AN EMPIRICAL EXAMINATION OF CERTAIN ASPECTS OF
AUDITOR CHANGES IN NYSE, AMEX, AND
SELECTED OTC COMPANIES

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The purpose of this thesis was to analyze a number of auditor change and other peripheral issues from two related perspectives. Empirical data were gathered from publicly available Forms 8-K and 10-K to first assess whether meaningful differences existed between NYSE, AMEX, and OTC registrants regarding disclosures required in those documents. Secondly, the data were analyzed to determine whether differences existed with respect to the accounting firms (Big Eight or non-Big Eight) involved in the auditor changes. In most of the tests designed to achieve these purposes, statistically defensible results were obtained using the nonparametric chi-square test for significance of observed differences and the McNemar test for significance of changes, at the .05 level.

The research was conducted in four phases, the first of which was oriented entirely toward the three exchange groupings. There were 102 instances of at least one disagreement reported in the 848 auditor change Forms 8-K examined for the years 1974 through 1978. The three most frequently encountered disagreement types constituted 42.1 per cent of the 309 total disagreements reported. "Timing of revenue recognition"
disagreements were the most frequently observed type for each exchange grouping. Forty-four firms, designated chronic auditor changers, made an average of 3.36 switches from November 1971 through 1978. The group included no NYSE firms and only two AMEX firms. The chronic changers received more qualified opinions, but had fewer disagreements than other firms changing auditors.

In the second research phase, statistically significant differences were found at the .05 level between NYSE, AMEX, and OTC registrants in the following areas between 1974 and 1978: rates of disagreement involvement, rates of qualified audit opinions in the two years preceding auditor changes, Board of Director approval of auditor changes, and extent of "disagreements regarding disagreements." Only two Rule 3-16(s) disclosures were identified in disagreement auditor changes, both involving timing of revenue recognition.

The third research phase dealt statistically with the issue of increasing Big Eight dominance of auditing services during the five years ended in 1978. NYSE auditor changes indicated such increasing dominance. AMEX auditor changes indicated a greater degree of switches between Big Eight and non-Big Eight firms, but inter-tier changes were as likely in either direction. OTC firms were found to be resisting changes toward Big Eight auditors, who, in fact, lost OTC clients.
In the fourth research phase, it was found that forty per cent of all disagreement auditor changes involved auditor "clarification" of the former client's representations. Evidence was found indicating that the practice of reporting disagreements was not deteriorating, contradicting SEC contentions. As with the disagreements issue, OTC registrants were found to exhibit much lower rates of "disagreements regarding disagreements" than did NYSE or AMEX registrants, at the .05 level.

From the perspective of auditors involved, statistically significant differences were observed at less than the .05 level between Big Eight and other auditors, as well as within the Big Eight grouping, in terms of rates of auditor/client disagreement involvement, for both predecessor and successor auditor groupings. However, no such evidence was found indicating differences existed between these groupings in terms of rates of qualified opinions rendered prior to auditor changes or "disagreements regarding disagreements." The evidence indicated that Big Eight firms were more likely than other auditors to have been both predecessor and successor auditors to disagreement auditor changes.
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CHAPTER I

INTRODUCTION

Background for the Study

In the words of Mautz and Sharaf, "The significance of independence in the work of the independent auditor is so well established that little justification is needed to establish this concept as one of the cornerstones in any structure of auditing theory" (15, p. 204). Maintenance of the public's confidence in the auditor's independence in attesting to financial statements is vital to the proper functioning of the capital markets and in the fairest practicable allocation of scarce real economic resources underlying these financial statements.

The fact or even the threat that an auditor could be summarily dismissed at the whim of a client pursuant to a disagreement over significant accounting policies, auditing procedures or scope, or over a question of disclosure, casts a real question as to the viability of the auditor's independence with respect to his client. Furthermore, numerous authors have emphasized that the lack of an appearance of independence is as damaging as is a compromise of independence in fact.

In England, the relationship of an auditor to the companies he examines is such that it is rather difficult for
a company to discharge its auditors (15, p. 216). In contrast to practices in the United States, stockholder approval of auditors in England is mandatory and the auditor is permitted to have his views on any dispute with management on technical matters sent to stockholders (4, p. 359). The primacy of the concept of independence has similarly prompted the United States Securities and Exchange Commission (SEC) to take certain measures toward strengthening auditor independence in both fact and appearance. Such measures have included (1) several releases describing situations deemed incompatible with the accountant's independence, (2) Accounting Series Release (ASR) 123 urging registrants to create corporate audit committees, (3) the Commission's general refusal to accept opinions qualified in regard to audit scope or accounting principles, and (4) specific disclosures in Form 8-K of changes in principle accountants, including disclosure of significant disagreements between the registrant and principal accountant prior to the auditor change.

Changes in auditors have been a reportable event by publicly listed companies since October 31, 1971 when the SEC issued Securities Act Release No. 34-9344, on September 21, 1971, revising Forms 8-K and N-1Q to require the reporting of a change in the principal accountant of a registrant. The SEC implemented the new disclosure requirements, after considerable deliberation with the American
Institute of Public Accountants (AICPA), based upon the belief that such measures might strengthen auditor independence and have the effect of discouraging auditor changes simply to obtain more favorable accounting treatment (7, p. 3315).

The requirements stated that when a principal accountant had been displaced, the registrant was required to furnish the Commission with a letter stating whether in the eighteen months preceding the termination there had been any significant disagreements with the former accountant as to accounting principles or practices, financial statement disclosure, or auditing procedures, which disagreements if not resolved to the satisfaction of the former accountant would have caused him to make reference in his opinion to the subject matter of the disagreement. Similarly, the registrant was to append as an exhibit a letter from the former accountant stating whether he agreed with the registrant's assertions or, if not, stating the respects in which he did not agree (17, p. 19). The final promulgation differed from the originally proposed requirements in that reasons for the change did not have to be disclosed on the grounds that such a requirement was too broad and too subjective to be practicable (14, p. 151).

Subsequently, the SEC issued Accounting Series Release 165 on December 20, 1974 in an attempt to expand upon the disclosures and clarify certain areas of the original
requirements. Briefly, the following disclosure changes came about (See Appendix A):

1. The termination of the prior auditor (not the hiring of the successor auditor as before) became the critical reporting event.

2. The eighteen month time span for reporting disagreements was expanded to the two most recent fiscal years and the subsequent interim period prior to the auditor change.

3. A requirement to disclose the nature of any disclaimer or adverse opinion or any qualification as to uncertainty, audit scope, or accounting principles by the prior auditor in either of the two previous years.

4. Clarification as to what constituted a reportable disagreement. Disagreements were to be interpreted broadly and were to be defined as occurring at the "decision-making level." Disagreements were reportable whether resolved or not resolved to the accountant's satisfaction.

5. Furthermore, Regulation S-X was amended by the addition of Rule 3-16(s) requiring footnote disclosure on Form 10-K of the existence and nature of any disagreement reported on a Form 8-K within the two years prior to the date of the most recent financial statements filed.

6. Additionally, footnote disclosure was to be required on Form 10-K if, during the fiscal year of the change or
or the subsequent fiscal year, there were any material events or transactions similar to those about which reported disagreements revolved, which were accounted for or disclosed in a manner different from that recommended by the predecessor auditor. Also, disclosure was to be required of the effect (if material) on the financial statements if the prior auditor's suggestions had been followed in the current financial statements.

7. Finally, the Commission amended Item 8 of Schedule 14-A regarding proxy rules to provide additional disclosures in proxy statements of the relationship between issuers and independent public accountants. Among other things, the proxy amendments require disclosure of the name of the principal accountant for the prior year if different from the one selected or recommended for the current year, as well as disclosure of any disagreements between accountant and issuer reported on a Form 8-K during the past year. Moreover, the issuer is required to submit the preliminary proxy material for the prior accountant's review in cases wherein a disagreement had been reported either in Form 8-K or the appended accountant's letter filed as an exhibit. The former accountant is to be allowed to make a brief statement of up to 200 words in the proxy statement presenting his view of the disagreement in the event that the accountant considers management's description of the disagreement to be incomplete or incorrect (7, pp. 3315-3318).
The amendments to Form 8-K and for proxy statements became effective for filings subsequent to January 31, 1975, while the Regulation S-X changes related to financial statements filed for periods beginning on or after January 1, 1975 (7, p. 3320).

Responding to objections to Rule 3-16(s) of ASR 165, (points 5 and 6 above), the SEC issued ASR 194 on April 29, 1976 to be effective with respect to financial statements filed after August 31, 1976. The objections to ASR 165 centered upon the requirement to disclose in financial statements filed with the Commission the fact of disagreements where disclosure regarding the effect was not required. Among the objections were the following:

1. In the vast majority of cases, disagreements are resolved to the satisfaction of the former auditor and the same kinds of transactions or events continue to be accounted for or disclosed as the former auditor had concluded was required. Hence, while a different resolution could have affected the financial statements, the statements typically had not been so affected.

2. Many felt that the 8-K and proxy rules in effect provided adequate disclosure.

3. Disclosure of disagreements had been intended only to inform readers that financial statements might have been prepared differently if the disagreement had been resolved differently, and not to raise questions as to
the adequacy or fairness of the statements presented. Some voiced concern that this might be misunderstood.

4. Finally, several critics of ASR 165 felt that auditor changes following disagreements were not numerous and that only a small portion of those cases would involve circumstances wherein the successor auditor had deemed acceptable that which the prior auditor had found unacceptable. Therefore, the majority of disclosures under Rule 3-16(s) would require no disclosure of effect upon financial statements (8, pp. 3435-3436). Hence, it was felt that including redundant information on the fact of a disagreement might obfuscate the critical disclosure regarding a change contrary to the prior auditor's conclusions.

In concluding that the objections had substantial validity, the Commission amended Rule 3-16(s) of Regulation S-X to require footnote disclosure of the existence and nature of a disagreement previously reported on Form 8-K only when disclosure was required of a case where the successor auditor had found acceptable what his predecessor had considered unacceptable. The rule was amended to read as follows:

If, (1) within the twenty-four months prior to the date of the most recent financial statements, a Form 8-K has been filed reporting a change of accountants, (2) included in the Form 8-K there was a reported disagreement on any matter of accounting principles or practices or financial statement disclosure, (3) during the
fiscal year in which the change of accountants took place or during the subsequent fiscal year there have been any transactions or events similar to those which involved the reported disagreement, and (4) such transactions or events were material and were accounted for or disclosed in a manner different from that which the former accountants apparently would have concluded was required, state the existence and nature of the disagreement and also state the effect on the financial statements if the method had been followed which the former accountants apparently would have concluded was required. These disclosures need not be made if the method asserted by the former accountants ceases to be generally accepted because of authoritative standards or interpretations subsequently issued (8, p. 3436).

The most recent development regarding the reporting of changes in a registrant's independent accountant was proposed by the SEC in Securities Act Release No. 34-13989 dated September 26, 1977. In attempting to go beyond the mere reporting of disagreements preceding a change in auditors, the Commission proposed to require disclosure of the reasons for changes and whether the decision to change had been approved by the registrant's Board of Directors or its audit committee. The Commission felt that the increased disclosure of facts surrounding a change in auditors would aid investors in better understanding and evaluating the registrant's relationship with its independent accountants (18, p. 218).

On May 26, 1978, the Wall Street Journal reported that, in its final release, the SEC would be abrogating that part of the proposal dealing with disclosure of all reasons for auditor changes in favor of "very strongly urging" voluntary disclosure of the circumstances in the registrant's 8-K
filing (23). Most of the comments received by the SEC were negative, prompting Commissioner Irving M. Pollack to concede "that this was one of those times 'when your wisdom and your judgment tell you not to push' " (26, p. 70).

It is interesting to note that this is the second time that the SEC has retreated from a proposal to require disclosure of all reasons for auditor changes. The original proposal which culminated in the issuance of Securities Act Release No. 34-9344, dated September 21, 1971, had recommended that the reasons for the change be reported by the registrant while the displaced auditor would state his understanding of the reasons for the change; however as Charles N. Johnson of Arthur Andersen & Co. wrote

There were objections to this proposal on the basis that a requirement to state the reasons for a change was too broad and too subjective to be practicable, and further that it was not reasonable to require the former auditor to make a subjective judgment as to the reason for a decision made by his former client (14, p. 151).

Similarly, in its 2,000 word response to the original draft, the AICPA stated that while

We agree with the premise that a change in accountants is an event of sufficient importance to warrant current reporting . . . The SEC proposal to "call for subjective 'reasons'[for the change in accountants] rather than objective facts relating to the particular kind of problem to which the item is directed might well tend to obscure, rather than reveal, the occurrence of a problem [significant disagreements on matters of accounting principles or practices, financial disclosure or auditing scope or procedure] in which the Commission is interested [sic] (14, p. 12).
Paradoxically, in criticizing the more recent attempt to require disclosure of all reasons for auditor changes, the New York City Bar Association contended that such disclosure might in fact have a chilling effect on the auditor's independent relationship with a client company:

Out of fear that their professional competence and ability might be "unjustifiably questioned" in a public report, auditors "may find themselves becoming unduly cautious of failing to meet the requests" of clients (23).

After considering the various points of view, the SEC issued ASR 247 effective for all 8-K's filed after July 31, 1978. The final promulgation requires the registrant to state on Form 8-K whether the decision to change auditors has been recommended or approved by an audit committee or by the Board of Directors, where no audit committee exists. As was expected, no requirement for disclosure of reasons for changes was adopted; however, both the registrant and the former auditor were encouraged to include such disclosures in their respective filings (9, p. 3650).

Importance of the Topic

Leonard M. Savoie, speaking in 1970 at a meeting of The Conference Institute in New York said, "... the situation [shopping for accounting principles] occurs often enough to be a cause of discomfort to the accounting profession" (19, p. 12). Similarly, A. A. Sommer, Jr., SEC Commissioner in 1974, said in part:
There is little information which can be made available to shareholders which is more important than information concerning disputes that have developed between the independent auditor and management. It seems to me that the threat of more widespread dissemination of this information will lead to greater management willingness to prepare financial statements in the manner which will meet auditor approval (23, p. 11).

A number of questions may be posed: How prevalent is the practice of "auditor shopping"? That is, which firms are chronic changers? Do firms who chronically change auditors exhibit noteworthy characteristics or areas of commonality? What types of significant disagreements are occurring? What types of audit opinions are preceding auditor changes with and without disagreements? What has been the nature of Rule 3-16(s) disclosures? Since the enactment of ASR 247, are Boards of Directors becoming more actively involved in the auditor change process? Are reasons for changes being given voluntarily? What kinds of reasons are being cited? Also, to what extent are displaced auditors reporting positions as to disagreements contrary to formed client representations? Finally, what evidence can be found to support or refute the SEC's recent contentions that the practice of reporting disagreements had been deteriorating (9, p. 3652)?

Furthermore, with respect to all of these interrogatories, are there differences as between larger firms and smaller firms? Recently the Financial Accounting Standards Board abrogated the requirements for smaller firms (nonpublic)
to disclose earnings per share or segment information based in part upon an AICPA Accounting Standards Division study of the application of generally accepted accounting principles to smaller businesses (15, pp. 1-3). In a study of auditor changes, John C. Burton and William Roberts concluded in part:

What is true of these companies [the Fortune 500] may not be true of smaller and unlisted concerns. While the reasons for auditor change in smaller concerns may be similar, the proportions might well be different. For example, it is possible that disputes over accounting principles and fees may result in an increasing proportion of auditor changes as the size of the company grows smaller. Companies . . . not required to file . . . may feel more inclined to seek new auditors as a result of . . . disagreement on accounting principles (3, p. 35). (Italics added).

Furthermore, do meaningful differences exist in terms of the accounting firms involved in auditor changes? That is, are there differences between Big Eight and non-Big Eight auditors, as well as within the Big Eight grouping (consisting of Arthur Andersen & Co.; Arthur Young & Co.; Coopers & Lybrand; Deloitte, Haskins & Sells; Ernst & Whinney; Peat, Marwick, Mitchell & Co.; Price Waterhouse & Co.; and, Touche Ross & Co.), regarding audit opinions rendered, disagreement involvement, and audit engagements accepted which had been preceded by reporting disagreements? Finally, in view of the Moss and especially the Metcalf congressional reports, are the Big Eight auditing firms gaining publicly listed clients (21); or, are they in fact losing such clients?
More research is needed into the nature of the differences between larger and smaller enterprises to guide the development of future accounting and disclosure related issues. The purpose of this thesis is to analyze the above questions and several ancillary issues, from both a registrant and auditor perspective.

Prior Research on the Topic

The following section constitutes a brief summarization of prior research relating to auditor changes. A more in-depth analysis of prior literature appears in Chapter II of the thesis.

Burton and Roberts made a study of auditor changes by Fortune 500 Industrial firms between 1955-1963. Net changes were from small to larger auditing firms. A survey/questionnaire was utilized as to reason for auditor changes. The most common source of auditor change was concurrent with a management change while accounting principles disputes constituted the second most common reason (3, pp. 32-35).

Bedingfield and Loeb examined Forms 8-K of 250 firms changing auditors between November 1971 and February 1973 and found 14 with a clear-cut indication of disagreement. All 250 were surveyed as to reasons for change in auditors. Of 141 respondents, 46 per cent cited audit fees as a cause of change while 11 per cent cited disputes on accounting matters (16 companies). While national firms had more clients than non-national firms before and after the changes,
they incurred a net loss in clients (2, p. 68). The relative paucity of disagreements existing through February 1973 does not allow any meaningful analysis. As with the Burton and Roberts study, the data is old and does not contrast results in terms of New York Stock Exchange (NYSE) and American Stock Exchange (AMEX) versus over-the-counter (OTC) firms, as will be done in this thesis.

"CPA Letter" (November 22, 1976) categorized disagreements through April 1976 by type. Recoverability of asset cost was the commonest source of disagreement from among nine categories (11, p. 4). This data is not so old (approximately another three years data can be examined to December 31, 1978); however, there is virtually no analysis. Of greater significance is the fact that the data used in this study were incomplete, having been gathered, at least in part, from a compilation of auditor changes between January 1973 and April 1975 published by Disclosure, Inc. Correspondence with Leonard Lorensen of the AICPA confirms this assertion. This writer found a number of omissions in testing the accuracy of Disclosure Inc's. compilation to the SEC's official daily report of 8-K filings, the SEC News Digest.

Fertuck (1977) completed a doctoral dissertation at Cornell University entitled A Test of the Efficient Market Hypothesis Using Auditor Changes. In his study, Fertuck examined all NYSE firms who changed auditors between 1954
and 1968 for whom adequate data existed. No significantly abnormal returns were found before the new auditor's first report was released, indicating that either the market did not learn of the auditor change before the report was released or that it placed no value on that news. No strong statistical evidence was found to indicate any market inefficiency associated with the release of the first annual report by a firm's new auditor. Also, evidence was found to indicate that firms which change auditors are smaller and riskier than firms which do not (12).

Coe and Palmon presented two papers dealing with auditor changes at professional meetings. In the first of these, the authors analyzed the extent of several auditor turnover issues for two data bases: the industrials listed on the Compustat tape during the twenty-four years ended in 1975 and all SEC companies changing auditors in 1974 and 1975. While Big Eight dominance increased among the industrials, it decreased among the SEC companies. Also, the SEC companies experienced a higher auditor turnover rate (5).

The second paper by Coe and Palmon sought to determine whether auditors were more likely to be dismissed after issuing an unfavorable opinion, as defined, versus an unqualified opinion. Among Fortune 500 Industrials, this was found not to be the case at the .05 significance level; however, smaller industrial firms were found to be more likely to dismiss their auditors after receiving an unfavorable
opinion. Also, "exploratory" results were found that companies who dismiss their auditors were unsuccessful in subsequently obtaining favorable audit opinions (6).

Research Methodology and Hypotheses

Due to the difficulties inherent in determining operational measures of independence resulting from the auditor change disclosure requirements (other than in an intuitive sense), that issue was not addressed in this thesis. Instead, the scope of the dissertation circumscribed issues which could more readily be researched based upon data publicly available on Forms 8-K and 10-K, compared and contrasted, where possible, with the results of the Burton and Roberts and the Bedingfield and Loeb studies.

Three populations were studied: NYSE firms, AMEX firms, and OTC firms, the latter being assumed a surrogate for small and closely held firms. Determination of which firms had changed auditors was made by listing from the daily SEC News Digest all firms reporting an auditor change 8-K filing from the inception of the disclosure rules through filings for December 1978. Disclosure Inc's Disclosure Journal, compiling auditor changes for the two and one-third years ended in early 1975, was not used as a source as it was found to be incomplete.

Firms changing auditors were classified into NYSE, AMEX, and OTC by reference to monthly Standard & Poor's Stock Guide issues dated coinciding as closely as possible with 8-K
report dates to avoid missclassifications which could have arisen due to mergers, corporate delistings, or similar occurrences.

The research was conducted in four related phases using the *Statistical Package for the Social Sciences* (SPSS) where possible in compiling tables and crosstabulations. Statistically analyzed data utilized the nonparametric statistic, chi-square, for two and k-sample cases, at the traditional .05 level of significance. However, chi-square only indicates whether variables are independent or related; therefore, suitable measures of association were used to indicate strength of relationships (16, p. 222).

Possible measures of association available with SPSS include the phi statistic, which corrects for the fact that chi-square values are directly proportional to the number of cases, N; Cramer's V, a modification of the phi statistic for tables larger than 2 x 2; and the contingency coefficient, which is often used as a nonparametric measure of association for tables with the same dimensions (16, pp. 224-225).

The first phase of the research presents separate tabulations of types of disagreements reported, types of opinions rendered preceding auditor changes, and types of opinions preceding auditor changes wherein significant disagreements had been involved. The purpose of this phase was to examine descriptively whether differences existed between the three groupings in terms of disagreement types and occurrences and
audit opinion activity. The tabulations were presented by years and given for total selected reporting companies, all NYSE, all AMEX, and all selected OTC companies, for a total of twelve tabulations.

Two points should be made at this juncture. First, the term significant disagreements will be carefully defined in the body of the thesis. Secondly, it was not possible to employ chi-square in analyzing the tabular data described above. This is due to the fact that some companies reported more than one disagreement. This, in turn, produces a condition referred to as "inflated N's" which invalidates the chi-square test (20, p. 109).

Auditor changes to be analyzed were selected as follows. The three sample groupings were comprised of all NYSE and AMEX auditor changes from January 1, 1974 through December 1978 and an SPSS generated random sample of OTC changes of a number reasonably approximating the summation of the NYSE and AMEX firm changes. OTC firm auditor changes were only sampled insofar as there are about four times as many SEC listed OTC companies as there are combined NYSE and AMEX firms. The propriety of drawing statistical inferences from groupings of all NYSE and AMEX auditor changes is discussed more fully in Chapter IV.

Auditor change data gathered through December 1973 were disregarded in this part of the study because much of the data were found to be spurious. When the auditor change
discussions were first implemented, they were to be reported under Form 8-K item 12. Item 12 had previously been reserved for reporting "other materially important events," which were to be subsequently assigned item 14 classification. Regrettably, for some period of time, many companies continued to report "other materially important events" under the prior classification scheme. Discussions with News Digest staff revealed that no concerted effort was made to appropriately report the misfiled items. Consequently, a high percentage of News Digest "auditor changes" reported in the early years are, in fact, "other materially important events;" however, the problem appeared to have been largely resolved by 1974.

Finally, the entire population of 8-K data (October 31, 1971 through December 31, 1978) was searched with SPSS to identify firms who were chronic changers of auditors, such firms being defined as those having changed auditors more than twice in the relevant time span of the research. Forms 8-K and 10-K for these firms were then obtained and analyzed to determine whether any noteworthy characteristics or areas of commonality existed in firms who had, in fact, made several auditor changes. As explained earlier, some of the News Digest reported changes, especially in the earlier years were irrelevant, and, consequently, disregarded in the analysis.

In the second phase of this thesis, five areas of inquiry could be addressed based upon the disclosure
requirements for Forms 8-K and 10-K as they currently exist:

1. Existence of significant disagreements preceding auditor changes (since January 1, 1974).

2. Existence of Rule 3-16(s) disclosures (a position contrary to that of the predecessor auditor) after a disagreement (since effective date, January 31, 1975).

3. Whether an other-than-unqualified opinion preceded the auditor change (since effective date, January 31, 1975).

4. Whether the auditor change was recommended or approved by the Board of Directors (since effective date, July 31, 1978).

5. Whether reasons for the auditor change were voluntarily given (since effective date, July 31, 1978).

The intent of the research in this phase was to determine whether or not statistically significant differences existed among the three groupings in terms of activity in these five areas. Each of these areas were statistically analyzed for significant differences between total selected companies, NYSE, AMEX, and OTC firms through the use of five sets of contingency tables for each sample grouping, a total of twenty-five chi-square tests. The null hypotheses ($H_0$) and the operational hypotheses ($H_1$) for the first area were styled as follows:
1. $H_0$: There is not a statistically significant difference between NYSE, AMEX, and OTC firms regarding the rate of significant disagreements preceding auditor changes.

$H_1$: There is a statistically significant difference between NYSE, AMEX, and OTC firms regarding the rate of significant disagreements preceding auditor changes.

2. $H_0$: There is not a statistically significant difference between NYSE and AMEX firms regarding the rate of significant disagreements preceding auditor changes.

$H_1$: There is a statistically significant difference between NYSE and AMEX firms regarding the rate of significant disagreements preceding auditor changes.

3. $H_0$: There is not a statistically significant difference between NYSE and OTC firms regarding the rate of significant disagreements preceding auditor changes.

$H_1$: There is a statistically significant difference between NYSE and OTC firms regarding the rate of significant disagreements preceding auditor changes.

4. $H_0$: There is not a statistically significant difference between AMEX and OTC firms regarding the rate of significant disagreements preceding auditor changes.

$H_1$: There is a statistically significant difference between AMEX and OTC firms regarding the rate of significant disagreements preceding auditor changes.

5. $H_0$: There is not a statistically significant difference between NYSE and AMEX firms as a unit and OTC firms regarding the rate of significant disagreements preceding auditor changes.

$H_1$: There is a statistically significant difference between NYSE and AMEX firms as a unit and OTC firms regarding the rate of significant disagreements preceding auditor changes.

The same pattern of null and alternate hypotheses were prepared for each of the four remaining areas.

As a point of clarification, it should be noted that the relevance of the latter four hypothesized relationships in
each grouping of five hypotheses sets is a function of the significance decision made regarding the first hypothesis in each set of five. That is, the latter four tests are only necessary to isolate the sources of significance detected in rejecting the initial null hypothesis. Stated differently, a decision not to reject the preliminary null hypothesis in each set of five makes it obviously illogical to test the latter four hypotheses sets for significance.

Additionally, the phase two areas dealing with significant disagreements and audit opinion activity were analyzed from the perspective of the auditors involved as predecessors and successors to the changes. These tests were made to discern whether statistically significant differences existed between Big Eight firms and all other auditors, as well as within the Big Eight grouping, in terms of these activities. The two hypothesis sets for each area (by predecessor and successor auditor), appearing in Chapter III of the thesis, stylistically parallel the hypotheses delineated above.

The third phase of the research addresses the issue of the types of auditing firms selected after an auditor change. The results of the Burton and Roberts study conflicted with the Loeb and Bedingfield study with respect to whether Big Eight firms were net gainers or losers of clients subsequent to auditor changes. However, the two sets of contradictory conclusions may have been attributable to population
size characteristics in the two studies. The issue is significant insofar as the Metcalf and Moss Committee reports have assailed the accounting profession for increasing polarization of the auditing function in the Big Eight firms. The purpose of the third phase of the research was to obtain empirical evidence as to whether the Big Eight firms are increasing their dominance of the auditing services market for all publicly listed companies, as well as within the exchange groupings.

Essentially the question of increasing Big Eight dominance has two facets. The first of these represents a broader perspective, whether firms tend to engage new auditors dependent upon whether the predecessor was a Big Eight or non-Big Eight firm. This issue was researched utilizing chi-square at the .05 significance level. However, a second dimension exists. It might be that registrants in one or more sample groupings were staying with a Big Eight or non-Big Eight auditor after an auditor change; nevertheless, from a narrower perspective, a secondary question arises as to whether those registrants actually switching between auditor "tiers" were trending toward one of the two tiers, or were switching proportionately equally in each direction. The latter facet was researched using the non-parametric McNemar test for significance of changes at the .05 significance level, described more fully in Chapter IV.
The first perspective was analyzed in terms of absolute changes and as to whether the changes were statistically significant. Five sets of contingency tables were generated and analyzed with the chi-square test, one for each sample, or combination as follows: all companies selected, NYSE, AMEX, OTC, and the combination of NYSE and AMEX firms. The null and operational hypotheses were stated for each of the five samples paralleling the following:

1. \( H_0 \): For all publicly listed companies, the successor auditing firm selected in an auditor change is independent of whether the predecessor auditor was a Big Eight or non-Big Eight firm.

\[ H_1: \text{For all publicly listed companies, the successor auditing firm selected in an auditor change is dependent upon whether the predecessor auditor was a Big Eight or non-Big Eight firm.} \]

To test for significance of changes in those firms who have, in fact, switched between Big Eight and non-Big Eight auditors, the cell data in the immediately preceding contingency tables were analyzed using the McNemar test at the \(.05\) level of significance. The null and operational hypotheses were styled for each of the five tests as follows:

1. \( H_0 \): For those publicly listed companies who change from a Big Eight to a non-Big Eight auditor or vice versa, the probability that any company will change from a Big Eight to a non-Big Eight auditor is equal to the probability that the firm will change from a non-Big Eight to a Big Eight auditor.

\[ H_1: \text{For those publicly listed companies who change from a Big Eight to a non-Big Eight auditor or vice versa, the probability that any company will change from a Big Eight to a non-Big Eight auditor is not equal to the probability that the firm will change from a non-Big Eight to a Big Eight auditor.} \]
According to one national firm audit partner, the SEC mandated disclosures with respect to auditor changes constitute "...a powerful weapon for an auditor who wants to do the right thing" (23, p. 32). Not infrequently, auditors have cited disagreements which were not acknowledged by their clients. However, such "disagreements over disagreements" have frequently resulted in "poor loser" or "sour grapes" charges by the former client. Consequently, there is a measure of concern that some auditors may be intimidated into not reporting disagreements to avoid such charges. Indeed, the practice of reporting disagreements has deteriorated in some cases such that the SEC in ASR 247 admonished both registrants and former accountants to carefully review their disclosures (9, p. 3652). The final phase of the research was directed toward the question of how frequently disengaged auditors cite disagreements not reported by their clients. More specifically, the purpose of this phase was to determine whether statistically significant differences existed between the exchange groupings under study, as well as between Big Eight and non-Big Eight auditors and within the Big Eight grouping, in terms of "disagreements over disagreements."

Both descriptive results of interest and nonparametric tests of significance of relationships were generated in this phase. The relevant data were obtained by scrutinizing the 8-K's utilized in the first phase of the research for
evidence of company Form 8-K representations which conflicted with appended auditor exhibit letters as to the nature or presence of disagreements. Chi-square was then used to test the following assertions:

1. \( H_0 \): There is not a statistically significant difference between NYSE, AMEX, and OTC firms as to the existence of conflicts between firms and their predecessor auditors regarding the nature or presence of disagreement preceding auditor changes.

\( H_1 \): There is a statistically significant difference between NYSE, AMEX, and OTC firms as to the existence of conflicts between firms and their predecessor auditors regarding the nature or presence of disagreements preceding auditor changes.

The same null and operational hypotheses above were tested four more times in the chi-square test for two independent samples for these cross tabulations: NYSE versus AMEX, NYSE versus OTC, AMEX versus OTC, and NYSE plus AMEX versus OTC.

Finally, further inquiries were made regarding the extent of auditor and client conflict regarding the nature or presence of disagreements, from the perspective of the predecessor auditors involved. Here, as in earlier tests, evidence was sought to determine whether meaningfully significant differences existed between Big Eight and non-Big Eight auditors, as well as within the Big Eight grouping, with respect to this issue. The hypotheses tested closely parallel those described immediately above.
Limitations and Key Assumptions

An assumption in this thesis was the OTC firms could be considered to be representative of non-public firms. Obviously, this may not be the case; therefore, that assumption of itself constitutes a potential limitation to the study. The Commission on Auditor's Responsibilities: Report, Conclusions, and Recommendations (The Cohen Commission Report) concluded, among other things, that the kind of disclosure currently mandated by the SEC in ASR 165 should be included in a report by management accompanying all audited financial statements (8, p. 108). This recommendation has not yet been made an authoritative pronouncement by the AICPA; therefore, the necessary data are not available. Nevertheless, there certainly exists a continuum of size, economic power, and other socio-economic differences between OTC firms, on the one hand, and NYSE and AMEX firms, on the other which lends merit to research of the nature being proposed in this thesis.

Another unavoidable limitation must be recognized in that the source data, though of a public nature, may in some cases not constitute an accurate representation of the attendant circumstances and events which actually occurred.

Description of Proposed Chapters

The chapters presented in this thesis will be as follows. Chapter I serves to introduce the study as well as to provide
a précis of background for the issues, prior research, the
significance of the topic, the methodology and hypotheses
to be tested, and a description of the key assumptions and
limitations inherent in the study.

Chapter II constitutes a brief presentation concerning
prior literature and studies in the area of the thesis.
The brevity is a function of the paucity of research which
has been undertaken to date in this area. The prior studies
are discussed using November 1971 as a point of demarcation,
the date the SEC disclosures became effective.

Chapter III presents an in-depth analysis of the evolution
of the SEC's disclosure requirements with respect to
auditor changes. The chapter also includes an analysis of
the circumstances involved in several noteworthy auditor-
client experiences with the requirements as presented in
the financial press. The discussion provides, for each of
the key SEC documents dealing with auditor changes, an analysis of the exposure draft stages and the responses leading
to the final promulgation.

The final three chapters in the thesis deal with the
methodology, test results, summary, and conclusions. Chapter
IV consists of an expansion upon the research methodology and
hypotheses introduced in Chapter I. Chapter V contains an analysis of the data and findings, while Chapter VI summarizes
and concludes the study.
CHAPTER BIBLIOGRAPHY


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CHAPTER II

PRIOR LITERATURE AND RESEARCH CONCERNING AUDITOR CHANGES

In view of the importance of the issue of conflicts between auditor and firm and the consequent impact upon the questions of auditor independence, reliability of audited financial data, and the resultant optimization of the allocation of scarce economic resources, it is somewhat enigmatic that there have been relatively few scholarly studies dealing with the issue of auditor changes. Several obstacles hinder such research. Operational measurement, cost, and data availability problems must be surmounted.

Intuitively, there can be little doubt that the SEC-mandated auditor-change disclosure requirements, as a minimum, provide conditions for enhancing auditor independence. The problems arise in assigning operational measures of the impact of those disclosures upon auditor independence. Both Nichols and Price (9) and Goldman and Barlev (8) concluded in theoretical studies that assymetrical power relationships existing between the auditor and client serve to compromise auditor independence insofar as management's ability to displace the auditor increases client power over the auditor. Nevertheless, there appear to be very few empirical studies relative to the issue of auditor
independence. Coe and Palmon (4) made such a study; however, the analysis was limited only to industrial companies listed on the Fortune 500 and in Moody's Industrial Manual. Furthermore, the conclusions of that study (to be discussed more fully later in this chapter) are somewhat inferentially deduced.

Cost and data availability problems also impede viable auditor change research. As will be seen in the following sections of the chapter, most of the studies to date have been limited in scope in some aspect. This thesis will provide insights into auditor change activities through the sampling of data from all publicly listed companies.

Finally, the high per page cost of obtaining 8-K and 10-K copies by mail render a comprehensive study on that basis virtually impracticable. The alternative is to analyze microfiche of the original publicly available data; however, complete sets of 8-K reports are maintained only by the home offices of a few of the Big Eight firms and at the SEC offices in Washington D.C. and Los Angeles, California.

The remainder of this chapter will entail an analysis of prior research in the area of auditor changes. Two studies conducted prior to the enactment of the SEC auditor change disclosure requirements will be examined first, followed by an overview of the research which has been undertaken since the advent of the SEC disclosures.
Auditor Change Research Preceding the SEC Mandated Disclosures

The first significant auditor change research was conducted by Burton and Roberts (2). John C. Burton, then an Associate Professor of Finance and Accounting at Columbia University, was later to become the chief accountant of the SEC. Using as a data base the Fortune 500 list of the largest industrial companies between 1955 and 1963, the authors sought to make a systematic examination of auditor changes and the reasons therefore; and, finally to determine if evidence could be found that corporations were seeking to exploit the existing economic relationships to threaten the independence of auditors (2, p. 32).

Burton and Roberts found 137 auditor changes occurring in the 620 companies appearing in Moody's Industrial Manual during the 13 year period. Fifty-four of the 137 changes were due to merger of public accounting firms. Whereas the 620 industrial companies had been audited by 92 different firms in 1952, those same companies were being audited by only 37 different accounting firms in 1965 (2, p. 33). This tendency toward increasing centralization of auditors among large industrial corporations has also been noted by Penney (1), Zeff and Fossum (14, pp. 300-301), and Coe and Palmon (5, p. 10).

The remaining 83 of 137 changes were ones in which an entirely new auditor had been selected by the industrial firm.
Furthermore, in only 13 of the 83 cases was an auditor selected other than one of the Big Eight (2, p. 33). Additionally, only 5 of the 13 companies made changes from Big Eight firms to smaller firms (2, p. 33).

Nothing that "even changes of 1 per cent per year for the wrong reasons might indicate major deficiencies in the fulfillment of the attest function . . ." (2, p. 33), Burton and Roberts next sought to determine the principal reason for the eighty-three changes involving entirely new auditors. They used a three stage approach to do so: analysis of annual reports in the years preceding and succeeding the change, mailing of questionnaires to each changing company's management requesting specification of the principal reasons for the change, and, inquiries directed to the accounting firms involved in the displacements as to their interpretations of the reasons for the changes (2, p. 33).

Burton and Roberts concluded from the seventy-six of eighty-three cases in which judgments as to reasons were determinable that changes in management and the need for additional services were, respectively, the two most common reasons for change, followed by underwriter recommendations resulting from the need for new financing (2, p. 34). While accounting principles disputes appeared to be the major motivating reason in only six cases (7.9 per cent),
it is interesting that changes in accounting principles were secondarily evident in an additional twenty-one cases (2, p. 35).

Finally, Burton and Roberts found no empirical evidence that auditor competition was occurring in the area of looser accounting principles or fee competition (2, p. 36). The fact that six times as many large industrial companies had changed from smaller to Big Eight auditors than the converse was cited as evidence that large corporations were not attempting to increase leverage over their auditors (2, p. 33).

Approximately six months prior to the promulgation of the SEC auditor change disclosure requirements, Carpenter and Strawser (3) published a study of the extent of displacement of local and regional auditing firms by national firms (the authors did not define this term) as a result of first time registration under the Securities Act of 1933. The methodology consisted of mailing questionnaires to the chief financial officers of all corporations which had made initial filings for interstate issuance of securities with the SEC in the last quarter of 1969 and the first quarter of 1970. The five question instrument sought answers in these areas: whether the current auditor was national or not; whether that auditor had been retained for greater or fewer than five years; and in the latter case, whether management or outsiders had been the source causing the change; the reasons for the change; and, finally, the corporation's size in terms of assets and income (3, p. 56).
The authors received 165 usable responses from a sample of 379 (43.5 per cent) and found that "... if the corporation had changed auditors within the last five years the probability was that its auditor was now a national firm" (3, p. 56). One hundred thirty-seven of the 165 respondents reported they had national CPA firms as auditors (3, p. 56).

Ten of the twenty-five corporations utilizing non-national auditing firms had retained those auditors for fewer than five years. Among those ten, six cited a combination of management and outside parties as providing the major impetus for the change, while three companies gave dissatisfaction with quality of services as the primary reason for the change (3, pp. 56-57).

Eighty-one of the 137 corporations who had "gone public" with national auditors had retained those auditors for fewer than five years. In the 38.3 per cent of those cases wherein comments had been received, the major impetus for the change had come from underwriters citing the importance of positive market reaction to the issuance, as well as the prestige, reputation and the greater SEC technical expertise of a national firm (3, pp. 57-58).

Carpenter and Strawser concluded that local and regional auditors are often replaced when a client "goes public." In contrast, Burton and Roberts had found auditor changes to be
infrequent among large industrial concerns which had been
publicly listed for sometime (3, p. 58).

**Auditor Change Research Subsequent to the SEC Mandated Disclosures**

The review of prior research in the area of auditor changes revealed five basic studies since the SEC implemented the requirement for disclosure of auditor displacement. Among those studies, one was a doctoral dissertation, while two others were presented as papers at regional and national meetings of the American Accounting Association (AAA). As was done in the preceding section of this chapter, these studies will be discussed chronologically.

Bedingfield and Loeb (1) published the first research results dealing directly with the SEC mandated disclosures on auditor changes. The authors looked at 250 disclosures reported on Forms 8-K between November 1, 1971, the date Release No. 34-9344 became effective, and February 1973. The 8-K reports were scrutinized to determine whether national firms were gaining or losing clients, as well as for evidence of disagreements. This study defined national firms as the Big Eight plus other national firms. Additionally, Bedingfield and Loeb sent questionnaires to each of the 250 companies, seeking input as to the reasons for the changes (1, p. 67).

The researchers found that national auditors had more clients (than non-national firms) both before and after the
reported changes; however, in contrast with the Burton and Roberts study, Bedingfield and Loeb found that national firms had incurred a net loss of clients. Bedingfield and Loeb raised the conjecture that these antithetical results may have been attributable to their using a broader spectrum of companies than the Fortune 500 Industrials examined by Burton and Roberts (1, pp. 66-67).

Regarding the disagreements issue, fourteen cases (5.6 per cent) indicated clear-cut conflict between the company and its predecessor auditor. Twenty-seven disagreements were noted in those fourteen cases. By far, the most common source of disagreement was that of "timing of revenue recognition" (nine instances), followed, respectively, by "asset valuation" (six instances), and "uncertainty of recovery of book value of assets" (four instances) (1, p. 67).

A total of 141 questionnaires soliciting reasons for changes were received from the 246 companies to whom inquiries were sent. Some interesting results were elicited. Sixteen respondents cited disagreements as a reason for change, intriguingly, two greater than the number of companies who had publicly reported disagreements on Form 8-K. Furthermore, Burton and Roberts had concluded that "fee competition" and "dissatisfaction with services" had seldom motivated auditor displacements. On the other hand, Bedingfield and Loeb reported that 47 and 44 per cent, respectively of respondents had indicated these reasons as having contributed to causing changes (1, pp. 68-69).
The AICPA published tables of types of auditor/client disagreements in the CPA Letter in 1976 and 1979 (6; 13). The former study, containing data from November 1971 through April 1976, lists "recoverability of the cost of some or all assets" as the most frequently mentioned type of disagreement followed by "timing of expense recognition," "timing of revenue recognition," and "need for recording a liability or disclosing a contingent liability," in that order. The brief article indicates that 165 of the 1,667 companies reporting auditor changes on Form 8-K cited 223 total disagreements (6, p. 4).

The latter AICPA study, published in October 1979, presents a similar tabulation for the five years ended in 1978. While both studies reported "recoverability of the cost of some or all assets" as most frequently mentioned, the order of the second and third types of disagreements, described in the preceding paragraph of this thesis, were reversed in the 1979 study. The more recent study describes "necessity for certain audit procedures" as the fourth most common source of disagreement, this classification having been fifth in the earlier tabulation. Finally, the more recent tabulation indicates 297 disagreements were reported by 202 public companies (13, p. 2).

Both the initial CPA Letter report and the subsequent update are extremely brief and contain virtually no analysis. What is presented is solely descriptive in nature. However,
what is most significant is the fact that the data in the earlier study were compiled, at least in part, by reference to the Disclosure Journal, published by Disclosure, Inc., for auditor changes reported to the SEC from January 1973 through April 1975, according to Leonard Lorensen of the AICPA Publication and editorial office. As part of the research for this thesis, the Disclosure Journal compilations of auditor changes were tested for accuracy by tracing reported auditor changes listed in the daily SEC News Digest to inclusion in the Disclosure Journal. The compilations were found to be incomplete.

A 1977 doctoral dissertation entitled, "A Test of the Efficient Market Hypothesis Using Auditor Changes," by John Fertuck (7) of Cornell University was discovered in the prior literature search of Dissertation Abstracts International. Fertuck sought to discover whether the market placed any value on auditor changes, as an efficient market would incorporate such a change in the stock price as soon as it was known. One hundred and fifty-two NYSE firms who had changed auditors between 1954 and 1968 were analyzed along with a sample of firms matched by industry and annual report date. Abnormal return indices were computed for twelve different time periods relative to annual report release dates for the NYSE firms, and were compared, in turn, with corresponding returns for the matched sample using the non-parametric Mann-Whitney U-test (7).
No significantly abnormal returns were found before the successor auditor's first report, indicating that either the market did not learn of the change before the report was released, or that it placed no value on the occurrence. Furthermore, no strong statistical evidence was found to indicate any market inefficiency associated with the release of the successor auditor's first report. Evidence was found, however, indicating that firms which do change auditors are smaller and riskier than firms which do not (7).

The final two studies to be discussed in this chapter were presented by Coe and Palmon as papers at professional meetings of the American Accounting Association. These papers also constitute the most recent research discovered in the literature search for this thesis.

The first Coe and Palmon paper (5) looks into some aspects of auditor turnover for two data bases: large companies and SEC companies. Large companies are defined as the industrial concerns listed on the Standard and Poor's Compustat tape, while the SEC companies population consists of all publicly listed companies changing auditors during the years 1974 and 1975, as per the Disclosure Journal (5, pp. 2-3).

Twenty-four years of large industrial company data through 1975 were utilized by the researchers to yield an initial random sample of 500 NYSE, 200 AMEX, and 300 OTC companies (5, p. 3). However, after certain selection
criteria were applied (registrant not incorporated and traded before January 1, 1952, or auditor not listed in Standard and Poor's Corporate Record), fully 62 per cent of the initial OTC random sample was eliminated. The data analyzed were categorized into all auditor changes and changes other than as a result of CPA firm merger activity (5, p. 3).

The findings in the large company data base included the following. Big Eight firm dominance increased in the twenty-four year span studied, largely through mergers with non-Big Eight firms (5, p. 5); however, the discussant of the paper at the meeting, Wanda A. Wallace, criticized this inference of causality on the grounds that "causality can go in either direction or can be attributed to other factors coincidentally correlated to mergers" (12, p. 6). Auditor change rates over time could not be shown to be statistically related to macroeconomic variables such as the prime rate and inflation rates (5, p. 7). The annual auditor turnover rate increased over time, especially during the last six years of the sample period (5, p. 8). Finally, Coe and Palmon found that auditor/industry concentration had increased during the twenty-four year period, especially in those industries which had the lowest auditor to company ratios in 1952 (5, p. 10).

The results of the SEC companies research can be summarized as follows: for the two years examined, the
cross-section of all publicly listed companies exhibited a higher turnover rate than was the case with the large company data (5, p. 11). Also, the Big Eight audit firms lost clients to smaller firms during the two year span.

The second Coe and Palmon paper (4) sought to obtain indirect evidence on the issue of auditor independence. More specifically, two questions were addressed: whether an auditor is more likely to be dismissed after issuing an unfavorable opinion than after issuing a favorable one; and, secondly, whether or not management is successful in hiring a more compliant auditor after terminating an auditor who has issued an unfavorable opinion (4, p. 3).

Coe and Palmon defined favorable opinions to include qualifications for inconsistent application of generally accepted accounting principles, arguing that "... an opinion qualified for consistency does not generally represent a situation of client-auditor disagreement ..." (4, p. 6). This would probably be "generally true;" nevertheless, instances were noted in the research for this thesis wherein auditors had disagreed with clients (and had qualified opinions) for failure to show adequate justification for a change in accounting principle, as prescribed by Accounting Principles Board Opinion No. 20.

The study was conducted by analyzing audit opinions on financial statements for large and small industrial companies between 1973 and 1977. The large companies population
was defined as the Fortune 500 Industrial list. To ensure a substantial size difference, small companies were selected randomly from the 800 OTC companies in Moody's Industrial Manual as of December 31, 1976. Similarly, to emphasize size differentials, large auditors were defined as the Big Eight, while small auditors were defined as non-Big Fifteen firms. At the date of this writing, the Big Fifteen audit firms are generally considered to consist of the Big Eight plus Alexander Grant & Company; Elmer Fox, Westheimer & Co.; Hurdman & Cranstoun; Laventhol & Horwath; McGladrey, Hendrickson & Co.; Main LaFrentz & Co.; and Seidman and Seidman (11). After applying these and several other selection criteria, Coe and Palmon had usable data for 286 industrial companies audited by non-Big Eight firms and 289 audited by Big Eight firms. The nonparametric test, chi-square, was used to test hypothesized relationships (4, p. 8).

With respect to the large company sample, all of whom were audited by Big Eight firms, the researchers concluded that Big Eight firms are not significantly more likely to be dismissed as a result of issuing an unfavorable opinion rather than a favorable opinion at the .05 level of significance; however, the null hypothesis was rejected at the .10 level (4, p. 10).

On the other hand, Coe and Palmon found that small industrial firms were more likely to dismiss both Big Eight and non-Big Fifteen auditors following the issuance of
unfavorable opinions. The hypothesized relationships were significant at levels of 0.025 and 0.01, respectively (4, p. 10).

The second research question could not be analyzed statistically as a result of non-independent observations. Nevertheless, the researchers presented what they termed as "exploratory" results that "companies who dismiss their auditors for issuing unfavorable opinions in order to obtain a favorable opinion in the next year from a subsequent auditor appear to be unsuccessful" (4, p. 11).

Implications for this Thesis

The quality of research conducted to date in the realm of auditor changes has been quite good; nevertheless, a number of legitimately researchable issues and ramifications remain available for inquiry.

It should be apparent in this chapter that most prior work has been only contiguously related to the research to be presented in this thesis. However, even those few aspects which are being replicated in this thesis will be analyzed from a much broader perspective, encompassing a lengthier time span than has been true generally true in previous efforts.

The current undertaking will also involve an analysis of a great number of heretofore unaddressed areas from the perspective of all publicly listed companies and by the major exchanges versus OTC companies, whereas antecedent
efforts have focused primarily on large industrial concerns, or have been constrained to a relatively short time span. Additionally, several areas of inquiry will be analyzed by Big Eight and non-Big Eight firms involved to provide a more in-depth perspective of auditor-client disagreement activity. Finally, while prior research has been almost wholly descriptive in nature, the research in this thesis will be presented in a rigorous statistical context, where possible.
CHAPTER BIBLIOGRAPHY


Economics is concerned with the optimal allocation of scarce societal resources. The classical economist, Adam Smith, described in his timeless treatise, *An Inquiry into the Nature and Causes of the Wealth of Nations*, how capital and resources are attracted to economic sectors where "quantities available fall short of effectual demand." Ordinarily such an imbalance leads to profitability. In a capitalist society, profitability is the magnet drawing those resources and capital. Profitability is communicated by corporate managers to the financial markets through the issuance of financial statements prepared within the constraints and conventions of the accounting framework. Anderson, Giese and Booker have described the process as follows:

The accounting measurement of income, attested to by the [independent] auditor is reported to the capital market. The capital market, in turn, assigns favorable prices to the securities of the more efficient managements, thus enabling those managements to secure additional resources at favorable terms. Presumably, attestation of the reliability of management’s representations of their operations is an essential link in this process of resource allocation (3, p. 525).

The financial markets in the United States are as broad and liquid as they are due to the perceptions of investors,
both domestic and foreign, as to the relative fairness of these markets in terms of both the accounting measurement criteria which have been developed and the quality of the attest function. The Securities and Exchange Commission has been empowered by the Congress to act as an overseer to insure the perpetuation of that fairness, as far as is practicable.

There can be little doubt that independence on the part of the independent auditor serves as an essential cornerstone to the credibility of the attest function in contributing to financial market fairness. Both the AICPA and the SEC have expounded voluminously on the primacy of the concept of auditor independence, the ability to act with integrity and objectivity. The AICPA Code of Professional Ethics states that

... no matter how competent any CPA may be, his opinion on financial statements will be of little value to those who rely on him—whether they be clients or any of his unseen audience of credit grantors, investors, governmental agencies and the like—unless he maintains his independence (4, p. 56).

Nevertheless, the outside auditor is cast in an anomalous relationship with corporate management in attesting to the fairness with which the latter's financial representations have been presented. His position is akin to that of a judge who can be dismissed by the litigants in whose judgment he sits. Sterling describes the problem as being one of responsibility without any concomitant authority in that "the
Given this conflict of interests, what alternatives exist for the auditor in dealing with a recalcitrant client over an accounting or auditing issue? Leonard Spacek, the outspoken former managing partner of Arthur Andersen & Co. wrote in a classic 1958 piece that the auditor "... can (1) swallow his convictions or (2) he can qualify his opinion on the basis of his convictions or (3) he can resign. Usually the latter two courses are one and the same" (25, p. 371). The implications for viable auditor independence are self evident.

Several incidents perhaps bear out Mr. Spacek's assertions. In 1958, Arthur Andersen & Co. qualified, for a variety of reasons, its report on Alaska Juneau Gold Mining Company. The following year, Arthur Andersen & Co. was replaced by Arthur Young & Co., who audited Alaska Juneau until 1961, when the successor CPA firm listed two major qualifications in its audit report. Alaska Juneau then hired Haskins & Sells (now Deloitte, Haskins & Sells) in 1962. Haskins & Sells subsequently issued an unqualified opinion (28).

In still another case documented in a 1966 Wall Street Journal article, a New York CPA relates how he was fired by the president of a construction company:
He [the president] claimed a lot of work in progress and equipment that I never saw. In my certification of his annual report, I qualified it by saying I never saw them. When the executive came back from the bank after being denied a $100,000 loan because of my qualification he was furious and wanted me to drop it. I refused and he fired me, saying: "I'll get a CPA who'll play ball with me."

(28. p. 1).

A 1970 article by D. R. Carmichael states the point succinctly:

Corporate management can undoubtedly exert tremendous pressure on independent auditors not to require the financial presentation the auditor believes is appropriate. The primary source of this managerial power is the ability to hire and fire the independent auditor. If the auditor is unyielding in his position . . . , management may dismiss one auditor and engage another . . .

(5, p. 73).

Prior to October 1971 there were undoubtedly some instances of public companies seeking and finding more compliant auditors without the stigma of revelation. However, in addition to that, conscientious auditors sometimes succeeded other auditors without the benefit of adequate knowledge of circumstances attending the predecessor's dismissal. The difficulties in obtaining that knowledge were exacerbated by the fact that neither the SEC's disclosure structure, nor the AICPA's SAS 7, "Communications Between Predecessor and Successor Auditors," were yet in effect. These institutional structures would later serve as "warning flags" for both potential successor auditors and the SEC.

In one case involving inadequate forewarning, Peat, Marwick, Mitchell & Co. succeeded Arthur Andersen & Co. on
the 1968 audit of National Student Marketing. Subsequently in a highly controversial, questionable decision, two Peat, Marwick, Mitchell & Co. accountants, Joseph A. Scansaroli and Anthony M. Natelli, were found guilty of having made false and misleading statements (as a result of certain improprieties perpetrated by National Student Marketing officers) in a proxy statement filed in 1969 (1, p. 69; 6, p. 163). Prior to accepting the engagement Natelli had made the customary inquiries to the predecessor auditors:

"In response to Mr. Natelli's direct inquiry," says a Peat, Marwick statement, "the partner in charge of the predecessor firm's Washington office stated that there was no professional reason [we] should not take on the NSMC engagement, and he confirmed this advice by letter. We have since learned from testimony given to the SEC by a partner of the predecessor firm that they resigned the engagement because of serious doubts about the credibility and integrity of NSMC's management" (36, p. 76).

ASR 165 would later specifically describe the issue of questionable management integrity as a reportable disagreement (7, p. 3316). Had the disclosure framework been in effect, it seems likely that the National Student Marketing debacle would not have transpired as it did.

The tenor of professional meeting addresses and literature in the latter 1960's and early 1970's increasingly called into question the adequacy of institutional structures for preserving auditor independence. In a 1972 speech, Leonard Savoie, a former Price Waterhouse & Co. partner and executive vice president of the AICPA, stated that:
In a dialogue continuing over several months, the SEC and the Institute [AICPA] became increasingly concerned about "shopping for accounting principles." This concern stemmed not only from the relatively few instances where a change in auditor appeared to involve a dispute with a client over accounting principles but also from the pressure that might be exerted on an auditor through the mere threat of change (20, p. 13).

There was also a concomitant realization that with public attention directed to such disputes, it would become more difficult for a company to seek more compliant auditors.

Perceiving the foregoing problems, the SEC issued Release No. 9169 in May, 1971 seeking responses from interested parties to its proposed initial auditor change disclosures. As modified by significant AICPA input, the initial release culminated in the first authoritative SEC disclosure requirement, Securities Act Release No. 34-9344.

**Securities Act Release No. 34-9344**

The initial exposure draft circulated by the SEC in May 1971 was intended to strengthen auditor independence by discouraging the practice of changing accountants in order to obtain more favorable accounting treatment (7, p. 3315). The vehicle proposed in Release No. 9169 for dissemination of the information was Form 8-K, a publicly available document to be used by companies registered with the SEC for the purpose of reporting specified current events pursuant to sections 13 and 15 (d) of the Securities Exchange Act of 1934. (A similar document, Form N-1Q, was to be used instead of Form 8-K by registered broker-dealers.) The
relatively terse text of the preliminary document reads as follows:

If an independent accountant has been engaged as the principal accountant to audit the registrant's financial statements, who was not the principal accountant for the registrant's most recently filed certified financial statements, state the date of the change in accountants and the reasons for the change. The registrant shall request the former accountant to furnish the Commission with a letter setting forth his understanding of the reasons for the change and shall file such letter as a part of the report. In the event the former accountant had already begun the current years audit, the letter should indicate the extent of the work done and any problems encountered in connection therewith (22, p. 14). (Italics added.)

Additionally, the SEC sought comment on several possible alternatives. One of these was whether or not any or all of the information proposed for disclosure in Form 8-K should instead be reported on a quarterly basis on Form 10-Q, with the fourth quarter reported in the annual report on Form 10-K. Another alternative considered was whether the change should require reporting within ten days of its occurrence, as opposed to a reporting within ten days after the month in which the new auditor was secured. Finally, the SEC solicited comment as to whether or not the registrant's and auditor's assertions regarding reasons for changes should be made publicly available. (These letters, therefore, being filed as non-public exhibits, whereas the notice of the change itself would have been public information) (22, pp. 14-16).
Responses to the Exposure Draft

In its 2,000 word response filed June 10, 1971, the AICPA declared that "we agree with the premise that a change in independent accountants is an event of sufficient importance to warrant current reporting" (2, p. 12). More specifically, the AICPA agreed that the engagement of the new principal accountant, rather than the termination of the prior accountant, should constitute the reportable event as "... the engagement of a new principal accountant can be expected to be a more definite and readily identifiable event than the termination of the former accountant's engagement" (2, p. 12).

Regarding the SEC proposed alternatives for timing of the reporting of the event and the mode of communication, the AICPA concluded that the event should be reportable on Form 8-K within ten days after the month in which the new auditor was engaged as this would be "... more prompt than that involved in Form 10-Q, and more practical than a requirement for a report within ten days of the event itself" (2, p. 12).

The remaining two recommendations communicated by the Institute to the SEC were dramatically different in perspective in the first case and somewhat surprising in the second. In the first of these recommendations, the AICPA urged that the focal point for reporting be areas of auditor/client disagreement, rather than reasons for changes because the SEC's proposal:
to "call for subjective 'reasons' [for the change in accountants] rather than objective facts relating to the particular kind of problem to which the item is directed might well tend to obscure, rather than reveal, the occurrence of a problem in which the Commission is interested [sic] (2, p. 12)."

Others objected to the citing of reasons on the grounds that such a requirement was too broad and too subjective to be practicable; furthermore, it did not seem reasonable to require the predecessor auditor to make subjective judgments as to the reasons for a decision made by his former client (17, p. 151).

Related to this aspect, the AICPA recommended that the SEC require the predecessor auditor to review the former client's letter so that he could state whether or not he agreed with the statements contained therein, and to explain any reservations that he might have with the registrant's assertions as to disagreements (2, p. 12). The original proposal would have required no such review of the registrant's letter by the predecessor auditor.

The last recommendation made by the AICPA in its lengthy response was surprising in that the Institute felt that both the registrant's and auditor's exhibit letters should be treated as nonpublic information:

'We believe the public interest would be better served by not giving such letters the automatic general distribution that would be entailed by treatment as part of the public 8-K file . . . (2, p. 12)."

The source for this quote did not elaborate upon how the public interest would be disserved by such general distribution.
Superficially, it would seem that the AICPA's recommendation in this area, if adopted, would have contradicted the basic intent of the proposed disclosures.

Finalized Text of Release No. 34-9344

After assessing the various responses to its initial exposure draft, on September 27, 1971, the SEC issued its finalized pronouncement, Securities Act Release No. 34-9344, effective with respect to 8-K reports filed on or after October 31, 1971:

Changes in Registrant's Certifying Accountant.
If an independent accountant has been engaged as the principal accountant to audit the registrant's financial statements who was not the principal accountant for the registrant's most recently filed certified financial statements, state the date when such independent accountant was engaged. The registrant shall also furnish the Commission with a separate letter stating whether in the eighteen months preceding such engagement there were any disagreements with the former principal accountant on any matter of accounting principles or practices, financial statement disclosures, or auditing procedure, which disagreements if not resolved to the satisfaction of the former accountant would have caused him to make reference in connection with his opinion to the subject matter of the disagreement. The registrant shall also request the former principal accountant to furnish the registrant with a letter addressed to the Commission stating whether he agrees with the statements contained in the letter of the registrant and, if not, stating the respects in which he does not agree; and the registrant shall furnish such letter to the Commission together with its own (21, p. 19).

It should be noted that most of the suggestions made by the AICPA were incorporated in the preceding text. The pivotal issue of what critical event should be disclosed was resolved in favor of disclosure of disagreements versus
reasons for changes. Moreover, in the interest of timeliness, filing of an 8-K report within ten days of the hiring of a new auditor was opted for, in opposition to quarterly reports on Form 10-Q or 10-K. Furthermore, the final pronouncement required auditor review of, and comment upon, the client's representations regarding disagreements, as opposed to requiring two totally independent letters of response. However, it is noteworthy that the Commission wisely rejected the Institute's recommendation that the exhibit letters not be given public dissemination on the grounds that, in fact "... treating these letters as non-public information would not be in the public interest" (21, p. 19).

From an interpretive perspective, a few additional points regarding the final promulgation should be highlighted. First, while the original proposal set no time frame for the reporting of the critical event, the final promulgation required the reporting of any disagreements which had occurred in the eighteen months preceding the firing of the successor auditor. Secondly, whether such disagreements were considered to be reasons for the change was not pertinent; furthermore, the fact that the client ultimately acquiesced in the dispute did not negate the need for disclosure (17, pp. 151-152). (However, the latter provision would be widely "misinterpreted," until the issuance of ASR 165, in favor of disclosing only "resolved" disagreements.) Additionally, the
disclosure requirements pertained only to changes in principal auditors; hence, a change in auditors for a significant subsidiary (as defined in Regulation S-X, Rule 1-02) (23, pp. 1003-1004) did not constitute a reportable item unless the subsidiary was itself a registrant subject to the reporting requirements of the 1934 Act (17, p. 152). Finally, Release No. 34-9344 provided no definition for the term "disagreements," nor did it specifically require a description of the nature of any relevant disagreements.

The advent of the SEC's auditor change disclosure requirements was widely acclaimed as an improvement in the institutional structures for enhancing auditor independence. Charles N. Johnson of Arthur Andersen & Co. wrote in early 1972:

To the extent that changes in auditors have resulted from disagreements on material matters, the new requirements may improve the chances for the auditor to sustain his position, while not inhibiting clients from changing auditors for other reasons (17, p. 154).

According to former Big Eight partner and AICPA executive, Leonard Savoie:

The bright light of publicity should go far in strengthening the hand of an auditor in dealing with a client who wants to cut corners and also in deterring a firm from lowering standards to obtain a client (20, p. 14).

Finally, Henry P. Hill, in 1973 the national director of accounting and auditing services for Price Waterhouse & Co. assessed the import of the disclosures as follows:
"With these new 8-K letters you're going to see more and more of these debates coming to the surface . . . . If the company doesn't make the change we feel is necessary and then switches accountants, it'll end up at the SEC explaining its methods, even if the company makes the change and still switches accountants . . . it still has to disclose the problem" (35, p. 32).

Securities Act Release No. 34-9344 constituted a tremendous step forward. Nevertheless, as with most initial endeavors, subsequent problems of implementation would necessitate a reevaluation of adequacies and inadequacies in the disclosure requirements. Accounting Series Release No. 165 would represent the fruition of that process of reevaluation.

Accounting Series Release No. 165

In the opening comments to ASR 165, "Notice of Amendments to Require Increased Disclosure of Relationships Between Registrants and Their Independent Public Accountants," the SEC concluded that the necessary independence of accountants, both in fact and appearance, did indeed exist (7, p. 3315). The Commission cited two instances they felt corroborated that assertion. In one case, an auditor reported that, while its client's accounting procedure were in conformity with generally accepted accounting principles, those principles were not the most appropriate under the particular factual circumstances. In the latter case, the Commission cited an auditor's report on a five year summary of earnings which indicated that the accounting principles used for a certain transaction in the subsequent unaudited
interim period were such that an adverse opinion would have been required, had the auditor reported on that interim period (7, p. 3315).

Furthermore, SEC Chief Accountant, John C. Burton, cited, in late 1973, a number of other positive effects which had resulted from the auditor change disclosure rules. In addition to making companies more reluctant about "shopping" for compliant auditors, Burton indicated that 8-K report disclosures had frequently provided the SEC with initial warning signals of serious operating and, consequently, financial problems in a number of companies. An 8-K filed by U.S. Financial had prompted an SEC investigation and subsequent court action against the company and its auditors, Touche Ross & Co. Similarly, a number of computer leasing companies had come under SEC scrutiny based upon 8-K reports filed in 1972 indicating those companies had apparently terminated auditors to avoid qualified opinions as a result of the advent of the new series of IBM 370 computers (36, p. 76). The newer generation hardware had called into serious question the recoverability, from operating revenues, of the costs invested in the older model computers. Nevertheless, the SEC's experiences with 8-K auditor change disclosures had indicated a number of problem areas.

Problems Encountered with Release No. 34-9344

Soon after the issuance of Release No. 34-9344, it became obvious that the requirements of the document were
stated too ambiguously. Not all companies were reporting as fully as the SEC had intended them to do. According to SEC Chief Accountant Burton, some companies would only mention that disagreements existed, without discussing them; furthermore, many companies would discuss only resolved disagreements (36, p. 76).

Moreover, considerable confusion existed as to what manner of occurrences constituted reportable disagreements. It is clear that many companies had adopted a philosophy of not disclosing disagreements, when in doubt. Refac Technology Development Corporation did just that in 1973; however, after prompting by the SEC staff, Refac filed an amended 8-K reporting disagreements with its former auditors (36, p. 77).

Similarly, first Executive Corporation's March 1973 8-K reported no disagreements, although its former auditor, Coopers and Lybrand, indicated four unresolved accounting issues (36, p. 77).

ICB Corporation, a bank holding company, said little more in its November 1971 8-K than that Arthur Andersen & Co. had discussed with bank management certain of the bank's accounting practices. Practices the bank saw no need to change insofar as they met the requirements of regulatory authorities; the SEC later sought additional information in the matter (29, p. 36).

As a final example of the confusion in defining disagreements under Release No. 34-9344, the 8-K of State Savings and
Loan Association of July 1974 is noteworthy, and not at all atypical. In one paragraph of the company's 8-K it is stated that the "... registrant had no disagreements with its former principal accountant, Peat, Marwick, Mitchell & Co. on any matters ..." (26, p. 1). Two paragraphs of disagreements are then delineated, followed by a statement (rebutted by the auditor) that

Registrant considers that none of the foregoing referenced discussions involved disagreements with the former principal accountants of the sort to be reported by Item 12 of Form 8-K. They are set forth ... in the spirit of full disclosure with regard to the relationship between Registrant and its former principal accountant ... (26, p. 2).

Other areas of concern became manifest. For example, was the eighteen month span preceding the change in auditors too short for reporting disagreements? Also, did disclosure in Form 8-K alone provide an adequate enough scope for dissemination of disagreements, or should stockholders be more directly informed of disagreements via proxy statements? Coopers and Lybrand and its former client, Cerro Corporation, quarreled in eight major areas reported in a sixteen page 8-K. In this widely publicized case, Cerro Corp's. preliminary 1971 earnings figure of $8.5 million was restated as $2.8 million, at Coopers and Lybrand's insistence (18, p. 61). Cerro Corp's. management apparently smoldered over the conflict, waiting seventeen months before terminating its auditor of thirty-six years. Had Cerro Corp's management waited one
month, the entire altercation would have gone unreported, causing writers of Forbes to conclude:

. . . that Cerro had hoped that nobody who mattered would pay attention to the Form 8-K letters. Why, we wondered, doesn't the SEC insist that these letters be mailed to stockholders and to brokerage houses?

Considering how close Cerro came to sweeping the whole thing under the rug, it is a fair question to ask whether the whole Form 8-K process does any good unless it is given wide circulation (18, p. 62).

Additionally, the SEC staff pondered a number of other problematical areas which had not been foreseen in the initial disclosure requirements. Among those, should the auditor disclosures be triggered, in the interest of timeliness and expediency, by the termination of the predecessor auditor, rather than by the engaging of the successor auditor? Also, should the termination of the auditor for a principal subsidiary of a registrant constitute a reportable disagreement? Finally, should there be some form of "follow up" disclosures to auditor changes which had been preceded by disagreements?

In late 1973, A. A. Sommer Jr., then a commissioner of the Securities and Exchange Commission said in a speech before the AICPA membership that

. . . frequently the "competitive zeal" among accountants has resulted in a willingness of some firms "to give clean opinions when the competition insisted upon a dirty one."

. . . the SEC had come across too many instances of accountants succeeding other auditors fired by corporations because of differences with management (30).
Perhaps such occurrences could be alleviated by requiring, in addition to the disclosures already required, the disclosure of instances wherein the successor auditor had accepted a client position contrary to the preferences of the terminated auditor.

In light of these and other considerations, the SEC concluded that it would be desirable to both further clarify and expand upon the level of disclosures required regarding relationships between auditors and their clients. In Securities Act Release No. 5534 dated October 11, 1974, the SEC sought responses to its proposals to amend Form 8-K and Regulation S-X to include

. . . (1) a report of any disagreements with accountants within 24 months preceding termination as compared with 18 months currently, (2) footnote disclosure [on Form 10-K] of any material disagreement over accounting principles or practices within two years of the most recently filed statement and (3) additional disclosure of relationships between registrants and auditors via proxy rule changes (16, p. 11).

After considering the various points of view and recommendations, the SEC released its final document, Accounting Series Release No. 165, on December 20, 1974. ASR 165 constitutes, by far, the SEC's most lengthy auditor change promulgation to date.

**Changes to Form 8-K Reporting Requirements**

The Form 8-K disclosures for auditor changes were considerably modified and expanded upon with the issuance of ASR 165. The changes pertinent to Form 8-K dealt primarily
with: (1) further elucidation upon what constituted reportable disagreements, including some specific situations not dealt with in Release No. 34-9344, (2) a new requirement for disclosure of types of audit opinions rendered preceding the auditor change, (3) expansion of the time span for reporting disagreements, (4) a requirement that disagreements be specifically described and included in the body of the Form 8-K, rather than filed as an exhibit letter, and finally (5) predecessor auditor responsibilities with respect to a client failing to file the necessary disclosures.

Prior to the issuance of ASR 165, the SEC staff often found instances of a year or more elapsing between the date of termination of a predecessor auditor and the engagement of the successor. Consequently, in the interest of timeliness, the SEC changed the initial critical reporting event from the hiring of the new auditor to that of terminating the predecessor. Hence, two Form 8-Ks would be required if such a delay occurred: one reporting termination and one reporting the hiring of a subsequent auditor. Furthermore, an 8-K report would be triggered regarding an auditor who did not report on financial statements due to his termination during interim work:

For example, where accounting A reported on the financial statements of the prior year, accountant B was engaged for the current year but was replaced by accountant C before he completed any examination, reports . . . would be required with respect to the change from Accountant A to . . . B and from . . . B to . . . C (7, p. 3316).
ASR 165 also stipulated that resignation or declination to stand for re-election after completion of an audit, the substantive act of resignation, constituted reportable actions. Finally, changes in the auditor for a significant subsidiary (as defined in Regulation S-X, Rule 1-02) or non-incorporated segment such as a division became a reportable event (7, pp. 3315-3316). Previously, disclosures had only been initiated by changes involving principal auditors.

A new facet of auditor change disclosure was evidenced in the requirement of ASR 165 that the registrant report whether the principal auditor's reports for either of the two prior fiscal years had contained an adverse opinion, a disclaimer of opinion, or an opinion qualified as to uncertainty, audit scope, or accounting principles. Consistency qualifications were excluded, based upon comments received to the exposure draft (7, p. 3316). Though auditor opinion data is obviously available elsewhere, the SEC staff felt that including such data in the 8-K report "... would bring together in one place information which is relevant in the evaluation of auditor-client relationships" (7, p. 3316).

After careful consideration, and in view of the highly publicized Cerro Corp. situation, the SEC proposed in its exposure draft to extend the time span for reportable disagreements from the eighteen month time span preceding the engagement of the new auditor to twenty-four months prior
to the initial reportable event. The SEC staff reasoned that the previous requirement had been insufficient to assure the reporting of disagreements in the two prior audits. Furthermore, the twenty-four months span was selected as it was consistent with the usual reporting convention of comparative financial statements (7, p. 3316).

However, this was one area where the Auditing Standards Division of the AICPA was dissatisfied with the SEC proposal. The AICPA response letter stated that although they generally agreed with the proposed Form 8-K changes, the Institute had concluded that it might be preferable for the period of time for which disagreements were to be reported to be equated with the preceding two fiscal years or to the preceding two reports on audited financial statements, instead of the preceding twenty-four months (16, p. 11). ASR 165 ultimately was stated in terms of the two preceding fiscal years and the subsequent interim period.

The SEC also embodied several clarifying comments in ASR 165 regarding the disagreements issue. The staff made it clear that there was to be a description of all disagreements, including those wherein the disagreement was ultimately resolved to the former auditor's satisfaction:

This clarification was necessary as a result of the experience gained from analyzing 8-Ks filed in which no description was given of disagreements or in which a simple statement was made that there were no unresolved disagreements and staff follow-up was required to obtain the necessary information (7, p. 3316).
Additionally, several commentators to Release No. 5534 had questioned whether disagreements at lower staff levels were to be reported. The SEC subsequently ruled that disagreements were to be contemplated as occurring at the "decision-making" level; that is "... between personnel of the registrant responsible for presentation of its financial statements and personnel of the accounting firm responsible for rendering its report" (7, p. 3316).

Furthermore, in ASR 165 the SEC admonished registrants that the term disagreements should be "interpreted broadly." They cited two cases as examples. Were an auditor to resign or be dismissed after informing a registrant that internal controls were inadequate to provide reasonable assurance of reliable financial statements, this would constitute a reportable disagreement. Similarly, a reportable disagreement would exist were an auditor to resign or be dismissed after concluding that he could no longer rely upon management representations, or if the auditor were unwilling to be associated with the client's financial statements (7, p. 3316).

Another change in the reporting requirements is found in the SEC's decision to require that disagreements be delineated in the body of the 8-K filing, rather than appended by the registrant as a separate exhibit letter. Moreover, the auditor's exhibit letters were to be filed with each 8-K copy. Previously, the exhibit letters had only been included with the three complete copies of the 8-K filed with the SEC.
and the copies filed with each exchange on which securities of the registrant were listed; however, the letters were not included with the five additional copies sent to the SEC (17, p. 152). The SEC's purposes here were to both simplify the filing process and to preclude the practice some registrants had pursued of submitting exhibit letters separately from the 8-K itself. The result of this practice was that full disclosure of disagreements had not always been readily available to the public (7, p. 3317).

The final 8-K item dealt with in ASR 165 concerned guidance for auditors when former clients apparently had failed to file the necessary 8-K reports pursuant to an auditor change. As soon as the change occurred, the auditor was encouraged to bring the reporting responsibility to the attention of the registrant. Furthermore, in cases where the auditor was aware that the required reporting had not been made (because the auditor had not been asked by the client to prepare his letter of concurrence or non-concurrence with the client's disagreement representations), ASR 165 stated that the auditor should consider advising the registrant in writing of that reporting responsibility, with a copy sent to the Commission (7, p. 3317).

To conclude the foregoing discussion, the finalized text of ASR 165 regarding amendments to Form 8-K follows:
Item 12. Changes in Registrant's 
Certifying Accountant

If an independent accountant who was previously engaged as the principal accountant to audit the registrant's financial statements resigns (or indicates he declines to stand for re-election after the completion of the current audit) or is dismissed as the registrant's principal accountant, or if an independent accountant on whom the principal accountant expressed reliance in his report regarding a significant subsidiary resigns (or formally indicates he declines to stand for re-election after the completion of the current audit) or is dismissed, or another independent accountant is engaged to audit that subsidiary:

(a) State the date of such resignation (or declination to stand for re-election), dismissal or engagement.

(b) State whether in connection with the audits of the two most recent fiscal years and any subsequent interim period preceding such resignation, dismissal or engagement there were any disagreements with the former accountant on any matter of accounting principles or practices, financial statement disclosure, or auditing scope or procedure, which disagreements if not resolved to the satisfaction of the former accountant would have caused him to make reference in connection with his report to the subject matter of the disagreement(s); also, describe each such disagreement. The disagreements required to be reported in response to the preceding sentence include both those resolved to the former accountant's satisfaction and those not resolved to the former accountant's satisfaction. Disagreements contemplated by this rule are those which occur at the decision-making level; i.e., between personnel of the registrant responsible for presentation of its financial statements and personnel of the accounting firm responsible for rendering its report.

(c) State whether the principal accountant's report on the financial statements for any of the past two years contained an adverse opinion or a disclaimer of opinion or was qualified as to uncertainty, audit scope, or accounting principles; also describe the nature of each such adverse opinion, disclaimer of opinion, or qualification.
(d) The registrant shall request the former accountant to furnish the registrant with a letter addressed to the Commission stating whether he agrees with the statements made by the registrant in response to this item and, if not, stating the respects in which he does not agree. The registrant shall file a copy of the former accountant's letter as an exhibit with all copies of the Form 8-K required to be filed pursuant to General Instructions F (7, pp. 3318-3319).

Stanley H. Weiss, a former partner with the now dissolved accounting firm of Clarence Rainess & Co., wrote a very insightful critique of ASR 165 in which he admonished accountants of what he perceived as significantly increased potentialities for liability exposure. In his article, Weiss expressed concern with "... the lingering uncertainty as to what constitutes a 'disagreement' " (34, p. 12); however, he particularly takes issue with the two examples of "broadly interpreted" disagreements cited from ASR 165 in this chapter.

The first case described in ASR 165 had dealt with an auditor's resigning or being terminated after concluding that internal controls were inadequate to allow an opinion to be expressed. Weiss correctly notes that if such were the case, "... it is manifestly unclear how any successor auditor could ultimately conclude an examination with the issuance of an opinion" (34, p. 13).

The SEC's second exemplary case dictated that a disagreement would exist were an auditor to decide he was unwilling to be associated with financial statements prepared by management. Weiss contends that
an unwillingness to be associated with the financial statements is so subjective an approach as to be virtually meaningless. In any case, it is hard to believe that an accountant would set forth such a reason as a disagreement. Obviously the points of disagreement would lie in other areas (34, p. 13).

According to Weiss, both examples are indicative of the practical difficulties inherent in responding to ASR 165, as well as being illustrative of the potentially increased exposure accountants might face as a consequence of compliance (34, p. 13). Interestingly, examples of both cases described in ASR 165 were encountered in the research for this thesis.

New Reporting Requirements Under Regulation S-X

By far the more controversial aspects of ASR 165 are contained in the initial requirement for auditor change disclosures under Regulation S-X. Heretofore, it should be recalled, reporting of disagreements had been constrained to Form 8-K, whereas Regulation S-X now mandated that footnote disclosures of disagreements should appear in the annual financial statements, via Form 10-K.

Designated as Rule 3-16(s) to the general notes required by Regulation S-X, the disclosure requirements proposed in Securities Act Release No. 5534 had two facets. The first facet proposed a mere condensation of disagreements already reported on Form 8-K. However, the second and more controversial aspect required pro forma disclosure of the nature and effects of any transactions or events occurring subsequent to an auditor change which were similar to
transactions or events which entailed disagreements, but were accounted for in a manner different from that which the predecessor had concluded was necessary. The SEC maintained that such disclosures would

... make investors aware of situations where alternative accounting approaches may be followed and are favored by at least one professional accountant, and the effect of such alternative approaches. In addition, it is believed that such disclosure requirements may have the effect of discouraging shifts in accountants simply to obtain approval of an alternative accounting approach (7, p. 3317).

Release No. 5534 also proposed that the SEC staff would consider waiving the rule upon submission of a statement that disclosure of the effects of applying the alternative accounting approach favored by the predecessor would not be significant to investors (7, p. 3317).

The AICPA roundly criticized the proposed Rule 3-16(s). Regarding the first facet, they contended that any disclosure in Form 10-K of disagreements between management and previous auditors would be inappropriate:

The Commission's present rules provide adequate protection for the sophisticated investor who is fully cognizant of the matters to be included in Form 8-K... Other investors might well be uncertain as to the purpose of such disclosures (16, p. 12).

Hence, the AICPA position was stated in deference to the concept of differential disclosure. However, ironically, the Institute's position (had it been sustained) would have reduced public scrutiny of such matters, thereby attenuating the independence enhancing measures being sought.
On the other hand, it is interesting to note that the AICPA sponsored Commission on Auditor’s Responsibilities (the Cohen Commission) subsequently concluded in its 1978 report that "... the type of disclosure in financial statements required by the SEC in ASR 194 concerning disagreements when a change in auditors is made should be required for all audited financial statements" (11, p. 108), not just for publicly listed companies. (ASR 194 will be discussed more fully later in this chapter.) Moreover, the Cohen Commission concluded that the initial reporting of an auditor change and any attendant disagreements should be communicated in a management report accompanying audited financial statements:

The Commission proposes that, when auditors are changed, disclosure comparable to that required by the SEC as stated in ASR 165 should be included in the report by management which we anticipate would accompany all audited financial statements. The disclosure should appear in the first report by management issued after it is known that the auditor will not be retained (11, p. 108).

These proposed modifications to generally accepted auditing standards had not yet been implemented by the Auditing Standards Board of the AICPA at the date of this writing.

The AICPA also raised a number of questions and issues with respect to the second facet regarding pro forma disclosure of accounting alternatives. The AICPA position paper argued that
The proposed disclosure in the current financial statements of the pro forma effect on the recording of a current transaction similar to one involved in a prior "disagreement," had that transaction been accounted for or disclosed in a manner different from that recommended by the former accountant, would raise questions in the minds of the users . . . as to what the financial statements should show in spite of the fact that the current auditor has approved the accounting for the transaction and has issued an unqualified opinion . . . (16, p. 12).

Also, the SEC's exposure draft did not specifically portend prior auditor involvement; however, the AICPA contended that the successor auditor would probably have to consult with the previous auditor to realistically enable the succeeding accountant to render an opinion on the pro forma effects of the alternative. The predecessor might well be hesitant to do so:

. . . must not the former accountant be consulted and asked to agree that the current auditor's interpretation and application of his [the predecessor's] prior recommendations are appropriate? Must not the former accountant be consulted to determine that the facts and circumstances underlying the current transaction are sufficiently similar to the transaction giving rise to the prior "disagreement" to justify the proposed required disclosure? If it will be . . . necessary to involve the prior accountant in such disclosures he may well refuse to become involved (16, p. 12).

Notwithstanding the concerns of the AICPA and others, the SEC issued the amendments to Regulation S-X in ASR 165 almost exactly as had been proposed. One modification, however, was made not to require pro forma disclosures where the method asserted by the former accountant had ceased to
be "generally accepted" due to subsequently issued technical standards. The finalized text of the new Rule 3-16(s) read as follows:

(s). Disagreements on accounting and financial disclosure matters -- If, within the twenty-four months prior to the date of the most recent financial statements, a Form 8-K has been filed reporting a change of accountants and included in such filing there is a reported disagreement on any matter of accounting principles or practices or financial statement disclosure, and if such disagreement, if differently resolved, would have caused the financial statements to differ materially from those filed, state the existence and nature of the disagreement. In addition, if during the fiscal year in which the change in accountants took place or during the subsequent fiscal year there have been any transactions or events similar to those which involved a reported disagreement and if such transactions are material and were accounted for or disclosed in a manner different from that which the former accountants apparently concluded was required, state the effect on the financial statements if the method which the former accountant apparently concluded was required had been followed. The effects on the financial statements need not be disclosed if the method asserted by the former accountant ceases to be generally accepted because of authoritative standards or interpretations subsequently issued (7, p. 3319).

Stanley Weiss, in his critique of ASR 165, expressed concerns similar to those set forth by the AICPA in its response to the exposure draft. He criticized the requirement for pro forma disclosures as being potentially dangerous to the successor in discharging his attest function in that it would be extremely difficult for the succeeding auditor to know of all the attendant circumstances which would make the event similar. He also poses a number of related questions: would it be proper to question the previous auditor as to
the facts and circumstances of the alternative? What should the previous auditor's responsibilities and liabilities be to examine the current circumstances? Finally, should the predecessor auditor have to make representations or warranties to the successor (34, p. 13)?

Furthermore, Weiss expresses concern with the pro forma disclosures requirement from an information economics perspective. (See, for example, Demski (12) and Feltham (13)). That is, the costs of compliance in terms of staff time and auditing costs might in some cases substantially exceed the possibly marginal benefits to be derived from the pro forma disclosures:

Assume for a moment that the "similarity of events" criteria had been satisfied and that a disagreement over the use of FIFO or LIFO in valuing inventories had been reported . . . . If the client used FIFO, can anyone project the dollar cost and time required to recompute his inventory at LIFO for mere disclosure purposes? The same would be true of a disagreement over depreciation methods for a multinational corporation with hundreds of millions of dollars in property assets (34, p. 14).

Weiss concludes by saying that though the SEC's intent had been to discourage auditor "shopping," the actual result might be "... to cast one honest and sincere professional against another, frequently in cases involving legitimate differences in audit judgment" (34, p. 14).

**New Amendments to Proxy Rules**

In England and most of Canada, the various Companies and Province Acts allow an auditor whom management has moved to
terminate a forum at annual stockholder meetings for airing
the auditor's interpretation of the reasons for his proposed
dismissal. Stockholder ratification of the appointment and
tenure of auditors is mandated by statute (15, p. 1). Further-
more, in recent years several English corporate managements
have been forced by mandate of stockholders to retain an
auditing firm which had been proposed for termination due to
an accounting related disagreement (15, pp. 7-8). However,
such countervailing measures to enhance the resolve of
auditors in this country have been severely lacking. A num-
ber of prominent accountants including Leonard Savoie (20),
a former executive vice president of the AICPA, and D. R.
Carmichael (5), current director of auditing research for
the AICPA, have noted with alarm the imbalances in these as-
pects of the institutional structures for preserving auditor
independence.

Even with the advent of the Form 8-K and, subsequently,
the 10-K disclosure requirements, stockholders seldom have
had sufficient information regarding relationships between
auditors and management. This is attributable to the fact
that though Forms 8-K and 10-K are publicly available, they
are, in fact, readily available only to a very select seg-
ment of the public. In sum, very few stockholders ever
solicit the 10-K's indicated in annual reports as being avail-
able. Even fewer stockholders would ever become aware of an
8-K triggered by an auditor change unless they had subscribed
to the rather obscure SEC News Digest, or had become aware of an 8-K filing in the quarterly report, Form 10-Q.

In proposing a number of amendments to Item 8 of Schedule 14A of the proxy rules in Release No. 5534, the SEC sought to alleviate some of these problems by requiring additional proxy statement disclosures of the relationships between registrants and independent accountants. The auditor change related amendments centered upon (1) disclosure of the auditor selected or to be recommended, (2) disclosure of the name of a previous auditor if different from the currently selected or recommended auditor, (3) disclosures of any disagreements with a predecessor, along with his representations, and (4) disclosures as to whether representatives of auditing firms would be available at the annual stockholders' meeting.

The first of the four items listed above was designed by the SEC to make shareholders aware of the identity of the auditor of record even in situations wherein stockholders were not being asked to vote upon or ratify the selection. The Commission felt that such knowledge would enhance the stockholders' recognition of the role of the independent accountant (7, p. 3317).

The second aforementioned item, naming a displaced principal auditor was intended to inform stockholders that a change in auditors had occurred, and to require naming the auditor-of-record in cases where no formal action had yet been taken to select an auditor for the current year (7, p. 3317).
Item number three concerning proxy statement disclosure of disagreements with a predecessor auditor was criticized in several respects by the AICPA. Paralleling the 8-K treatment, the exposure draft proposed that the registrant would include a description of any disagreements with the predecessor auditor in the preliminary proxy materials. The materials were to be submitted to the former auditor, allowing him five business days from date of receipt to return a statement of up to 200 words (for inclusion in the final proxy materials) as to any reservations he might have regarding the accuracy of the disagreement assertions. The Institute responded that

... it did not believe Item (c) [described above] should be adopted in that (1) the limitation of 200 words and five business days for responding to stockholders' inquiries may create practical problems that may defeat the purpose of the proposal and (2) the prior accountant may, for various reasons, decline to review the proxy material, thereby defeating the purpose of the proposed rule (16, pp. 12-14).

In response to these objections, the SEC ultimately chose not to delete the proposed disagreements disclosures; however, the Commission did eliminate the rigid 200 word restriction and it extended from five to ten the number of days for the terminated auditor to respond.

The final proposals for amending the proxy rules required the proxy materials to indicate whether or not representatives of the auditors for the current year and the most recently completed fiscal year were expected to be
present at the stockholders' annual meeting. The Commission's intent was to encourage communication between stockholders and auditors by allowing auditors the opportunity to bring certain matters to the attention of shareholders, while responding to reasonable questions from shareholders (7, p. 3318).

Stanely Weiss presents an interesting scenario illustrative of the potential for liability exposure in the foregoing. Assume an auditor change subsequent to a reportable disagreement. Further assume full compliance with the new proxy rules, that both the predecessor and current auditors were to attend the stockholders' meeting, and, finally, that the new auditors had honestly accepted the client's position as to the area of disagreement, accounting for it differently from the predecessor. Continuing,

Can you imagine the spectacle of two honest and sincere professional accountants sitting at the same table while a shareholder says, in effect, "If auditor A was right, then auditor B must be wrong; but, on the other hand, if auditor B is right, then auditor A must be wrong." One potential solution for the troubled shareholder would be to sue everyone in sight on the presumption that someone is wrong. Add a soft market and the potential for significant stockholder litigation is chilling (34, pp. 14-15).

It should be noted that the proposal (and the subsequent promulgation) imposed no statutory requirement that the auditors in fact be present at the annual meeting. Consequently, the predecessor might decide, on advice of counsel, not to attend. Similarly, an "auditor shopping" management
(toward whom the disclosure requirements are directed) might entice a compliant successor not to attend, abrogating the usual custom of having an auditor representative present. Unfortunately, these conditions could effectively circumvent the SEC's intent in the disclosure requirements.

The final promulgation pertaining to Item 8 of Schedule 14A entitled, "Relationships with Independent Public Accountants," is presented as follows:

Item 8. Relationship with Independent Public Accountants

If solicitation is made on behalf of management of the issuer and relates to an annual meeting of security holders at which directors are to be elected, or financial statements are included pursuant to Item 15, furnish the following information describing the issuer's relationship with its independent public accountants:

(a) The name of the principal accountant selected or being recommended to shareholders for election, approval or ratification for the current year. If no accountant has been selected or recommended, so state and briefly describe the reasons therefor.

(b) The name of the principal accountant for the fiscal year most recently completed if different from the accountant selected or recommended for the current year or if no accountant has yet been selected or recommended for the current year.

(c) If a change or changes in accountants have taken place since the date of the proxy statement for the most recent annual meeting of shareholders, and if in connection with such change(s) a disagreement between the accountant and issuer has been reported on Form 8-K or in the accountant's letter used as an exhibit thereto, the disagreement shall be described. Prior to submitting preliminary proxy material to the Commission which contains or amends such description, the issuer shall furnish the description of the disagreement to any accountant with whom a disagreement has been reported. If that accountant believes that the description of the disagreement is incorrect or incomplete, he may include a brief statement,
ordinarily expected not to exceed 200 words in
the proxy statement presenting his view of the
disagreement. This statement shall be sub-
mitted to the issuer within ten business days
of the date the accountant receives the issuer's
description.

(d) The proxy statement shall indicate
whether or not representatives of the prin-
cipal accountants for the current year and for
the most recently completed fiscal year are
expected to be present at the stockholder's
meeting with the opportunity to make a state-
ment if they desire to do so and whether or
not such representatives are expected to be
available to respond to appropriate questions
(7, pp. 33-9-3320).

The amendments to Regulation 14A and for Form 8-K be-
come effective for 8-K's and proxy statements filed subse-
quent to January 31, 1975. The amendments to Regulation
S-X became effective with respect to Forms 10-K filed for
periods beginning on or after January 1, 1975.

Accounting Series Release No. 194

About a year and a half after the issuance of ASR 165,
the SEC issued Securities Act Release No. 5701 proposing cer-
tain amendments to the provisions set forth initially in ASR
165 pertaining to the required auditor change disclosures
under Rule 3-16(s) of Regulation S-X. Based upon objections
to the original promulgation, Release No. 5701 proposed to
separate the two dimensions of Rule 3-16(s): the fact of an
8-K reported disagreement, and, secondly, the effect on fi-
nancial statements, had the client's position in an area of
disagreement been subsequently accepted by a successor auditor.
There were four basic areas of objection to the existing Rule 3-16(s) regarding the requirement for continuing disclosure in the footnotes to the financial statements of the fact of a disagreement in circumstances where no effects required disclosure, as the predecessor's position had been subsequently sustained.

The first of these centered upon the fact that in the vast majority of cases, disagreements are resolved to the satisfaction of the former auditor, and the same kinds of transactions or events continue to be accounted for or disclosed as the former auditor had concluded was required. Hence, while a different resolution could have effected the financial statements, the statements typically had not been so affected (8, p. 3435).

Another objection to Rule 3-16(s) held by many was that the requirements of Form 8-K and the proxy rules provided adequate notification to those users of financial statements who might deem such disclosures material to their consideration (8, p. 3435).

Also, disclosure of only the fact of a disagreement had been intended to inform readers that the financial statements might have been prepared differently if the disagreement had been resolved differently, and not to raise questions as to the adequacy or fairness of the statements presented. Some voiced concern that this might be misunderstood (8, pp. 3435-3436).
Finally, several critics of ASR 165 contended that auditor changes following disagreements were not numerous and that only a small portion of those cases would involve circumstances wherein the successor auditor had deemed acceptable accounting principles, practices, or financial statement disclosures which the predecessor had found unacceptable. Therefore, the preponderance of disclosures under Rule 3-16(s) would require no disclosure of effect upon financial statements (8, p. 3436). Consequently, including redundant information on the fact of a disagreement might obfuscate the critical disclosure regarding a change which was in fact contrary to the previous auditor's conclusions.

Release No. 5701 was styled to reflect the spirit of these objections. Only nine letters of comment, all favorable, were received to the proposal (8, p. 3434). Therefore, the SEC amended Rule 3-16(s) of Regulation S-X to require footnote disclosure of the nature and existence of a disagreement previously reported on a Form 8-K only when disclosure was required of a case where the successor auditor had found acceptable what his predecessor had considered unacceptable. The revised Rule 3-16(s), effective for financial statements filed after August 31, 1976, currently reads as follows:

(s) Disagreements on accounting and financial disclosure matters -- If, (1) within the twenty-four months prior to the date of the most recent financial statements, a Form 8-K has been filed reporting a change of accountants, (2) included in the Form 8-K there was a reported disagreement on any matter of accounting principles or practices or financial statement disclosure,
(3) during the fiscal year in which the change of accountants took place or during the subsequent fiscal year there have been any transactions or events similar to those which involved the reported disagreement, and (4) such transactions or events were material and were accounted for or disclosed in a manner different from that which the former accountants apparently would have concluded was required, state the effect on the financial statements if the method had been followed which the former accountants apparently would have concluded was required. These disclosures need not be made if the method asserted by the former accountants ceases to be generally accepted because of authoritative standards or interpretations subsequently issued (8, p. 3436). (Italics added.)

Accounting Series Release No. 206

Before proceeding to the most recent SEC release dealing with auditor changes, one minor aspect regarding Form 8-K filings should be mentioned. ASR 206, dated January 13, 1977, required that Forms 8-K reporting auditor changes (and other current events required to be reported on Form 8-K) would henceforth have to be filed within fifteen calendar days after the occurrence of a reportable event. Previously, the requirement had been that the filing be made within ten days after the month in which an auditor had resigned or been terminated.

In deciding upon the fifteen day requirement, the SEC rejected recommendations that all 8-K reported data be transferred to quarterly Forms 10-Q (as had been suggested by the Wheat Committee Report) in the interest of timeliness. Similarly, the Commission's exposure draft had proposed a ten day reporting deadline; however, this was ultimately
changed to the fifteen day requirement in view of objections to the impracticability of complying with a ten day deadline (9, p. 3479).

Accounting Series Release No. 247

The most recent modifications to the auditor change disclosure requirements are contained in ASR 247, which was issued May 26, 1978, effective for all Forms 8-K and proxy materials submitted to the SEC after July 31, 1978. The exposure draft for the promulgation, Securities Act Release No. 5868, dated September 26, 1977, proposed changes to proxy rules and Form 8-K in two major areas. The first of these dealt with audit committee involvement in auditor changes. While the proposals in this area were rather uncontroversial, the proposals in the second area, dealing with reporting of reasons for auditor changes, drew considerable comment, mostly negative.

Audit Committee Involvement in Auditor Changes

The SEC has for years recognized the potential benefits to be had in the existence of audit committees of Boards of Directors. The Commission's investigation into the circumstances of the McKesson and Robbins debacle culminated in a recommendation in the late 1930's that registrants form active audit committees. Similarly, the Commission issued ASR 123 in 1972 urging registrants to create audit committees consisting of outside members of Boards of Directors to
provide a more effective communications channel between the Board and the auditor, thereby enhancing the independence of the latter:

...such a committee would lessen the accountants' direct reliance on management and would put them directly in touch with outside members of the Board of Directors whose performance was less specifically being reported on... thus increasing the accountants' independence (7, p. 3315).

Hence, such a committee would give auditors a forum at a higher level than management for the resolution of controversial audit related issues.

Additionally, the commission felt that a primary responsibility of an audit committee should be that of recommending or approving the engagement or discharge of the registrant's auditors (10, p. 3652). Toward the end of inculcating a similar philosophy in the practices of registrants, the SEC proposed that required disclosures be made on proxy statements and Forms 8-K of whether changes in auditors had been considered, recommended, or approved by the Board of Directors, or an audit committee thereof.

Comments received to these proposals were largely favorable. Most commentators felt that such disclosures would be useful to investors in better understanding and evaluating a company's relationships with its independent auditor (10, p. 3652). The AICPA supported the proposed measures and, additionally, further suggested that the disclosures be expanded to indicate whether the former auditor had discussed (or had
been given the opportunity to do so) the proposed change with the Board of Directors or audit committee (19, p. 10). The Institute's letter of comment stated, in part, that "we believe such additional disclosure would further encourage boards of directors and audit committees to be involved in decisions concerning changes in auditors . . ." (10, p. 10).

The commission issued its originally proposed requirements regarding audit committee involvement with only minor changes. To focus attention on the role of such a body, registrants were to state affirmatively whether the audit committee had reviewed the change. Secondly, in a measure of dubious value, the Commission mandated that proxy statements must disclose disagreements required to be reported on Form 8-K, whether or not such reports had been filed (10, p. 3652). (It is questionable that a company would be wont to comply with such proxy disclosures if the necessary 8-K filings had been disregarded). As the Item 8, Schedule 14A proxy disclosures are otherwise similar, hence largely redundant, only the text of the Form 8-K amendments follows:

Item 4. Changes in Registrant's Certifying Accountant:
(e) State whether the decision to change accountants was recommended or approved by:
   (1) any audit or similar committee of the Board of Directors, if the issuer has such a committee; or
   (2) the Board of Directors, if the issuer has no such committee (10, p. 3653).
Proposals for Disclosure of Reasons for Auditor Changes

It should be recalled that the SEC proposed the citing of reasons for auditor changes in the exposure draft which culminated in the initial auditor change disclosure requirements. The 1971 proposal had been widely assailed due to the subjectivity and impracticalities involved and had been ultimately cast aside in favor of a more verifiable disagreements perspective. Nevertheless, the spectre of "reasons disclosures" again appeared in the most recent exposure draft. While some positive responses were received by the Commission staff, by far the predominance of respondents were unfavorably disposed toward the "reasons" proposals.

While commentators who favored the reporting of reasons for auditor displacements generally contended that it would provide useful information for investors, few provided meaningful elaboration beyond an initial expression of support, and "none discussed solutions to the potential problems expressed by those who opposed the amendments" (10, p. 3651).

Though the AICPA had supported the Board of Director disclosures, the Institute was vociferously in opposition to the reasons disclosures. Perhaps the preeminent argument cited against the reasons disclosures was that the "disclosure of reasons for all changes might downgrade or obscure the disclosures of disagreements" (10, p. 3651).

The AICPA's letter of comment states:
... disclosure of reasons for changes in auditors would "dilute the significance of the meaningful reporting of disagreements" ... this information would probably be of a "highly subjective" nature and would not be objectively verifiable by the auditor (19, p. 10).

Auditors would be largely unable to comment upon such subjective reasons as "high fees" or "poor services." Furthermore, the AICPA stated that insofar as clients "... tend to strongly resist the disclosure of disagreements ... it isn't reasonable to expect that they would cite a reported disagreement as the reason for an auditor change" (33). Instead, reasons disclosure would take the form of "boilerplate" such as "audit rotation policy, high fees, need for a fresh look" and so forth.

Other commentators expressed reservations that the requirements, if mandated, would be neutralized because "... candid disclosures would not be made for fear of litigation involving libel or other allegations." (10, p. 3651). Still others maintained that reasons disclosures might inhibit changes in accountants in that unsatisfactory auditor/client relationships might be continued, to avoid disclosure (10, p. 3651).

Paradoxically, the New York City Bar Association contended that the delineation of reasons for auditor changes might in fact have a chilling effect on the auditor's independent relationship with a client company:
Out of fear that their professional competence and ability might be "unjustifiably questioned" in a public report, auditors "may find themselves becoming unduly cautious of failing to meet the requests" of clients (33).

After weighing the various comments, the SEC once again withdrew its proposal to require the statement of reasons for changes. Chief accountant Clarence Sampson concluded, "Once you get past the requirement to report any disagreements on accounting matters, there isn't any logical place to draw the line" (33). However, ASR 247 did encourage registrants and auditors to include, on a voluntary basis, information beyond the minimum required concerning auditor changes. The Commission's remaining comments supporting voluntary "reasons" disclosures contained thinly veiled references to the highly publicized clash between Price Waterhouse and Gulf Oil Corporation, its client of forty-six years.

On December 7, 1977, James Higgins, Chairman of Mellon Bank and of Gulf Oil Corporation's audit committee, notified Robert G. Nichols, a Price Waterhouse regional managing partner, that his auditing firm was being terminated in favor of Coopers and Lybrand. The loss of the $1.8 million Gulf account constituted almost 1 per cent of Price Waterhouse's total professional fees of $221.5 million in 1976 (32). The following interchange reportedly took place, culminating a heated 2-1/2-year controversy:
The banker reiterated that the move had "nothing to do with the settlement," and expressed hope that Gulf and the auditor could 'agree on a reason for the change,' . . . But Mr. Nichols replied: "That would be difficult."

Mr. Higgins' terse response: "So be it." (32).

The settlement mentioned in the preceding passage had been the source of the rift between the two parties. In March, 1975, the SEC disclosed that its investigation into questionable payments made by Gulf Oil had revealed the existence of political payments in excess of $10 million from a "slush fund" maintained outside of the United States. Gulf shareholders subsequently brought suit against the auditors and various current and former officers and directors of Gulf Oil. An internal fact finding committee launched by Gulf later concluded in December 1975 that Price Waterhouse "... couldn't have detected the cache through normal audit procedures" (32). Furthermore, a federal judge in Pittsburg later exonerated Price Waterhouse as a defendant in the litigation (31).

Nevertheless, counsel for several Gulf directors approached Price Waterhouse in February 1976 seeking $2 million to settle what could have otherwise been a protracted litigation. Price Waterhouse refused after carefully reviewing its position. According to David Christopher, partner-in-charge of the Pittsburg office of Price Waterhouse:

It was recognized that if the terms of the settlement called upon Price Waterhouse to make any contribution thereto, regardless of its size, there would be an implication
that our firm acted with impropriety. Participation in any settlement, which could give rise to such a false implication obviously couldn't be accepted by Price Waterhouse (31).

A May 11, 1976 Gulf audit committee meeting resulted in a "last offer" that Price Waterhouse make a $350,000 contribution. The auditors again refused. After being informed that "the time for talking had ended," Price Waterhouse delivered a letter of resignation, but was dissuaded from resigning by Gulf's chairman, Jerry McAfee. In July, a lawyer asked Price Waterhouse to "throw in $50,000 to settle," and implied that the auditors would not be terminated (32).

By now, Gulf's audit committee had decided it had a fiduciary responsibility to consider rotating auditors. During Price Waterhouse's October tenth presentation for reengagement, Mr. Christopher says Mr. McAfee observed that

"A lot of people at Gulf don't understand why P.W. wouldn't participate in the settlement, and that," the Gulf chairman added, "Goes [sic] to the heart of the matter of why we're here." (32).

Mr. McAfee later would only state that Christopher's understanding of the question had been incorrect (32).

In the wake of this tumult, Price Waterhouse was terminated. Both the 8-K filed by Gulf Oil Corporation and the Price Waterhouse letter innocuously reported no disagreements; and, in fact, no disagreements as described in ASR 165 technically existed. (Actually, after SEC prompting in view of the journalistic jousting between Gulf and Price Waterhouse, Gulf did issue an amended Form 8-K in May 1978 reporting a
disagreement relating to the estimated liability for income
taxes of prior periods (14, p. 2).) A short statement re-
leased to the press by Gulf didn't give any specific reasons
for the decision not to reappoint Price Waterhouse. Ad-
ditionally, a Gulf spokesman said somewhat flippantly, "The
change was made for the same reason you change doctors. It
isn't that big a deal" (31). However, Price Waterhouse's
seven paragraph response to Gulf's announcement indicated
that the former auditors had to assume that ". . . the
underlying reason for this action is our repeated, adamant
refusal to become a contributing party to the settlement. . . ."
(31). To this a higher level Gulf Oil executive retorted,
"Sour grapes" (32).

In encouraging the voluntary communication of reasons
for auditor changes, the SEC contended in ASR 247 that it
would be particularly appropriate to include such informa-
tion in public filings with the Commission when such matters
had been discussed in a public forum (10, p. 3652), as had
been the case with Gulf Oil Corporation and Price Waterhouse.

In concluding this discussion of ASR 247, it should be
mentioned that the SEC also warned registrants and auditors
that the practice of reporting disagreements had, in some
cases, become perfunctory. Specifically, the Commission
criticized the practice of some registrants of filing 8-K re-
ports citing no disagreements, while former auditors reported
disagreements (10, p. 3652). The extent of this problem will
be addressed in the following chapters.
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CHAPTER IV

RESEARCH METHODOLOGY

The basic intent of the SEC's auditor change disclosure requirements has been to enhance auditor independence. Though most individuals would probably concur, at least intuitively, that the current institutional structures have strengthened auditor independence, it is difficult to operationally measure those achieved levels of improvement. In fact, given the frailties of the measurement tools currently available to the social sciences researcher, it may be impossible to do so in an empirical sense. Consequently, the scope of this thesis will circumscribe issues which can be empirically analyzed based upon auditor change data publicly available on Forms 8-K and 10-K, compared and contrasted, where possible, with the results of previous studies.

Recently, the accounting profession has begun serious inquiry into the question of what is often colloquially termed the "big GAAP - little GAAP" controversy. That is, are there sufficient differences between large publicly listed companies and smaller enterprises to justify differing disclosure and accounting criteria? Recently, the Financial Accounting Standards Board (FASB) abolished the requirements for smaller firms (nonpublic) to disclose earnings per share information, as had been required by APB 15,
and segmental information, as had been required by SFAS 14, based in part upon an AICPA Accounting Standards Division Study of the application of generally accepted accounting principles to smaller businesses (10, pp. 1-3). Similarly, the SEC occasionally imposes differential reporting requirements for smaller publicly listed companies.

Prior research efforts have also alluded to the fact that differences may exist between larger and smaller business enterprises. The previously discussed Burton and Roberts study concludes in part:

It should be emphasized, however, that our study deals with only a limited number of the largest corporations. What is true of these companies may not be true of smaller and unlisted concerns. While the reasons for auditor change in such smaller concerns may be similar, the proportions might well be different. For example, it is possible that disputes over accounting principles and fees may result in an increasing proportion of auditor changes as the size of the company involved grows smaller. Companies . . . not required to file . . . may feel more inclined to seek new auditors as a result of . . . disagreement on accounting principles . . . (7, p. 35). (Italics added).

More research is needed into the nature of such alleged differences to guide the development of future accounting and disclosure related issues. The purpose of this thesis is to analyze a number of auditor change and peripheral issues from the perspective of larger enterprises listed on the New York and American Stock Exchanges versus over-the-counter companies. Such a perspective, of itself, should provide useful insights. NYSE listed firms can be considered to head a size,
prestige hierarchy followed by AMEX listed firms, and finally, OTC listed firms in a third tier of the hierarchy.

However, an assumption in this thesis will be that OTC firm results may be extrapolated to, and therefore considered representative of, non-public firms. Obviously this may not be the case; therefore, that assumption of itself constitutes a potential limitation to the study. The Cohen Commission Report concluded, among other things, that the kinds of disclosures currently required by the SEC in ASRs 165 and 194 should be included in a report by management accompanying all audited financial statements (9, p. 108). The recommendation has not yet been incorporated into the body of authoritative pronouncements; hence, the necessary data are not available to enable a direct comparison of larger, listed firms and smaller, unlisted firms. Nevertheless, there certainly exists a continuum of size, economic power, and other financial and socio-economic differences between NYSE and AMEX firms, on the one hand, and OTC firms, on the other, which lends merit to research of the nature being presented in this thesis. Clearly the activities of unlisted firms should be more nearly approximated by OTC firms than by NYSE listed firms.

Scope of the Study and General Research Approach

Three populations were studied in this thesis: NYSE firms, AMEX firms, and OTC firms, the latter being assumed a
surrogate for small and closely held firms. Determination of which firms had changed auditors was made by listing from the daily SEC News Digest the names of all firms reporting an auditor change 8-K filing from the inception of the disclosure rules, October 31, 1971, through December 31, 1978.

SEC News Digest issues were available for 1971 through 1975 at the Dallas Public Library, while issues thereafter were available at the North Texas State University Library. Neither collection was found to be complete; therefore, issues missing at those locations were obtained by mail from libraries in Austin, Texas, Philadelphia, Chicago, and New York City, through the Inter-Library Loan Department of the University of Texas at Arlington.

December 31, 1978 was selected as a cut-off point to enable adequate follow-up on potential Rule 3-16(s) disclosures by all firms having changed auditors. The reader will recall that Rule 3-16(s) disclosures are to be made, when relevant, on Form 10-K in the year of change or the subsequent fiscal year. Hence, 10-K reports filed in 1979 would contain all possible Rule 3-16(s) disclosures pertaining to auditor changes through 1978.

Procedures for Classifying the Data

Firms changing auditors were then classified into NYSE, AMEX, and OTC companies by reference to monthly Standard & Poor's Stock Guide issues which list all NYSE and AMEX firms, but only list activity of larger, more active OTC companies.
Consequently, smaller OTC firms were classified based upon their absence in the Stock Guides.

Such a procedure introduces the possibility of classificational non-sampling error in at least two dimensions. First, human error in searching for a company name in the Stock Guides might result in failure to observe a NYSE or AMEX listed company which was actually listed in the booklet. Secondly, the New York and American Exchanges occasionally temporarily suspend trading in securities of member firms for various reasons. The Stock Guides do not relist these firms until trading in the firm's securities is re-established. Both of these types of error would result in the misclassification of NYSE and AMEX firms as OTC firms.

To counteract such misclassificational possibilities the following procedures were employed. Firms initially classified as OTC were checked to Standard & Poor's Stock Guide issues a year subsequent to the date used for the first classification. In those few instances where a contra classification was indicated, the issue was resolved by examining pertinent Wall Street Journal Index listings for the companies in question. The typical resolution was that a company whose securities had previously been traded over-the-counter had subsequently been listed with one of the major exchanges. Classification errors were also tested for by noting the exchange listing indicated on the microfiche copies of 8-K and 10-K reports actually examined. Finally,
after all the auditor change data had been key punched, an alphabetizing computer routine was utilized and scrutinized for inconsistencies in classifications for firms having made more than one auditor change from 1971-1978. These situations were similarly resolved by reference to Wall Street Journal Index corporate news reports.

A data problem existing in the Securities and Exchange Commission's procedures for disseminating the nature of 8-K reports filed with the Commission resulted in a decision to eliminate the data gathered from the News Digest for the year 1971 through 1973 from the scope of this thesis in all but one aspect (to be discussed later). Those data were rejected because they were found to be inordinately spurious, especially in 1971 and 1972. The data problem was suspected when it was found that almost one-half as many "auditor changes" had been reported in the SEC News Digest for 1971 and 1972 as in the years 1973 through 1978 combined.

Telephone discussions with SEC News Digest staff indicated the following: when the auditor change disclosure requirements were first implemented, they were to be reported under item 12 of Form 8-K. Item 12 had previously been reserved for the reporting of "other materially important events," which were to be subsequently assigned an item 14 classification. Regrettably, for some period of time, many companies continued to report "other materially important events" under the prior classificational scheme. According
to *News Digest* staff, no concerted effort was made to appropriately report the actual nature of misfiled 8-K reports. Consequently, a high percentage of *News Digest* "auditor change" 8-K's reported in the early years are, in fact, "other materially important events." However, the problem appeared to have been largely resolved by 1974.

**SPSS Routines and Nonparametric Statistical Tests**

The research was conducted by using the *Statistical Package for the Social Sciences* (SPSS) where possible in generating random samples, compiling tables and cross-tabulations, and for computing nonparametric statistics. The nonparametric statistic chi-square, for two and k-independent sample cases, was used in most of the statistical analyses. SPSS provides the facility for computing in a chi-square test the exact probability of occurrence of a Type I error, rejecting a null hypothesis when it is in fact true. However, the traditional .05 level of significance was considered a point of reference for analyzing the results presented in the following chapter.

Chi-square only indicates whether variables are independent or related. However, statistical significance is obtainable with either a very strong relationship between variables and a small sample size, or with a weak relationship coupled with large sample sizes (6, p. 294). Therefore, suitable measures of association were utilized to measure strength of relationships. The data in this study were
measured at the nominal level. Possible nonparametric measures of association for data measured at the nominal level include the phi statistic, Tschuprow's $T$, Pearson's contingency coefficient $C$, and Cramer's $V$.

The phi statistic is a measure of association which corrects for the fact that chi-square values are directly proportional to the number of cases, $N$. Its value is determined simply by taking the square root of the quantity derived by the division of $N$ into the raw chi-square value. The values of the phi statistic can range from zero to one. A value of zero is obtained when two variables have absolutely no relationship, whereas phi has an upper limit of unity (one) when the relationship between two variables is perfect (6, pp. 295-296).

Because the phi statistic can attain a value considerably larger than unity in the general $r \times c$ cross tabulation (larger than $2 \times 2$), other nonparametric measures of association have been developed. All of these are functions of the phi statistic and all but one have unity as their upper limits, given certain conditions. Tschuprow's $T$, for tables larger than $2 \times 2$, has an upper limit of one, but only when the number of rows and columns in a crosstabulation are equal. Where there are considerably more rows than columns (or vice versa), the upper limit of $T$ can be well below unity. Though this condition can be corrected, other satisfactory measures are available as an alternative (6, p. 296).
Another common measure of correlation used with data measured at the nominal level is Pearson's contingency coefficient $C$. Like Tschuprow's $T$, the contingency coefficient is used for crosstabulations larger than 2x2 in size and it will attain a minimum value of zero when a complete lack of association exists between variables. However, according to Siegel (15), the contingency coefficient has several weaknesses. The most problematical of these is that the upper limit for the contingency coefficient is a function of the number of categories, even where the number of rows and columns are equal. For instance, in a 2x2 table the upper limit of $C$ for two perfectly correlated variables is .707 and .816 for perfectly associated variables in a 3x3 tabulation (15, p. 201). Hence, the contingency coefficient cannot attain unity as an upper limit. Furthermore, two coefficients are not comparable unless yielded by tables of the same size. Therefore $C$ is somewhat more difficult to interpret than other measures.

Cramer's $V$ is a modified version of the phi statistic for tables larger than 2x2. Blalock (6, p. 297) asserts that although $V$ has not commonly been used in the social science literature, it seems preferable to Tschuprow's $T$ in that it can attain unity even when the number of rows and columns are not equal. It is also preferable to the contingency coefficient in that it can attain unity, whereas the latter cannot.
The SPSS package offers all of the previously discussed measures of association except Tschuprow's T. The analysis in the following chapter will focus on the phi statistic for 2x2 tabulations and Cramer's V for all other tables as both of these measures can range from zero to unity. Due to its rather wide acceptance, the contingency coefficient will also be calculated in each case where measures of association are determined (and presented in Appendix D). However, these will be left for the reader to assess as he wishes.

The final statistical test used in the thesis research was the McNemar test, the nonparametric equivalent of the parametric t test for differences. The McNemar test for significance of changes is especially applicable to "before and after" experimental designs in which each case (listed company) is used as its own control and in which measurement is in the strength of either nominal or ordinal scaling (15, p. 63). The McNemar test was utilized in the third phase of the research (discussed more fully later) to determine if Big Eight firms were increasing their dominance of the audit services market for publicly listed companies.

SPSS does not have a McNemar test routine; hence, calculations were made manually in this one area of the thesis. The following discussion, borrowing heavily from Siegel (15, pp. 61-67), presents the rationale and specifics of the test. To test for significance of observed changes, one first
prepares a fourfold table of frequencies as shown in Figure 1 below:

\[
\begin{array}{c|cc}
\text{Before} & + & - \\
+ & A & B \\
- & C & D \\
\end{array}
\]

Fig. 1 -- Fourfold table for use in testing significance of changes.

It should be noted that cells A and D above involve changes in some given condition as between two points in time. No change (as for example terminating a Big Eight or non-Big Eight firm and hiring another auditor from that same group) is represented in cells B and C. Under the null hypothesis of no significance in changes, the expectation would be that 1/2 (A+D) cases of changes would fall into each of cells A and D.

In the McNemar test, paralleling chi-square theory, the researcher is interested only in the relationship between observed and expected numbers of cases in cells A and D. Applying Yate's correction for continuity, the McNemar test is given by

\[
X^2 = \frac{(|A - D| - 1)^2}{A + D} \text{ with df } = 1
\]

The significance of a chi-square ($X^2$) value as computed above is then determined by reference to a table of critical
values of chi-square for various levels of significance and various degrees of freedom (df).

A final consideration relating to the overall statistical methodology must be addressed. That is, can one draw statistical inferences in analyzing data from all NYSE and AMEX firm auditor changes, versus merely samples thereof? It may be argued that all NYSE and AMEX firms changing auditors can be considered to constitute samples from the universes of all NYSE and AMEX firms listed on those exchanges. However, such polemics may be unnecessary. The real issue centers upon whether or not statistical inferences can be drawn from a complete universe, whether or not one concedes that all NYSE and AMEX auditor changes constitute universes rather than samples. The propriety of doing so is argued persuasively by Winch and Campbell (18, pp. 142-143).

After all firms indicated as having changed auditors were listed from the SEC News Digest and classified, the data available at that point (company name, 8-K report date, and exchange listing) were keypunched and manually verified. Three computer runs were then made. The first of these produced a printout alphabetically listing all firms indicated as having changed auditors from 1971 through 1978 for the "chronic changer" research discussed later in the thesis.

Next, an SPSS category frequencies routine was prepared to determine the number of NYSE, AMEX, and OTC firm sub-totals contained within the entire population of auditor
changes between 1973 and 1978. It was found that about 80 per cent of the approximately 3,300 tentatively identified auditor changes in those years had been made by OTC firms.

As there was so many indicated auditor changes, it was decided to select, for the years 1974 through 1978 inclusive, all indicated NYSE and AMEX changes for examination plus an SPSS randomly generated sample of OTC firm changes approximating the total of changes contained in the combined NYSE and AMEX samples. On that basis, 205 NYSE auditor changes and 277 AMEX changes (a total of 482 changes) were obtained along with 406 OTC changes, or 20 percent of the approximately 2,100 possible OTC changes. The final tabulation contained 888 total indicated changes. A listing of actual auditor changes so obtained, by year and by firm, is presented in Appendix B. As indicated earlier, some of the indicated changes were found to be spurious upon examination of actual 8-K reports. This accounts for the difference in the number of changes selected for examination and the number listed in Appendix B.

While numerous organizations subscribe to the microfiche service of 10-K reports offered by Disclosure, Inc., complete files of 8-K reports are maintained only at the home offices of several of the Big Eight accounting firms and at the SEC archives in Washington D.C. and Los Angeles, California. The examination of the selected auditor change microfiche of 8-K's was conducted in Washington, D.C. Four man weeks
were involved in examining relevant 8-K reports for the following information in each case (indicated variable names utilized in the SPSS computer runs presented in Appendix D, pp.308-439, precede the type of information):

1. SIGDISAG : existence of a significant disagreement reported by the auditor, the firm, or both.

2. OLDAUDIT : whether the predecessor auditor was a Big Eight or non-Big Eight firm.

3. OLD NAME : name of the predecessor auditor, if a Big Eight firm.

4. NEWAUDIT : whether the successor auditor was a Big Eight firm or non-Big Eight firm.

5. NEWNAME : name of the successor auditor, if a Big Eight firm.

6. OTUNQUAL : whether the auditor change was preceded by other than an unqualified audit opinion.

7. TYPEOPIN : type of opinion rendered preceding the auditor change.

8. BOARDAPP : whether or not the auditor change was approved by the Board of Directors.

9. REASON : whether or not reasons were voluntarily given for the auditor change

10. DISC 316S : whether disclosure occurred under Rule 3-16(s) if a disagreement had been cited.

11. YEAR : year of the 8-K report filed.

12. DISAGREE : whether or not the auditor and registrant disagreed as to the presence of disagreements.

13. TYPE : types of disagreements reported.

(Value labels for variable names listed above are presented on page 312, Appendix D.) Each case (record) in the file of data contained two Hollerith cards. The first punched card of each record contained all data except the types of
disagreements encountered. The second card of each record provided for the recording of up to forty different disagreements, far more than generally needed. Once these data were gathered, they were keypunched and, again, manually verified.

The next stage in the research involved developing the SPSS routines (presented in Appendix D) utilized for processing and tabulating the data and performing the nonparametric statistical calculations. Once the routines were prepared, "dummy data" were developed and processed with the SPSS programs. To ensure the correspondence of the intent of the programs with the results obtained, the "dummy data" were processed manually and reconciled with the machine output. No errors were detected in the SPSS routines.

The discussion of the general research approach will now shift to an elaboration upon the four related phases into which the actual research activities were gathered. Each phase will address a number of auditor change issues and data relationships.

Phase I: Types of Disagreements and Opinions
Preceding Auditor Changes and Firms
Chronically Changing Auditors

The first phase of the research involved an examination of three basic aspects of auditor change activity: (1) types of disagreements reported preceding auditor changes, (2) types of auditor opinions rendered prior to all auditor changes involving disagreements, and, finally, (3) a search
for characteristics of commonality in firms who change auditors chronically (as defined later in this chapter). The purpose of this phase was to examine descriptively whether differences existed between the three groupings, NYSE, AMEX, and OTC firms, in terms of disagreement types and occurrences and audit opinion activity. The data in this phase of the research were not analyzed in a statistical context as they were not meaningfully amenable to such an approach. More specifically two problems existed.

First, the tabulated disagreements and auditor opinions are presented in this phase by years. Hence, statistical tests of relationships (as the data are arranged) would be of those variables by years. While such results might be of interest, they do not really lie within the scope of the intended research. Only if clearly discernible trends existed by years would tests of significance prove worthwhile. Furthermore, the perspective of differences in those variables by exchanges is addressed in the second phase of the research.

The second reason why the analysis in the first phase of the research was not statistically oriented centers upon a condition statisticians refer to as "inflated N's." For example, many companies report more than one type of disagreement per auditor change. To utilize such cases with multiple observations would produce an "inflated N's" condition invalidating the chi-square test (15, p. 109). That is, one cannot make more than one observation of a characteristic in a sampled item in a chi-square test.
Types of Disagreements Reported

Four tables of types of disagreements reported were prepared: for all auditor changes attended by disagreement, for auditor changes made by NYSE companies, for auditor changes made by AMEX companies, and a table for selected OTC auditor changes attended by disagreements. Disagreements were considered to exist if reported in the company's 8-K report or by the auditor in his letter of concurrence or non-concurrence appended to the 8-K. Each tabulation provided columns for the years 1974 through 1978 and a cumulative total column. (See Appendix D.)

Each tabulation lists the following sixteen types of disagreements:

1. Recoverability of the cost of some or all assets or adequacy of related reserves.
4. Necessity for certain audit procedures or other audit scope disagreements.
5. Necessity for accruing a liability or disclosing a contingent liability or adequacy of liability accruals.
6. Manner or need for disclosure of transactions with related parties (as defined in SAS 6 (6, pp. 1-2).
7. Balance per sheet or income statement classification of an item.
8. Adequacy of internal controls.
9. Whether inaccurate information was given to or withheld from the auditor, or auditor withdrawal due to management integrity.
11. Initial valuation of an asset or procedures for asset valuation.

12. Whether a particular accounting principle is generally accepted (GAAP).

13. Miscellaneous types of disagreements.

14. Disagreements acknowledged without specification of types (largely, a pre-ASR 165 condition).

15. Necessity for a qualified, adverse, or disclaimer of opinion (as those terms are defined in SAS 2 (3, pp. 10-16).

16. Manner or need for certain footnote or other disclosure (other than for contingent liabilities).

Disagreement type No. 1 is distinguished from No. 11 in that the former concerns the proper carrying value for an existing asset, while the latter pertains to the proper valuation for a newly acquired asset, as for example, in a non-monetary exchange. Type No. 7 is contrasted with No. 16 in that the former would constitute a disagreement over disclosure within the bodies of the three integral financial statements, whereas type No. 16 pertains to the necessity for other informative disclosures (other than for contingent liabilities, which are contained in type No. 5), including conflicts covered by SAS 8. Statement on Auditing Standards No. 8, "Other information in Documents Containing Audited Financial Statements," (5) pertains to unaudited disclosures presented with audited financial data which contravene the audited data and the auditor's responsibilities in such cases. Disagreement type No. 8, "adequacy of internal controls," constitutes, technically, a scope problem, but has been
disaggregated from that classification, type No. 4. Similarly, the "management integrity" disagreements classified in type No. 9 have audit scope ramifications, but are disaggregated therefrom. Type No. 10 disagreements are indicative of disclosures which would be required, for example, due to violations of the Foreign Corrupt Practices Act. The facts surrounding the clandestine Gulf Oil political payments would have constituted such a disagreement, had they not been disclosed. The remaining disagreement types should be self descriptive; however, for further clarification, actual examples of each of the sixteen types of disagreements will be presented in the following chapter.

Several additional points should be made regarding the disagreement classification scheme used in this thesis. First, as in any similar undertaking, certain items were difficult to classify. In those few cases, carefully weighed judgment tempered by collegial consultation provided the ultimate resolution. So that the reader may assess the success of that process, the following areas which caused classificational difficulty are presented.

The issue of disagreements concerning audit fees has been construed by some not to constitute a reportable disagreement. (See, for example Kay (12, pp. 79-80)). Clearly, normal fee discussions would not constitute areas of disagreement; nevertheless, fee disagreements can have audit scope implications. Consequently, cases encountered reporting
audit fee disagreements were classified as type No. 13, "miscellaneous disagreements."

Another troublesome question arose in classifying "accounting changes," as that term is defined in APB 20. Robino Ladd Corporation, for example, cited in its 8-K report dated April 1975 a disagreement concerning whether a certain item constituted a change in accounting principle or a change in accounting estimate (12, p. 1). APB 20 states that the cumulative effect of a change in accounting principle should be included in net income of the period of the change; on the other hand, the effects of a change in accounting estimate are ordinarily accounted for in both the period of change and future periods, with no restatement of amounts reported in financial statements of prior periods (2, pp. 393-397). Such cases were classified as type No. 7, "balance sheet or income statement classification of an item."

Perhaps the most difficult disagreement classification consideration arose with respect to the accrual of the benefits of net operating loss carry forwards. APB 11, "Accounting for Income Taxes," states that

.. the tax benefits of loss carryforwards should not be recognized until they are actually realized, except in unusual circumstances when realization is assured beyond any reasonable doubt at the time the loss carryforwards arise (1, p. 173).

Both Standard Pressed Steel (14, p. 3) and Genesco (9, p. 1) in their 8-K reports of February 1976 and April 1976, respectively, argued unsuccessfully with their auditor Peat,
Marwick, Mitchell & Co., that they had met the "unusual circumstances" necessary to accrue receivables and the related revenues. The item at issue therefore has both "initial valuation of an asset or procedures for asset valuation" aspects as well as "timing of revenue recognition" ramifications. The latter classification was chosen in view of the relatively greater contemporary importance attached to income measurement and presentation.

No other areas of inordinate difficulty arose in classifying disagreements. One final point, however, should be made. Not infrequently, a given 8-K report would cite more than one occurrence of a given type of disagreement. This was especially true regarding disagreement types 1, 2, 3, and 5. In those cases, the data record was encoded to reflect the number of occurrences of that given type of disagreement. For example, if a Form 8-K reported three different disagreements concerning the recoverability of the cost of three different assets, that number of occurrences of that type of disagreement were encoded on the second card of the record.

Types of Audit Opinions Rendered Preceding All Changes and Changes Attended by Disagreements

The second general area examined in the first phase of the research entailed an analysis of the types of audit opinions rendered by auditors in the two fiscal years preceding the change in auditors. Also analyses were prepared of
types of audit opinions rendered preceding auditor changes reporting disagreements.

Several objectives were sought in this aspect of the research. In addition to the types and relative frequencies of other-than-unqualified opinions preceding auditor changes, did such opinions exhibit something of a "multiplier effect" when disagreements attended the changes? Also, were there discernible differences and trends between the major exchanges and OTC firms which might merit statistical analyses for significance of differences.

To examine these questions, four tables for each of these two issues were prepared as follows: for all companies changing auditors, for NYSE listed companies, for AMEX listed companies, and for OTC companies. The tabulations, presented in Appendix D, were prepared for 8-K report years 1975 through 1978 with a total column. It should be recalled that ASR 165 has required disclosure of audit report information only for Forms 8-K filed since January 31, 1975. Hence, only four 8-K report years of data were presented.

Four possible audit opinions were reportable: an unqualified opinion, a qualified opinion, an adverse opinion or a disclaimer of opinion, as those terms are defined in SAS 2. The SEC's general refusal to accept qualified or adverse opinions due to audit scope problems or the application of inappropriate accounting principles render those
types virtually nonexistent. Uncertainty ("subject to") qualifications, however, are not at all unusual. Professional standards define the four opinions as follows:

An unqualified opinion states that the financial statements present fairly financial position, results of operations and changes in financial position in conformity with generally accepted accounting principles (which include adequate disclosure) consistently applied. This conclusion may be expressed only when the auditor has formed such an opinion on the basis of an examination made in accordance with generally accepted auditing standards.

A qualified opinion states that, "except for" or "subject to" the effects of the matter to which the qualification relates, the financial statements present fairly financial position, results of operations and changes in financial in conformity with generally accepted accounting principles consistently applied. Such an opinion is expressed when a lack of sufficient competent evidential matter or restrictions on the scope of the auditor's examination have led him to conclude that he cannot express an unqualified opinion, or when the auditor believes, on the basis of his examination, that

a. the financial statements contain a departure from generally accepted accounting principles, the effect of which is material,

b. there has been a material change between periods in accounting principles or in the method of their application, or

c. there are significant uncertainties affecting the financial statements, and he has decided not to express an adverse opinion or to disclaim an opinion.

An adverse opinion states that financial statements do not present fairly the financial position, results of operations or changes in financial position in conformity with generally accepted accounting principles. Such an opinion is expressed when, in the auditor's judgment, the financial statements taken as a whole are not presented fairly in conformity with generally accepted accounting principles.
A disclaimer of opinion states that the auditor does not express an opinion on the financial statements . . . . The disclaimer of opinion is appropriate when the auditor has not performed an examination sufficient in scope to enable him to form an opinion on the financial statements (3, pp. 10-16).

The preceding definitions were presented only for informational purposes. Obviously, no judgments could be made regarding the appropriateness of the opinions rendered, based solely on the review of the 8-K data. In fact, it should be recalled that the question of whether an opinion other-than-unqualified was required, itself, constitutes a type of reportable disagreement.

**Firms Chronically Changing Auditors**

The final aspect of the first phase of the research involved an examination for possible areas of commonality in firms who chronically change auditors. A chronic auditor changer was defined as a firm which had changed auditors more than twice since the advent of the auditor change disclosure requirements in 1971. It was hoped that something of a profile of such firms could be developed.

The procedures used to identify chronic auditor changers were as follows. Using a standard utility alphabetizing computer program, the entire file of News Digest reported auditor changes was read and printed out alphabetically. The reader will note that this was the one area of the research where all possible years of data were examined. It should be recalled that data reported in 1971 through 1973
had been disregarded in the other research areas due to the previously discussed data problems in those years.

Once all chronic auditor changers had been "tentatively" identified in alphabetic groupings of three or more reported Forms 8-K filed, microfiche of the 8-K reports were examined to determine if actual auditor changes had occurred. Those Forms 8-K examined which were found to actually be reports of "other materially important events" were discarded. Furthermore, auditor changes which in fact only reported mergers of CPA firms were not considered to be auditor changes. A total of forty-four such chronic auditor changers remained, as listed in Appendix C.

A number of items pertaining to these chronic auditor changers were then gathered from the 8-K reports as well as from articles as reported in the Wall Street Journal Index for the year 1971 through 1979. The following items were noted for each of the forty-four companies between 1971 and 1978, as per 8-K reports: exchange listing, the number of auditor changes, whether disagreements had been reported, the number and nature of such reported disagreements, and whether other-than-unqualified auditor opinions had been rendered preceding the changes. Next, the Standard Industrial Classification (SIC) four digit code number for each company was determined from a listing prepared by Disclosure, Inc. for all publicly listed firms. The purpose here was to determine if industry commonality existed. Finally, articles
appearing in the Wall Street Journal for each company were examined for other possible items of interest. This was done to ascertain, for example, whether chronic auditor changers tended to experience financial or other operating problems.

Phase II: Statistical Analysis of Auditor Change Data by Exchanges

In the second phase of the thesis research, five areas of inquiry were addressed based upon the auditor change disclosure requirements as they currently exist for Forms 8-K and 10-K. The five basic areas examined dealt with: (1) the existence of significant disagreements, (2) the existence of disclosures under Rule 3-16(s), (3) types of audit opinions rendered preceding auditor changes, (4) Board of Director involvement in auditor changes, and (5) the extent of voluntary disclosure of reasons for auditor changes.

The intent of the research in this phase was to determine whether or not statistically significant differences existed among the three groupings in terms of activity in these five areas.

Each of the five individual areas of inquiry were analyzed for statistically significant differences between total selected companies, NYSE, AMEX, and OTC firms through the use of five sets of contingency tables for each sample grouping. The non parametric chi-square test was used to test for statistically significant differences.
Significant Disagreements Preceding Auditor Changes

As discussed more fully in Chapter III, the existence of significant disagreements in the application of accounting principles or practices, financial statement disclosure, or auditing scope or procedures, between a registrant changing auditors and the predecessor auditor must be disclosed on Form 8-K. The disagreements at issue must have been material enough that the auditor would have made reference to them in his audit report, had the areas of conflict not been resolved. However, disagreements must be acknowledged and described whether resolved or not resolved to the auditor's satisfaction.

To test for statistically significant differences in rates of occurrences of such reported disagreements between NYSE, AMEX, and OTC firms, the following null hypotheses ($H_0$) and operational hypotheses ($H_1$) were examined, based upon 8-K reports dated 1974 through 1978:

1. $H_0$: There is not a statistically significant difference between NYSE, AMEX, and OTC firms regarding the rate of significant disagreements preceding auditor changes.

   $H_1$: There is a statistically significant difference between NYSE, AMEX, and OTC firms regarding the rate of significant disagreements preceding auditor changes.

2. $H_0$: There is not a statistically significant difference between NYSE and AMEX firms regarding the rate of significant disagreements preceding auditor changes.
H₁: There is a statistically significant difference between NYSE and AMEX firms regarding the rate of significant disagreements preceding auditor changes.

3. H₀: There is not a statistically significant difference between NYSE and OTC firms regarding the rate of significant disagreements preceding auditor changes.

H₁: There is a statistically significant difference between NYSE and OTC firms regarding the rate of significant disagreements preceding auditor changes.

4. H₀: There is not a statistically significant difference between AMEX and OTC firms regarding the rate of significant disagreements preceding auditor changes.

H₁: There is a statistically significant difference between AMEX and OTC firms regarding the rate of significance disagreements preceding auditor changes.

5. H₀: There is not a statistically significant difference between NYSE and AMEX firms as a unit and OTC firms regarding the rate of significant disagreements preceding auditor changes.

H₁: There is a statistically significant difference between NYSE and AMEX firms as a unit and OTC firms regarding the rate of significant disagreements preceding auditor changes.

As a point of clarification, it should be noted that the relevance of the latter four hypothesized relationships in each grouping of five hypotheses sets is a function of the significance decision made regarding the first hypothesis in each set of five. That is, the latter four tests are only necessary to isolate the sources of significance detected in rejecting the initial null hypothesis. Stated differently a decision not to reject the preliminary null hypothesis in each set of five makes it obviously illogical
and unnecessary to test the latter four hypotheses sets for significance. However, with respect to the issues to be analyzed in this manner, each grouping of five hypotheses sets will be specifically stated, in the event that the preliminary null hypothesis is rejected.

Several ancillary questions might arise with respect to the existence of significant disagreements from the perspective of the auditors displaced as well as succeeding auditor changes preceded by disagreements. For example, with respect to the totality of auditor changes examined, one might question whether differences existed between Big Eight auditing firms, as a group, and all other auditors. Similarly, one might further wonder whether differences in significant disagreement involvement existed between individual Big Eight auditing firms in these areas.

To determine whether statistically significant differences existed from the point of view of the predecessor auditors involved, the following null and alternate hypotheses were tested:

6. $H_0$: There is not a statistically significant difference between Big Eight auditors, as a group, and all other auditors regarding the rate of audit engagements lost preceded by significant disagreements.

$H_1$: There is a statistically significant difference between Big Eight auditors, as a group, and all other auditors regarding the rate of audit engagements lost preceded by significant disagreements.
7. $H_0$: There is not a statistically significant difference between individual Big Eight auditors regarding the rate of audit engagements lost preceded by significant disagreements.

$H_1$: There is a statistically significant difference between individual Big Eight auditors regarding the rate of audit engagements lost preceded by significant disagreements.

To determine whether statistically significant differences existed in terms of auditors who were successors to auditor changes, these two sets of null and operational hypotheses were examined:

8. $H_0$: There is not a statistically significant difference between Big Eight auditors, as a group, and all other auditors regarding the rate of audit engagements gained which had been preceded by significant disagreements.

$H_1$: There is a statistically significant difference between Big Eight auditors, as a group, and all other auditors regarding the rate of audit engagements gained which had been preceded by significant disagreements.

9. $H_0$: There is not a statistically significant difference between individual Big Eight auditors regarding the rate of audit engagements gained which had been preceded by significant disagreements.

$H_1$: There is a statistically significant difference between individual Big Eight auditors regarding the rate of audit engagements gained which had been preceded by significant disagreements.

It should be recognized that while a successor auditor would have had no realistic impact upon disagreements preceding his engagement, it might nevertheless be interesting to see if discernible differences exist among those firms who are subsequently engaged after such discordant circumstances.
Audit Opinions Preceding Auditor Changes

Chapter III indicated that the SEC's issuance of ASR 165 required for the first time that registrants report whether a principal accountant's opinion for any of the preceding two years had contained an adverse opinion, a disclaimer of opinion, or had been qualified due to uncertainty, audit scope, or accounting principles. The SEC further required that the nature of each such opinion be described under item 12(b). The opinion information became effective with the filing of all Forms 8-K subsequent to January 31, 1975.

Nonparametric tests were performed to determine if statistically significant differences existed between NYSE, AMEX, and OTC registrants during the four years ended in 1978 with respect to the occurrences of opinions which were other-than-unqualified preceding auditor changes. To do so, five sets of contingency tables were prepared to test the following assertions:

10. $H_0$: There is not a statistically significant difference between NYSE, AMEX, and OTC firms regarding the percentage of other-than-unqualified audit opinions received in the two years preceding an auditor change.

$H_1$: There is a statistically significant difference between NYSE, AMEX, and OTC firms regarding the percentage of other-than-unqualified audit opinions received in the two years preceding an auditor change.

11. $H_0$: There is not a statistically significant difference between NYSE and AMEX firms regarding the percentage of other-than-unqualified audit opinions received in the two years preceding an auditor change.
There is a statistically significant difference between NYSE and AMEX firms regarding the percentage of other-than-unqualified audit opinions received in the two years preceding an auditor change.

There is not a statistically significant difference between NYSE and OTC firms regarding the percentage of other-than-unqualified audit opinions received in the two years preceding an auditor change.

There is a statistically significant difference between NYSE and OTC firms regarding the percentage of other-than-unqualified audit opinions received in the two years preceding an auditor change.

There is not a statistically significant difference between AMEX and OTC firms regarding the percentage of other-than-unqualified audit opinions received in the two years preceding an auditor change.

There is a statistically significant difference between AMEX and OTC firms regarding the percentage of other-than-unqualified audit opinions received in the two years preceding an auditor change.

There is not a statistically significant difference between NYSE and AMEX firms as a unit and OTC firms regarding the percentage of other-than-unqualified audit opinions received in the two years preceding an auditor change.

There is a statistically significant difference between NYSE and AMEX firms as a unit and OTC firms regarding the percentage of other-than-unqualified audit opinions received in the two years preceding an auditor change.

Similarly, it would be interesting to determine, from the perspective of auditors involved, if statistically defensible differences existed among those auditors in terms of the relative numbers of other-than-unqualified audit opinions rendered preceding auditor changes. Furthermore,
do such differences exist between Big Eight auditing firms, as a group, and all other auditors, as well as between individual Big Eight firms? To do so, the following null and operational hypotheses were tested:

15. $H_0$: There is not a statistically significant difference between Big Eight auditors, as a group, and all other auditors regarding the rate of audit engagements lost preceded by audit opinions which were other-than-unqualified.

$H_1$: There is a statistically significant difference between Big Eight auditors, as a group, and all other auditors regarding the rate of audit engagements lost preceded by audit opinions which were other-than-unqualified.

16. $H_0$: There is not a statistically significant difference between individual Big Eight auditors regarding the rate of audit engagements lost preceded by audit opinions which were other-than-unqualified.

$H_1$: There is a statistically significant difference between individual Big Eight auditors regarding the rate of audit engagements lost preceded by audit opinions which were other-than-unqualified.

It was decided not to replicate the pattern of the two preceding tests from the perspective of the successor auditor. The hypotheses examined here were of the active actions of those auditors who had actually rendered audit opinions. The successor auditor would obviously have had no influence upon an audit opinion rendered by his predecessor.

**Rule 3-16(s) Disclosures Subsequent to Auditor Changes**

The initial public reporting of disagreements is communicated via Form 8-K. To call such filings "public" in any sense of broad exposure basically constitutes a misnomer.
Though Form 10-K, similarly, is not given wide distribution by most companies, it is, nevertheless, seen by more stockholders than is Form 8-K. The SEC promulgated Rule 3-16(s) of Regulation S-X, in part, to provide for wider dissemination of auditor changes through Form 10-K.

Chapter III of this thesis indicated that Rule 3-16(s) was adopted by the SEC in ASR 165, for Forms 10-K filed for fiscal years beginning on or after January 1, 1975, to communicate two distinct matters: (1) the facts of any disagreements reported on a Form 8-K within the twenty-four months prior to the date of the most recent financial statements, and (2) the effects, if during the fiscal year of the change or the subsequent year, transactions or events involving disagreements had been disclosed or accounted for contrary to the predecessor auditor's conclusions.

ASR 194 subsequently disaggregated the aspects of facts and effects such that Rule 3-16(s) footnote disclosures in Form 10-K were only necessitated when both disagreements had occurred and they had been accounted for or disclosed other than as the former accountant had concluded was required.

In this phase of the thesis research, the latter definition of Rule 3-16(s) disclosures was adopted. That is mere disclosures of the existence of previous disagreement were considered irrelevant.

The Perry Castenada Library of the University of Texas at Austin maintains complete microfiche copies of Forms 10-K
filed by all publicly listed companies since 1968. Approximately two weeks were spent examining Forms 10-K for those NYSE, AMEX, and OTC firms whose 8-K reports had indicated significant disagreements.

Paralleling the preceding tests, five sets of contingency tables were proposed for tests of significant differences between NYSE, AMEX, and OTC firms, based upon disclosures indicated in Forms 10-K filed for periods beginning on or after January 1, 1975, as follows:

17. \( H_0 \): There is not a statistically significant difference between NYSE, AMEX, and OTC firms with respect to the proportion of Rule 3-16(s) disclosures (as defined) required subsequent to auditor changes.

\[ H_1: \text{There is a statistically significant difference between NYSE, AMEX, and OTC firms with respect to the proportion of Rule 3-16(s) disclosures (as defined) required subsequent to auditor changes.} \]

18. \( H_0 \): There is not a statistically significant difference between NYSE and AMEX firms with respect to the proportion of Rule 3-16(s) disclosures required subsequent to auditor changes.

\[ H_1: \text{There is a statistically significant difference between NYSE and AMEX firms with respect to the proportion of Rule 3-16(s) disclosures required subsequent to auditor changes.} \]

19. \( H_0 \): There is not a statistically significant difference between NYSE and OTC firms with respect to the proportion of Rule 3-16(s) disclosures required subsequent to auditor changes.

\[ H_1: \text{There is a statistically significant difference between NYSE and OTC firms with respect to the proportion of Rule 3-16(s) disclosures required subsequent to auditor changes.} \]
20. $H_0$: There is not a statistically significant difference between AMEX and OTC firms with respect to the proportion of Rule 3-16(s) disclosures required subsequent to auditor changes.

$H_1$: There is a statistically significant difference between AMEX and OTC firms with respect to the proportion of Rule 3-16(s) disclosures required subsequent to auditor changes.

21. $H_0$: There is not a statistically significant difference between NYSE and AMEX firms as a unit and OTC firms with respect to the proportion of Rule 3-16(s) disclosures required subsequent to auditor changes.

$H_1$: There is a statistically significant difference between NYSE and AMEX firms as a unit and OTC firms with respect to the proportion of Rule 3-16(s) disclosures required subsequent to auditor changes.

Board of Director Approval of Auditor Changes

The remaining two areas in the second phase of the thesis research center upon tests for differences, by the major exchanges and OTC firms, of auditor change information required for the first time under ASR 247: Board of Director involvement and, secondly, voluntary disclosures of reasons for auditor changes. These two disclosures, discussed more fully in Chapter III, became effective for all Forms 8-K filed with the SEC after July 31, 1978.

For many years the SEC has encouraged registrants to form audit committees of Boards of Directors. The principal responsibilities of such committees should include recommending or approving the engagement or termination of the registrant's independent auditors. Additionally, a well structured audit committee gives the auditor a level of
authority higher than management for the resolution of troublesome audit matters. The SEC considered that requiring companies to report on Form 8-K whether a decision to change auditors had been recommended or approved by an audit committee or, where no such committee existed, by the Board of Directors, would be helpful to investors in better comprehending the registrant's relationship with its external auditor.

To discern whether significant differences existed in the three populations under study as to the extent of audit committee or Board of Director involvement in the decision to change independent auditors, the following assertions were tested, based upon data in Forms 8-K filed during the final five months of 1978:

22. $H_0$: There is not a statistically significant difference between NYSE, AMEX, and OTC firms regarding the proportion of cases where auditor changes were recommended or approved by the Board of Directors or audit committee thereof.

$H_1$: There is a statistically significant difference between NYSE, AMEX, and OTC firms regarding the proportion of cases where auditor changes were recommended or approved by the Board of Directors or audit committee thereof.

23. $H_0$: There is not a statistically significant difference between NYSE and AMEX firms regarding the proportion of cases where auditor changes were recommended or approved by the Board of Directors or audit committee thereof.

$H_1$: There is a statistically significant difference between NYSE and AMEX firms regarding the proportion of cases where auditor changes were recommended or approved by the Board of Directors or audit committee thereof.
24. $H_0$: There is not a statistically significant difference between NYSE and OTC firms regarding the proportion of cases where auditor changes were recommended or approved by the Board of Directors or audit committee thereof.

$H_1$: There is a statistically significant difference between NYSE and OTC firms regarding the proportion of cases where auditor changes were recommended or approved by the Board of Directors or audit committee thereof.

25. $H_0$: There is not a statistically significant difference between AMEX and OTC firms regarding the proportion of cases where auditor changes were recommended or approved by the Board of Directors or audit committee thereof.

$H_1$: There is a statistically significant difference between AMEX and OTC firms regarding the proportion of cases where auditor changes were recommended or approved by the Board of Directors or audit committee thereof.

26. $H_0$: There is not a statistically significant difference between NYSE and AMEX firms as a unit and OTC firms regarding the proportion of cases where auditor changes were recommended or approved by the Board of Directors or audit committee thereof.

$H_1$: There is a statistically significant difference between NYSE and AMEX firms as a unit and OTC firms regarding the proportion of cases where auditor changes were recommended or approved by the Board of Directors or audit committee thereof.

Voluntary Disclosure of Reasons for Auditor Changes

It should be recalled that the SEC's initial proposals for auditor change disclosures had advocated that reasons for auditor changes constitute the critical reporting event. Undaunted by earlier criticism of such a perspective, the Commission again proposed in its exposure draft to ASR 247 that registrants be required to disclose the reasons for auditor changes. However, once again, commentators argued
that "reasons" disclosures would, in most cases, at best be subjective and unmeaningful. At worst, most commentators felt that requiring such disclosures might obfuscate critical disagreements disclosures, cause allegations of libel, and lead to other untenable auditor-client relationships. A further discussion appears in Chapter III of the thesis.

In view of the resounding criticism to its proposals, the SEC moderated its final promulgation of ASR 247 to merely encourage that registrants voluntarily include information beyond the minimum required concerning auditor changes. The SEC concluded that situations widely discussed in public forums, as had been the case with Gulf Oil Company and Price Waterhouse & Co., were particularly exemplary of recommended further disclosures.

The final issue addressed in this phase of the thesis research concerns the question of whether or not differences exist in the three studied populations in terms of their dissemination of such voluntary "reasons" disclosures during the final five months of 1978. Toward that end, the following null and operational hypotheses were tested:

27. \( H_0 \): There is not a statistically significant difference between NYSE, AMEX, and OTC firms regarding the proportion of auditor changes attended by voluntary disclosures of reasons for such changes.

\( H_1 \): There is a statistically significant difference between NYSE, AMEX, and OTC firms regarding the proportion of auditor changes attended by voluntary disclosures of reasons for such changes.
28. \( H_0 \): There is not a statistically significant difference between NYSE and AMEX firms regarding the proportion of auditor changes attended by voluntary disclosures of reasons for such changes.

\( H_1 \): There is a statistically significant difference between NYSE and AMEX firms regarding the proportion of auditor changes attended by voluntary disclosures of reasons for such changes.

29. \( H_0 \): There is not a statistically significant difference between NYSE and OTC firms regarding the proportion of auditor changes attended by voluntary disclosures of reasons for such changes.

\( H_1 \): There is a statistically significant difference between NYSE and OTC firms regarding the proportion of auditor changes attended by voluntary disclosures of reasons for such changes.

30. \( H_0 \): There is not a statistically significant difference between AMEX and OTC firms regarding the proportion of auditor changes attended by voluntary disclosures of reasons for such changes.

\( H_1 \): There is a statistically significant difference between AMEX and OTC firms regarding the proportion of auditor changes attended by voluntary disclosures of reasons for such changes.

31. \( H_0 \): There is not a statistically significant difference between NYSE and AMEX firms as a unit and OTC firms regarding the proportion of auditor changes attended by voluntary disclosures of reasons for such changes.

\( H_1 \): There is a statistically significant difference between NYSE and AMEX firms as a unit and OTC firms regarding the proportion of auditor changes attended by voluntary disclosures of reasons for such changes.

In addition to the foregoing statistical tests, descriptive examples of voluntary reasons disclosures encountered in the research effort will be presented in Chapter V.
Phase III: Statistical Analysis of CPA Firms Involved in Auditor Changes by Exchange

In the third phase of the research, evidence was sought to determine if Big Eight auditing firms were significantly increasing their dominance of the audit services market for all publicly listed companies. The issue of dominance was not looked at directly in a dollar quantitative sense (for example: dollars of audited sales or net assets gained or lost). Instead, the issue was examined in terms of magnitude of occurrences of auditor changes. However, indirectly it could be said that dollar quantitative issues are being analyzed. This is due to the fact that the populations under study can generally be cast in a continuum of economic size with respect to various operating and financial variables. That is, NYSE firms as a whole will generate greater sales and have larger net asset structures than OTC firms, while AMEX firms as a whole would lie somewhere in between.

Several prior studies have centered upon the question of Big Eight dominance of the audit services market. However, several caveats should be mentioned. The Burton and Roberts study (7), as well as a 1967 study by Zeff and Fossum (19), were directed only toward the largest industrial companies. A more recent work by Coe and Palmon (8) does the same in one of its two data bases. However, even though the second data base is directed toward all SEC companies, the scope of the examination was limited to only the year 1974 and 1975. Furthermore, the selection criteria used in the
latter study (described more fully in Chapter II of the thesis) eliminated fully 62 per cent of the initial OTC random sample (8, p. 3). These comments should not be construed as criticisms of the aforementioned studies, but rather as a means of contrasting them with the undertaking in this thesis.

In addition to the foregoing discussion, the results of these various studies conflicted with respect to whether Big Eight firms had been net gainers or losers of clients. These contradictory conclusions may have been attributable to population size characteristics in the studies. The issue has significance insofar as the Congressional Metcalf and Moss Committee reports have assailed the accounting profession for increasing polarization of the auditing function in the Big Eight firms.

The research in this thesis goes beyond that which has been done before in several respects. First, a broader spectrum of publicly listed companies was examined. All SEC companies, not just larger industrials, were available for sampling. None were eliminated by any selection criteria. Secondly, earlier studies dealing with the total population of SEC listed companies utilized a much shorter time span than the five years of auditor changes under examination in this thesis. Thirdly, the thesis research will be conducted in terms of the two major exchanges and OTC firms. Finally whereas earlier studies have been descriptive
nature, the data in this thesis were examined in a statistical context.

The thrust of the research in phase three consists of descriptive analyses of the absolute changes (by exchanges), and tests of nonparametric statistical significance of differences. The statistical perspective addresses the basic question of whether the two major exchanges and OTC firms have had significant changes in the percentage of such firms audited by Big Eight auditors. In addressing the basic question of Big Eight firm dominance, two interrelated supporting issues were analyzed in juxtaposition.

The first supporting issue centers upon the question of whether firms in each sample grouping (all companies, NYSE, AMEX, OTC, NYSE plus AMEX) are changing auditors independent of the level of auditing firm the predecessor represents (Big Eight or non-Big Eight auditor). Stated less rigorously, do firms who change auditors tend to hire a Big Eight firm (non-Big Eight firm) if the predecessor was a Big Eight firm (non-Big Eight firm)? This particular issue was analyzed using the chi-square test.

The second supporting issue deals with the direction and significance of changes in auditors made by registrants who, in fact, changed between Big Eight and non-Big Eight auditors, rather than retaining an auditor from within the same level as had been the predecessor auditor. This issue was researched using the nonparametric McNemar test at the .05 level of significance.
It should be clear that the two supporting issues are complementary sides of the same "coin." As a hypothetical example, registrants may, as a whole, tend to retain a Big Eight firm if the predecessor were also a Big Eight firm. Hence, it could be inferred that the status quo, as a whole, was not changing. However, continuing the scenario, it would similarly be interesting to determine if in those few registrants who had switched between auditor levels, there were statistically significant differences from the null hypothesis that the switches should be proportionately equal in each direction.

Tests for Increasing Big Eight Dominance of the Audit Services Market

To test the first supporting issue, five sets of contingency tables were generated and analyzed with the chi-square test, one for each sample or combination as follows: all companies selected, NYSE firms, AMEX firms, OTC firms and the combination of NYSE and AMEX firms. The data were gathered from 8-K reports dated 1974 through 1978. The null and operational hypotheses were stated as follows:

32. $H_0$: For all publicly listed companies, the successor auditing firm selected in an auditor change is independent of whether the predecessor auditor was a Big Eight or non-Big Eight firm.

$H_1$: For all publicly listed companies, the successor auditing firm selected in an auditor change is dependent upon whether the predecessor auditor was a Big Eight or non-Big Eight firm.
33. H₀: For all NYSE companies, the successor auditing firm selected in an auditor change is independent of whether the predecessor auditor was a Big Eight or non-Big Eight firm.

H₁: For all NYSE companies, the successor auditing firm selected in an auditor change is dependent upon whether the predecessor auditor was a Big Eight or non-Big Eight firm.

34. H₀: For all AMEX companies, the successor auditing firm selected in an auditor change is independent of whether the predecessor auditor was a Big Eight or non-Big Eight firm.

H₁: For all AMEX companies, the successor auditing firm selected in an auditor change is dependent upon whether the predecessor auditor was a Big Eight or non-Big Eight firm.

35. H₀: For all OTC companies, the successor auditing firm selected in an auditor change is independent of whether the predecessor auditor was a Big Eight or non-Big Eight firm.

H₁: For all OTC companies, the successor auditing firm selected in an auditor change is dependent upon whether the predecessor auditor was a Big Eight or non-Big Eight firm.

36. H₀: For all NYSE and AMEX companies, the successor auditing firm selected in an auditor change is independent of whether the predecessor auditor was a Big Eight or non-Big Eight firm.

H₁: For all NYSE and AMEX companies, the successor auditing firm selected in an auditor change is dependent upon whether the predecessor auditor was a Big Eight or non-Big Eight firm.

Tests of Significance of Changes in Firms Actually Switching Between Big Eight and Non-Big Eight Auditors

To test for significance of changes in those firms who have, in fact, switched between Big Eight and non-Big Eight auditors, the cell data in the immediately preceding contingency tables were analyzed using the McNemar test at the
.05 level of significance. The null and operational hypothesis were styled as follows:

37. $H_0$: For those publicly listed companies who change from a Big Eight to a non-Big Eight auditor or vice versa, the probability that any company will change from a Big Eight to a non-Big Eight auditor is equal to the probability that the firm will change from a non-Big Eight to a Big Eight auditor.

$H_1$: For those publicly listed companies who change from a Big Eight to a non-Big Eight auditor or vice versa, the probability that any company will change from a Big Eight to a non-Big Eight auditor is not equal to the probability that the firm will change from a non-Big Eight to a Big Eight auditor.

38. $H_0$: For those NYSE companies who change from a Big Eight to a non-Big Eight auditor or vice versa, the probability that any company will change from a Big Eight to a non-Big Eight auditor is equal to the probability that the firm will change from a non-Big Eight to a Big Eight auditor.

$H_1$: For those NYSE companies who change from a Big Eight to a non-Big Eight auditor or vice versa, the probability that any company will change from a Big Eight to a non-Big Eight auditor is not equal to the probability that the firm will change from a non-Big Eight to a Big Eight auditor.

39. $H_0$: For those AMEX companies who change from a Big Eight to a non-Big Eight auditor or vice versa, the probability that any company will change from a Big Eight to a non-Big Eight auditor is equal to the probability that the firm will change from a non-Big Eight to a Big Eight auditor.

$H_1$: For those AMEX companies who change from a Big Eight to a non-Big Eight auditor or vice versa, the probability that any company will change from a Big Eight to a non-Big Eight auditor is not equal to the probability that the firm will change from a non-Big Eight to a Big Eight auditor.

40. $H_0$: For those OTC companies who change from a Big Eight to a non-Big Eight auditor or vice versa, the probability that any company will change from a Big Eight to a non-Big Eight auditor is equal to the probability that the firm will change from a non-Big Eight to a Big Eight auditor.
**$H_1$:** For those OTC companies who change from a Big Eight to a non-Big Eight auditor or vice versa, the probability that any company will change from a Big Eight to a non-Big Eight auditor is not equal to the probability that the firm will change from a non-Big Eight to a Big Eight auditor.

**$H_0$:** For those NYSE and AMEX companies who change from a Big Eight to a non-Big Eight auditor or vice versa the probability that any company will change from a Big Eight to a non-Big Eight auditor is equal to the probability that the firm will change from a non-Big Eight to a Big Eight auditor.

**Phase IV: Analysis of Extent of Auditor and Client Conflict Regarding Reported Disagreements**

According to Henry P. Hill, a past director of accounting and auditing services for the Big Eight accounting firm, Price Waterhouse & Co., the SEC mandated auditor change disclosure requirements constitute "... a powerful weapon for an auditor who wants to do the right thing" (17, p. 32). Not infrequently, auditors have cited disagreements in their exhibit letters which were not acknowledged by the registrant. Such situations indeed constitute the auditor doing the "right thing" at its best. Only very rarely, as will be expanded upon in Chapter V, do registrants cite disagreements in situations where the auditor says none existed.

Instances of "disagreements over disagreements" have frequently resulted in "poor loser" or "sour grapes" charges
by the former client, as was the case in the Gulf Oil and Price Waterhouse altercation. Consequently, there is a measure of concern that some auditors may be intimidated into not reporting disagreements to avoid such charges. Indeed, one's skepticism is aroused when an auditor resigns and no disagreements are cited by either party. A number of such cases were encountered in the research; however, as will be seen in Chapter V, many of these were found to be less sinister in nature than one would initially have expected.

The practice of reporting disagreements has deteriorated in some cases such that the SEC in ASR 247 admonished both registrants and former accountants to carefully review their disclosures. These warnings were largely grounded in registrant, rather than auditor, malfeasance.

The final phase of the research was directed toward the issue of how frequently disengaged auditors cite disagreements not reported by their clients, or vice versa. More specifically, the purpose of this phase was to determine whether statistically significant differences existed between the exchange groupings under study, as well as between Big Eight and non-Big Eight auditors and within the Big Eight grouping, in terms of "disagreements over disagreements." The research was conducted from two perspectives: that of registrants by exchange and from the point of view of the displaced auditors involved.
Registrant Data: Auditor and Client Conflict Regarding Reported Disagreements

The registrant aspects of reported disagreement conflicts between registrants and displaced auditors were patterned after the research in the preceding major phases. Four tabulations were prepared presenting auditor changes with and without agreement between the registrant and auditor regarding the nature or existence of disagreements. The tabulations were prepared for all companies changing auditors, NYSE listed companies, AMEX listed companies, and OTC companies. The tabulations, presented in Appendix D, were prepared for 8-K report years 1974 through 1978. As in the first phase, no statistical tests were made, for the reasons cited earlier in this chapter. These tables were intended, in part, to examine descriptively the SEC's concern in ASR 247 that the practice of reporting disagreements had been deteriorating.

To test for significance of differences by exchange, null and alternate hypotheses were examined in the chi-square test for two and k-sample cases as follows, based upon Forms 8-K filed during the five years ended in 1978:

42. $H_0$: There is not a statistically significant difference between NYSE, AMEX, and OTC firms as to the existence of conflicts between firms and their predecessor auditors regarding the nature or presence of disagreements preceding auditor changes.

$H_1$: There is a statistically significant difference between NYSE, AMEX, and OTC firms as to the existence of conflicts between firms and their predecessor auditors regarding the nature or presence of disagreements preceding auditor changes.
43. $H_0$: There is not a statistically significant difference between NYSE and AMEX firms as to the existence of conflicts between firms and their predecessor auditors regarding the nature or presence of disagreements preceding auditor changes.

$H_1$: There is a statistically significant difference between NYSE and AMEX firms as to the existence of conflicts between firms and their predecessor auditors regarding the nature or presence of disagreements preceding auditor changes.

44. $H_0$: There is not a statistically significant difference between NYSE and OTC firms as to the existence of conflicts between firms and their predecessor auditors regarding the nature or presence of disagreements preceding auditor changes.

$H_1$: There is a statistically significant difference between NYSE and OTC firms as to the existence of conflicts between firms and their predecessor auditors regarding the nature or presence of disagreements preceding auditor changes.

45. $H_0$: There is not a statistically significant difference between AMEX and OTC firms as to the existence of conflicts between firms and their predecessor auditors regarding the nature or presence of disagreements preceding auditor changes.

$H_1$: There is a statistically significant difference between AMEX and OTC firms as to the existence of conflicts between firms and their predecessor auditors regarding the nature or presence of disagreements preceding auditor changes.

46. $H_0$: There is not a statistically significant difference between NYSE and AMEX firms as a unit and OTC firms as to the existence of conflicts between firms and their predecessor auditors regarding the nature or presence of disagreements preceding the auditor changes.

$H_1$: There is a statistically significant difference between NYSE and AMEX firms as a unit and OTC firms as to the existence of conflicts between firms and their predecessor auditors regarding the nature or presence of disagreements preceding auditor changes.
Auditor Data: Auditor and Client Conflict Regarding Reported Disagreements

Though not part of the major thrust of the dissertation research, further inquiries were made with respect to the extent of auditor and client conflict regarding the nature or presence of disagreements, from the perspective of the predecessor auditor.

Here, answers were sought to questions such as whether or not differences existed between Big Eight auditors, taken as a whole, and all other auditors with respect to the extent of auditor disagreement over the nature or presence of disagreements preceding auditor changes. That is, if it can be found in the immediately preceding series of chi-square tests that universally registrants would prefer not to report attendant disagreements to the same extent, does either auditor grouping tend to be predisposed to nevertheless report disagreements? This test will hinge interpretatively somewhat upon the results of hypotheses sets numbers forty-two through forty-six. For example, a conclusion of no significance of differences in those tests (registrant constancy) would tend to lend credence to a conclusion of significance in the latter tests, were that the case. On the other hand, concluding no significance of differences between auditors (auditor constancy) would tend to add credibility to a conclusion of significant differences in the earlier tests by exchanges.
The following hypotheses were prepared for testing, using data from 8-K reports filed in the years 1974-1978:

47. \( H_0 \): There is not a statistically significant difference between Big Eight auditors, as a group, and all other auditors as to the existence of conflicts between firms and their predecessor auditors regarding the nature or presence of disagreements preceding auditor changes.

\( H_1 \): There is a statistically significant difference between Big Eight auditors, as a group, and all other auditors as to the existence of conflicts between firms and their predecessor auditors regarding the nature or presence of disagreements preceding auditor changes.

Finally, as a test for significance of differences between individual Big Eight firms with respect to the same issue, the following null and operational hypotheses were tested in the chi-square test for k-independent samples (seven degrees of freedom), as follows:

48. \( H_0 \): There is not a statistically significant difference between individual Big Eight auditors as to the existence of conflicts between firms and their predecessor auditors regarding the nature or presence of disagreements preceding auditor changes.

\( H_1 \): There is a statistically significant difference between individual Big Eight auditors as to the existence of conflicts between firms and their predecessor auditors regarding the nature or presence of disagreements preceding auditor changes.

The results of all of the tests described in this chapter are documented in Appendix D and discussed in the following chapter.
CHAPTER BIBLIOGRAPHY


17. "Well Done!" Forbes, CXI (June 1, 1973), 32-34.


CHAPTER V

RESULTS OF THE STUDY

The results of the thesis research presented in this chapter parallel the description of the four basic research phases described in the preceding chapter. The first phase of the research involved a non-statistically oriented examination of types of disagreements reported, types of auditor opinions rendered preceding auditor changes, and an analysis of firms designated as chronic auditor changers. The results of the second phase offer statistical insights into the extent of differences between the three populations studied regarding various disclosures required on Forms 8-K and 10-K. Phase three addresses the question of increasing Big Eight dominance of the auditing services market. Finally, phase four presents both statistical and descriptive evidence with respect to the extent of auditor-client conflict as to the nature or presence of reportable disagreements.

Phase I Results: Types of Disagreements and Opinions Preceding Auditor Changes and Firms Chronically Changing Auditors

The first phase of the research was further subdivided into three areas of inquiry: (1) types of disagreements reported preceding auditor changes, (2) types of auditor
opinions rendered prior to all auditor changes and rendered prior to auditor changes involving disagreements, and, finally, (3) a search for characteristics of commonality in firms who change auditors chronically. The data in this phase were not analyzed in a statistical context, for the reasons cited in the preceding chapter.

**Types of Disagreements Reported**

Appendix D (pp. 314-328) presents tabular results of the analysis of the types of disagreements reported in all auditor changes (pp. 314-316), NYSE company auditor changes (pp. 318-320), AMEX company changes (pp. 322-324), and in auditor changes by selected OTC companies (pp. 326-328), during the five 8-K report years ended December 31, 1978. Table I on the following page has been prepared to summarize the results of the tabulations presented in Appendix D.

It should be noted in Table I that the types of disagreements encountered in the thesis research have been ranked according to frequency of occurrence by all companies and each exchange. To further clarify their nature, several representative examples of each of the specific disagreement types found will be integrated with the results of Table I in the following discussion. However, examples of disagreement types Nos. 13 and 14, "miscellaneous types of disagreements," and "disagreements acknowledged without specification of types," will not be presented due to their generalized nature.
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Disagreement type No. 1. --Disagreement type No. 1 in the thesis classificational scheme is "recoverability of the cost of some or all assets or adequacy of related reserves." As can be seen in Table I, this was the second ranked most frequently observed type of disagreement for all companies, as well as for each of the individual sample groupings, NYSE, AMEX, and OTC firms. There were 46 occurrences of this disagreement type, constituting 14.9 per cent of the total of 309 disagreements reported by all companies. AMEX listed companies reported 26 such disagreements in a total of 178 (14.6 per cent), 11 were reported by OTC companies from among 62 total disagreements (17.7 per cent), and only 9 cases were reported in the 69 disagreements (13.0 per cent) reported in NYSE Forms 8-K.

Each of the following exemplary cases of disagreement type No. 1 involved former audit clients of Arthur Andersen & Co. In the first case, Gladding Corporation filed a Form 8-K dated April 30, 1977 in which it is stated that

In the opinion of the Registrant, there were no disagreements with Arthur Andersen & Co. in connection with the audit of the Registrant's two most recent fiscal years and any subsequent interim period . . . However, Registrants have been informed by Arthur Andersen & Co. that they consider a disagreement or disagreements have existed with respect to prior financial statements (26. p. 2).

Among other areas of disagreement, the Arthur Andersen exhibit letter appended to the registrant's 8-K lists the following exemplary type No. 1 disagreements:
Accounts Receivable Due From Franchise Distributors

It was determined, during the course of our September 30, 1976 examination, that a reserve in the amount of approximately $1 million was required to reduce the amount due from the franchised distributors to net realizable value.

Citizen Bank Radio Inventories

On or about July 27, 1976, the Federal Communications Commission expanded the number of approved citizen band radio channels from 23 to 40. This action had an adverse effect on the selling prices of 23-channel sets. The Company's pricing of this inventory did not give recognition to the net realizable value adjustment required to properly state this inventory. (26, pp. 2-3)

The next type No. 1 disagreement involved a subsidiary of Liberty Corporation, Liberty Life Insurance Company, and Arthur Andersen. In this particular case, Arthur Andersen auditorily questioned what the firm considered to be a permissive treatment allowed in the AICPA Industry Audit Guide, "Audits of Stock Life Insurance Companies," regarding the valuation of certain investments in preferred stocks. The Form 8-K filed by Liberty Corporation relates the following:

The company follows the accepted accounting practice for life insurance companies of carrying its investment in common stock at quoted market values and recording unrealized gains or losses in the retained earnings account. Preferred stocks are treated as long-term investments and carried at cost unless there has been a permanent impairment in their value. Quoted market values of preferred stocks are disclosed in a footnote to the financial statements. Early in December, 1974, Arthur Andersen & Co. began discussions with Liberty management regarding the carrying value of preferred stocks. Arthur Andersen & Co. pointed out that there had been a significant decline in the quoted market values of equity securities and raised the question as to whether Liberty should consider recognizing the unrealized depreciation of its preferred stocks. Arthur Andersen & Co. stated
that it felt that the recoverability of the amount at which preferred stock are reflected in the financial statements is an economic concern that overrides the permissive treatment stated in the Industry Audit Guide. Arthur Andersen & Co. feels that the significant market decline creates uncertainty as to the ultimate recoverability of cost of the preferred stocks and that it is appropriate to reflect such declines in the financial statements. The unrealized depreciation of approximately $10 million in the investment of Liberty Life in preferred stocks is considered by Arthur Andersen & Co. to be material (38). (Italics added.)

The Registrant did not accept the auditor's position; consequently, Arthur Andersen qualified its opinion on the consolidated financial statements as of December 31, 1974 due to the uncertainty of the recovery of the carrying value of the preferred stocks.

Had the successor auditor, Ernst & Ernst (Now Ernst & Whinney), subsequently accepted the position of Liberty Corporation, a Rule 3-16(s) disclosure (as defined earlier) would have been required on Form 10-K. However, Arthur Andersen was somewhat exonerated when FASB 12 was released in December 1975 requiring exactly the position that they had insisted upon in the dispute. The Form 10-K certified by Ernst & Whinney for the year ended December 31, 1975 states:

Preferred stocks, which were valued at cost December 31, 1974, are valued at market December 31, 1975, in accordance with Financial Accounting Standards Board Statement No. 12 issued in December 1975. See Note 8 of the notes to the financial statements in the Liberty Life financial statements section of this report which is incorporated herein by reference. This change in accounting principles had no effect on the 1975 consolidated results of operations and resolved a disagreement which the Company had with its previous auditors as to the method of valuing preferred stocks (39).
Disagreement type No. 2.--Disagreement type No. 2 is "timing of expense recognition." An examination of Table I indicates that this area constitutes the third most common source of auditor/client disagreement for all companies, as well as for both NYSE and AMEX listed firms. Interestingly, however, timing of expense recognition is co-ranked only eight for OTC firms. Whereas the 26 instances of such disagreements constituted 10.5 per cent of 247 combined NYSE and AMEX total disagreements, type No. 2 disagreements were only 4.8 per cent of total OTC disagreements.

An interesting example of a type No. 2 disagreement is found in the January 1977 Form 8-K report of Inter-Continental Computing, Incorporated. In this case, Peat, Marwick, Mitchell & Co. qualified its report on the consolidated financial statements of Inter-Continental for the two years ended December 31, 1975 based, in part, upon the subject matter of the disagreement. The opinion qualification was unusual in that it was based upon the client's having failed to provide adequate justification for a change in accounting principle, though the newly adopted principle was in conformity with generally accepted accounting principles. The Peat, Marwick, Mitchell & Co. report, as presented in Form 8-K says:

As described in Note 3 to the financial statements, the Company capitalized certain software development costs in 1975 whereas it previously expensed these costs in the period of development. Although use of the deferral method for these software costs is in conformity with
generally accepted accounting principles, the
Company, in our opinion, has not provided reason-
able justification for making a change in method
of accounting as required by Opinion No. 20 of the
Accounting Principles Board as the recoverability
of these capitalized costs is dependent upon future
profitable operations, and the measurability of
future benefits of these costs cannot be reasonably
identified and objectively determined (34).

The auditor's qualification was also "subject to" significant
working capital deficits. Hence, it is not surprising that
the registrant sought to defer the software costs to subse-
quent period. No Rule 3-16(s) disclosure was subsequently
required because, as the Form 8-K continues:

Subsequent to the change in principle accoun-
tants, the Company has elected to expense software
development costs for 1976 and future years. As a
result, the 1975 financial statements will be re-
stated to reflect the expense of the previously de-
ferred software development costs (34).

The next exemplary type No. 2 disagreement centered upon
a subsequent events review conducted by Deloitte, Haskins, &
Sells during the 1974 audit of Permaneer Corporation, whose
Form 8-K dated September 1975 indicates the following:

In performing their subsequent events review
in connection with their 1974 audit, Haskins &
Sells noted that the Company had deferred ap-
proximately $500,000 of general and administrative
expense and interest expense in the three month
period ended February 1, 1975. Haskins & Sells
maintained that Accounting Principles Board Opinion
No. 28 did not provide for the deferral of such
items. Subsequently, the financial officer re-
considered his interpretation of such Opinion and
charged to expense during the first quarter sub-
stantially all of the amounts previously deferred (42).

Disagreement type No. 3.--The most frequently encoun-
tered type of disagreement in the thesis research was "timing
of revenue recognition." There were 55 instances of this form of disagreement, constituting 17.8 per cent of the 309 total disagreements for all companies. It is also noteworthy that timing of revenue recognition was ranked or co-ranked first in frequency of occurrence for both the major exchanges as well as for OTC firms. Furthermore, in terms of relative frequencies for each sample grouping, there is considerable uniformity. In NYSE companies it was found that 20.3 per cent of all disagreements were type No. 3. AMEX firms had the most absolute numbers of occurrences, 30; but, in fact, the lowest percentage (16.9 per cent) of any sample grouping. OTC firm 8-K reports listed 11 type No. 3 disagreements.

It is not at all surprising, given the contemporary pre-eminence of income and earnings per share data, that timing of revenue recognition disagreements were so abundant. The situations were predicatively recurrent. The client position was almost invariably inclined toward accelerating revenue recognition, with the auditor resisting recognition. A secondarily recurring theme was also evident in Forms 8-K of 1974 involving revenue timing disagreements. Prior to the issuance of the AICPA guides for profit realization in real estate transactions, many disagreements arose similar to the following dispute between Budget Capital Corporation and Peat, Marwick, Mitchell & Co.:
During 1973, State Savings and Loan Association, a subsidiary of Registrant, sold an apartment complex. The Subsidiary had concluded that, based upon regulations of the Federal Home Loan Bank Board and consistent with past practices of the Board this transaction qualified as a sale, and had recognized a profit. PMM&Co. concluded, on the basis of the Profit Recognition Guide, that profit recognition was not appropriate. On that ground the profit was not recognized, which had the effect of reducing earnings before income taxes by approximately $101,000 (7).

The auditor's exhibit letter challenged the appropriateness of the preceding description; however, rather than specifying the inadequacies, the following was presented:

During 1973, State Savings and Loan Association, a majority owned subsidiary of the Company, sold an apartment complex. The buyer's down payment was insufficient to permit profit recognition pursuant to the provisions of the AICPA Industry Accounting Guide, Accounting for Profit Recognition on Sales of Real Estate. The company had recorded this transaction as a sale and recognized a profit. PMM&Co. disagreed with the Company's conclusion and the profit was not recognized, which had the effect of reducing earnings before income taxes by approximately $101,000 (7).

An example of a revenue timing disagreement not involving real estate transactions evolved between Canal Corporation and Peat, Marwick, Mitchell & Co. as related below:

The registrant contended that a transaction involving the sale of shares of stock held by Canal National Bank, a subsidiary of the registrant, was essentially completed in the fiscal year ended December 31, 1974, and that the substantial gain resulting from the transaction should be reflected in the registrant's income for that period. Peat, Marwick, Mitchell & Co. disagreed, feeling that the transaction was not completed until 1975 and that therefore reflecting the results in 1974 figures would not be in accordance with generally
accepted accounting principles. After discussions, the registrant accepted the auditor's position and reported the transaction in its financial results for the first quarter of 1974 (9, p. 2).

As a final example of a revenue recognition timing disagreement, the following Form 8-K excerpt is cited regarding a disagreement between Callon Petroleum Company and Coopers & Lybrand:

During the year ended May 31, 1976, Callon sold oil well investments to several investors, some of whom were related parties. A portion of the sales proceeds was borrowed from a bank by investors repayable only from future production. Callon agreed as a condition of the bank loan to the investors, to purchase and deposit as collateral, certificates of deposit in amounts which at all times were to be at least equal to the unpaid balance of the notes. Callon’s security was the underlying hydrocarbon reserves.

Based upon independent petroleum engineers estimates, Callon held that the underlying reserves were more than sufficient to conclude that the notes were collectible and that, therefore, all sales proceeds from the investors should be considered revenue. Coopers & Lybrand maintained that despite the aforesaid engineering report, a portion of the profit should be deferred since part of the sales proceeds might be required to be used to repay the investors notes to the bank. Based upon Coopers & Lybrand’s recommendation, a portion of the profit from the transaction was deferred (10).

Disagreement type No. 4.--Disagreement type No. 4, "Necessity for certain audit procedures or other audit scope disagreements," is, understandably, a rather unusual item. Certainly a client may question the extent of an auditor's proposed scope; however, the client must ultimately acquiesce
or receive an audit opinion qualified on that basis. Furthermore, the position of the SEC has been for some time not to accept audit opinions qualified in respect of accounting principles or auditing scope (17, p. 3315).

Audit scope disagreements constituted 4.5 per cent of the total of 309 disagreement instances reported in the Forms 8-K of the 102 total registrants reporting disagreements. Percentages of total disagreements within each sample grouping were 3.9 per cent, 4.4 per cent, and 6.4 per cent, respectively, for AMEX, NYSE, and OTC firms. Though these percentages for OTC firms are only slightly higher than for NYSE and AMEX firms, one plausible explanation might be that OTC firms are somewhat less conversant in auditing matters. Consequently, they might exhibit a greater proclivity toward questioning audit scope decisions than would their larger counterparts. Table I shows audit scope disagreements ranked ninth for all companies (14 occurrences), co-ranked seventh for NYSE firms (3 occurrences), co-ranked ninth for AMEX firms (7 occurrences), and co-ranked sixth for OTC registrants (4 occurrences).

The Form 8-K filed by Iota Industries dated April 1976 contained an audit scope disagreement and was unusual in several other respects. The 8-K report was triggered by the resignation of Arthur Young & Co. as auditors, whose previous audit report had disclaimed an opinion on Iota's financial statements due, in part, to the auditing scope restriction as follows:
There were no disagreements with Arthur Young & Company . . . except as follows: During the week of February 2, 1976, when Arthur Young & Company was finalizing their report for the year ended December 31, 1974, the President of the Registrant declined to make satisfactory written representations as to the financial statements and Registrant's affairs. As a result of this limitation on their scope and the uncertainties referred to in (c) below, Arthur Young & Company disclaimed an opinion on Registrant's financial statements (36).

Similarly, Alexander Grant & Company, a member of the so-called Big Fifteen auditing firms, resigned the engagement with Neotec Corporation on December 11, 1975 after a scope disagreement:

For the fiscal year ended January 31, 1975, with respect to which Grant has not rendered a report, disagreements occurred with respect to the extent of auditing procedures to be performed and disclosures deemed necessary by Grant in connection with the company's GM/A [ground meat analyzer] transactions with limited partnerships. The company intends to follow Grant's recommendations with respect to auditing procedures and in that connection has retained independent outside counsel; it also intends to make such disclosures deemed proper by the independent outside counsel it has retained (41).

Disagreement type No. 5.--Disagreement type No. 5 is entitled, "necessity for accruing a liability or disclosing a contingent liability or adequacy of liability accruals." While this disagreement type was ranked fifth both overall (24 instances) and for NYSE firms (5 instances), this area was ranked seventh for AMEX firms (12 instances), but was the third most common disagreement type for OTC firms (7 instances). On a relative basis, such disagreements constituted 7.8 per cent of all disagreements reported. NYSE firms
(7.2 per cent) and AMEX firms (6.7 per cent) were quite close to the 7.8 per cent overall figure; however, such disagreements represented fully 11.3 per cent of all OTC disputes. An attempt to explain this disparity would be pure conjecture.

The Form 8-K reporting Gulf Oil Corporation's highly publicized termination of Price Waterhouse & Co. cites such a liability accrual disagreement as the only source of disagreement reportable:

In connection with the audits of the two most recent fiscal years (there having been no subsequent interim audit period) preceding such engagement there have been no disagreements with Price Waterhouse & Co. on any matter of accounting principles or practices, financial statement disclosure or auditing scope or procedure, which disagreements if not resolved to the satisfaction of Price Waterhouse & Co. would have caused it to make reference in connection with its report to the subject matter of the disagreement or disagreements, except that in January 1978, in connection with the completion of the audit for the fiscal year ended December 31, 1977, there was a disagreement with Price Waterhouse & Co. concerning the amount to be reflected in the Corporation's Financial statements to provide for the Corporation's estimated liability for federal income taxes for prior periods. The disagreement was resolved to the satisfaction of Price Waterhouse & Co. prior to its completion of the audit (29, p. 2).

Preceding this disagreement, the reader will recall that Price Waterhouse & Co. had refused to contribute to a fund to provide redress to Gulf stockholders as a result of clandestine political payments from a "slush fund" maintained abroad. However, that particular area of dispute, technically, did not constitute a reportable disagreement. The SEC later urged voluntary disclosure of such "reasons" in ASR 247.
Effective January 17, 1975, Golden Flake, Inc. hired Hurdman and Cranstoun to succeed Peat, Marwick, Mitchell & Co. as auditors following a series of disagreements regarding the registrant's financial statements for the year ended May 31, 1974. In addition to revenue recognition and necessity for report qualification disagreements, the following dispute arose pertaining to loss contingency disclosures:

The Company was notified on August 21, 1974, that it was one of sixteen Defendants in a lawsuit alleging violation of the Anti-trust Laws, before its Annual Report to Stockholders for the year ended May 31, 1974 was issued. The Company's Counsel notified its auditors that sufficient investigation had not been conducted to enable Counsel to express an opinion as to the ultimate outcome of the litigation. The auditors notified Management of the Company that its disclosure of the allegations would be required in a footnote to the Financial Statements for the year ended May 31, 1974 and that because the potential effect of the litigation was unknown, it would be necessary for the Accountant's opinion to be qualified. Management disagreed with the requirement to disclose the litigation because, in its opinion, the allegations were not warranted and informed the auditors that in its opinion the litigation was not of a substantial nature as to require the Accountant's Report to be qualified (27).

Subsequently, registrant's counsel concluded that an adverse judgment, if rendered, would not be highly material. The auditors therefore opted for footnote disclosure of the contingency; however, the auditor's opinion was ultimately qualified in respect of various other uncertainties (27).

**Disagreement type No. 6.**-- This particular disagreement type, "manner or need for disclosure of transactions with related parties" (as that term is defined in SAS 6), was
rather infrequently reported. There were only 9 such cases indicated in the 309 total disagreements reported (2.9 per cent) in the 102 Forms 8-K citing disagreements. Five of the 9 cases were reported by AMEX firms, for whom related party disagreements were ranked tenth in frequency of occurrence. This disagreement type was also ranked tenth for OTC registrants (2 cases) sampled. Table I shows that, overall, related party disclosure disagreements were ranked twelfth by frequency for all firms. This area was co-ranked eleventh for NYSE firms, by whom only 2 such cases were reported.

Several recent occurrences have probably served to minimize the probability for related party disclosure disagreements. First, the legal liability criminal judgments rendered in U.S. vs. Simons (Continental Vending) centered upon disclosure (or as Federal government attorneys asserted, the lack thereof) of related party transactions. Secondly, SAS 6, issued in July 1975 by the AICPA provides very definitive guidelines for identifying, auditing, and reporting related party transactions. Both of these factors have, no doubt, significantly reduced the likelihood of auditor/client confrontations in this area.

In terminating the services of Alexander Grant & Co., I.C.H. Corporation made the following vague representations regarding related party disclosure disagreements:

With respect to the Registrant's financial statements for fiscal year ended December 31, 1974, there were extended discussions between Alexander Grant & Co. and Registrant's management as to the
extent of required disclosure of certain transactions with management which resulted in those disclosures set forth in Footnote P to said financial statements ...(32).

While I.C.H. contended that this was only an area of discussion, rather than a disagreement, Alexander Grant & Co. stated more assertively that "... there were disagreements as to the disclosure, and the extent thereof, of certain transactions between the Corporation and corporations and individuals who might be considered related parties of the Corporation" (32).

As final example of a related party transaction disclosure dispute, Southeastern Public Service Company stated in its August 1977 Form 8-K reporting the resignation of Peat, Marwick, Mitchell & Co. that:

During the audit for the year ended December 28, 1977, a disagreement arose between Registrant and PMM&Co. concerning the necessity of disclosing related party transactions in accordance with SAS #6. Registrant believed that there had not been a significant change from the preceding fiscal year when reference to related party transactions in Registrant's financial statements had not been made. PMM&Co. did not agree with Registrant's position. The matter was resolved to the satisfaction of PMM&Co. and Registrant by the inclusion of footnote (8) Transactions with Affiliates in Registrant's financial statements (50).

Disagreement type No. 7.--Disagreement type No. 7 in the thesis classificational scheme is "balance sheet or income statement classification of an item." For all registrants, this area constituted the sixth most frequent disagreement type, with 23 such cases (7.4 per cent of all disagreements). OTC firms, for whom this disagreement type was ranked highest
(fourth), reported 5 cases, constituting 8.1 per cent of all OTC disputes. NYSE firms had fewer type No. 7 disagreements (4 cases) than any sample grouping. Such disagreements were ranked sixth in frequency of occurrence and accounted for 5.8 per cent of all disagreements reported by NYSE firms. AMEX firms had 14 instances (7.9 per cent) of total disagreements categorized as balance sheet or income statement classificational disputes. These disagreements were co-ranked fifth for AMEX registrants.

As described more fully in the preceding chapter, "accounting change" disagreements, as that term is defined in APB 20, were included in this classificational area. The following accounting change dispute is unusual in that the auditor ultimately acquiesced to the client's position:

A disagreement [existed] concerning the accounting for the change in Registrant's capitalization policy as it applied to general and administrative expenses. HKF [Harris, Kerr, Forster & Company] initially argued that such change was effectively a change in accounting estimate and, accordingly, should be accounted for in the period of change and future periods without showing the cumulative effects thereof. After discussion with management, HKF concurred with Registrant in the manner of reporting such change. Thus this disagreement was resolved to the satisfaction of HKF and Registrant (47).

An example of a type no. 7 disagreement involving issues other than accounting changes is found in the May 1975 Form 8-K of Sanitas Service Corporation. Arthur Andersen & Co., the terminated auditor, relates the following item (not acknowledged by the registrant) in the auditor's exhibit letter:
In April 1973, the limited partnership, which in 1972 had purchased all the assets (excluding real property) subject to all the liabilities (except a mortgage and certain acquisition debt) of Economy Linen Service Division, terminated operations and Sanitas began liquidating the assets of this entity in order to satisfy obligations to Sanitas. While Sanitas had indicated in its press release and Form 10-Q reports that the loss to be sustained in the liquidation would result in an extraordinary charge to income, we required that the loss not be reflected as extraordinary in the June 30, 1973 financial statements (49).

As a final example, the following unusual transaction was the subject of a balance sheet classificational disagreement between ICN Pharmaceuticals and Peat, Marwick, Mitchell & Co.:

The agreement under which ICN acquired a company in Switzerland in 1969 contained a provision that the former owners would receive additional consideration if certain earnings levels were met during subsequent years. ICN agreed to give the former owners full management control during the "earnout period". To protect ICN against the effect of mismanagement the acquisition agreement further provided that the retained management (former owners) guarantee a minimum profit of $500,000 during each of the first three years following the acquisition. In 1972 the company incurred a net loss of $1,064,385 which required a payment to the subsidiary by the retained management of $1,564,385.

Management's position was that the profit guarantee (paid by the former owners) to the subsidiary should be recorded in accordance with the provisions of the contract and intention of the parties and as such, reflected in its consolidated statement of earnings as an extraordinary credit. The company's auditors required the reimbursement of shareholders to be accounted for as an adjustment to the purchase price by crediting consolidated additional paid in capital (33, p. 2).
Disagreement type No. 8.--This disagreement type, "adequacy of internal controls," occurred only 4 times in the total of 309 disagreements reported by all companies and was co-ranked fourteenth out of sixteen disagreement types. NYSE Form 8-K reports listed no such disagreements, while three instances were reported in AMEX 8-K's, the remaining occurrence having been reported by an OTC firm. This disagreement type was fourteenth in rank for AMEX registrants and co-ranked thirteenth by OTC companies.

The infrequency of occurrence of internal control disputes is understandable in that publicly listed firms ordinarily would have the resources available for implementing adequate controls to preclude or detect the occurrence of a material error or irregularity. Furthermore, in the opinion of many practicing accountants, the provisions of the Foreign Corrupt Practices make it literally illegal for a publicly listed firm to have materially weak internal controls. It seems likely that were the necessary data available for smaller, non-public firms, many more internal controls disagreements would be identified. This is attributable to the fact that potentially serious internal control inadequacies often plague smaller businesses who frequently lack the resources and personnel for optimal segregation of duties.

An example of an adequacy of internal controls dispute appears in the following excerpt from the August 1977 Form 8-K of Xonics, Incorporated:
During recent years the Company had experienced rapid growth through acquisitions and internal development, and needed to develop a professional staff at an equally rapid pace. In order to maintain control during this extraordinary growth period, on several occasions Arthur Young has recommended the Company to implement the following suggestions . . .

to retain a qualified senior financial officer who will assume responsibility for implementing accounting systems and providing timely financial statements (57, p. 16).

The aforementioned Xonics Form 8-K was unusual in several respects. Twenty-seven separate disagreements are contained in the lengthy (sixteen page) document. Additionally, at one point in the audit for the year ended March 31, 1977, relations between client and audit personnel became so strained that the Arthur Young partner in charge of the engagement was refused access to the client's premises:

... due to a personality conflict, the Arthur Young partner who was responsible for the audit engagement was refused access to the client's premises by order of the Company. Arthur Young immediately removed all its other personnel from the Company's premises and informed the Company that it would not continue the engagement until the audit partner was granted free access to the Company's premises. The personality conflict was subsequently resolved, and such access was granted (57, p. 16).

Understandably, the Form 8-K states that Arthur Young & Co. resigned its appointment as auditor.

**Disagreement type No. 9.**-- This disagreement type was entitled, "whether inaccurate information was given to or withheld from the auditor, or auditor withdrawal due to management integrity." OTC firms had the highest ranked frequencies of occurrence in this area, co-ranked eighth
with 3 such instances, or 4.8 per cent of all OTC disagreements. NYSE firms also had 3 cases constituting 4.4 per cent of disagreements in that sample grouping. Type No. 9 disputes were co-ranked seventh for NYSE firms. AMEX firms reported both the highest absolute number (7 instances), but lowest percentage of total disagreements (3.9 per cent) in this area. For all companies combined, type No. 9 disagreements were ranked tenth, with 4.2 percent of all disagreements so classified.

In the following exemplary type No. 9 disagreement, Movie Star, Inc. represents in the Form 8-K that S.D. Leidesdorf, a member of the Big Fifteen accounting firms, had resigned its appointment. Presumably the auditor's action was based, in part, upon receiving conflicting information from management relating to inventory valuation. It is also noteworthy that S. D. Leidesdrof resigned within four months of the firm's appointment and had questioned inventory valuations reported upon in the predecessor's unqualified audit report. Movie Star's management states:

(b) The former accountant, S. D. Leidesdorf & Co. was retained by the registrant on or about September 30, 1976, the close of the registrant's last fiscal year having been May 29, 1976. The registrant's independent accountant had been Clarence Rainess & Co. who, under date of August 3, 1976, issued its auditor's report concerning the registrant's consolidated balance sheet as at May 29, 1976 and May 31, 1975, and the related consolidated statements of income and retained earnings, and changes in financial position for the years then ended. S. D. Leidesdorf & Co. stated in its letter of resignation that although it had performed no audits of any financial
statements of the registrant, nor had it completed its limited review of the registrant's interim financial statements as at and for the 26 week period ended November 27, 1976, it had received from registrant's management conflicting information concerning the inventory included in or affecting the registrant's heretofore issued annual and interim balance sheets and statements of income, tax returns, etc. The registrant denies that there was any justification in fact for the resignation and in a news release to the American Stock Exchange stated that S. D. Leidesdorf & Co. had raised the question of excessive provision for markdowns in the registrant's inventory at the end of its fiscal year May 29, 1976 (40).

S. D. Leidesdorf issued the following statement in its auditor's letter indicating that the item cited above was only one area in which conflicting information had been received and that the problems encountered were not limited to the fiscal year 1976:

We disagree with the statement in Item 12(b) that "S.D. Leidesdorf & Co. had raised the question of excessive provision for markdowns in the registrant's inventory at the end of its fiscal year May 29, 1976." The character of and explanation for what is referred to in the quoted language as an "excessive provision for markdowns in the registrant's inventory at the end of its fiscal year May 29, 1976" is one of the matters concerning which we received conflicting information from management and to which the second paragraph of one letter of January 28, 1977 applies. In addition, as indicated in the third sentence of Item 12(b), the conflicting information concerning inventory was not limited in its application to the financial statements for the fiscal year ended May 29, 1976 (40).

An example of a disagreement involving questionable documentation and management integrity is found in the May 1978 Form 8-K of Tiffany Industries. The document reports that Alexander Grant & Company had been terminated in favor
of Coopers and Lybrand at a special meeting of the Board of Directors on May 18, 1978. The Form 8-K further states:

Alexander Grant & Company did not complete its audit work in connection with the Registrant's financial statements for the fiscal year ended December 31, 1977. During the course of its audit work, Alexander Grant & Company became aware of certain alleged irregularities, including apparently spurious and questionable documents, which necessitate extended auditing procedures that have not been completed. On April 28, 1978, Alexander Grant & Company first notified the Registrant of these matters and certain other incidents during the course of their audit which raised serious questions about the integrity of some operating management personnel and might involve a material impact on the Registrant's financial position and the results of its operations for the most recent fiscal year. Alexander Grant & Company also advised the Registrant that there were a significant number of audit issues which had not yet been resolved (52, p. 2).

While superficially it might seem that this situation could have triggered a subsequent disclosure under Rule 3-16(s) of Regulations S-X, in fact, none would be possible. This is due to the fact that no other disagreements were reported and apparently Alexander Grant & Company had not yet reached the stage that a proposed unfavorable opinion had been presented to Tiffany Industries. Consequently, in this respect, no conclusion as to an audit opinion by the predecessor existed for any possible contravention by the successor.

Disagreement type No. 10.--This disagreement type concerns the "necessity for disclosure of apparently illegal actions." With only three such occurrences, two reported by NYSE Registrants and one by an AMEX firm, this disagreement
type was ranked sixteenth out of sixteen areas for all companies AMEX firms, and OTC firms. Table I indicates that disclosure of illegal action disputes were co-ranked eleventh for NYSE firms.

Foster Wheeler Corporation, A NYSE listed company, reported the following disagreement preceding its termination of Hurdman and Cranstoun on February 28, 1977 and the subsequent hiring of Price Waterhouse & Co.:

In February, 1976 Hurdman and Cranstoun reported to the Audit Committee of the Board of Directors, after discussions with management, that there may have been questionable payments or accounting practices in respect of certain foreign subsidiaries of the Registrant. In March, 1976 the Audit Committee authorized an investigation by Registrant's outside counsel and by Hurdman and Cranstoun. The results of the investigation were covered in a report to the Registrant in October, 1976. The disagreement in question between Registrant and Hurdman and Cranstoun arose as to the necessity of disclosing the results of the investigation. Management, the Audit Committee of the Board, and the Board of Directors were of the view that the matters revealed by the investigation did not require disclosure. Hurdman and Cranstoun, after consultation with its outside counsel, concluded that it could not render an "unqualified" opinion or otherwise associate itself with Registrant's financial statements unless the results of the investigation were properly disclosed or unless Hurdman and Cranstoun received an unqualified opinion of Registrant's outside counsel concluding that the disclosure was not required and obtained its own outside counsel's concurrence in such unqualified opinion. The opinion of Registrant's outside counsel as submitted to Hurdman and Cranstoun contained qualifications which were determined by Hurdman and Cranstoun and its counsel to be sufficiently significant as to be unacceptable as a basis for non-disclosure. After further meetings between Hurdman and Cranstoun and its counsel and Registrant's Board of Directors decided at its November 29, 1976 regular meeting to file a Form 8-K Report for November 1976 and such report was filed on December 10, 1976. This resolved the disagreement (23, pp. 2-3).
Disagreement type No. 11.—Disagreement type No. 11 is "initial valuation of an asset or procedures for asset valuation." Table I shows significantly disparate results between NYSE and AMEX firms versus OTC firms in both frequencies and ranking of such disagreement types. For all firms, NYSE firms and AMEX firms, this disagreement type was ranked fourth in frequency of occurrence. On the other hand, OTC firms had only 2 asset valuation disagreements (co-ranked tenth and 3.2 per cent of OTC conflicts), while NYSE and AMEX firms combined had 92 per cent of the total of 25 instances of all asset valuation disagreements. These 25 instances constituted 8.1 per cent of the total of 309 disagreements. Although, the greatest absolute number of type No. 11 disagreements were reported by AMEX firms (16 instances and 9.0 per cent of all AMEX disagreements), the 7 asset valuation disagreements reported in NYSE Forms 8-K constituted 10.1 per cent of all NYSE disputes.

How can one explain the fact that NYSE and AMEX firms had so many more asset valuation conflicts with their auditors than did OTC firms? One explanation might be as follows. Asset valuation decisions often require significant technical expertise as, for example, is frequently the case in non-monetary transactions and in accounting for leases. OTC firms, whose accounting personnel may be relatively less sophisticated technically than are the same personnel with their larger counterparts, may place greater reliance upon the judgments of their auditors in such asset valuation decisions.
An example of the complexities which may be encountered in asset valuation decisions is found in the January 1975 Form 8-K of CCI Corporation:

The Corporation's subsidiary, Crane Company, manufactures mobile construction equipment. Some of this equipment is sold to an unconsolidated leasing subsidiary. On certain lease transactions, this leasing subsidiary sells the equipment to a financial institution and obtains a third party as lessee for the financial institution. The unconsolidated subsidiary transfers title to the equipment to the financial institution. The leases between the financial institutions and the third party lessee are of the operating type, since they do not fully amortize the cost of the equipment and there is no requirement that the lessee purchase the equipment. As part of the sale to the financial institution, the unconsolidated subsidiary gives the financial institution an option to sell the equipment to the Corporation or its unconsolidated leasing subsidiary at the end of the lease for a predetermined residual value; thus assuring the financial institution of a recovery of its investment at the termination of the lease. The financial institution assumes only normal credit risks.

In its preliminary closing at April 30, 1973, profits on these transactions were deferred in accordance with Opinion #27 of the Accounting Principles Board which had been issued during the Corporation's fiscal year. However, the corresponding assets and liabilities had not been recorded pending discussions with the independent accountants as to the proper method of accounting for same under this new opinion. Following these discussions, the appropriate assets and liabilities were recorded. While we do not view this as a "disagreement" per se, we mention it in the interest of full disclosure (12, pp. 3-4).

However, Peat, Marwick, Mitchell & Co. contended that this was a disagreement.

We have read CCI Corporation's separate letter, dated January 6, 1975, to be filed with its Form 8-K for the months of December 1974, pursuant to the requirements of Item 12 of that Form and we agree with the statements contained in the letter, except for the statement "While we do not view this as a disagreement per se, we mention it in the interest of full
disclosure," in the sixth full paragraph on page 3 and the first full paragraph on page 4. We believe that these matters were disagreements to be covered in Item 12 of Form 8-K (12).

In a disagreement involving procedures for asset valuation, Coopers & Lybrand cites the following disagreement with Sunair Electronics, Inc., which disagreement had not been acknowledged by Sunair:

Pursuant to Item 12 of Form 8-K, we have read the Registrant's letter to the Commission, dated January 20, 1975, we agree with the statements contained therein, except as explained hereunder . . .

Sunair management considered adopting the LIFO method of accounting for a subsidiary's (Schnacke, Inc.) inventory using the index method of valuation of materials. We advised them of the extent of the calculations necessary (double extending a major portion of the inventory) to satisfy our Firm as to the fairness of the new inventory valuation and compliance with applicable IRS regulations. Management disagreed, based on their interpretation of the applicable IRS regulations, that such detailed calculations were necessary. After numerous discussions, however, Sunair management agreed to use the detailed calculations rather than a simplified index approach. Management abandoned its plan when it became apparent that the calculations would cost, in terms of time spent by its employees, what they considered to be an excessive amount. Since the subsidiary had been struck by the UAW on October 31 prompting management to furlough its office personnel, it would also prevent the company from meeting its scheduled time for the release of annual earnings to the public (51).

**Disagreement type No. 12.**--Occurrences of disagreement type No. 12, "whether a particular accounting principle is generally accepted," were found to rather infrequent. There were 11 such instances reported by all firms (co-ranking:
eleventh), 7 of which were reported by AMEX firms (co-ranking: ninth), 3 of which were reported by NYSE firms (co-ranking: seventh), while the remaining 1 instance was attributable to OTC firms (co-ranking: tenth). Percentages of disagreements involving general acceptability of accounting principles to all disputes by sample groupings ranged from a high of 4.4 per cent for NYSE companies to a low of only 1.6 per cent for OTC firms. AMEX firms, at 3.9 per cent, were slightly above the average for all companies, 3.6 per cent.

A few months prior to the issuance of SFAS 5, "Accounting for Contingencies," Price Waterhouse & Co. was terminated as auditor by General Recreation, Incorporated. Preceding the auditor change, Price Waterhouse had challenged the propriety of a newly established general loss contingency reserve, a practice disallowed subsequently by SFAS 5. The auditor's letter states:

Shortly before the issuance of our report in March 1974, GRI [General Recreation, Incorporated] management proposed the establishment of an undesignated reserve of $370,000 in respect of deferred charges and other assets on the consolidated balance sheet. Management did not identify any specific basis for the establishment of such a general reserve. Management had previously booked in 1973 certain significant new deferred charges and we had previously concurred in the appropriateness of such deferrals. Management's proposal respecting the $370,000 undesignated reserve raised uncertainties in our mind as to the recoverability of the new deferrals. We advised that the establishment of an undesignated reserve such as that proposed was not in accordance with generally accepted accounting principles and that some write-offs of deferrals was required. GRI decided not to establish the
proposed undesignated reserve and wrote off approximately $250,000 of specific deferred items. Had GRI elected to provide for such undesignated reserve, or had not decided on such write-off, we would have found it necessary to qualify our opinion (25). (Italics added).

In another case pertinent to SFAS 5, General Exploration Company was involved with, and subsequently dismissed, Haskins and Sells in a disagreement which centered upon whether a gain contingency should have been accrued:

There has been one disagreement with Haskins & Sells concerning the accounting, during the quarter ending September 30, 1977, for certain costs and claims of one of Registrant's subsidiaries. Management of Registrant believed that costs under certain construction contracts in effect when the subsidiary was acquired were covered by warranties of the former owners and should be recorded on the balance sheet as a claim in litigation, since a lawsuit has been filed against the former owners in this matter. The accountants took the position that this treatment would not be in conformity with generally accepted accounting principles. It was their opinion that the construction costs should be reported as charges against income and that no claim against the former owners should be recorded as an asset. Registrant acceded to the accountant's opinion in this matter and considers it a closed issue (24).

As a final example of a conflict as to whether or not a particular accounting principle was generally accepted, the following excerpt is taken from the February 1975 Form 8-K of Computer Investors Group, Inc.:

Registrant and PMM [Peat, Marwick, Mitchell & Co.] had a disagreement, during a series of discussions, regarding Registrant's proposed methods of either straight-lining interest costs or employing "sinking-fund" depreciation which, in Registrant's opinion, would in either instance match such lease-related expenses more appropriately against the corresponding revenues. PMM disagreed with both proposals because, in its opinion, such methods were not
consistent with the methods of accounting for operating leases discussed in Accounting Principles Board Opinion No. 7. . . . If Registrant had adopted either treatment, PMM would have been required to make reference, in connection with their report, to the subject matter of such disagreement. In view of PMM's position, Registrant never concluded it should adopt either method (20).

Disagreement types No. 13 and 14.--Examples of disagreement types No. 13, "miscellaneous types of disagreements," and No. 14, "disagreements acknowledged without specification of types," will not be provided due to their obvious generalized nature.

Twenty instances of miscellaneous disagreements (seventh ranked) were reported in all Forms 8-K examined. Sixty percent of those were reported by AMEX firms, for whom such disagreements were co-ranked fifth in frequency of occurrence. For OTC firms, miscellaneous disagreements were co-ranked sixth, with four occurrences. Only two such disagreements were reported in NYSE Forms 8-K, miscellaneous disagreements being co-ranked eleventh.

Though something of a problem prior to ASR 165, registrants now seldom report disagreements without describing the nature of those disagreements. The reader will recall that ASR 165 specified that all disagreements (as defined) be described, whether or not resolved to the satisfaction of the auditor. The only pre-ASR 165 year under study in the thesis was 1974. Table I indicates that this disagreement type is
ranked or co-ranked next to last in terms of occurrences by each sample grouping studied.

**Disagreement type No. 15.**—This area concerns the "necessity for a qualified, adverse, or disclaimer of opinion." Though 5.8 per cent of all disagreements were of this nature (18 cases), within sample groupings, both NYSE (3 cases and AMEX firms (10 cases) were below, while OTC firms (5 cases) were above, the overall rate of 5.8 per cent. There is an interesting discernible trend in that such disagreements constituted 4.4 per cent of all NYSE disputes, 5.6 per cent of all AMEX disputes, and 8.1 per cent of the total of OTC disputes.

Though no tests of statistical significance were possible here due to the "inflated N's" possibilities, the preceding results are not surprising. If one accepts the premise that OTC firms are characteristically more speculative and riskier than their staid "Big Board brothers," then it follows that OTC firms are relatively more likely to become embroiled in going concern and contingency qualification situations. Furthermore, as all rational managements are averse to the stigma of such qualified or disclaimers of opinion, it follows that OTC firms would be relatively more greatly involved in opinion disagreements.

Two examples of disagreements entailing the necessity for a qualified, adverse, or disclaimer of opinion now follow. In the first of these, S. D. Leidesdorf qualified the opinion of
Greater Heritage Corporation for the year ended December 31, 1975 due to material uncertainties resulting from litigation. There were also disagreements related in the Form 8-K pertaining to audit fees and the adequacy of certain loss reserves. The Form 8-K states:

The Registrant's decision not to reappoint Leidesdorf for the current fiscal year was attributable in part to the amount of fees payable, but was also attributable in part to certain dissatisfaction on the part of the Registrant which arose during the course of the audit for the year ended December 31, 1975. The dissatisfaction related to the Registrant's opinion that the certain litigation mentioned in the Accountant's Report did not require a qualification on the part of Leidesdorf and also that an increase in the reserve of $150,000 (as compared to total reserves of $4,000,000) was not necessary. The Registrant did, however, accept Leidesdorf's report and recommendations with little resistance (28).

The second exemplary audit opinion disagreement arose between American Realty Trust, a real estate investment trust, and Brown, Dakes, and Company, a Virginia based accounting firm. The disagreement centered upon the necessity for a going concern qualification:

During none of the years for which Messrs. Brown, Dakes and Company served as independent auditors for the Trust, except for the fiscal year ended September 30, 1974, were there any disagreements between the Trust and them on any matter . . . . However, for the fiscal year ended September 30, 1974, Messrs. Brown, Dakes and Company rendered a qualified report as to the financial statements of the Trust, such qualification being "subject to the ability of the Trust to continue as a going concern". In addition to the foregoing statement the report of Messrs. Brown, Dakes and Company, dated November 22, 1974, contains the following paragraph:
"The financial statements have been prepared by Management on the basis of a going concern. Amounts on the balance sheet do not purport to represent liquidation values, present economic values or replacement values. The ability of the Trust to continue as a going concern is dependent upon the banks not demanding payment of the short-term notes as described in Note 8 and upon future profitable operations. A loss was incurred in the year ended September 30, 1974."

While management of the Trust included the aforesaid qualified report of Messrs. Brown, Dakes and Company for the fiscal year ended September 30, 1974, together with all of the financial statements of the Trust for said year, in its Form 10-K, Annual Report for the fiscal year ended September 30, 1974, filed with the Securities and Exchange Commission on December 30, 1974, so as to assure timely compliance with the reporting requirements of the Securities Exchange Act of 1934, management did not, and does not, agree that a qualified report was called for. . . (3).

Disagreement type No. 16.--The final disagreement category in the thesis is entitled "manner or need for certain footnote or other disclosures (other than for contingent liabilities)." Only 11 such cases were found in the 309 total disagreements, 7 of those being reported by AMEX firms (co-ranked ninth). NYSE and OTC firms each reported 2 cases, and these disagreement types were co-ranked eleventh and tenth, respectively. However, in relative terms within sample groupings, there is great similarity. For all firms, type No. 16 disagreements constituted 3.6 per cent of all disagreements, while those same relationships were 2.9 per cent, 3.9 per cent and 3.2 per cent for NYSE, AMEX, and OTC firms, in that order.
An example of a type No.16 disagreement is found in the September 1976 Form 8-K of International Aluminum Corporation reporting the termination of Arthur Andersen & Co. The dispute arose over a question of whether or not the registrant needed to disclose the results of a voluntary self-investigation to determine whether any illegal payments had been made by the parent company or any of its subsidiaries. The 8-K states:

In response to the SEC Voluntary Compliance Program on Corporate Disclosure, the Audit Committee of the Board of Directors conducted an internal investigation to determine whether any questionable or illegal payments, either foreign or domestic, had been made by the Company or its subsidiaries. The investigation revealed no transactions which had not been properly accounted for or which were undertaken without the knowledge of Management or which were material to the presentation of the Company's financial position.

In reliance on the Company's understanding of pronouncements and publications of the SEC, particularly the "Report of the Securities and Exchange Commission on Questionable and Illegal Corporate Payments and Practices" dated May 12, 1976, Management of the Company, the Audit Committee and Outside Counsel were of the opinion that no disclosure of the results of such investigation was required or appropriate. This opinion conflicted with the recommendation of Arthur Andersen & Co. which was that such matters be disclosed by the Company or that they be reviewed and discussed with the Securities and Exchange Commission, and, in accordance with such recommendation, disclosure of the findings of the Audit Committee investigation has been made in Item 13 of this Form 8-K (35, p. 3).

The final exemplary type No. 16 disagreement involves a rather unusual set of circumstances. Statement on Auditing Standards No. 8: "Other Information in Documents Containing
Audited Financial Statements" indicates that corroborating evidence need not be obtained for other information accompanying audited data. Nevertheless, the auditor must read the accompanying unaudited information to consider whether such information or the manner of its presentation is materially inconsistent with information appearing in the audited financial statements. Where such inconsistencies exist, and if the client refuses to revise that information, the auditor must consider actions such as including an explanatory paragraph in his report, withholding the use of his report in the document, or withdrawing from the engagement (2, p. 2).

In a Form 8-K dated February 4, 1974, Kingstip, Inc. reported a disagreement relating to the provisions of SAS 8. Management of Kingstip contended that the losses sustained in discontinuing its San Antonio, Texas operations should have been disclosed as if they were losses arising out of the discontinued operations of a segment, as described in APB 30. This opinion requires that gains and losses from segment disposal be presented, net of tax, following earnings from continuing operations. The registrant ultimately acquiesced to the position of its auditor, Touche Ross & Co., and the losses were disclosed in the audited financials before earnings from continuing operations. Nevertheless, Kingstip's management included unaudited representations in its annual report reflecting the registrant's disclosure preference:
The Company discontinued operations of one of its aggregate plants located near San Antonio, Texas, as described in Note B of the Company's financial statements for the year ended September 30, 1974. It is Touche Ross & Co.'s opinion that the loss on the disposal of the plant is not a loss on a segment of a business nor an extraordinary item.

We did not agree with the opinion; however, we agreed to changes in our financial statements to obviate the necessity of a qualification in Touche Ross & Co.'s accountant's report thereon.

The President's letter and the eight year summary in the annual report to stockholders presented information at variance with the disclosures made in the financial statements on which Touche Ross & Co. rendered their accountant's report. A comment noting these presentation differences was made in their accountant's report included in the report to the stockholders... (37).

Touche Ross & Co. did not consider the conflicting information serious enough to require any action other than disclosure in an explanatory paragraph, in its otherwise unqualified audit report:

Attention is drawn to the fact that the presentation with regard to the loss from disposition of discontinued plant operation in 1974 as displayed in the President's Letter on page 3 and in the Eight Year Summary on page 8 is presented in a manner different from the above-mentioned Consolidated Statement of Earnings, which is presented in accordance with generally accepted accounting principles (37).

It should be apparent that this single disagreement had several facets of classification, as was true with a number of disagreements encountered in the research. The item was foremost a type No. 7 disagreement, a balance sheet or income statement classificational dispute. However, as just
indicated, the dispute also constituted a "manner of other disclosures" disagreement, based upon the nature of the un-audited disclosures appearing in the annual report.

Types of Opinions Rendered Preceding All Auditor Changes and Changes Attended by Disagreements

The results of the analysis of types of audit opinions rendered in the two years preceding all auditor changes by the firms whose 8-K reports were examined is presented in Appendix D (pp. 330-336). The four tabulations show, by years, audit opinions received prior to auditor changes for all companies (p.330), NYSE companies (p.332), AMEX companies (p.334), and the selected OTC companies (p.336). Appendix D (pp.338-344) also presents the types of opinions received by all firms (p. 338), NYSE firms (p. 340), AMEX firms (p.342), and by OTC registrants (p. 344) in those circumstances wherein the auditor change was also preceded by the existence of significant disagreements pertaining to auditing scope, accounting principles, or related disclosures. Table II presented on the following page summarizes the findings appearing in Appendix D.

With respect to each auditor change Form 8-K examined, the more unfavorable type of opinion reported in the two prior fiscal years was selected for purposes of the analyses presented in this thesis. For example, if a Form 8-K reported a qualified opinion in one of the two preceding years and a disclaimer in the other, only the disclaimer of opinion was
recorded in the data. Similarly, were no unfavorable opinions rendered in the two previous years, a single unqualified opinion notation was entered in the data. In sum, the tabulations present only one of the two possible reportable opinions preceding each auditor change.

**TABLE II**

TYPES OF AUDIT OPINIONS RECEIVED BY NYSE, AMEX, AND OTC FIRMS IN TWO YEARS PRECEDING AUDITOR CHANGES, AND CHANGES ATTENDED BY DISAGREEMENTS, FROM 1975 TO 1978

<table>
<thead>
<tr>
<th>Opinion Type</th>
<th>Per Cent of Opinions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ALL</td>
</tr>
<tr>
<td>Unqualified:</td>
<td></td>
</tr>
<tr>
<td>All Changes</td>
<td>60.4</td>
</tr>
<tr>
<td>Disagreements Reported</td>
<td>35.0</td>
</tr>
<tr>
<td>Qualified:</td>
<td></td>
</tr>
<tr>
<td>All Changes</td>
<td>31.0</td>
</tr>
<tr>
<td>Disagreements Reported</td>
<td>52.5</td>
</tr>
<tr>
<td>Disclaimer:</td>
<td></td>
</tr>
<tr>
<td>All Changes</td>
<td>8.6</td>
</tr>
<tr>
<td>Disagreements Reported</td>
<td>12.5</td>
</tr>
<tr>
<td>Adverse:</td>
<td></td>
</tr>
<tr>
<td>All Changes</td>
<td>0.0</td>
</tr>
<tr>
<td>Disagreements Reported</td>
<td>0.0</td>
</tr>
</tbody>
</table>

The data appearing in Table II are elaborated upon in the following two sections of this chapter.

**Opinions rendered preceding auditor changes.**--Regarding the types of opinions received by all registrants in the four year period ended in 1978, it is readily observable that, as would be expected, far more unqualified opinions precede
auditor changes than do any other opinion type. Unqualified opinions accounted for 60.4 per cent of opinion classifications (as defined on the previous page) prior to auditor changes, while qualified opinions and disclaimers of opinion constituted 31.0 per cent and 8.6 per cent, respectively. It is interesting to note that not one single case of an adverse opinion occurred in any report year for any sample grouping. This is not surprising in that such opinions can only result from highly material departures from generally accepted accounting principles, a situation the SEC generally deems as unacceptable in satisfying the provisions of the Securities Acts.

The reader will note in Appendix D that while in the overall four year period 60.4 per cent of opinion classifications were unqualified, there was a slight improvement in those figures between years: from 58.7 per cent in 1975, to 59.7 per cent in 1976, to 62.6 per cent in 1977, then dropping slightly in 1978 to 60.6 per cent. The incidence of qualified opinions over the same four years was fairly stable except for a 2.1 per cent decrease in 1976 and a 1.7 per cent increase in 1977 from the average for the overall period, 31.0 per cent. The percentage of disclaimers of opinion for all companies was highest at 11.4 per cent in 1976; however, there has been a slight reduction in the incidence of such opinions over the four years. Due to the fact that no constant trends existed in the pattern of these opinion
percentages, it was not feasible to use chi-square in testing significance of the trends.

No discussion will be provided of the relative frequencies of occurrence by years within a given opinion type (row percentages). Such an analysis does not seem pertinent as it would be a function of the numbers of auditor changes occurring in those various years. For example, the fact that 150 auditor changes occurred in 1975 versus only 109 in 1978 would automatically weight percentages of occurrences to total occurrences for any given opinion type more heavily in 1975.

An examination of the tabulations by sample groupings appearing in Table II indicates that NYSE firms had the highest percentage of auditor changes preceded by clean audit opinions (70.4 per cent), followed by AMEX firms (66.9 per cent), while OTC auditor changes were preceded by unqualified opinions least frequently (52.0 per cent). Similarly, in terms of disclaimers of opinion, only 0.9 per cent of NYSE auditor changes were so preceded, whereas 4.1 per cent of AMEX changes, and fully 14.8 per cent of OTC changes were preceded by disclaimers of opinion.

These observations appear to be consistent with the conventional wisdom that NYSE firms would generally be less risky than AMEX firms which are, in turn, generally less risky than OTC firms. Presumably, the relatively riskier and aggressive a firm is, the greater the likelihood that firm will experience financial difficulties and other uncertainties requiring audit opinion qualifications.
Concentrating upon the NYSE tabulation in Appendix D (p. 332), another striking trend is indicated. Though possibly attributable to the few absolute instances of NYSE auditor changes, there has been a substantial deterioration in the trend of unqualified opinions, from 82.1 per cent unqualified opinions to total opinions in 1975 to only 50.0 per cent in 1978. As so very few disclaimers are received by Big Board firms, that deterioration has been reflected in a concomitant percentage increase in qualified opinions prior to auditor changes, 17.9 per cent in 1975 steadily upward to 50.0 per cent in 1978.

On the other hand, AMEX firms (p. 334) have exhibited an improvement in the percentage of auditor changes preceded by unqualified opinions, from 55.1 per cent in 1975 to 75.0 per cent in 1978. Furthermore, the percentage of qualified opinions preceding AMEX auditor changes decreased by 11.7 percentage points in 1975 to 25.0 per cent in 1978. There has also been a steady diminution of AMEX disclaimers of opinion prior to auditor changes.

With respect to OTC companies, there has been remarkable consistency in unqualified opinion percentages within the four years. No single year varied by more than 0.9 per cent from the overall average of 52.0 per cent unqualified opinions. Percentages of qualified opinions fell slightly, while percentages of disclaimers of opinion increased somewhat, between 1975 and 1978.
Opinions rendered preceding changes with disagreements.

Appendix D (pp. 338-344) presents tabulations of types of audit opinions received by firms whose auditor changes were preceded by disagreements. An examination of Table II reveals striking differences in the incidence of each opinion type from the results indicated for all auditor changes. Whereas 60.4 per cent of opinions preceding all auditor changes were unqualified, that figure drops to only 35.0 per cent unqualified opinions in cases where disagreements also occurred before the change. Similarly, while qualified opinions preceded only 31.0 per cent and disclaimers of opinion only 8.6 per cent of all auditor changes, those same figures deteriorated to 52.5 per cent and 12.5 per cent, respectively, for changes also attended by disagreements. Furthermore, these trends are observable in each of the three sample groupings comprising the overall results.

For instance, among NYSE companies, in those cases where disagreements also preceded the auditor termination, there was a 23.0 per cent reduction in unqualified opinions (to 47.4 per cent) from the incidence rate of 70.4 per cent unqualified opinions preceding all auditor changes by Big Board firms. Correspondingly, the percentage of qualified opinions was 8.7 per cent higher. While the rate of disclaimers of opinion was 4.4 per cent higher, that figure was not meaningful in that so few absolute numbers of disclaimers exist in the data.
A greater deterioration is observable in a similar analysis for AMEX firms, as shown in Table II. Where disagreements also preceded the switch in auditors, only 36.8 per cent of the changes were preceded by unqualified opinions, a reduction of 30.1 per cent from the figure of 66.9 per cent such opinions received by all AMEX firms changing auditors. Twenty-nine per cent of the unqualified opinion loss was attributable to an increase in qualified auditor's opinions, from 29.0 to 57.9 per cent.

Furthermore, the pattern continues among OTC registrants to an even greater extent. The percentage of unqualified opinions dropped by fully 30.3 per cent to only 21.7 per cent when disagreements were reported preceding the change in auditors. That reduction in unqualified opinions was rather equally distributed in terms of increases in the incidences of qualified opinions (14.6 per cent higher) and disclaimers of opinion (15.6 per cent higher).

These descriptive results for all sample groupings seem to indicate rather convincingly that other-than-unqualified opinions are much more predominantly associated with auditor changes preceded by disagreements than is the case when changes are not preceded by such disputes.

The reader will recall from the definitions provided in Chapter IV that qualified opinions can result only from one or more of five basic sets of circumstances: (1) there is a lack of sufficient competent evidential matter to support
an opinion, (2) there is a scope limitation, imposed by the client or circumstances (3) there is a departure from generally accepted accounting principles in the financial statements, (4) there has been a significant change in accounting principles involving the consistency standard, or (5) there are significant uncertainties affecting the financial statements. Furthermore, a disclaimer of opinion can only arise when the auditor has not performed an examination sufficient in scope to enable an opinion.

All of these circumstances can be viewed as negative or problematical in nature, except for item (4), the consistency qualification (which will be soon discarded, if a recent proposed Statement on Auditing Standards is adopted (31)). However, ASR 165 dictates that consistency qualifications need not be reported as a type of other-than-unqualified opinion for purposes of Form 8-K auditor change disclosures. Furthermore, while a scope limitation imposed by circumstances need not be negatively construed, such a qualification is, for all practical purposes, precluded in a publicly listed company as would similarly be true of any other form of "except for" qualification. Consequently by far the preponderance of other-than-unqualified opinions examined in the conduct of the research were "subject to" going concern status or litigious uncertainties or disclaimed on similar grounds.

Therefore, other-than-unqualified auditor's opinions received by publicly listed companies are ordinarily indicative
of unfavorable circumstances, operationally and financially or in terms of material uncertainties. Since other-than-unqualified opinions are more predominantly associated with auditor changes preceded by disagreements than when no such disagreements are attendant, it can reasonably be inferred that firms who have disagreements preceding a change in auditors are more likely to be involved in operating, financial or uncertainty discordancies, than are other firms changing auditors.

**Firms Chronically Changing Auditors**

The final aspect of the first phase of the research will provide some insights into the characteristics of firms who chronically change auditors. A chronic auditor changer was defined as a firm which had changed auditors more than twice (excluding changes due to CPA firm mergers) since the advent of the auditor change disclosure requirements in late 1971. Forty-four firms were found to meet these criteria, and are listed in Appendix C. The procedures for identifying those firms are described more fully in Chapter IV. It should be pointed out, however, that the following discussion will not reflect findings from the survey of Wall Street Journal articles as nothing found therein was remarkable.

Meaningful commonality was discovered in the chronic auditor changers in terms of exchange listing. All but two companies were found to be OTC firms, the remaining two being AMEX firms. No NYSE firms had changed auditors more than
twice. Seven different Standard Industrial Classification four digit codings appeared two or more times among the forty-four chronic changers. Those codings and their descriptions, in order of frequency of occurrences were as follows. Five firms were listed as SIC No. 7370 - computer and data processing services. Three other Standard Industrial Classification codings categorized three chronic changers: No. 6790 - miscellaneous investing companies; No. 1310 - oil and gas extraction companies; and, No. 3840 - surgical, medical and dental instruments and supplies. Finally, two chronic changers were classified under each of SIC No.'s 6710-holding companies; 2310 - men's, youth's, and boys' suits, coats, and overcoats; and, 6750 - fire and casualty insurers.

In terms of auditor involvement, the forty-four chronic auditor changers made an average of 3.36 auditor switches from November 1971 through December 1978. Pacific American Real Estate Funds registered the most changes, an incredible six, while Coap Systems had five. Ten chronic changers switched auditing firms four times, and the remaining thirty-two registrants made three switches. Among the latter thirty-two was one of the two AMEX companies classified as a chronic changer. The remaining AMEX firm, Cellu-Craft, Incorporated, had four changes; however, one of those was forced by the dissolution in 1978 of Clarence Rainess & Co., a small national CPA firm.
In analyzing the types of auditor's opinions received by the firms chronically changing auditors, it was determined that twenty-one of those firms had received some form of qualified opinion during the sequence of auditor changes. Two firms received disclaimers of opinion. Consequently, 52.3 per cent of chronic changers received an other-than-unqualified opinion. This percentage is higher than the earlier discussed incurrence rate for such opinions received by all firms changing auditors (39.6 per cent), but lower than the overall incurrence rate for such opinions received by registrants whose changes were also preceded by disagreements (65.0 per cent).

The final area addressed was that of the extent to which these chronic auditor changers became involved in disagreements with their auditors. Six of these firms indicated disagreements with one of the series of auditors terminated, while Falstaff Brewing Corporation quarreled with two displaced accounting firms. These figures translate into a 5.4 per cent overall disagreement occurrence rate in the 147 total switches made by the entire group of chronic auditor changers. Interestingly, this rate is quite a bit lower than the 13.6 per cent rate observed in all auditor changes.

In summarizing all of the foregoing, a somewhat amorphous typical firm emerges. Generally, a chronic auditor-changing firm tended to be an OTC firm. Between late 1971 and the end of 1978, 11.4 per cent of these firms were involved in
computer and electronic data processing services, and made an average of slightly more than three auditor changes. The typical chronic changer was less likely than a cross-section of all auditor changers to have been involved in disagreements with disengaged auditors. However, the chronic changer was more likely to have received qualified audit opinions.

Phase II Results: Statistical Analysis of Auditor Change Data by Exchanges

In the second phase of the thesis research, a non-parametric statistical perspective was utilized to test for significance of differences between NYSE, AMEX, and OTC firms in five basic areas. Those five basic issues examined dealt with (1) the existence of significant disagreements preceding auditor changes, (2) types of auditor's opinions rendered prior to the changes, (3) the presence of Rule 3-16(s) disclosures (as defined in Chapter III), (4) Board of Director involvement in auditor changes, and (5) the extent of voluntary disclosure of reasons for auditor changes. The necessary data were gathered from Registrant Forms 8-K and 10-K, for the periods indicated in Chapter IV.

Also in phase two, statistical tests of differences between Big Eight and all other auditing firms, as well as between individual Big Eight firms, were performed with respect to the first two basic issues delineated above. The results of all these tests, with relevant interpretive discussions, will follow.
Significant Disagreements Preceding Auditor Changes

Hypotheses sets numbers one through five (in Chapter IV) were tested with the SPSS chi-square routine to determine if there were statistically significant differences between the sample groupings regarding the rate of significant disagreements preceding auditor changes. The results of those tests are presented in contingency table format in Appendix D (pp. 346 - 354).

It should also be noted that each 3x2 contingency table of frequencies is followed by the raw chi-square value, the level of statistical significance associated with that raw chi-square value (that is, the probability of committing a type I error, rejecting a null hypothesis which is in fact true), and finally the measures of association: Cramer's V and Pearson's contingency coefficient. The contingency coefficient will be left for the reader to assess, in view of the weaknesses attributed to that measure, discussed more fully in Chapter IV of the thesis.

Each 2x2 contingency table in Appendix D is also followed by a raw chi-square value and its level of significance. However, the reader should also notice that a corrected chi-square value (chi-square corrected for continuity) and related level of significance is presented in each case. Most discussion of these tables will focus upon the chi-square value corrected for continuity. The measure of association discussed in the following will be the phi statistic, as it can range from zero to one, whereas the contingency coefficient cannot.
Disagreement preceding changes: registrant perspective.

Appendix D (p.346) presents the results of hypothesis set number one. This table crosstabulates the presence or non-presence of significant disagreements by each of the three sample groupings, between 1974 and 1978. It can be seen that, overall, 14.0 per cent of all auditor changes were preceded by disagreements. The chi-square value of 25.114 is significant at less than the .0000 level, significantly beyond the traditional .05 level. Hence, the null hypothesis is rejected. Consequently, these results support the research hypothesis \((H_1)\) that there are statistically significant differences between NYSE, AMEX, and OTC firms in terms of the percentage of instances in which disagreements preceded the auditor change. The Cramer's V value of .186 indicates that the variables are reasonably correlated.

As a means for further isolating those sample groupings causing the observed differences, hypotheses numbers two through five were tested, as shown in these crosstabulations: NYSE versus AMEX firms (p.348), NYSE versus OTC firms (p.350), AMEX versus OTC firms (p.352), and finally, the summation of NYSE and AMEX firms versus OTC firms (p.354). The observed differences in disagreement rates between NYSE firms (16.8 per cent) and AMEX firms (22.2 per cent) were not found to be statistically significant. On the other hand, the disagreement rates between NYSE (16.8 per cent) and OTC firms (7.8 per cent) were found to be significantly different at the .005 level. However, the phi value of .132 indicates the variables
are not very highly correlated. In comparing activity between AMEX and OTC firms the corrected chi-square value of 23.766 was found to be significant at less than the .000 level. Furthermore, a fairly good association in variables is reflected in phi value statistic of .202. In view of the foregoing, it is not surprising that the combined NYSE and AMEX results crosstabulated against OTC firms reflected statistically significant differences. The chi-square value obtained was also significant at less than the .000 level, with a phi value of .175.

Stated less rigorously, the data indicate that OTC firm auditor changes reveal significantly lower disagreement rates (7.8 per cent) than do NYSE firm changes (16.8 per cent). Furthermore, these differences are further accentuated between OTC and AMEX firm changes (22.2 per cent). How might these differences be interpreted?

One possible explanation might be that OTC firms may have less sophisticated accounting and financial personnel than their larger counterparts. Consequently, they may tend to rely more upon the advice of their outside attorneys and accountants and to challenge that advice less frequently than a larger firm would. AMEX and Big Board firms, on the other hand, may have personnel who are more capable and, therefore, often more willing to challenge their outside auditors.

These inferences of causality are not necessarily inconsistent with an earlier conclusion, that OTC firms may
experience higher rates of audit scope disagreements than NYSE or AMEX companies as the former may be less conversant in auditing matters. While in the practice of public accounting, this writer found, not infrequently, that the same client who might show little reluctance in questioning the need for certain auditing procedures, might be much less recalcitrant in accepting materially unfavorable auditing judgments. This paradox may be attributable to a number of possibilities.

Perhaps there are degrees of esotericism involved. That is, the necessity for some auditing procedures may be more real than is readily apparent to the client. On the other hand, certain accounting issues require such technical expertise that relatively less sophisticated client personnel may not even be capable of challenging the auditor's conclusions. Finally, it may be that auditing scope issues are more readily perceived by clients in terms of immediate cash flow impacts, whereas most auditing adjustments have no short run cash flow implications. Such cash flow implications may seem more onerous to a characteristic OTC firm, with a relatively smaller equity cushion and greater cash demanding growth opportunities, than a more established AMEX or NYSE firm.

Disagreements preceding changes: auditor perspective.-- Given that significant differences exist between the two major exchanges and OTC firms regarding the extent of disagreements reported, the next four chi-square tests were structured to
determine whether or not differences existed between Big Eight and all other auditors, as well as among Big Eight auditors, with respect to involvement in disagreements. These tests were made from the perspective of both the predecessor and successor auditors involved.

Hypotheses sets numbers six and seven were prepared from the perspective of the predecessor auditor. The first hypothesis set was phrased operationally to determine if statistically significant differences existed between Big Eight auditors, as a group, and all other auditors with respect to disagreement involvement. The results of that test are presented in Appendix D (p.356). The corrected chi-square value of 13.910 was significant at the .0002 level, well beyond the rejection level of .05. The phi value of .143 shows moderate correlation. Consequently, these results tended to support the research hypothesis that Big Eight auditor terminations were preceded by disagreements to a different extent (18.2 per cent), whereas only 8.2 per cent of terminations of all other auditors were so preceded. One might well wonder what causal explanations exist.

It may be that Big Eight auditors are imposing stricter standards on their clients, or that their clients are more willing to challenge their auditors, or a combination of both factors. Regarding non-Big Eight auditors, it may be that their former clients were more docile. On the other hand, it may be that non-Big Eight auditors are more reluctant than their larger counterparts to risk antagonizing and perhaps
losing their clients. According to one audit manager with a successful local CPA firm in Fort Worth, local firms and their clients often "grow together" initially. However, if the client eventually grows more relatively, the audit fees can become increasingly significant to the local firm's gross revenues. Furthermore, all normative judgments aside, it has been observed that underwriters frequently pressure such growing firms to seek Big Eight auditors. (See, for example, Carpenter and Strawser (11)). Both of these factors might tend to cause the smaller CPA firm to be more compliant than a national auditor would be, according to a former Big Eight firm manager. What is perhaps most disturbing are the independence implications in this scenario.

Continuing the analysis from the point of view of the predecessor auditor displaced, hypothesis set seven was tested to determine if differences existed among Big Eight firms regarding the extent of disagreement involvement issue. The crosstabulation appearing in Appendix D (p. 358) shows that the differences are statistically significant at the .016 level. Furthermore, the Cramer's V value of .202 indicates relatively strong correlation in the variables.

The crosstabulation indicates that while all Big Eight auditors had an average of 18.2 disagreements preceding each 100 auditor changes, Ernst & Whinney had an incidence ratio of only 11.5 per cent, Coopers & Lybrand had still fewer disagreements, relatively, with 10.9 per cent, and Deloitte, Haskins, & Sells experienced the lowest ratio, 5.4 per cent,
less than one third of the overall rate. In terms of the totality of clients lost by all Big Eight firms, Appendix D shows (bottom of column percentages) that Coopers & Lybrand was ranked fifth with 10.9 per cent of all Big Eight losses, Touche Ross & Co. was sixth with only 9.9 per cent, while Deloitte, Haskins & Sells lost fewer clients than any Big Eight firm, other than Arthur Young & Co., who also lost 37 clients.

On the other hand, Arthur Young & Co. experienced disagreements with fully 29.7 per cent of that firm's clients lost between 1974 and 1978. Arthur Young & Co. was followed rather closely by Peat, Marwick, Mitchell & Co. (27.3 per cent), then by Price Waterhouse & Co. (21.4 per cent), the latter being only a little above the mean result of 18.2 per cent. In terms of percentages of clients lost by Big Eight firms, Peat, Marwick, Mitchell & Co. suffered the highest percentage of the total of 423 Big Eight losses, 23.4 per cent, followed by Price Waterhouse & Co. with 13.2 per cent. However, as mentioned earlier, Arthur Young & Co. was co-ranked last in terms of clients lost.

Causality determinations are often difficult to make. Why, for example, are the first three auditing firms named above so well below average in terms of disagreement involvement? Could it be that they are less demanding of their clients; or, from a more positive perspective, could it be that these firms are in closer communication with their clients, thereby heading off serious disputes? Or, also in a
positive light, are the clients of these auditors better indoctrinated toward that auditor's procedures and practices?

Regarding Arthur Young & Co. and Peat, Marwick, Mitchell & Co., are these firms tougher with or perhaps less "personal" toward their audit clients? It is conceivable that the SEC sanctions imposed upon Peat, Marwick, Mitchell & Co. in the mid 1970's caused that firm to take a sterner stand with its existing clients in the latter years of that decade. Furthermore, the adverse publicity may have caused Peat, Marwick, Mitchell & Co. to have lost more clients than the other firms.

Hypotheses sets eight and nine parallel the sample groupings crosstabulated in the two preceding tests, but from the perspective of the auditing firm succeeding the auditor change wherein disagreements existed.

Appendix D (p.360) portrays the results of the comparison of Big Eight auditors versus all others. Again, the observed differences were found to be significant at less than the .05 level, supporting the operational hypothesis that meaningful differences exist between Big Eight and all other auditors in terms of the percentages of clients accepted where disagreements had been reported prior to the auditor change. The test was found to be significant at the .028 level; however, the phi statistic shows somewhat weak correlation at .086. More specifically, the Appendix D crosstabulation indicates that 16.1 per cent of the engagements taken on by Big Eight firms had been preceded by disagreements, while only 9.9 per cent
of new engagements obtained by all other auditors had been preceded by disagreements.

These observations are consistent with results found in other tests in this thesis. As will be discussed more fully later in this chapter, the level of auditing firm selected in a switch is generally dependent on the level the predecessor auditor represented. That is, registrants as a whole tend to rehire a Big Eight or non-Big Eight auditor, as the case may be. This coupled with the results noted earlier, that Big Eight auditors are more frequently involved, relatively, in disagreements with their former clients, supports the results of hypothesis set eight above. That is, Big Eight firms accept engagements having been preceded by disagreements more frequently, on a relative basis, due to the fact that characteristically the client had terminated a Big Eight auditor.

The final hypothesis set in this sub-phase of the research, number nine, was intended to determine whether meaningful differences existed among Big Eight firms with respect to the percentages of engagements accepted which had been preceded by material disputes. Appendix D (p. 362) shows that the research hypothesis just described was significant at the .036 level, within the .05 region of rejection of the null hypothesis. Though the raw chi-square value is not so high as in earlier tests, the Cramer's V level of .181, measuring correlation, was somewhat stronger than was true in most tests.
The cross-tabulation indicates that an overall average of 16.1 per cent of audit engagements accepted by Big Eight firms had been preceded by disagreements. Coopers & Lybrand accepted the highest percentage (26.3 per cent) of such new engagements. This observation is interesting in view of the fact that this firm was found to be seventh in terms of engagements lost preceded by disagreements (Appendix D (p.358)). Ranked second on this basis was Price Waterhouse & Co., with 21.4 per cent of newly acquired engagements during the five years ended in 1978 having been preceded by disagreements. Coopers & Lybrand was also second only to Arthur Andersen & Co. in terms of clients gained by Big Eight firms with 17.4 per cent of the 460 newly obtained engagements between 1974 and 1978, Arthur Andersen & Co. having gained 21.5 per cent. Price Waterhouse & Co. was third on this basis with 12.2 per cent.

In terms of relative infrequency of accepting an engagement preceded by disagreements, the first three rankings were as follows: Peat, Marwick, Mitchell & Co. (3.7 per cent), followed (not closely) by Deloitte, Haskins & Sells (10.3 per cent), and finally by Arthur Young & Co. (11.8 per cent). The reader will recall that the first and third ranked firms just named were also ranked first and second in the earlier results of Big Eight audited engagements lost preceded by disagreements. These same three firms accepting the fewest engagements preceded by disagreements were also ranked fourth, fifth, and
eighth in terms of clients gained as a percentage of all Big Eight audit engagements gained: Peat, Marwick, Mitchell & Co. (11.7 per cent), Arthur Young & Co. (11.1 per cent), and Deloitte, Haskins & Sells (6.3 per cent).

One interpretation of these results may be made in terms of severity of engagement acceptance criteria implemented as firm policy. For example, it is possible that the SEC related troubles experienced by Peat, Marwick, Mitchell & Co. caused that firm to stiffen its criteria for accepting new clients during the time span of the research.

Audit Opinions Preceding Auditor Changes

The results of the second basic issue examined in phase two of the research are presented in this section. In this section, two points of view were addressed with respect to the nature of audit opinions received by registrants in the two years preceding an auditor change. First, evidence was sought to determine if statistically significant differences existed between exchanges with respect to the relative percentages of other-than-unqualified opinions received. Secondly, similar evidence was examined to determine if material differences existed between predecessor Big Eight versus non-Big Eight auditors, as well as among Big Eight firms, in terms of the incidence of other-than-unqualified opinions rendered.

Opinions preceding changes: registrant perspective. -- Hypothesis sets numbers ten through fourteen, stated formally
in the preceding chapter, were phrased operationally to discern if differences existed between NYSE, AMEX, and OTC registrants in terms of opinion types received prior to auditor changes. The results of the chi-square tests are presented in Appendix D (pp.364 -372) in crosstabular format.

Appendix D (p.364) presents the matrix of results for all publicly listed companies whose Forms 8-K were examined. With a raw chi-square value of 15.726 and two degrees of freedom, this test was found to be significant at the .0004 level, well within the region of rejection. The Cramer's V value can be seen to be .168, indicating moderate correlation. In rejecting the null hypothesis at the .05 level of significance, the research hypothesis is accepted that significant differences do exist between the two major exchanges and OTC firms regarding the percentage of other-than-unqualified opinions received preceding auditor terminations.

As a means for further isolating those sample groupings contributing the most to the observed overall differences above, four 2x2 contingency tables were prepared crosstabulating the possible individual grouping combinations relevant to the research. Appendix D (p. 366) indicates that the observed differences between NYSE and AMEX firms were not statistically significant, indicating that the two major exchanges are in fact fairly homogenous on the basis of auditor opinion activity preceding auditor changes. Continuing the analysis, Appendix D (pp.368 and 370) shows that statistically significant differences exist between NYSE and OTC registrants at
the .001 level (phi value of .170), and between AMEX and OTC registrants at the .003 level (phi value .146), based upon the chi-square values corrected for continuity. Appendix D (p.372) further illustrates that the combination of the major exchanges versus OTC firms indicates significantly disparate results at the .0001 level with a phi value of .166.

As described earlier, though direction of changes were not hypothesized in these or any other tests in the thesis, it can be seen in the crosstabulations just discussed that NYSE firms had relatively fewer other-than-unqualified opinions preceding auditor changes than AMEX firms who, in turn, had relatively fewer such opinions than OTC firms. The reader will recall that similar results were noted in the discussion earlier in this chapter pertaining to opinion activity by exchanges between years. Additionally, the analysis above shows that while the extent of other-than-unqualified opinions received prior to changes by the combined NYSE and AMEX grouping were quite different from those received by OTC firms, the significance disparity between NYSE and OTC firms (p.368-.001) was somewhat greater than the disparity between AMEX and OTC firms (p.370-.003), in terms of levels of statistical significance achieved in these tests. This seems to indicate the NYSE firms are slightly more unlike OTC firms than are AMEX firms, on this basis.

Opinions preceding changes: auditor perspective.--The results of the tests crosstabulating presence of other-than-
unqualified audit opinions preceding auditor changes by predecessor auditor rendering those opinions are presented in Appendix D (pp.374 and 376). As can be seen in the cross-tabulations, neither the test of opinions rendered prior to auditor changes as between Big Eight versus non-Big Eight firm (p.374), nor the test of those opinions within the Big Eight grouping (p.376) were found to be significant at the .05 level. Hence, there is no reason to believe that the type of CPA firm, whether Big Eight or not, rendering the opinion preceding an auditor change is of any significance.

Despite the fact that no significance existed, several points are noteworthy. Appendix D (p.374) indicates that Big Eight firms gave only a slightly lower percentage of other-than-unqualified opinions (38.4 per cent) than did all other CPA firms (41.4 per cent). This observation is logical, based upon earlier results indicating that OTC firms received more unfavorable opinions relatively than did major exchange members; coupled with a result, to be discussed later, that more OTC audits are performed by non-Big Eight than by Big Eight auditors.

Furthermore, from the point of view of individual Big Eight auditors (p.376), Price Waterhouse & Co. was ranked the most severe on this basis (46.7 per cent), followed by Arthur Young & Co. (44.4 per cent), then by Touche Ross & Co. (42.3 per cent). Only Ernst & Whinney (21.4 per cent) was notably below the overall average of 38.4 per cent other-than-unqualified opinions rendered preceding all Big Eight auditor
changes. This individual tightness of fit about the overall mean accounts mathematically for the lack of significance. In the interest of expediency, no further rationalization of this lack of significance will be attempted.

In light of these results, coupled with the lack of practical consequence of whomever the successor auditor might have been, it was decided not to examine the foregoing opinion type issue from the perspective of the successor auditor involved. That is, while it might be interesting to research any pattern in successors to problem audits (as was done earlier), the same would probably not generally be true in terms of prior audit opinions rendered.

**Rule 3-16(s) Disclosures Subsequent to Auditor Changes**

In the third basic area of phase two, evidence was sought to determine if statistically significant differences existed among the registrant groupings in terms of relative percentages of Rule 3-16(s) disclosures (as defined) required on Forms 10-K following auditor changes. As can be seen in Appendix D (pp. 378-386), none of hypotheses sets numbers seventeen through twenty-one described in Chapter IV were found to be significant at the .05 level. Hence, there is no reason to believe that any of the sample groups examined exhibits a meaningfully different rate of Rule 3-16(s) disclosures in the year of the auditor change or in the subsequent fiscal year.
What is rather striking in the overall crosstabulation presented in Appendix D (p.378) is the low absolute number of Rule 3-16(s) disclosures made. In only 2 cases out of 102 observed disagreements reported in the Forms 8-K for 748 total auditor changes did a successor auditor disclose or account for a transaction or event contrary to a predecessor's position in a previous disagreement. No such occurrences were reported by NYSE registrants, while one Rule 3-16(s) disclosure was reported by City Stores Company, an OTC firm, and one by E.C. Ernst, Inc. an AMEX listed firm. Both of these situations will be described in the following pages.

Disagreements resulting in Rule 3-16(s) disclosures.— On November 3, 1978, less than three months prior to the firm's fiscal year end, the Board of Directors of City Stores Company terminated the appointment of Ernst & Ernst in favor of Touche Ross & Co., citing as a reason the perception that "... Touche Ross & Co., with its experience in retailing, offer [sic] the broadest range and scope of quality servies" [sic] (13, p. 1). Management further indicated that the auditor of record for the two preceding fiscal years, S. D. Leidesdorf, had been merged in the preceding July with Ernst & Ernst, with whom the registrant had experienced an unsatisfactory relationship in 1975:

The Registrant had a previous relationship with Ernst & Ernst, which was terminated and a payment was made by Ernst & Ernst to the Registrant in settlement of a claim. As a result of this prior unsatisfactory relationship, management of the
Registrant requested proposals from other major accounting firms (13, p. 1).

However, notwithstanding the stated reason for the auditor change and the further "rationalization" offered due to the earlier relationship with Ernst & Ernst, it is apparent that the registrant had not made an immediate break with that firm, as evidenced in the following reported disagreement:

During the period from January 29, 1978 to November 3, 1978, management of the Registrant conferred with Ernst & Ernst on several occasions regarding the appropriate accounting for a certain lease amendment transaction. Under the amendment, the lessor of a shopping center in which the Registrant leases a store, developed plans to expand the shopping center to an integrated regional mall and the Registrant concurred, as required by the lease, with the lessor's further development of the center. The lessor agreed to pay the Registrant $1,500,000 for this concurrence ($1,000,000 of which has been received and $500,000 of which is due on January 2, 1979). Further, the amendment provided that the lessor refurbish the exterior of the Registrant's store and the Registrant agreed to proceed diligently to alter, modernize, and refixture the interior of the store, (with no amount to be expended specified). As a result of lessor's enhancement of the center along with the refurbishing of the exterior of the Registrant's store, the Registrant agreed to pay an increase in rent of $90,000 per annum for the remaining 12 of the original 30 years of the original lease term (such increased option periods). Management of the Registrant considered reflecting the $1,500,000 consideration for its concurrence as income during fiscal year 1978. However, management concluded that the most appropriate accounting treatment was to recognize income of approximately $900,000 in fiscal year 1978 representing the difference between the $1,500,000 and the present value of the increased rental. Management is of the opinion that the accounting treatment described above is the most appropriate under the circumstances and is in accordance with generally accepted accounting practices. The accounting treatment was ratified by the Registrant's Audit Committee on November 3, 1978.
Ernst & Ernst has informed management of the Registrant that it does not agree with management's accounting treatment and believe the $1,500,000 should be amortized to income over the remaining term of the lease (13, p. 2).

Although the Form 8-K does not state at what date proposals were sought from other accounting firms, one is nevertheless left to wonder about the true mix of philosophical principle (the prior unsatisfactory relationship) and accounting principle (timing of revenue realization) involved in the auditor change. In fairness to the registrant, perhaps the disagreement with Ernst & Ernst had been the final straw tipping the balance.

The acceptance of the client's position by Touche Ross & Co., and the financial statement impact thereof, was related in the following excerpt from the Form 10-K filed by City Stores Company for the fifty-two weeks ended February 3, 1979:

The gain on disposition of leasehold right arose from the payment received from a lessor in exchange for the Company's concurrence to the expansion of a shopping center in which it operates a department store. In November 1978, the Company filed a Form 8-K with the Securities and Exchange Commission reporting a change in independent public accountants. The Company's former accountants, Ernst & Ernst (successors to the practice of S. D. Leidesdorf & Co.), disagreed with the Company's accounting for the transaction and was of the opinion that the gain should be amortized to income over the remaining term of the lease. Management with the concurrence of the Audit Committee of the Board of Directors and the Company's current accountants, Touche Ross & Co., believes its accounting treatment is preferable based on the substance of the transaction and the intent of the parties. Had the accounting suggested by the Company's former accountants been followed, net income for this year would have been $795,000 less than reported ($.24 per share) and
income over the next twelve years would have been $795,000 more (14, p. s-8).

The second disagreement necessitating Rule 3-16(s) disclosure arose between E. C. Ernst, Inc., an AMEX electrical contracting concern, and Arthur Young & Company. As in the City Stores Company situation, the disagreement centered upon timing of revenue realization and the auditor was terminated just before year end. In the E. C. Ernst case, however, Arthur Young & Co. was replaced by Richard A. Eisner & Co., a New York firm, just seven days prior to the year ended March 31, 1977.

More specifically, the registrant wanted to apply its normal method for reporting income on long term contracts, the percentage-of-completion method, to several foreign contracts begun in the third quarter of the 1977 fiscal year. Arthur Young & Co. had argued that there wasn't any fair basis for accruing income on those contracts because the unusually high costs of material acquisitions and rather limited installation costs created an imbalance in incurred costs (54). The Form 10-K filed by E. C. Ernst for the year ended March 31, 1977 describes the registrant's practices as follows:

Accounting for contracts - Income from contracts, including joint venture contracts, is recorded on the percentage-of-completion method utilizing engineering estimates when experience is sufficient to project final results with reasonable accuracy. Under this method there is included in income that proportion of the total contract price which the cost of the work completed bears to the total estimated cost of each contract. Contract income initially includes an estimated amount to defray contract expenses such as bid and proposal, estimating and pre-job planning
expenses. Commencing in the fiscal year ended March 31, 1977 the Company's international subsidiary (Note 2) undertook certain foreign contracts which prior to the installation of materials, require significant lead time for the purchase, transportation and marshalling of construction materials as well as the establishment and operation of foreign offices to support the contracting activities. For such contracts the Company includes in its estimated contract costs, those expenses directly associated with the aforementioned activities (21).

Arthur Young & Co. apparently felt that the significant lead time referred to above would result in premature profit recognition on these foreign contracts in that little actual construction activity would, in fact, have taken place during 1977. However, Richard A. Eisner & Co., in an independent opinion, concurred with the registrant's position and was engaged to complete the audit for 1977. The specifics of the dispute are described as follows:

On March 22, 1977 the Company filed a Form 8-K with the Securities and Exchange Commission reporting a disagreement between the Company and Arthur Young & Company (its former accountants) as to the application of the Company's percentage of completion method of accounting on a foreign contract in the third quarter ended December 31, 1976.

Arthur Young & Company recommended that, in this specific case, the Company should not recognize profit on a portion of the cost of materials which had been acquired for the job but had not been installed. The Company's position was that such an adjustment was inconsistent with the substance of the transaction, in that the job anticipated substantial effort in the purchasing of materials and delivery thereof to the foreign project site before installation efforts could commence (21).

The remaining excerpt from the Form 10-K indicates that the formalized disagreement reporting process frequently serves as a "warning flag" for SEC inquiry. In this case, the SEC
investigated the area of dispute and essentially insisted upon the more conservative position advocated by Arthur Young & Co.:

Subsequently, the Company had meetings with the Securities and Exchange Commission and with Richard A. Eisner & Company (its present accountants) and ultimately determined to exclude the entire cost of uninstalled material as well as the related cost of delivery and freight from the calculation of income to be recognized in the third and fourth quarters and to include in such calculation for the second, third and fourth quarters as a measure of the effort expended in partial performance of the contract, certain expenses of the international subsidiary which meet the criterion of being directly related to the foreign contract (Note 1). It is impractical to compute the effect on the financial statements for the full fiscal year ended March 31, 1977 of the difference between the concept proposed by Arthur Young & Company and the concept ultimately adopted by the Company (21).

Interestingly, Arthur Young & Co. was reappointed to audit the financial statements of E. C. Ernst in the following year, 1978.

The facts of the E. C. Ernst situation were quite similar to an earlier disagreement which transpired between Prime Motor Inns and Peat, Marwick, Mitchell & Company. The event would have triggered a Rule 3-16(s) disclosure had it not been for the fact that the disagreement culminated twenty-five months (versus twenty-four under the rule) prior to the date of the first financials issued by the registrant for which Rule 3-16(s) became effective. Therefore, technically, this case could not be classified as a Rule 3-16(s) disclosure.

Prime Motor Inns acted as a general contractor of projects comprising a motor lodge and restaurant, principally for
investors under sale and lease-back provisions. Following
the provisions of the June 1973 AICPA accounting guide,
"Accounting for Profit Recognition on Sales of Real Estate," Prime Motor Inns had accounted for profit recognition on the motor lodge component of each project using the completed contract approach, with profits deferred and amortized on a straight line basis corresponding to the initial lease back term. However, Prime Motor Inns argued that it should be allowed to continue using a variant of the percentage of completion approach in recognizing profits related to the restaurant component of each project. Peat, Marwick, Mitchell & Co. was concerned that heretofore insignificant profits, using the company's approach, had become material and would be realized prematurely. Because of their adamant stand, Peat, Marwick, Mitchell & Co. was terminated in favor of J. D. Cohn & Company in late April 1974, one month before the end of the fiscal year. In its exhibit letter, under a caption labeled "Disagreement unresolved at date of our termination," Peat, Marwick, Mitchell & Co. states:

On December 7, 1973, we wrote the Company stating that we did not agree with the amount of profit recognition on the portion of a project attributable to restaurant construction if such profit were based on a percentage of completion that was equivalent to the ratio that total projects costs (applicable to motor lodge and restaurant construction) incurred to date bear to total estimated costs of the project ("aggregate approach"). We advised that restaurant construction profit can be recognized using the percentage of completion method based only upon the ratio that actual restaurant construction costs incurred to a given date bear to the total estimated restaurant construction
costs, based on reliable job cost estimates and plans and specifications ("component approach"). The Company had informed us that delays could, and most likely would, be encountered in starting construction of restaurants, and therefore such construction would lag behind construction of the related motor lodge. We were concerned that the Company would be recognizing profit for construction effort not yet expended, and therefore would not be following the preferable accounting practice under the circumstances (43).

Subsequently, as in the E. C. Ernst case, the SEC intervened in the matter. The SEC required that the registrant adopt the completed contract approach with restaurant profit deferral and amortization over the lease back term as was being done with the motor lodges (44).

Comparison with the Burton and Roberts findings.--It would be quite interesting if one could discern whether Rule 3-16(s) has reduced "shopping" for accounting principles. Unfortunately there has been very little research conducted regarding this issue prior to the release of ASR 165. Perhaps the most relevant analysis with respect to the extent of significant accounting principles changes subsequent to an auditor change is found in the earlier discussed Burton and Roberts study.

Burton and Roberts (8, pp. 33-35) used questionnaires, inquiries of management, and analyses of financial statements in an attempt to discover the principal reason behind the eighty-three auditor changes they observed among firms appearing in the Fortune 500 list of largest industrials between 1955 and 1963. The authors were able to make a judgment in
seventy-six of the cases. From among those, in six cases (7.9 per cent) the weight of evidence indicated that accounting principles disputes had been the primary reasons for the auditor change. Two of these cases were surmised from analyses of financial statements while in four cases (5.3 per cent) accounting principles disputes were acknowledged in questionnaires as having motivated the registrant to change auditors.

Although these data pertained to only large industrial firms, they are nevertheless usefully comparable to the thesis results. While Burton and Roberts found a 7.9 per cent (or, more conservatively, a 5.3 per cent) rate of auditor changes for accounting principles reasons, the data in the thesis indicated less than a 2 per cent incidence rate of acknowledged Rule 3-16(s) disclosures. One cannot conclude that the potential light of publicity due to Rule 3-16(s) disclosures has been the sole cause of these improved results. Indeed some of the improvement may have been attributable to the continuing efforts of the Financial Accounting Standards Board to reduce the plethora of unnecessary accounting principles alternatives which have plagued corporate disclosures. Nevertheless, the cause is not so important as has been the effect.

Board of Director Approval of Auditor Changes

The final two areas of this phase of the research focused upon disclosures required for the first time with the issuance
of ASR 247, effective for Forms 8-K filed after July 31, 1978. Only five months of data were observable through the end of 1978. However, in that same period of time, fifty-four auditor changes were observed, significantly more than enough to allow statistical inferences.

ASR 247 requires registrants to report whether a decision to change auditors had been recommended or approved by the Board of Directors, or an audit committee thereof. Hypotheses sets numbers twenty-two through twenty-six were tested, as shown in Appendix D (pp. 388-396), for significance of differences between the sample groupings with respect to the extent of Board of Director involvement in that process.

Page 388 of Appendix D indicates that the observed frequencies distributed among each of the three groupings were statistically significant at the .023 level. The Cramer's V value of .374 confirms a rather strong correlation between the variables. These results tend to support the research hypothesis that meaningful differences do exist between the sample groupings on this basis.

In the series of one-on-one cross-tabulations, it can be seen that the null hypothesis of no differences between NYSE and AMEX firms (p. 390) is not rejected at the .05 level. While the crosstabulation of NYSE and OTC firms (p. 392) shows no significant differences at the .05 level, in fact, the greatest percentage disparity exists here: 100 per cent of NYSE auditor changes had been recommended or approved by the Board of Directors or audit committee thereof; however, only
71.4 per cent of OTC auditor changes were so approved. Therefore one would have expected a lower level of significance than the .163 achieved. This anomaly is attributable to the small sample size of thirty-one observations in this test. The cross-tabulation of NYSE and AMEX registrants (p. 390) shows significant homogeneity between those classifications. It could be inferred that any differences here could have been fully attributable to chance. It can also be seen that 95.7 per cent of the AMEX auditor changes in the five month period examined were sanctioned by the Board of Directors. Combining the NYSE and AMEX results versus OTC (p. 396) isolates the source of the significance of differences noted in the first of this series of hypothesis tests. The homogeneity of NYSE and AMEX results in this area and the larger sample size caused by their aggregation indicates that there are statistically significant differences at the .021 level between the combined exchanges and OTC firms. Furthermore, the phi value of .371 indicates fairly strong association in the variables.

These results are not surprising in view of the 1978 New York Stock Exchange mandate that member firms must form audit committees comprised of outside members of the Board of Directors (19, p. 106). In that nearly as high a percentage of AMEX firm auditor changes (95.7 per cent) were similarly sanctioned probably reflects a stronger desire in AMEX firms to emulate the activities of Big Board firms than would generally be true of OTC firms.
Voluntary Disclosure of Reasons for Auditor Changes

The final issue addressed in this phase of the thesis research concerned the question of whether or not statistically significant differences existed in the three populations studied in terms of the extent of their voluntary dissemination of reasons for auditor changes. Such disclosures were urged, rather than required, by the SEC with its issuance of ASR 247.

Hypotheses sets numbers twenty-seven through thirty-one presented in the preceding chapter were tested utilizing chi-square at the .05 level of rejection of null hypotheses. The results are presented in Appendix D (pp.398-406). As can be seen therein, none of the tests of hypothesized relationships were found to be significant at the .05 level.

Appendix D (p. 398) shows that twenty-three (42.6 per cent) of the total of fifty-four auditor change Forms 8-K filed between August and December 1978 cited reasons for the changes. However, thirteen of the twenty-three Forms 8-K indicating reasons stated that the reason for the auditor change was the dissolution of the former Big Fifteen public accounting firm, Clarence Rainess & Company. In fact all four of the NYSE changes and six of the eight AMEX changes citing reasons were attributable to the Rainess dissolution.

As discussed more fully in Chapter III, by far the majority of commentators to the SEC proposals for required disclosures of reasons for auditor changes had felt that such
disclosures would at best constitute "boiler plate," or be subjective and unmeaningful. The remaining ten reasons cited were not very illuminating, their tenor supporting the concerns of the critics of reasons disclosures. The following are exemplary of the types of reasons voluntarily given.

Two firms stated that growth considerations had caused them to seek the services of a larger auditor. Beehive International indicated that the change "... was made in recognition of the expanded operations of the registrant and the attendant need to be served by accountants with international expertise" (6). Similarly, Raycomm Industries, Incorporated said that "... the growth of the Registrant, especially in the past three years, has increased the need for an auditing firm with nation-wide offices" (46). On the other hand, Fimaco, Inc. changed from a Big Eight to a non-Big Eight firm because "the individual accountant who had been servicing the Registrant's account terminated his employment with Touche Ross & Co. and is now a partner of Ronald B. Cohen & Company. The Registrant changed ... to maintain continuity of service and personnel" (22).

Three firms cited audit fee problems, past or present. Rathbun Investment indicated its auditor had been forced to resign "... because of the substantial amount owing and unpaid to such firm" (45). Housing Dynamics, Incorporated stated in classical "boiler plate," that the action had been taken "... with a view that it would reduce accounting costs and also provide management ... better access to the company's
regular accountant" (30). Similarly, Wits, Inc. terminated Moss, Adams & Co. due to the amount of time and concomitant cost requested to complete the audit for the year ended December 31, 1977 (56).

Phase III Results: Statistical Analysis of CPA Firms Involved in Auditor Changes by Exchange

The third phase of the thesis research was directed toward the important question of the extent of increasing Big Eight firm dominance in the auditing services market. The issue is significant in that recent Congressional reports have assailed the public accounting profession for increasing dominance by Big Eight firms. One cannot refute that Big Eight firms hold a tremendous share of the auditing services market for the largest corporations in the United States. However, a totally different question is whether that market penetration is being expanded. The results of this phase of the research will shed some light on that issue.

To do so, all NYSE and AMEX and a random sample of OTC firm auditor changes between 1974 and 1978 were analyzed in terms of direction of change within the auditing firm hierarchy consisting of Big Eight auditors as one tier, with all other auditors in a second tier. (For convenience and economy of exposition, the following test results will be discussed in terms of tiers; however, no literal comparative ranking on any basis is intended). Earlier studies of this issue were wholly descriptive, and were either constrained to the
largest industrial firms, or, where OTC firms were included, otherwise seriously limited in scope.

As discussed more fully in the preceding methodology chapter, the thesis data will be analyzed first in terms of whether registrants, by sample groupings, are changing auditors independent of the tier occupied by the predecessor. Secondly, tests of significance of changes by firms who in fact switched between auditor tiers will be made. Finally, these results will be compared and contrasted with the results of earlier studies by other researchers.

Tests for Increasing Big Eight Dominance of the Audit Services Market

To assess the question of increasing Big Eight dominance from an aggregative perspective, hypothesis sets numbers thirty-two through thirty-six were prepared for testing with the chi-square test. Five contingency tables were generated, as shown in Appendix D (pp. 408-416), for: all registrant auditor changes, NYSE changes, AMEX changes, OTC changes, and finally, the combination of NYSE and AMEX changes.

Appendix D (p.408), presenting the test results for all registrant changes, indicates significance at the .0000 level with a phi value of .192. These results are manifestly lower than the traditional .05 level for rejection of the null hypothesis; and, therefore, tend to support the operational hypothesis that this cross section of all publicly listed firms selected a successor auditor dependent upon the tier
occupied by the predecessor. In other words, all registrants, as a group, tended to engage a Big Eight auditor if the terminated auditor had been a Big Eight firm, the same being true of changes from non-Big Eight auditors. Stated more directly in terms of the research hypothesis, there was not a significant exodus from non-Big Eight to Big Eight auditing firms.

NYSE firm results appear in Appendix D (p.410). The raw chi-square value indicates significance at less than the .05 level which, paralleling the logic above, would indicate that Big Eight firms are not having significant impact upon the non-Big Eight share of the NYSE firm audit market. However, it can be seen in the chi-square corrected for continuity calculation (.10) that the null hypothesis of independence is not rejected, resulting in an opposing conclusion. Therefore, being totally objective, the final conclusion must be that NYSE auditor change selection is made independent of whichever tier was occupied by the predecessor auditor. More specifically, though this was not a directionally hypothesized realtionship, it can be seen in Appendix D (p.410) that there was a net gain of twenty-four NYSE audit engagements by Big Eight firms.

The same results are even more strikingly evident in the pattern of AMEX auditor changes during the five years ended in 1978, as per Appendix D (p.412). The chi-square value of .0000 indicates that any observed differences had a 99 per cent probability of having arisen by chance. Consequently,
the null hypothesis is not rejected at the .05 level and the conclusion is that AMEX auditor selections are not a function of the auditor tier of which the predecessor was a member. Also, as was the case with NYSE auditor changes, Big Eight firms succeeded more AMEX engagements than they lost, a net gain of seventeen audit engagements.

However, turning to the analysis of the nature of OTC firm auditor changes (p.414), an entirely different situation is observable. Here the chi-square value was found to be statistically significant at the .0006 level, accompanied by a phi value of .184. These results then tended to corroborate the research hypothesis that OTC auditor changes are dependent upon whether the predecessor auditor was a Big Eight or non-Big Eight firm. More specifically, OTC firms were found to retain an auditor from the same tier represented by the disengaged firm. In absolute terms, it can be seen that in 368 total OTC changes, the status quo was largely maintained; however, Big Eight firms, in fact, incurred a net loss of 2 OTC audit engagements in the five years examined.

The results of the combined NYSE and AMEX change activity, Appendix D (p.416), are, obviously, consistent with the commonality of results and conclusions in the underlying constituent samples. The null hypothesis is not rejected at the .05 level, the conclusion, therefore, being that NYSE and AMEX auditor changes are not influenced by the tier represented by the predecessor auditor. However, these results should be viewed
with a jaundiced eye, as they result from the aggregation of virtually disparate results. That is, the NYSE results were very nearly significant at the .05 level (and were without continuity correction), whereas the AMEX results were strongly insignificant at the .05 level.

The earlier observation that aggregating all auditor changes, Appendix D (p. 408), resulted in a very low level of significance (.0000) appears to be a function of relative sample change weightings to total. That is, although a strongly different significance level was observed in AMEX changes with respect to OTC registrant changes, OTC changes constituted 49.6 per cent of the total of 742 changes made. On the other hand, AMEX changes constituted only 31 per cent of total changes, while NYSE firms made only 19.4 per cent of the total auditor changes. Hence, the aggregative results are weighted toward the OTC sample results.

Tests of Significance of Changes in Firms Actually Switching Big Eight and Non-Big Eight Auditors

The perspective of the analysis now will shift to the question of direction of changes made by registrants who, in fact, switched between Big Eight and non-Big Eight auditor tiers. While the immediately preceding series of tests provided evidence of the overall trend in increasing Big Eight dominance, the following tests provide a more finely focused analysis. For example, as discussed more fully in Chapter IV, while a sample grouping as a whole might tend to engage an
auditor from the same tier as the predecessor, the minority of registrants actually making inter-tier switches might not be doing so proportionately equally in each direction.

Hypotheses sets numbers thirty-two through thirty-six were styled to test for statistical significance of any variance from an hypothesized equal distribution of such inter-tier auditor changes. These tests were performed using the McNemar test, described in the preceding chapter, at the .05 level. As SPSS does not have a McNemar test routine, these tests were calculated manually using the same cell data appearing in the cross-tabulations in Appendix D (pp.408-416). The calculation made included Yate's correction for continuity; hence, the results are comparable to the SPSS corrected chi-square values.

The McNemar test calculation for all registrants (cell data p. 408) was 5.034. Reference to a table of chi-square values indicates that such a value with one degree of freedom has a probability of occurrence less than p=.025. As this probability is less than the .05 level, the null hypothesis was rejected. Therefore the conclusion is that the probability an auditor change will be from a Big Eight to a non-Big Eight firm is not equal to the probability of a change being in the opposite direction. More specifically, the cell data show a net gain of thirty-nine audit engagements by Big Eight auditors.

With respect to NYSE firms (cell data, p.410), the calculated McNemar test value was 15.559. This value is significant at less than the .0002 level, causing rejection of
the null hypothesis at the .05 level. Therefore, these data indicate that there is only a .02 per cent probability that this net acquisition of twenty-four NYSE audit engagements by Big Eight firms could have occurred by chance.

Concerning AMEX inter-tier auditor changes, Appendix D (p.412) shows a net gain of seventeen AMEX audit engagements by Big Eight auditors. However, with a McNemar test value of 2.485, the null hypothesis could not be rejected at the .05 level. Hence, the conclusion would be that AMEX inter-tier auditor changes are as likely to be from Big Eight to non-Big Eight firms as in the converse direction.

The lowest number of net changes between auditor tiers was observed among OTC registrants, as per Appendix D (p.414). Furthermore, whereas NYSE and AMEX auditor changes resulted in net gains for Big Eight auditors, the Big Eight lost a net of two OTC engagements. The McNemar test value calculated for these cell data was .007. The probability of random occurrence of such a value is in excess of 80 per cent. Therefore, the null hypothesis was not rejected at the .05 level, the conclusion being the same as described above for AMEX firms.

In combining NYSE and AMEX auditor changes, Appendix D (p.416), a McNemar value of 11.679 was obtained, significant at less than the .001 level. Therefore the null hypothesis was rejected. Hence, the conclusion would be that inter-tier auditor changes by the two major stock exchanges are not equally distributed. Specifically, Big Eight auditors had a
net gain of forty-one such engagements during the five years ended in 1978. However, the earlier caveat applies in aggregating the two exchanges in this case.

To coalesce and summarize the results of the foregoing chi-square and McNemar tests, all registrants, as a whole, tended to engage an auditor from the same tier as was represented by the predecessor. However, among those registrants actually switching between tiers, some evidence was found indicating a proclivity toward hiring a Big Eight auditor. Big Eight auditors experienced a net gain of thirty-nine audit engagements. Regarding NYSE firms, evidence from both tests supported a trend of greater Big Eight dominance. Statistically, NYSE auditor changes were found not to be within the same auditor tier. Furthermore the net tier switches were not equally distributed between non-Big Eight and Big Eight auditors, the latter having a net gain of twenty-four clients. AMEX firm chi-square results showed quite a greater degree of inter-tier switching of auditors; however, the McNemar test indicated that those inter-tier changes were as statistically likely to be toward as from a Big Eight auditor. Nevertheless, Big Eight firms gained a net of seventeen AMEX audit engagements. On the other hand, OTC firm results were found to indicate if anything, a resistance to switching toward a Big Eight auditor. That non-Big Eight firm loyalty is reflected in the chi-square test significance level of .0006. The McNemar test showed further that the total of 150
inter-tier changes were as likely to be toward either auditor tier. In absolute terms, Big Eight firms lost two OTC engagements during the five years studied.

Comparison of Results With Previous Studies

Chapter II of this thesis outlined the results of several other studies related to the issue of direction of auditor changes by various registrant populations. These three previous studies were largely descriptive in nature and somewhat limited in scope, either in terms of time or the definition of the populations examined. The results of this thesis will now be reconciled with those prior studies.

The Burton and Roberts study (8) examined auditor changes made by the Fortune 500 Industrials between 1955 and 1963. The authors identified 83 changes not resulting from accounting firm mergers in the 620 companies which had appeared in the Fortune lists. Only 13 times was a non-Big Eight firm selected in those 83 changes. Furthermore, the Big Eight firms had a significant net gain of 26 audit engagements. The conclusion in that study of increasing Big Eight dominance in larger industrial concerns is confirmed in the thesis results for NYSE firms, many of the Fortune 500 Industrials being listed on the Big Board. The thesis results showed statistically significant increases in Big Eight dominance of the NYSE audit market.

In contrast, Bedingfield and Loeb (5) found that national firms (defined as the Big Eight plus other national firms),
while having more clients both before and after 250 auditor changes by publicly listed companies between November 1971 and February 1973, had experienced a net loss of 12 clients in 240 changes. Bedingfield and Loeb felt these disparate results may have been attributable to their using a broader spectrum of companies than the Fortune 500 Industrials (5, pp. 66-67). Attempts to compare the Bedingfield and Loeb findings with the thesis results are blurred somewhat by their combining of Big Eight and other national firms. However, the all registrant thesis results are most nearly comparable. Here, it was found that the cross section of all registrants had made a net of thirty-nine changes toward Big Eight auditors, these results being weakly indicative of a trend in that direction by firms actually switching tiers.

For comparative purposes, a continuity corrected chi-square calculation was made, using data provided in the Bedingfield and Loeb study (5, p. 67). The value so obtained, .195, was found to be insignificant at the .05 level. This determination was found to be inconsistent with the thesis result that a cross-section of all registrants tended to engage an auditor from the same tier as had been represented by the predecessor. In fact, the Bedingfield and Loeb data showed considerable inter-tier switching when tested with chi-square. On the other hand, applying the McNemar test to their data yielded a value of 1.287, which was not significant at the .05 level. Therefore, in that study, while many inter-tier switches
occurred, the probability is that they were distributed equally in each direction. This conclusion was also statistically antithetical with the thesis result for all registrants.

The third study dealing with this auditor change issue appeared in a paper by Coe and Palmon (16). Using as a database all publicly listed companies changing auditors in 1974 and 1975, the researchers found a net loss of clients by Big Eight firms. As discussed in the preceding paragraph, the thesis results for five rather than two years of changes indicated a net gain of audit engagements by Big Eight firms. However, statistically, the overall tendency was one of loyalty to the auditor tier occupied by the predecessor.

Phase IV Results: Analysis of Extent of Auditor and Client Conflict Regarding Reported Disagreements

The final phase of the dissertation research was directed toward the question of how frequently auditors and their former clients disagree as to the nature or presence of disagreements preceding the change in auditors. The issue was researched using both descriptive and nonparametric statistics. As was done in several previous sections of this thesis, the issue was addressed from the perspective of both the registrant and the auditor involved in the conflict. However, first, an analysis of circumstances attending auditor resignations wherein no disagreements were cited will follow.
Auditor Resignations: No Disagreements Reported

Since the earliest exposure drafts for disclosing auditor changes, the Securities and Exchange Commission has recognized the crucial importance of auditor involvement in the disagreement disclosure process. The auditor's exhibit letter corroborating or refuting the former client's assertions serves as a control in that process. That is, in theory, auditor monitoring of the client's disagreement disclosures should motivate the registrant to fully disclose the circumstances of any attendant disagreements. Furthermore, were the former client's disclosures lacking in requisite candor, the auditor would communicate his interpretation of the disagreements. Not infrequently, auditors have cited disagreements (or a different interpretation thereof) in their exhibit letters, which disagreements were not acknowledged by the registrant. Such was the case in 39 of the 749 auditor changes reported by all registrants (5.2 per cent) in the five years examined. Those 39 cases constituted 38.2 per cent of the 102 auditor changes reporting disagreements. That almost 40 per cent of auditor changes involving disagreements required auditor clarification or would not have been reported at all attests to the importance of auditor involvement in the disclosure process.

Obviously, the theoretical scenario outlined above does not always occur. Disagreements go unreported by either party. Perhaps some auditors are concerned about "poor loser" or
"sour grapes" charges, as occurred in the Price Waterhouse and Gulf Oil conflict, and the consequent impact upon their practices. Or perhaps there is a concern over possible litigation. Queried on this matter, one Big Eight partner replied, "You don't go around opening yourself up to litigation."

Given the intensely competitive nature of the public accounting profession (See, for example, the Cohen Commission Report (19)), one's skepticism is aroused when an auditor resigns an engagement and no disagreements are cited by either party. Twenty-five such cases were noted among the 748 auditor changes examined in the thesis research.

For each of those twenty-five cases, Forms 8-K were examined to determine whether any insights could be obtained as to reasons for these resignations. Table III on the next page summarizes the results of that analysis.

As seen in Table III, there were thirteen cases where no reason was determinable. Most Forms 8-K of this nature merely stated that the auditor had resigned. However, one indicated that there had been no problems at all, and that the auditor, Ernst & Whinney, and the client, Vermont American Corporation, had mutually agreed to terminate their relationship (53). In another Form 8-K, Banker's Mortgage Corporation said that Deloitte, Haskins & Sells had simply declined to submit a proposal for reelection (4).
TABLE III

REASONS FOR AUDITOR RESIGNATIONS WITHOUT DISAGREEMENTS

<table>
<thead>
<tr>
<th>Reason</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not determinable</td>
<td>13</td>
</tr>
<tr>
<td>Litigation with registrant or major</td>
<td>4</td>
</tr>
<tr>
<td>shareholder thereof</td>
<td></td>
</tr>
<tr>
<td>Auditor not independent under Rule</td>
<td>2</td>
</tr>
<tr>
<td>2-01 of Regulation S-X.</td>
<td></td>
</tr>
<tr>
<td>Auditor not independent due to unpaid</td>
<td>2</td>
</tr>
<tr>
<td>audit fees</td>
<td></td>
</tr>
<tr>
<td>Disagreements with affiliated</td>
<td>2</td>
</tr>
<tr>
<td>companies</td>
<td></td>
</tr>
<tr>
<td>Time required and burden of practicing</td>
<td>2</td>
</tr>
<tr>
<td>before the SEC</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
</tr>
</tbody>
</table>

Eight of the twenty-five cases involved auditor independence issues: four due to litigation; one due to an SEC ruling; one due to the merger of the auditor with another auditing firm, of whom the registrant's president was a member; and two as a result of unpaid audit fees.

Two resignations occurred when Peat, Marwick, Mitchell & Company resigned from the audit of eight companies controlled by Victor Posner. Posner was at that time under investigation by the SEC regarding the accuracy and adequacy of financial reporting by Sharon Steel Corporation (55). Though Peat, Marwick, Mitchell & Company cited no disagreements with the two companies, DWG Corporation and Pennsylvania Engineering
Corporation, the auditor had experienced disagreements with other Posner Affiliates and had accused both Sharon Steel Corporation and NVF Company of "... having concealed and misrepresented 'significant matters' affecting their 1974 1975 financial results" (55).

Finally, two resignations arose due to a local auditing firm's having concluded that the burdens of SEC practice were simply too onerous. The auditor for Houston Oil Fields Company, A Burke Haymes & Co., declined to stand for re-election "... due to uneconomical factors of maintaining a practice before the SEC and membership in the 'SEC practice section' of the AICPA" (31). Similarly, the auditor for Ryerson & Haynes, Incorporated indicated that proper service could not be given to other clients due to the time required of partners and staff on this SEC engagement (48).

Registrant Data: Auditor and Client Conflict Regarding Reported Disagreements

The analysis will now shift to the more immediate issue of auditor and client conflict regarding the nature or presence of disagreements, from the perspective of the registrant's exchange classification. Two types of analyses were prepared. The first of these portrays the extent of auditor and client disagreement conflict by year and exchange. The second analysis was to test for significance of differences by exchange in this respect.
In the final paragraphs of ASR 247, the most recent auditor change promulgation, the SEC staff expressed its concern that some registrants had become perfunctory in reporting disagreements:

The Commission is concerned that in recent Form 8-K filings the practice of reporting disagreements has deteriorated. Filings have been made in which the registrant has indicated no disagreements, while the former accountant's letter concludes that reportable disagreements did occur (18, p. 3652).

Tabulations were prepared appearing in Appendix D (pp.418-424) to test both the extent and trend of these assertions.

Appendix D (p. 418) shows the extent of auditor and client conflict regarding disagreements reported in auditor exhibit letters for all registrants. In only one of these thirty-nine conflicts did the client report a disagreement, although the auditor maintained no disagreement existed. The exhibit letter filed with amended Form 8-K No. 2 of Clary Corporation by the predecessor auditor, Touche Ross & Co. states:

The Registrant states that there were disagreements related to December 31, 1975, financial statements involving the value of the accounts receivable of the Registrant's subsidiary, Rushmore Homes, Inc., and involving the ability of the Registrant to meet working capital requirements of a term loan agreement. These matters were not disagreements but were uncertainties that were of sufficient materiality to require qualification in our report on the consolidated financial statements for the year ended December 31, 1975 (15).

The overall crosstabulation shows that 5.2 per cent of the 748 Forms 8-K reporting auditor changes indicated conflicts
with respect to the nature or existence of disagreements.
In terms of similar crosstabulations by exchanges, it can be seen that AMEX auditor changes (p. 422) contained the highest percentage of such conflicts, 8.3 per cent, while OTC auditor changes (p. 424) reflected the best registrant compliance with the disclosure requirements, 3.2 per cent, or only 12 such instances in 374 total changes. NYSE listed registrants (p. 420) had only 8 "disagreements over disagreements" from among 136 auditor switches, or 5.6 per cent. The low incidence of OTC conflicts in this area seems to be consistent with earlier conclusions in this thesis as to the reasons for correspondingly low rates of disagreements reported in OTC auditor changes.

With respect to the SEC's assertions that the practice of reporting disagreements had deteriorated, the overall tabulation (p. 418) presents a different picture. Here it can be seen that, in fact, the conflict rate has decreased between 1974 and 1978, though not steadily, from 6.4 per cent to 4.6 per cent. Similarly, NYSE conflicts concerning disagreements have trended downward (though with greater volatility attributable to fewer observations) from 17.9 per cent in 1974 to 5.6 per cent in 1978. The pattern of OTC conflicts (p. 424) has been rather constant except for 1976 (6.3 per cent) and 1978 (0.0 per cent). However, the trend of AMEX and predecessor auditor conflicts over disagreements (p. 422) rose from 6.6 per cent in 1974 to 9.1 per cent in 1978.
Hypothesis sets numbers forty-two through forty-six, appearing in Chapter IV, were structured to test for significance of differences between sample groupings as to the existence of conflicts between registrants and their predecessor auditors regarding the nature or presence of disagreements preceding auditor changes. The overall crosstabulation (p.426) indicated statistical significance at the .025 level, causing rejection of the null hypothesis of no differences between exchanges. However, the Cramer's V value of .100 suggests a rather weak relationship between the cross-tabulated variables.

In disaggregating the overall data, it was found that differences between NYSE and AMEX firms (p.428) and between NYSE and OTC firms (p.430) were not significant at the .05 level and could, therefore, be largely attributable to chance. As would be expected, the greatest significance of differences was reflected in the AMEX versus OTC results (p.432) which were statistically significant at the .011 level. However, the phi value of .111 indicates the variables are only weakly correlated. Combining NYSE and AMEX results, as they were found to be statistically homogenous, vs. OTC firms (p.434) reveals statistically significant differences at the .021 level, but a phi value of only .090.

Therefore, the conclusion is that differences, though not strong, exist between the two major exchanges and OTC registrants in terms of the extent of conflicts over disagreements reported prior to auditor changes. OTC firms have
significantly fewer such conflicts. The same conclusion was true, however with stronger evidence, when AMEX data were crosstabulated against OTC data. What cannot be determined, however, is whether the more "favorable" OTC disagreement rate actually reflects fewer such conflicts or tacitly collusive agreements not to disclose existing conflicts.

**Auditor Data: Auditor and Client Conflict Regarding Reported Disagreements**

The foregoing series of tests indicated that the three sample groupings did not exhibit an equal affinity in terms of conflict with their former auditors over the nature or presence of disagreements preceding auditor changes. The analysis will now shift toward an examination of the disagreements conflict issue from the perspective of the displaced auditor. These results should tend to refute or corroborate the immediately preceding findings.

Hypothesis set number forty-seven was stated operationally to determine whether statistically significant differences existed between Big Eight and non-Big Eight auditors regarding the extent of their involvement with former clients in conflicts as to the nature or presence of disagreements. The results are presented in Appendix D (p.436). The low chi-square value of 2.606 was not found to be significant at the .05 level, tending to support the null hypothesis that meaningful differences do not exist between the auditor tiers in terms of disagreement conflict with former clients.
Furthermore, a similar conclusion was even more strongly evident in a similar analysis of this issue among individual Big Eight firms. The results of testing hypothesis set number forty-eight appear in Appendix D (p.438). Here it can be seen that any differences among the Big Eight, on this basis could have been attributable to chance with a 30 per cent probability. Hence, the differences are not statistically meaningful.

Nevertheless, it is interesting to note the pattern of variations from the overall conflict rate of 6.6 per cent in this test. Exhibit letters filed with the SEC by Peat, Marwick, Mitchell & Co. disputed or modified the former clients' assertions regarding disagreements in 11.1 per cent of all audit engagements lost. Price Waterhouse was second on this basis with an 8.9 per cent occurrence rate, followed by Touche Ross with a 7.1 per cent. The three firms least likely to have been involved in such disputes were found to be Deloitte, Haskins & Sells (0.0 per cent), Ernst & Whinney (1.9 per cent), and Arthur Young & Co. (5.4 per cent).

Amalgamating the results from both the registrant and auditor perspective, a clearer picture now emerges. The registrant tests provided some evidence of statistically meaningful differences between the registrant sample groupings in terms of disagreement conflict involvement. The major exchange registrants were found to be more frequently so involved than were OTC registrants. Furthermore, the same tests
from the point of view of the auditor involved showed relative constancy, both between the two auditor tiers and among the individual Big Eight firms. Registrants within all sample groupings are audited by both Big Eight and non-Big Eight firms. Consequently, as the SEC indicated in ASR 247, the problem of failing to acknowledge disagreements, to the extent one exists, is due to registrant more so than auditor noncompliance.
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42. Permaneer Corporation, Form 8-K (September, 1975).
43. Prime Motor Inns, Incorporated, Form 8-K (May, 1974).
44. ______________, Form 10-K (June, 1976).
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55. ______________, September 6, 1977.
CHAPTER VI

SUMMARY AND CONCLUSIONS

Summary of the Study

The purpose of this thesis was to analyze a number of auditor change and other peripheral issues from two related perspectives. Empirical data were gathered from publicly available Forms 8-K and 10-K to first assess whether meaningful differences existed between NYSE, AMEX, and OTC registrants regarding disclosures required in those documents. Secondly, the data were analyzed to determine whether differences existed with respect to the accounting firms involved in the auditor changes. In most of the tests designed to achieve these purposes, statistically defensible results were obtained using the nonparametric chi-square test for significance of observed differences and the McNemar test for significance of changes, at the .05 level.

Summary of Registrant Tests

Considerable interest has been stimulated in recent years concerning whether or not different measurement and disclosure criteria should exist for larger and smaller business entities. Recently, the Financial Accounting Standards Board issued SFAS 21 eliminating the requirement that nonpublic firms disclose earnings per share or segmental
information (2). Similarly, the SEC occasionally imposes differential reporting and registration requirements for smaller public registrants. Such measures presuppose meaningful differences between larger and smaller firms; however, little empirical research has been gathered to substantiate these presupposed differences.

The first of the four research phases was oriented entirely toward the three registrant sample groupings: NYSE, AMEX, and OTC firms. The analyses performed, all descriptive in nature, centered upon (1) the types of disagreements reported preceding auditor changes, (2) the types of opinions received by registrants prior to all auditor changes and those changes attended by disagreements, and (3) an analysis of chronic auditor changer characteristics.

There were 102 instances of at least one disagreement reported in the 848 auditor change Forms 8-K examined for the years 1974 through 1978 inclusive, a 12.0 per cent occurrence rate. The three most frequently encountered disagreement types constituted 42.1 per cent of all of the 309 total disagreements reported. "Timing of revenue recognition" disagreements were the most frequently observed in each of the three sample groupings. "Recoverability of the cost of some or all assets or adequacy of related reserve" disagreements were cited second most frequently by NYSE and AMEX firms and co-ranked first for OTC registrants. While "timing of expense recognition" was the third most common disagreement type
overall, as well as for NYSE and AMEX firms, this type was co-ranked only eighth for OTC firms. In terms of disagreement rates, evidence was found indicating significant differences existed between OTC firms and the two major exchanges. NYSE and AMEX auditor changes combined indicated the existence of disagreements almost three times as often as did OTC changes.

In addressing the issue of types of audit opinions received prior to auditor changes by the sample groupings, a definite pattern emerges. As would be expected, more unqualified opinions were received by all registrants than any other opinion type, while no adverse opinions were noted. Again NYSE and AMEX results were quite similar, the NYSE firms receiving a slightly higher percentage of clean opinions (70.4 per cent) than did AMEX firms (66.9 per cent). However, OTC firm auditor changes were preceded by unqualified audit opinions in only 52.0 per cent of those cases. Isolating upon auditor opinions preceding changes where disagreements had been reported, the overall rate of unqualified opinions deteriorated by more than 40 per cent to 35.0 per cent. Where disagreements were involved, once again NYSE registrants had the highest incidence of unqualified opinions preceding auditor changes, followed by AMEX and OTC firms, in that order. Furthermore, in auditor changes preceded by disagreements, NYSE companies had the lowest percentage erosion in unqualified opinions when compared to all NYSE auditor changes. OTC firms showed the greatest erosion.
Forty-four firms were identified as chronic auditor changers in the research, based upon 8-K reports filed between late 1971 and the end of 1978. None of these firms were listed on the New York Stock Exchange, while only two were listed on the American. This group as a whole made an average of 3.36 changes; however as many as six auditor changes were made by one firm and five by another. While no one Standard Industrial Classification was predominant; nevertheless, five of the forty-four firms were classified as computer and data processing services enterprises. When compared to a cross-section of all firms changing auditors, the chronic changer group was found to have received a higher percentage of other-than-unqualified audit opinions. However, interestingly, the chronic changers were found to have been less frequently involved in significant disagreements.

In the second phase of the thesis, statistically oriented tests were performed to determine if significant differences existed between the three sample groupings with respect to various disclosures required or recommended following auditor changes by publicly listed companies. Table IV presented on the following page summarizes the results of those tests.

The first series of tests centered upon disclosures regarding the existence of significant disagreements preceding auditor changes. This requirement has been in effect since November 1971. The second and third series of tests were based upon the requirements in ASR 165, issued in December
TABLE IV
SUMMARY OF STATISTICAL TESTS OF SIGNIFICANCE:
REGISTRANT PERSPECTIVE

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>All Firms</th>
<th>NYSE by AMEX</th>
<th>NYSE by OTC</th>
<th>AMEX by OTC</th>
<th>NYSE + AMEX by OTC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disagreements Reported Preceding Auditor Change</td>
<td>X*</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Other-Than-Unqualified Audit Opinions Received</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Rule 3-16(s) Disclosures After Auditor Change</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Board of Director Approval of Auditor Change</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reasons Given for Auditor Change</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disagreements as to Reportable Disagreements</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

* X, Test significant at .05 level; blank, not significant.

1974, that registrants disclose (1) on Form 8-K, the nature of any qualified, adverse, or disclaimer of opinion received in the two years preceding the change and (2) on Form 10-K any conditions, which had been the subject matter of a disagreement, and were disclosed or accounted for subsequent to the auditor change in a manner contrary to the preferences of the predecessor auditor. The final two test areas were
oriented toward the provisions of ASR 247, effective for disclosures subsequent to July 31, 1978, that registrants indicate whether the Board of Directors had approved the auditor change. Furthermore, registrants had been encouraged in ASR 247 to voluntarily report the reasons for auditor changes.

In the first of these tests, statistically significant differences were found to exist at less than the .05 level between both NYSE and OTC firms (.005 level) and AMEX and OTC firms (.0000 level). The combined NYSE and AMEX results were significantly different from OTC results at the .0000 level. NYSE and AMEX results were found not to be statistically significant, indicating homogeneity. More specifically, OTC firm Forms 8-K indicated the presence of disagreements almost two-third less frequently than did AMEX firms. Similarly, NYSE firm disclosures revealed disagreements more than twice as frequently as did OTC firm disclosures.

As in the first test above, statistical evidence was found to indicate that significant differences existed between the two major exchanges and OTC firms at less than the .05 level with respect to the relative percentages of other-than-unqualified auditor's opinions received preceding changes in auditors. NYSE opinion activity was found to be significantly from OTC results at the .003 level. In combining the opinion results for the two major exchanges, statistically
significant differences were noted from OTC results at the .0001 level. NYSE results were found not to be significantly different from AMEX results at the .05 level. While OTC firms received at least one auditor's opinion qualified in some respect in the two years preceding the change in auditor in 48.0 per cent of the switches observed, AMEX firms had such opinions in only 33.1 per cent and NYSE firms in only 29.6 per cent of the auditor changes reported between 1975 and 1978 inclusive. These tests added statistical credibility to the differences noted earlier in the thesis regarding opinion activity by years for these sample groupings.

The third series of tests centered upon differences in rates of Rule 3-16(s) disclosures reported in registrant Forms 10-K subsequent to auditor changes. No statistically significant differences were noted among any crosstabulation of sample groupings at the .05 level. What was noteworthy, however, was the confirmation that such disclosures were, in fact, very rare, as had been indicated by one SEC official in Washington. Only 2 Rule 3-16(s) disclosures were noted (one AMEX, one OTC) in the 102 instances of disagreements detected in 748 total auditor changes. However, a third situation, involving an AMEX firm, would have constituted a Rule 3-16(s) disclosure had it occurred a month later. It is also interesting to note that each of these three cases centered upon the registrant's wanting to accelerate revenue recognition. Furthermore, in two of the three cases, the SEC
ultimately intervened and required solutions that, though different from either advocated position, more nearly approximated the displaced auditor's preferences.

Boards of Directors with active audit committees can greatly enhance the auditor's independence by providing auditors a forum at a higher level than management for the resolution of sensitive audit issues. Evidence was found indicating that statistically significant differences existed at less than the .05 level between the combined results of the two major exchanges and OTC firms (.021 level) in terms of the extent of Board of Director involvement in the auditor change process. All NYSE changes were found to have been so approved in the last five months of 1978, as were 97 per cent of the AMEX switches. However, only 71.4 per cent of OTC changes were ratified by Boards of Directors, or audit committees thereof.

In addition to required disclosures pertinent to Board of Director involvement in auditor changes, ASR 247 encouraged the voluntary dissemination of reasons for auditor changes. Based upon the statistical results obtained, there was no evidence found to indicate that either NYSE, AMEX, or OTC registrants are more likely to provide reasons for their auditor changes. While 42.6 per cent of the auditor change Forms 8-K observed between July 31 and December 31, 1978 indicated reasons for changes, over half of those indicated the change had been required due to the dissolution of
Clarence Rainess & Company. As critics of reasons disclosures had argued, the remaining reasons cited were not very illuminating.

The question of Big Eight firm dominance of the auditing services market for publicly listed companies has achieved such preeminence that both the United States Senate and Congress have formed committees to investigate the extent of that dominance. Table V presented below summarizes the results of the chi-square and McNemar tests concerning the issue of increasing Big Eight dominance.

**TABLE V**

**SUMMARY OF STATISTICAL TESTS OF SIGNIFICANCE CONCERNING ISSUE OF INCREASING BIG EIGHT FIRM DOMINANCE**

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Exchange</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Firms</td>
<td></td>
</tr>
<tr>
<td>NYSE</td>
<td>X*</td>
</tr>
<tr>
<td>AMEX</td>
<td>X</td>
</tr>
<tr>
<td>OTC</td>
<td></td>
</tr>
<tr>
<td>NYSE + AMEX</td>
<td></td>
</tr>
</tbody>
</table>

*X*, Test significant at .05 level; blank, not significant.

Using chi-square, the researcher found that, in the totality of auditor changes observed in the five years ended
in 1978, registrants tended not to be switching toward Big Eight auditors. In fact, Big Eight firms had a net gain of only 39 audit engagements in the 742 changes for which data were available. However, it was found that among those registrants actually switching from a non-Big Eight to a Big Eight auditor or vice versa, the probabilities of direction of change were not equal. The McNemar test confirmed this at the .025 level.

On the other hand, NYSE firm auditor changes indicated increasing Big Eight firm dominance. Chi-square tests showed NYSE changes to be independent of whether the predecessor had been a Big Eight or non-Big Eight auditor. Furthermore, the McNemar test revealed statistically that net tier switches had not been equally distributed, Big Eight firms having had a net gain of twenty-four audit engagements.

AMEX firm chi-square results indicated a greater degree of switching between Big Eight and non-Big Eight auditors than had been done by NYSE firms; however, the McNemar test indicated that the inter-tier switches were as likely to be from as toward a Big Eight firm. Nevertheless, Big Eight auditors had a net gain of 17 audits in 230 total changes.

In contrast with NYSE and AMEX results, OTC firms, who made 50 per cent of all auditor changes observed, were found to be resisting changes toward Big Eight auditors. While Big Eight firms had more NYSE and AMEX audits both before and after those changes, non-Big Eight firms audited more OTC
firms before the 368 observed changes and, in fact, had a net gain of 2 clients subsequent to those changes. The McNemar test for significance of changes provided evidence that the 150 inter-tier OTC changes were as likely to be toward either a Big Eight or non-Big Eight auditor.

The final research phase was directed toward the question of how frequently auditors and their former clients disagree as to the nature or presence of disagreements preceding changes in auditors. Not infrequently, a disengaged auditor was found to have cited disagreements (or provided a different interpretation thereof), when no such disagreements had been reported by the registrant. This was found to be the case in 39 of the 748 auditor changes (5.2 per cent) reported by all registrants in the five years examined. Furthermore, the fact that these 39 cases requiring "clarification" constituted almost 40 per cent of the auditor changes attended by disagreements attests to the criticality of auditor involvement in the disagreement disclosure process.

In the general case, according to one highly prominent audit partner in the emerging technical problems area of a Big Eight firm, displaced auditors are usually very interested in communicating the circumstances of audit related difficulties to successors. However, these privileged communications may often be more candid than disclosures made publicly. Additionally, some have expressed concern that disagreements may go unreported by either party to avoid "poor loser" charges or potential litigation.
During the course of the research, twenty-five cases were noted wherein an auditor had resigned and no disagreements had been cited by either party. Apparent reasons for thirteen of the twenty-five cases could not be determined. However, in eight situations, the auditor had resigned for conflict of independence reasons: four due to litigation with the registrant or a major shareholder thereof, two as a result of past due audit fees, one due to an SEC ruling, and one due to a quirk in a merger of two local CPA firms. In two of the remaining four cases wherein reasons for the resignation were determinable, the auditor, Peat, Marwick, Mitchell & Co., had resigned due to disagreements with affiliated registrants. Finally, two local CPA firms had resigned due to the onerous problems of practicing before the SEC.

Two types of analyses, by exchange grouping, were prepared in addressing the extent of auditor and client conflict regarding the nature or presence of reportable disagreements preceding auditor changes. The first of these was directed toward the SEC's contentions in ASR 247 that the practice of reporting disagreements had been deteriorating. Filings had been made in which the registrant had reported no disagreements, while the auditor had indicated that reportable disagreements had occurred (1, p. 3652). In analyzing the evidence of such conflicts by year, it was found that the rate for all registrants had, in fact, decreased from 6.4 to 4.6
per cent between 1974 and 1978. Similarly, the extent of these auditor and registrant conflicts had generally trended downward over that same period for NYSE and OTC firms. However, AMEX firms "disagreements over disagreements" had trended upward in that five year period, from a rate of 6.6 per cent to 9.1 per cent.

The final registrant test was for significance of differences between NYSE, AMEX, and OTC firms as to the extent of conflicts between registrants and their predecessor auditors regarding the nature or presence of disagreements preceding auditor changes. The differences observed between AMEX firms, with the highest conflict rate (8.3 per cent), and NYSE firms (5.6 per cent) were found not to be statistically significant at the .05 level, indicating considerable homogeneity. On the other hand, OTC firms exhibited the lowest conflict rate (3.2 per cent). These OTC results were significantly different from the combined NYSE and AMEX results at the .02 level.

Summary of Auditor Tests

A number of the foregoing issues were also analyzed from the perspective of the auditors involved in the changes. Each of these issues were examined using chi-square at the .05 level of rejection to determine if meaningful differences existed first between Big Eight auditors, as a group, and all other auditors, and, secondly, within the grouping of Big Eight accounting firms. The issues where such an analysis
appeared relevant were: (1) disagreement involvement (2) opinion types rendered prior to auditor changes, and (3) the extent of conflicts with former clients regarding the existence of disagreements preceding changes in auditors. Table VI below summarizes the results of those tests.

**TABLE VI**

**SUMMARY OF STATISTICAL TESTS OF SIGNIFICANCE: AUDITOR PERSPECTIVE**

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Predecessor Auditor</th>
<th>Differences Within</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disagreements Reported Preceding Auditor Change</td>
<td>X*</td>
<td>X</td>
</tr>
<tr>
<td>Other-Than-Unqualified Audit Opinions Rendered</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disagreements as to Reportable Disagreements</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*X*, Test significant at .05 level; blank, not significant.

Evidence was found indicating that statistically significant differences existed at less than the .05 level (.0002) between Big Eight auditors, as a group, and all other auditors in terms of disagreement involvement between registrants and predecessor auditors. It was found that Big Eight auditor terminations were preceded by disagreements in 18.2 per cent.
of all cases while only 8.2 per cent of terminations of all other auditors were so preceded.

Similarly, within the Big Eight grouping, statistically significant differences were found at the .016 level, due to considerable variation about the overall disagreement rate of 18.2 per cent. The three firms most frequently involved in disagreements preceding auditor changes in the five years studied were Arthur Young & Co. (29.7 per cent), followed by Peat, Marwick, Mitchell & Co. (27.3 per cent), and Price Waterhouse & Co. (21.4 per cent). The lowest disagreement rate was experienced by Deloitte, Haskins & Sells (5.4 per cent), while Coopers & Lybrand (10.9 per cent) had only a slightly lower rate than Ernst & Whinney (11.5 per cent).

In terms of gross audit engagements lost, Deloitte, Haskins & Sells, with the lowest disagreement rate, lost fewer audits than any other firm, other than Arthur Young & Co., who also lost 37 clients. Touche Ross & Co. had the third fewest audit engagements lost. On the other hand, Peat, Marwick, Mitchell & Co. and Price Waterhouse, who were among the top three in terms of disagreements audits lost, were also first and second, in terms of gross audits lost. Arthur Andersen & Co. was third on this basis.

Viewing the disagreements analysis from the point-of-view of successor auditors to disagreement audits, statistically significant differences were again observed between Big Eight and non-Big Eight auditors at less than the .05 level. Those
differences were significant at the .028 level. It was found that 16.1 per cent of the engagements succeeded by Big Eight auditors had been preceded by disagreements, while only 9.9 per cent of new engagements obtained by all other auditors had been so preceded.

Statistically significant differences also existed at less than the .05 level within the Big Eight grouping in terms of engagements taken on preceded by disagreements. Coopers & Lybrand, who had the second lowest disagreement rate for engagements lost, had the highest percentage of engagements gained which had been preceded by disagreements, 26.3 per cent. The second highest percentage on this basis was registered by Price Waterhouse & Co. (21.4 per cent). Ernst & Whinney, who was among the three firms with the lowest disagreement rates preceding auditor changes, was third (17.8 per cent) in terms of percentage of new engagements which had been preceded by disagreements. The three firms accepting the lowest percentages of new engagements preceded by disagreements were Peat, Marwick, Mitchell & Co. (3.7 per cent), Deloitte, Haskins & Sells (10.3 per cent), and Arthur Young & Co. (11.8 per cent). Arthur Young & Co. and Peat, Marwick, Mitchell & Co. had also been first and second in terms of percentages of audits lost preceded by disagreements.

In terms of gross audit engagements gained between 1974 and 1978, Arthur Andersen & Co. had the most gains with 99, followed by Coopers & Lybrand with 80 and Price Waterhouse & Co. with 56. The fewest gross gains were registered by
Deloitte, Haskins & Sells with 29, followed by Ernst & Whinney with 45, then by Touche Ross & Co. with 46.

Tests were also performed to determine whether meaningful differences existed between predecessor auditor groupings with respect to percentages of other-than-unqualified audit opinions rendered prior to auditor changes. Neither the test of opinions rendered prior to auditor changes as between Big Eight, as a group, versus all other auditors, nor the test of opinions rendered within the Big Eight grouping were found to be significant at the .05 level. Hence, no evidence was found to indicate that the type of CPA firm, whether Big Eight or not, rendering the opinion preceding an auditor change has any bearing on whether that opinion will be qualified. Non-Big Eight firms rendered only a slightly higher percentage of other-than-unqualified opinions (41.4 per cent) than did Big Eight firms (38.4 per cent). Among Big Eight firms, only Ernst & Whinney (21.4 per cent) was notably below the overall average of 38.4 per cent other-than-unqualified opinions rendered preceding all Big Eight auditor changes.

The final test from an auditor perspective was for significant differences as to rates of audit engagements lost in which the auditor and former client had disagreed regarding the nature or presence of reportable disagreements. In all but one of the thirty-nine such cases encountered, the auditor instigated the corrective interpretations. As in the immediately preceding tests, no statistically significant
differences were noted at the .05 level between either Big Eight and non-Big Eight auditors or within the Big Eight grouping. Nevertheless, Big Eight auditors were found to have challenged their former clients' assertions more often relatively (6.6 per cent) than did non-Big Eight auditors (3.6 per cent). Among Big Eight firms, Peat, Marwick, Mitchell & Co. disputed or modified former client disagreement assertions most often relatively (11.1 per cent), followed by Price Waterhouse & Co. (8.9 per cent) and Touche Ross & Co. (7.1 per cent). The three firms least likely to have been involved in these conflicts were Deloitte, Haskins & Sells (0.0 per cent), Ernst & Whinney (1.9 per cent), and Arthur Young & Co. (5.4 per cent).

Conclusions, Recommendations, and Areas for Subsequent Research

The findings in this study relating to the types of disagreements most frequently reported between auditors and former clients and the nature of Rule 3-16(s) disclosures vividly point out the critical importance of the Financial Accounting Standards Board's on-going "conceptual framework" project. All of the Rule 3-16(s) disclosures and the most common disagreement type encountered in the research involved the issue of timing of revenue recognition. Furthermore, combining these situations with disagreements concerning asset cost recoverability and timing of expense recognition, the second and third most common types, constituted almost
half of all the disagreement instances observed in the study. The development of carefully considered definitions of the elements of financial statements - assets, liabilities, revenues, and expenses, and standards for how income should be measured - may greatly diminish the extent of these conflicts.

According to the Senate Subcommittee on Reports, Accounting, and Management in their report entitled, Improving the Accountability of Publicly Owned Corporations and their Auditors (the Metcalf Report), "... the fundamental problem [facing the accounting establishment] is one of independence, which is clearly the auditor's single most valuable attribute" (4, p. 90). Measures such as the Form 8-K auditor change disclosure requirements and the SEC's urging that registrants form audit committees comprised of outside members of Boards of Directors have no doubt enhanced the independence of accountants auditing public listed companies.

However, dissemination of Form 8-K type disclosures by nonpublic companies does not constitute a viable alternative, as no regulatory body analogous to the SEC exists to oversee the activities of nonpublic entities. Nevertheless, the independence of auditors of nonpublic firms could be greatly improved if the types of disclosures currently required in Forms 10-K under Rule 3-16(s) of Regulation S-X were to be required in all audited financial statements. The Auditing Standards Board of the AICPA could easily promulgate such a
requirement in a Statement on Auditing Standards. The effect of requiring such disclosures would be to help strengthen the resolve of auditors-of-record, while discouraging the practice of "shopping" for accounting principles in the nonpublic sector.

The preponderance of the test results in this thesis confirmed the basic operational hypothesis that meaningful differences do exist between NYSE and AMEX firms, on the one hand, and OTC registrants. For example, all but two of the forty-four chronic auditor changers were found to be OTC firms. Furthermore, statistically significant differences were observed at less than the .05 level in all of the most basic areas addressed, as follows. NYSE and AMEX firms combined experienced higher disagreement rates than did OTC firms. NYSE and AMEX firms also received lower rates of other-than-unqualified auditor's opinions than OTC firms. Similarly, NYSE and AMEX firms had greater Board of Director involvement in auditor changes by those firms. Finally, NYSE and AMEX firms had higher rates of conflicts with their predecessor auditors regarding the nature or presence of reportable disagreements preceding auditor changes. Furthermore, in each of these cases, crosstabulating NYSE activity versus AMEX activity revealed significant statistical homogeneity among the major exchange members.

In only two areas tested, voluntary disclosures of reasons for auditor changes and Rule 3-16(s) disclosures, were
differences between NYSE and AMEX firms and OTC firms found not to be statistically significant. It seems likely that comparing nonpublic and OTC results in the tests described would have produced significant homogeneity, as was noted between NYSE and AMEX firms.

The Metcalf Report stated that "certain standards and procedures may be overly complicated and burdensome for use by smaller businesses and the parties who are interested in the financial and operating results of such businesses" (4, p. 90). This statement and recent promulgations by both the AICPA and SEC (See Chapter IV) presuppose differences between larger and smaller firms. The results of this thesis, at least in the areas examined, lend empirical support to those presumptions.

Based upon the statistical results obtained, it can be concluded that Big Eight auditors are more likely than all other auditors to have been involved in disagreements with former clients. Similarly, the Big Eight group of firms are more likely to succeed audit engagements wherein disagreements had preceded the change in auditors. The first conclusion would tend to indicate that Big Eight auditors are sterner with their clients, perhaps because they have "more to lose" than a smaller auditor or have been more sensitive to the litigious shock wave of the past decade; or, it may be that former Big Eight clients are more willing to challenge their auditors. Most likely some combination of these two
perspectives exists. The second conclusion appears consistent with the first, given that other results in this thesis indicated that registrants as a whole tended to hire an auditor from the same tier, Big Eight or non-Big Eight, as had been represented by the predecessor auditor.

On the other hand, it can be concluded that Big Eight auditors are not more likely than all other auditors to have rendered a qualified or disclaimer of opinion to former clients in the two years preceding the change. Additionally, it can be concluded statistically that neither auditor grouping disagreed to a greater extent with former clients as to the nature or presence of disagreements. These results would tend to isolate the significant differences by exchange noted earlier as being more a function of client characteristics than auditor type.

Finally, within the Big Eight auditor grouping, the tests revealed that the individual firms experienced meaningfully dissimilar occurrence rates in terms of both audits lost preceded by disagreements, as well as audits gained attended by disagreements. These results were among the most enigmatic found in the research. Why, for example, did two of the three Big Eight firms who experienced the highest disagreement rates with former clients rank, first and second in terms of engagements lost, while the firm experiencing the lowest disagreement rate lost the fewest clients? Also, why did the Big Eight firm with the second lowest disagreement rate preceding engagements lost gain the highest percentage
of audits which had been disagreement audits? These data seem to indicate that registrants do tend to terminate their disagreeing auditors, though perhaps more as a matter of philosophical principle than for accounting principle "shopping." However, these results also elicit questions regarding differences among Big Eight firms in terms of firm quality control and operating procedures as well as engagement acceptance criteria. Furthermore, these observations portend fruitful opportunities for future research.

The final conclusions in this thesis relate to the issue of increasing Big Eight dominance of the auditing services market. Data compiled by the Metcalf Committee in 1974 and 1975 indicate that the Big Eight audited 92 per cent of the companies listed with the New York Stock Exchange and 76 per cent of the firms listed on the American Exchange (3, pp. 5-6). Furthermore, the thesis results support a conclusion that the extent of Big Eight firm dominance is increasing in the audits of NYSE firms. Clearly Big Eight dominance exists in the audits of these corporate giants. However, perhaps this trend is not nefarious, in and of itself.

Galbraith coined the phrase "countervailing power" to describe how the immense potentially abusive power of corporate giants was somewhat mitigated or held in check by the existence of equally large and powerful labor unions and retailing chains. The parallel should be obvious. Realistically, how independent and how firm can be the resolve of
even a large non-national CPA firm in dealing with a client whose audit fees are significant to the very existence of that accounting firm? For that matter, how many auditing firms of any size can afford the loss of a $1.9 million Gulf Oil Company account, as Price Waterhouse & Co. did? Perhaps the public interest and assurance of a fair game are, in fact, better served by the status quo - the perpetuation of the existing institutional countervailing powers of large accounting firms auditing large companies.

On the other hand, the statistical tests lead to a conclusion that Big Eight dominance is not increasing in the accounting and auditing services market for either AMEX or OTC firms. While AMEX firms had the greatest degree of switches between Big Eight and non-Big Eight auditors, those inter-tier changes were as likely to be from as toward a Big Eight firm. Similarly, it can be concluded that OTC registrants resisted a trend toward the Big Eight. In absolute terms, the Big Eight actually lost OTC engagements in the changes examined over the five year period, while the inter-tier switches were found to be equally distributed statistically.


APPENDIX A
APPENDIX A

A CHRONOLOGICAL SUMMARY OF THE SEC AUDITOR

CHANGE DISCLOSURE REQUIREMENTS

<table>
<thead>
<tr>
<th>Prior to Disclosure Requirement</th>
<th>Release 74-936</th>
<th>ASR 165</th>
<th>ASR 194</th>
<th>ASR 247</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/31/71</td>
<td>1/31/75</td>
<td>8/31/76</td>
<td>7/31/78</td>
<td></td>
</tr>
</tbody>
</table>

1. Disclosure of significant disagreements in 8-K in prior 18 months.

2. Auditor termination triggers disclosure.

3. 8-K disclosure of disclaimer, adverse or qualified opinion in two years prior to change.


5. Rule 3-16(a) requiring 10-K disclosure of disagreement.

6. 10-K disclosure where in year of change or next year, an area of disagreement treated contrary to prior auditor's position.

7. Proxy disclosures of disagreements.

1. Same except disagreements in prior two fiscal years and subsequent prior interim period.

2. Indication on 8-K and proxy as to whether change recommended or approved by Board of Directors.

2. Recommendation reasons for changes be voluntarily given.
APPENDIX B

1974 NYSE AUDITOR CHANGES

 Associated Spring Corporation
 Associated Transport, Incorporated
 Bankers Trust New York Corporation
 Best Products Company, Incorporated
 Budget Capital Corporation
 Budget Industries, Incorporated
 Carolina Freight Carriers Corporation
 Castle & Cooke, Incorporated
 CCI Corporation
 Cook United, Incorporated
 First Virginia Bankshares Corporation
 First Wisconsin Mortgage Trust
 General Cable Corporation
 General Development Corporation
 Grand Union Company
 Handleman Company
 Hazeltine Corporation
 ICN Pharmaceuticals, Incorporated
 IPCO Hospital Supply Corporation
 Mattel, Incorporated
 Mobile Home Industries, Incorporated
 Newhall Land & Farming Company
 Portec, Incorporated
 Reliable Stores Corporation
 Sargent-Welch Scientific Company
 Suave Shoe Corporation
 Teleprompter Corporation
 United States Realty Investments

1974 AMEX AUDITOR CHANGES

 Aero-Flow Dynamics, Incorporated
 Alpha Industries, Incorporated
 American Agronomics Corporation
 American Training Services, Incorporated
 Associated Food Stores, Incorporated New York
 Astrex, Incorporated
 Cellu-Craft, Incorporated
 Century Industries Company, Incorporated
 Cook Industries, Incorporated
<table>
<thead>
<tr>
<th>Company Name</th>
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</thead>
<tbody>
<tr>
<td>Dero Industries, Incorporated</td>
</tr>
<tr>
<td>Drew National Corporation</td>
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<tr>
<td>Eckmar Corporation</td>
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<tr>
<td>Ero Industries, Incorporated</td>
</tr>
<tr>
<td>First Virginia Mortgage and Real Estate Investors</td>
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<tr>
<td>Flagg Industries, Incorporated</td>
</tr>
<tr>
<td>Flying Diamond Oil Corporation</td>
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<tr>
<td>Foote Mineral Company</td>
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<tr>
<td>General Recreation, Incorporated</td>
</tr>
<tr>
<td>General Resources Corporation Georgia</td>
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<tr>
<td>Granite Management Services, Incorporated</td>
</tr>
<tr>
<td>Gulf Republic Financial Corporation</td>
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<tr>
<td>Hallcraft Homes, Incorporated</td>
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<tr>
<td>Health-Chem Corporation</td>
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<tr>
<td>I. C. H. Corporation</td>
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<tr>
<td>Integrated Resources, Incorporated</td>
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<tr>
<td>International Funeral Services, Incorporated</td>
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<td>Ionics, Incorporated</td>
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<tr>
<td>Jeannette Corporation</td>
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<td>Kin-Ark Corporation</td>
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<td>Landmark Land Company, Incorporated</td>
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<td>Medallion Leisure Corporation</td>
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<td>Medenco, Incorporated</td>
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<tr>
<td>Mercantile Industries, Incorporated</td>
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<tr>
<td>Milgo Electronic Corporation</td>
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<tr>
<td>Ohio-Sealy Mattress Manufacturing Company</td>
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<td>Oxford First Corporation</td>
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<tr>
<td>Pease &amp; Elliman Realty Trust</td>
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<tr>
<td>Pep Boys - Manny, Moe &amp; Jack (The)</td>
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<tr>
<td>Pioneer Plastics Corporation</td>
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<td>Potter Instrument Company, Incorporated</td>
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<tr>
<td>Presley Companies (The)</td>
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<td>Prime Motor Inns, Incorporated</td>
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<td>Rex-Noreco, Incorporated</td>
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<tr>
<td>Riker-Maxson Corporation</td>
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<td>Ruddick Corporation</td>
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<td>Savoy Industries, Incorporated</td>
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<tr>
<td>Savoy Industries, Incorporated</td>
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<tr>
<td>Security Mortgage Investors</td>
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<tr>
<td>Shenandoah Corporation</td>
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<tr>
<td>Sky City Stores, Incorporated</td>
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<tr>
<td>State Savings and Loan Association</td>
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<tr>
<td>Technitrol, Incorporated</td>
</tr>
<tr>
<td>Tennessee Forging Steel Corporation</td>
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<tr>
<td>Tenney Engineering, Incorporated</td>
</tr>
<tr>
<td>TFI Companies, Incorporated</td>
</tr>
</tbody>
</table>
1974 AMEX Auditor Changes - Continued

Torin Corporation
UnionAmerica Mortgage and Equity
Universal Container Corporation
Wainoco Oil Limited

1974 OTC AUDITOR CHANGES

Acadia Company, Incorporated
Aeroflex Laboratories, Incorporated
Alphanumeric, Incorporated
Alpine Geophysical Associates, Incorporated
Altex Oil Corporation
Andersen Laboratories, Incorporated
Anderson Industries, Incorporated
Aries Corporation
Artex Systems Corporation
Atla National Investments Corporation
Autocomp, Incorporated
Bacardi Corporation
Bristol Silver Mines Company
Cannon Group, Incorporated
Canyonlands Uranium, Incorporated
Coast Catamaran Corporation
Commercial Technology, Incorporated
Computer Power International Corporation
Consolidated Capital Realty Investors
Continental Plastics & Chemicals, Incorporated
Continental Recreation Corporation
Control Research Corporation
Cornwall Tin & Mining Corporation
Cornwall Tin & Mining Corporation
Cracker Barrel Old Country Store, Incorporated
Crown Crafts, Incorporated
Eagle, Incorporated
Eagle, Incorporated
Eastern Petroleum Company
EDP Resources, Incorporated
Elco Corporation
Eldorado Electrodata Corporation
Enviromed Corporation
Family and Industry Management Corporation
Federated Development Company
Ferronics, Incorporated
Florida First Equities Corporation
Fremont Bancorporation
Funk Seeds International, Incorporated
1974 OTC Auditor Changes - Continued

Georgia Bonded Fibers, Incorporated
Goodrich Realty & Development Group, Incorporated
Hager, Incorporated
Health Delivery Systems, Incorporated
Healthco, Incorporated
I. E. C. Electronics Corporation
Information Displays, Incorporated
Jaymee Industries, Incorporated
Leisure Living Communities, Incorporated
Lincoln International Corporation
Love Oil Company, Incorporated
LSL Corporation
Medfax, Incorporated
Media Creations, Limited
Media Investment Corporation
Midlantic Banks, Incorporated
Minute Man of America, Incorporated
Moviematic Industries, Corporation
Mr. Hanger, Incorporated
N-Triple-C, Incorporated
Nathan Hale Investment Corporation
National Telefilm Associates, Incorporated
Navaree-500 Building Associates
Norwesco, Incorporated
Ocean Science & Engineering, Incorporated
OCG Technology, Incorporated
Ohio Real Estate Equities Company
Olrix Industries, Incorporated
Pacemaker Financial Corporation
Pacer Corporation
Pacesetter Financial Corporation
Pacific International Equities, Incorporated
Pharmacaps, Incorporated
Philipsborn, Incorporated
Pilgrim Intergroup Investment Corporation
Postal Instant Press
Process Systems, Incorporated
Programmed Proprietary Systems, Incorporated
Real Estate Partners of America
Republic Mobile Homes Corporation
Robinson Halpern Company
Rocky Mount Undergarment Company, Incorporated
Rodale Electronics, Incorporated
Rotex Corporation
Scot's Inn Land Company
Scottex Corporation
Silver Bell Industries, Incorporated
Standard Container Transport Corporation
1974 OTC Auditor Changes - Continued

Sunset Funding Corporation
Todd Group, Incorporated
Transco Realty Trust
Tropicana Pools, Incorporated
United Fire & Casualty Company
Urban Improvement Fund Limited
Vertex Industries
Vertex Industries
Washburn Wire Company
Wisconsin Real Estate Investment Trust
Yondata Corporation
Zenith Laboratories, Incorporated
1975 NYSE AUDITOR CHANGES

Alleghany Corporation
Ampex Corporation
Apco Oil Company
Apeco Corporation
Caesar's World, Incorporated
Conagra, Incorporated
 Dial Financial Corporation
DFF, Incorporated
F. W. Woolworth Company
Far West Financial Corporation
Great Western United Corporation
Grolier, Incorporated
IU International Corporation
Knight Ridder Newspapers, Incorporated
Lear Seigler, Incorporated
Liberty Corporation
Magnavox Company
Minnesota Mining & Manufacturing Company
Mohawk Rubber Company
Natomas Company
Northrop Corporation
Parker Pen Company
Playboy Enterprises, Incorporated
Skaggs Companies, Incorporated
Sterndent Corporation
Tappan Company
United Nuclear Corporation
Veeder Industries, Incorporated
Vornado, Incorporated

1975 AMEX AUDITOR CHANGES

Aberdeen Petroleum Corporation
American Realty Trust
Arrow Electronics, Incorporated
Arwood Corporation
Avondale Mills
AVX Corporation
BRT Realty Trust
Capital Reserve Corporation
Computer Investors Group, Incorporated
Data Control Systems, Incorporated
DHJ Industries, Incorporated
FDI, Incorporated
FPA Corporation
Frantz Manufacturing Company
1975 AMEX Auditor Changes - Continued

Gloucester Engineering Company, Incorporated
Gruen Industries, Incorporated
Hastings Manufacturing Company
Howell Corporation
I. C. H. Corporation
Imoco Gateway Corporation
Kingstip, Incorporated
Leisure Technology Corporation
Lynch Corporation
Meridian Industries, Incorporated
MPB Corporation
MPS International Corporation
Neisner Brothers, Incorporated
Newbery Energy Corporation
Paterson Parthment Paper Company
Pemcor, Incorporated
Permaneer Corporation
Prudential Group, Incorporated
Robino Ladd Company
Rockwood Computer Corporation
Rocor International
Ruddick Corporation
Ryerson & Haynes, Incorporated
Sanitas Service Corporation
Scope Industries
Seaport Corporation
Servotronics, Incorporated
Simplex Industries, Incorporated
Sitkin Smelting & Refining, Incorporated
Sunair Electronics, Incorporated
Synalloy Corporation
Telecom Equipment Corporation
Tenney Engineering, Incorporated
Western Orbis Company
WTC Air Freight Company

1975 OTC AUDITOR CHANGES

Air California
AITS, Incorporated
Alberts, Incorporated
Ameco, Incorporated
American Bancorp
American Bancorporation
American Commonwealth Financial Corporation
American Express Credit Corporation
American Pet Company
1975 OTC Auditor Changes - Continued

Automated Information Industries, Incorporated
C & R Clothiers, Incorporated
Callon Petroleum Company
C B & T Bancshares, Incorporated
Centennial Villas, Incorporated
Century Mortgage Corporation
Comp-U-Check, Incorporated
Data Pacific Corporation
Data Research Corporation
Daytona Beach General Hospital, Incorporated
Delta States Oil, Incorporated
Dentalloy, Incorporated
Dero Industries, Incorporated
Diplomat Electronics Corporation
Diversified Retailing Company, Incorporated
First American Corporation Florida
Florida Bankshares, Incorporated
Gay Gibson, Incorporated
Golden Flake, Incorporated
Golden Nugget, Incorporated
Helmet Petroleum Corporation
Hers Apparel Industries, Incorporated
Highland Inns Corporation
Jerome Underground Transmission Equipment, Incorporated
John Roberts, Incorporated
Landmark Banking Corporation of Florida
Lilac Time, Incorporated
Lion Country Safari, Incorporated
Louisiana Pacific Resources, Incorporated
Marine Resources, Incorporated
Medi, Incorporated
Medical Investment Corporation
Mediscience Technology Corporation
Micropac Industries, Incorporated
Mid Central Properties Limited
Missouri Utilities Company
Mountain States Financial Corporation
Multiventure, Incorporated
National Bancshares Corporation
Nationwide Nursing Centers, Incorporated
National Recreation Products, Incorporated
Nautiloid Corporation
NBS Financial Corporation
New England Merchants Company, Incorporated
Pacific Far East Line, Incorporated
Pathfinder Mobile Home, Incorporated
Precision Instrument Company
1975 OTC Auditor Changes - Continued

Real Estate Equities Corporation
Real Estate Equities Corporation
Resource Ventures Development Fund 71
Riverside Metal Products Company
Santa Anita Consolidated, Incorporated
Sernco, Incorporated
Sonar Radio Corporation
Sonic Industries
Southern Diversified Industries, Incorporated
Star Dust Mines, Incorporated
Sutton Corporation
Talisman Fund
Tech Serv, Incorporated
Temco Service Industries, Incorporated
Trinity Management Company, Incorporated
University Real Estate Trust
Vaportech Corporation
Vocational Advancement Services
WITS, Incorporated
Xiox International, Incorporated
1976 NYSE AUDITOR CHANGES

Adams Millis Corporation
Arlen Realty & Development Corporation
Baker International Corporation
Beneficial Corporation
CCI Corporation
Cenco, Incorporated
Central Maine Power Company
CNA Financial Corporation
Colt Industries, Incorporated
Diamond M Drilling Company
Diversified Mortgage Investors, Incorporated
Fidelity Union, Bancorporation
Gannett Company, Incorporated
General Bancshares Corporation
Genesco, Incorporated
Hayes Albion Corporation
Jonathan Logan, Incorporated
Kawicki Berylco Industries, Incorporated
Koracorp Industries, Incorporated
Kysor Industrial Corporation
Loew's Theatres, Incorporated
J. W. Mays, Incorporated
Midland Mortgage Investors Trust
National Medical Care, Incorporated
Oneida Limited
Perkin, Elmer Corporation
Polaroid Corporation
Puerto Rican Cement Company, Incorporated
Republic of Texas Corporation
Rollins, Incorporated
Southdown Incorporated
Standard Pressed Steel Company
Storage Technology Corporation
Studebaker - Northington, Incorporated
Youngstown Steel Door Company

1976 AMEX AUDITOR CHANGES

Anken Industries
Anken Industries
Askin Service Corporation
Aydin Corporation
Big Bear Stores
Canadian Javelin Limited
Canadian Merrill Limited
Coffee Mate Corporation
1976 AMEX Auditor Changes - Continued

Coit International, Incorporated
Coit International, Incorporated
Crystal Oil Company
Designcraft Jewel Industries, Incorporated
Forest Laboratories, Incorporated
General Exploration Company
General Resources Corporation Georgia
General Resources Corporation Georgia
Geon Industries, Incorporated
GIT Industries, Incorporated
Hasbro Industries, Incorporated
Herman Miller, Incorporated
Imperial Industries, Incorporated
Instron Corporation
International Aluminum Corporation
Kingstip, Incorporated
Kleinert's, Incorporated
Laneco, Incorporated
Masoneilan International, Incorporated
Movie Star, Incorporated
MPS International Corporation
Oakwood Homes Corporation
Oriole Homes Corporation
Refrigerated Transport Company, Incorporated
Safetran System Corporation
Thriftmart, Incorporated
Treadway Companies, Incorporated

1976 OTC AUDITOR CHANGS

Ald, Incorporated
American Commonwealth Financial Corporation
American Thermal Resources, Incorporated
A. T. & E. Corporation
Axtec Manufacturing Company
Bun & Burger International, Incorporated
Canal Corporation
Carterfone Communications Corporation
Century Properties Equity Fund 73
Champion, Incorporated
Chatham Corporation
Citation Manufacturing Company, Incorporated
Clary Corporation
Coleman Systems
Computer Careers, Incorporated
Consolidated Equities Corporation
1976 OTC Auditor Changes - Continued

Consumers Water Company
Driskill Hotel Corporation
Fort Worth Steel & Machinery
GAC Corporation
General Datacom Industries
General International Corporation
GIT Realty & Mortgage Investors
Golconda Corporation
Great Yellowstone Corporation
Greater Heritage Corporation
Hermetite Corporation
Hess's, Incorporated
Ibex Minerals, Incorporated
International Manufacturing & Marketing Corporation
Investors Reit One & Two
Iota Industries, Incorporated
Jet Air Freight
Kingstip Communications, Incorporated
Korfund, Incorporated
Litronix, Incorporated
Little Arthur D, Incorporated
Luminall Paints, Incorporated
Macrodata Corporation
Madison Company
Mayco Industries, Incorporated
McCarthy Company
McFarland Energy, Incorporated
Medco Centers, Incorporated
Medical Dimensions, Incorporated
Metaline Mining & Leasing Company
Midcon Industries Incorporated
Midwest Rubber Reclaiming Company
Miller Florence Cosmetics, Incorporated
Murphy Pacific Marine Salvage Company
Neotec Corporation
New Orleans Bancshares, Incorporated
Nuclear Systems, Incorporated
Oak Hill Sportswear, Incorporated
Optical Scanning Corporation
Panacolor, Incorporated
Perfection Enterprises, Incorporated
Petro Silver, Incorporated
Porta Systems Corporation
Programmed Bookkeeping Systems, Incorporated
Property Trust of America
Ridgewood Industries, Incorporated
Security Savings Life Insurance Company
Sigmatics
1976 OTC Auditor Changes - Continued

Signal Finance Corporation
Superior Manufacturing & Instrument Corporation
Symetrics Industries, Incorporated
Town Enterprises, Incorporated
Turbodyne Corporation
Unifi, Incorporated
United Communities Corporation
Versa Technologies, Incorporated
Vision Cable Communications, Incorporated
Washburn Wire Company
Westcalind Corporation
Western Beef, Incorporated
Western Preferred Corporation
Winchester Corporation
Winthrop Scott Corporation
1977 NYSE AUDITOR CHANGES

Alcon Laboratories, Incorporated
Alpha Portland Industries, Incorporated
Arlen Realty & Development Corporation
Avery International Corporation
Foster Wheeler Corporation
Foster Wheeler Corporation
General Bancshares Corporation
Gulf Oil Corporation
Hazeltine Corporation
Hewlett Packard Company
Hillenbrand Industries, Incorporated
Hobart Corporation
Horizon Corporation
Host International Incorporated
James, Fred S. & Company, Incorporated
J. P. Morgan & Company
Kaufman & Broad, Incorporated
Kroger Company
Lincoln National Company
McDermott J. Ray & Company, Incorporated
Northeast Utilities
NVP Company
Peoples Drug Stores, Incorporated
Republic Corporation
Rosario Resources Corporation
Seagrave Corporation
Southeastern Public Service Company
Sprague Electric Company
Taft Broadcasting Company
United Brands Company
United Energy Resources, Incorporated
United Park Cities Mine Company
Winter, Jack, Incorporated
Zale Corporation

1977 AMEX AUDITOR CHANGES

A & E Plastik Pak Company, Incorporated
ATI, Incorporated
Automatic Radio Manufacturing Company, Incorporated
AZL Resources, Incorporated
Bodin Apparel, Incorporated
Campbell Industries
Canadian Hydrocarbons Limited
Canaveral International, Corporation
Compo Industries, Incorporated
1977 AMEX Auditor Changes - Continued

Discount Fabrics, Incorporated
DWG Corporation
E. C. Ernst, Incorporated
Edmos Corporation
E. T. Barwick Industries, Incorporated
Fields Plastics & Chemicals, Incorporated
General Exploration Company
Genge, Incorporated
Gross Telecasting, Incorporated
Guardsman Chemicals, Incorporated
Holly Corporation
Horn & Hardart Company
Inflight Services, Incorporated
International Systems & Controls Corporation
Johnson Products Company, Incorporated
Leisure Technology Corporation
Louisiana General Services, Incorporated
Movie Star, Incorporated
Palomar Financial
Pennsylvania Engineering Corporation
Pep Boys-Manny, Moe, & Jack
Pittsburg & West Virginia Railroad
Redlaw Enterprises, Incorporated
R. H. Medical Services, Incorporated
Rogers Corporation
Sargent Industries, Incorporated
Scurry Rainbow Oil Limited
Sharon Steel Corporation
Unimax Group Incorporated
Vermont American Corporation
Welded Tube Company of America
Wilson Brothers
Xonics, Incorporated

1977 OTC AUDITOR CHANGES

American Investors Life Insurance Company, Incorporated
American Pioneer Corporation
American Western Corporation
Aseco, Incorporated
Automated Medical Laboratories, Incorporated
Banker's Mortgage Corporation
Belco Pollution Control Corporation
Biospherics, Incorporated
Boothe Courier Corporation
Bristol Silver Mines Company
1977 OTC Auditor Changes - Continued

Campbell Manufacturing Company, Incorporated
Canandaigua Wine Company, Incorporated
Chemold Corporation
Combanks Corporation
Consolidated Equities Corporation
Consolidated Resources, Incorporated
Context Industries, Incorporated
Data Pex Systems, Incorporated
Daylight Industries, Incorporated
Dentalloy, Incorporated
Dietrich Exploration Company, Incorporated
Don Hirschhorn, Incorporated
Educational Development Corporation
Escalade, Incorporated
First Builders Bancorporation
First Holding Company, Incorporated
First National Realty & Construction Corporation
First National Realty & Construction Corporation
First Paramount Equity Corporation
Gay Gibson, Incorporated
General Finance Corporation
Gladding Corporation
Gladstone Resources, Incorporated
GRT Corporation
Hartford Electric Light Company
Hospital Affiliates International, Incorporated
Houston Oil Fields Company
Imperial Four Hundred National, Incorporated
Inter Continental Computing, Incorporated
International Mining Corporation
Investors Tax Sheltered Real Estate Limited
Jaco Electronics, Incorporated
James Dole Corporation
Kenton Corporation
Killearn Properties, Incorporated
Marine Explorations Company, Incorporated
Mechtron International Corporation
Moxie Industries, Incorporated
NCC Industries, Incorporated
Nuclear Exploration & Development Company
Peninsular Life Insurance Company
Pentair Industries, Incorporated
Pioneer Industries, Incorporated
Proprietors, Corporation
Radiant Industries, Incorporated
Scheutzow Helicopter Corporation
Sea World, Incorporated
SG Metals
1977 OTC Auditor Changes - Continued

Solar Energy Research Corporation
Sonoma International
Southwest Mortgage & Realty Investors
Staco, Incorporated
Surveyor Industries, Incorporated
Titan Wells, Incorporated
Tosco Corporation
Trinity Management Company, Incorporated
United Financing Corporation
Universal Housing & Development Company
Westamerica Automotive Corporation
Western Gold Mining, Incorporated
White Shield Exploration Corporation
1978 NYSE AUDITOR CHANGES

Aristar, Incorporated
Bangor Punta Corporation
Coleco Industries, Incorporated
CP National Corporation
Donaldson Lufkin & Jenrette, Incorporated
Federal Signal Corporation
General Electric Company
Handleman Company
Koracorp Industries, Incorporated
Lanier Business Products, Incorporated
Miller Wohl Company, Incorporated
OKC Corporation
Philip A. Hunt Chemical Corporation
Puritan Fashions Corporation
R. L. Burns Corporation
SCA Services, Incorporated
Standard Motor Products, Incorporated
Ward Foods, Incorporated

1978 AMEX AUDITOR CHANGES

Altamil Corporation
American Precision Industries, Incorporated
Binney & Smith, Incorporated
Cagle, S., Incorporated
Canaveral International Corporation
Cellu Craft, Incorporated
Computer Investors Group, Incorporated
Corenco Corporation
Cott Corporation
Damon Creations, Incorporated
Decorator Industries, Incorporated
E. T. Barwick Industries, Incorporated
E. C. Ernst, Incorporated
Eazor Express, Incorporated
Fair Tex Mills, Incorporated
Fischer and Porter Company
Flow General, Incorporated
Flying Diamond Oil Corporation
GI Export Corporation
Hartfield Zodys, Incorporated
Hospital Mortgage Group
House of Vision, Incorporated
IMC Magnetics Corporation
International Stretch Products, Incorporated
Lafayette Radio Electronics Corporation
1978 AMEX Auditor Changes - Continued

Metrocare, Incorporated
Michigan General Corporation
Michigan Sugar Company
Movie Star, Incorporated
National Silver Industries, Incorporated
Rocor International
Ronco Teleproducts, Incorporated
Sealectro Corporation
Sears Industries, Incorporated
Servo Corporation of America
Standard Metals Corporation
Stanwood Corporation
Stardust, Incorporated
Susquehanna Corporation
Tetra Tech, Incorporated
Tiffany Industries, Incorporated
Trans Lux Corporation
Verit Industries
Vintage Enterprises, Incorporated

1978 OTC AUDITOR CHANGES

Albuquerque Western Solar Industries, Incorporated
Alta Loma Oil Company
Amco Energy Corporation
A T & E Corporation
Beehive International
Callon Petroleum Company
Candeub Fleissig & Associates
City Stores Company
Coding Enterprises
Commodity Resources, Incorporated
Computer Research, Incorporated
Continental Investment Corporation
Continental Telephone International Finance Corporation
Council Commerce Corporation
Country Miss, Incorporated
Ealing Corporation
Federated Communications Corporation
Fimaco, Incorporated
First National Corporation Wisconsin
First Tulsa Bancorporation
Hadron, Incorporated
Health Industries, Incorporated
Hornblower Weeks Noyes and Trask, Incorporated
Housing Dynamics, Incorporated
1978 OTC Auditor Changes - Continued

Infoton, Incorporated
Kate Greenway Industries, Incorporated
King James Extended Care, Incorporated
Kustom Electronics, Incorporated
Laguna Hills Utility Company
Life of Montana Insurance Company
Modular Computer Systems, Incorporated
Morse Electro Products Corporation
Nathan Hale Investment Corporation
National Investment Corporation
Phoenix Leasing Performance Fund 1976
Piedmont Bankgroup, Incorporated
Preston Trucking Company, Incorporated
Rathbun Investment Corporation
Raycomm Industries, Incorporated
Shepmyers Investment Company
Solomon, Sam Company, Incorporated
Tejon Agricultural Partners
Tower Products, Incorporated
Utah Shale Land and Minerals Corporation
Vaughan Jacklin Corporation
West Bay Financial Corporation
Wits, Incorporated
APPENDIX C

CHRONIC AUDITOR CHANGERS

Aetna Properties, Incorporated
Ambassador Group, Incorporated
American Bancorp
American Thermal Resources, Incorporated
Anacomp, Incorporated
Artco Bell Corporation
A T & E Corporation
Atla National Investments Corporation
Atlantic Oil Corporation
Bank Computer Network Corporation
Callon Petroleum Company
Cardiff Industries, Incorporated
Cellu-Craft, Incorporated
Charlotte Motor Speedway, Incorporated
Charles Findyck, Incorporated
Chem-Nuclear Systems, Incorporated
Coap Systems, Incorporated
Computer Transceiver Systems, Incorporated
Consurgico Corporation
Council Commerce Corporation
Custodial Guidance Systems, Incorporated
Data Automation Company, Incorporated
Falstaff Brewing Corporation
First Illinois Trust
Fluid Power Pump Company
Goody's Food Systems, Incorporated
Hadron, Incorporated
Hers Apparel Industries, Incorporated
Jaco Electronics, Incorporated
Jerome Underground Transmission Equipment, Incorporated
Ladd Enterprises, Incorporated
Landsverk Corporation
Mediscience Technology Corporation
Mobile America Corporation
MPS International Corporation
Ovitron Corporation
Pacific American Real Estate Funds
Standard Dredging Corporation
Surgicott, Incorporated
Tax Computer Systems, Incorporated
Templet Industries, Incorporated
United Securities Financial Corporation of Illinois
Chronic Auditor Changers - Continued

Virginia Savshares, Incorporated
Westamerica Automotive Corporation
$ 19.11.05 JOB 198 -- SPSSRUN -- BEGINNING EXEC -- LIMIT 6 -- CLASS C
*19.11.21 JOB 198 EXC404I SPSSRUN STARTED TIME=19.11.21
*19.20.47 JOB 198 EXC404I SPSSRUN ENDED TIME=19.20.47
$ 19.20.47 JOB 198 END EXECUTION.

COST $ 3.39 * BALANCE $ 197.91 * CPU 1.57 MIN * LINES 3,943 * CARDS OUT 0 * CARDS IN 1,764
--001-- MESSAGES FOR STEP X
EXC1066I STEP ATTACHED AT 19.11.31
EXC450I SPSSRUN X
EXC376I JOB SPSSRUN / 81.069 19.11.24 = 19.29.47/ CPU 94.73 SEC

///SPSSRUN JOB 0266, 'ACCONNELL'
***PASSWORD *****************************************
***FORMS 3193
***TIME 2M
***LINES 5
***JOB 7310
///SYSTIN BD *
* THE EXECUTOR (TM) HIGH SPEED JOB PROCESSOR IS A PROPRIETARY PRODUCT OF THE ALLEN SERVICES CORPORATION.
SPSS BATCH SYSTEM

03/10/81 PAGE 1

SPSS FOR OS/360, VERSION 8, RELEASE 6.1, APRIL 1, 1980

CURRENT DOCUMENTATION FOR THE SPSS BATCH SYSTEM

ORDER FROM ACHMANN-HILL: SPSS, 2ND ED. (PRINCIPAL TEST) ORDER FROM SPSS INC.: SPSS STATISTICAL ALGORITHMS

SPSS PRIMER (W/ISP INTRO TO SPSS) SPSS PATCH GUIDE, RELEASE 9

SPSS UPDATE (W/ISP/SPSS, 2ND FOR REL. 7 & 8)

KEYWORDS: THE SPSS INC. NEWSLETTER

DEFAULT SPACE ALLOCATION... ALLOWS FOR... 102 TRANSFORMATIONS
WORKSPACE 71680 BYTES 409 RECORD VALUES + LAG VARIABLES
TRANSSPACE 10240 BYTES 1641 IT/COMPUTE OPERATIONS

1 VARIABLE LIST
COM1 TO COM13, DAYS1 TO DAYS3, EXCHANGE, SIGDISAG, OLDAUDIT,
2 OLONAME, NEWAUDIT, NEWNAME, GENDER, ITYPEP1, EXCARAPP, REASON,
3 DISC168, YEAR, DISAGREE, TYPE1 TO TYPE40
4 INPUT RECORD CARD
5 N OF CASES 740
6 INPUT FORMAT FIXED (12A4, A2, A2, A2, A2, A2, A2, A2, 13F1.0/40F2.0)

ACCORDING TO YOUR INPUT FORMAT, VARIABLES ARE TO BE READ AS FOLLOWS

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THE INPUT FORMAT PROVIDES FOR 68 VARIABLES. 69 WILL BE READ.
IT PROVIDES FOR 2 RECORDS ('CARDS') PER CASE. A MAXIMUM OF 80 'COLUMNS' ARE USED ON A RECORD.

7 RECODE
8 VAR LABELS
9 DISAGREE AUDITOR-FIRM AGREE AS TO DISAGREEMENTS/ OLD AUDIT OR
10 NAME/TYPICAL TYPE OF AUDITOR OPINION/ YEAR YEAR OF REPORT/
11 INDICATING SIGNIFICANT DISAGREEMENT REPORTED/ EXCHANGE LISTING/
12 DISCLOSURE UNDER RULE 4-103 ON FORM 10-K/
13 OTHER CHANGE PRECEDED - OTHER THAN UNQUALIFIED/
14 NO BOARD APPROVAL OF AUDITOR CHANGE?
15 REASON GIVEN FOR AUDITOR CHANGE/ OLD AUDIT PREDECESSOR AND
16 NEW SUCCESSEOR AUDITOR
17 VALUE LABELS
18 DISAGREE (1) NO (2) YES/ OLD AUDIT (1) PRIN (2) AA (3) EM (4) AN
19 YEAR (1) 1970 (2) 1975 (3) 1976 (4) 1977 (5) 1978/
20 UNQUALIFIED OPINION (2) QUALIFIED OPIN (3) AVERSE OPINION
21 DISCLAIMED/ EXCHANGE (1) FISC (2) ALEX (3) 016/ SINGDISAG
22 NO DISAGREEMENT (2) SIGN DISAGREEMENT/ DISCLOSURE (1)
23 NO 316-5 RPT (2) 10-K RPT (3) 10-K RPT (1)
24 VALUE LABELS
25 OTHER UNQUALIFIED OPINION (2) OTHER OPINIONS/ BICAREP
26 (1) NO BOARD APPROVAL (2) BOARD APPROVED/ REASON (1) YEAR NOT GI
27 (2) REASON GIVEN/ OLD AUDIT (1) NATIONAL FIRM (2) NON-SAT FIRM
28 NEW AUDIT (1) NATIONAL FIRM (2) NON-SAT FIRM
29 VALUE LABELS
30 OTHER OPINIONS (2) OTHER OPINIONS/ BICAREP
31 (1) NO BOARD APPROVAL (2) BOARD APPROVED/ YEAR NOT GI
32 (2) REASON GIVEN/ OLD AUDIT (1) NATIONAL FIRM (2) NON-SAT FIRM
33 OTHER OPINIONS (2) OTHER OPINIONS/ BICAREP
34 VALUE LABELS
35 TYPE1 (1) COST RECOVERY (2) TIMING EXP RECON (2) TIMING RSP RECON
36 (1) NEED AUDIT FEES (5) DISCLOSE UNAVAIL (6) RELATED PARTIES
37 (7) DISC OR IN CLASS (8) DISCLOSED CIDS (9) DAD AGT INFO
38 (10) DISCLOSE ILLEGALITY (11) AGT: FIRST VALUE (12) IS PRINCIP.
39 E CONC (13) INC DISCLOSURES (14) DISC: NO DESCRIPTION
40 PRINT FORMATS
41 TASK NAME
42 ALL COMPANIES: TYPES OF DISAGREEMENTS BY YEARS
43 MULT RESPONSE
44 GROUPS-TYPE 1/40 1/90
45 VARIABLES-YEAR 1, 2, 3
46 TABLES-TYPE 1, 2, 3

*MULT RESPONSE* COMMAND REQUIRES 1028 BYTES OF WORKSPACE NOT INCLUDING LABELS.
GIVEN SPACE PROVIDES FOR 1766 LABELS FOR FREQUENCIES
AND 3532 LABELS FOR TABLES.
## Cross Tabulation

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**COLS AND PERCENTS BASED ON RESPONDENTS**

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**Percentages and Totals Based on Respondents**

- **192 Valid Cases**
- **646 Missing Cases**
SY/SX BATCH SYSTEM

ALL COMPANIES : TYPES OF DISAGREEMENTS BY YEARS

SPACE REQUIRED.. 100 BYTES
1 TRANSFORMATIONS
2 ENCODE VALUES + LAG VARIABLES
0 IF/COMPUTE OPERATIONS

CPU TIME REQUIRED.. 9.57 SECONDS

42 *SELECT IF (EXCHANGE EQ 1)
43 TASK NAME NYSE COMPANIES: TYPES OF DISAGREEMENTS BY YEARS
44 DATA RESPONSE GROUPS-TYPE (TYPE 1 TO TYPE 40(1,40)) /
45 VARIABLES=YEAR (1,8)/
46 TABLES=TYPE BY YEAR/
47 STATISTICS 1,2,3

'MULT RESPONSE' PROBLEM REQUIRES 1028 BYTES OF WORKSPACE NOT INCLUDING LABELS.
GIVEN SPACE PROVIDES FOR 1760 LABELS FOR FREQUENCIES
AND 3932 LABELS FOR TABLES.
### TYPES OF DISAGREEMENTS BY YEARS

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*Percentages and totals based on respondents*

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PERCENTS AND TOTALS BASED ON RESPONDENTS

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Percent and totals based on respondents.

20 valid cases 120 missing cases
APSS BATCH SYSTEM
WISE COMPANIES: TYPES OF DISAGREEMENTS BY YEARS

TRANSPARENCY REQUIRED... 100 BYTES
1 TRANSFORMATIONS
3 RECORD VALUES + LAG VARIABLES
3 IF/COMPARE OPERATIONS

CPU TIME REQUIRED... 1.89 SECONDS

40 *SELECT IF
49 TASK MAP
50 MUL RESPONSE
GROUPS=TYPE (TYPE) TO TYPES(1,40))/
VAR=VARIABLES-YEAR (4,9,3)
TABLES=TYPE BY YEAR/
51 STATISTICS 1,2,3

MULT RESPONSE* PROBLEM REQUIRES 1028 BYTES OF WORKSPACE NOT INCLUDING LABELS.
GIVEN SPACE PROVIDES FOR 1768 LABELS FOR FREQUENCIES
AND 3532 LABELS FOR TABLES.
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Percent and totals based on respondents.
**TYPE CROSS TABULATION**

**BY YEAR YEAR OF REPORT**

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**BAD MGMT INFO**

**DISCLOSE ILLEGALITY**

**ASSET: FIRST VALUE**

**IS PRINCIPLE GAP**

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PERCENTS AND TOTALS BASED ON RESPONDENTS

50 VALID CASES  180 MISSING CASES
SPSS BATCH SYSTEM

TEXT FILE USED: TYPES OF DISAGREEMENTS BY YEARS

MEMORY REQUIRED: 100 BYTES
1 TRANSFORMATIONS
9 RECODE VALUES + LAG VARIABLES
3 IF/COMPUTE OPERATIONS

CPU TIME REQUIRED: 2.32 SECONDS

54 *SELECT IF
55 *TASK NAME OTC COMPANIES: TYPES OF DISAGREEMENTS BY YEARS
56 *MULT RESPONSE GROUPS-TYPE (TYPE1 TO TYPE3(1,40))/
57 VARIABLES=YEAR(Y,0)/
58 TABLES=TYPE BY YEAR/
59 STATISTICS 1,2,3

*MULT RESPONSE* PROBLEM REQUIRES 1028 BYTES OF WORKSPACE NOT INCLUDING LABELS.
GIVEN SPACE PROVIDES FOR 1760 LABELS FOR FREQUENCIES
AND 3532 LABELS FOR TABLES.
## OTC COMPANY TYPES OF DISAGreements BY YEARS

**FILE:** NONAME  **(CREATION DATE = 03/10/81)**

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**PERCENTS AND TOTALS BASED ON RESPONDENTS**

(continued)
### Cross Tabulation

#### Type (Group) by Year of Report

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Percent and totals based on respondents

(Continued)
**SPSS BATCH SYSTEM**

**CTC COMPANIES: TYPES OF DISAGREEMENTS BY YEARS**

**FILE: MONAME**  (CREATION DATE = 03/10/81)

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**CROSSTABULATION**

**YEAR**


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**COOPER**  5  6  11  4  3  28

**TOTAL**   17.9  21.4  39.3  10.7  10.7  100.0

**PERCENTS AND TOTALS BASED ON RESPONDENTS**

**20 VALID CASES**

**346 MISSING CASES**
SPSS BATCH SYSTEM

DTC COMPANIES: TYPES OF DISAGREEMENTS BY YEARS

TRANSoperate required.. 100 bytes
1 TRANsformations
0 SAVing VALUES + LAG VARIABLES
1 IF/COMPUTE OPERATIONS

CPU TIME REQUIRED.. 2.39 SECONDS

60 TASK NAME ALL COMPANIES: OPINION PRECEDING AUDITOR CHANGE
61 CrosSTABS VARIABLES: YEAR(5,6), TYPEOPEN(1,4)/
62 TABLES-TYPEOPEN BY YEAR/

***** "CROSSTABS" PROBLEM Requires 64 BYTES WORKSPACE NOT INCLUDING VALUE LABELS *****

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Number of missing observations = 193
03/10/81 PAGE 22

**SUSS BATCH SYSTEM**
**ALL COMPANIES: OPINION PRECEDING AUDITOR CHANGE**

CPU TIME REQUIRED: 1.12 SECONDS

63 *SELECT IF
64 TASK NAME
65 CROSSTABS
66

*(EXCHANGE EQ 1)*

**BYSE: OPINION PRECEDING AUDITOR CHANGE**

**VARIABLES: YEAR(2,5), TYPEPIN(1,6)**

**TABLES=TYPEPIN BY YEAR/**

***** "CROSSTABS" PROBLEM REQUIRES 64 BYTES WORKSPACE NOT INCLUDING VALUE LABELS *****

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NUMBER OF MISSING OBSERVATIONS = 29
SPSS BATCH SYSTEM
WILE: OPINION PRECEDING AUDITOR CHANGE
TRANSFORMATIONS REQUIRED... 100 BYTES
6 TRANSFORMATIONS
6 RECODE VALUES = LAM VARIABLES
1 IF/COMPUTE OPERATIONS
CPU TIME REQUIRED... 1.21 SECONDS
67 *SELECT IF
68 TASK NAME: OPINION PRECEDING AUDITOR CHANGE
69 CROSSTAB
70 VARIABLES = YEAR(.), TYPEPIN(.), /TABLES=TYPEPIN BY YEAR/

***** "CROSSTABS" PROBLEM REQUIRE 64 BYTES WORKSPACE NOT INCLUDING VALUE LABELS *****

***** GIVEN WORKSPACE ALLOWS FOR 2983 LABELLED VALUES *****
**Crosstabulation of Type of Audit Opinion by Year of Report**

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**Number of Missing Observations = 61**
SUBS BASH SYSTEM
AREA: OPINION PRECEDING AUDITOR CHANGE

TRANSFORMS REQUIRED: 100 BYTES
1 TRANSFORMATIONS
0 RECORD VALUES + LAG VARIABLES
3 IF/COMPUTE OPERATIONS

CPU TIME REQUIRED: 1.23 SECONDS

71 *SELECT IF
72 TASK NAME OTC : OPINION PRECEDING AUDITOR CHANGE
73 CROSSTABS VARIABLES = YEAR(5,4), TYPEOFIN(1,4)/
74 TABLES = TYPEDEF IN BY YEAR/

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NUMBER OF MISSING OBSERVATIONS = 103
SPSS BATCH SYSTEM
OTC : OPINION PRECEDING AUDITOR CHANGE

TRANSPACE REQUIRED... 100 BYTES
1 TRANSFORMATIONS
0 RECODE VALUES + LAG VARIABLES
3 IF/COMPARE OPERATIONS

CPU TIME REQUIRED... 1.39 SECONDS

75 *SELECT IF (SIGNSIG IQ 2)
76 TASK View ALL COMPANIES; OPINION PRECEDING SIGNIFICANT DISAGREEMENT
77 CROSSTABLES VARIABLES=YEAR(5,9),TYPEOPIN(1,4)/
TABLES=TYPEOPIN BY YEAR

***** "CROSSTABS" PROBLEM REQUIRES 64 BYTES WORKSPACE NOT INCLUDING VALUE LABELS *****

***** GIVEN WORKSPACE ALLOWS FOR 2987 LABELED VALUES *****
CROSSTABULATION OF TYPE OPINION BY YEAR OF REPORT

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NUMBER OF MISSING OBSERVATIONS = 22
SPSS BATCH SYSTEM
ALL COMPANIES: OPINION PRECEDING SIGNIFICANT DISAGREEMENT

TRANSPACE REQUIRED.. 100 BYTES
TRANSFORMATIONS
0 RESTORE VALUES * LAG VARIABLES
1 IF/COMPUTE OPERATIONS

CPU TIME REQUIRED.. 1.11 SECONDS

**SELECT IF
90 TASK NAME "BYE: OPINION PRECEDING SIGNIFICANT DISAGREEMENT"
81 Crosstabs VARIABLES=YEAR(5,6),TYPEPIN(1,4) /
02 TABLES=TYPEPIN BY YEAR

***** "CROSSTABS" PROBLEM REQUIRES 64 BYTES WORKSPACE NOT INCLUDING VALUE LABELS *****

***** GIVEN WORKSPACE ALLOWS FOR 2983 LABELLED VALUES *****
** Crosstabulation of Type of Auditor Opinion by Year **

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Number of missing observations = 5
SPSS BATCH SYSTEM
HIGH OPINION PRECEDING SIGNIFICANT DISAGREEMENT

TRANSPIRER == 100 BYTES
1 TRANSFORMATIONS
0 RECORDER VALUES + LAG VARIABLES
7 IF/COMPUTE OPERATIONS

CPU TIME REQUIRED == 1.22 SECONDS

A3 *SELECT 2
A4 NAME NAME (SIGDISAG EQ 2 AND EXCHANGE EQ 2)
A5 CROSSTABS NAME: OPINION PRECEDING SIGNIFICANT DISAGREEMENT
VARIABLES=YEAR(5,0),TYPEPIN(1,4)
TABLES=TYPEPIN BY YEAR

***** "CROSSTABS" PROBLEM REQUIRES 64 BYTES WORKSPACE NOT INCLUDING VALUE LABELS *****
***** GIVEN WORKSPACE ALLOWS FOR 2983 LABELLED VALUES *****
### Cross Tabulation of Type of Audit Opinion by Year of Report

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**Column Total**

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**Number of Missing Observations = 12**
SPSS BATCH SYSTEM
AREA: OPINION PRECEDEING SIGNIFICANT DISAGREEMENT

TRANSFORMS REQUIRED... 100 BYTES
1 TRANSFORMATIONS
6 DECIDE VALUES + LAG VARIABLES
7 IF/COMPUTE OPERATIONS

CPU TIME REQUIRED... 1.15 SECONDS

07 *SELECT IF (SIGDISAG EQ 2 AND EXCHANGE EQ J)
09 TASK NAME "OTC : OPINION PRECEDEING SIGNIFICANT DISAGREEMENT"
09 CROSSTABS VARIABLES=YEAR(5,9),TYPEPIN(1,4)/
TABLES=TYPEPIN BY YEAR

***** "CROSSTABS" PROBLEM REQUIRES 64 BYTES WORKSPACE NOT INCLUDING VALUE LABELS *****

***** GIVEN WORKSPACE ALLOWS FOR 2981 LABELED VALUES *****
**CROSSTABULATION OF TYPE OPIN ON YEAR OF REPORT**

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**QUALIFIED OPIN**

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**COLUMN**

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**NUMBER OF MISSING OBSERVATIONS** = 5
SPSS BATCH SYSTEM

UTC: OPINION PRECEDING SIGNIFICANT DISAGREEMENT

TRANSFORMED.. 100 BYTES
1 TRANSFORMATIONS
0 RECODE VALUES = LAG VARIABLES
7 IF/COMPUTE OPERATIONS

CPU TIME REQUIRED.. 1.31 SECONDS

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EXTENT OF DISAGS. PRECEDING AUDITOR CHANGES BY EXCHANGES
VARIABLES=SIGSIG(1,2),EXCHANGE(1,3)/
TABLES=SIGSIG BY EXCHANGE/
ALL

***** "CROSSTABS" PROBLEM REQUIRES 24 BYTES WORKSPACE NOT INCLUDING VALUE LABELS *****

***** GIVEN WORKSPACE ALLOWS FOR 2985 LABELLED VALUES *****
### CROSS TABULATION OF SIGNIFICANT DISAGREEMENT BY EXCHANGE LISTING

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#### Raw Chi Square

- Raw Chi Square = 25.11351
- With 2 degrees of freedom, significance = 0.0000

#### Contingency Coefficient

- Contingency Coefficient = 0.19261

#### Lambda

- Lambda (Asymmetric) = 0.0
- With Significant Disagreement = 0.05076

#### Lambda (Symmetric)

- Lambda (Symmetric) = 0.00481

#### Uncertainty Coefficient

- Uncertainty Coefficient (Asymmetric) = 0.02427
- Uncertainty Coefficient (Symmetric) = 0.01089

#### Kendall's Tau

- Kendall's Tau B = -0.14227
- Significance = 0.0000

- Kendall's Tau C = -0.11009
- Significance = 0.0000

#### Gamma

- Gamma = -0.31960

#### Somers' D

- Somers' D (Asymmetric) = -0.00259
- With Significant Disagreement = -0.22841

- Somers' D (Symmetric) = -0.12706

#### Cramer's V

- Cramer's V = 0.18576
- With Significant Disagreement = 0.13466

#### Pearson's R

- Pearson's R = 0.0000
- With Significant Disagreement = 0.0001

#### Number of Missing Observations

- 20
SPSS BATCH SYSTEM
EXTENT OF DISAG. PRECEDING AUDITOR CHANGES BY EXCHANGES
CPU TIME REQUIRED... 1.07 SECONDS

95 *SELECT IF (EXCHANGE EQ 1 OR 2)
96 CROSSTABS VARIABLES=SIGDISAG(1,2),EXCHANGE(1,2)/
97 TABLES=SIGDISAG BY EXCHANGE/
98 STATISTICS ALL

***** "CROSSTABS" PROBLEMQUIRES 76 BYTES WORKSPACE NOT INCLUDING VALUE LABELS *****
***** GIVEN WORKSPACE ALLOWS FOR 2995 LABELLED VALUES *****
## Cross Tabulation of Significant Disagreement Reported by Exchange Listing

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**Column Counts:**
- 143
- 225
- 306

**Chi-Square Tests:**
- Corrected Chi Square: 1.2872 with 1 degree of freedom, significance: 0.2562
- May Chi Square: 1.6100 with 1 degree of freedom, significance: 0.2045

**Other Measures:**
- Contingency Coefficient: 0.0666
- Lambda (Asymmetric): 0.0666
- Kendall's Tau C: 0.0516
- Gamma: 0.1724
- Somers' D (Asymmetric): 0.0664
- Somers' D (Symmetric): 0.0000
- ETA: 0.0664
- Pearson's R: 0.0665

**Number of Missing Observations:** 6
SPSS BATCH SYSTEM
EXTENT OF DISAGGREGATION AUDITOR CHANGES BY EXCHANGES

TRANSFORM SPACE REQUIRED: 100 BYTES
1 TRANSFORMATIONS
0 RECODE VALUES + LAG VARIABLES
7 IF/COUNT OPERATIONS

CPU TIME REQUIRED: 1.55 SECONDS

99 SELECT IF (EXCHANGE TO 1 OR 3)
100 CROSSTABS VARIABLES=SIGDISAG(1,3), EXCHANGE(1,3)/
101 TABLES=SIGDISAG BY EXCHANGE/
102 STATISTICS ALL

***** "CROSSTABS" PROGRAM REQUIRES 24 BYTES WORKSPACE NOT INCLUDING VALUE LABELS *****

***** GIVEN WORKSPACE ALLOWS FOR 2985 LABELED VALUES *****
**SPSS BATCH SYSTEM**

**FILE NAME** (CREATION DATE = 03/10/81)

---

**SIGDISAG SIGNIFICANT DISAGREEMENT REPORTED BY EXCHANGE LISTING**

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**CORRECTED CHI SQUARE = 8.00490 with 1 degree of freedom, significance = 0.0047**

**RAW CHI SQUARE = 8.95440 with 1 degree of freedom, significance = 0.0028**

**PHI = 0.133642**

**CONTINGENCY COEFFICIENT = 0.13255**

**LAMDA (ASYMERIC) = 3.0 with SIGDISAG dependent.**

**LAMDA (SYMERIC) = 0.9 with SIGDISAG dependent.**

**UNCERTAINTY COEFFICIENT (ASYMERIC) = 0.02471 with SIGDISAG dependent.**

**UNCERTAINTY COEFFICIENT (SYMERIC) = 0.01768 with SIGDISAG dependent.**

**KENDALL'S TAU C = -0.13342 significance = 0.0014**

**GAMMA = -0.41027 significance = -0.01768 with SIGDISAG dependent.**

**SOMER'S D (ASYMERIC) = 0.09005 with SIGDISAG dependent.**

**SOMER'S D (SYMERIC) = -0.12370 significance = 0.0014**

**LI = 0.13343 with SIGDISAG dependent.**

**PEARSON'S R = 0.13343 with SIGDISAG dependent.**

**NUMBER OFMISSING OBSERVATIONS = 15**
**SOGS BATCH SYSTEM**

**EXTENT OF DISAUS. PRECEDING AUDITOR CHANGES BY EXCHANGES**

**TRANSERACE REQUIRED.. 100 BYTES**
1 TRANSFORMATIONS
0 RECORD VALUES + LAG VARIABLES
2 IF/COMPUTE OPERATIONS

**CPU TIME REQUIRED.. 1.69 SECONDS**

103 *SELECT IF (EXCHANGE EQ 2 OR 3)
104 CROSSTABS
105
106 STATISTICS ALL

***** "CROSSTABS" PROCEDURE REQUIRES 16 BYTES WORKSPACE NOT INCLUDING VALUE LABELS *****

***** GIVEN WORKSPACE ALLOWS FOR 2905 LABELLED VALUES *****
**SCHS DATABASE SYSTEM**

**EXTENT OF DISAG. PRECEDING AUDITORS CHANGES BY EXchanges**

FILE: [REDACTED] (CREATION DATE: 03/10/81)

---

**CROSS TABULATION OF SIGNIFICANT DISAGREEMENT REPORTED BY EXCHANGE LISTING**

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**CORRECTED CHI SQUARE = 21.70 > 59 WITH 1 DEGREE OF FREEDOM. SIGNIFICANCE = 0.0000**

**PHI = 0.20672**

**CONTINGENCY COEFFICIENT = 0.20240**

**LAMBDA (ASYMERIC) = 0.0 WITH SIGNIFICANT DEPENDENT.**

**LAMBDA (SYMMETRIC) = 0.07240**

**UNCERTAINTY COEFFICIENT (ASYMERIC) = 0.05285 WITH SIGNIFICANT DEPENDENT.**

**UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.00000**

**KENDALL'S TAU B = 0.20712. SIGNIFICANCE = 0.0000**

**KENDALL'S TAU C = -0.13675. SIGNIFICANCE = 0.0000**

**GAMMA = -0.54319**

**SOMOGYI'S D (ASYMERIC) = -0.17444 WITH SIGNIFICANCE DEPENDENT.**

**SOMOGYI'S D (SOMEGI'S D) = -0.17444**

**EAT = 0.26073 WITH SIGNIFICANCE DEPENDENT.**

**PEARSON'S R = 0.20676 SIGNIFICANCE = 0.0000**

**NUMBER OF MISSINg OBSERVATIONS = 19**
SPSS BATCH SYSTEM

DATA OF DISAGG. PRECEDING AUDITOR CHANGES BY EXCHANGES

TRANSPARENCY REQUIRED: 100 BYTES
    0 TRANSFORMATIONS
    0 RECORD VALUES + LAG VARIABLES
    0 IF/COMPUTE OPERATIONS

CPU TIME REQUIRED: 1.72 SECONDS

107 RECORDS
100 CROSSTABS
100 VARIABLES = SIGDISAG(1,2), IACHANGE(2,3)
110 STATISTICS = SIGDISAG BY EXCHANGE/

***** "CROSSTABS" PROBLEM REQUIRES 16 BYTES WORKSPACE NOT INCLUDING VALUE LABELS *****

***** GATHER WORKSPACE ALLOWS FOR 2985 LABELLED VALUES *****
SPSS BATCH SYSTEM
EXTENT OF DISAGREEMENT ON AUDITOR CHANGES BY EXCHANGES

03/10/81 PAGE 45

* * * * * * * * * * * * * CROSS TABULATION OF * * * * * * * * * * * * *
* * * * * * * * * * * * * STATISTICAL SIGNIFICANCE REPORTED BY EXCHANGE LISTING
* * * * * * * * * * * * * PAGE 1 OF 1

<table>
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<tr>
<th>EXCHANGE</th>
<th>TOT PCT</th>
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<tbody>
<tr>
<td>EXCHANGE 1</td>
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</tr>
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SIGDISAG (SIGNIFICANT DISAGREEMENT REPORTED)

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<td>TOTAL</td>
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BG DISAGREEMENT

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SIGNIF DISAGREEMENT

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CORRECTED CHI SQUARE = 21.95459 WITH 1 DEGREE OF FREEDOM. SIGNIFICANCE = 0.0000
RAW CHI SQUARE = 22.90667 WITH 1 DEGREE OF FREEDOM. SIGNIFICANCE = 0.0000

PHI = 0.17762

CONTINGENCY COEFFICIENT = 0.17498
LASSO (ASYMETRIC) = 0.9 WITH SIGDISAG DEPENDENT.
LASSO (SYMMETRIC) = 0.9225 WITH SIGDISAG DEPENDENT.

UNCERTAINTY COEFFICIENT (ASYMERIC) = 0.04023 WITH SIGDISAG DEPENDENT.
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.02968

KENDALL'S TAU B = 0.17762 WITH SIGDISAG DEPENDENT.
KENDALL'S TAU C = 0.12329 WITH SIGDISAG DEPENDENT.

GAMMA = -0.49805
SOMER'S D (ASYMERIC) = -0.12331 WITH SIGDISAG DEPENDENT.
SOMER'S D (SYMMETRIC) = -0.10431

ETTA = 0.17762 WITH SIGDISAG DEPENDENT.
PEARSON'S R = 0.17761 SIGNIFICANCE = 0.0000

NUMBER OF MISSING OBSERVATIONS = 20
SPSS BATCH SYSTEM
EXTENT OF DISAGREES, PRECEDING AUDITOR CHANGES BY EXCHANGES

TRANSPARENCY REQUIRED.. 100 BYTES
1 TRANSFORMATIONS
2 RECODE VALUES + LAG VARIABLES
0 IF/COMPUTE OPERATIONS

CPU TIME REQUIRED.. 1.61 SECONDS

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<th>TASK NAME</th>
<th>PRECEDENT: ALL BIG 8 BY OTHERS INVOLVED IN DISAGREEMENTS</th>
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</thead>
<tbody>
<tr>
<td>111</td>
<td>VARIABLES=SIGDISAG(1,2), OLDAUDIT(1,2)/</td>
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<tr>
<td>112</td>
<td>TABLES=SIGDISAG BY OLDAUDIT/</td>
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<tr>
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<td>ALL</td>
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***** "CROSSTABS" PROBLEM REQUIRES 16 BYTES WORKSPACE NOT INCLUDING VALUE LABELS *****

***** GIVEN WORKSPACE ALLOWS FOR 2985 LABELLED VALUES *****
CROSS TABULATION OF SIGNIFICANT DISAGREEMENT REPORTED BY OLDAudit PREDECESSOR AUDITOR

OLDAudit

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<th>TOTAL</th>
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<td>ROW PCT</td>
<td>INATIONAL NON-SATL</td>
<td>ROW</td>
<td>COL PCT</td>
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</tr>
<tr>
<td>1</td>
<td>324</td>
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<td>2 I</td>
</tr>
<tr>
<td>2</td>
<td>77</td>
<td>1</td>
<td>25 I</td>
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<tr>
<td>TOTAL</td>
<td>423</td>
<td>395</td>
<td>720</td>
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CORRECTED CHI SQUARE = 13.90899 WITH 1 DEGREE OF FREEDOM. SIGNIFICANCE = 0.0002
RAW CHI SQUARE = 14.72085 WITH 1 DEGREE OF FREEDOM. SIGNIFICANCE = 0.0001

PHI = 0.4724
CONTINGENCY COEFFICIENT = 0.14046
LAMDA (ASYMTRIC) = 0.0 WITH SIGDISAG DEPENDENT. = 0.9 WITH OLDAudit DEPENDENT.
UNCERTAINTY COEFFICIENT (ASYMTRIC) = 0.02637 WITH SIGDISAG DEPENDENT. = 0.01572 WITH OLDAudit DEPENDENT.

KENDALL'S TAU C = -0.00174. SIGNIFICANCE = 0.9999
GAIA = 0.02724
SOMER'S D (ASYMTRIC) = -0.10467 WITH SIGDISAG DEPENDENT. = -0.29119 WITH OLDAudit DEPENDENT.

ST = 0.14223 WITH SIGDISAG DEPENDENT. = 0.14224 WITH OLDAudit DEPENDENT.

NUMBER OF MISSING OBSERVATIONS = 20
CPM TIME REQUIRED..  1.23 SECONDS

** Task Name  | Ind. Big R Auditors Involved in Disagreements
115 TASK NAME | VARIABLES=SIGDISAS[1,2], OLDDATE[1,8]/
116 CHOSSTARS | TABLES=SIGDISAS BY OLDDATE/
117           | ALL

***** "CHOSSTARS" problem requires 64 bytes workspace not including value labels *****

***** Given workspace allows for 2983 labelled values *****
## SPSS Output

**SPSS BATCH SYSTEM**

**INDIVIDUAL SIG & AUDITORS INVOLVED IN DISAGREEMENTS**

**FILE NAME** (CREATION DATE = 03/10/81)

---

**SIGDISAG SIGNIFICANT DISAGREEMENT REPORTED BY OLDNAME, AUDITOR NAME**

---

**OLDNAME**

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<tr>
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<tr>
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<td>I</td>
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<td>0.5</td>
<td>1.4</td>
<td>1.2</td>
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</table>

**COLUMN**

| 99 | 54 | 52 | 37 | 56 | 37 | 37 | 42 | 46 | 42 |

**TOTAL**

| 23.4 | 12.8 | 12.1 | 8.7 | 13.2 | 8.7 | 9.9 | 10.9 | 10.9 | 100.0 |

**RANK CHI SQUARE** = 17.29038 WITH 7 DEGREES OF FREEDOM. SIGNIFICANCE = 0.015b

**CHI-SQUARE** = 0.20250

**COEFFICIENT** = 0.05819

**LAMBDA (ASYMTRIC) = 0.0** WITH SIGDISAG DEPENDENT.

**UNCERTAINTY COEFFICIENT (ASYMTRIC) = 0.04499 WITH SIGDISAG DEPENDENT.**

**KENDALL'S Tau B = 0.10604**. SIGNIFICANCE = 0.0062

**HENDALL'S Tau U = 0.13728**. SIGNIFICANCE = 0.0062

**GAMMA = 0.2095**

**SOERENS'S D (ASYMTRIC) = 0.06242 WITH SIGDISAG DEPENDENT.**

**SOERENS'S D (ASYMTRIC) = 0.00272**

**TIME** = 0.11524 WITH SIGDISAG DEPENDENT.

**PEARSON'S r = -0.11624** SIGNIFICANCE = 0.0064

**NUMBER OF MISSING OBSERVATIONS = 325**
CPU TIME REQUIRED: 1.19 SECONDS

119 TASK NAME SUCCESSORS: ALL BIG 0 BY OTHERS INVOLVED IN DISAGREEMENTS
120 CROSSTABS VARIABLES=SIGDISAG(1,2),NEWAUIDIT(1,2)
121 TABLES=SIGDISAG BY NEWAUIDIT/
122 STATISTICS ALL

***** "CROSSTABS" PROBLEM REQUIRES 16 BYTES WORKSPACE NOT INCLUDING VALUE LABELS *****

***** GIVEN WORKSPACE ALLOWS FOR 2985 LABELLED VALUES *****
**SPSS BATCH SYSTEM**
**SUCCESSORS: ALL MEN & BY OTHERS INVOLVED IN DISAGREEMENTS**

**FILE NAME** (CREATION DATE = 03/10/81)

---

**CROSSTABULATION OF**
**SIGHDISAG: SIGNIFICANT DISAGREEMENT REPORTED BY NEWAREID SUCCESSOR AUDIT**

**NEWAUDIT**

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</table>

**CORRECTED CHI SQUARE =** 4.61014 WITH 1 DEGREE OF FREEDOM. SIGNIFICANCE = 0.0263

**Fisher CHI SQUARE =** 5.32412 WITH 1 DEGREE OF FREEDOM. SIGNIFICANCE = 0.0272

**PHI =** 0.08579

**CONTINGENCY COEFFICIENT =** 0.08579

**LAMBDA (ASYMTRIC) =** 0.0 WITH SIGDISAG DEPENDENT.

**LAMBDA (SYMMETRIC) =** 0.0

**UNCERTAINTY COEFFICIENT (ASYMTRIC) =** 0.00955 WITH SIGDISAG DEPENDENT.

**UNCERTAINTY COEFFICIENT (SYMMETRIC) =** 0.00772

**KENDALL'S TAU B =** -0.06579. SIGNIFICANCE = 0.0106

**KENDALL'S TAU C =** -0.05706. SIGNIFICANCE = 0.0106

**CARCH =** -0.27611

**SOMERS D (ASYMTRIC) =** -0.01463 WITH SIGDISAG DEPENDENT.

**SOMERS D (SYMMETRIC) =** 0.003613

**ETA =** 0.08579 WITH SIGDISAG DEPENDENT.

**PEARSON'S CHI =** -0.00579 SIGNIFICANCE = 0.0106

**NUMBER OF MISSING OBSERVATIONS =** 26
S035 BATCH SYSTEM
SUCCESSORS: ALL DIG 8 BY OTHERS INVOLVED IN DISAGREEMENTS
CPU TIME REQUIRED.. 1.12 SECONDS

123 TASK NAME
124 CROSSTABS
125
126 STATISTICS

123 TASK NAME
124 CROSSTABS
125
126 STATISTICS

BIG 8 AUDITORS AS SUCCESSORS TO DISAGREEMENT AUDITS
VARIABLES=SIGDISAG(1,2),NEWNAME(1,8)/
TABLES=SIGDISAG BY NEWNAME/

***** "CROSSTABS" PROBLEM REQUIRES 64 BYTES WORKSPACE NOT INCLUDING VALUE LABELS *****
***** GIVEN WORKSPACE ALLOWS FOR 2983 LABELLED VALUES *****
### Crosstabulation

**Cross Tabulation of**: Sigdisag Significant Disagreement Reported by Newname

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<td>-----</td>
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**Number of Missing Observations**: 268
**SPSS BATCH SYSTEM**

**BIG & AUDITORS AS SUCCESSORS TO DISAGREEMENT AUDITS**

**CPU TIME REQUIRED** 1.18 SECONDS

<table>
<thead>
<tr>
<th>TASK NAME</th>
<th>EXTENT OF UNQUAL. OPINIONS BEFORE AUDITOR CHANGES BY EXCHANGES</th>
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<tbody>
<tr>
<td>127 TASK NAME</td>
<td>VARIABLES=OTUNQUAL(1,2), EXCHANGE(1,3)/</td>
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<tr>
<td>129 CROSSTABS</td>
<td>TABLES=OTUNQUAL BY EXCHANGE/</td>
</tr>
<tr>
<td>130 STATISTICS</td>
<td>ALL</td>
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***** "CROSSTABS" PROBLEM REQUIRES 24 BYTES WORKSPACE NOT INCLUDING VALUE LABELS *****

***** GIVEN WORKSPACE ALLOWS FOR 2985 LABELLED VALUES *****
SPSS MATCH SYSTEM

EXACT TEST OF UNQUAL OPINIONS BEFORE AUDITOR CHARGES BY EXCHANGES
FILE NOVANE (CREATION DATE = 03/10/81)

* CROSSTABULATION OF UNQUAL CHANGE PRECEDED - OTHER THAN UNQUALIFIED BY EXCHANGE LISTING

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<tr>
<td>UNQUAL Opinion</td>
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<tr>
<td>OTHER OPINIONS</td>
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<tr>
<td>COLUMN</td>
<td>115</td>
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</table>
| 2 X 2 CHI SQUARE = 15.72601 WITH 2 DEGREES OF FREEDOM. SIGNIFICANCE = 0.0004
| Cramer's V = 0.1683
| Contingency Coefficient = 0.1683
| Lambda (Asymmetric) = 0.0 WITH UNQUALIFIED DEPENDENT. = 0.0 WITH EXCHANGE DEPENDENT.
| Lambda (Symmetric) = 0.0
| Uncertainty Coefficient (Asymmetric) = 0.02124 WITH UNQUALIFIED DEPENDENT. = 0.01976 WITH EXCHANGE DEPENDENT.
| Kendall's Tau B = 0.15689. SIGNIFICANCE = 0.0001
| Kendall's Tau C = 0.17173. SIGNIFICANCE = 0.0001
| Gamma = 0.28569
| Somers D (Asymmetric) = 0.13716 WITH UNQUALIFIED DEPENDENT. = 0.17943 WITH EXCHANGE DEPENDENT.
| Somers D (Symmetric) = 0.15569
| PHI = 0.16034 WITH UNQUALIFIED DEPENDENT. = 0.16027 WITH EXCHANGE DEPENDENT.
| NUMBER OF MISSING OBSERVATIONS = 193

PAGE 1 OF 1
SAS Batch System

Extent of unequal opinions before auditor changes by exchanges

CPU time required: 1.16 seconds

111 * SELECT
112 CROSSTABS
133
134 STATISTICS

* * * * "CROSSTABS" PROBLEM REQUIRES 16 BYTES WORKSPACE NOT INCLUDING VALUE LABELS *****

* * * * GIVEN WORKSPACE ALLOWS FOR 2985 LABELLED VALUES *****
### Extent of Unqualified Opinions Before Auditor Changes by Exchanges

**File: ROSARE**  
(Creation Date = 03/10/83)

**Cross Tabulation of Unqualified Change Proceeded - Other Than Unqualified by Exchange Listing**

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<th>AMEX Pct In Use</th>
<th>Dow Pct In Use</th>
<th>Total</th>
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<tr>
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<tr>
<td>Total</td>
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<td>218</td>
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**Corrected Chi Square** = 0.25822 WITH 1 DEGREES OF FREEDOM, SIGNIFICANCE = 0.6116

**Raw Chi Square** = 0.40369 WITH 1 DEGREES OF FREEDOM, SIGNIFICANCE = 0.5255

**Contingency Coefficient** = 0.03765

**Lambda (Asymmetric)** = 0.0 WITH OTHER QUALIFICATION DEPENDENT.

**Lambda (Symmetric)** = 0.0

**Uncertainty Coefficient (Asymmetric)** = 0.0011% WITH OTHER QUALIFICATION DEPENDENT.

**Uncertainty Coefficient (Symmetric)** = 0.0011%

**Kendall's Tau B** = 0.03767, SIGNIFICANCE = 0.2631

**Kendall's Tau C** = 0.03767, SIGNIFICANCE = 0.2631

**Cramer's V** = 0.03767

**Somers' D (Asymmetric)** = 0.03767, SIGNIFICANCE = 0.2636

**Somers' D (Symmetric)** = 0.03767

**EFA** = 0.03767 WITH OTHER QUALIFICATION DEPENDENT.

**Pearson's R** = 0.03767, SIGNIFICANCE = 0.2636

**Number of Missing Observations** = 90
TRANSPACE REQUIRED... 100 BYTES
7 TRANSFORMATIONS
0 RECODE VALUES * LAG VARIABLES
7 IF/COMPUTE OPERATIONS
CPU TIME REQUIRED... 1.47 SECONDS

135 *SELECT IF (EXCHANGE EQ 1 OR 3)
136 CROSSTABS VARIABLES=ETNEQUAL(1,2),EXCHANGE(1,3)/
137 TABLES=OTNEQUAL BY EXCHANGE/
138 STATISTICS ALL

***** "CROSSTABS" PROBLEM REQUIRES 24 BYTES WORKSPACE NOT INCLUDING VALUE LABELS *****

***** GIVEN WORKSPACE ALLOWS FOR 2005 LABELED VALUES *****
**SOCC BATCH SYSTEM**

**EXTENT OF UNQUAL. OPINIONS BEFORE AUDITOR CHANGES BY EXCHANGES**

**FILE NOVARE (CREATION DATE = 03/16/81)**

**CROSS TABULATION OF UNQUAL. CHANGES PRECEDED - OTHER THAN UNQUALIFIED - BY EXCHANGE LISTING**

**PAGE 1 OF 1**

<table>
<thead>
<tr>
<th>EXCHANGE</th>
<th>BOV PCT NYSE</th>
<th>OTC</th>
<th>BOV PCT TOTAL</th>
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<tr>
<td></td>
<td>2 3 1</td>
<td></td>
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<td>OTHER OPINIONS</td>
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<tr>
<td></td>
<td>6 4 6</td>
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<tr>
<td>COLUMNS</td>
<td>115 271 386</td>
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<td>29.8 70.2 100.0</td>
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**CORRECTED CHI SQUARE = 10.45212 WITH 1 DEGREE OF FREEDOM. SIGNIFICANCE = 0.0012**

**RAW CHI SQUARE = 11.19287 WITH 1 DEGREE OF FREEDOM. SIGNIFICANCE = 0.0008**

**PHI = 0.17029**

**CONTINGENCY COEFFICIENT = 0.16767**

**LAMBDA (ASYMPTOTIC) = 0.6 WITH OTUNUAL DEPENDENT. = 0.0 WITH EXCHANGE DEPENDANT.**

**LAMBDA (SYMMETRIC) = 0.0 UNCERTAINTY COEFFICIENT (ASYMPTOTIC) = 0.02181 WITH OTUNUAL DEPENDENT. = 0.02442 WITH EXCHANGE DEPENDANT.**

**UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.02304**

**KENDALL'S TAU B = 0.17029. SIGNIFICANCE = 0.0004**

**KENDALL'S TAU C = 0.15999. SIGNIFICANCE = 0.0004**

**GAMMA = 0.37414**

**SOMERS'S D (ASYMPTOTIC) = 0.10405 WITH OTUNUAL DEPENDENT. = 0.15755 WITH EXCHANGE DEPENDANT.**

**SOMERS'S D (SYMMETRIC) = 0.10405**

**ETA = 0.17029 WITH OTUNUAL DEPENDENT.**

**PEARSON'S R = 0.17029 SIGNIFICANCE = 0.0008**

**NUMBER OF MISSING OBSERVATIONS = 132**
SPSS BATCH SYSTEM

EXTENTS OF UNQUALIFIED OPINIONS BEFORE AUDITOR CHANGES BY EXCHANGES

TRANSFORMS REQUIRED: 100 BYTES
0 RECODE VALUES + LAG VARIABLES
7 IF/COMPUTE OPERATIONS

CPU TIME REQUIRED: 1.50 SECONDS

119 *SELECT IF
160 CROSSTABS VARIABLES=CTQUAL(1,2), EXCHANGE(2,3)/
142 STATISTICS TABLES=CTQUAL BY EXCHANGE/

***** CROSSTABS PROBLEM REQUIRES 16 BYTES WORKSPACE NOT INCLUDING VALUE LABELS *****

***** GIVEN WORKSPACE ALLOWS FOR 2985 LABELLED VALUES *****
### Extent of Unqual. Opinions Before Auditor Changes by Exchanges

**File Name:** (Creation Date = 03/10/81)

* * * * * * * * * * * * * * * * * CROSSTABULATION OF * * * * * * * * * * * * * * * * * *

**Unqual Change Preceded - Other Than Unqualifled by Exchange Listing**

* * * * * * * * * * * * * * * * * * PAGE 1 OF 1

### Exchange

<table>
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<tr>
<td></td>
<td>I</td>
<td>I</td>
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#### Unqual

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<tr>
<td></td>
<td>I</td>
<td>113</td>
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#### Unqual Opinion

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#### Other Opinions

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<tr>
<td></td>
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<td>I</td>
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#### Column

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#### Total

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</table>

**Corrected Chi Square = 8.74639 with 1 Degree of Freedom, Significance = 0.0039**

**Raw Chi Square = 9.18644 with 1 Degree of Freedom, Significance = 0.0022**

**PHI = 0.14606**

**Contingency Coefficient = 0.14442**

**Lambda (Asymmetric) = 0.0 with Unqual Opinion Dependent**

**Lambda (Symmetric) = 0.0**

**Uncertainty Coefficient (Asymmetric) = 0.01505 with Unqual Opinion Dependent, \( = 0.01 \) with Exchange Dependent.**

**Uncertainty Coefficient (Symmetric) = 0.01505**

**Kendall's Tau B = 0.14605, Significance = 0.0011**

**Kendall's Tau C = 0.14605, Significance = 0.0011**

**Gamma = 0.38081**

**Somers's D (Asymmetric) = 0.14505 with Unqual Opinion Dependent, \( * = 0.14505 \) with Exchange Dependent,**

**Somers's D (Symmetric) = 0.14505**

**ZTA = 0.14505 with Unqual Opinion Dependent, \( = 0.14505 \) with Exchange Dependent.**

**Pearson's R = 0.14505, Significance = 0.0011**

**Number of Missing Observations = 169**
SPSS BATCH SYSTEM
EXTENT OF UNQUAL OPINIONS BEFORE AUDITOR CHANGES BY EXCHANGES

TRANSPARENCY REQUIRED.. 100 BYTES
1 TRANSFORMATIONS
0 RECODE VALUES * LAG VARIABLES
7 IF/COMPUTE OPERATIONS

CPU TIME REQUIRED.. 1.69 SECONDS

143 *RECODE
144 CROSSSTARS
145 ALL

***** "CROSSTABS" PROBLEM REQUIRES 16 BYTES WORKSPACE NOT INCLUDING VALUE LABELS *****

***** GIVEN WORKSPACE ALLOWS FOR 2485 LABELLED VALUES *****
### Extent of Unqualified Opinions Before Auditor Changes by Exchanges

**File Name:** (Creation Date = 03/10/81) 

**Cross Tabulation of Unqualified Change Preceded - Other Than Unqualified By Exchange Listing**

<table>
<thead>
<tr>
<th>Exchange</th>
<th>Count</th>
<th>Row Pct IAMEX</th>
<th>OTC</th>
<th>Row Pct TOTAL</th>
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<tbody>
<tr>
<td></td>
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<td>TOTAL</td>
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<tr>
<td>OTUQUAL</td>
<td>3</td>
<td>194 (61.4%)</td>
<td>335</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>57.9 (18.9%)</td>
<td>42.1 (13.3%)</td>
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</tr>
<tr>
<td></td>
<td>1</td>
<td>68.3 (22.1%)</td>
<td>31.7 (10.3%)</td>
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<tr>
<td></td>
<td>1</td>
<td>35.3 (11.7%)</td>
<td>64.7 (21.4%)</td>
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</tr>
</tbody>
</table>

Other Opinions

|          | 2     | 50 (16.1%)   | 130 (41.4%) |
|          | 1     | 40.9 (13.6%) | 59.1 (19.0%) |
|          | 1     | 16.2 (5.3%)  | 33.8 (10.7%) |

**Correlated Chi Square** = 14.60006 with 1 Degree of Freedom. **Significance** = 0.00001

**Raw Chi Square** = 14.60006 with 1 Degree of Freedom. **Significance** = 0.00001

**Phi** = 0.16637

**Contingency Coefficient** = 0.16741

**Lambda (Asymmetric)** = 0.0, **Lambda (Symmetric)** = 0.00047

**Uncertainty Coefficient (Asymmetric)** = 0.02070 with Unqualified Dependent. **Uncertainty Coefficient (Symmetric)** = 0.02036

**Kendall's Tau B** = 0.16637, **Significance** = 0.00000

**Cramer's V** = 0.33052

**Somers' D (Asymmetric)** = 0.16280 with Unqualified Dependent. **Somers' D (Symmetric)** = 0.16637

**Eta** = 0.16637 with Unqualified Dependent. **Pearson's R** = 0.16637, **Significance** = 0.00000

**Number of Missing Observations** = 193
STATS BATCH SYSTEM
EXTENT OF UNQUAL. OPINIONS BEFORE AUDITOR CHANGES BY EXCHANGES

TRANSPAC REQUIRED... 100 BYTES
1 TRANSFORMATIONS
2 ENCODE VALUES + LAG VARIABLES
0 IF/COMPUTE OPERATIONS

CPU TIME REQUIRED... 1.67 SECONDS

147 TASK NAME ALL BIG 8 AND OTHERS GIVING OTHER THAN UNQUALIFIED OPINIONS
148 CROSSTABS VARIABLES=CTUNQUAL(1,2),OLDAUDIT(1,2)/
149 TABLES=CTUNQUAL BY OLDAUDIT/
150 STATISTICS ALL

***** "CROSSTABS" PROBLEM REQUIRES 16 BYTES WORKSPACE NOT INCLUDING VALUE LABELS *****

***** GIVEN WORKSPACE ALLOWS FOR 2985 LABELED VALUES *****
**CROSS TABULATION OF**

**OTUNQUAL CHARGE PRECEDED - OTHER THAN UNQUALIFIED**

BY OLD AUDIT PREDECESSOR AUDITON

<table>
<thead>
<tr>
<th>CATEGORY</th>
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<th>ROW PCT</th>
<th>COL PCT</th>
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<tr>
<td><strong>OLD AUDIT</strong></td>
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<td></td>
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<tr>
<td><strong>TOT CT</strong></td>
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<td>41.0</td>
<td>100.0</td>
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<tr>
<td><strong>OTHER OPINIONS</strong></td>
<td>555</td>
<td>212</td>
<td>323</td>
<td></td>
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<tr>
<td><strong>CORRECTED CHI SQUARE</strong></td>
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<td>SIGNIFICANCE = 0.5339</td>
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<tr>
<td><strong>RAW CHI SQUARE</strong></td>
<td>0.30423</td>
<td>1 DEGREE OF FREEDOM.</td>
<td>SIGNIFICANCE = 0.4726</td>
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<tr>
<td><strong>PHI</strong></td>
<td>0.09014</td>
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<tr>
<td><strong>CONTINGENCY COEFFICIENT</strong></td>
<td>0.03311</td>
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<tr>
<td><strong>LAMBDA (ASYMMETRIC)</strong></td>
<td>0.0</td>
<td>WITH OTUNQUAL DEPENDENT.</td>
<td>= 0.0</td>
<td>WITH OLD AUDIT DEPENDENT.</td>
</tr>
<tr>
<td><strong>LAMBDA (SYMMETRIC)</strong></td>
<td>0.0</td>
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<tr>
<td><strong>SHEPFIELD'S TEST (ASYMMETRIC)</strong></td>
<td>0.00069</td>
<td>WITH OTUNQUAL DEPENDENT.</td>
<td>= 0.00067</td>
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<td><strong>SHEPFIELD'S TEST (SYMMETRIC)</strong></td>
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<tr>
<td><strong>KENDALL'S TAU B</strong></td>
<td>0.03014</td>
<td><strong>SIGNIFICANCE</strong> = 0.2390</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>KENDALL'S TAU C</strong></td>
<td>0.02705</td>
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<td><strong>GAMMA</strong></td>
<td>0.03228</td>
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<tr>
<td><strong>SNEDES'S D (ASYMMETRIC)</strong></td>
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<td>WITH OTUNQUAL DEPENDENT.</td>
<td>= 0.0339</td>
<td>WITH OLD AUDIT DEPENDENT.</td>
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<tr>
<td><strong>SNEDES'S D (SYMMETRIC)</strong></td>
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<td></td>
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<tr>
<td><strong>PEARSON'S R</strong></td>
<td>0.03014</td>
<td><strong>SIGNIFICANCE</strong> = 0.2393</td>
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**NUMBER OF MISSING OBSERVATIONS** = 193
SPSS BATCH SYSTEM
ALL BIG 8 AND OTHERS GIVING OTHER THAN UNQUALIFIED OPINIONS

CPU TIME REQUIRED.. 1.13 SECONDS

<table>
<thead>
<tr>
<th>TASK NAME</th>
<th>BIG 8 AUDITORS GIVING OTHER THAN UNQUALIFIED OPINIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>TABLES</td>
<td>VARIABLES=OTUNQUAL(1,2), OLNAME(1,8)/</td>
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<td>STATISTICS</td>
<td>ALL</td>
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</table>

***** "CROSSTABS" PROBLEM REQUIRES 64 BYTES WORKSPACE NOT INCLUDING VALUE LABELS *****

***** GIVEN WORKSPACE ALLOWS FOR 2983 LABELLED VALUES *****
### Cross Tabulation of Categorical Variables

<table>
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<tr>
<th></th>
<th>OTHQUAL</th>
<th>UNQUAL OPINION</th>
<th>OTHER OPINIONS</th>
<th>COLUMN TOTAL</th>
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<td>EGW</td>
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<td>1</td>
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<td>6</td>
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<td>OTHER OPINIONS</td>
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<tr>
<td>COLUMN TOTAL</td>
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<td>7</td>
<td>3</td>
<td>5</td>
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</table>

#### Chi-Square Analysis

- **Raw Chi-Square**: 7.33835 with 7 degrees of freedom. **Significance**: 0.3945
- **Cramer's V**: 0.15073
- **Concordance Coefficient**: 0.14905
- **Lambda (Asymmetric)**: 0.0 with Othqual dependent.
- **Lambda (Symmetric)**: 0.0
- **Uncertainty Coefficient (Asymmetric)**: 0.01801 with Othqual dependent.
- **Uncertainty Coefficient (Symmetric)**: 0.00865
- **Kendall's Tau B**: 0.01801. **Significance**: 0.35320
- **Kendall's Tau C**: 0.02354. **Significance**: 0.35320
- **Gama**: 0.02067
- **Somer's D (Asymmetric)**: 0.01141 with Othqual dependent.
- **Somer's D (Symmetric)**: 0.00759
- **Eta**: 0.15074 with Othqual dependent.
- **Pearson's R**: 0.02155. **Significance**: 0.3498

**Number of Missing Observations**: 425
SPSS BATCH SYSTEM
BIG 6 AUDITORS GIVING OTHER THAN UNQUALIFIED OPINIONS

CPU TIME REQUIRED: 1.21 SECONDS

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<tr>
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<td>155 TASK NAME</td>
<td>EXTENT OF 116-S DISCLOSURES AFTER AUDITOR CHANGES BY EXCHANGES</td>
</tr>
<tr>
<td>156 CROSSTABS</td>
<td>VARIABLES=DISC316S(1,3), EXCHANGE(1,3)</td>
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<td>157 TABLES</td>
<td>DISC316S BY EXCHANGE</td>
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<tr>
<td>158 STATISTICS</td>
<td>ALL</td>
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</table>

***** "CROSSTABS" PROBLEM REQUIRES 24 BYTES WORKSPACE NOT INCLUDING VALUE LABELS *****

***** GIVEN WORKSPACE ALLOWS FOR 2985 LABELLED VALUES *****
**SWES BATCH SYSTEM**

**EXTENT OF 316-S DISCLOSURES AFTER AUDITOR CHANGES BY EXCHANGES**

**FILE NAME** | [CREATION DATE = 03/10/81]

---

**CROSS TABULATION OF 316-S DISCLOSURES UNDER RULE 3-16S ON FORM 10-K BY EXCHANGE LISTING**

---

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*J OUT OF 6 (50.00%) OF THE VALID CELLS HAVE EXPECTED CELL FREQUENCY LESS THAN 5.0.*

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<th>MINIMUM EXPECTED CELL FREQUENCY</th>
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<tbody>
<tr>
<td>CHI-SQUARE</td>
<td>0.8526</td>
</tr>
<tr>
<td>CHAID'S V</td>
<td>0.09173</td>
</tr>
<tr>
<td>CONTINGENCY COEFFICIENT</td>
<td>0.09135</td>
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<tr>
<td>LAMBDA (ASYMMETRIC)</td>
<td>0.0</td>
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<tr>
<td>LAMBDA (SYMMETRIC)</td>
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</tr>
<tr>
<td>Uncertainty Coefficient (ASYMMETRIC)</td>
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<tr>
<td>Uncertainty Coefficient (SYMMETRIC)</td>
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<tr>
<td>KENDALL'S TAU C</td>
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<tr>
<td>SARNA</td>
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</tr>
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<td>SOERENS'S D (ASYMMETRIC)</td>
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<td>SOERENS'S D (SYMMETRIC)</td>
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<td>PERSON'S R</td>
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**NUMBER OF MISSING OBSERVATIONS = 646**
SPSS BATCH SYSTEM

EXTENT OF 316-5 DISCLOSURES AFTER AUDITORS CHANGES BY EXCHANGES

CPU TIME REQUIRED.. 1.13 SECONDS

150 *SELECT IF (EXCHANGE EQ. 1 OR 2)
160 CROSSTABS VARIABLES=DISC3165(1,2) , EXCHANGE(1,2)/
161 TABLES=DISC3165 BY EXCHANGE/
162 STATISTICS ALL

***** "CROSSTABS" PROBLEM REQUIRES 16 BYTES WORKSPACE NOT INCLUDING VALUE LABELS *****

***** GIVEN WORKSPACE ALLOWS FOR 2905 LABELLED VALUES *****
**SPSS BATCH SYSTEM**

**EXTENT OF 316-S DISCLOSURES AFTER AUDITOR CHANGES BY EXCHANGES**

**FILE: MORAIS**

*Creation Date: 03/10/81*

---

**CROSS TABULATION OF DISCLOSURE UNDER RULE 316-S OR FORM 10-K BY EXCHANGE LISTING**

**EXCHANGE**

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<td>MG 316-S</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>100</td>
<td>1</td>
</tr>
<tr>
<td>MG 316-S</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>100</td>
<td>1</td>
</tr>
</tbody>
</table>

---

2 OUT OF 4 (50.0%) OF THE VALID CELLS HAVE EXPECTED CELL FREQUENCY LESS THAN 5.0.

**MINIMUM EXPECTED CELL FREQUENCY = 0.124**

**CORRECTED CHI SQUARE = 0.07463 WITH 1 DEGREE OF FREEDOM. SIGNIFICANCE = 0.32877**

**SAMPLE CHI SQUARE = 0.01209 WITH 1 DEGREE OF FREEDOM. SIGNIFICANCE = 0.2442**

**PHI = 0.00199**

**CONTINGENCY COEFFICIENT = 0.008062**

**LAMBDAB (ASYMMETRIC) = 0.0 WITH DISC316S DEPENDENT.**

**LAMBDAX (ASYMMETRIC) = 0.0**

**UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.007463 WITH DISC316S DEPENDENT.**

**UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.071523**

**KENDALL'S TAU B = 0.001294 WITH 1 DEGREE OF FREEDOM. SIGNIFICANCE = 0.2442**

**KENDALL'S TAU C = 0.001294 WITH 1 DEGREE OF FREEDOM. SIGNIFICANCE = 0.2442**

**GAMMA = 1.00000**

**SOMESD'S D (ASYMMETRIC) = 0.02000 WITH DISC316S DEPENDENT.**

**SOMESD'S D (SYMMETRIC) = 0.03171**

**ZETA = 0.08108 WITH DISC316S DEPENDENT.**

**PEARSON'S R = 0.00109 WITH 1 DEGREE OF FREEDOM. SIGNIFICANCE = 0.2442**

**NUMBER OF MISSING OBSERVATIONS = 300**
SPSS BATCH SYSTEM

EXTENT OF DISCLOSURES AFTER AUDIT REACH CHANGES BY EXCHANGES

TRANSPACE REQUIRED.. 100 BYTES
1 TRANSFORMATIONS
0 RECODE VALUES + LAG VARIABLES
7 IF/COMPUTE OPERATIONS

CPU TIME REQUIRED.. 1.57 SECONDS

164 SELECT IF EXCHANGE EQ 1 OR 3
165 CROSSSTABS VARIABLES=DISC3165(1,2),EXCHANGE(1,3)/
166 STATISTICS TABLES=DISC3165 BY EXCHANGE/

***** "CROSSTABS" PROBLEM REQUIRES 24 BYTES WORKSPACE NOT INCLUDING VALUE LABELS *****

***** GIVEN WORKSPACE ALLOWS FOR 2965 LABELED VALUES *****
### CROSSTABULATION OF DISCLOSURE UNDER RULE 1-16B ON FORM 10-K BY EXCHANGE LISTING

<table>
<thead>
<tr>
<th>EXCHANGE</th>
<th>COUNT</th>
<th>HOW PUT IN USE</th>
<th>GTC</th>
<th>RON</th>
</tr>
</thead>
<tbody>
<tr>
<td>DISCLOSUE</td>
<td>TOT PUT</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>1</td>
<td>24</td>
<td>1</td>
<td>27</td>
<td>1</td>
</tr>
<tr>
<td>100-9</td>
<td>47.1</td>
<td>1</td>
<td>52.9</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>46.2</td>
<td>1</td>
<td>51.9</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>10-K REPORTS</td>
<td>3.1</td>
<td>1</td>
<td>100.0</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>0.0</td>
<td>1</td>
<td>3.6</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>0.0</td>
<td>1</td>
<td>1.9</td>
<td>1</td>
</tr>
<tr>
<td>COLUMN</td>
<td>24</td>
<td>28</td>
<td>52</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>46.2</td>
<td>51.8</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

2 OUT OF 4 (50.0%) OF THE VALID CELLS HAVE EXPECTED CELL FREQUENCY LESS THAN 5.0.

**Minimum Expected Cell Frequency** = 0.162
**Corrected Chi Square** = 0.0 WITH 1 DEGREE OF FREEDOM, SIGNIFICANCE = 1.0000
**Raw Chi Square** = 0.57395 WITH 1 DEGREE OF FREEDOM, SIGNIFICANCE = 0.4604
**PHI** = 0.12566
**Contingency Coefficient** = 0.12566
**LAMBDA (ASYMPTOTIC)** = 0.0 WITH DISCLOSURE DEPENDENT. = 0.0 WITH EXCHANGE DEPENDENT.
**LAMBDA (SYMMETRIC)** = 0.0
**Uncertainty Coefficient (ASYMPTOTIC)** = 0.12697 WITH DISCLOSURE DEPENDENT. = 0.01748 WITH EXCHANGE DEPENDENT.
**KENDALL'S TAU B** = 0.12964, SIGNIFICANCE = 0.1771
**KENDALL'S TAU C** = 0.03350, SIGNIFICANCE = 0.1771
**GAMMA** = 0.00000
**Snedecor's D (ASYMPTOTIC)** = 0.01748 WITH DISCLOSURE DEPENDENT. = 0.01748 WITH EXCHANGE DEPENDENT.
**Snedecor's D (SYMMETRIC)** = 0.01748
**LTA** = 0.12962 WITH DISCLOSURE DEPENDENT. = 0.12964 WITH EXCHANGE DEPENDENT.
**PEARSON'S R** = 0.12964 SIGNIFICANCE = 0.1771

**Number of Missing Observations** = 466
SPSS BATCH SYSTEM
EXTENT OF 316-5 DISCLOSURES AFTER AUDITOR CHANGES BY EXCHANGES

TRANSFORMS REQUIRED: 100 BYTES
1 TRANSFORMATIONS
0 RECODE VALUES + LAG VARIABLES
7 IF/COMPUTE OPERATIONS

CPU TIME REQUIRED: 1.45 SECONDS

167 *SELECT IF (EXCHANGE EQ 2 OR 3)
168 CROSSTABS VARIABLES=DISC165(1,2),EXCHANGE(2,3)/
169 TABLES=DISC165 BY EXCHANGE/
170 STATISTICS ALL

***** "CROSSTABS" PROBLEM REQUIRES 16 BYTES WORKSPACE NOT INCLUDING VALUE LABELS *****

***** GIVEN WORKSPACE ALLOWS FOR 2985 LABELED VALUES *****
### Extent of 316-S Disclosures After Auditor Changes by Exchanges

**File Name:** XEMEX (Creation Date = 03-10-81)

#### Cross Tabulation of **Disclosures** Under Rule 3-16S on Form 10-K By Exchange Listing

<table>
<thead>
<tr>
<th>Exchange</th>
<th>Count</th>
<th>316-S Index</th>
<th>FTC</th>
<th>316-S Disclosures</th>
</tr>
</thead>
<tbody>
<tr>
<td>DISC 165</td>
<td></td>
<td></td>
<td>76</td>
<td></td>
</tr>
<tr>
<td>10-K Repo</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

2 Out of 4 (50.0%) of the valid cells have expected cell frequency less than 5.0.

**Minimum Expected Cell Frequency = 0.716**

**Corrected Chi-Square = 0.0** with 1 degree of freedom. **Significance = 1.000**

**Raw Chi-Square = 0.1774** with 1 degree of freedom. **Significance = 0.676**

**Phi = 0.0476**

**Contingency Coefficient = 0.0476**

**Lambda (Asymmetric) = 0.0** with DISC 165 dependent. **= 0.0** with Exchange dependent.

**Uncertainty Coefficient (Symmetric) = 0.00016** with DISC 165 dependent. **= 0.00167** with Exchange dependent.

**Kendall's Tau-B = 0.04769**. **Significance = 0.338**

**Gamma = 0.2894**

**Somers's D (Asymmetric) = 0.01577** with DISC 165 dependent. **= 0.0476** with Exchange dependent.

**Somers's D (Symmetric) = 0.0233**

**Eta = 0.04765** with DISC 165 dependent. **= 0.04766** with Exchange dependent.

**Pearson's R = 0.04766**. **Significance = 0.332**

**Number of Missing Observations = 526**
SPSS BATCH SYSTEM

EXTENT OF 316-S DISCLOSURES AFTER AUDITOR CHANGES BY EXCHANGES

TRANSFER REQUIRED: 100 BYTES
- 1 TRANSFORMATIONS
0 RECODE VALUES * LAG VARIABLES
7 IF/COMPUTE OPERATIONS

CPU TIME REQUIRED: 1.49 SECONDS

171 RECODE EXCHANGE [1=2]
172 Crosstabs VARIABLES=DISC316S[1,2], EXCHANGE[2,3]/
173 Tables=DISC316S BY EXCHANGE/
174 Statistics ALL

***** "CROSSTABS" PROBLEM REQUIRES 16 BYTES WORKSPACE NOT INCLUDING VALUE LABELS *****

***** GIVEN WORKSPACE ALLOWS FOR 2985 LABELLED VALUES *****
## SPSS BATCH SYSTEM

**EXTENT OF 316-B DISCLOSURES AFTER AUDITOR CHANGES BY EXCHANGES**

**FILE NAME** (CREATION DATE = 03/10/81)

<table>
<thead>
<tr>
<th>CHANGES IN DISCLOSURES UNDER RULE 3-165 ON FORM 10-K BY EXCHANGE LISTING</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EXCHANGE</strong></td>
</tr>
<tr>
<td><strong>COUNT</strong></td>
</tr>
<tr>
<td><strong>ROW</strong></td>
</tr>
<tr>
<td><strong>COL</strong></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
</tr>
<tr>
<td><strong>DISCLOSURES</strong></td>
</tr>
<tr>
<td><strong>---</strong></td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>10-K REPORTS 316 I</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
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<tr>
<td>2</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>2</td>
</tr>
</tbody>
</table>

**CROSS TABULATION**

<table>
<thead>
<tr>
<th>DISCLOSURES</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>TOTAL</th>
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</thead>
<tbody>
<tr>
<td>NO 316-B</td>
<td>73</td>
<td>27</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>DISCLOSURES</td>
<td>72.5</td>
<td>27.5</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

2 OUT OF 4 (50.0%) OF THE VALID CELLS HAVE EXPECTED CELL FREQUENCY LESS THAN 5.0.

MINIMUM EXPECTED CELL FREQUENCY = 0.549

CHI SQUARE = 0.0 WITH 1 DEGREE OF FREedom. SIGNIFICANCE = 1.0000

RAW CHI SQUARE = 0.5200 WITH 1 DEGREE OF FREedom. SIGNIFICANCE = 0.4705

PHI = 0.07146

CONTINGENCY COEFFICIENT = 0.07146

LAMBDA (ASYMTRIC) = 0.0 WITH DISCLOSURES DEPENDENT. = 0.0 WITH EXCHANGE DEPENDENT.

LAMBDA (SYMMETRIC) = 0.0

UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.02362 WITH DISCLOSURES DEPENDENT. = 0.00386 WITH EXCHANGE DEPENDENT.

KENDALL'S Tau B = 0.07146. SIGNIFICANCE = 0.2363

KENDALL'S Tau C = 0.07146. SIGNIFICANCE = 0.2363

Gamma = 0.46000

SANTH'S D (ASYMMETRIC) = 0.02200 WITH DISCLOSURES DEPENDENT. = 0.2000 WITH EXCHANGE DEPENDENT.

SANTH'S D (SYMMETRIC) = 0.0449

ETA = 0.07146 WITH DISCLOSURES DEPENDENT. = 0.07147 WITH EXCHANGE DEPENDENT.

PEARSON'S R = 0.07146 SIGNIFICANCE = 0.2377

NUMBER OF MISSING OBSERVATIONS = 648
TRANSPACER REQUIRED... 100 BYTES
1 TRANSFORMATIONS
2 RECODE VALUES + LAG VARIABLES
0 IF/COMPUTE OPERATIONS

CPU TIME REQUIRED... 1.50 SECONDS

175 TASK NAME EXTENT OF BOARD APPROVAL OF AUDITOR CHANGES BY EXCHANGES
176 CROSSTABS VARIABLES-BOARDAPP(1,2),EXCHANGE(1,3)/
177 TABLES-BOARDAPP BY EXCHANGE/
178 STATISTICS ALL

***** "CROSSTABS" PROBLEM REQUIRES 24 BYTES WORKSPACE NOT INCLUDING VALUE LABELS *****

***** GIVEN WORKSPACE ALLOWS FOR 2985 LABELLED VALUES *****
### SPSS Batch System

**Extent of Board Approval of Auditor Changes by Exchanges**

*Creation Date: 03/16/81*

**Cross Tabulation**

#### Board Approval of Auditor Changes by Exchange Listing

<table>
<thead>
<tr>
<th>Exchange</th>
<th>Count</th>
<th>NYSE</th>
<th>AMEX</th>
<th>OTC</th>
<th>ROW</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BOARDAPP</td>
<td>4</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>NO BOARD APPEAL</td>
<td>1.0</td>
<td>1</td>
<td>14.3</td>
<td>1</td>
<td>85.7</td>
</tr>
<tr>
<td>1</td>
<td>0.1</td>
<td>1</td>
<td>4.3</td>
<td>1</td>
<td>26.6</td>
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<tr>
<td>2</td>
<td>0.0</td>
<td>1</td>
<td>10.0</td>
<td>1</td>
<td>15.7</td>
</tr>
<tr>
<td>BOARD APPROVED</td>
<td>18.5</td>
<td>1</td>
<td>46.8</td>
<td>1</td>
<td>31.9</td>
</tr>
</tbody>
</table>

3 out of 6 (.500) of the valid cells have expected cell frequency less than 5.0.

**Minimum Expected Cell Frequency**: 1.256

**Raw Chi Square**: 7.33690 with 2 degrees of freedom. **Significance**: 0.0231

**Cramer's V**: 0.33750

**Contingency Coefficient**: 0.33997

**Lambda (Symmetric)**: 0.0 with BOARDAPP dependent. **Significance**: 0.16129 with exchange dependent.

**Lambda (Asymmetric)**: 0.13750

**Uncertainty Coefficient (Symmetric)**: 0.19925 with BOARDAPP dependent. **Significance**: 0.07367 with exchange dependent.

**Uncertainty Coefficient (Asymmetric)**: 0.10757

**Kendall's TAU b**: -0.33915. **Significance**: 0.0047

**Kendall's TAU C**: -0.25652. **Significance**: 0.0047

**Somers's D (Asymmetric)**: -0.20260 with BOARDAPP dependent. **Significance**: 0.0047

**Somers's D (Symmetric)**: -0.23972

**Eta**: 0.17354 with BOARDAPP dependent. **Significance**: 0.0055 with exchange dependent.

**Pearson's R**: 0.34555 **Significance**: 0.0052

**Number of Missing Observations**: 694
SPSS BATCH SYSTEM
EXTENT OF BOARD APPROVAL OF AUDITOR CHANGES BY EXCHANGES
CPU TIME REQUIRED.. 1.06 SECONDS

179 *SELECT IF (EXCHANGE EQ 1 OR 2)
180 CROSSTABS VARIABLES=BOARDAPP(1,2), EXCHANGE(1,2)/
181 TABLES=BOARDAPP BY EXCHANGE/
182 STATISTICS ALL

***** "CROSSTABS" PROBLEM REQUIRES 96 BYTES WORKSPACE NOT INCLUDING VALUE LABELS *****
***** GIVEN WORKSPACE ALLOWS FOR 2985 LABELLED VALUES *****
SPSS BATCH SYSTEM
03/10/81 PAGE 81

EXHAUSTIVE APPROVAL OF AUDITOR CHANGES BY EXCHANGES
FILE NOBASE  (CREATION DATE = 03/10/81)

CROSSTABULATION OF BOARDAPPROVAL OF AUDITOR CHANGES BY EXCHANGE LISTING

<table>
<thead>
<tr>
<th>EXCHANGE</th>
<th>COUNT</th>
<th>ROW PT</th>
<th>INVERSE</th>
<th>AMEX</th>
<th>ROW TOTAL</th>
</tr>
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<tbody>
<tr>
<td>BOARDAPP</td>
<td>------</td>
<td>--------</td>
<td>---------</td>
<td>------</td>
<td>-----------</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>NO BOARD APPROVAL</td>
<td>0.0</td>
<td>1</td>
<td>100.0</td>
<td>1</td>
<td>3.0</td>
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<tr>
<td>1</td>
<td>0.0</td>
<td>1</td>
<td>4.3</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>0.0</td>
<td>1</td>
<td>3.0</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

| COLUMNS | TOTAL | 30.3 | 69.7 | 100.0 |

| 2 OUT OF 4 (.50%) OF THE VALID CELLS HAVE EXPECTED CELL FREQUENCY LESS THAN 5.0. |
|------------------|--------|------|-----|------|
| MINIMUM EXPECTED CELL FREQUENCY = 0.30 |
| CORRECTED CHI SQUARE = 0.0 WITH 1 DEGREE OF FREEDOM. SIGNIFICANCE = 1.0000 |
| RAW CHI SQUARE = 0.44817 WITH 1 DEGREE OF FREEDOM. SIGNIFICANCE = 0.5031 |
| PHI = 0.0.11574 |
| CONTINGENCY COEFFICIENT = 0.11574 |
| LAMBDA (ASYMMETRIC) = 0.0 WITH BOARDAPP DEPENDENT. = 0.0 WITH EXCHANGE DEPENDENT. |
| LAMBDA (SYMMETRIC) = 0.0 |
| UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.00207 WITH BOARDAPP DEPENDENT. = 0.01417 WITH EXCHANGE DEPENDENT. |
| UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.0275 |
| KENDALL'S TAU B = 0.11656. SIGNIFICANCE = 0.2548 |
| KENDALL'S TAU C = 0.03673. SIGNIFICANCE = 0.2548 |
| GACCA = -1.00000 |
| SOMER'S D (ASYMMETRIC) = -0.0434 WITH BOARDAPP DEPENDENT. = 0.31200 WITH EXCHANGE DEPENDENT. |
| SOMER'S D (SYMMETRIC) = -0.0763 |
| ETA = 0.11660 WITH BOARDAPP DEPENDENT. = 0.11657 WITH EXCHANGE DEPENDENT. |
| PEARSON'S R = 0.11656 SIGNIFICANCE = 0.2591 |

NUMBER OF MISSING OBSERVATIONS = 341
SPSS BATCH SYSTEM
EXTENT OF BOARD APPROVAL OF AUDITOR CHANGES BY EXCHANGES

TRANSPACE REQUIRED..  100 BYTES
1 TRANSFORMATIONS
0 ENCODE VALUES + LAG VARIABLES
7 IF/COMPUTE OPERATIONS

CPU TIME REQUIRED..  1.38 SECONDS

193 *SELECT IF
194 CROSSTABS
195 TABLES=BOARDAPP BY EXCHANGE/
196 STATISTICS ALL

***** "CROSSTABS" PROBLEM REQUIRES 24 BYTES WORKSPACE NOT INCLUDING VALUE LABELS *****

***** GIVEN WORKSPACE ALLOWS FOR 2805 LABELLED VALUES *****
**SPSS BATCH SYSTEM**

**EXTENT OF BOARD APPROVAL OF AUDITOR CHANGES BY EXCHANGES**

<table>
<thead>
<tr>
<th></th>
<th>COUNT</th>
<th>BOARD APPROVED</th>
<th>NO BOARD APPROVAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TOTAL</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
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<td>10</td>
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<td>8</td>
</tr>
<tr>
<td></td>
<td>31</td>
<td>32.3</td>
<td>67.7</td>
</tr>
</tbody>
</table>

2 OUT OF 6 (50.0%) OF THE VALID CELLS HAVE EXPECTED CELL FREQUENCY LESS THAN 5.0.

**MINIMUM EXPECTED CELL FREQUENCY** = 7.535

**CORRECTED CHI SQUARE** = 1.9482 WITH 1 DEGREE OF FREEDOM. **SIGNIFICANCE** = 0.1627

**CONTINGENCY COEFFICIENT** = 0.1226

**LAMBDA** (ASYMMETRIC) = 0.0  WITH BOARDAPP DEPENDENT.  = 0.0  WITH EXCHANGE DEPENDENT.

**LAMBDA (SYMMETRIC)** = 0.0

**UNCERTAINTY COEFFICIENT (ASYMMETRIC)** = 0.1751  WITH BOARDAPP DEPENDENT.  = 0.13665  WITH EXCHANGE DEPENDENT.

**UNCERTAINTY COEFFICIENT (SYMMETRIC)** = 0.15364

**KENDALL'S Tau B** = -0.33856. **SIGNIFICANCE** = 0.0329

**KENDALL'S Tau C** = -0.34574. **SIGNIFICANCE** = 0.0329

**GAMMA** = -1.00000

**SOMERS'D (ASYMMETRIC)** = -0.28571  WITH BOARDAPP DEPENDENT.  = -0.40000  WITH EXCHANGE DEPENDENT.

**SOMERS'D (SYMMETRIC)** = 0.33333

**ZTA** = 0.33856  WITH BOARDAPP DEPENDENT.  = 0.33860  WITH EXCHANGE DEPENDENT.

**PEARSON'S R** = -0.33856. **SIGNIFICANCE** = 0.0314

**NUMBER OF MISSING OBSERVATIONS** = 487
**SPSS BATCH SYSTEM**

**EXTENT OF BOARD APPROVAL OF AUDITORS CHANGES BY EXCHANGES**

**TRANSFORMATIONS REQUIRED:**
- 100 BYTES
- 1 TRANFORMATIONS
- 0 RECODE VALUES * LAG VARIABLES
- 1 IF/COMPUTE OPERATIONS

**CPU TIME REQUIRED:**
- 1.45 SECONDS

```
107 *SELECT 1F
148 CROSSTABS VARIABLES=BOARDAPP(1,2),EXCHANGE(0,3)/
189 TABLES=BOARDAPP BY EXCHANGE/
190 STATISTICS ALL
```

***** "CROSSTABS" PROBLEM REQUIRES 76 BYTES WORKSPACE NOT INCLUDING VALUE LABELS *****

***** GIVEN WORKSPACE ALLOWS FOR 2905 LABELLED VALUES *****
SPSS BATCH SYSTEM

EXCHANGE

COUNT
ROW PCT IAMEX OTC ROW
ALT PCT I TOTAL

TUM PCT I 2 1 3 1

BOARDAPP 

1 1 1 6 1 7

TUMBOARDAPPROV 1 14.1 i 85.7 i 15.9
1 4.3 i 20.6 i
1 2.3 i 13.6 i

TOTAL 22 1 15 1 37

BOARDAPPROVED 1 59.5 1 40.5 1 84.1
1 95.7 1 71.4 1
1 59.0 1 34.1 1

TOTAL 23 1 29 1 46

2 OUT OF 4 (50.0%) OF THE VALID CELLS HAVE EXPECTED CELL FREQUENCY LESS THAN 5.0.

MAXIMUM EXPECTED CELL FREQUENCY = 1.391

CHI SQUARE = 3.17449 WITH 1 DEGREE OF FREEDOM. SIGNIFICANCE = 0.0746

RAW CHI SQUARE = 4.91479 WITH 1 DEGREE OF FREEDOM. SIGNIFICANCE = 0.0262

PHI = 0.31890

CONTINGENCY COEFFICIENT = 0.31406

LAMBDA (ASYMMETRIC) = 0.0 WITH BOARDAPPROVED DEPENDENT.

LAMBDA (SYMMETRIC) = 0.17857

UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.13946 WITH BOARDAPPROVED DEPENDENT.

UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.10464

KENDALL'S TAU B = -0.33060. SIGNIFICANCE = 0.0150

RANKS' TAU B = -0.24174. SIGNIFICANCE = 0.0150

GAMMA = -0.79592

SOREN'S D (ASYMMETRIC) = -0.24224 WITH BOARDAPPROVED DEPENDENT.

SOREN'S D (SYMMETRIC) = -0.33060

ETA = 0.31890 WITH BOARDAPPROVED DEPENDENT.

PEARSON'S R = 0.33060 SIGNIFICANCE = 0.0141

NUMBER OF MISSING OBSERVATIONS = 560
SRSS BATCH SYSTEM
EXTENT OF BOARD APPROVAL OF AUDITOR CHANGES BY EXCHANGES

TRANSPACE REQUIRED... 100 BYTES
7 TRANSFORMATIONS
0 RECODE VALUES + LAG VARIABLES
7 IF/COMPUTE OPERATIONS

CPU TIME REQUIRED... 1.55 SECONDS

191 *RECODE EXCHANGE [1:2]
192 CROSSTABS VARIABLES=BOARDAPP [1,2], EXCHANGE [2,3]
193 TABLES=BOARDAPP BY EXCHANGE/
194 STATISTICS ALL

***** "CROSSTABS" PROBLEM REQUIRES 16 BYTES WORKSPACE NOT INCLUDING VALUE LABELS *****

***** GIVEN WORKSPACE ALLOWS FOR 2995 LABELLED VALUES *****
### Extent of Board Approval of Auditor Changes by Exchanges

#### File: `board.approval.of.auditor.changes.by.exchanges`

#### Cross Tabulation of: Board Approval of Auditor Changes by Exchange Listing

<table>
<thead>
<tr>
<th>Exchange</th>
<th>ROW PUT</th>
<th>LAMEX</th>
<th>OTC</th>
<th>BOW</th>
<th>TOTAL</th>
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<tr>
<td></td>
<td>1</td>
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</tr>
<tr>
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<td>3</td>
<td>1</td>
<td>7</td>
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<td>NC BOARD APPROV</td>
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<td>85.7</td>
<td>1</td>
<td>13.0</td>
</tr>
<tr>
<td>I</td>
<td>3.0</td>
<td>1</td>
<td>20.6</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>19.9</td>
<td>1</td>
<td>11.1</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

| BOARD APPROVED | 66.1 | 1 | 31.9 | 1 | 97.0 |
| I           | 97.0  | 1 | 71.4 | 1 |       |
| I           | 59.3  | 1 | 27.0 | 1 |       |

| COLUMN | 33     | 27   | 54  |
| TOTAL  | 61.1   | 38.9 | 100.0 |

2 out of 4 (50.0%) of the valid cells have expected cell frequency less than 5.0.

**Minimum Expected Cell Frequency = 2.722**

**Corrected Chi Square = 5.32901 with 1 degree of freedom, significance = 0.0219**

**RHO Chi Square = 7.42013 with 1 degree of freedom, significance = 0.0064**

**Phi = 0.37069**

**Continuity Coefficient = 0.34758**

**Lambda (Asymetric) = 0.0 with BOARDAPP dependent.**

**Uncertainty Coefficient (Asymetric) = 0.38159 with BOARDAPP dependent.**

**Kendall's Tau B = -0.17093. Significance = 0.0035**

**Gamma = -0.85597**

**Somers' D (Asymetric) = 0.25541 with BOARDAPP dependent.**

**Somers' D (Symetric) = -0.34644**

**Eta = 0.37069 with BOARDAPP dependent.**

**Pearson's r = -0.37069 significance = 0.0029**

**Number of missing observations = 694**
EXTENT OF BOARD APPROVAL OF AUDITOR CHANGES BY EXCHANGES

TRANSPARENCY REQUIRED.. 100 BYTES
2 TRANSFORMATIONS
2 RECODE VALUES + LAG VARIABLES
0 IF/COMPUTE OPERATIONS

CPU TIME REQUIRED.. 1.48 SECONDS

195 TASK NAME REASON GIVEN FOR AUDITOR CHANGES BY EXCHANGES
196 CROSSTABS VARIABLES=REASON (1,2),EXCHANGE(1,3)/
197 TABLES=REASON BY EXCHANGE/
198 STATISTICS ALL

***** "CROSSTABS" PROBLEM REQUIRES 24 BYTES WORKSPACE NOT INCLUDING VALUE LABELS *****

***** GIVEN WORKSPACE ALLOWS FOR 2985 LABELLED VALUES *****
**SPSS BATCH SYSTEM**
**REASON GIVEN FOR AUDITOR CHANGE BY EXCHANGES**
**FILE: ROHAME (CREATION DATE = 03/10/81)**

---

**CROSSTABULATION OF REASON GIVEN FOR AUDITOR CHANGE? BY EXCHANGE LISTING**

<table>
<thead>
<tr>
<th>EXCHANGE</th>
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<th>AZEX</th>
<th>GC8</th>
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</tr>
</tbody>
</table>

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1 OUT OF 6 (16.74) OF THE VALID CELLS HAVE EXPECTED CELL FREQUENCY LESS THAN 5.0.

**MAXIMUM EXPECTED CELL FREQUENCY = 4.239**
**BAS CHI SQUARE = 1.42412 WITH 2 DEGREES OF FREEDOM. SIGNIFICANCE = 0.4908**
**Cramer's V = 0.16249**
**CONTINUITY COEFFICIENT = 0.16030**

**LAMBDA (ASYMTRIC) = 0.09348 WITH REASON DEPENDENT. = 0.09677 WITH EXCHANGE DEPENDENT.**

**LAMBDA (SYMMETRIC) = 0.07602**
**UNCERTAINTY COEFFICIENT (ASYMTRIC) = 0.01935 WITH REASON DEPENDENT. = 0.02196 WITH EXCHANGE DEPENDENT.**

**UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.01530**
**KENDALL'S TAU B = 0.12249. SIGNIFICANCE = 0.1749**
**KENDALL'S TAU C = 0.12569. SIGNIFICANCE = 0.1749**
**GAMMA = 0.21569**
**SOMERS'S D (ASYMTRIC) = 0.10726 WITH REASON DEPENDENT. = 0.10736 WITH EXCHANGE DEPENDENT.**

**SOMERS'S D (SYMMETRIC) = 0.12681**
**ETA = 0.14223 WITH REASON DEPENDENT. = 0.11079 WITH EXCHANGE DEPENDENT.**
**PEARSON'S R = 0.11879 SIGNIFICANCE = 0.1961**

**NUMBER OF MISSING OBSERVATIONS = 694**
SPSS BATCH SYSTEM
REASON GIVEN FOR AUDITORS CHANGE BY EXCHANGES
CPU TIME REQUIRED.. 1.14 SECONDS

199 *SELECT IF (EXCHANGE EQ 1 OR 2)
200 Crosstabs VARIABLES=REASON(1,2),EXCHANGE(1,2)/
201 TABLES=REASON BY EXCHANGE/
202 STATISTICS ALL

***** "CROSSTABS" PROBLEM REQUIRES 16 BYTES WORKSPACE NOT INCLUDING VALUE LABELS *****
***** GIVEN WORKSPACE ALLOWS FOR 2985 LABELED VALUES *****
SPSS BATCH SYSTEM
REASON GIVEN FOR AUDITOR CHARGE BY EXCHANGES
FILE: NOMAME (CREATION DATE: 03/10/81)

**CROSS TABLES OF REASON GIVEN FOR AUDITOR CHARGE BY EXCHANGE LISTING**

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<tr>
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<td>31.3</td>
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</table>

1 OUT OF 4 (25.0%) OF THE VALID CELLS HAVE EXPECTED CELL FREQUENCY LESS THAN 5.0.

MINIMUM EXPECTED CELL FREQUENCY = 3.636

CORRECTED CHI SQUARE = 0.0 WITH 1 DEGREE OF FREEDOM, SIGNIFICANCE = 0.0000

PHI = 0.04984

CONTINGENCY COEFFICIENT = 0.04978

LAMDA (ASYMETRIC) = 0.0 WITH REASON DEPENDENT. = 0.0 WITH EXCHANGE DEPENDENT.

LAMDA (SYMMETRIC) = 0.0

UNCERTAINTY COEFFICIENT (ASYMETRIC) = 0.04984 WITH REASON DEPENDENT. = 0.00201 WITH EXCHANGE DEPENDENT.

UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.00201

KENDALL'S TAU-U = -0.00284. SIGNIFICANCE = 0.3869

KENDALL'S TAU-C = -0.00468. SIGNIFICANCE = 0.3006

GAMMA = -0.11111

SOMERS'S D (ASYMETRIC) = -0.05527 WITH REASON DEPENDENT. = -0.04762 WITH EXCHANGE DEPENDENT.

SOMERS'S D (SYMMETRIC) = -0.04762

ETA = 0.04984 WITH REASON DEPENDENT. = 0.04984 WITH EXCHANGE DEPENDENT.

PEARSON'S R = -0.04984 SIGNIFICANCE = 0.3915

NUMBER OF MISSING OBSERVATIONS = 344
SPSS MATCH SISTEM
REASON GIVEN FOR AUDITOR CHANGE BY EXCHANGES

TRANSFORM REQUIRED.. 100 BYTES
7 TRANSFORMATIONS
0 RECODE VALUES + LAG VARIABLES
7 IF/COMPUTE OPERATIONS

CPU TIME REQUIRED.. 1.51 SECONDS

201 *SELECT IF [EXCHANGE EQ 1 OR 3]
204 CROSSTABS VARIABLES=REASON(1,2),EXCHANGE(1,3)/
205 TABLES=REASON BY EXCHANGE/
206 STATISTICS ALL

***** "CROSSTABS" PROBLEM REQUIRES 24 BYTES WORKSPACE NOT INCLUDING VALUE LABELS *****

***** GIVEN WORKSPACE ALLOWS FOR 2985 LABELED VALUES *****
**SPSS BATH SYSTEM**

**REASON GIVEN FOR AUDITOR CHANGE BY EXCHANGES**

**FILE NAME: (CREATION DATE = 03/10/81)**

---

**CROSS TABULATION OF REASON GIVEN FOR AUDITOR CHANGE BY EXCHANGE LISTING**

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<tr>
<th>EXCHANGE</th>
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<td>6 2</td>
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<td>4 1</td>
<td>11</td>
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<td>15</td>
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<td>REASON NOT GIVEN</td>
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<td>6 2</td>
<td>10</td>
<td>1</td>
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<td>4 1</td>
<td>11</td>
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<td>15</td>
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<td>6 2</td>
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<td>COLUMN</td>
<td>10</td>
<td>21</td>
<td>31</td>
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<td>100.0</td>
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</tbody>
</table>

1 OUT OF 4 (25.0%) OF THE VALID CELLS HAVE EXPECTED CELL FREQUENCY LESS THAN 5.0.

**MINIMUM EXPECTED CELL FREQUENCY = 4.039**

**CORRECTED CHI SQUARE = 0.00744 WITH 1 DEGREE OF FREedom. SIGNIFICANCE = 0.7945**

**RAW CHI SQUARE = 0.45579 WITH 1 DEGREE OF FREedom. SIGNIFICANCE = 0.5190**

**PHI = 0.11504**

**CONTINGENCY COEFFICIENT = 0.11504**

**LAMBDA (ASYMMETRIC) = 0.36667 WITH REASON DEPENDENT.**

**LAMBDA (SYMMETRIC) = 0.00000**

**UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.00074 WITH REASON DEPENDENT.**

**UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.01021**

**KENDALL'S Tau B = 0.11561. SIGNIFICANCE = 0.2629**

**KENDALL'S Tau C = 0.10822. SIGNIFICANCE = 0.2629**

**GAMMA = 0.24528**

**SOERNS'S D (ASYMMETRIC) = 0.13261 WITH REASON DEPENDENT.**

**SOERNS'S D (SYMMETRIC) = 0.11561**

**ETA = 0.11561 WITH REASON DEPENDENT.**

**PEARSON'S R = 0.11561 SIGNIFICANCE = 0.2675**

**NUMBER OF MISSING OBSERVATIONS = 487**
SPSS BATCH SYSTEM
REASON GIVEN FOR AUDITOR CHANGE BY EXCHANGES

TRANSPACE REQUIRED... 100 BYTES
1 TRANSFORMATIONS
0 RECODE VALUES + LAG VARIABLES
7 IF/COMPUTE OPERATIONS

CPU TIME REQUIRED... 1.55 SECONDS

207 *SELECT IF [EXCHANGE = 0 2 OR 3]
200 Crosstabs VARIABLES = REASON{1,2}, EXCHANGE{2,3}/
205 Tables=REASON BY EXCHANGE/
210 STATISTICS ALL

***** "CROSSTABS" PROBLEM REQUIRES 16 BYTES WORKSPACE NOT INCLUDING VALUE LABELS *****

***** GIVEN WORKSPACE ALLOWS FOR 2985 LABELLED VALUES *****
### Cross Tabulation of Reason Given for Auditor Change by Exchange Listing

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<th>EXCHANGE</th>
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<th>INDEX</th>
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<td><strong>TOTAL</strong></td>
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<td>21</td>
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</table>

**Corrected Chi Square = 0.76119 with 1 degree of freedom. Significance = 0.3830**

**Raw Chi Square = 1.36564 with 1 degree of freedom. Significance = 0.2391**

**Phi = 0.17746**

**Contingency Coefficient = 0.17747**

**Lambda (Asymmetric) = 0.05243 with reason dependent. = 0.14286 with exchange dependent.**

**Lambda (Symmetric) = 0.10000**

**Uncertainty Coefficient (Asymmetric) = 0.02312 with reason dependent. = 0.02285 with exchange dependent.**

**Uncertainty Coefficient (Symmetric) = 0.02290**

**Kendall's Tau C = 0.17562. Significance = 0.1223**

**Gamma = 0.34694**

**Somers's D (Asymmetric) = 0.17598 with reason dependent. = 0.17945 with exchange dependent.**

**Somers's D (Symmetric) = 0.17745**

**Eta = 0.17746 with reason dependent. = 0.17746 with exchange dependent.**

**Pearson's R = 0.17746 Significance = 0.1246**

**Number of Missing Observations = 560**
SPSS BATCH SYSTEM
BEHAVIOR GIVEN FOR AUDITOR CHANGE BY EXCHANGES

TRANSFORMATIONS REQUIRED.  160 BYTES
1 TRANSFORMATIONS
0 REGRESSION VALUES * LAG VARIABLES
7 IF/COMPUTE OPERATIONS

CPU TIME REQUIRED.  1.69 SECONDS

211 *RECODE  EXCHANGE (1,2)
212 Crosstabs  VARIABLES=REASON (1,2), EXCHANGE (2,3)/
213  TABLES=REASON BY EXCHANGE/
214 Statistics  ALL

***** "CROSSTABS" PROBLEM REQUIRES  16 BYTES WORKSPACE NOT INCLUDING VALUE LABELS *****

***** GIVEN WORKSPACE ALLOWS FOR 2005 LABELLED VALUES *****
**SPSS BATCH SYSTEM**
**REASON GIVEN FOR AUDITOR CHANGE BY EXCHANGES**
**FILE NAME** (CREATION DATE = 03/10/81)

**CROSS TABULATION OF**
**REASON GIVEN FOR AUDITOR CHANGE?**
**BY EXCHANGE LISTING**

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<td></td>
<td>22.2</td>
<td>13.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COLUMNS</td>
<td>33</td>
<td>21</td>
<td>54</td>
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<tr>
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<td>61.1</td>
<td>38.9</td>
<td>100.0</td>
<td></td>
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</tr>
</tbody>
</table>

**CORRECTED CHI SQUARE** = 0.77111 WITH 1 DEGREE OF FREEDOM.
**SIGNIFICANCE** = 0.3999

**RAW CHI SQUARE** = 1.36653 WITH 1 DEGREE OF FREEDOM.
**SIGNIFICANCE** = 0.2459

PHI = 0.15791
CONTINGENCY COEFFICIENT = 0.15598
LAMBDA (ASYMMETRIC) = 0.04389 WITH REASON DEPENDENT.
LAMBDA (SYMMETRIC) = 0.22273
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.01824 WITH REASON DEPENDENT.
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.01843
KENDALL'S TAU B = 0.15791, SIGNIFICANCE = 0.1252
KENDALL'S TAU C = 0.15226, SIGNIFICANCE = 0.1252
GAMMA = 0.31624
SOBER'S D (ASYMMETRIC) = 0.14017 WITH REASON DEPENDENT.
SOBER'S D (SYMMETRIC) = 0.15799
ETA = 0.15791 WITH REASON DEPENDENT.
PEARSON'S A = 0.15791 SIGNIFICANCE = 0.1271

**NUMBER OF MISSING OBSERVATIONS** = 694
SPSS BATCH SYSTEM

REASON GIVEN FOR AUDITOR CHANGE BY EXCHANGES

TRANSFORM REQUIRED.. 100 BYTES
I TRANSFORMATIONS
2 RECODE VALUES + LAG VARIABLES
0 IF/CONFUSE OPERATIONS

CPU TIME REQUIRED.. 1.54 SECONDS

215 TASK NAME ALL COMPANIES
216 CROSSTABS VARIABLES=CLEAUDIT(1,2),NEAUDIT(1,2)/
217 TABLES=OLDAudit BY NEAUDIT/
218 STATISTICS ALL

****"CROSSTABS" PROBLEM REQUIRES 16 BYTES WORKSPACE NOT INCLUDING VALUE LABELS ****

**** GIVEN WORKSPACE ALLOWS FOR 2995 LABELLED VALUES ****
**CROSSTABULATION OF**

**OLD AUDIT PREDCESSOR AUDITOR**

**BY NEW AUDIT SUCCESSOR AUDITOR**

<table>
<thead>
<tr>
<th></th>
<th>Row 1</th>
<th>Row 2</th>
<th>Row 3</th>
<th>Total</th>
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<tbody>
<tr>
<td>Column 1</td>
<td>1 I</td>
<td>1</td>
<td>2</td>
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<tr>
<td>Old National</td>
<td>1 I</td>
<td>1</td>
<td>2</td>
<td>4</td>
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<tr>
<td>Col % of Firm</td>
<td>71.3%</td>
<td>4.7%</td>
<td>5.3%</td>
<td>81.3%</td>
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<td>Col % of Firm</td>
<td>69.8%</td>
<td>4.8%</td>
<td>5.2%</td>
<td>81.3%</td>
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<tr>
<td>Col % of Firm</td>
<td>71.5%</td>
<td>16.7%</td>
<td></td>
<td>88.2%</td>
</tr>
<tr>
<td>National Firm</td>
<td>1 I</td>
<td>1</td>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>
| Col % of Firm    | 52.7% | 12.4% | 34.9% | 100.0%
| Col % of Firm    | 51.2% | 17.3% | 31.5% | 100.0%
| Col % of Firm    | 54.2% | 15.2% |       | 100.0%
| Non-Nat Firm     | 1 I   | 1     | 2     | 4     |
| Col % of Firm    | 34.6% | 14.7% | 41.9% | 100.0%
| Col % of Firm    | 34.6% | 14.7% | 41.9% | 100.0%
| Col % of Firm    | 41.0% | 19.8% |       | 100.0%
| Total            | 471   | 271   | 762   | 1000  |

**CORRECTED CHI SQUARE = 26.46765 WITH 1 DEGREE OF FREEDOM, SIGNIFICANCE = 0.0000**

**RAW CHI SQUARE = 27.28997 WITH 1 DEGREE OF FREEDOM, SIGNIFICANCE = 0.0000**

**PHI = 0.19170**

**CONTINGENCY COEFFICIENT = 0.10826**

**LAMDA (ASYMMETRIC) = 0.07419 WITH OLD AUDIT DEPENDENT.**

**LAMDA (SYMMETRIC) = 0.03959**

**UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.035459 WITH OLD AUDIT DEPENDENT.**

**UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.02702**

**KENDALL'S TAU B = 0.19170. SIGNIFICANCE = 0.0000**

**GAMMA = 0.18273**

**SOMERS' D (ASYMMETRIC) = 0.19636 WITH OLD AUDIT DEPENDENT.**

**SOMERS' D (SYMMETRIC) = 0.19165**

**ETA = 0.19170 WITH OLD AUDIT DEPENDENT.**

**PEARSON'S R = 0.19170 SIGNIFICANCE = 0.0000**

**NUMBER OF MISSING OBSERVATIONS = 6**
CPU TIME REQUIRED... 1.09 SECONDS

219 *SELECT      (EXCHANGE EQ 1)
220 TASK NAME    NYSE
221 CROSSTABS    VARIABLES=OLDAUDIT(1,2),NEWAUDIT(1,2)/
222            TABLES=OLDAUDIT BY NEWAUDIT/
223 STATISTICS   ALL

***** "CROSSTABS" PROBLEM REQUIRES 16 BYTES WORKSPACE NOT INCLUDING VALUE LABELS *****

***** GIVEN WORKSPACE ALLOWS FOR 2965 LABELLED VALUES *****
### SPSS BATCH SYSTEM

**FILE** MONA (CREATION DATE = 03/10/81)

#### CROSSTABULATION OF OLDAUDIT PREDECESSOR AUDITOR BY NEWAUDIT SUCCESSOR AUDITOR

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<td>NATIONAL FIRM</td>
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<td>I 95.5 I 4.5 I 76.4</td>
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<td>78.4</td>
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<td>I</td>
<td>72.9</td>
<td>3.5</td>
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<tr>
<td>NON-NATL FIRM</td>
<td></td>
<td>I 85.3 I 14.7 I 23.6</td>
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<td>I</td>
<td>21.6</td>
<td>50.0</td>
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<tr>
<td></td>
<td>I</td>
<td>20.1</td>
<td>3.5</td>
</tr>
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</table>

| COLUMNS        | 1 10 140 | TOTAL        | 93.1    |

1 OUT OF 4 (25.0%) OF THE VALID CELLS HAVE EXPECTED CELL FREQUENCY LESS THAN 5.0.

**MINIMUM EXPECTED CELL FREQUENCY = 2.361**

**CORRECTED CHI SQUARE = 2.74760 WITH 1 DEGREE OF FREedom. SIGNIFICANCE = 0.0987**

**RAW CHI SQUARE = 4.49090 WITH 1 DEGREE OF FREEDOM. SIGNIFICANCE = 0.0417**

**PHI = 0.16974**

**CONTINGENCY COEFFICIENT = 0.16732**

**LAMBDAS (ASYMMETRIC) = 0.0** WITH OLDAUDIT DEPENDENT. = 0.0 WITH NEWAUDIT DEPENDENT.

**LAMBDAS (SYMMETRIC) = 0.0**

**UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.22261** WITH OLDAUDIT DEPENDENT. = 0.04900 WITH NEWAUDIT DEPENDENT.

**UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.00534**

**KENDALL'S TAU B = 0.16974, SIGNIFICANCE = 0.0212**

**KENDALL'S TAU C = 0.07300, SIGNIFICANCE = 0.0212**

**GAMMA = 0.16974**

**SOMER'S D (ASYMMETRIC) = 0.28358** WITH OLDAUDIT DEPENDENT. = 0.10160 WITH NEWAUDIT DEPENDENT.

**SOMER'S D (SYMMETRIC) = 0.14961**

**ITA = 0.16974 WITH OLDAUDIT DEPENDENT. = 0.16974 WITH NEWAUDIT DEPENDENT.**

**PEARSON'S R = 0.16974 SIGNIFICANCE = 0.0210**
**SPSS BATCH SYSTEM**

**BYTE**

**TRANSPACE REQUIRED.. 100 BYTES**

1 TRANSFORMATIONS
0 REMOVE VALUES + LAG VARIABLES
3 IF/COMPUTE OPERATIONS

**CPU TIME REQUIRED.. 1.23 SECONDS**

```
224 *SELECT (EXCHANGE EQ 2)
225 TASK NAME AMEX
226 CROSSTABS VARIABLES=CLDAudit{1,2};R2Audit{1,2}/
227 TABLES=CLDAudit BY R2Audit/
228 STATISTICS ALL
```

***** "CROSSTABS" PROBLEM REQUIRES 16 BYTES WORKSPACE NOT INCLUDING VALUE LABELS *****

***** GIVEN WORKSPACE ALLOWS FOR 2985 LABELLED VALUES *****
<table>
<thead>
<tr>
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<th>140</th>
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<th>239</th>
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<tr>
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<td>63.6</td>
<td>30.6</td>
<td>100.0</td>
</tr>
</tbody>
</table>

**CORRECTED CHI SQUARE** = 0.00000 WITH 1 DEGREE OF FREEDOM.  **SIGNIFICANCE** = 0.9949

**RAW CHI SQUARE** = 0.02177 WITH 1 DEGREE OF FREEDOM.  **SIGNIFICANCE** = 0.8375

**PHI** = 0.01017

**CONTINGENCY COEFFICIENT** = 0.01017

**LAMBDA (ASYMPTOTIC)** = 0.0 WITH OLD AUDIT DEPENDENT.

**LAMBDA (SYMMETRIC)** = 0.0 WITH NEW AUDIT DEPENDENT.

**UNIVERSITY COEFFICIENT (ASYMPTOTIC)** = 0.00000 WITH OLD AUDIT DEPENDENT.

**UNCERTAINTY COEFFICIENT (ASYMPTOTIC)** = 0.00000 WITH NEW AUDIT DEPENDENT.

**KENDALL’S TAU U** = 0.01017,  **SIGNIFICANCE** = 0.4389

**KENDALL’S TAU C** = 0.00907,  **SIGNIFICANCE** = 0.4389

**SPEARMAN’S R** (ASYMPTOTIC) = 0.021771 WITH OLD AUDIT DEPENDENT.

**SPEARMAN’S R** (SYMMETRIC) = 0.021771 WITH NEW AUDIT DEPENDENT.

**ETA** = 0.01016 WITH OLD AUDIT DEPENDENT,  **SIGNIFICANCE** = 0.01016

**PEARSON’S R** = 0.01017,  **SIGNIFICANCE** = 0.4399
SPSS MATCH FILE

TRANSPACE REQUIRED.. 100 BYTES
1 TRANSFORMATIONS
0 RECODE VALUES * LAG VARIABLES
2 IF/COMPUTE OPERATIONS

CPU TIME REQUIRED.. 1.30 SECONDS

229 *SELECY (EXCHANGE EQ 3)
230 TASK NAME OGC
231 CROSSTAB VARIABLES=OLDAUDIT(1,2),NEWAUDIT(1,2)/
232 TABLES=OLDAUDIT BY NEWAUDIT/
233 STATISTICS ALL

***** "CROSSTAB" PROBLEM REQUIRES 16 BYTES WORKSPACE NOT INCLUDING VALUE LABELS *****

***** GIVEN WORKSPACE ALLOWS FOR 2985 LABELED VALUES *****
NEWAUDIT
COUNT
ROW PCT NATIONAL NON-NATL NON
COL PCT FIRM FIRM TOTAL
TUT PCT I 1 1 2 1
OLDAUDIT -----------1----------I
1 I 103 1 76 1 179
NATIONAL FIRM I 57.5 I 42.5 I 48.6
I 56.2 I 39.8 I
I 28.0 I 20.7 I
I 123 1 53 1 176
2 I 74 1 115 1 189
NON-NATL FIRM I 39.2 I 60.8 I 51.4
I 41.0 I 59.2 I
I 20.1 I 31.3 I
I 104 1 146 1 189
COLUMN 177 191 368
TOTAL 46.1 51.9 100.0

CORRECTED CHI SQUARE = 11.72650 WITH 1 DEGREE OF FREEDOM. SIGNIFICANCE = 0.0004
RAW CHI SQUARE = 12.45220 WITH 1 DEGREE OF FREEDOM. SIGNIFICANCE = 0.0004

PHI = 0.18395
CONTINGENCY COEFFICIENT = 0.18091
LAMDA (ASYMMETRIC) = 0.16201 WITH OLD AUDIT DEPENDENT. = 0.15254 WITH NEW AUDIT DEPENDENT.
LAMDA (SYMMETRIC) = 0.15730
UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.02456 WITH OLD AUDIT DEPENDENT. = 0.02457 WITH NEW AUDIT DEPENDENT.
UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.02456
KENDALL'S TAU B = 0.18395. SIGNIFICANCE = 0.0002
KENDALL'S TAU U = 0.18375. SIGNIFICANCE = 0.0002
GAMMA = 0.15612
SOMER'S D (ASYMMETRIC) = 0.18402 WITH OLD AUDIT DEPENDENT. = 0.18399 WITH NEW AUDIT DEPENDENT.
SOMER'S D (SYMMETRIC) = 0.16345
ETA = 0.18395 WITH OLD AUDIT DEPENDENT. = 0.18395 WITH NEW AUDIT DEPENDENT.
PEARSON'S R = 0.18395 SIGNIFICANCE = 0.0002

NUMBER OF MISSING OBSERVATIONS = 6
**SPSS BATCH SITER**

**CPU TIME REQUIRED:** 1.36 SECONDS

```
234 *SELECT
235 TASK NAME
236 CROSSTABS
237 STATISTICS

***** "CROSSTABS" PROBLEM REQUIRES 16 BYTES WORKSPACE NOT INCLUDING VALUE LABELS *****

***** GIVEN WORKSPACE ALLOWS FOR 2965 LABELLED VALUES *****
```
**SPSS BATCH SYSTEM**  
**COMBINED WISE AND ARMS**  
**FILE: HOMASE (CREATION DATE = 03/10/81)**

---

**CROSS TABULATION OF OLD AUDIT PREDICTOR AUDITOR BY NEW AUDIT SUCCESSOR AUDITOR**

---

**NEW AUDIT**

<table>
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<tr>
<th></th>
<th>OLD AUDIT</th>
<th>NATIONAL</th>
<th>NON-MULT</th>
<th>ROW</th>
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</thead>
<tbody>
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<td></td>
<td>ROW PCT</td>
<td>IN I</td>
<td>IN I</td>
<td>PCT</td>
</tr>
<tr>
<td></td>
<td>COL PCT</td>
<td>FIRM I</td>
<td>FIRM I</td>
<td>TOT</td>
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<tr>
<td></td>
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<td>205</td>
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**COLUMN**

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<td>TOTAL</td>
<td>78.6</td>
<td>21.4</td>
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</table>

**CORRECTED CHI SQUARE** = 2.24287 WITH 1 DEGREE OF FREEDOM. SIGNIFICANCE = 0.1330

**RAW CHI SQUARE** = 2.77120 WITH 1 DEGREE OF FREEDOM. SIGNIFICANCE = 0.0991

**PHI** = 0.08527

**CONTINGENCY COEFFICIENT** = 0.08496

**LAMBDA ( ASYMMETRIC) = 0.0** WITH OLD AUDIT DEPENDENT. = 0.0 WITH NEW AUDIT DEPENDENT.

**LAMBDA (SYMMETRIC) = 0.0**

**UNCERTAINTY COEFFICIENT (ASYMMETRIC) = 0.00563** WITH OLD AUDIT DEPENDENT. = 0.00683 WITH NEW AUDIT DEPENDENT.

**UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.00617**

**KENDALL'S TAU U** = 0.08. SIGNIFICANCE = 0.0498

**KENDALL'S TAU C** = 0.08527. SIGNIFICANCE = 0.0498

**GAMMA** = 0.21123

**SOMERS'S D (ASYMMETRIC) = 0.09720** WITH OLD AUDIT DEPENDENT. = 0.07470 WITH NEW AUDIT DEPENDENT.

**SOMERS'S D (SYMMETRIC) = 0.20454**

**ETSI = 0.08527** WITH OLD AUDIT DEPENDENT. = 0.08527 WITH NEW AUDIT DEPENDENT.

**PEARSON'S R = 0.08527** SIGNIFICANCE = 0.0498
TRANSFILE REQUIRED.. 100 BYTES
1 TRANSFORMATIONS
0 DECODE VALUES + LAG VARIABLES
7 IT/COMPUTE OPERATIONS

CPU TIME REQUIRED.. 1.62 SECONDS

240 TASK NAME 240 CROSSTABS
241

******** "CROSSTABS" PROBLEM REQUIRES 40 BYTES WORKSPACE NOT INCLUDING VALUE LABELS ******

****** GIVEN WORKSPACE ALLOWS FOR 2984 LABELED VALUES ******
### Table: Cross Tabulation of Auditor-Fian Agree as to Disagreements

<table>
<thead>
<tr>
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<tr>
<td><strong>Disagree</strong></td>
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<td>No</td>
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<td>1 20.4</td>
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**Count:**
- 1
- 2

**Column:**
- 1
- 1
SPSS BATCH SYSTEM
03/10/81

ALL COMPANIES: EXTENT OF AGREEMENT AS TO DISAGREEMENTS

CPU TIME REQUIRED.. 1.17 SECONDS

242 *SELECT IF (EXCHANGE EQ 1)
243 TASK NAME ALL COMPANIES: EXTENT OF AGREEMENT AS TO DISAGREEMENTS
244 CROSSTABS VARIABLES=DISAGREE(1,2),YEAR(4,8),
245 TABLES=DISAGREE BY YEAR/

***** "CROSSTABS" PROBLEM REQUIRES 40 BYTES WORKSPACE NOT INCLUDING VALUE LABELS *****

***** GIVEN WORKSPACE ALLOWS FOR 2984 LABELLED VALUES *****
**FILE: NAME**

**CREATION DATE** = 03/10/81

---

**CROSS TABULATION OF**

**DISAGREE AUDITOR-FIRM AGREE AS TO DISAGREEMENTS**

**BY YEAR YEAR OF REPORT**

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**SUMMARY**

- **COUNT**: Total number of observations
- **SOW**: Sum of observations
- **1974**: Year 1974
- **1975**: Year 1975
- **1976**: Year 1976
- **1977**: Year 1977
- **1978**: Year 1978
- **TOTAL**: Total count of agreements and disagreements
SPSS BATCH SYSTEM

NYSE COMPANIES: EXTENT OF AGREEMENT AS TO DISAGREEMENTS

TRANSFORMS REQUIRED: 100 BYTES
1 TRANFORMATIONS
0 RECODE VALUES + LAG VARIABLES
1 IF/COMPUTE OPERATIONS

CPU TIME REQUIRED: 1.24 SECONDS

```plaintext
246 *SELECT IF
247  TASK NAME  (EXCHANGE EQ 2)
248  Crosstabs  NYSE COMPANIES: EXTENT OF AGREEMENT AS TO DISAGREEMENTS
249
250 VARIABLES=DISAGREE(1,2),YEAR(4,9)/
251 TABLES=DISAGREE BY YEAR/
```

***** "CROSSTABS" PROBLEM REQUIRES 40 BYTES WORKSPACE NOT INCLUDING VALUE LABELS *****

***** GIVEN WORKSPACE ALLOWS FOR 2984 LABELED VALUES *****
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SPSS BATCH SYSTEM
APPLICATION TO COMPANIES: EXTENT OF AGREEMENT AS TO DISAGREEMENTS

TRANSFORMATION REQUIRED.. 100 BYTES
1 TRANSFORMATIONS
0 RECODE VALUES = LIST
3 IF/COMPUTE OPERATIONS

CPU TIME REQUIRED.. 1.21 SECONDS

250 *SELECT IF [EXCHANGE EQ 3]
251 TASK BASE [GET COMPANIES: EXTENT OF AGREEMENT AS TO DISAGREEMENTS
252 CROSSTABS VARIABLES=D ISSAGREE(1,2), YEAR(4,8)/
253 TABLES=D ISSAGREE BY YEAR/

****** "CROSSTABS" PROBLEM REQUIRES 40 BYTES WORKSPACE NOT INCLUDING VALUE LABELS *****
****** GIVEN WORKSPACE ALLOWS FOR 2984 LABELLED VALUES *****
**SPSS BATCH SYSTEM**

*ORC COMPANIES: EXTENT OF AGREEMENT AS TO DISAGREEMENTS*

**FILE NO./NAME** (CREATION DATE = 03/10/81)

* * * * * * * * CROSSTABULATION OF * * * * * * * * * *

**DISAGREE AUDITOR-FIRM AGREE AS TO DISAGREEMENTS** BY YEAR YEAR OF REPORT

* * * * * * * * * * * * * * * * * * * * * * * * * * PAGE 1 OF 1

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**OK**

**5/10/81 PAGE 1 OF 1**
SESS BATCH SYSTEM
DIC COMPANIES: EXTENT OF AGREEMENT AS TO DISAGREEMENTS

TRANSPARENCY REQUIRED... 100 BYTES
1 TRANSFORMATIONS
0 RECODE VALUES + LAG VARIABLES
3 IF/COMPUTE OPERATIONS

CPU TIME REQUIRED... 1.24 SECONDS

254 TASK NAME EXTENT OF AGREEMENT AS TO DISAGREEMENTS BY EXCHANGES
255 CROSSTABS VARIABLES-DISAGREE[1,2], EXCHANGE[1,2]/
256 TABLES-DISAGREE BY EXCHANGE/
257 STATISTICS ALL

***** "CROSSTABS" PROBLEM REQUIRES 24 BYTES WORKSPACE NOT INCLUDING VALUE LABELS *****

***** GIVEN WORKSPACE ALLOWS FOR 2985 LABELED VALUES *****
**SPSS BATCH SYSTEM**

EXTENT OF AGREEMENT AS TO DISAGREEMENTS BY EXCHANGES

FILE WORKFILE (CREATION DATE = 03/10/91)

* * * * * * * * * * * * * * * * * CROSSTABULATION OF * * * * * * * * * * * * * *
DISAGREE  AGUATOR-FIRM AGREE AS TO DISAGREEMENTS?  BY EXCHANGE LISTING
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * PAGE 1 OF 1

EXCHANGE

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**RAW CIL SQUARE = 7.39807 WITH 2 DEGREES OF FREEDOM.** SIGNIFICANCE = 0.0247

**CRANDER'S V = 0.0949**

**CONTINGENCY COEFFICIENT = 0.09896**

**LAMDA (ASYMMETRIC) = 0.0 WITH DISAGREE DEPENDENT.**

**Uncertainty Coefficient (Asymmetric) = 0.02363 WITH DISAGREE DEPENDENT.**

**KENDALL'S TAU B = 0.05816. SIGNIFICANCE = 0.2251**

**SOMER'S D (ASYMMETRIC) = -0.02725 WITH DISAGREE DEPENDENT.**

**SOMER'S D (SYMMETRIC) = -0.04599**

**P E A R S O N ' S R = 0.0947 WITH DISAGREE DEPENDENT.**

**SIGNIFICANCE = 0.05247**
EXTENT OF AGREEMENT AS TO DISAGREEMENTS BY EXCHANGES

CPU TIME REQUIRED, 1.14 SECONDS

25A *SELECT IF (EXCHANGE EQ 1 OR 4)
259 CROSSTABS VARIABLES DISAGREED(1,7), EXCHANGE(1,2)/
260 Tabled DISAGREED BY EXCHANGE/ 261 STATISTICS ALL

***** "CROSSTABS" PROBLEM REQUIRES 16 BYES WORKSPACE NOT INCLUDING VALUE LABELS *****

***** GIVEN WORKSPACE ALLOWS FOR 2985 LABELLED VALUES *****
### SPSS Batch System

**Extent of Agreement as to Disagreements by Exchanges**

**File Name**: (Creation Date = 03/10/81)

#### Cross Tabulation of Disagree Auditor-Firm Agree as to Disagreements by Exchange Listing

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**Column | 144 | 273 | 374 **

**Total | 301 | 61.5 | 100.0**

**Corrected Chi-Square = 0.60567 with 1 degree of freedom. Significance = 0.4343**

**Raw Chi-Square = 0.94762 with 1 degree of freedom. Significance = 0.3253**

**Phi = 0.05686**

**Contingency Coefficient = 0.05360**

**Lambda (Asymmetric) = 0.0 with disagree dependent.**

**Lambda (Symmetric) = 0.0**

**Uncertainty Coefficient (Asymmetric) = 0.0516 with disagree dependent.**

**Uncertainty Coefficient (Symmetric) = 0.02289**

**Kendall's Tau C = 0.02362. Significance = 0.1630**

**Gamma = 0.20974**

**Somer's D (Asymmetric) = 0.02705 with disagree dependent.**

**Somer's D (Symmetric) = 0.04216**

**Eta = 0.0592 with disagree dependent.**

**Pearson's R = 0.05067 Significance = 0.1633**
SPSS BATCH SYSTEM

EXTENT OF AGREEMENT AS TO DISAGREEMENTS BY EXCHANGES

TRANSFORMS REQUIRED: 100 BYTES
1 TRANSFORMATIONS
0 RECODE VALUES + LAG VARIABLES
7 IF/COMPUTE OPERATIONS

CPU TIME REQUIRED: 1.96 SECONDS

262 *SELECT IF
263 CROSSTABS
264 TABLES=DISAGREE BY EXCHANGE/
265 STATISTICS ALL

**** "CROSSTABS" PROBLEM REQUIRES 24 BYTES WORKSPACE NOT INCLUDING VALUE LABELS ****

**** GIVEN WORKSPACE ALLOWS FOR 2985 LABELLED VALUES ****
### EXTENT OF AGREEMENT AS TO DISAGREEMENTS BY EXCHANGES

**FILE NO NAME (CREATION DATE = 03/10/81)**

**DISAGREE AUDITOR-FIRM AGREE AS TO DISAGREEMENTS?**

**BY EXCHANGE LISTING**

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**COLUMN**

1 134

**TOTAL**

144 174 513

**CORRECTED CHI SQUARE** = 0.97597 WITH 1 DEGREE OF FREEDOM. SIGNIFICANCE = 0.3233

**RAW CHI SQUARE** = 1.46287 WITH 1 DEGREE OF FREEDOM. SIGNIFICANCE = 0.2142

**PHI** = 0.05498

**CONTINGENCY COEFFICIENT** = 0.05498

**LAMBDAL (ASYMMETRIC)** = 0.3 WITH DISAGREE DEPENDENT. = 0.3 WITH EXCHANGE DEPENDENT.

**LAMBDAL (SYMMETRIC)** = 0.9

**UNCERTAINTY COEFFICIENT (ASYMMETRIC)** = 0.00056 WITH DISAGREE DEPENDENT. = 0.00235 WITH EXCHANGE DEPENDENT.

**UNCERTAINTY COEFFICIENT (SYMMETRIC)** = 0.00056

**KENDALL'S TAU B** = -0.05458. SIGNIFICANCE = 0.1073

**KENDALL'S TAU C** = -0.01884. SIGNIFICANCE = 0.1073

**GAMMA** = -0.27915

**SOMER'S D (ASYMMETRIC)** = -0.02347 WITH DISAGREE DEPENDENT. = -0.12644 WITH EXCHANGE DEPENDENT.

**SOMER'S D (SYMMETRIC)** = -0.0361

**ETA** = 0.05474 WITH DISAGREE DEPENDENT. = 0.05474 WITH EXCHANGE DEPENDENT.

**PEARSON'S R** = -0.05474 SIGNIFICANCE = 0.1075
SPSS BATCH SYSTEM

EXTRACT OF AGREEMENT AS TO DISAGREEMENTS BY EXCHANGES

TRANSFORMATIONS REQUIRED... 100 BYTES
1 TRANSFORMATIONS
0 VARIANCE VALUES + LAG VARIABLES
7 IF/COMPUTE OPERATIONS

CPU TIME REQUIRED... 1.55 SECONDS

266 *SELECT IF (EXCHANGE EQ 2 OR 3)
267 CROSSTABS VARIABLES=DISAGREE(1,2),EXCHANGE(2,3)/
268 TABLES=DISAGREE BY EXCHANGE/
269 STATISTICS ALL

***** "CROSSTABS" PROBLEM REQUIRES 16 BYTES WORKSPACE NOT INCLUDING VALUE LABELS *****

***** GIVEN WORKSPACE ALLOWS FOR 2985 LABELLED VALUES *****
## COHORT ANALYSIS OF DISAGREED AUDITOR-INTERN AGREEMENT AS TO DISAGREEMENTS: EXCHANGE LISTING

### Exchange

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**Correlated Chi Square** = 6.46462 with 1 degree of freedom. Significance = 0.0110

**Raw Chi Square** = 7.46462 with 1 degree of freedom. Significance = 0.0067

**Phi** = 0.1118

**Contingency Coefficient** = 0.11058

**Lambda (Asymmetric)** = 0.90304 with DISAGREE dependent. = 0.90304 with EXCHANGE dependent.

**Lambda (Symmetric)** = 0.28682

**Uncertainty Coefficient (Asymmetric)** = 0.02943 with DISAGREE dependent. = 0.00897 with EXCHANGE dependent.

**Uncertainty Coefficient (Symmetric)** = 0.01374

**Kendall's Tau C** = 0.11180. Significance = 0.00032

**Gamma** = -0.46185

**Somers's D (Asymmetric)** = -0.35052 with DISAGREE dependent. = -0.24407 with EXCHANGE dependent.

**Somers's D (Symmetric)** = -0.06179

**Eta** = 0.11180 with DISAGREE dependent. = 0.11180 with EXCHANGE dependent.

**Pearson's R** = 0.11118. Significance = 0.0331

**SPSS Batch System**

**File Name** (Creation Date: 03/10/81)
SPSS BATCH SYSTEM

EXTENT OF AGREEMENT AS TO DISAGREEMENTS BY EXCHANGES

TRANSFORM REQUIRED.. 100 BYTES
1 TRANSFORMATIONS
0 RECODE VALUES + LAG VARIABLES
7 IF/COMPUTE OPERATIONS

CPU TIME REQUIRED.. 1.58 SECONDS

270 RECODE EXCHANGE \{1-2\}
271 CROSSTABS VARIABLES=DISAGREE \{1,2\}, EXCHANGE \{2,3\}/
272 TABLES=DISAGREE BY EXCHANGE/
273 STATISTICS ALL

***** "CROSSTABS" PROBLEM REQUIRES 16 BYTES WORKSPACE NOT INCLUDING VALUE LABELS *****

***** GIVEN WORKSPACE ALLOWS FOR 2985 LABELED VALUES *****
## Extent of Agreement As to Disagreements by Exchanges

**File Name**  [Creation Date: 03/10/81]

**Cross Tabulation of Disagreement Audit-Firm Agreements by Exchange Listing**

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**Connected Chi Square** = 5.30208 with 1 degree of freedom. Significance = 0.0213

**Raw Chi Square** = 6.04966 with 1 degree of freedom. Significance = 0.0126

**Phi** = 0.09021

**Contingency Coefficient** = 0.09096

**Lambda (Symmetric)** = 0.065342

**Uncertainty Coefficient (Asymmetric)** = 0.020366 with Disagree Dependent.

**Uncertainty Coefficient (Symmetric)** = 0.09929

**Kendall's Tau B** = -0.09021. Significance = 0.0048

**Gamma** = -0.40250

**Simpson's D (Asymmetric)** = -0.09021 with Disagree Dependent.

**Simpson's D (Symmetric)** = -0.020366

**Eta** = 0.09020 with Disagree Dependent.

**Pearson's R** = -0.09021. Significance = 0.0048
SPSS BATCH SYSTEM
EXTENT OF AGREEMENT AS TO DISAGREEMENTS BY EXCHANGES

TRANSFORMATIONS REQUIRED: 100 BYTES
1 TRANSFORMATIONS
2 ENCODE VALUES + LAG VARIABLES
0 IF/COMPUTE OPERATIONS

CPU TIME REQUIRED: 10.60 SECONDS

274 *SELECT IF (SIGDISAG LE 1 OR 2)
275 TASK NAME EXTENT OF AGREEMENT AS TO DISAGREEMENTS BY ALL BIG 8 VERSUS OTHER
276 CROSSTABS VARIABLES=DISAGREES(1,2),OLDAUNIT(1,2)/
277 278 STATISTICS ALL

***** "CROSSTABS" PROBLEM REQUIRES 36 BYTES WORKSPACE NOT INCLUDING VALUE LABELS *****

***** GIVEN WORKSPACE ALLOWS FOR 2985 LABELED VALUES *****
### Extent of Agreement as to Disagreements by All Big 8 Versus Other

**File Name:** (Creation Date = 03/10/81)

**Cross Tabulation of Disagree Auditor-Firm Agree as to Disagreements? By OLAudit Predecessor Auditor**

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<td>1</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td><strong>COLUMN</strong></td>
<td>423</td>
<td>305</td>
<td>720</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>58.1</td>
<td>41.9</td>
<td>100.0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Correction Chi Square** = 2.60635 with 1 degree of freedom. Significance = 0.1064

**Raw Chi Square** = 3.12725 with 1 degree of freedom. Significance = 0.0799

**Phi** = 0.036432

**Contingency Coefficient** = 0.06547

**Lamda (Asymmetric)** = 0.0 with Disagree dependent. = 0.0 with OLAudit dependent.

**Lamda (Symmetric)** = 0.0

**Uncertainty Coefficient (Asymmetric)** = 0.01899 with Disagree dependent. = 0.00335 with OLAudit dependent.

**Uncertainty Coefficient (Symmetric)** = 0.00512

**Kendall's Tau B** = -0.06602. Significance = 0.0375

**Kendall's Tau C** = -0.02934. Significance = 0.0375

**Gamma** = -0.39306

**Somers's D (Asymmetric)** = -0.03013 with Disagree dependent. = -0.14665 with OLAudit dependent.

**Somers's D (Symmetric)** = -0.04907

**Eta** = 0.06597 with Disagree dependent.

**Pearson's R** = -0.06601 with OLAudit dependent. Significance = 0.0375
SPSS BATCH SYSTEM
EXTENT OF AGREEMENT AS TO DISAGREEMENTS BY ALL BIG 8 VERSUS OTHER

TRANSPARENCY REQUIRED... 100 BYTES
1 TRANSFORMATIONS
0 REQUIRE VALUES + Lag VARIABLES
7 IF/COMPUTE OPERATIONS

CPU TIME REQUIRED... 1.79 SECONDS

279 *SELECT IF (SIGDISAG PQ 1 OR 2)
280 TASK NAME EXTENT OF AGREEMENT AS TO DISAGREEMENT BETWEEN BIG 8 ITEMS
281 CROSSSTABS VARIABLES=DIGNAG(1,2),GLOBAN(1,8)/
282 TABLES=DIGNAG BY GLOBAN/
283 STATISTICS ALL

***** "CROSSSTABS" PROBLEM REQUIRES 64 BYTES WORKSPACE NOT INCLUDING VALUE LABELS *****

***** GIVEN WORKSPACE ALLOWS FOR 2963 LABELLED VALUES *****
## Cross Tabulation of Disagree Auditor-Peer Agree AS TO DISAGREEMENTS BY OLDNAME/auditor Name

<table>
<thead>
<tr>
<th>OLDNAME</th>
<th>COUNT I</th>
<th>ROW PCT</th>
<th>I PM</th>
<th>AA</th>
<th>ESW</th>
<th>AW</th>
<th>PW</th>
<th>DHES</th>
<th>TR</th>
<th>CBL</th>
<th>LSW</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO</td>
<td>100</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>YES</td>
<td>40</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

| COLUMN | TOTAL | 99   | 94   | 52  | 37  | 56  | 33  | 48   | 42  | 46  | 423 |

7 OUT OF 16 43.88% OF THE VALID CELLS HAVE EXPECTED CELL FREQUENCY LESS THAN 5.0.

MINIMUM EXPECTED CELL FREQUENCY = 2.449

CHI SQUARE = 6.990 WITH 7 DEGREES OF FREEDOM. SIGNIFICANCE = 0.298

Cramer's V = 0.109

CONTINGENCY COEFFICIENT = 0.134

LAMDA (ASYMTRIC) = 0.0 WITH DISAGREE DEPENDENT, = 0.0 WITH OLDNAME DEPENDENT.

LAMDA (SYMMETRIC) = 0.0

UNCERTAINTY COEFFICIENT (ASYMTRIC) = 0.0524 WITH DISAGREE DEPENDENT, = 0.0084 WITH OLDNAME DEPENDENT,

UNCERTAINTY COEFFICIENT (SYMMETRIC) = 0.0114

KENDALL'S TAU B = -0.05742. SIGNIFICANCE = 0.1103

KENDALL'S TAU C = -0.0337. SIGNIFICANCE = 0.1103

GAMMA = -0.16210

SOMER'S D (ASYMTRIC) = -0.01965 WITH DISAGREE DEPENDENT, = -0.11662 WITH OLDNAME DEPENDENT.

SOMER'S D (SYMMETRIC) = -0.03437

ETAS = 0.14093 WITH DISAGREE DEPENDENT.

PEARSON'S r = -0.05060. SIGNIFICANCE = 0.1496

NUMBER OF MISSING OBSERVATIONS = 305
JOHNS HOPKINS DURHAM MATCH SYSTEM
EXTENT OF AGREEMENT AS TO DISAGREEMENT BETWEEN BIG 8 FIRMS

TRANSPACE REQUIRED: 100 BYTES
1 TRANSFORMATIONS
0 RECODE VALUES + LAG VARIABLES
7 IF/COMPUTE OPERATIONS

CPU TIME REQUIRED: 1.73 SECONDS

204 FINISH
NORMAL END OF JOB.
204 CONTROL CARDS WERE PROCESSED.
0 ERRORS WERE DETECTED.
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____________________, June 1, 1979
____________________, September 6, 1979.
____________________, September 7, 1979.
____________________, August 30, 1979.