Disclosure database	(89)
Firms audited by non-Big Five auditors	(48)
Number of firms finally selected for the study	335

Panel B: Industry Distribution of Sample Firms (Based on Two-Digit SIC Code)

Industries	No. of firms	Industries	No. of firms
Metal Mining:	6	Glass, glassware and cement:	5
Crude petroleum and natural gas; field and exploration activities:	32	Iron and steel products:	18
Nonmetallic minerals:	4	Metal industries:	16
Heavy construction:	4	Engines, turbines, industrial, and construction and mining machinery:	34
Dairy and food products:	12	Power distribution transformer;	
Textile and fabric mills:	4	Electrical and industrial apparatus:	25
Lumber and wood products:	8	Motor vehicle and passenger car bodies:	21
Home and office furniture:	6	Industrial instrument:	14
Pulp and paper mills:	16	Jewelry and precious metals:	5
Printing and publishing:	14	Wholesale-durable goods:	12
Chemical and pharmaceuticals:	44	Wholesale products:	4
Petroleum refining:	10	Retail industry:	8
Tires and tubes:	7	Conglomerates:	4
Leather and leather products:	2		335

Table 2: Descriptive Statistics for the Final Sample
N = 335

Panel A: Descriptive Data for Continuous Variables

Variables	Mean	Median	Standard Deviation	Minimum	Maximum
AFEE (in \$000)	1638	665	2868	23.47	25000
NAFEE (in \$000)	4384	1045	10783	0	79700
ITFEE (in \$000)	554	0	2874	0	35500
FEERATIO	0.5568	0.5702	0.20	0	0.9413
TA (in \$ mil)	8413	1885	33751	102.34	437006
SUB	6.31	5.39	4.49	0	25.28
ROA	0.0613	0.0534	0.07	-0.37	0.33
MB	2.83	1.95	5.37	-49.26	55.86
FCF	0.0304	0.024	0.07	-0.34	0.27
ASSETGROW	1.1272	1.042	0.34	0.30	4.04
FOROP	0.20	0.14	0.21	0	1
LEV	0.23	0.21	0.15	0	0.85
BDINDP	0.80	0.83	0.12	0.33	0.98
BDEXP	1.86	1	0.85	0	4
DINST	0.39	0.40	0.19	0	0.95
BLOCK	0.40	0.37	0.23	0	1

Panel B: Descriptive Data for Dummy Variables

Variables	Mean	Median	No. of firms coded "1"	No. of firms coded "0"
AQUIS	0.38	0	126	209
ISSUE	0.60	1	202	133

RESTRUC	0.39	0	132	203
ACEXP	0.70	1	235	100
ACIND_DL	0.34	0	114	221
CEOIND	0.31	0	103	232

Table 2 (Continued)

Panel C: Distribution of Variables of Interests per Size

	BASED ON TOTAL ASSETS (from lowest to highest)			
Mean	Quartile 1	Quartile 2	Quartile 3	Quartile 4
AFEE (in \$000)	303	636	1207	4442
NAFEE (in \$000)	371	1030	2260	12585
ITFEE (in \$000)	674	1636	3567	17027
FEERATIO	0.428	0.535	0.566	0.644
DINST	0.477	0.357	0.420	0.317
BLOCK	0.269	0.445	0.389	0.495

Variable definitions

AFEE = Audit fees.

NAFEE = Nonaudit fees.

ITFEE = Information system implementation and development fees.

FEERATIO = Nonaudit fees divided by total client (audit + nonaudit) fees.

TA = Total assets.

SUB = Square root of the number of subsidiaries.

ROA = Return on assets computed as net income divided by average total assets.

MB = Market-to-book computed as equity market value divided by stockholders' equity.

FCF = Free cash flow scaled by total assets. FCF is computed as: operating cash flow - capital expenditures - dividend.

ASSETGROW = Percentage change in total assets as a measure of change in firm size from one year to the next.

AQUIS = A dummy variable of 1 for firms that were involved in merger or acquisition activity; 0 otherwise.

ISSUE = A dummy variable of 1 for firms that issued new debt or equity during the year or in the previous two years; 0 otherwise.

FOROP = Foreign sales divided by total sales.

RESTRUC = A dummy variable of 1 for firms that were involved in restructuring activity during the year or in the previous two years; 0 otherwise.

LEV = Leverage ratio computed as long-term debt divided by total assets.

CEOIND = A dummy variable of 1 if the CEO and chairman are different persons (i.e., board independence of CEO); 0 otherwise (i.e., CEO dominance).

BDEXP = Number of outside directorships in other firms held by outside nonmanagement board members.

BDINDP = Percentage of nonmanagement outside directors in the board.

ACEXP = A dummy variable of 1 for the firm if the audit committee had at least a member with accounting and financial expertise; 0 otherwise.

ACIND_DL = A dummy variable of 1 if a firm had an audit committee that is comprised solely of independent directors and meets at least four times in a fiscal year; 0 otherwise.

DINST = Aggregate percentage of stock ownership of institutional investors who individually own less than 5% of outstanding common stock.

BLOCK = Aggregate percentage stock ownership of substantial shareholders (institutional + noninstitutional) who individually own 5% or more of outstanding common stock.

Table 3: Correlation Statistics**N = 335**

Variables	FEERATIO	LTA	SUB	ROA	MB	FCF
FEERATIO	1.000					
LTA	0.282***	1.000				
SUB	0.266***	0.363***	1.000			
ROA	0.066	0.027	0.191***	1.000		
MB	0.009	0.160***	0.162***	0.269***	1.000	
FCF	0.027	-0.010	0.075	0.531***	0.206***	1.000
ASSETGROW	0.062	0.159***	0.068	0.205***	0.077	-0.027
AQUIS	0.171***	0.268***	0.284***	0.077	0.044	0.055
ISSUE	0.099*	0.245***	0.184***	-0.024	0.038	-0.042
FOROP	0.085	0.132**	0.131**	-0.037	0.030	-0.010
RESTRUC	0.102*	0.154***	0.138**	-0.074	-0.033	-0.020
LEV	-0.034	0.023	0.060	-0.122**	-0.063	-0.038
CEOIND	0.001	-0.089	-0.165	-0.094	-0.080	-0.035
BDEXP	0.040	-0.010	0.088	0.012	-0.063	-0.062
BDINDP	0.110**	0.118**	0.106*	0.002	0.082	-0.003
ACEXP	-0.052	-0.013	-0.079	0.093*	0.044	0.120**
ACIND_DL	-0.010	-0.008	-0.082	-0.126**	-0.074	-0.107**
DINST	0.092*	0.182***	0.218***	0.068	-0.030	-0.013
BLOCK	-0.211***	-0.207***	-0.204***	-0.061	0.015	0.005

Table 3: Correlation Statistics (Continued)

Variables	ASSETGROW	AQUIS	ISSUE	FOROP	RESTRUC	LEV
FEERATIO						
LTA						
SUB						
ROA						
MB						
FCF						
ASSETGROW	1.000					
AQUIS	0.100*	1.000				
ISSUE	0.186***	0.265***	1.000			
FOROP	0.053	0.055	0.099*	1.000		
RESTRUC	-0.009	0.093*	0.018	0.125**	1.000	
LEV	-0.001	0.070	0.213***	0.013	0.059	1.000
CEOIND	0.071	-0.050	-0.001	-0.019	-0.021	-0.087
BDEXP	0.042	-0.072	-0.049	-0.073	-0.044	0.064
BDINDP	0.023	0.005	0.081	0.088	0.084	0.118**
ACEXP	0.013	-0.073	-0.036	-0.003	0.059	0.088
ACIND_DL	-0.075	0.015	0.042	0.010	-0.025	0.055
DINST	-0.042	0.110**	0.101	-0.013	0.072	0.006
BLOCK	-0.099*	-0.130**	-0.170**	0.005	-0.105**	-0.021

Table 3: Correlation Statistics (Continued)

Variables	CEOIND	BDEXP	BDINDP	ACEXP	ACIND DL	DINST	BLOCK
FEERATIO							
LTA							
SUB							
ROA							
MB							
FCF							
ASSETGROW							
AQUIS							
ISSUE							
FOROP							
RESTRUC							
LEV							
CEOIND	1.000						
BDEXP	0.068	1.000					
BDINDP	-0.237	-0.048	1.000				
ACEXP	0.039	-0.034	0.049	1.000			
ACIND_DL	0.040	0.114**	0.009	0.083	1.000		
DINST	-0.158	0.023	0.060	-0.010	-0.060	1.000	
BLOCK	0.165***	-0.097*	-0.180***	0.036	0.043	0.037	1.000

Note: *** indicates significance at the 1% level; ** indicates significance at the 5% level;

* indicates significance at the 10% level (based on two-tailed tests). All the variables are defined in previous sections.

Table 4: Cross-Sectional Regression of Fee Ratio on Ownership Variables in the Presence of Other Control Variables

MODEL: FEERATIO = $\beta_0 + \beta_1 \text{LTA} + \beta_2 \text{SUB} + \beta_3 \text{ROA} + \beta_4 \text{MB} + \beta_5 \text{FCF} + \beta_6 \text{ASSETGROW} + \beta_7 \text{AQUIS} + \beta_8 \text{ISSUE} + \beta_9 \text{FOROP} + \beta_{10} \text{RESTRUC} + \beta_{11} \text{LEV} + \beta_{12} \text{CEOIND} + \beta_{13} \text{BDEXP} + \beta_{14} \text{BDINDP} + \beta_{15} \text{ACEXP} + \beta_{16} \text{ACIND_DL} + \beta_{17} \text{DINST} + \beta_{18} \text{BLOCK} + \varepsilon$

N = 335

Variable	Reduced	Model	Full	Model
	Coefficient	p-value	Coefficient	p-value
Intercept	0.473	0.000	0.360	0.000
LTA	0.181	0.003	0.179	0.003
SUB	0.151	0.012	0.150	0.015
ROA	0.016	0.809	0.027	0.683
MB	-0.065	0.236	-0.063	0.256
FCF	0.027	0.665	0.030	0.632
ASSETGROW	0.006	0.912	-0.002	0.972
AQUIS	0.059	0.299	0.062	0.277
ISSUE	-0.004	0.946	-0.011	0.854
FOROP	0.039	0.459	0.038	0.480
RESTRUC	0.030	0.577	0.029	0.588
LEV	-0.057	0.289	-0.054	0.323
CEOIND			0.085	0.130
BDEXP			0.022	0.683
BDINDP			0.072	0.191
ACEXP			-0.036	0.501
ACIND_DL			0.013	0.812
DINST	0.023	0.668	0.033	0.549
BLOCK	-0.137	0.013**	-0.139	0.014**
Adjusted R ²	0.110		0.126	

Note: ** indicates significance at the 5% level. All variables are defined in previous sections. The reported p-values are all two-tailed.

Table 5: Cross-sectional Regressions Testing the Size Effects on the Relationship between Ownership Variables and Fee Ratio in the Presence of Other Controls

MODEL: FEERATIO = $\beta_0 + \beta_1 \text{SUB} + \beta_2 \text{ROA} + \beta_3 \text{MB} + \beta_4 \text{FCF} + \beta_5 \text{ASSETGROW} + \beta_6 \text{AQUIS} + \beta_7 \text{ISSUE} + \beta_8 \text{FOROP} + \beta_9 \text{RESTRUC} + \beta_{10} \text{LEV} + \beta_{11} \text{CEOIND} + \beta_{12} \text{BDEXP} + \beta_{13} \text{BDINDP} + \beta_{14} \text{ACEXP} + \beta_{15} \text{ACIND_DL} + \beta_{16} \text{DINST} + \beta_{17} \text{BLOCK} + \varepsilon$

N = 335

Variable	1st Quartile Coefficient p-value	2nd Quartile Coefficient p-value	3rd Quartile Coefficient p-value	4th Quartile Coefficient p-value
Intercept	-0.157 0.524	0.479 0.042	0.722 0.000	0.769 0.000
SUB	0.132 0.345	0.397 0.002	0.085 0.468	0.063 0.603
ROA	-0.086 0.617	-0.293 0.089	-0.017 0.909	-0.090 0.570
MB	-0.066 0.578	0.165 0.228	-0.112 0.436	-0.284 0.020
FCF	-0.109 0.419	0.320 0.029	0.137 0.318	0.120 0.418
ASSETGROW	0.183 0.233	-0.014 0.901	-0.126 0.302	0.094 0.444
AQUIS	0.177 0.191	-0.016 0.889	0.092 0.401	0.057 0.631
ISSUE	0.014 0.922	-0.174 0.156	0.114 0.391	0.017 0.890
FOROP	0.062 0.625	-0.007 0.953	0.155 0.177	0.118 0.351
RESTRUC	-0.057 0.635	-0.108 0.386	0.221 0.057	-0.053 0.668
LEV	0.082 0.492	-0.156 0.229	0.012 0.924	-0.362 0.008
CEOIND	0.413 0.002	0.198 0.100	-0.234 0.053	-0.281 0.046

Table 5 (Continued)

Variable	1st Quartile Coefficient p-value	2nd Quartile Coefficient p-value	3rd Quartile Coefficient p-value	4th Quartile Coefficient p-value
BDEXP	-0.032 0.791	0.111 0.390	-0.006 0.958	-0.009 0.938
BDINDP	0.059 0.632	0.001 0.995	-0.092 0.454	0.028 0.818
ACEXP	0.169 0.146	0.051 0.659	0.032 0.781	-0.283 0.021
ACIND_DL	0.090 0.480	-0.001 0.995	-0.149 0.172	0.085 0.463
DINST	0.090 0.463	-0.095 0.422	0.007 0.955	-0.046 0.719
BLOCK	0.091 0.427	-0.265** 0.025	-0.240** 0.046	-0.059 0.635
Adjusted R	0.060	0.149	0.157	0.090

Note: **indicates significance at the 5% level. All variables are defined in previous sections. The reported p-values are all two-tailed.