

On The Effectiveness Of The Auditing Standards Board In Improving Audit Communication With The SAS 58 Auditor's Standard Report: An Exploratory Study

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ABSTRACT

In a field experiment, the authors examine whether three alternative versions of the auditor's standard report communicate effectively the cognitive dimensions of understand-ability, engagement risk, and needed accommodation to a user group (investment and banking professionals) and an expert group (audit partners and managers). The study focuses on the mandated SAS 58 (AICPA 1988) three-paragraph auditor's standard report (SR), the previously mandated two-paragraph auditor's standard report (OSR) and a modified auditor's standard report (MSR) more in harmony with the stated auditor's responsibility for detecting fraud, as mandated by SAS 53 (AICPA 1988b) which was subsequently superseded by SAS 82 and SAS 99. The results indicate that both auditors and users are consistent in their belief that the SR represents an enhancement in understandability of the audit message over OSR, and that a format along the lines of MSR would not have represented an improvement over the SR format given the inconsistencies in ratings between auditors and users of the MSR (which contains explicit language relative to fraud). Specifically, auditors' perception of engagement risk associated with the MSR is much higher than users' perception and the demand for needed accommodation (additional information) is also greater for auditors than users. Overall, the results suggest that the ASB was effective in responding to the user needs with respect to the message communicated in the auditor's report, a critical link in the financial information reporting process. This investigation has the potential to inform policy-making bodies concerned with adopting a report standard that fairly communicates the risks borne by both auditor and user groups.

INTRODUCTION

Questionable accounting practices/disclosures and the fall of large publicly held companies like Enron, Global Crossing, and WorldCom have shaken public confidence in the auditing profession. Further, the integrity of public accountants and the profession's effectiveness through self-regulation to protect user interests has been questioned. To address these public concerns and to counter future corporate scandals and restore investor confidence, the Sarbanes-Oxley Act was signed into law in July 2002 (Myers 2003), which establishes the Public Company Accounting Oversight Board (PCAOB) to regulate auditors of public companies.

The PCAOB is responsible for establishing or adopting auditing and other standards relating to the preparation of audit reports (Miller and Pashkoff 2002). The Board is not required to, but may, adapt Statements on Auditing Standards (SASs) of the Auditing Standards Board (ASB) and use them as a basis for developing auditing rules. It is expected that the American Institute of CPA's (AICPA) will continue to make the case that the ASB is the appropriate body to resume setting auditing standards (Miller and Pashkoff 2002). Whether the AICPA has been

effective in establishing current audit reporting policy is a debatable issue in the current regulatory environment, which is explored in this study.

The AICPA's mission statement stipulates that its purpose is "to provide members with the resources, information, and leadership that enable them to provide valuable services...to benefit the public." How well the AICPA adheres to its mission should be of interest to Congress and the Securities and Exchange Commission (SEC) as they determine the organization and capacity of the PCAOB. The effectiveness of the AICPA undoubtedly also will influence the extent to which the PCAOB exercises its authority to amend, modify, repeal or reject standards of the ASB.

Considering the critical role of the auditor's report in the accounting information reporting process for reducing information risk to users, and the authority of the PCAOB to set or modify standards of reporting, it is timely and informative to explore how well the ASB performed in establishing the current reporting standard. In this regard, we examine the effectiveness of the SAS 58 auditor's standard report (SR) by evaluating the perceptions of both users and auditors. "Statement on Auditing Standards (SAS) No. 58" was adopted by the ASB in 1988.

One reason for selecting the ASB's policy decision of SAS 58 as the setting for this study is that it was adopted, in part, to ensure that auditors properly convey the level of assurance provided and responsibility being assumed in the audit of financial information reported by management, so that users could understand the level of assurance associated with an audit. This level of assurance is reflected in the audit report, the end product of the audit process and is the only formal communication from the auditor, the user's agent, about the audit. It is conceivable that the same audit message could be interpreted or perceived differently by auditors and users. Therefore, the extent to which the profession was able to improve audit communication between these parties should be of importance to regulators.

The policy decision of SAS 58 also would appear to be an appropriate setting because of possible implications for reporting (communication) regulations relating to assurance services (AICPA 1997) being identified and developed by the accounting profession. With the emergence of new, non-traditional assurance services, the potential exists for an expectations gap¹, and this study could provide insight to the AICPA in taking a proactive role to mitigate any potential communication gap with respect to new assurance services.

In order to explore the effectiveness of the ASB's reporting regulation, we study the auditor's report. A field experiment is conducted to compare auditor and user perceptions of specific attributes of the SAS 58 auditor's standard report (SR) and the old two-paragraph auditor's standard report (OSR). We also compare perceptions of a modified standard report format (MSR), which (compared to the SAS 58 report format) was designed to be more in harmony with the auditor's responsibility for detecting fraud as currently described in auditing standards. Also, given the current regulatory environment, a report with explicit language for fraud may be revisited. Therefore, it may be instructive to assess whether the MSR could have been perceived as an improvement over SR.

The findings indicate that both auditors and users are consistent in their perceptions that the SR represents an improvement over OSR in the understandability of the audit message. Furthermore, inconsistencies in ratings between auditors and users of the MSR suggest that such a format would not have represented an improvement over the SR. The profession's ability to enhance communication between auditors and users, assuming differing evaluations of the message by these parties resulting from differing perceptions, is supportive of its ability to protect user interests. The AICPA could use this study to make the case that the ASB is the appropriate body to continue setting auditing standards. Also, regulators (such as the PCAOB) need to weigh the findings of this study when implementing the provisions of the Sarbanes-Oxley Act relating to monitoring the ASB and auditing regulation.

The remainder of the paper is organized as follows. Section II reviews prior audit reporting literature. Hypotheses are developed in Section III. Research design is described in Section IV. Section V discusses data analysis and results, Section VI presents the conclusion, and limitations of the study are provided in Section VII.

PRIOR AUDIT REPORTING RESEARCH

Prior studies (Fess and Ziegler 1977; Epstein 1978) examining the usefulness of the auditor's report found that users' understanding of the message intended by the prior two-paragraph auditor's standard report (OSR) was deficient. Epstein (1978), based on a survey of shareholders, reported that 21.5 percent found it difficult to understand the auditor's report, and 13.9 percent expressed a desire for additional information about it. Fess and Ziegler (1977) reported that only one-third of individual shareholders completely understood the auditor's report and that less than one-half of all bankers and financial analysts surveyed understood the report completely.

Libby (1979) examined whether the message intended by the auditor when she (he) issues different types of reports (e.g., unqualified, qualified for scope limitation, etc.) or different variations within a report class is consistent with the perceptions of the message by commercial loan officers, an important user group. Libby concluded that there might not exist a communication gap between the auditors and users of the audit report. In contrast, when Nair and Rittenberg (1987) extended Libby's study to include bank lending officers from large and small banks, and nine types of reports including reports for compilation and review engagements, the results suggested that a communication gap might exist. These mixed results provided further support to examine the issue of audit communication to user groups.

In addition to academics, policy makers have also evaluated the adequacy of the auditor's report. Reports of the Commission on Auditors' Responsibility (AICPA 1978) and the National Commission on Fraudulent Financial Reporting (AICPA 1987) considered the two-paragraph auditor's standard report to be inadequate as a communication device. In recognizing the need for modifying the audit communication formats, the AICPA released "Statement on Auditing Standards No. 58 (AICPA 1988)" to revise some of the audit report formats in connection with the general-purpose financial information reporting process.

Houghton and Messier (1991) measured the meaning of six types of Pre-SAS 58 audit reports and six types of SAS 58 (exposure draft) audit reports using Osgood's (see Osgood et al. 1971) semantic differential technique. Their findings indicate that although differences in meaning (attributed to audit reports) exist between bankers (users) and auditors, the revised wording (used in the report formats as per the exposure draft relating to SAS 58) may close the communication gap. The study suggests that improved communication may still be achieved even when auditors and users perceive somewhat different contextual meanings of reporting formats.

In contrast to Houghton and Messier (1991), we examine perceptions about the SAS 58 auditor's standard report (SR). The exposure draft incorporated the language of unintentional or intentional (fraud) misstatement, but the final SAS 58 standard report did not make reference to intentional misstatement or fraud. For manipulation purposes, we also evaluate a modified standard report (MSR) that incorporates the auditor responsibility for fraud detection (and is substantially similar to the exposure draft format).

Kelly and Mohrweis (1989) investigated the impact of the SAS 58 auditor's standard report on users' perceptions. They found that compared to the two-paragraph auditor's standard report, the SAS 58 auditor's standard report was perceived by users (bankers and investors) to increase understandability. The wording changes did not alter investors' perceptions of the level of responsibility being assumed by the auditors, but bankers were more skeptical. Bankers perceived that auditors assumed less responsibility under the SAS 58 auditor's standard report compared to the old standard report. Auditors were not used in their study; therefore, the perceptions of the auditor group were not compared with those of the user group. The present study compares both auditors' and users' perceptions of the SAS 58 report, as well as the MSR referred to above.

Scaling Cognitive Dimensions

A number of prior audit communication studies have explored the multidimensional nature of audit judgments related to audit communications. Dimensions identified in the studies include: "need for additional information" and "auditor judgment" dimensions (Libby 1979); "level of assurance provided" and "clarity of responsibility assumed" by auditor dimensions (Pillsbury 1985; Kelly and Mohrweis 1989); "work performed by the

auditor” and “assurance communicated” dimensions (Nair and Rittenberg 1987); understandability dimension (Kelly and Mohrweis 1989); evaluative (good-bad), obligatory (discretionary-required, necessary-unnecessary), and potency (dynamic-static, exact-estimated) dimensions (Houghton and Messier 1991). These studies indicate that understandability or clarity of communication, responsibility being assumed by auditors, and additional information required by users when making decisions using the auditor’s report, were common dimensions in examining audit communications. In evaluating the SR format, we examine both user and auditor perceptions on similar dimensions – we label these cognitive dimensions as: *understandability*, *engagement risk*, and *accommodation* (need for additional information).

HYPOTHESES DEVELOPMENT

Since the hypotheses developed in this section are tested in the pre-Sarbanes-Oxley Act environment, the study is intended to serve as a benchmark for comparison with future studies on audit reporting formats. One benefit of using this environment is the ability to evaluate the policy-making decision of the AICPA without concern for the results being tainted or confounded by the spectacular corporate failures in 2001 and 2002, which led to the legislation requiring independent oversight of public company audits and the firms that perform them.

We develop hypotheses for testing based on the perceptions of users and auditors about the three report formats (OSR, SR, and MSR) with respect to *understandability*, auditor *engagement risk*, and *accommodation* (the need for additional information). The measurement of these constructs is discussed in the next section on research methodology. Reporting formats used in the experiment are described as follows:

- the two-paragraph auditor's standard report (which had been in use for nearly forty years) -- referred to as OSR,
- the three-paragraph (SAS 58) auditor's standard report (which was adopted, among other matters, to close a perceived *expectations gap*) -- referred to as SR, and
- a modified three-paragraph auditor’s standard report (incorporating the language of irregularity and fraud) -- referred to as MSR.

Reporting formats are presented in the Appendix. Of interest is whether auditors and users have similar or divergent perceptions of the improvement in audit communication of the SR relative to the OSR. Compared to the OSR, the SR clarifies the responsibilities of the company’s management and auditor with respect to the financial statements and describes the essence of the audit process, indicating that the audit is designed to provide reasonable assurance that the financial statements are free of material misstatements. There is no reference to reasonable assurance, materiality, or that the financial statements are the responsibility of management in the OSR.

The MSR (modified standard report format) is introduced as an alternative to the SR to assess whether such a format could have been perceived (by users and/or auditors) as an improvement in the *understandability* of the message communicated over the SR. The motivation for examining perceptions of the MSR is that a similar format was originally considered by the AICPA Auditor Communication Task Force (TF) during the deliberations leading to SAS 58 (Geiger 1993, 116). Another important reason for considering a format such as the MSR is that it is more consistent with the stated auditor’s responsibility for detecting fraud, as mandated by SAS 53 (AICPA 1988). SAS 53 was superseded by SAS 82 (AICPA 1997b) and SAS 99 (AICPA 2002). SAS 82 and SAS 99 provide additional guidance to the auditor in carrying out the provisions of SAS 53.² In addition, MSR may well be revisited given the current public outrage over fraudulent financial reporting (Wall Street Journal 2003). The MSR is based on the SAS 58 three-paragraph auditor's standard report (SR), and is modified by incorporating the following statements:

"...the financial statements are free of material misstatement due to error, irregularity, or fraud," (incorporated in the scope paragraph) and, "... the financial statements referred to above are free of material misstatements due to error, irregularity or fraud," (incorporated in the opinion paragraph)

The above modified words inserted in the MSR are along the lines of the Treadway Commission's recommendation (AICPA 1987), which the TF attempted to address. The Treadway Commission was established to

study management-related fraud and the role of the auditor in its detection. The MSR recognizes that users may demand that the audited financial statements provide at least a reasonable degree of assurance that the financial statements are free of (quantitative and qualitative) misstatements including fraud.

The terms “irregularity” and “fraud” are vivid and are likely to attract users’ attention.³ Although the auditor must design the audit to provide *reasonable assurance* of detecting errors and fraud that are material to the financial statements, detecting fraud is not clearly stated in the OSR or SR format. Of course, under the old standard report, the auditor was only required to plan the audit *to search for* material errors and irregularities (SAS 16, AICPA 1977).⁴

Based on the clarifications relating to the responsibilities of management and the auditor, details on what an audit entails, and the degree of assurance provided, we expect that both auditors and users will evaluate SR to be an improvement over OSR as to *understand-ability* of the message communicated by the audit report format. By contrast, users and auditors may not be consistent in their evaluation of understandability of the MSR. One reason for a possible inconsistency is that users may perceive that auditors are exercising more due diligence of audit tasks under the MSR due to the stated auditor’s responsibility for fraud detection; whereas auditors, who know their responsibility, are not likely to perceive that more due diligence is required under the MSR format relative to SR. Also, because it is assumed that perceptions between auditors and users will vary, significant interaction between report format type and subject group type on the understandability dimension is expected. The hypotheses for the *understandability* dimension are formally stated as follows:

H_{1,1}: Both users and auditors perceive *understandability* of the SR to be a significant improvement over the OSR.

H_{1,2}: Users perceive *understandability* of the MSR to be a significant improvement over the SR and the OSR; while auditors will not perceive *understandability* of the MSR to be a significant improvement over the SR and the OSR.

Since the SR was promulgated, in part, to communicate more clearly the audit process, the level of assurance provided and the degree of responsibility being assumed by the auditor for the financial statements, it is not likely that the ASB would adopt language that could be misconstrued as increasing the auditor’s responsibility or exposure to legal liability. In addition, if auditors had thought that the proposed SR would have resulted in greater liability exposure, then they could have exerted pressure on regulators for the adoption of a report format likely to be assessed by them as less risk prone. Accordingly, the SR adopted by the ASB is expected to be considered by auditors and users as not increasing the auditor’s *engagement risk* over the OSR. This is examined by hypothesis_{2,1}:

H_{2,1}: Both users and auditors perceive no significant increase in the auditor’s *engagement risk* for the SR over the OSR.

The use of language such as “irregularity” and “fraud” in the MSR may be interpreted or perceived by users as the auditor accepting a greater degree of responsibility for detection of fraud than under SR. The auditor, knowledgeable of his/her responsibility, is likely to consider the affect of such language on users’ perceptions. Thus, the explicit statement regarding detection of fraud, which is not incorporated in the SR or the OSR, is expected to be perceived by both users and (more so by) auditors as significantly increasing the auditor’s *engagement risk*.

We expect auditors and users to differ in their assessment of the magnitude of perceived risk under the MSR. That is, auditors are likely to assess MSR as much more risky than users’ assessment (as users are likely to consider the detection and reporting of irregularity or fraud as a primary part of the audit process). The auditor group is likely to perceive the SR (as compared to the MSR) as more reflective of the degree of responsibility auditors are willing to accept (given the nature and limitations of an audit) for material misstatements.⁵ These possible inconsistencies between user and auditor perceptions about the MSR format might explain why the ASB has not added explicit language to the auditor’s report concerning the detection of fraud, even though such language appears elsewhere in auditing standards (e.g., SAS 53). The second and third hypotheses for *engagement risk* are stated as follows:

H_{2,2}: Both users and auditors perceive the auditor's *engagement risk* to be significantly greater for the MSR compared to the SR and the OSR.

H_{2,3}: Auditors will perceive their engagement risk to be significantly greater for the MSR than will users.

Accommodation refers to the need for additional information in conjunction with the auditor's report when making a decision. This dimension is expected to be inversely related to user and auditor perceptions about the *understandability* of the audit communication. Since we expect both groups to rate the *understandability* of communication using SR significantly higher than that of OSR, we also expect that both groups will perceive the degree of *accommodation* significantly less when using the SR than when using the OSR.

Further, because users may perceive auditors as doing more (or providing more information) with respect to fraud detection under the MSR format, it is expected that the level of accommodation required by users when using this format would be the least. That is, users will have less need for additional information when making decisions using the MSR compared to when using the other (OSR and SR) formats. By contrast, since auditors may perceive that users are misled about the auditor's responsibility for detection of fraud with the MSR, they will perceive the amount of needed user *accommodation* when using the MSR to be greater than that for the SR and the OSR.

Since auditors may perceive the SR (compared to MSR and OSR) as effectively communicating the limitations of an audit, the level of assurance given, and the degree of responsibility being assumed, it is likely that auditors will evaluate the level/amount of *accommodation* required by users when using the SR to be significantly lower than that for the other formats. Hence, the following hypotheses relate to the *accommodation* dimension:

H_{3,1}: Both users and auditors perceive the amount of *accommodation* (need for additional information) by users to make a decision when using the SR to be significantly less than when using the OSR.

H_{3,2}: Users perceive the amount of *accommodation* when using the MSR to be significantly less than when using the SR and the OSR; while auditors perceive the amount of user *accommodation* using the MSR to be greater than for the SR and the OSR.

RESEARCH METHODOLOGY

Some of the prior studies used field experiments in a "context free" setting (e.g., Houghton and Messier 1991; Kelly and Mohrweis 1989). Likewise, this study uses a field experiment with a substantially "context free frame of reference" to assess report format perceptions. To this end, we do not provide detailed financial accounting information underlying the various audit reporting formats assigned to subjects for evaluation.

Subjects, Task, and Presentation of Case Instrument

Certified public accounting firms, financial analysts, and banks in the State of Oklahoma and surrounding area (southwest region) were contacted to identify participants. We were able to identify representatives at banks, financial analysts associations, and CPA firms through whom we coordinated administration of the instrument. We provided instructions to these representatives for administering the instrument, and then we hand-delivered or mailed the survey instrument. The data was collected in 1991 relatively soon after the release of SAS 58. A benefit of using this data is that the perceptions of auditors and users are not tainted or confounded by the spectacular corporate scandals and fraud that occurred in 2001 and 2002 leading to the passage of the Sarbanes-Oxley Act of 2002. Another benefit of using this (pre-Sarbanes-Oxley Act period) data is that the results of the study can provide useful insights and serve as a benchmark for comparison with future studies on reporting formats relating to audits of financial statements and other assurance services.

A 100% response rate was achieved as the number of cases distributed was based on the contact-representative's indication of expected respondents. Participants included 123 bank officers and financial analysts representing users, and 122 audit partners and managers from CPA firms representing the auditor group. The average

(relevant) work experience for each group was over 10 years. Biographical background data for the user and auditor groups are presented in Table 1.⁶

TABLE 1
Biographical Background Information – User Group
(n = 123)

| Years of experience in banks/financial institutions | Mean 10.6 years Standard deviation 5.75 |
|---|--|
| Percent of time spent in reviewing audit report, financial data, loan application | Mean 51% |
| EDUCATION | |
| Graduate Degree | 45 |
| Undergraduate | 59 |
| Some or no College | 10 |
| Total | 114 |
| Background information not completed but case questions responded | 9 |
| Total usable responses | 123 |

Subjects included: Presidents and Vice Presidents – 76
(Vice Presidents include Executive, Senior, and Assistant Vice Presidents)

- 12 Held CFA (Chartered Financial Analyst) only
- 11 Held CPA (Certified Public Accountant) only
- 4 Held CFA and CPA designations
- 1 Held CPA and another designation

Total 28 subjects held professional designations

- 26 Subjects reported that they were preparing for CFA examinations

Biographical Background Information – Auditor Group
(n = 122)

| Make-up of auditor group | Years of experience Mean [Standard deviation] |
|---|--|
| 93 Managers | 8.2 [2.5] |
| 28 Partners | 20.2 [6.2] |
| 121 Overall | 11.0 [6.3] |
| EDUCATION | |
| Graduate Degree | 19 |
| Undergraduate | 102 |
| Total | 121 |
| All are Certified Public Accountants | |
| Background information not completed but case questions responded | 1 |
| Total usable responses | 122 |

Each subject was presented with background information (shown in Appendix) concerning XYZ, a hypothetical company. This was followed by:

- one auditor's standard report format (OSR, SR, or MSR), and
- fourteen (randomly-ordered) case questions with provision for subjects' responses on a seven-point Likert scale. Scales were anchored on one end with *strongly disagree* (1) and the other end with *strongly agree* (7).

The instrument was pre-tested with accounting/auditing instructors, graduate students, and practitioners, and modified as necessary before administering. A systematic procedure was used to ensure random and even distribution of cases. For example, if we presented the case containing OSR to the first subject for providing responses, the

second subject would be presented SR, and the third subject MSR. That is, every third subject (e.g., #1, #4, #7) would be presented with the OSR format.

Independent (Treatment) and Dependent Variables

Fourteen case questions, derived from prior studies relating to audit communications (e.g., Libby 1979; Nair and Rittenberg 1987; Kelly and Mohrweis 1989), were developed to elicit responses on the three standard report formats (treatment variables). Deriving the measures used in this study from existing research helped to ensure their content validity (O'Leary-Kelly and Vokurka 1998).

Exploratory factor analysis (SAS User's Guide 1985, 338; Rummell 1970) was first used to determine if the questions loaded on dimensions as expected, which they did. For descriptive purposes, we labelled the dimensions as *goodness* (which refers to the understandability or clarity of the audit communication), auditor *engagement risk* (which refers to the degree of responsibility being assumed by the auditor and/or likelihood of legal liability/lawsuit with the communication), and *accommodation* (which refers to the need for additional information by users to make an informed decision). The questions are shown in the Appendix.

As a further test, to check the discriminant validity of the dimensions generated by using exploratory factor analysis, confirmatory factor analysis was performed with the resulting measurement model providing a reasonable fit to the data (O'Leary-Kelly and Vokurka 1998; Gerbing and Hamilton 1996). To test scale reliability, Cronbach's coefficient alpha was computed for each dimension (Nunnally 1978). Cronbach's coefficient alpha for the *accommodation*, *risk*, and *goodness* dimensions were .63, .74, and .82, respectively. According to Nunnally (1978), a scale reliability level of .70 coefficient alpha is sufficient in the early stages of basic research, and increasing reliability beyond .80 is often wasteful of resources. Notwithstanding this, reliabilities of less than .70 have been used to construct composites in research studies. For example, Kisielius and Sternthal (1984) used a three item composite scale with .60 Cronbach's alpha.

Because of the moderate coefficient alpha (.63) on the *accommodation* dimension, the test-statistics relating to this dimension were adjusted for attenuation to take into consideration the lower level of reliability.⁷ Average responses for the set of questions associated with each dimension were then used to compose scale scores.

DATA ANALYSIS AND RESULTS

In the planning stage of this research, we decided upon using a between-subjects design instead of a within-subjects [repeated measures] design (Campbell and Stanley 1969; Kirk 1982), to avoid a potential demand effect while requiring less time to complete the instrument. Tests of hypotheses require examining interaction effects, which is accomplished using a 3 by 2 full factorial ANOVA.

Understandability Dimension Hypotheses

The hypotheses relating to the understandability of the audit communication are supported by the data. As shown in the ANOVA (Table 2), the interaction between subject type and report type on the *understandability* dimension is significant at .01.

The mean ratings of users about *understandability* of the OSR, SR, and MSR formats are 4.44, 4.88, and 5.09, respectively, and those of auditors are 4.69, 5.30, and 4.63, respectively. Table 2 also shows the one-tailed t-tests of mean differences in *understand-ability* ratings. Figure 1 provides a graph of the interaction effect, which is very pronounced.

Both auditors and users perceive the SR as a significant improvement in understandability over the OSR in support of hypothesis 1.1. Further, in support of hypothesis 1.2, users assign the highest rating to MSR (which incorporates irregularity and fraud) and auditors assign the highest rating to SR. The user group, however, does not perceive the improvement of MSR over SR as significant.

TABLE 2
Perceived Understandability Dimension¹ Assessment Results

3 x 2 Full Factorial ANOVA: Understandability Dimension

| Source | Sum of Squares | DF | Mean Square | F- value | Sig. |
|--------------------------|----------------|-----|-------------|----------|------|
| Subject Type | .2828 | 1 | .283 | .295 | .588 |
| Report Type | 11.2598 | 2 | 5.630 | 5.873 | .003 |
| Subj. Type * Report Type | 8.7743 | 2 | 4.387 | 4.577 | .011 |
| Error | 229.0933 | 239 | .959 | | |
| Total | 249.8331 | 244 | | | |

Pairwise Comparisons for Understandability Dimension

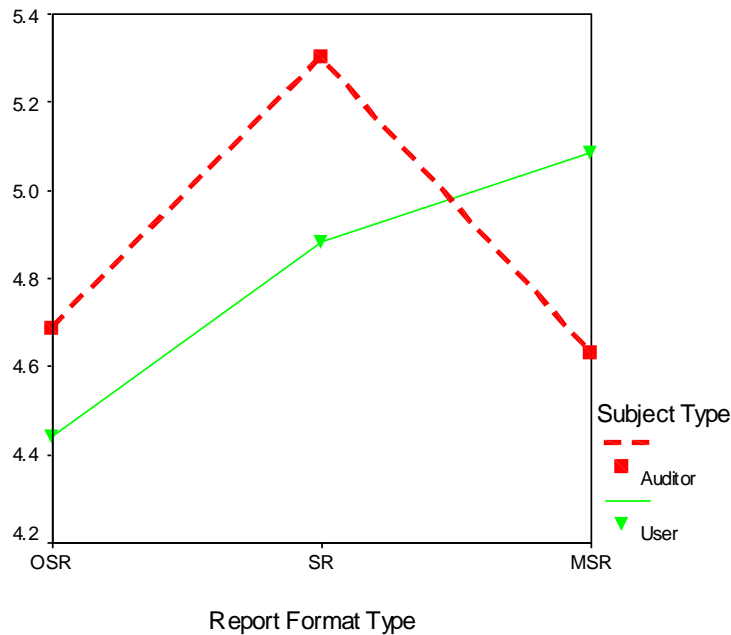
| Subject | Report Type | | | Difference | | |
|------------|-------------|---------|--------|------------|----------|----------|
| | OSR | SR | MSR | OSR-SR | OSR-MSR | SR-MSR |
| User | 4.44 | 4.88 | 5.09 | -0.44** | -0.65*** | -0.21 |
| Auditor | 4.69 | 5.30 | 4.63 | -0.61*** | 0.06 | 0.67 *** |
| Difference | -0.25 | -0.42** | 0.46** | | | |

* Significant at p-value = 0.10 for one-tailed t-test

** Significant at p-value = 0.05 for one-tailed t-test

*** Significant at p-value = 0.01 for one-tailed t-test

FIGURE 1
Interaction Effect: Understandability Dimension



¹Understandability is a measure of clarity of the audit report message communicated. OSR, SR, and MSR represent old, SAS 58, and modified standard reports, respectively.

Engagement Risk Dimension Hypotheses

The hypotheses relating to the auditor’s *engagement risk* are supported by the data. As shown in the ANOVA (Table 3), the interaction between subject type and report type on the *engagement risk* dimension is significant at .05, indicating that the effect of report format type on *engagement risk* is dependent on subject group type.

TABLE 3
Perceived Engagement Risk Dimension¹ Assessment Results

3 x 2 Full Factorial ANOVA: Engagement Risk Dimension

| Source | Sum of Squares | DF | Mean Square | F-value | Sig. |
|--------------------------|----------------|-----|-------------|---------|-------|
| Subject Type | 16.330 | 1 | 16.687 | 12.08 | 0.001 |
| Report Type | 46.477 | 2 | 23.394 | 16.93 | 0.000 |
| Subj. Type * Report Type | 10.844 | 2 | 5.422 | 3.93 | 0.021 |
| Error | 330.162 | 239 | 1.381 | | |
| Total | 403.812 | 244 | | | |

Pairwise Comparisons for Engagement Risk Dimension

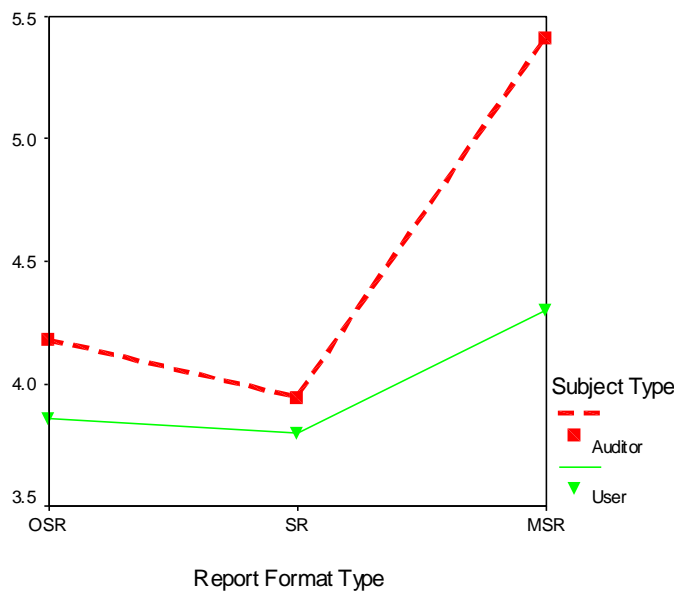
| Subject | Report Type | | | Difference | | |
|------------|-------------|-------|----------|------------|----------|----------|
| | OSR | SR | MSR | OSR-SR | OSR-MSR | SR-MSR |
| User | 3.86 | 3.80 | 4.30 | .06 | -0.44* | -0.5** |
| Auditor | 4.18 | 3.94 | 5.41 | .24 | -1.23*** | -1.47*** |
| Difference | -0.32 | -0.14 | -1.11*** | | | |

* Significant at p-value = 0.10 for one-tailed t-test

** Significant at p-value = 0.05 for one-tailed t-test

*** Significant at p-value = 0.01 for one-tailed t-test

FIGURE 2
Interaction Effect: Engagement Risk Dimension



¹Engagement Risk is a measure of the responsibility assumed by auditors and likelihood of exposure to legal liability/lawsuit. OSR, SR, and MSR represent old, SAS 58, and modified standard reports, respectively.

The mean ratings of users about engagement risk of the OSR, SR, and MSR are 3.86, 3.80, and 4.30, respectively, and those of auditors are 4.18, 3.94, and 5.41, respectively. Table 3 also shows the one-tailed t-tests of mean differences in risk ratings. Figure 2 provides a graph of the interaction effect, which is very pronounced.

Both users and auditors perceive the engagement risk to be significantly greater for the MSR (which refers to irregularity and fraud) compared to the SR and the OSR in support of $H_{2.2}$. Further, auditors evaluate the risk of the MSR significantly higher (at the .01 level) than do users in support of $H_{2.3}$. Also as expected ($H_{2.1}$), both users and auditors perceive no significant increase in engagement risk of the SR over the OSR. In fact both perceive the risk associated with the SR slightly lower than that of OSR.

Accommodation Dimension Hypotheses:

The hypotheses relating to the *accommodation* dimension are partially supported. The interaction between subject type and report type on the *accommodation* dimension is significant at .10 as shown in the ANOVA (Table 4), indicating that the effect of report format type on user required *accommodation* is dependent on subject group type.

The mean ratings of users about accommodation of the OSR, SR, and MSR are 5.15, 5.23, and 4.90, respectively. As expected, the direction of these ratings is inversely related to the mean ratings of *understandability*, which are 4.44, 4.88, and 5.09, respectively for OSR, SR, and MSR (Table 2).

The mean ratings of auditors about accommodation are 5.36, 4.72, and 5.24, respectively. As expected, the direction of these ratings is inversely related to the mean ratings of *understandability*, which are 4.69, 5.30, and 4.63, respectively for OSR, SR, and MSR (Table 2).

Hypothesis 3.1 holds for the auditor group, but not for the user group. Auditors evaluate needed accommodation for the SR (mean = 4.72) as significantly less (at .01 level) than that for the OSR (mean = 5.36), whereas users do not evaluate the level of needed accommodation for the two reporting formats (SR and OSR) as being significantly different.

With respect to and in support of hypothesis 3.2, users evaluate MSR (mean = 4.90) (which is also assigned the highest rating by users as to *understandability*), as requiring significantly less (at the .01 level) accommodation than that for the SR (mean = 5.23). Contrary to expectation, although in the hypothesized direction, users do not perceive the amount of needed accommodation when using the MSR as significantly less than that for the OSR (5.15).

Also in support of $H_{3.2}$, auditors perceive the use of MSR (mean = 5.24) as requiring significantly more (at the .01 level) user accommodation than that for the SR (mean = 4.72). Auditors, like users, do not perceive any difference in needed accommodation between the MSR and the OSR. Stated differently, auditors rate the SR (which is assigned the highest rating by auditors as to *understandability*) as requiring significantly less user accommodation than the other two reporting formats. Table 4 also shows the one-tailed t-tests of mean differences in accommodation ratings. Figure 3 provides a graph of the interaction effect, which is very pronounced.

Based on the above, it appears that evaluations by users and auditors of needed user accommodation are consistent with their perceptions of the understandability of the audit communication. As additional support for this observation, the computed correlation between the *understandability* and *accommodation* dimensions is negative and significant (at the .01 level) for the user group, the auditor group, and both groups combined.

DISCUSSION AND CONCLUSION

The motivation for exploring how well the ASB performed in promulgating the current reporting standard is based on the critical role of the auditor's report in reducing information risk to users and the authority of the PCAOB to establish or modify standards of reporting. In order to determine if the ASB responded effectively to the needs of users, this study examines whether the SAS 58 auditor's standard report (SR) represents an improvement in the audit message communicated over the earlier two-paragraph report (OSR), and whether the SR format could have been

improved upon with a modified standard report format (MSR) similar to the one considered during the deliberations leading to the release of the SAS 58 report. The paper provides empirical results indicating consistency between auditor and user perceptions of the understandability and assessed engagement risk of the SR relative to the OSR.

TABLE 4
Perceived Accommodation Dimension¹ Assessment Results

3 x 2 Full Factorial ANOVA: Accommodation Dimension

| Source | Sum of Squares | DF | Mean Square | F-value | Sig. |
|-----------------------------|----------------|-----|-------------|---------|-------|
| Subject Type | 0.10 | 1 | 0.010 | 0.01 | 0.934 |
| Report Type | 3.365 | 2 | 1.683 | 1.11 | 0.330 |
| Subj. Type * Report Type | 8.522 | 2 | 4.261 | 2.82 | 0.061 |
| Error | 360.716 | 239 | 1.509 | | |
| Total | 372.792 | 244 | | | |

Pairwise Comparisons for Accommodation Dimension²

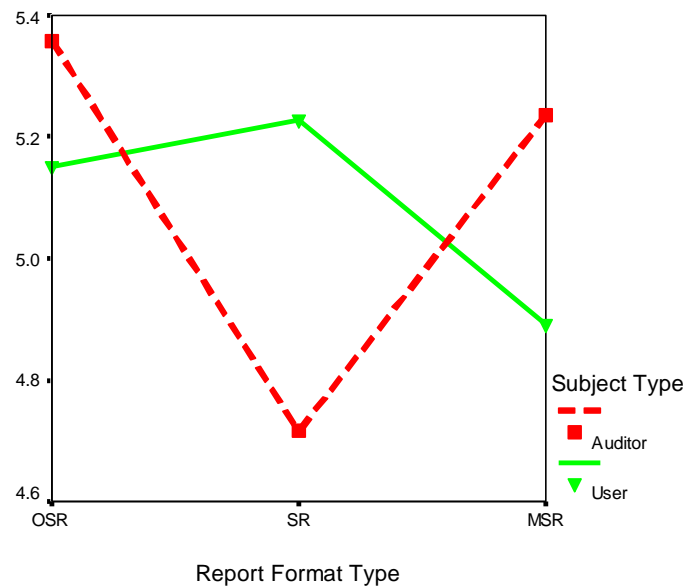
| Subject | Report Type | | | Difference | | |
|------------|-------------|--------|--------|------------|---------|----------|
| | OSR | SR | MSR | OSR-SR | OSR-MSR | SR-MSR |
| User | 5.15 | 5.23 | 4.90 | -0.08 | 0.25 | 0.33* |
| Auditor | 5.36 | 4.72 | 5.24 | 0.64*** | 0.12 | -0.52*** |
| Difference | -0.21 | 0.51** | -0.34* | | | |

* Significant at p-value = 0.10 for one-tailed t-test

** Significant at p-value = 0.05 for one-tailed t-test

*** Significant at p-value = 0.01 for one-tailed t-test

FIGURE 3
Interaction Effect: Accommodation Dimension



¹Accommodation is a measure of the need for additional information in conjunction with the auditor’s report when making a decision.

²Test-statistics were corrected for attenuation by dividing the original t-statistic by the square root of the accommodation scale’s reliability. A conservative estimate for scale reliability is Cronbach’s alpha which for this scale = .6307.

OSR, SR, and MSR represent old, SAS 58, and modified standard reports, respectively.

Both auditor and user groups evaluate the SR format as a significant improvement over OSR as to understandability, and both perceive no significant change in auditor engagement risk between the SR and the OSR. With regard to need for user accommodation, we expected that both auditor and user would perceive the required level of user accommodation as significantly less with the SR compared to the OSR, and inversely related to their perceptions of understandability of the communication. This is confirmed for the auditor group, but not the user group. Users do not perceive any difference in required accommodation between the SR and the OSR, inspite of perceiving SR as superior with respect to understandability. Overall, the ratings of SR and OSR on the three cognitive dimensions of *understandability*, *engagement risk*, and need for user *accommodation*, suggest that both auditors and users consider the SAS 58 report an improvement in the audit message communicated.

Furthermore, it is not likely that a format along the lines of MSR would have represented an improvement in the audit message communicated over the SAS 58 report given the inconsistent ratings between auditors and users of the cognitive dimensions of the MSR. These inconsistencies, as discussed below, occur even though the MSR format is more in harmony with the auditor's responsibility for fraud detection than disclosed in the SAS 58 auditor's report.

We expected that users would perceive the *understandability* of MSR as a significant improvement over both OSR and SR; the improvement is only significant (at the .01 level) over the OSR. With regard to auditors, as expected, the SR is perceived as a significant improvement (at the .01 level) in understandability over both the MSR and OSR. These findings point to the lack of agreement between user and auditor perceptions of the understandability of the MSR containing the language of irregularity and fraud. That is, for understandability, users assign the highest rating to MSR whereas auditors assign the highest rating to SR. This may be because auditors believe that the SR provides the best indication to readers regarding what the auditor is actually required to do, while users perceive that the auditor is exercising more due diligence under MSR.

Perceptions of needed user *accommodation* when utilizing MSR appear to be inversely related to perceptions of *understandability*, as expected. For accommodation, users assign the lowest rating to MSR while auditors assign the lowest rating to SR. The differences in ratings between auditors and users for MSR and SR for both understandability and accommodation are significant and particularly noteworthy.

As hypothesized, both users and auditors perceive the auditor's *engagement risk* to be significantly greater under the MSR compared to the SR and OSR, and the auditor's assessment of this risk for the MSR is significantly higher than that of users. The engagement risk assessment may partly explain why auditors do not perceive the MSR as an improvement in understandability over SR (or OSR for that matter). Auditors may perceive that users are mislead about the auditor's responsibility for fraud detection with the MSR. By contrast, users are likely to consider that detection of fraud is a primary objective of the audit process, and as a result the user's assessment of the auditor's engagement risk with MSR is significantly lower than the auditor's assessment.

In conclusion, the results taken as a whole suggest that the AICPA was effective in responding to the needs of users by improving the audit message communicated with the SR format.⁸ Furthermore, potential misconceptions between auditors and users of the MSR might explain why the ASB did not add explicit language to the auditor's report concerning the auditor's responsibility for detection of fraud.

Subject to the limitations discussed below, this study provides evidence in support of the profession's ability to protect user interests for the public's benefit. The findings, *ceteris paribus*, should be pondered by academics, regulators, and the ASB (in its future deliberations on reporting regulation for assurance services).

LIMITATIONS

Because of the study's limitations, caution should be taken when interpreting or generalizing the findings. One limitation may be the substantially "context free" setting in which the experiment took place. Although prior studies have used a context free frame of reference, it is not known whether reported results would have been any different had detailed financial information underlying the reporting formats been provided. Also, the sample

selection was restricted to the southwest region of the U.S. Further, evaluation by users and auditors of the cognitive dimensions explored could be investigated in light of recent regulations (e.g., Sarbanes-Oxley Act).

Since the study uses data collected relatively soon after the promulgation of SAS 58, similar studies in the current environment may yield different results due to public sensitivity to corporate scandals and fraud motivating passage of the Sarbanes-Oxley Act. On the other hand, our study is useful in evaluating the effectiveness of the AICPA's policy-making decision on audit reporting in a period of time not tainted or confounded by spectacular events alleging audit failures.

To the extent that SAS 82 and SAS 99 change the level of auditor responsibility for detection of fraud, the results of our data may not be comparable to post-SAS 82 perceptions. We do not believe this to be problematic since SAS 82 and SAS 99, in substance, reflect the provisions of SAS 53 (in existence at the time of SAS 58 adoption) with respect to stating that the auditor has some responsibility for detection of fraud. The MSR format, used for experimental manipulation, basically states that the auditor is required to plan and perform the audit to obtain reasonable assurance that the financial statements are free of material misstatement, whether due to error or fraud. The report format does not indicate the specific nature of the process or procedures (as per auditing standards on fraud detection) the auditor uses in discharging this responsibility. SAS 82 and SAS 99, for the most part, provide more guidance to the auditor in carrying out his/her responsibility established in SAS 53.

More attributes can be added to construct richer composites to scale cognitive dimensions/sub-dimensions, and other concepts (e.g., source credibility) can be investigated.⁹ In this study we have used a between-subjects full factorial ANOVA design. A within-subjects (repeated measures) design could be used, as a between-subjects design may not evoke differential attention (Taylor and Thompson 1982).

The limitations discussed in this section are suggestive of avenues for future research. For instance, a similar study in the current regulatory environment could provide evidence of how perceptions of the auditor's report have been influenced by corporate scandals and fraud. Also, richer experiments with more diverse user groups represented could be utilized.

Acknowledgments: We are thankful for constructive comments, suggestions, and recommendations of Carolyn Callahan, Tommy Carnes, Don Finn, Karen Pincus, Bob Roussey, Bill Wright, colloquium participants at the University of Arkansas and Florida State University, and research roundtable participants at the International Symposium on Audit Research, July 2002.

FOOTNOTES

¹ The expectations gap represents the gap between the public's (users of the auditor's report) expectations of the audit and what the auditors are reasonably expected to deliver to the users.

² The MSR format recognizes that users may require that audited financial statements provide at least a reasonable degree of assurance that the financial statements are free of (quantitative and qualitative) misstatements including fraud. The Treadway Commission (AICPA 1987), established to study management fraud and the role of auditors in its detection, recommended that "fraud" be referred to in the auditor's report. In deliberations leading to SAS 58 (Geiger 1993), the ASB considered use of the term "fraud" because of concern for consistency with the provisions of SAS 53 (AICPA 1988b) on auditor's responsibility for the detection of fraud, where fraud was specifically defined as "intentional misstatements." Under SAS 53 the auditor is required to assess the risk that errors and irregularities may cause the financial statements to contain a material misstatement. Nevertheless, when the SAS 58 auditor's standard report refers to financial statements being free of material misstatement, it does not indicate whether this may be due to "error, irregularity, or fraud." SAS 53 has since been superseded by SAS 82 (AICPA 1997b), which is superseded by SAS 99 (AICPA 2002). Some of the classic risk factors associated with management fraud (based on research into fraud cases of the 1970s and 1980s) are outlined in SAS 82. The auditor is required to assess these risk factors in planning and executing the audit. SAS 99 expands the number of information sources for identifying risks of fraud.

Guidance is provided on gathering information from analytical procedures, management and others within the client organization, consideration of fraud risk factors, as well as other sources.

³ Vividness can be interpreted in terms of the process it evokes (Kisielius and Sternthal 1984, 1986). Vivid information has certain properties that can exert greater influence on attitudinal judgment than non-vivid information. A study by McGill and Anand (1989) showed that consumers' judgments are disproportionately influenced by information that is concrete and imagery provoking relative to information that is equally important to judgment but presented in a more pallid manner. Therefore, incorporating the language of irregularity and fraud in the MSR may exert greater influence on users' judgments than the SR or OSR format.

⁴ SAS 16 (AICPA 1977) required the auditor to plan the audit *to search for* material errors and irregularities. In contrast, under SAS 53 (AICPA 1988b) the auditor is required to assess the risk that errors and irregularities may cause the financial statements to contain a material misstatement. Based on that assessment, the auditor should design the audit to provide *reasonable assurance* of detecting errors and irregularities that are material to the financial statements. The standard does recognize that some irregularities, like collusion and forgery, may preclude even a properly designed and executed audit from detecting material irregularity (Carmichael 1988; Guy and Sullivan 1988; Roussey et al. 1988).

⁵ While the present study does not consider the cost (or change in cost) to the audit client of an SR or MSR format compared to the OSR format, studies (Gist 1995, 1994; Palmrose 1989, 1986; Simunic 1984, 1980) have shown audit fees to be influenced by the auditor's exposure to potential legal liability. In switching from the OSR format there could be an increase/decrease (increment/decrement) in the cost of an audit if liability exposure is perceived to have changed. Auditors would consider the cost implications as an element when assessing *engagement risk*. Hence, the risk dimension implicitly takes into account the cost associated with the degree of responsibility assumed and/or exposure to legal liability by the auditor.

⁶ We assume that audit firm managers and partners who are responsible for preparing and reviewing the audit report are in a better position than other auditors to serve as subjects and that bankers and financial analysts are knowledgeable and sophisticated users of the audit report and are therefore good subjects to survey for the user perspective. T-tests performed did not provide evidence that the audit manager perceptions or the audit partner perceptions unduly influenced (drove) the results for the auditor group, nor did the perceptions of financial analyst or bank lending officers drive the results for the user group. We did not examine audit firm size, as we had no prior expectations of auditor perceptions of standard reporting formats being influenced by firm affiliation.

⁷ The t-statistics associated with mean differences were corrected for attenuation (i.e., reduction in true strength of the relation due to the reliability of the accommodation scale being less than 100 percent) by dividing the originally computed test-statistics by the square root of the scale's reliability (Cohen 1988; Bobko et al. 1991). The computed Cronbach's alpha for the accommodation scale (.63) was used as it provides a conservative estimate of the reliability when correcting for attenuation (Novick and Lewis 1967).

⁸ The ASB's promulgation of SAS 58 has also been received with approval in the international arena. The International Standards on Auditing adopted an auditor's standard report format, which is substantially similar to the SAS 58 three-paragraph auditor's standard report format. [For report format please see AU 8700.28, AICPA Professional Standards, Volume 2, June 1, 2001 -- relating to International Auditing Standards]. The Canadian Institute of Chartered Accountants, in 1991, switched from a two-paragraph auditor's standard report format to a three-paragraph auditor's standard report. The three-paragraph auditor's standard report format is substantially similar to the SAS 58 auditor's standard report format. [1991 CICA Handbook, Assurance Recommendations, Handbook section 5400.26].

⁹ While we cannot be absolutely sure that some confounding between perceived understandability and risk due to the wording "irregularity and fraud" is not present, confounding does not appear to be a problem as the ratings by users and auditors suggest that they were able to distinguish among the three reporting formats in terms of the cognitive dimensions examined.

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APPENDIX

XYZ COMPANY

YEAR: 19X2

XYZ Company may be classified as a small to medium sized closely-held manufacturing company with approximate annual sales of \$80 million. The company was established about 10 years ago to manufacture paint and chemical products. The company sells its products through independent distributors. The company has been using the services of a well established firm of independent certified public accountants (auditors).

This CPA firm conducted its audit of the financial statements of XYZ Company for the year ended December 31, 19X2, according to standards established by the American Institute of Certified Public Accountants. Based on their audit, the independent public accountants have determined that the financial statements of XYZ Company for the year ended December 31, 19X2, are fair within the framework of generally accepted accounting principles. The text of the auditor's report follows. Please read the auditor's report (shown on the next page) and provide your considered responses to questions/statements that follow the auditor's report.

AUDITOR'S REPORT FORMATS

OSR – TWO-PARAGRAPH AUDITOR'S STANDARD REPORT FORMAT

Auditor's Report
To the Stockholders of XYZ Company

We have examined the balance sheet of XYZ Company as of December 31, 19X2, and the related statements of income, retained earnings, and cash flows for the year then ended. Our examination was made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the financial statements referred to above present fairly the financial position of XYZ Company as of December 31, 19X2, and the results of its operations and its cash flows for the year then ended in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

SR – THREE-PARAGRAPH AUDITOR'S STANDARD REPORT FORMAT

Auditor's Report
To the Stockholders of XYZ Company

We have audited the accompanying balance sheet of XYZ Company as of December 31, 19X2, and the related statements of income, retained earnings, and cash flows for the year then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audit.

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

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of XYZ Company as of December 31, 19X2, and the results of its operations and its cash flows for the year then ended in conformity with generally accepted accounting principles.

MSR – MODIFIED AUDITOR'S STANDARD REPORT FORMAT

Auditor's Report
To the Stockholders of XYZ Company

We have audited the accompanying balance sheet of XYZ Company as of December 31, 19X2, and the related statements of income, retained earnings, and cash flows for the year then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audit.

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

In our opinion, the financial statements referred to above are free of material misstatements due to error, irregularity or fraud, and present fairly, in all material respects, the financial position of XYZ Company as of December 31, 19X2, and the result of its operations and its cash flows for the year then ended in conformity with generally accepted accounting principles.

Case Questions Listed By Cognitive Dimension

Fourteen (14) Questions Forming Three Composite Measurements for the Auditor's Standard Report

UNDERSTANDABILITY DIMENSION

1. The message communicated by the above auditor's report (on XYZ Company's financial statements) is **completely understandable**.
2. How **confident** are you that the financial statements of XYZ Company for the year ended December 31, 19X2, covered by the above auditor's report are **free of material errors**?
3. The purposes of the audit of XYZ Company are **clearly communicated** in the above audit report.
6. How **confident** are you that the financial statements of XYZ Company for the year ended December 31, 19X2, covered by the above auditor's report are **free of material misstatements due to an irregularity**?
9. How **confident** are you that the financial statements of XYZ Company for the year ended December 31, 19X2, covered by the above auditor's report are **free of material misstatements due to fraud**?
13. It can be concluded that the financial statements of XYZ Company for the year ended December 31, 19X2, covered by the above auditor's report are **free of material misstatements**.
14. The above auditor's report provides a **high degree of reliability** about the financial statements of XYZ Company for the year ended December 31, 19X2.

ENGAGEMENT RISK DIMENSION

4. The **likelihood** that the above auditor's report will expose the auditor of XYZ Company to **legal liability** is high.
8. The **likelihood** that the above auditor's report (on XYZ Company's financial statements) will lead to a **lawsuit** against the auditor of XYZ Company is high.
10. By issuing the above auditor's report, the auditor of XYZ Company is exposed to a **great amount of risk**.
11. It is clear from the above auditor's report that the auditor of XYZ Company is assuming a high **degree of responsibility**.

ACCOMMODATION DIMENSION

5. The amount of **additional information** needed to assess the contents of the above audit report is a great amount.
7. Given the above audit report, the amount of **additional information** needed concerning the financial statements of XYZ Company for the year ended December 31, 19X2, in determining the **soundness of XYZ Company** as a loan prospect (or investment prospect) is a great amount.
12. Given the above audit report, a great amount of **additional information** is needed concerning the financial statements of XYZ Company for the year ended December 31, 19X2, in **determining the quality of XYZ Company** as a loan prospect (or investment prospect).

NOTES