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UNIVERSITY OF OKLAHOMA

GRADUATE COLLEGE

THE EFFECT OF NON-AUDIT SERVICES ON INVESTOR JUDGMENTS ABOUT AUDITOR INDEPENDENCE, AUDITOR KNOWLEDGE, AUDIT QUALITY AND INVESTMENT

A Dissertation

SUBMITTED TO THE GRADUATE FACULTY

in partial fulfillment of the requirements for the degree of

Doctor of Philosophy

By

LINDA JEANNE FLAMING
Norman, Oklahoma
2002

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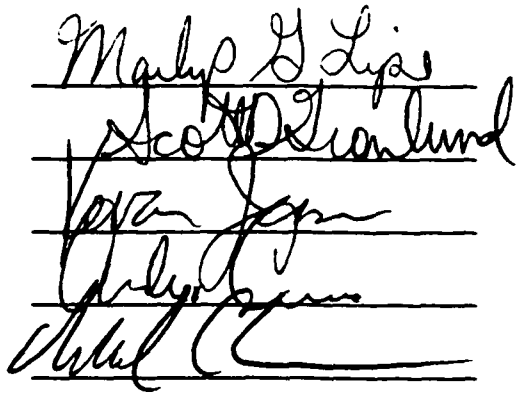
A Dissertation APPROVED FOR THE
MICHAEL F. PRICE COLLEGE OF BUSINESS

BY



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ABSTRACT

Increasing levels of non-audit services (NAS) provided by auditors to their audit clients, along with large-scale investigations of questionable accounting practices employed by major firms, have brought the issue of auditor independence to the forefront. New SEC proxy disclosure requirements reveal an average NAS fee to audit fee ratio of over 200 percent. The magnitude of these NAS fees, as well as the advocacy issues they raise, increase concerns, not only about the ability of the auditor to be independent, but also how these conflicting roles affect the investing public's perception of the auditor and the financial statements themselves. In a between-subjects experiment, graduate business students viewed financial information and audit fee disclosures about a client firm and indicated their perceptions of auditor knowledge, auditor independence, audit quality, and financial statement reliability. NAS was varied at four levels. Results showed that perceptions of auditor independence, audit quality and the attractiveness of the firm as an investment were negatively affected by the provision of NAS. Asking for judgments about both auditor knowledge and independence allowed analyses that confirmed that audit quality perceptions are primarily influenced by auditor knowledge and independence perceptions, and that audit quality perceptions are the primary indicator of financial statement reliability perceptions.

I. INTRODUCTION

> "Auditor independence goes to the very essence of our capital markets, and it's linked inextricably to the efficiencies of our capital markets (Whitworth 2000)."

Auditor independence is at the core of the auditing industry. Independence is generally understood to refer to the external auditor's mental state of objectivity and lack of bias (SEC 2000). One of the three requirements in the general section of Generally Accepted Auditing Standards (GAAS) specifically requires an auditor to be independent in mental attitude in all matters relating to the audit assignment. Because an essential element of the Securities and Exchange Commission's (SEC) primary mission is to protect investors and maintain the integrity of the securities market, all publicly traded companies must publish financial statements that have been independently audited (SEC 2000). The American Institute of Certified Public Accountants (AICPA) in their Code of Professional Conduct requires independence both in fact and appearance when a member in public practice provides auditing and other attestation services (AICPA 1997b). Since independence refers to a state of mind, which cannot be directly observed, the SEC considers that "an auditor is not independent if a reasonable investor, with knowledge of all relevant facts and circumstances, would conclude that the auditor is not capable of exercising objective and impartial judgment" (SEC 2000, p.3). In their 1997 white paper, the AICPA describes auditor independence as an absence of interests that create an unacceptable risk of bias with respect to the quality or context of information that is the subject of an audit engagement (AICPA 1997a).

Today, the SEC, the AICPA, the press, and the public are scrutinizing auditor independence. The recent concerns stem in part from a rapidly growing trend of audit firms providing extensive non-audit services (NAS) to the firms they audit. Primary areas of non-audit services include provision of information technology, internal audit functions, and tax and other consulting services. The ability of the auditor to remain independent while receiving fees for these services has been questioned by the SEC. The expectation seems to be that the more financial remuneration an auditor receives, the more influence that client potentially exerts over the auditor. In addition, the auditor is acting as a client advocate when performing non-audit services, in opposition to the public advocacy role he or she plays as an auditor. In other words, both the larger financial stake and the client advocacy role might affect the auditor's objectivity and independence from client influence.

In response to these concerns, the SEC and the AICPA jointly announced the formation of an Independence Standards Board (ISB) in May of 1997. In addition, the SEC (2000) has recently issued new rules revising independence regulations. In reference to NAS, the SEC now limits the provision of internal audit services by the external auditor to 40 percent of the internal auditing performed. The SEC also requires disclosure in the client's proxy statement of all fees paid to the external auditor, disaggregated into 3 categories: audit fees, information technology service fees, and fees for other non-audit service. The SEC was concerned that NAS provision was growing rapidly, from being 13 percent of total fees received by Big 5 auditors in 1981, to what they estimated to be 50 percent of total revenues in 1999

(SEC 2000). Interestingly, an analysis of the new disclosures for 307 of the Standard and Poor's 500 (S&P500) firms reveals the average level of NAS fees to be almost 300 percent of audit fees (Weil and Tannenbaum 2001). A subsequent analysis of 3,074 firms filing proxies between February 5 and June 15, 2001 reveals an average NAS level to be 246 percent of audit fees (Frankel et al. 2002). Members of the public accounting community have argued that these NAS fees do not affect independence any more than the receipt of the audit fee itself (Weil and Tannenbaum 2001).

Academic research has investigated the independence issue with mixed results. There are two areas of concern, independence in fact, and independence in appearance. There are studies on independence in fact that indicate that such independence is compromised by the provision of NAS. Other studies investigate the effect that various NAS have on perceptions of auditor independence and report mixed results. Of ultimate concern is how the provision of non-audit services affects the credibility and perceived reliability of the information contained in a public company's financial statements.

The trade press considers both the competency (knowledge and ability) of the auditor as well as the objectivity (independence) of the auditor in determining audit quality (e.g., Elliott and Jacobsen, 1998). DeAngelo (1981) defines audit quality as the combined probability of (1) detecting a material misstatement in financial statements (a competency issue), and (2) disclosing that misstatement (an independence issue). Prior studies on auditor independence and non-audit service provision have not addressed these dual aspects of overall audit quality.

Participants in previous experimental research may have been confounding these two factors by responding to the competency issue instead of the independence issue. In other words, participants may be considering that the auditor's knowledge and detection likelihood are enhanced by the provision of NAS, while ignoring the effect of this NAS provision on the auditor's objectivity and likelihood of disclosing a problem if it is discovered. In this study, the two aspects of audit quality are investigated separately and in combination to determine how each affects the overall perception of audit quality. In addition, I investigate how these perceptions of auditor competency (i.e., knowledge) and independence are combined to affect investment decisions.

This study experimentally tests the effect the new SEC rule (requiring disclosure in the proxy statement of audit and non-audit fees) has on investors' perceptions and decisions. Because the goal of the SEC is to protect the individual investor, I use graduate business students as experimental participants to proxy for individual investors. The participants are presented with financial statements and auditor information for a large company. I manipulate the level of audit firm service to be (1) audit fees only, (2) audit and non-audit service (i.e., in addition to the audit fee, there is an additional non-audit service fee, listed as "other" fees, that is 2.92 times the audit fee, reflecting the average NAS/audit percentage actually revealed in proxy statements for 307 of the Standard and Poor's 500 firms), (3) high audit fee only (i.e., an audit only fee equal to the combined audit and NAS fees from the previous condition), and (4) audit and NAS separated into information systems provision and "other" NAS fee. Because independence is based on what a

"reasonable investor, with knowledge of all relevant facts and circumstances, would conclude" (SEC 2000), the proxy disclosure regarding audit firm fees is a salient part of the experimental instrument, along with summarized financial statement information that is held constant across the levels of NAS.

The results of the experiment indicate that the provision of non-audit services reduces investors' judgments of auditor independence, audit quality, and the attractiveness of the firm as an investment, but does not affect auditor knowledge or financial statement reliability judgments. A lack of any statistically significant differences in judgments between average audit fee only and high audit fee only conditions suggests that it is not the magnitude of the total fee that affects the participants' judgments. Interestingly, the identification of information technology services as one of the non-audit services mitigated some or all of the decrease in judgments found when all NAS was listed as "other" compared to judgments for the audit only condition. Although independence judgments were statistically significantly lower in the presence of IT services than when only audit fees were paid, they were also marginally significantly higher than when all NAS was "other."

II. HISTORY AND REGULATION OF NON-AUDIT SERVICES

The issue of auditor independence has been of concern since the Generally Accepted Auditing Standards (GAAS) were first written in 1947. The general standards state that an auditor must not only have adequate technical training and proficiency, and exercise due professional care in planning and performing the audit

and preparing the audit report, but must also maintain independence in mental attitude in all matters relating to the assignment. One intention of the SEC is to insure that companies are telling the truth about their financial condition and the securities they offer. To be able to rely on financial statements, independent auditors furnish critical assurance that the financial statements have been examined by "an objective, impartial and skilled professional" (SEC 2000, p. 2).

As early as the 1960's, researchers and the trade press raised concerns about the provision of various non-audit services (NAS) by a firm's external auditors. This concern led to the SEC adoption of Accounting Series Release (ASR) #250 in September 1978, requiring public companies to disclose in their proxy statement fees paid for non-audit services as a percentage of audit fees. If the fee for a non-audit service comprised more than 3 percent of the total fee, that service had to be listed separately. The disclosure also had to reveal whether the board of directors or the audit committee approved the non-audit services. Another rule, ASR #264, listed factors for auditors and boards of directors to use to evaluate the effect of NAS provision on the external auditors' independence. Both rules were rescinded in February of 1982 as part of President Reagan's deregulation initiative (SEC 2000; Glezen and Miller 1985).

Over the last decade, the independence issue has re-emerged. Auditing firms have increasingly been providing information technology, internal audit, and other management advisory and consulting services to their audit clients. By 1997, this vast increase in non-audit services, and the increasing financial consideration received by the independent auditor, caused the SEC to again consider the issue of

auditor independence. The SEC and the AICPA jointly announced the establishment of the Independence Standards Board (ISB) to evaluate the issue, and elaborate on guidelines that could be used to ascertain independence. Although the ISB was a private board operating independently of both the AICPA and the SEC, both the AICPA and SEC agreed to its composition (4 practicing CPAs and 4 public members). The SEC decided to effectively transfer its independence authority to this new private sector standards-setting body, while retaining its enforcement authority (Rankin, 1997). The AICPA (1997a) suggested to the ISB three core principles: auditors should not be financially dependent on a client, should not have conflicting interests that would impair their objectivity, and should avoid relationships or activities where auditors performed management functions. They also proposed that audit firms establish their own independence standards using these core principles as guidelines, and that firms themselves establish "safeguards" that would insure the independence of the external auditors. An ISB exposure draft (ISB 2000) established a conceptual framework including a definition of auditor independence, the goal of auditor independence, and principles by which auditor independence can be evaluated. This ISB disbanded in July 2001, referring its independence authority back to the SEC (ISB 2001). The SEC introduced its own ruling (Rule #33-7919) approved in November 27, 2000 and enacted on February 5, 2001, containing the current independence rules, including the above-mentioned NAS and audit fees disclosures (SEC 2000). The AICPA itself oversees independence issues through its Public Oversight Board (POB), and its Professional Ethics Executive Committee (PEEC), and its Peer Review Committees. The Public

Oversight Board was established to oversee the Auditing Standards Board, and the SEC Practice Section. In January 2002, during the period of SEC scrutiny of major audit failures, the POB issued its intent to disband by March 31, 2002 (POB 2002). Also in January 2002, the United States Governmental Accounting Office issued its own new auditor independence standards. [1]

In June 2000, the SEC proposed extensive non-audit service curtailment, including the elimination of all information technology or internal auditing provision by accounting firms that perform the client's independent audit. The AICPA countered that the existing rules limiting the provision of non-audit services, such as the ban on auditor performance of any sort of management function, or preparing any part of the financial information they subsequently audit, were sufficient. An AICPA National Investor Poll (2000) showed that a vast majority (91 percent) of individual investors have confidence in the annual audits of the financial statements of the firms in which they invest, and that the majority believe the audit committee and the board of directors generally act in the shareholders' best interests (73 percent) and are in the best position to determine the appropriateness of non-audit services (70 percent). It also reports that 79 percent believe that the more an auditor knows about the company, the better the audit. However, 89 percent of the respondents indicated that it's important to know if a company's auditor also provides other services.[2]

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[1] Other bodies that have addressed the independence issue include the European Economic Union, the International Federation of Accountants, the Federation des Experts Comptables Europeens , and the AICPA Professional Ethics Committee (www.cpaindependence.org).

[2] http://www.aicpa.org/auditor_independence/report.htm

After much discussion and compromise, the SEC issued a new set of rules governing auditor independence on November 21, 2000. While dropping its proposed ban on all non-audit services, the SEC limited the amount and scope of some services. For example, an audit firm is limited to providing no more than 40 percent of total internal audit hours for client firms with greater than $200 million in assets. A major source of concern, the provision of information technology services, is also allowed, with restrictions precluding the audit firm from providing any management or supervisory functions. There are a number of other provisions narrowing the scope of financial, employment, and business relations that violate independence relative to the previous rule. In addition, the new rule requires a firm's audit committee to state in the proxy statement that they have considered the effect of the provision of NAS on auditor independence, although they do not have to disclose their conclusions on the issue.

Although the limitations above might affect the public's perception of auditor independence, the greatest effect may be due to the disclosure rule that went into effect for proxy statements issued on and after February 5, 2001. Companies must disclose the total fees billed for services rendered by the principal accountant (the term the SEC uses to refer to a public company's external auditors and their firm), disaggregated into three categories: audit services, information technology consulting, and all other services (AICPA 2000; SEC 2000).

Recent research results may increase the SEC's concerns. Weil and Tannenbaum (2001) disclosed that for the first 307 Standard & Poor's 500 firms that issued proxy statements under the SEC's new independence rule, non-audit fees

average nearly 300 percent of audit fees. Frankel et al. (2001) reviewed over 3,074 proxies, representing a greater range of client firm sizes, and still found NAS fees to average over 246 percent of audit fees. These percentages contrast sharply with then SEC chief accountant Lynn Turner's concern that non-audit fees were 25-40 percent of audit fees. Although the Big 5 auditing firms continue to maintain that their independence is not impaired by these services, Lynn Turner says he is a "firm believer that economics does have a firm impact on people's behavior" (Weil and Tannenbaum 2001).

Recent Enron, Arthur Andersen and other accounting irregularity investigations have brought the accounting and auditing concerns to the attention of Congress and the public as well. Congressional legislators are again considering the enforced curtailment or elimination of NAS provision (United States Senate, 2002). Arthur Andersen voluntarily proposed the elimination of information technology services (Berardino 2002). A proposed United States House of Representatives bill would establish a new Securities and Exchange Commission regulatory oversight body (Stout 2002).

III. PRIOR RESEARCH

III. A. The importance of auditor independence

The Independence Standards Board (ISB 2000, p.11) states, "The goal of auditor independence is to support user reliance on the financial reporting process and to enhance capital market efficiency." In the professional accounting literature, Elliott and Jacobson (1998, p.1) elaborate on this, stating "The purpose of audit

independence is to improve the cost-effectiveness of the capital markets...by reducing the likelihood of material bias by auditors that can undermine the quality of the audit." They explain that the objective of audit independence is to improve the reliability of the financial statements, thereby lowering the information risk that the financial statements are inaccurate. This information risk is reflected in the cost of capital, both of the particular firm and in the market in general. They discuss the effect of NAS on independence, bringing up the issue of materiality. For example, they argue that the audit fee itself, being paid by the client, impairs independence, but the amount is not material enough to induce bias in the auditor's judgments. Carmichael (1999) argues that if an auditor is biased (acts as a client advocate) the financial statements are less credible, increasing the risk, and the cost of capital. He notes that this is not just an individual auditor concern, but that the overall perception of the auditing industry can be affected. He concludes, therefore, that the appearance of independence is an appropriate subject for regulation.

Kinney (1999) agrees that independence standards, along with accounting and auditing standards, are essential to the value our capital markets system provides for investor protection, corporate governance, and facilitation of capital formation. He describes both a constraint view and a core value view of independence. According to the constraint view, independence is achieved by externally constraining auditors through rules issued by the SEC or the AICPA. According to the core value view, auditors themselves will maintain independence to preserve their market value. The 1997 AICPA white paper subscribes to this second view by proposing that audit firms be allowed to set their own independence

guidelines, although they did suggest some core principles to guide the self-regulation (AICPA 1997a).

For the most part, the accounting trade journals support the AICPA opposition to the new rules, asserting that the previous restraints and professionalism are sufficient. Goldwasser (2001) argues that the new regulations are just a means for the SEC to assert its authority over the Big 5 firms, and indirectly, over the whole auditing profession. He states that through this new rule, the SEC has undermined the ISB and poisoned its relationship with the accounting profession. The fact that the ISB disbanded once the SEC issued a new independence ruling seems to support this view, although the SEC acknowledged that the groundwork laid by the ISB was an essential part of the new rulings (ISB 2001). Goldwasser also comments that the new fee disclosure rule does not reveal other important considerations, such as the audit tests that auditors used, the expertise the auditors have, or what safeguards are in place to maintain the objectivity of the auditor, nor does it answer what he considers to be the most important question: What percentage of an audit firm's total audit income is from a particular client (i.e., the economic importance of the client to the auditor)? Michaels (2001) also comments on the adversarial stance the SEC has taken toward the Big 5 audit firms, referring to the increase in the number of suits filed and the ill will generated by the SEC's actions. He also speculates on the possibility that the SEC stepped in because the Public Oversight Board (POB) lacked teeth.

Overall, the investment press appears skeptical of auditors' ability to withstand client pressure, emphasizing the effect of economic interests. An Investment News

article (November 20, 2000) calls consulting the "tail that wags the dog" in the accounting industry, raising the issue of potential conflicts of interest and referring to scandals, especially in the high tech industries, where outside auditors had signed off on questionable practices. The end result is an increased burden on the industry to police itself. Even with the new SEC auditor independence rule in place, controversies continue to emerge. Corporate Financing Week (Dec 25, 2000) mentions a possible Senate Banking Committee hearing that may be called to deal with the controversy over the SEC's new independence rule. The same article cites another controversy over letters the SEC sent out to audit committees containing instructions that went beyond the agreed compromise between the SEC and the AICPA. In an April Wall Street Journal article, Weil and Tannenbaum (2001) cite a SEC investigation of Waste Management that includes a probe into the possibility that consulting fees compromised the independence of Arthur Andersen's auditing work. The current scrutiny surrounding Arthur Andersen's role in the Enron bankruptcy is another example. Academic research continues to address the independence controversy as well.

III.B. The importance of the effect of NAS on audit independence

Recent studies (Abbott et al. 2001; Weil & Tannenbaum 2001; Frankel et al. 2001) reveal that the nation's biggest firms paid far more to their audit firms for non-audit services than previously estimated, renewing concerns about potential auditor conflicts of interest. Abbott et al. (2001) indicate that, out of the first 319 public companies to file proxies under the new rule, 17 percent did not comply with

the disclosure requirements. Of the 265 firms that did provide disclosure data, 96 percent (254) paid non-audit fees to their audit firms, and these non-audit fees averaged 197 percent of audit fees. Weil and Tannenbaum's (2001) analysis showed that the first 307 of the S&P500 companies that filed proxies paid their auditors for other services and, on average, the fees for the other services were 293 percent of the audit fee. Frankel et al. (2002) reviewed all proxy statements from February 5 to June 15, 2001, and, for their sample of 3,074 firms (excluding only financial institutions, those not listed on Compustat, or with those with incomplete information) found a mean NAS to audit fee ratio of 246 percent (median of 115 percent). Thus the new proxy disclosures reveal a much larger amount of NAS than was previously suspected.

III.B.1 Studies indicating a negative effect of NAS on auditor independence

Some prior research suggests that NAS has negative effects on auditor independence. Such work includes analytical studies, market studies, studies of auditor decision-making, and studies of financial statement user perceptions. Each of these areas will be reviewed below.

Antle (1984) considers auditor independence to be an auditor's freedom from management influence as desired by a company's owners (i.e., the interested party is current rather than potential owners). According to his economic model, since management controls the auditor's fees, an auditor is at least as well-off foregoing independence in favor of management unless a control mechanism is in place. Control mechanisms that might apply to an audit situation might be

reputation (an auditor will maintain independence to preserve his reputation), or the need to maintain an overall market demand for auditors.

Wines (1994) suggests that auditors receiving NAS fees are less likely to qualify their opinion than auditors that don't receive such fees, based on his empirical analysis of audit reports issued between 1980 and 1989 by 76 companies publicly listed on the Australian Stock Exchange. He found that auditors of companies with clean opinions received a higher proportion of non-audit fees than did auditors of companies with at least one qualification. Gul and Tsui (2001) provide empirical evidence, also using Australian companies, that provision of management advisory services (MAS) affects the informativeness of earnings. They found evidence that the explanatory power of earnings for returns is less for firms that provide MAS, although this is mitigated by the reputation (i.e., the audit quality) of the Big 6 accounting firms. Frankel et al. (2001) found empirically that levels of discretionary accruals are higher for firms whose auditors provided NAS than for firms whose auditors do not provide such services. These higher levels of accruals suggest a greater potential for earnings management.

Beeler and Hunton (2001) suggest that contingent economic rents, (e.g., potential non-audit revenue), increase unintentional bias in the judgments of auditors. They found experimentally that audit partner participants searched more supportively, weighted confirmatory evidence more heavily, and made more elaborate arguments in the presence of low-balling and potential non-audit revenue than did audit partners when these two contingent economic rents were not available. Farmer et al. (1987) found that 70 percent of the Big Eight partners they

interviewed allowed a client's aggressive accounting treatment proposal under high risk of client loss, but 80 percent did not under high risk of litigation, suggesting that both factors influence the objectivity of an auditor's decision. In a survey of auditors conducted by Jenkins and Lowe (1999), 63 percent of the respondents indicated that potential loss of a client is an important factor and must be considered when deciding how hard to press a client over an accounting disagreement. Also, although 59 percent of their auditor survey participants responded that their primary responsibility is to safeguard investor and creditor interests, nearly one third of the participants indicated that their primary responsibility in an audit is to act as a client *advocate*.

Research has also shown that provision of non-audit services, as well as the threat of client loss can lower financial statement users' perceptions of auditor independence. Knapp (1985) asked sophisticated financial statement users (senior loan officers) about their perceptions of an auditor's ability to withstand client pressure in a disagreement, given the presence or absence of management advisory services (MAS). He found that significant MAS provision increased the participants' estimation of the likelihood that the auditor would yield to client pressure and ignore unrecorded liabilities. Shockley (1981) presented four groups of participants (Big Eight partners, other certified public accountants, loan officers, and financial analysts) with 16 abbreviated business scenarios, combining two levels each of audit firm competition, MAS provision, audit firm size, and auditor tenure. He found that high competition, provision of MAS, and smaller audit firm

size increased all groups' assessments of the risk that auditor independence is impaired.

Lowe, Geiger and Pany (1999) tested the effect of internal audit outsourcing on loan officers' perceptions of auditor independence. When the internal audit function was outsourced to the firm's external auditors, resulting perceptions were mixed. The authors found no loss of perceived independence unless auditors performed management tasks, or the same personnel performed both the external and internal audit. Perceived independence decreased when the same personnel did both internal and external audits, but independence ratings actually increased when the same firm did both, but with different personnel. This experiment also tested financial statement reliability, i.e., confidence that the financial statements are free from unintentional and intentional misstatement, with the same results. In their financial statement reliability measure, Lowe et al. (1999) found an increase in perceived likelihood that an auditor would find an intentional misstatement when the internal audit is performed by the external audit firm, but by different personnel (compared to an in-house internal control structure.)

Pany and Reckers (1984) found experimentally that financial statement users were highly concerned about independence impairment when auditors provided consulting services to clients, but were less concerned if a separate division of the CPA firm did the consulting. Swanger and Chewning (2001) found experimentally that financial analysts perceived auditor independence to be higher when internal auditing was done by the client's own staff or by a different audit firm than when it was done by the external auditor. In the case where the external audit

firm performed internal auditing, perceptions of independence were higher when internal auditing was done by different staff from a different division, rather than performed by the same personnel doing the external audit.

III.B.2 Studies indicating no effect of NAS on auditor independence

Glezen and Millar (1985) used the brief (3 year) implementation of ASR #250's NAS disclosure rules to empirically investigate the effect the new disclosure had on stockholders. They hypothesized that stockholders could most effectively express their concern over NAS by voting against the rehiring of the incumbent auditor. For a subset of firms who required annual stockholder approval of the firm's auditor, they found no difference in approval percentages, and no statistically significant correlation between stockholder approval ratings and the amount of NAS between years 1976-78 and 1979, the post disclosure year. Although this seems to indicate a lack of relevance of NAS to stockholders and therefore no reason to require such a disclosure, the data were from a voluntary subset of all firms, and there was a substantial ceiling effect, in that the approval rating means were all over 99 percent approval. Kinney (1999) surveyed 20 years of empirical research and saw virtually no evidence of independence impairment. Wallman (1997) and an AICPA white paper (1997a) also suggest that the provision of NAS does not impair apparent independence. Palmrose (1999) found that less than one percent of auditor litigation has NAS as part of the basis on which the lawsuits are founded. Pany and Reckers (1988) described the results of a survey of loan officers and financial analysts, which suggested that NAS does not impair independence. They gave

financial information about a department store firm to both groups of participants and manipulated the level of NAS (internal control design) to be none, 25 percent, 60 percent and 90 percent of the audit fees. They asked loan officers for loan decisions and risk premiums recommendations, and financial analysts about safety of stock (both twelve months and thirty-six months in the future), expected stock performance, and desirability of stock for purchase. Both groups also rated their confidence in the financial statements' freedom from fraud and clerical errors and adherence to GAAP, and for confidence in the independence of the auditor defined as "able to act with integrity and objectivity." They found no statistically significant difference between levels of NAS manipulations, except that loan approvals were statistically significantly higher for the 25 percent NAS group, and that the 12-month safety evaluation for the 90 percent manipulation was statistically significantly lower. In a questionnaire sent to financial analysts, loan officers, and investment officers, Schulte (1965) found that although 91 percent believe independence is necessary to a CPA's audit report, responses were split on the effect of management consulting on auditor independence. Forty-three percent of the respondents did not believe it endangered independence, thirty-three percent thought it did, and 24 percent were undecided.

Jenkins and Krawczyk (2001) asked 83 Big Five and 139 Non-Big Five accounting professionals and 101 investor participants to rate their perceptions of auditor independence, integrity, and objectivity for two scenarios in which an auditor provides no NAS to one firm and either a nominal amount of NAS (3 percent of total client revenues) or a material amount of NAS (40 percent) to

another. They varied the type of NAS provided (actuarial, internal audit outsourcing, legal or software training services). There were no actual financial statements included in the experimental materials. Although they found investors' perceptions of independence and decisions on whether to invest were not affected by either level of non-audit service provision, investors (and non-big-5 professionals) did consider the 40 percent level of NAS to be significant in their investment decisions.

III.B.3 Studies indicating a positive effect of NAS on auditor independence

Goldman and Barlev (1974) hypothesize theoretically that non-routine services provided by the auditor enhance independence. They reason that an auditor providing management advisory services is not as easy to replace, and so has more power to withstand client preferences. DeAngelo (1981) hypothesized that the quasi- rents created by repeat audits, and provision of other services increase audit quality because auditors have more to lose, should a failure or breach be discovered. This was also her motivation for auditor firm size being a proxy for audit quality. She proposed that the large auditor has less to lose from the loss of a single client, and more to lose reputationally from the discovery of audit failure. Both of these factors imply that the provision of non-audit services is not detrimental to auditor independence or audit quality. However, she also suggested that these same quasi-rents might also be incentive for incumbent auditors to lower quality opportunistically to retain clients, weakening her argument. Lowe, Geiger and Pany (1999) found that internal audit outsourcing through the external auditor's firm

increased loan-officer participants' confidence in the auditor's independence and loan approval rate, but only when the internal audit work was done by different personnel within the audit firm. Jenkins and Krawczyk (2001) found that some decision-makers (accounting professionals) increased their perceptions of audit independence in the presence of NAS provision.

To summarize, the prior research has not provided clear conclusions on the effect of NAS on auditor independence. Some theoretical research has supported the idea that the provision of NAS improves auditor independence (Goldman and Barlev 1974; DeAngelo 1981), while other theoretical work indicates that it could decrease auditor independence (Antle 1984). Some archival research suggests that NAS impairs independence by finding higher levels of discretionary accruals (Frankel et al. 2001), lower informativeness of earnings (Gul and Tsui 2001), and fewer qualified opinions (Wines 1994) in the presence of higher amounts of NAS, while other findings indicate NAS has no effect on independence (Glezen and Millar 1985). Questionnaire respondents sometimes indicated a potential loss of independence when NAS is provided (Jenkins and Lowe 1999; Farmer et al.1987), sometimes indicated no effect on perceptions of independence (Pany and Reckers 1988), and sometimes responded with conflicting perceptions (Schulte 1965). Independence-in-fact impairment has been suggested by experimental research showing more biased auditor decision-making when NAS is provided (Beeler and Hunton 2000). Experimental evidence collected by Shockley (1981), Knapp (1985), and Swanger and Chewning (2001) point to a negative effect of NAS on perceptions

of auditor independence and objectivity, while other evidence found mixed results (Lowe, Geiger and Pany 1999, Jenkins and Krawczyk 2001).

IV. HYPOTHESIS DEVELOPMENT

IV.A The two-part definition of audit quality

The mixed results from previous research on the effect of NAS on perceptions of auditor independence might be explained by considering the two-part definition of audit quality described both in the trade press and in academic literature. Elliott and Jacobson (1998) refer to a two-pronged requirement for a quality audit: objectivity and competence. They believe that objectivity can result from perfect integrity, perfect independence, or some adequate combination of the two. Carmichael (1999) also considers a two-part definition of audit quality in that the auditor must be without bias as well as technically competent. In the academic literature, DeAngelo (1981) subscribes to the two-part definition by defining audit quality as the combined probability of (1) detecting a material misstatement in financial statements (a competency issue), and (2) disclosing that misstatement (an independence issue). Knapp (1991) used these two aspects as dependent variables and found that auditor firm size affected disclosure probability, but not detection probability, white length of auditor tenure affected detection, but not disclosure likelihood. These results suggest that these two aspects affect perceptions differently. Previous experimental literature on the effect of NAS on financial statement users' perceptions did not address both aspects of audit quality in their experimental instruments. In the following hypothesis development, the ability of

the auditor is assumed to be a constant, so that it is the knowledge aspect of competency that will be addressed.

IV.B Knowledge

By providing NAS to a client, the auditor potentially has more extensive knowledge about the company (e.g., the auditor knows the extent and effectiveness of the information technology used within a company if he or she had a hand in designing the system) (Jenkins and Krawczyk 2001). Bonner and Lewis (1990) found that higher performance of experienced auditors over inexperienced auditors was due more to task-specific knowledge and experience than to general business knowledge or years of experience. The auditor who performs NAS might therefore be perceived to be more knowledgeable and competent regarding their client, more likely to detect an error in the system or the output (financial information). The first hypothesis, stated in alternative form, posits a positive relation between the level of NAS provision and perceptions of an auditor's knowledge about the client.

> Hypothesis 1 Investors' evaluations of auditor knowledge about a client firm will be higher in the presence of NAS than when NAS is not provided.

IV.C Independence

The SEC considers that "an auditor is not independent if a reasonable investor, with knowledge of all relevant facts and circumstances, would conclude that the auditor is not capable of exercising objective and impartial judgment" (SEC

2000, p.3). Independence is defined by the AICPA as an absence of interests that create an unacceptable risk of bias with respect to the quality or context of information that is the subject of an audit engagement. The increased fees received by auditors from their audit clients, especially the large amounts revealed in the new proxy disclosures, seem to create an economic bond between client and auditor that could tend to bias an auditor in favor of a client. Also, the client advocacy role that the auditor assumes by providing NAS might reduce the auditor's objectivity during the audit. Research has documented instances where the possibility of non-audit service provision affects auditors' actions and judgments (Beeler and Hunton 2001). In addition, Frankel et al. (2001) and Gul and Tsui (2001) show that a relation exists between NAS and (1) stock prices and (2) informativeness of earnings, respectively, presumably due to lower credibility of the financial statements. This implies a perceived impairment of auditor independence. Although some suggest that the threat of litigation mitigates the increased economic bond created by NAS provision (Farmer et al. 1987), Coffee (2001) counters by noting that recent legislation has lowered the threat of auditor litigation, while the higher NAS provision has increased the motivation to yield to client pressure and impair objectivity and independence. Hypothesis two, stated in alternative form, posits a negative relation between the provision of NAS and investors' perception of auditor independence.

Hypothesis two: Investors' evaluation of auditor independence will be lower in the presence of NAS than when NAS is not provided.

IV.D Audit Quality

Hypotheses one and two posit that the provision of NAS will affect perceptions of the two aspects of audit quality (i.e., auditor knowledge and auditor independence) in opposite directions. Although the surprisingly high level of NAS provision that is now being revealed might indicate a heavier decision weight placed on independence, if the two aspects are equally weighted there will be no effect on perceived audit quality. If one aspect is weighted more heavily, perceived audit quality would be affected. Since the extent and relative weighting of these two aspects, and even the functional form of how these two aspects combine is unknown, the effect of NAS on audit quality will be investigated as a research question.

> Research Question 1: How will the provision of NAS affect investors' evaluation of the overall quality of the audit?

Regression analysis will be used to investigate the relative effects of judged knowledge and independence on perceived overall audit quality.

IV.E Reliability of the Financial Statements

A major purpose of issuing audit opinions is to attest to the reliability of a client's financial statements, adding credibility to the statements. Past research has addressed the effect of various NAS on the perceived reliability of the financial statements (Lowe et al. 1999: Pany and Reckers 1988). Asking study participants to

judge the reliability of the financial statements will enhance the comparability of this study's results with prior work. In addition, the inclusion of this question in the experimental instrument will enable the investigation of a relation between the audit itself (evaluation of audit quality) and the value that regulators and professionals intend it to provide to decision-makers (i.e., enhanced reliability of the financial statements). Paul Healy (2001) noted that there is little empirical evidence indicating that audits add value to the financial statements of a firm.

Research Question 2: How will the provision of NAS affect investors' evaluation of the reliability of the financial statements?

If evidence on research question one shows that provision of NAS does not affect investor's evaluation of audit quality, I do not expect NAS to affect judged financial statement reliability. However, if there is an effect of NAS on audit quality (i.e., research question one), then there may be a similar effect on perceived financial statement reliability.

IV.F Investment decision

The above hypotheses and questions assess the effect of NAS on financial statement users' perceptions of auditor knowledge and independence, audit quality, and the reliability of the financial statements. The third research question considers how these perceptions (judgments) actually affect investment decisions. The

extensive attention given to the issue of auditor independence, especially in recent years, and the accompanying increase in NAS that may threaten independence, lead to the prediction that financial statement users' decisions based on the audited financial statements could be affected by the provision of NAS. Frankel et al.'s (2001) finding of a relation between the proportion of NAS fees to total auditor fees and stock prices suggest that there will be an effect. Prospect theory (Kahneman and Tversky 1979) and economic analyses propose that decision-makers are generally risk-averse in investment decisions. If perceptions of impaired auditor independence due to NAS provision increase the perceived risk of a company, the company's attractiveness as an investment could be affected negatively. Alternatively, if there is no (or minimal) value placed on an audit opinion, there could be no effect of NAS on a financial statement user's decision to invest, even if the audit quality rating is affected.

Research Question 3: How will the provision of NAS affect investors' judgments regarding the attractiveness of a firm as an investment?

IV.G Type of fee (audit or non-audit service)

This renewed concern about auditor independence is due to the increasing magnitude of an audit firms' NAS fees, compared to the audit fee itself. There are two aspects to this concern. One is that non-audit services create a *client* advocacy role for the auditor as the services are provided for the benefit of the client. This role is in conflict with the *public* advocacy role the auditor is supposed to hold as an

external auditor. In addition, some of the non-audit services imply management function or at least a deeper involvement with the client firm itself, which could also impair the public advocacy role of the auditor. The other issue is the magnitude of the fees themselves. When NAS fees are more than double the audit fee, the total fees are over three times as large as the audit-related fee. Perhaps any effect of non-audit service provision on investor perceptions (of auditor independence, audit quality, etc.) is a reaction only to the magnitude of the fees, and not to the nature of the fees. By including a high audit fee manipulation (i.e., an audit-only fee equal to the combined audit and non-audit service fees in other experimental cells), I will be able to discern the relative importance of these two issues.

> Research Question 4: How will an increase in the audit fee only (without the presence of non-audit services) affect investor's ratings of (a) auditor independence, (b) knowledge, (c) audit quality, (d) financial statement reliability and (e) investment attractiveness?

IV. H Type of non-audit service (information technology provision or other)

Different non-audit services provide different threats to auditor independence. Both accounting firms and regulators agree that audit independence is impaired if an audit firm performs management functions for a client firm or audits its own work. Internal audit services are sometimes considered to be management activities by definition. For this reason, external audit firm personnel cannot perform more than 40 percent of the hours spent on the internal audit

function. Other services, such as tax preparation, are not perceived to threaten independence (SEC, 2000). The amounts paid for both these services are included under the same heading ("other fees") in the required proxy disclosure. Investors viewing the presence of "other fees" may differ in their perceptions of how much the implied services impair independence. In contrast, the SEC proxy disclosure rule requires information system-related services to be listed separately. These services are considered to be more threatening to independence due to their magnitude and because auditors could find themselves auditing the system they have designed and implemented (SEC 2000). If investors perceive that different non-audit services affect independence differently, then independence, audit quality, financial statement reliability and investment attractiveness might be affected more when an independent threatening service (e.g., information system services) is identified than when all non-audit services are grouped together. If they perceive no difference, ratings not will be affected. Alternatively, as suggested by Gaynor (2002), the increased information provided by identifying the non-audit service may lessen the perceived independence impairment. In addition, the manipulation of information technology provision may give some insight into the effect Congressional and industry proposals to eliminate all or specific non-audit services (i.e., internal auditing and information technology services) would have on perceptions of the auditing industry (United States Senate, 2002; Berardino 2002).

Research Question 5: How will auditor provision of information technology related services affect investor's ratings of (a) auditor independence, (b)

knowledge, (c) audit quality, (d) financial statement reliability and (e) investment attractiveness?

V. METHOD SECTION

V.A Participants

Because the goal of the SEC is to protect individual investors, investors are the ideal participants for this study. Ninety-eight graduate business students at a large public university participated in the experiment. Twenty-nine were in a Financial Accounting Analysis class, seventeen were members of a Quantitative Financial Controls class, and fifty-two were in the Accounting for MBA's course. Sixty-seven (68.4 percent) reported having investment experience in stocks and/or mutual funds. Participants had taken an average of 4.2 accounting classes. There were no statistically significant differences in age, gender, marital status, number of accounting classes, or investment experience for participants in different experimental treatments.

V.B Design

The experiment used a between-subjects design in which participants received one of four cases. All information was identical except that the services provided by the external auditor were manipulated at four levels. The participants were informed, through the audit fee disclosure segment of the client's proxy statement, that the auditor received either (1) audit fees only (AUDIT), (2) both audit and non-audit fees, listed as "other fees" (AUD/NAS), (3) a high level of

audit fees (HighAUD), or (4) audit, information technology (IT) fees, and other fees (AUD/NAS/IT).

Specific levels of audit fees used in the experiment were determined using data reported by Weil and Tannenbaum (2001). They found the mean audit fee paid by their sample of 307 of the Standard and Poor's 500 firms (S&P500) to be $2,962,687. Since the mean total assets of firms in the S&P500 is $31,265,430,000, audit fees average about 0.09 percent of total assets for these firms. The audit fee amount of $2,537,367 in the AUDIT cell was obtained by multiplying the sample firm's total assets by this 0.09 percent ratio.

Determination of non-audit fees was also based on the results reported by Weil and Tannenbaum (2001). Specifically, they found that the mean total NAS was $8,666,129. This is 2.93 times the mean audit fee. Thus, in the AUD/NAS cell, total NAS was set at $7,422,029 (2.93 times the $2,537,367). Because only 31 percent of Weil and Tannenbaum's firms reported any information technology provision, all of the NAS fees in the AUD/NAS cell were listed in the "other fees" category. These two cells (AUDIT and AUD/NAS) were used to test the two hypotheses and the first three research questions.

The HighAUD cell presented the case where no NAS were reported, but audit fees were set at $9,959,396, the sum of audit and NAS fees used in AUD/NAS. Mean ratings for this cell were compared to the ratings for the AUDIT cell to answer Research Question 4. Additionally, the HighAUD cell mean ratings were compared to the AUD/NAS cell means, to determine the extent of effect due only to the type of fee reported (audit versus non-audit service)

Finally, in the AUD/NAS/IT cell, the amount of IT services provided by the auditor was calculated by finding the ratio of average IT services to average total NAS, using only Weil and Tannenbaum (2001) firms that purchased IT services (96 out of the 307 firms). Applying this ratio (approximately 30 percent) to the NAS amount used in the AUD/NAS cell led to IT services of $2,202,912. The remaining NAS fee of $5,219,117 remains in the "other fees" category. (See Table 1). This cell manipulation was used to test Research Question 5.

The goal was to generate a sample firm that was typical of large firms that are considered for investment purposes. Since the mean S&P500 total assets were higher than the third quartile of S&P500 firms, a sample firm was chosen whose total assets ($26,777,000,000) were somewhat lower than the mean total assets of the S&P500.

V.C Materials

Each participant received a packet containing the Institutional Review Board consent page, an introductory page, case information and questions, and a post-experimental questionnaire with demographic information and manipulation check questions. The information section included abbreviated financial information about the sample firm (financial statements and a brief financial analysis of the firm), a clean, unqualified audit opinion letter, and the proxy statement disclosure required under SEC rule #33-7919 disclosing the fees the client paid the auditor disaggregated into three categories: audit fees, information systems fees, and all

other fees.[3] This proxy statement contained the audit services manipulation. A copy of the experimental stimuli is included in Appendix 1, with further information in Appendix 2.

V.D Pilot Test

Undergraduate accounting students served as participants for the pilot tests during class time. Participation was voluntary and a small amount of class credit was offered for their participation. The pilot results led to the clarification of some of the follow-up questions and improvements in the administration of the test itself.

V.E Procedure

Graduate MBA and MAcc students participated in the study during their scheduled meeting times on March 27 and April 8, 2002, on a voluntary basis. Participants were given an envelope containing two packets. The first page of the main packet contained the IRB consent form, which the participants signed, removed, and handed in if they agreed to participate. Another introductory page, the experimental materials, and the response page for the five ratings followed. Participants could refer back to the materials while entering these ratings. Participants then placed the initial packet into the envelope before proceeding to the "followup" packet which contained demographic, manipulation check, and other

[3] The SEC did not specify any format for their disclosure beyond the disaggregation of fees into audit-related, information technology–related and other non-audit service fees. Actual disclosures vary. The format used in the experimental stimuli is an actual proxy disclosure that is typical of the disclosures reviewed. Only the amount of fees was changed across experimental cells. See Appendix 1.

supplementary questions. (Each participant recorded 5 responses in the initial packet and 20 responses in the followup). One hundred students participated, but two participants' responses were eliminated due to missing data, leaving 98 useable responses.

V.F Dependent Variables

To test the effects of NAS on auditor independence, auditor competency (defined as knowledge and ability, with ability held constant), and audit quality, participants were asked to evaluate (1) the knowledge level of the auditor (defined as the auditor's ability to discern a financial reporting problem, if one exists), (2) the independence of the auditor (defined as the auditor's ability to be objective and unbiased, likely to disclose a financial reporting problem, if one is discerned), (3) the overall quality of the audit, and (4) the reliability of the financial statements. These responses enable an analysis of how perceptions of the knowledge level and independence of the auditor are combined to determine perceived audit quality and financial statement reliability. In addition, participants were asked to rate (5) the attractiveness of the firm as an investment, to investigate how their perceptions affect their decisions.

VI. ANALYSIS OF RESULTS

VI.A Manipulation and other checks.

Data from the post-experimental questionnaire indicate that the case materials successfully manipulated the total audit fee levels. Participants were asked to recall the total fees paid to the auditor and how much of these fees were for non-audit services. Responses were made on a 0 to10 million-dollar scale, with numerical indications at 2.5, 5, and 7.5 million dollar intervals. There were no statistically significant differences between the total fee estimates for the AUD/NAS (mean 9.18, standard deviation 1.97), HAUD (mean 8.80, standard deviation 2.39), and AUD/NAS/IT (mean 8.16, standard deviation 3.00) conditions. The mean estimate of $2.72 million (standard deviation 0.5) of total fees paid to the auditor for the audit only (AUDIT) condition differs statistically significantly ($p < .01$) from each of the other three conditions.

The NAS fee manipulations were also successful, with one exception. Mean estimates of NAS fees for the AUDIT cell (mean 0.48, standard deviation 1.09), and the HighAUD cell (mean 0.92, standard deviation 2.50) were not statistically significantly different from each other ($p=0.4399$), but were statistically significantly different from both the AUD/NAS (mean 6.72, standard deviation 2.29) and AUD/NAS/IT (mean 5.27, standard deviation 1.94) cells, ($p <.01$ for both comparisons). However, there was a marginally statistically significant ($p = .10$) difference between the AUD/NAS and AUD/NAS/IT mean estimates of non-audit services.

Participants were also asked to rate how understandable and realistic the materials were on a scale of 0-10. The overall mean ratings of 6.45 (standard deviation 1.93) for understandability and 6.91 (standard deviation 2.00) for realism were not statistically significantly different for any of the conditions.

VI.B. Experimental results

VI.B.1 Overall tests and comparison plans

One-way analysis of variance (ANOVA) tests were run for each of the dependent variables to test for differences in judgment means between audit fee levels. Results showed that there were no significant differences in means between fee levels for auditor knowledge judgments ($F = 0.11$, $p = .95$) or the financial statement reliability judgments ($F = 1.81$, $p = .15$). However, there were statistically significant differences between fee levels for the auditor independence judgments ($F = 5.05$, $p < .01$) and for the investment judgments ($F = 2.72$, $p = .05$) and marginally significant differences for audit quality judgments ($F = 2.36$, $p = .08$). Non- parametric Kruskal-Wallis chi-square tests yielded similar results. Although there were no significant differences in means between fee levels for knowledge judgments ($\chi^2 = 0.62$, $p = .89$) or for financial statement reliability judgments ($\chi^2 = 4.31$, $p = .23$), there were statistically significant differences for the independence judgments ($\chi^2 = 12.82$, $p < .01$) and marginally significant differences for the audit quality ($\chi^2 = 6.74$, $p = .08$) and investment judgments ($\chi^2 = 7.19$, $p = .07$).

Due to the specific nature of the hypotheses and research questions, results were further addressed by using t-test comparisons between specific cells. ANOVA planned comparisons yielded similar results. Equality of variance tests for each comparison indicated that pooled sample t-tests were appropriate for all analyses except the investment attractiveness judgment comparison between the AUDNAS and HighAUD cells, where the Satterthwaite t statistic was used.

As detailed in the following sections, knowledge and independence evaluations for the AUDIT only manipulation were compared to knowledge and independence responses for the AUD/NAS manipulation to test hypothesis one and two, respectively. To answer research questions one, two, and three, evaluations of audit quality, financial statement reliability, and attractiveness of the firm as an investment for the AUDIT condition were compared to the same evaluations for the AUD/NAS condition. Responses for the AUDIT and HighAUD conditions were compared for each dependent variable to answer research question four. To address research question five, AUDIT cell responses were compared to AUD/NAS/IT responses, and AUD/NAS and AUD/NAS/IT responses were compared to investigate further. Regression analyses, as described below, were also used to investigate research questions one, two, and three.

VI.B.2 Hypothesis One: Perceived auditor knowledge

Hypothesis one states that investors' evaluation of auditor **knowledge** about a client firm will be higher in the presence of NAS than when NAS is not provided. To test this, participants were asked to indicate, on a 0 to 10 scale (with 10

indicating high knowledge), the knowledge level of the auditor, described as the ability to discern a financial reporting problem, if one exists. As illustrated in Table 2, the overall mean knowledge judgment was 6.31 (standard deviation 2.09). A t-test, recorded in Table 3, shows that the mean knowledge judgment of 6.15 (standard deviation 2.08) for the AUD/NAS cell was not statistically significantly smaller ($t = 0.30$, $p = .62$, one-tailed) than the AUDIT mean of 6.33 (standard deviation 2.07). This suggests that the provision of NAS is not perceived to increase (or decrease) an auditor's knowledge about the client firm.

VI.B.3 Hypothesis Two: Perceived auditor independence

According to hypothesis two, investors' evaluation of auditor **independence** will be lower in the presence of NAS than when NAS is not provided. Participants were asked to indicate, using a 0 to 10 scale (with 10 indicating high independence), how independent (objective and unbiased, likely to disclose a financial reporting problem, if one is discerned) the auditor was from the influence of the firm's management. Responses, illustrated in Tables 2 and 3, support this hypothesis. The mean auditor independence evaluation of 4.06 (standard deviation 2.20) for the AUD/NAS cell was statistically significantly lower ($t= 3.72$, $p < .01$) than the mean independence evaluation of 6.33 (standard deviation 2.16) for the AUDIT cell. This suggests that investors do perceive a decline in the independence of the auditor when an audit firm provides non-audit services to its audit client.

VI.B.4 Research Question One: Perceived Audit Quality

VI.B.4.a T-test Analysis: Perceived Audit Quality

To answer the first research question about how the provision of NAS affects investors' evaluation of audit quality, a t-test was used to analyze participants' judgments of the overall quality of the audit. Results, illustrated in Tables 2 and 3, suggest that the provision of NAS affects audit quality perception negatively. The mean audit quality evaluation of 5.25 (standard deviation 2.15) for the AUD/NAS cell is statistically significantly lower ($t = 2.20$, $p = .03$) than the mean audit quality evaluation for the AUDIT cell of 6.42 (standard deviation 1.65).

VI.B.4.b Regression analysis: Perceived Audit Quality

To further explore the manner in which competency and independence are combined the following regression was run,

$$QUAL = \alpha_0 + \beta_1 KNOW + \beta_2 INDEP + \varepsilon \quad (1)$$

where

QUAL = participants' judgments of audit quality,

KNOW = participants' judgments of auditor knowledge, and

INDEP = participants' judgments of auditor independence

As reported in Table 4, Panel A, regression results from equation (1) indicate that both knowledge ($\beta_1 = 0.495$, $t = 9.20$, $p < .01$) and independence ($\beta_1 = 0.445$, $t = 9.30$, $p < .01$) were highly statistically significant in explaining the variation in the audit quality judgments. The adjusted R^2 for the regression was .72.

To see if knowledge and independence were weighted differently for any of the experimental conditions (e.g., in the presence of non-audit services), the following regression using dummy variables for the fee levels was run,

$$QUAL = \alpha_0 + \beta_1 KNOW + \beta_2 INDEP + \beta_3 Daudnas + \beta_4 Dhighaud + \beta_5 Daudnasit + \beta_6 Daudnas*KNOW + \beta_7 Daudnas*IND + \beta_8 Dhighaud*KNOW + \beta_9 Dhighaud*IND + \beta_{10} Daudnasit*KNOW + \beta_{11} Daudnasit*IND + \varepsilon \quad (2)$$

where

QUAL = participants' judgments of audit quality,

KNOW = participants' judgments of auditor knowledge,

INDEP = participants' judgments of auditor independence,

Daudnas = 1 if fee level = AUD/NAS, = 0 otherwise,

Dhighaud = 1 if fee level = HighAUD, = 0 otherwise, and

Daudnasit = 1 if fee level = AUD/NAS/IT, = 0 otherwise.

As reported in Table 4, Panel B, none of the fee level dummies and none of the interaction coefficients had a statistically significant effect on perceived audit quality. These results indicate that the fee manipulation did not statistically significantly change the weights placed on knowledge and independence when evaluating audit quality.

In addition, a step-wise backwards regression was run, including post-questionnaire demographic and other responses along with knowledge and independence as explanatory variables, to see if any of these additional control

variables added explanatory power to the audit quality judgments. The following regression was used,

$$QUAL = \alpha_0 + \beta_1 KNOW + \beta_2 INDEP + \beta_3 CLASS + \beta_4 MAR + \beta_5 GEN + \beta_6 INVEXP + \beta_7 INTEG + \beta_8 ENRNKN + \beta_9 ENRNEF + \varepsilon \quad (3)$$

where

QUAL = participants' judgments of audit quality,

KNOW = participants' judgments of auditor knowledge,

INDEP = participants' judgments of auditor independence,

CLASS = number of accounting classes taken,

MAR = marital status (0 = married and 1 = single),

GEN = gender (0 = male and 1=female),

INVEXP = investment experience (1 = yes, 0 = no),

INTEG = participants' assumptions of auditor integrity on a scale of 0 (no integrity) to 10 (perfect integrity),

ENRNKN = participants self-ratings of how closely they followed the Enron situation on a 0-10 scale (with 10 indicating very closely), and

ENRNEF = participants' self-ratings of the effect of the Enron situation on their previous responses on a 0 to 10 scale with 10 indicating a strong effect.

Besides knowledge ($\beta_1 = 0.44$, $t = 7.38$, $p < .01$), and independence ($\beta_7 = 0.35$, $t = 5.91$, $p < .01$), only the assumption of the integrity of the auditor was statistically significant ($\beta_7 = 0.17$, $t = 2.54$, $p = .01$), increasing the adjusted R^2 to .74.

These results support the belief that perceptions of audit quality are primarily a combination of auditor knowledge (competency) and auditor independence (objectivity) perceptions (DeAngelo 1981; Eliott and Jacobsen 1998; Carmichael 1999). In addition, since these factors were not weighted differently across the experimental conditions, this helps explain the decrement in perceived audit quality when there is a decrement in independence perceptions.

VI.B.5 Research Question Two: Perceived financial statement reliability

VI.B.5.a T-test analysis: Perceived financial statement reliability

To investigate how the provision of NAS affects the perceived reliability of the financial statements, a t-test was used to analyze participants' financial statement reliability ratings, which were also made on a scale of 0-10 (with 10 indicating very good). As illustrated in Tables 2 and 3, although the mean response in the AUDIT cell was 5.91 (standard deviation 2.06) and the mean response in the AUDNAS cell was 5.07 (standard deviation 2.03), this difference was not statistically significant ($t = 1.47$, $p = .15$). This suggests that although the provision of NAS may have a negative effect on the perceived quality of the audit, perceived financial statement reliability is not affected.

VI.B.5.b Regression Analysis: Financial Statement Reliability

Regression analysis was used to see how perceptions of auditor knowledge and independence affect perceptions of the reliability of the financial statements and also to determine if these factors affect perceived financial statement reliability

through the audit quality ratings, or directly. The following regressions were performed;

$$FSREL = \alpha_0 + \beta_1 KNOW + \beta_2 INDEP + \varepsilon \quad (4)$$

$$FSREL = \alpha_0 + \beta_1 QUAL + \beta_2 KNOW + \beta_3 INDEP + \varepsilon \quad (5)$$

$$FSREL = \alpha_0 + \beta_1 QUAL + \beta_2 KNOW + \beta_3 INDEP + \beta_4 CLASS + \beta_5 MAR + \beta_6 GEN + \beta_7 INVEXP + \beta_8 INTEG + \beta_9 ENRNKN + \beta_{10} ENRNEF + \varepsilon \quad (6)$$

where

FSREL = participants' judgments of the reliability of the financial statements,

KNOW = participants' judgments of auditor knowledge,

INDEP = participants' judgments of auditor independence,

QUAL = participants' judgments of audit quality,

CLASS = number of accounting classes taken,

MAR = marital status (0 = married and 1 = single),

GEN = gender (0 = male and 1=female),

INVEXP = investment experience (1 = yes, 0 = no),

INTEG = participants' assumptions of auditor integrity on a scale of 0 (no integrity) to 10 (perfect integrity),

ENRNKN = participants self-ratings of how closely they followed the Enron situation on a 0 to 10 scale (with 10 indicating very closely), and

ENRNEF = participants' self-ratings of the effect of the Enron situation on their previous responses on a 0 to 10 scale with 10 indicating a

strong effect.

As reported in Table 5, Panel A, in the equation (4) regression, both the knowledge ($\beta_1 = 0.51$, $t = 7.27$, $p < .01$) and independence ($\beta_2 = 0.41$, $t = 6.54$, $p < .01$) coefficients were statistically significant, although the explanatory power was lower (adjusted $R^2 = .59$) for financial statement reliability than for audit quality. As reported in Table 5, Panel B, in the equation (5) regression, when audit quality is added as an independent variable, audit quality is highly statistically significant ($\beta_1 = 0.72$, $t = 6.30$, $p < .01$), while knowledge becomes marginally statistically significant ($\beta_2 = 0.16$, $t = 1.93$, $p = .06$) and independence loses its statistical significance ($\beta_3 = 0.09$, $t = 1.25$. $p = .22$). A regression of financial statement reliability on audit quality alone ($\beta_1 = 0.91$, $t=15.0$, $p < .01$) resulted in an adjusted R^2 of .70. To further explore this, when a backward stepwise regression was run on equation (6), knowledge and independence lost their statistical significance, and only audit quality ($\beta_1 = 0.73$, $t = 9.05$, $p < .01$) and integrity ($\beta_8 = 0.21$, $t = 2.99$, $p < .01$) are statistically significant, with an adjusted R^2 of .73. Thus, knowledge and independence appear to affect financial statement reliability only through their effect on audit quality.

VI.B.6 Research Question Three: Investment Decision

VI.B.6.a T-test analysis: Investment Attractiveness

To investigate how the provision of NAS might affect investors' actual decisions and perhaps the capital market itself, participants were asked to rate the attractiveness of the firm as an investment. Results, illustrated in Tables 2 and 3,

suggest that the provision of NAS does affect investment attractiveness negatively. The mean attractiveness rating of 3.38 (standard deviation 1.71) for the AUD/NAS condition was statistically significantly lower ($t = 2.66$, $p = .01$) than the mean attractiveness ratings for the AUDIT condition (mean 4.82, standard deviation 2.14). This effect on investment attractiveness suggests that actual investment decisions might also be affected negatively.

VI.B.6.b Regression Analysis: Investment Attractiveness

To see if and how knowledge, independence, audit quality, and financial statement reliability ratings (as well as other related measured variables) affected the investment attractiveness ratings, the following regressions were run (equation 8 as a backward stepwise regression);

$$INV = \alpha_0 + \beta_1 KNOW + \beta_2 INDEP + \varepsilon \quad (7)$$

$$INV = \alpha_0 + \beta_1 FSREL + \beta_2 QUAL + \beta_3 KNOW + \beta_4 INDEP + \beta_5 CLASS + \beta_6 MAR + \beta_7 GEN + \beta_8 INVEXP + \beta_9 INTEG + \beta_{10} ENRNKN + \beta_{11} ENRNEF + \varepsilon \quad (8)$$

where

KNOW = participants' judgments of auditor knowledge,

INDEP = participants' judgments of auditor independence,

INV = participants' judgments of the attractiveness of the firm as an investment,

FSREL = participants' judgments of the reliability of the financial statements,

QUAL = participants' judgments of audit quality,

CLASS = number of accounting classes taken,

MAR = marital status (0 = married and 1 = single),

GEN = gender (0 = male and 1=female),

INVEXP = investment experience (1 = yes, 0 = no),

INTEG = participants' assumptions of auditor integrity on a scale of 0 (no integrity) to 10 (perfect integrity),

ENRNKN = participants self-ratings of how closely they followed the Enron situation on a 0 to 10 scale (with 10 indicating very closely), and

ENRNEF = participants' self-ratings of the effect of the Enron situation on their previous responses on a 0 to 10 scale with 10 indicating a strong effect.

As reported in Table 6, for equation (7), although both knowledge ($\beta_1 = .26$, $t = 2.43$, $p = .02$) and independence ($\beta_2 = .36$, $t = 3.77$, $p < .01$) coefficients were statistically significant in the regression, the explanatory power (adjusted $R^2 = .21$) was lower than in equation (4), where financial statement reliability was regressed on the same two variables. The equation (8) regression yielded more informative results, revealing that in the presence of all variables listed, only financial statement reliability ($\beta_1 = .62$, $t = 6.09$, $p < .01$) and number of accounting classes ($\beta_2 = -.18$, $t = -2.15$, $p = .03$) remained significant. The adjusted R=square was only .28, indicating that there are other non-measured factors that contribute to the investment attractiveness evaluations.

VI.B.6. Research Question Four: Type of Fee: Audit or Non-Audit Service

Research question four investigates whether NAS themselves are of concern or whether it is simply the magnitude of the total auditor fees that drives the effect of NAS on investor perceptions. A t-test comparison of the AUDIT and HighAUD condition mean judgments for each of the dependent variables, reported in Table 3, revealed no statistically significant differences between these two cells for any of the dependent variables (all $p > .30$). This suggests that it is the type of fee and not the magnitude of the fee that affects investors' perceptions. Additionally, even though the total fees paid to the audit firm were identical for the HighAUD and AUD/NAS conditions, there were statistically significant differences between the two cells for four of the dependent variables (independence ($t = 2.95$, $p < .01$), audit quality ($t = 2.13$, $p = .04$), financial statement reliability ($t = 2.27$, $p = .03$) and investment attractiveness ($t = 2.69$, $p = .01$)). See Table 3.

VI.B.7. Research Question Five: Type of Non-Audit Service

The final fee manipulation included the disaggregation of the NAS fee into information technology (IT) fees, and "other" fees to see if the provision of a NAS service (IT) where an auditor might be auditing his own (firm's) work affects perceptions differently than NAS listed under a generic "other" designation. Results, illustrated in Table 3, indicate that there is a difference. When comparing the AUDIT cell judgments to the judgments for the AUD/NAS/IT cell, the only statistically significant difference was for the independence ratings ($t = 1.83$, $p = .04$). Unlike the AUDIT-AUD/NAS comparisons, there were no statistically

significant differences for audit quality or investment attractiveness. This suggests that the presence of information technology services mitigates some of the negative perceptions resulting from the presence of "other" non-audit services. To further investigate this finding, comparisons were made to see if judgments in the presence of both information technology and other non-audit services (AUD/NAS/IT) were significantly higher than judgments when only "other" non-audit services were listed (AUD/NAS). Results in table 3 show that, except for the auditor knowledge judgments, all AUD/NAS/IT judgments were statistically significantly higher than the AUD/NAS judgments. In particular, mean independence judgments ($t = 1.74$, $p = .04$, one-tailed), mean audit quality judgments ($t = 1.95$, $p = .03$, one-tailed), and mean investment attractiveness judgments ($t = 2.13$, $p = .02$, one-tailed) were statistically significantly higher in the presence of NAS with IT, than when NAS did not include IT. The AUD/NAS/IT mean was marginally statistically significantly higher than the AUD/NAS mean for financial statement reliability ($t = 1.65$, $p = .05$, one-tailed) as well. Thus, it appears that the presence of the provision of IT mitigates some of the perceived independence, audit quality, financial statement reliability, and investment attractiveness rating impairments created by NAS in general.

VI.C Other tests: Importance of NAS to judgments

As part of the post-experimental questionnaire, all 98 participants were asked to indicate the importance of NAS to their audit quality, financial statement reliability and investment attractiveness responses, on a 0 to 10 scale, with 10

indicating very important. Sixty-eight participants were also asked to rate the importance of the presence or absence of NAS to their previous responses about the knowledge and independence of the auditor. Mean responses are reported in Table 7, and are discussed below. Some participants omitted answers to some or all of these questions, resulting in varying numbers of responses for the different cells

VI.C.1 Knowledge.

The overall mean for the importance of NAS to participants' knowledge ratings was 5.26 (standard deviation of 3.06). There were no statistically significant differences between the importance judgment means for any of the fee manipulation cells (all $p > .48$).

VI.C.2 Independence.

The overall mean for the importance of NAS to the independence judgments was 6.90 (standard deviation 2.82). NAS was statistically significantly more relevant to the independence judgments in the AUD/NAS condition (mean 8.36, standard deviation 1.39) than in the AUDIT condition (mean 6.05, standard deviation 2.75), ($t = 3.24$, $p < .01$), and the AUD/NAS/IT condition (mean 5.94, standard deviation 3.53), ($t = 2.57$, $p = .02$), though it was not statistically more important than in the HighAUD condition (mean 7.33, standard deviation 2.69) ($t = 1.38$, $p = .18$).

VI.C.3 Audit Quality.

The overall mean for the importance of NAS to audit quality judgments was 5.93 (standard deviation 2.85). This was not statistically significantly different for any of the fee cells, except that the HighAUD judgment of 5.03 (standard deviation 3.47) was marginally statistically significantly lower ($t = 1.87$, $p = .070$) than the mean AUD/NAS rating of 6.63 (standard deviation 2.30).

VI.C.4 Financial Statement Reliability.

The overall mean for the importance of NAS to financial statement reliability judgments was 5.70 (standard deviation 2.74). This did not differ across the experimental conditions (all $p > .23$).

VI.C.5 Investment Attractiveness.

The overall mean for the importance of NAS to investment attractiveness judgments was 4.79 (standard deviation 2.83). NAS was statistically significantly more important in the investment attractiveness judgment for the AUD/NAS cell participants (mean = 6.00, standard deviation 2.13) than to the AUDIT (mean =4.58, standard deviation 2.49) and HighAUD (mean =3.90, standard deviation 3.53) participants ($t = 2.18$, $p = .04$ and $t = 2.46$,$p = .02$, respectively). The difference between the AUD/NAS/IT mean of 4.64 (standard deviation of 2.82) and the AUD/NAS condition was marginally statistically significant ($t = 1.84$, $p = 0.07$).

VII. DISCUSSION OF RESULTS

The proposition that NAS provision beneficially affects perceived audit quality due to the increased knowledge it provides to the audit firm about the client is not supported by this investigation. There were no significant differences in perceptions of auditor knowledge due to the presence or absence of NAS. However, perceptions of auditor independence were statistically significantly lower for the cases where the audit firm performed NAS in addition to audit services, compared to cases where only audit services were provided. This decrease in independence perception occurred even when the audit fees were high (i.e., equal to the combined audit and NAS fees paid), suggesting that it is the nature of NAS and not the fee amount that concerns investors. Audit quality and investment attractiveness perceptions were also lower when the client's auditors performed NAS.

Interestingly, when information technology (IT) was identified as part of the non-audit services, the decrease in perceived audit quality and investment attractiveness judgments from the audit only condition did not occur. Also, the decrease in independence perceptions was less for NAS including IT than when all NAS was listed under an "other fees" heading. Thus, the expectation that the independence evaluations for the AUD/NAS/IT condition would be lower than the independence evaluations for the AUD/NAS condition due to the certainty that independence impairing services were being performed, was not supported. A possible explanation is that knowing the specific non-audit service performed mitigated the uncertainty of the "other" designation, which might have been perceived to include suspicious services (such as SPE advisement), as well as more

innocuous services (such as tax preparation). Gaynor's (2002) finding that investors perceived auditors to be more independent when the auditor disclosed his involvement with a client supports this view. Another explanation might be that IT provision was not considered to be a non-audit service at all, thus reducing the perceived extent of non-audit services in this cell. This explanation is supported by responses to a manipulation check question about the amount of NAS fees. The AUD/NAS/IT participants' mean of $5.27 million is close to the actual "other fee" amount of $5,219,117.

Regression results support the belief that perceptions of audit quality are primarily a combination of auditor knowledge (competency) and auditor independence (objectivity) perceptions (DeAngelo 1981; Eliott and Jacobsen 1998; Carmichael 1999). Results also suggest that these two factors are approximately equally weighted, and the weighting is not affected by the presence of NAS. In addition, regression results revealed that knowledge and independence affect financial statement reliability perceptions primarily through their effect on audit quality.

VIII. LIMITATIONS

There are potential limitations to this study. The actual participants in this investigation may be atypical of investors in general. For example, student participants may have more accounting and auditing knowledge than average individuals. On the other hand, participants in this study do not have as much

training as professional investors, another large component of the investing community. However, non-professional financial statement users represent the class of investors that the SEC seeks to protect.

The investment scenario itself may be unrealistic. For time purposes, the amount of information was limited compared to the amount publicly available. Also the audit fee disclosure was purposely made readily accessible, while real-life investors would have to intentionally search for the information in the firm's proxy statement. This was necessary, however, to be able to evaluate the value of this information to financial statement users. This study indicates that, when explicitly available, investors do use this information in their investment perceptions and judgments.

This experiment was conducted in early 2002. During this time, the Enron bankruptcy investigation focused attention on public firms' accounting practices, and the integrity and independence of the accounting profession. Follow-up responses indicate that investors' responses were affected by the salience of these issues. The mean response to a question about "the extent to which the Enron situation affected your responses" was 5.45 (standard deviation 3.19) on a 0 to 10 scale, indicating that experimental participants (like market participants) were sensitized to this independence issue. However mean responses to this question did not differ across the experimental cells.

IX. CONCLUSION

The issue of auditor independence remains important, and the increased levels of non-audit services (NAS) provided by audit firms to their clients continue to be of concern. Using the newly mandated audit fee proxy disclosures, this study experimentally investigated investors' perceptions of auditor knowledge, auditor independence, audit quality, financial statement reliability, and a firm's attractiveness as an investment, in the presence and absence of various types of NAS. Basic findings suggest that the provision of non-audit services by a company's audit firm does negatively affect investors' perceptions of auditor independence, audit quality, investment attractiveness, and, to a lesser extent, the reliability of the company's financial statements. The perceived level of an auditor's knowledge about the client firm is not affected by NAS provision.

Regression results of audit quality perceptions on independence and knowledge perceptions support prior literature propositions that perceived audit quality is a combination of these two factors. Knowledge and independence were the basic variables explaining 72 percent of the variation in audit quality perceptions. In turn, audit quality perceptions contributed the most explanatory power (70 percent) to financial statement reliability perceptions. Although knowledge and independence perceptions were significant in explaining financial statement reliability perceptions, their effect disappeared when audit quality was included in the regression, suggesting that knowledge and independence perceptions affect perceived financial statement reliability only through their effect on perceived

audit quality. In turn, financial statement reliability perceptions affected investment attractiveness.

Investors do not believe the accounting industry's contention NAS does not affect independence. This study's results indicate that audit fee disclosures recently required by the SEC do provide relevant information to individual investors.

The study was run during the highly publicized Enron and Arthur Andersen investigations. Although the salience of these issues may have affected overall responses, new revelations of accounting irregularities at other firms cause auditor independence and responsibility to continue to be of concern. The in-depth investigation of WorldCom and Xerox are examples. Congress (Stout 2002), the Securities and Exchange Commission (Glater 2002), and the Financial Accounting Standards Board (Norris 2002) are currently scrutinizing these issues, and new accounting legislation and controls are under consideration. This study provides insight into some of the proposals being made. For instance, Congressional propositions are considering the elimination of external auditor provision of many or all non-audit services, including information technology services. This study, however, suggests that the identification of the fees paid for information technology services mitigated some perceptions of independence and audit quality impairment. This might be informational to both the SEC and Congress, and also to accounting firms, who have objected to the required disclosures. Future research could investigate the potential benefit of even more disclosure of specific non-audit services, and the ability of these disclosures to mitigate the decrements in perceived

auditor independence, audit quality, financial statement reliability, and investment attractiveness. This investigation is especially relevant during this time of increased scrutiny of the accounting and auditing profession.

EXHIBIT 1

Original excerpt from Powerwave Technologies' Proxy Statement, illustrating the format used for the auditor services manipulation. The instrument itself will use fee amounts approximating S&P500 averages and ratios found in the Weil and Tannenbaum (2001) article.

PRINCIPAL ACCOUNTING FIRM FEES

The following table sets forth the aggregate fees billed to the Company for the fiscal year ended December 31, 2000 by the Company's principal accounting firm, Deloitte & Touche LLP.

Audit Fees (1)	$201,982
Financial Information Systems Design and Implementation Fees	$ --
All other fees (2)	$358,926
	$560,908

(1) Includes fees for professional services rendered for the audit of the Company's annual financial statements for the fiscal year 2000 and for reviews of the financial statements included in the Company's quarterly reports on Form 10-Q for the first three quarters of fiscal 2000.

(2) Includes fees for other professional services rendered in fiscal 2000, including professional services in connection with tax preparation and consulting, statutory filings, SEC registration statements and other management consulting services. The Audit Committee considered whether the provision of non-audit services by Deloitte & Touche LLP is compatible with maintaining Deloitte & Touche LLP's independence from the Company.

BIBLIOGRAPHY

Abbott, L., S. Parker, G. Peters, and D. V. Rama. 2001. Audit, non-audit and information technology fees: Some empirical evidence. Working paper. University of Memphis.

American Institute of Certified Public Accountants. 1997a. *Serving the public interest: A new conceptual framework for auditor independence (white paper).* Commerce Clearing House, New York (or website).

American Institute of Certified Public Accountants. 1997b. *Codification of auditing standards – SAS No.1.* AICPA Professional Standards, New York.

American Institute of Certified Public Accountants. 2000. Findings from National Investor Poll about auditing and financial reporting. New York. AICPA.

Antle, R. 1984. Auditor Independence. *Journal of Accounting Research* (Spring): 1-20.

Berardino, J. 2002. Remarks to the U.S. House of Representatives Committee on Financial Services. February 5.

Bonner, S. and B. Lewis. 1990. Determinants of Auditor Expertise. *Journal of Accounting Research* (supplement): 1-21.

Beeler, J. D. and J. E. Hunton. 2000. Contingent economic rents: Insidious Threats to Auditor Independence. Working paper, Millsaps College & University of South Florida.

Carmichael, D. R. 1999. In search of concepts of auditor independence. *The CPA Journal* 69 (May): 38-43.

Coffee, J. C. Jr. 2001. The acquiescent gatekeeper: Reputational intermediaries, auditor independence and the governance of accounting. Columbia Law and Economics Working Paper No. 191.

Corporate Financing Week. 2000. (December 25).

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

Elliott, R. K. and P. D. Jacobson. 1998. Audit independence concepts. *The CPA Journal*, 68 (May): 30-37.

Farmer, T., L. Tettenberg, and G. Trompeter. 1987. An investigation of the impact of economics and organizational factors on auditor independence. *Auditing: A Journal of Practice and Theory* (Fall): 1-14.

Frankel, R. M., M. F. Johnson and K. K. Nelson. 2002. The relation between auditors' fees for non-audit fees and earnings quality. Working paper, Stanford University.

Gaynor, L. M. 2002. Investors' perceptions of auditor independence: The effect of disclosure versus auditor restrictions. Working paper, Georgetown University.

Glater, J.D. 2002. S.E.C. proposes a new board to oversee auditors. *New York Times* (June 21).

Glezen, G. W. and J. A. Millar. 1985. An empirical investigation of stockholder reaction to disclosures required by ASR No. 250. *Journal of Accounting Research* 23 (Autumn): 859-870.

Goldman, A. and B. Barlev. 1974. The auditor-firm conflict of interests: Its implications for independence. *The Accounting Review* 49 (October): 707-718.

Goldwasser, D. L. 2001. The SEC's new auditor independence standard. *The CPA Journal.* 71(April): 18.

Gul, F. and J. Tsui. 1999. Management Advisory Services, Perceived Auditor Quality, and Informativeness of Earnings. Working paper, City University of Hong Kong.

Independence Standards Board. 2000. Exposure Draft. Statement of Independence Concepts: A conceptual framework for Auditor Independence. (November) ISB. New York, NY.

Independence Standards Board. 2001. *Independence Standards Board to close.* (July 17). AICPA, New York, NY.

Investment News. 2000. SEC settles for half a loaf on auditor independence. 4 (November 20): 10.

Jenkins, J. G. and K. Krawczyk. 2000. The relationship between nonaudit services and perceived auditor independence. Working paper, North Carolina State University.

Jenkins J. G. and D. J. Lowe. 1999. Auditors as advocates for their clients: Perceptions of the auditor-client relationship. *The Journal of Applied Business Research* 15 (Spring): 73-78.

Healy, P. 2001. Comment during talk at the 2001 Doctoral Consortium, Tahoe City, CA,. June 16.

Kahneman, D. and A. Tversky. 1979. Prospect theory: An analysis of decisions under risk. *Econometrica*: 263-291.

Kinney, W. R. Jr. 1999. Auditor independence: A burdensome constraint or core value? *Accounting Horizons* 13 (March) 69-75.

Knapp, M. C. 1985. Audit conflict: An empirical study of the perceived ability of auditors to resist management pressure. *The Accounting Review* 60 (April): 202-211.

Knapp, M. C. 1991. Factors that audit committee members use as surrogates fro audit quality. *Auditing: A Journal of Practice & Theory* 10 (Spring): 35-52.

Lowe, D. J., M. A. Geiger and K. Pany. 1999. The effects of internal audit outsourcing on perceived external auditor independence. *Auditing: A Journal of Practice & Theory* 18 (Supplement): 7-26.

Michaels, A. 2001. Bad blood between Big Five and the SEC auditor independence atmosphere between US financial regulators and top accountancy firms is downright poison. *The Financial Times* . Jan 25: 4.

Norris, F. 2002. Promises of a nimbler accounting board. *New York Times* (April 25).

Palmrose, Z-V. 1999. *Empirical research on auditor litigation: Considerations and Data.* Sarasota, FL: AAA.

Pany, K. and P. M. J. Reckers. 1984. Non-audit services and auditor independence-A continuing problem. *Auditing: A Journal of Practice & Theory* 3 (Spring): 89-97.

Pany, K. and P. M. J. Reckers. 1988. Auditor performance of MAS: A study of its effects on decisions and perceptions. *Accounting Horizons* 2 (June): 31-38.

Public Oversight Board (POB). 2002. *Resolution Passed by the Public Oversight Board on January 20, 2002.*
http://www.publicoversightboard.org/news_1D_20_02.htm

Rankin, K. 1997. SEC, AICPA join to launch new auditor standards board. *Accounting Today*, June 16,1997.

Securities and Exchange Commission. 2000. *Final Rule: Revision of the Commission's Auditor Independence Requirements.* Washington D.C.

Schulte, Jr. A. A. 1965. Compatibility of management consulting and auditing. *The Accounting Review* 40 (July): 587-593.

Shockley, R. A. 1981. Perceptions of auditor' independence: An empirical analysis. *The Accounting Review* 56 (October): 785-800.

Stout, D. 2002. House approves accounting oversight inspired by Enron. *Wall Street Journal.* April 24.

Swanger, S. L. and E. G. Chewning, Jr. 2001. The effect of internal audit outsourcing on financial analysts' perceptions of external auditor independence. *Auditing: A Journal of Practice & Theory.* 20 (September). 115-129.

United States Senate. 2002. Dodd, Corzine introduce legislation to improve financial reporting system and reform accounting profession. Press release. Washington D.C. March 7, 2002.

Wallman, S. M. H. 1996. The future of accounting, part III: Reliability and auditor independence. *Accounting Horizons.* 10 (December). 76-97.

Weil, J., and J. Tannebaum. 2001. Big companies pay audit firms more for additional services. *Wall Street Journal* (April 10):C1.

Whitworth, R. 2000. Testimony at the SEC Hearing on Auditor Independence, New York, NY. September 13.

Wines, G. 1994. Auditor Independence, Audit Qualifications and the Provision of Non-Audit Services: A Note. *Accounting and Finance.* 34 (May): 75-87.

TABLE ONE
NON-AUDIT SERVICE MANIPULATIONS (FEE LEVELS)

	EXPERIMENTAL CELL			
	AUDIT	AUD/NAS	HighAUD	AUD/NAS/IT
Audit fee	$2,537,367	$2,537,367	$9,959,396	$2,537,367
Info Tech fees				$2,202,912
Other fees		$7,422,029		$5,219,117
TOTAL	$2,537,367	$9,959,396	$9,959,396	$9,959,396

TABLE TWO
MEANS (standard deviations) OF RESPONSES FOR EACH DEPENDENT VARIABLE, FOR EACH EXPERIMENTAL CELL

EXPERIMENTAL CELL

FEE LEVEL	Knowledge	Independence	Audit Quality	Financial Statement Reliability	Investment Attractiveness
AUDIT (n=27)	6.33 (2.07)	6.33 (2.16)	6.42 (1.65)	5.91 (2.06)	4.82 (2.14)
AUD/NAS (n=23)	6.15 (2.08)	4.06 (2.20)	5.25 (2.15)	5.07 (2.03)	3.38 (1.71)
HighAUD (n=24)	6.51 (1.80)	6.00 (2.30)	6.52 (1.93)	6.44 (2.11)	5.18 (2.78)
AUD/NAS/IT (n=24)	6.33 (2.46)	5.19 (2.30)	6.42 (1.99)	6.11 (2.27)	4.75 (2.62)
OVERALL (n=98)	6.31 (2.09)	5.41 (2.38)	6.14 (1.98)	5.87 (2.15)	4.51 (2.40)

Note: All responses were made on a 0-10 scale with 10 indicating the highest rating

TABLE THREE
TTEST COMPARISONS (probabilities) OF SELECTED EXPERIMENTAL CELLS FOR EACH DEPENDENT VARIABLE

DEPENDENT VARIABLES

Fee Levels Compared	Knowledge	Independence	Audit Quality	Financial Statement Reliability	Investment Attractiveness
AUDIT – AUD/NAS	0.30 (.62)	*3.72 (<.01)*	*2.20 (.03)*	1.47 (.15)	*2.66 (.01)*
AUDIT-HighAUD	0.32 (.37)	0.53 (.30)	0.19 (.85)	0.89 (.38)	0.52 (.60)
HighAUD-AUD/NAS	0.62	*2.95*	*2.13*	*2.27*	*2.69*
AUDIT-AUD/NAS/IT	0.00 (.50)	*1.83 (.04)*	0.00 (1.00)	0.32 (.75)	0.11 (.91)
AUD/NAS-AUD/NAS/IT	0.27	1.74	1.94	1.65	*2.13*

NOTE: T-tests for knowledge and independence were one-tailed tests for the AUDIT-AUD/NAS, the AUDIT-HighAUD, and the AUDIT-AUD/NAS/IT comparisons. All AUD/NAS-AUD/NAS/IT comparisons were also one-tailed. All others tests were two-tailed

TABLE FOUR
REGRESSION COEFFICIENTS OF INDEPENDENT VARIABLES
ON AUDIT QUALITY JUDGMENTS

Panel A:

$$QUAL = \alpha_0 + \beta_1 KNOW + \beta_2 INDEP + \varepsilon \quad (1)$$

	Coefficient	T-Statistic	P-Value
Intercept	0.61039	1.63	0.11
KNOW	0.49512	9.20	<.01
IND	0.44538	9.30	<.01

Panel B:

$$QUAL = \alpha_0 + \beta_1 KNOW + \beta_2 INDEP + \beta_3 Daudnas + \beta_4 Dhighaud + \beta_5 Daudnasit + \beta_6 Daudnas*KNOW + \beta_7 Daudnas*IND + \beta_8 Dhighaud*KNOW + \beta_9 Dhighaud*IND + \beta_{10} Daudnasit*KNOW + \beta_{11} Daudnasit*IND + \varepsilon \quad (2)$$

	Coefficient	T-Statistic	P-Value
Intercept	1.19186	1.49	.14
KNOW	0.4236	4.13	<.01
IND	0.40097	4.07	<.01
Daudnas	-.143313	-1.35	.18
Dhighaud	-0.84811	-0.73	.47
Daudnasit	-0.37781	-0.33	.74
Daudnas*know	0.24287	1.56	.12
Daudnas*indep	-0.06223	-0.12	.68
Dhighaud*know	0.182277	.99	.32
Dhighaud*ind	-0.03145	-0.20	.84
Daudnasit*know	-0.00105	-0.01	.99
Daudnait*ind	0.14554	1.02	.31

QUAL = participants' judgments of audit quality, on a 0-10 scale with 10 the highest,
KNOW = participants' judgments of auditor knowledge, on a 0-10 scale with 10 the highest,
INDEP = participants' judgments of auditor independence, on a 0-10 scale with 10 the highest,
Daudnas = 1 if fee level = AUD/NAS, = 0 otherwise,
Dhighaud = 1 if fee level = HighAUD, = 0 otherwise, and
Daudnasit = 1 if fee level = AUD/NAS/IT, = 0 otherwise.

TABLE FIVE
REGRESSION COEFFICIENTS OF INDEPENDENT VARIABLES ON FINANCIAL STATEMENT RELIABILITY JUDGMENTS

Panel A:

$$FSREL = \alpha_0 + \beta_1 KNOW + \beta_2 INDEP + \varepsilon \quad (4)$$

	Coefficient	T-Statistic	P-Value
Intercept	0.38202	0.78	0.44
KNOW	0.51258	7.27	<.01
IND	0.41294	6.54	<.01

Panel B:

$$FSREL = \alpha_0 + \beta_1 QUAL + \beta_2 KNOW + \beta_3 INDEP + \varepsilon \quad (5)$$

	Coefficient	T-Statistic	P-Value
Intercept	-0.05817	-0.14	0.89
QUAL	0.72114	6.30	< .01
KNOW	0.15768	1.93	0.06
IND	0.09176	1.25	0.21

FSREL = participants' judgments of the reliability of the financial statements (0-10 scale, 10= very good),
KNOW = participants' judgments of auditor knowledge (0-10 scale, 10= very good),
INDEP = participants' judgments of auditor independence (0-10 scale, 10= very good),
QUAL =participants' judgments of audit quality (0-10 scale, 10=very good)

TABLE SIX
REGRESSION COEFFICIENTS OF INDEPENDENT VARIABLES
ON INVESTMENT ATTRACTIVENESS JUDGMENTS

$$INV = \alpha_0 + \beta_1 KNOW + \beta_2 INDEP + \varepsilon \qquad (7)$$

	Coefficient	T-Statistic	P-Value
Intercept	0.91240	1.20	0.23
KNOW	0.26415	2.43	0.02
IND	0.36021	3.77	<.01

INV = participants' judgments of the attractiveness of the firm as an investment (0-10 scale, 10= very good),
KNOW = participants' judgments of auditor knowledge (0-10 scale, 10= very good),
INDEP = participants' judgments of auditor independence (0-10 scale, 10= very good).

TABLE SEVEN
MEANS (standard deviations) OF RESPONSES TO QUESTION ABOUT THE IMPORTANCE OF THE PRESENCE OR ABSENCE OF NON-AUDIT SERVICES

	IMPORTANCE OF NAS TO EVALUATIONS OF:				
FEE LEVEL	Knowledge	Independence	Audit Quality	Financial Statement Reliability	Investment Attractiveness
AUDIT	4.89 (2.85) N=19	6.05 (2.75) N=19	6.14 (2.49) N=27	6.00 (2.32) N=26	4.58 (2.49) N=26
AUD/NAS	5.54 (2.66) N=17	8.36 (1.39) N=17	6.63 (2.30) N=24	6.22 (2.17) N=24	6.00 (2.13) N=24
HighAUD	5.23 (3.52) N=16	7.33 (2.69) N=16	5.03 (3.47) N=23	5.17 (3.48) N=23	3.90 (3.53) N=23
AUD/NAS/IT	5.44 (3.46) N=16	5.94 (3.53) N=16	5.84 (3.03) N=23	5.35 (2.93) N=22	4.64 (2.82) N=22
OVERALL	5.26 (3.06) N=68	6.91 (2.82) N=68	5.93 (2.85) N=97	5.70 (2.74) N=95	4.79 (2.83) N=95

Note: All responses made on a 0-10 scale, with 10 = very important

APPENDIX 1

EXPERIMENTAL STIMULI

AUDIT FEE LEVEL FOUR:

AUDIT AND NON-AUDIT SERVICES INCLUDING

INFORMATION TECHNOLOGY SERVICES

INFORMED CONSENT FORM
FOR RESEARCH UNDER THE AUSPICES OF THE UNIVERSITY OF OKLAHOMA

This investigation, researching the decision-making process in the evaluation of firms as potential investments, is being conducted by Linda Flaming, of the University of Oklahoma School of Accounting, under the sponsorship of Dr. Marlys Lipe, also of The University of Oklahoma School of Accounting.

In this study, you will read case materials about a particular firm, including a brief description of the firm, condensed financial statements of the firm, an audit opinion letter and the proxy statement disclosure describing the fees paid to the external audit firm. You will be asked to take the role of a potential investor who is evaluating the firm and its auditors. You will be provided with an evaluation scale on which you can simply make a mark to indicate your evaluation. In addition, you will be asked to check off some information on a brief confidential questionnaire. Participation should take about 30 minutes or less.

The benefits to the study are increased knowledge regarding auditor issues in investment decisions and an opportunity to contribute to the research body of knowledge in investor decision-making. Participating in the study should pose no risk or discomfort for you.

You can participate in the research study by answering the questions provided. However, participation is entirely voluntary. If you decide not to answer the questions, there will be no negative repercussions for you. Also, if you start to participate but determine that you prefer not to continue, feel free to stop at any time.

Your answers to the questions provided will be used only to calculate means and other aggregated statistics. Your name will not be associated with your answers. In fact, this page is the only one on which your name should appear, and this page will be separated from your responses.

You must be 18 years of age or older to participate.

If you have any questions regarding the project, please contact Linda Flaming at 325-6903, (lflaming@ou.edu), or Dr. Marlys Lipe at 325-2293, (mlipe@ou.edu). If you have any questions or concerns regarding your rights as a research participant please contact the Office of Research Administration at 325-4757.

Please indicate that (1) you have read the above statements and that (2) your participation in this study (if you decide to participate) is voluntary by signing below. Thank you.

Signed: _____ Date: _____

INSTRUCTION PAGE

I appreciate your participation in this research investigation. Now that you have signed and submitted the consent form, we will proceed to the packet.

The first part contains information about a publicly traded firm, including a brief description of the firm, condensed financial statements, an audit opinion letter and the proxy statement disclosure describing the fees paid to the external audit firm. Please look at all pages of the case. This part also includes a page of questions about the firm and its auditors. For each question, you are provided with an evaluation scale on which you can simply make a mark to indicate your evaluation. *There are no right or wrong answers. Please respond to each question to the best of your ability within the time and informational constraints that you have.*

After you complete the initial packet and replace it in the envelope, please open the follow-up questionnaire. You will be asked to check off some information on this confidential questionnaire, which will only be used for purposes relating to the interpretation of the results of this study. Please respond to the best of your ability.

This will complete your participation. If you would like more information about this study and the research results, you may detach and take the last page with you, and contact me.

Thank you

Linda Flaming

Company Information:

THE STRATFORD COMPANY.

The principal activities of the Company are the provision of products and services in the area of commercial electronics systems, for both commercial and government customers. Products include command, control and communication systems, air traffic control systems, ground based air defense systems and ground-based phased-array radar. Electronic systems accounted for 42% of 2001 revenues: command, control communication and information systems, 19% aircraft, 18%, technical services, 10%, aircraft integration systems, 7% and commercial electronics, 4%.

Market information

Open	$ 38.30
High	$ 39.92
Low	$ 38.30
52-Wk Low	$ 23.95
52-Wk High	$ 40.00
P/E Ratio	27.9
Volume	2,612,200
Market Cap	$ 5.7 B
Shares Outstanding	390.9210 million shares

Financial Information Brief

	2001	2000
Revenue	$ 16.9 B	$ 17.2 B
Total Net Income	$ 141.0 M	$ 457.0 M
Earnings Per Share	$ 1.46	$ 1.47
EBITDA	$ 2.3 B	
Long Term Debt	$ 9.1 B	$ 7.3 B
Return on Sales	1.0%	2.0%
Return on Equity	1.0%	4.0%
Dividend Yield	2.07%	

INDEPENDENT AUDITORS' REPORT

To the Board of Directors and Shareholders of
Stratford, Inc. and subsidiaries:

We have audited the accompanying consolidated balance sheets of Stratford, Inc. and subsidiaries (the Company) as of December 31, 2001 and December 31, 2000, and the related consolidated statements of operations, shareholders' equity and cash flows for each of the three years in the period ended December 31, 2001. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of Stratford, Inc. and subsidiaries as of December 31, 2001, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2001, in conformity with accounting principles generally accepted in the United States of America.

XXXXXXXX, LLP

Anytown, USA
March 7, 2002

PROXY STATEMENT - PRINCIPAL ACCOUNTING FIRM FEES

XXXXXXXX LLP have been independent auditors of the firm for three years.

The following table sets forth the aggregate fees billed to the Company for the fiscal year ended December 31, 2001 by the Company's principal accounting firm, XXXXXXXX, LLP (a national accounting firm).

Audit Fees	$ 2,537,367 (1)
Financial Information Systems Design and Implementation Fees	$ 2,202,912
All other fees	$ 5,219,117 (2)
Total	$ 9,959,396

(1) Includes fees for professional services rendered for the audit of the Company's annual financial statements for the fiscal year 2001 and for reviews of the financial statements included in the Company's quarterly reports on Form 10-Q for the first three quarters of fiscal 2001.

(2) Includes fees for other professional services rendered in fiscal 2001, including professional services in connection with tax preparation and consulting, statutory filings, SEC registration statements and other management consulting services.

STRATFORD COMPANY
Consolidated Statements of Income
31-Dec-01

In Millions Except Per Share Amounts For Period Ended Dec 31, 2001	12/31/01	12/31/00	12/31/99
Net sales	16,895	17,201	17,364
Cost of sales	13,530	13,684	12,973
Administrative and selling expenses	1,214	1,417	1,550
Research and development expenses	526	508	582
Total operating expenses	$15,270	$15,609	$15,105
Operating income	1,625	1,592	2,259
Interest expense, net	736	703	697
Other expense (income), net	12	(9)	(145)
Non-operating expense, net	$748	$694	$552
Income from continuing operations before taxes	877	898	1,707
Federal and foreign income taxes	379	396	688
Income from continuing operations	$498	$502	$1,019
Discontinued operations	--	--	--
Loss from discontinued operations, net of tax	(70)	(45)	(175)
Loss on disposal of discontinued operations, net of tax	(287)	--	--
	$(357)	$(45)	$(175)
Income before accounting change	141	457	844
Cumulative effect of change in accounting principle, net of tax	--	(53)	--
Net income	$141	$404	$844
Earnings per share from continuing operations	--	--	--
Basic	1.47	1.49	3.02
Diluted	1.46	1.47	2.98
Loss per share from discontinued operations	--	--	--
Basic	(1.05)	(0.13)	(0.52)
Diluted	(1.05)	(0.13)	(0.51)
Earnings per share before accounting change	--	--	--
Basic	0.42	1.35	2.50
Diluted	0.41	1.34	2.47
Earnings per share	--	--	--
Basic	0.42	1.20	2.50
Diluted	0.41	1.19	2.47

STRATFORD COMPANY
Consolidated Balance Sheet
31-Dec-01

In Millions For Period Ended Dec 31, 2001	12/31/01	12/31/00
Current assets	--	--
Cash and cash equivalents	871	230
Accounts receivable, less allowance for doubtful accounts of $23 in 2001 and $27 in 2000	505	819
Contracts in process	4,061	4,348
Inventories	1,908	1,950
Deferred federal and foreign income taxes	476	490
Prepaid expenses and other current assets	178	192
Net assets from discontinued operations	14	573
Total current assets	$8,013	$8,602
Property, plant, and equipment, net	2,491	2,387
Goodwill, net of accumulated amortization of $1,285 in 2001 and $918 in 2000	13,281	13,596
Other assets, net	2,992	2,704
Total assets	$26,777	$27,289
Current liabilities	--	--
Notes payable and current portion of long-term debt	877	2,471
Advance payments, less contracts in process of $1,699 in 2001 and $1,332 in 2000	1,135	1,245
Accounts payable	1,099	1,204
Accrued salaries and wages	549	497
Other accrued expenses	1,205	1,716
Total current liabilities	$4,865	$7,133
Accrued retiree benefits and other long-term liabilities	1,262	1,411
Deferred federal and foreign income taxes	773	488
Long-term debt	9,054	7,298
Commitments and contingencies (note K)	--	--
Stockholders' equity	--	--
and 2000, respectively, after deducting 5,319,000 and 5,842,000 authorized, none outstanding in 2001 and 2000	--	--
Class A common stock, par value $0.01 per share, 450,000,000 shares authorized, 100,805,000 shares outstanding in 2001 and 2000 after deducting 1,537,000 treasury shares in 2001 and 2000	1	1
Class B common stock, par value $0.01 per share, 1,000,000,000 shares authorized, 239,815,000 and 237,955,000 shares outstanding in 2001 and 2000, respectively, after deducting 5,319,000 and 5,842,000 treasury shares in 2001 and 2000, respective	2	2
Additional paid-in capital	6,477	6,475
Accumulated other comprehensive income	(106)	(69)
Treasury stock, at cost	(382)	(413)
Retained earnings	4,831	4,963
Total stockholders' equity	$10,823	$10,959
Total liabilities and stockholders' equity	26,777	27,289

STRATFORD COMPANY
Consolidated Statements of Cash Flows
31-Dec-01

In Millions For Period Ended Dec 31, 2001	12/31/01	12/31/00	12/31/99
Cash flows from operating activities	–	–	–
Income from continuing operations after accounting change	498	449	1,019
Adjustments to reconcile income from continuing operations after acctg change	–	–	–
Depreciation and amortization	694	699	734
Net gain on sales of operating units and investments	(35)	(23)	(141)
Decrease (increase) in accounts receivable	311	(277)	218
Decrease (increase) in contracts in process	21	(377)	(920)
Increase in inventories	(78)	(178)	(248)
Decrease in deferred federal and foreign income taxes	14	350	816
Decrease (increase) in prepaid expenses and other current assets	38	16	(105)
(Decrease) increase in advance payments	(114)	313	186
(Decrease) increase in accounts payable	(167)	(372)	335
Increase (decrease) in accrued salaries and wages	59	(153)	22
Decrease in other accrued expenses	(222)	(419)	(701)
Other adjustments, net	41	(124)	(468)
Net cash provided by (used in) operating activities from continuing operations	$1,060	$(96)	$747
Net cash (used in) provided by operating activities from discontinued operations	(100)	(221)	247
Net cash provided by (used in) operating activities	$960	$(317)	$994
Cash flows from investing activities	–	–	–
Sale of financing receivables	776	1,239	1,105
Origination of financing receivables	(969)	(1,438)	(1,339)
Collection of financing receivables not sold	101	83	60
Expenditures for property, plant, and equipment	(431)	(524)	(468)
Proceeds from sales of property, plant, and equipment	40	102	649
Increase in other assets	(130)	(121)	(52)
Proceeds from sales of operating units and investments	330	251	748
Payment for purchase of acquired companies, net of cash received	–	–	(96)
Net cash (used in) provided by investing activities from continuing operations	$(283)	$(408)	$607
Net cash provided by investing activities from discontinued operations	70	9	10
Net cash (used in) provided by investing activities	$(213)	$(399)	$617
Cash flows from financing activities	–	–	–
Dividends	(272)	(269)	(271)
(Decrease) increase in short-term debt	(2,093)	771	(4,818)
Increase in long-term debt	2,255	10	3,757
Proceeds under common stock plans	4	164	103
Purchase of treasury stock	–	(150)	(247)
Net cash (used in) provided by financing activities from continuing operations	$(106)	$526	$(1,476)
Net cash used in financing activities from discontinued operations	–	(1)	(10)
Net cash (used in) provided by financing activities	$(106)	$525	$(1,486)
Net increase (decrease) in cash and cash equivalents	641	(191)	125
Cash and cash equivalents at beginning of year	230	421	296
Cash and cash equivalents at end of year	871	230	421

STRATFORD COMPANY
Statement of Shareholder's Equity
31-Dec-01

Years Ended December 31, 2001, 2000, and 1999 (In millions except per share amounts)	Common Stock Class A	Common Stock Class B	Additional Paid-in Capital	Accumulated Other Comprehensive Income	Treasury Stock	Retained Earnings	Comprehensive Income	Total Stockholders' Equity
Balance at December 31, 1998	1	2	6,151	(23)		4,255		10,386
Net income						844	844	844
Other comprehensive income								
Foreign exchange translation adjustments							(9)	(9)
Unrealized losses on investments							(6)	(6)
Pension adjustment							(12)	(12)
Other comprehensive income				(27)			(27)	
Comprehensive income							817	
Dividends declared						(270)		(270)
Common stock plan activity			121					121
Treasury stock activity					(257)			(257)
Balance at December 31, 1999	1	2	6,272	(50)	(257)	4,829		10,797
Net income						404	404	404
Other comprehensive income								
Foreign exchange translation adjustments							(13)	(13)
Unrealized losses on investments							(6)	(6)
Other comprehensive income				(19)			(19)	
Comprehensive income							385	
Dividends declared						(270)		(270)
Common stock plan activity			203					203
Treasury stock activity					(156)			(156)
Balance at December 31, 2000	1	2	6,475	(69)	(413)	4,963		10,959
Net income						141	141	141
Other comprehensive income								
Foreign exchange translation adjustments							(36)	(36)
Unrealized losses on investments							(1)	(1)
Other comprehensive income				(37)			(37)	
Comprehensive income							104	
Dividends declared						(273)		(273)
Common stock plan activity			17					17
Treasury stock activity			(15)		31			16
Balance at December 31, 2001	1	2	6,477	(106)	(382)	4,831		10,823

Make a slash on the scale that indicates your judgment. You may refer back to the case materials in answering the questions.

1. How knowledgeable (able to discern a financial reporting problem, if one exists) is the auditor about this firm?

0 - - - - 1 - - - - 2 - - - - 3 - - - - 4 - - - - 5 - - - - 6 - - - - 7 - - - - 8 - - - - 9 - - - - 10
Not at all knowledgeable — Totally knowledgeable

2. How independent (objective and unbiased, likely to disclose a financial reporting problem, if one is discerned) is the auditor from the influence of the firm's management?

0 - - - - 1 - - - - 2 - - - - 3 - - - - 4 - - - - 5 - - - - 6 - - - - 7 - - - - 8 - - - - 9 - - - - 10
Not at all independent — Totally independent

3. How would you rate the overall quality of the audit?

0 - - - - 1 - - - - 2 - - - - 3 - - - - 4 - - - - 5 - - - - 6 - - - - 7 - - - - 8 - - - - 9 - - - - 10
Very poor — Very good

4. How would you rate the reliability of the financial statements?

0 - - - - 1 - - - - 2 - - - - 3 - - - - 4 - - - - 5 - - - - 6 - - - - 7 - - - - 8 - - - - 9 - - - - 10
Very poor — Very good

5. Rate the attractiveness of the firm as an investment

0 - - - - 1 - - - - 2 - - - - 3 - - - - 4 - - - - 5 - - - - 6 - - - - 7 - - - - 8 - - - - 9 - - - - 10
Very poor — Very good

Please place these case materials back in the envelope and go on to the follow-up questionnaire. Thank you.

The following two pages contain a follow-up questionnaire. ***Please insert the initial case materials and responses into the envelope before answering the follow-up questions.*** Do not refer back to the case materials at this point.

Please answer the following questions. Your responses will only be used for purposes relating to the interpretation of the results of this study. Please indicate your best answer by circling the closest answer or making a mark along the scale.

FOLLOW-UP QUESTIONNAIRE Circle the appropriate answer, or make a slash on the scale to indicate your answer.

1. Age under 25 25-39 40-55 over 55

2. Gender Male Female

3. Marital status Married Single

4. Circle all that apply: Are you a

Graduate student Investment club member Accountant

5. Total Number of Accounting Courses you have taken, including this one.

1 2 3 4 5 6 7 8 over 8

6. Do you, or have you ever, invested in individual stocks? Yes No

7. Do you, or have you ever, invested in mutual funds? Yes No

8. How understandable were the case materials?

0 - - - - 1 - - - - 2 - - - - 3 - - - - 4 - - - - 5 - - - - 6 - - - - 7 - - - - 8 - - - - 9 - - - - 10
Not at all — Perfectly Understandable

9. How realistic were the case materials?

0 - - - - 1 - - - - 2 - - - - 3 - - - - 4 - - - - 5 - - - - 6 - - - - 7 - - - - 8 - - - - 9 - - - - 10
Totally Unrealistic — Totally Realistic

10. What amount of audit fees did Stratford pay to their auditor?

0 - - - - - - - - $2,500,000 - - - - - - - $5,000,000 - - - - - - - - $7,500,000 - - - - - - - - 10,000,000

11. How much of those fees were for <u>non-audit services</u> (services other than the audit itself)?

0 - - - - - - - - $2,500,000 - - - - - - - $5,000,000 - - - - - - - - $7,500,000 - - - - - - - - 10,000,000

12 How important was the presence or absence of non-audit services in your auditor knowledge rating decision?

0 - - - - 1 - - - - 2 - - - - 3 - - - - 4 - - - - 5 - - - - 6 - - - - 7 - - - - 8 - - - - 9 - - - - 10
Not important Very important

13 How important was the presence or absence of non-audit services in your auditor independence rating decision?

0 - - - - 1 - - - - 2 - - - - 3 - - - - 4 - - - - 5 - - - - 6 - - - - 7 - - - - 8 - - - - 9 - - - - 10
Not important Very important

14 How important was the presence or absence of non-audit services in your audit quality rating decision?

0 - - - - 1 - - - - 2 - - - - 3 - - - - 4 - - - - 5 - - - - 6 - - - - 7 - - - - 8 - - - - 9 - - - - 10
Not important Very important

15. How important was the presence or absence of non-audit services in your rating decision about the reliability of the financial statements?

0 - - - - 1 - - - - 2 - - - - 3 - - - - 4 - - - - 5 - - - - 6 - - - - 7 - - - - 8 - - - - 9 - - - - 10
Not important Very important

16. How important was the presence or absence of non-audit services in your investment decision?

0 - - - - 1 - - - - 2 - - - - 3 - - - - 4 - - - - 5 - - - - 6 - - - - 7 - - - - 8 - - - - 9 - - - - 10
Not important Very important

17. How important was the audit opinion in your decision about the reliability of the financial statements?

0 - - - - 1 - - - - 2 - - - - 3 - - - - 4 - - - - 5 - - - - 6 - - - - 7 - - - - 8 - - - - 9 - - - - 10
Not important Very important

18. How important was the audit opinion in your investment decision?

0 - - - - 1 - - - - 2 - - - - 3 - - - - 4 - - - - 5 - - - - 6 - - - - 7 - - - - 8 - - - - 9 - - - - 10
Not important Very important

19. How would you rate the relative importance of the auditor's **competence** (an auditor's ability and knowledge about his client) and **independence** (an auditor's objectivity and freedom from client influence) of an auditor when assessing the **quality** of the audit?

0 - - - - 10 - - - - 20 - - - - 30 - - - - 40 - - - - 50 - - - - 60 - - - - 70 - - - - 8 0- - - - 90 - - - - 100

Competence 100% — 50/50 — Independence 100%
Independence 0% — Competence 0%

20. What was your assumption about the integrity of Stratford's auditors?

0 - - - - 1 - - - - 2 - - - - 3 - - - - 4 - - - - 5 - - - - 6 - - - - 7 - - - - 8 - - - - 9 - - - - 10

Very low integrity — Very high integrity

21. How closely have you been following the news about Enron?

0 - - - - 1 - - - - 2 - - - - 3 - - - - 4 - - - - 5 - - - - 6 - - - - 7 - - - - 8 - - - - 9 - - - - 10

Not at all — Very closely

22. To what extent do you think the Enron problems affected your previous responses?

0 - - - - 1 - - - - 2 - - - - 3 - - - - 4 - - - - 5 - - - - 6 - - - - 7 - - - - 8 - - - - 9 - - - - 10

Not at all — Strong effect

23. When investors lose money due to accounting irregularities within a firm, how much of the liability should belong to the firm's auditors, versus the firm itself?

0 - - - - 1 - - - - 2 - - - - 3 - - - - 4 - - - - 5 - - - - 6 - - - - 7 - - - - 8 - - - - 9 - - - - 10

Auditor not liable for any losses — Auditor liable for all losses

Place this section back in the envelope. You may tear off the following page for your records. Contact me if you would like more information about the purpose and results of this research study.

FOR YOUR RECORDS

INFORMED CONSENT FORM
FOR RESEARCH UNDER THE AUSPICES OF THE UNIVERSITY OF OKLAHOMA

This investigation, researching the decision-making process in the evaluation of firms as potential investments, is being conducted by Linda Flaming, of the University of Oklahoma School of Accounting, under the sponsorship of Dr. Marlys Lipe, also of The University of Oklahoma School of Accounting.

In this study, you will read case materials about a particular firm, including a brief description of the firm, condensed financial statements of the firm, an audit opinion letter and the proxy statement disclosure describing the fees paid to the external audit firm. You will be asked to take the role of a potential investor who is evaluating the firm and its auditors. You will be provided with an evaluation scale on which you can simply make a mark to indicate your evaluation. In addition, you will be asked to check off some information on a brief confidential questionnaire. Participation should take about 30 minutes or less.

The benefits to the study are increased knowledge regarding auditor issues in investment decisions and an opportunity to contribute to the research body of knowledge in investor decision-making. Participating in the study should pose no risk or discomfort for you.

You can participate in the research study by answering the questions provided. However, participation is entirely voluntary. If you decide not to answer the questions, there will be no negative repercussions for you. Also, if you start to participate but determine that you prefer not to continue, feel free to stop at any time.

Your answers to the questions provided will be used only to calculate means and other aggregated statistics. Your name will not be associated with your answers. In fact, this page is the only one on which your name should appear, and this page will be separated from your responses.

You must be 18 years of age or older to participate.

If you have any questions regarding the project, please contact Linda Flaming at 325-6903, (lflaming@ou.edu), or Dr. Marlys Lipe at 325-2293, (mlipe@ou.edu). If you have any questions or concerns regarding your rights as a research participant please contact the Office of Research Administration at 325-4757.

APPENDIX 2

PROXY STATEMENTS FOR OTHER EXPERIMENTAL MANIPULATIONS

AUDIT FEE LEVEL ONE: AUDIT FEE ONLY

AUDIT FEE LEVEL TWO: AUDIT FEE WITH NON-AUDIT SERVICES

AUDIT FEE LEVEL THREE: HIGH AUDIT FEE ONLY

APPENDIX TWO: AUDIT FEE ONLY

PROXY STATEMENT - PRINCIPAL ACCOUNTING FIRM FEES

XXXXXXX LLP have been independent auditors of the firm for three years.

The following table sets forth the aggregate fees billed to the Company for the fiscal year ended December 31, 2000 by the Company's principal accounting firm, XXXXXXX LLP (a national accounting firm).

Audit Fees	$ 2,537,367	(1)
Financial Information Systems Design and Implementation Fees	$ --	
All other fees	$ --	
Total	$ 2,537,367	

(1) Includes fees for professional services rendered for the audit of the Company's annual financial statements for the fiscal year 2000 and for reviews of the financial statements included in the Company's quarterly reports on Form 10-Q for the first three quarters of fiscal 2000.

APPENDIX TWO: AUDIT WITH NON-AUDIT SERVICE CASE

PROXY STATEMENT - PRINCIPAL ACCOUNTING FIRM FEES

XXXXXXX LLP have been independent auditors of the firm for three years.

The following table sets forth the aggregate fees billed to the Company for the fiscal year ended December 31, 2000 by the Company's principal accounting firm, XXXXXXX LLP (a national accounting firm).

Audit Fees	$ 2,537,367	(1)
Financial Information Systems Design and Implementation Fees	$ –	
All other fees	$ 7,422,029	(2)
Total	$ 9,959,396	

(1) Includes fees for professional services rendered for the audit of the Company's annual financial statements for the fiscal year 2000 and for reviews of the financial statements included in the Company's quarterly reports on Form 10-Q for the first three quarters of fiscal 2000.

(2) Includes fees for other professional services rendered in fiscal 2000, including professional services in connection with tax preparation and consulting, statutory filings, SEC registration statements and other management consulting services.

APPENDIX TWO: HIGH AUDIT FEE ONLY CASE

PROXY STATEMENT - PRINCIPAL ACCOUNTING FIRM FEES

XXXXXXX LLP have been independent auditors of the firm for three years.

The following table sets forth the aggregate fees billed to the Company for the fiscal year ended December 31, 2000 by the Company's principal accounting firm, XXXXXXX LLP (a national accounting firm).

Audit Fees	$ 9,959,396	(1)
Financial Information Systems Design and Implementation Fees	$ --	
All other fees	$ --	
Total	$ 9,959,396	

(1) Includes fees for professional services rendered for the audit of the Company's annual financial statements for the fiscal year 2000 and for reviews of the financial statements included in the Company's quarterly reports on Form 10-Q for the first three quarters of fiscal 2000.