

# A Study of Differential Attitudes Held by Auditors from Large and Small U.S. Firms Toward Audits Performed by Small Public Accounting Firms

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## Abstract

*In an experiment (N=46), auditors from large U.S. firms attached greater relevancy to GAAS and assigned higher levels of quality to audit procedures applied to a small business audit than did auditors from small U.S. firms. These findings suggest the existence of a perception gap. Auditors from large firms may not be fully aware of the audit dilemmas facing small firms with small business audit clients.*

## Introduction

Some public accountants are voicing concerns that the professional organizations in the U.S. have been slow to respond to the needs of small public accounting firms that provide audit services. Comments by Peter Ciccone, Chairperson of the National Conference of CPA Practitioners, a national group formed in the U.S. to represent small firm practitioners, serve to exemplify these concerns. He claims that "Small firms have been abandoned by the AICPA . . . . The AICPA has made no attempt to serve the needs of small practitioners" (As quoted by Collins, 1990, p. 14). Wyatt (1984) summarizes the root of the concerns of small firms:

*The festering controversy over the applicability of generally accepted accounting principles to small and/or privately held companies continues. . . . [A] real burden [from increasingly complex and voluminous standards] does fall on smaller companies and on their accountants and auditors. . . . The "big firm - small firm" controversy has moved into the auditing arena, and it is not presently clear how the ASB [The Auditing Standards Board] will handle the various aspects of the controversy (pp. 112-113).*

The sluggishness of the profession's response to audit problems predominately encountered by small firms may be attributed to the dominating influence of large firms on policy makers. For instance, Wyatt (1984) states that "Over the years the standard setters in the profession have been guided by representatives from the large international

firms, even though the bulk of the AICPA membership is comprised of individuals who practice in smaller practice units" [p. 112]. Without adequate voice in the policy-setting process, small firms have had to rely on the capacity of large firms to recognize and address their problems. The present study provides evidence to suggest that large U.S. firms may not fully recognize the problems facing small firms, that there may exist a perceptions gap between auditors from large and small firms concerning the problems involved with auditing small business clients. This conclusion was reached by showing that auditors from large (international) and small (local) U.S. firms hold dissimilar views of the quality of work performed by auditors from a small public accounting firm.

The existence of a perceptions gap would be expected given that many auditors from large firms have not experienced the audit environment of small businesses. A primary audit client of small accounting firms is small business. The small size of these clients exposes the auditor to certain additional audit risks. These risks, and the characteristics that created them, have been well documented (e.g., Raiborn, 1982, p. 9; Raiborn et al., 1983, p. 53; Marino, 1986, p. 19). The audit problems stemming from small business characteristics are generally rooted in the internal control system of the small business audit client. So pervasive are the lack of internal controls in some small businesses, such as "ma and pa" stores or closely-held companies with few employees and owner-dominated operations, that their capacity to be

audited could be questioned. While large accounting firms also serve small business clients, most of the auditors from large firms have had minimal exposure to these kinds of clients.

Moreover, the economies of scale enjoyed by larger firms suggest that even those auditors from large firms who have had exposure to small business audit clients may hold different views about the risks associated with small business audits. Auditors from small firms continually face the dilemma of balancing audit risk exposure with the additional cost of performing an expanded audit to compensate for inadequate or nonexistent internal controls. The dilemma is less prevalent in large firms. Due to their size, they are more able (a) to absorb the additional audit costs from expanded testing by using lower cost professionals (e.g., seniors with 3-4 years of experience) during lulls in audit work of SEC clients and (b) to absorb any legal exposure that derives from the enhanced audit risk. Whereas the cost savings allow large firms to perform more in-depth audits, the small firm is deterred from doing so by an inability to pass the higher cost on to its small business client.

A potential solution to the problem of auditing small clients is to amend existing GAAS to include exceptions for audits of small businesses. The U.S. accounting profession discounted this approach, concluding that, while there may be times when special guidance may be necessary to meet the needs of small business auditors, there should be no differences in audit standards based on the size of the entity being audited (AICPA, 1978, p. 133). It opted for an advocacy and education approach to help auditors cope with small business audit problems.

The advocacy approach gave small practitioners a stronger voice in the profession. The major initiative for this stronger voice was the establishment of the Private Companies Practice Section of the Division of CPA Firms in 1977. An objective of this body was to provide member firms with a better means of effectively providing input on professional matters (AICPA, 1986). The AICPA's education approach was intended to improve communication with, and services to, small firm practitioners. This effort has included new continuing education courses, new seminars which address problems peculiar to audits of small businesses, and publication of small business audit guides by professional and private groups. The AICPA's education approach suggests that auditors from small accounting firms are unprepared to handle the problems encountered when auditing a small accounting firm and therefore require guidance. However, an alternative explanation is that the audit problems facing auditors of small businesses are largely unsolvable within existing GAAS: Highly capable auditors cannot apply the full

measure of GAAS to their small business audits because of the inherent characteristics of a small business client (e.g., weak internal controls).

The British profession responded differently to the problems facing small business auditors. British policy makers decided to allow auditors of small businesses to qualify their opinion with a middle paragraph that explains the limitations of the audit (Institute of Chartered Accountants in England and Wales, 1980, p. 55). Implied in the British profession's decision to permit a middle paragraph is that small business problems are not related simply to a deficiency in the capability of small practitioners to cope with small business problems, but are also related to the innate limitations imposed by the system of internal controls in small businesses that prevent auditors from meeting professional standards.

The U.S. profession's reluctance to reach a similar conclusion is explainable (a) if auditors from large firms have significant influence over policy setters, as suggested by Wyatt, and (b) if auditors from large firms are not fully aware of the intrinsic shortcomings associated with auditing small business and, hence, are not fully aware of the seriousness of the problems facing small practitioners. This study examines the latter condition by hypothesizing the existence of a perceptions gap between auditors from large and small firms.

The general approach used to show a potential for a perceptions gap was to select a sample of U.S. auditors from large (big-6) firms and a sample of U.S. auditors from local firms, and then to make comparisons between big-6 and local firm auditors in terms of three attitudinal variables. The first variable directly assessed the attitudes held by the two groups of auditors toward the relevancy of existing GAAS for small business audits. If auditors from larger AICPA member firms are not fully aware of the problems of implementing GAAS for small business audits, then they are likely to believe that GAAS applies equally to audits of small and large businesses. Since the system of internal controls in large businesses is generally stronger than in small businesses, they are less likely than auditors from small firms, who are familiar with the internal control and other problems common in small businesses, to question the relevancy of GAAS for small business audits. Thus, the first hypothesis is:

**Hypothesis 1:** Local practitioners will view GAAS as being less relevant for small business audits than will big-6 auditors.

The second variable is the attitude formed by the two groups of auditors toward the quality of work performed by auditors from small firms during an audit of a small

business. If auditors are not familiar with the internal control problems of small businesses, they are more likely to rate the set of audit procedures used by a small firm in an engagement as supporting a higher level of quality than would local practitioners who are familiar with the internal control problems. Thus, the second hypothesis is:

**Hypothesis 2:** Local practitioners will rate the quality of audit procedures employed in a small business engagement lower than will big-6 auditors.

The third variable selected for study was the change in attitudes about the quality of work performed after receipt of outcome information, specifically, a lawsuit alleging substandard audit work. A systematic judgmental bias to outcome information has been demonstrated in a broad spectrum of research (e.g., Wolf and Montgomery, 1977; Hawkins and Hastie, 1990). In general, the bias is that people in possession of additional information are unable to disregard that information when rendering a decision, a condition which Camerer et al. (1989, p. 1233) label as "the curse of knowledge." An aspect of the "curse" is the general tendency for negative outcome information to adversely affect evaluations of events that led to that outcome (e.g., Baron and Hershey, 1988). A major segment of the literature that has shown the effects of outcome information relates to studies demonstrating hindsight bias (e.g., Fischhoff, 1975, 1977; Hawkins and Hastie, 1990; Christensen-Szalanski and Fobian, 1991). Hindsight bias "... refers to people's tendency to alter their perception of the inevitability of an event once they know the outcome of the event" (Christensen-Szalanski and Fobian, 1991, p. 147).

A lawsuit was selected as the outcome information, since its outcome is directly related to the application of GAAS and to audit quality. We hypothesize that U.S. auditors from large firms, who view GAAS as relevant to small business audits, will interpret the outcome as an indication of an audit failure. These large firm auditors should exhibit a strong negative bias toward the audit conducted by the sued auditors. On the other hand, local practitioners, who believe that GAAS is less relevant for small business audits, should be inclined to view the lawsuit as an example of the problems of applying GAAS to small business audits. Attitudes concerning the quality of audit procedures used, and the audit judgments made, by the sued auditors should be less affected by the outcome information, since auditors from small accounting firms should be less inclined to hold the auditors responsible for actions that led to the lawsuit. For auditors from small accounting firms, the lawsuit outcome should reflect the expected outcome of applying inadequate GAAS, a condition which is beyond the control of the auditors. Since the actions of the sued auditor are not the direct

cause of the outcome, the lawsuit outcome should have minimal effect on attitudes held by auditors from small firms concerning the quality of work performed during the audit in question. In other words, the lawsuit information will fail to elicit the same degree of systematic judgment bias concerning the quality of work performed by the accused. Thus, the third hypothesis is:

**Hypothesis 3:** Firm size will have a moderating effect on the degree by which knowledge of the accusation will influence an auditor's evaluation of the quality of audit work performed. Big six auditors will be influenced more heavily by the accusation than will local practitioners.

## The Experiment

The general approach used to test the hypotheses of the study was to have two groups of U.S. auditors, one from big-6 firms and another from local firms, assess the quality of an audit of a small business that was conducted by a small audit firm. Accounting firm size (large vs. small) served as one factor of a 2x2 factorial design. The other factor was the existence (vs. not exist) of outcome information concerning a lawsuit against the auditors for substandard audit work. A description of the audit work performed by the auditors, and the lawsuit manipulation, were presented to subjects using a scenario format.

### Subjects

Subjects were 23 big-6 auditors from three offices located in two large cities in the Midwest region of the U.S. and 22 local practitioners from smaller Midwestern U.S. towns. Subjects' experience in public accounting ranged from one year to 38 years, with mean experience of 8.2 years. Their ages ranged from 22 years to 59 years, with mean age of 32 years. Thirty-two percent of the sample was female. Statistical analyses indicated that subjects' experience, age, and gender had no significant effect on the variables relevant to this study. While the makeup of the two samples of auditors were similar in terms of experience levels and gender, local practitioners were somewhat older (mean age of 35 years) than their counterparts from big-6 firms (mean age of 29 years).

### Experimental Procedures

Experimental materials were delivered to subjects through coordinators located in a firm (for large firms) or in a town (for small firms). Coordinators, who were alumni or friends of the sponsoring university, were responsible for selecting subjects and distributing the materials according to prepared criteria. Thus, the sample was not random. The criteria included the number of subjects for which they were responsible. Most were given

a quota of six subjects from their firm or region, but for some, due to restricted availability of auditors in the area, the number of subjects was fewer than six. The big-6 firms fulfilled 96 percent of their assigned quota, and local firms supplied 92 percent of their quota.

The experimental materials were presented to subjects in three separate, numbered envelopes. Envelope number one contained the instrument used to capture a subject's attitude toward GAAS.<sup>1</sup> Envelope number two contained a scenario of the audit performed by a small accounting firm and either the lawsuit or control manipulation. Envelope number three contained the instruments used to capture a subject's judgments concerning the quality of the work described in the scenario, to collect attention and manipulation check data, and to collect post-experimental information. Specific instructions directed subjects (a) to proceed through the envelopes in the preceding order, (b) to place the instrument back into its envelope when finished and to seal the envelope before proceeding on to the next envelope, and (c) not to refer back to materials in previous envelopes as they moved sequentially through the three envelopes.

#### *Scenario*

The scenario presented in envelope number two described details surrounding an inventory audit engagement. It contained information concerning: (1) The purpose of the engagement - to express an opinion as to the existence, valuation, ownership, and completeness of inventory pledged in connection with a bank loan. A set of unaudited financial statements and supporting detail of inventory were included as part of the scenario. (2) The public accounting firm that performed the engagement - a small firm containing four partners and eleven staff members. Each partners had experience with an international firm, and nine staff members were licensed CPAs. (3) The client who requested the engagement - a closely-held corporation, employing approximately 2,000 full-time workers. The president of the company was a major shareholder in the company, and the vice-president had been with the company since it was established approximately 20 years ago. (4) The audit procedures employed during the engagement - presented factually, without making a value judgment about the audit findings and described in narrative form to keep the length of a subject's participation within reasonable limits.

An audit procedure was added to the scenario to introduce fuzziness to the otherwise routine nature of the set of audit procedures described. To induce potential concern over the inventory's existence, management's

count of inventory was observed and tested over two days, but with a weekend between.

#### *Task, Manipulation and Experimental Design*

Subjects evaluated the overall quality of work performed on the engagement, using standards applicable for Private Companies Practice Section (PCPS) peer reviews. To vary the existence of negative outcome information concerning the audit, the sample was divided randomly into two groups, a group receiving the lawsuit manipulation and a control group.<sup>2</sup> The two groups differed only in terms of the reason for the requested peer review. The lawsuit manipulation group was told that the PCPS Special Investigation Committee was requesting the review of work quality because the bank sued the accounting firm for allegedly providing inaccurate information pertaining to the existence of the inventory. The control group was told that the review was in conjunction with the accounting firm's program of normal periodic PCPS peer review. Since all accounting firms which are members of the PCPS are required to have regular tri-annual peer reviews, the request for this review should have been perceived as a natural response to professional mandates and should have conveyed no special significance to subjects in the control group concerning the character of the auditors involved.

Thus, the experiment contained two variables, firm size and lawsuit outcome, crossed in a 2x2 design. The original intent was to obtain 12 subjects in each of the four cells. However, due to non-response, the final sample contained 11 subjects in the "control group, big-6 firms" cell and 10 subjects in the "control group, local firms" cell.

#### *GAAS Attitude*

A scale was constructed to measure each subject's pre-existing attitude toward the relevancy of GAAS to small business audits. The scale was composed of the following seven items, each item measured on a seven-point (+3 to -3) Likert-type scale anchored by "complete agreement" and "complete disagreement" (\*=reverse coded items): (1) GAAS are difficult to apply to small business audits (\*). (2) GAAS should be applied to small business audits as strictly as the standards are applied to large business audits. (3) The field standards of GAAS were written in such a way that they apply equally well to audits of both large and small businesses. (4) The accounting profession needs to consider drafting new GAAS field standards that reflect the audit characteristics of small businesses (\*). (5) Smaller regional and local public accounting firms had an adequate voice in the field standards of GAAS. (6) GAAS, as written, are adequate

for small business audits. (7) If the profession were to implement an immediate review of the adequacy of GAAS for small business audits, I would support the decision (\*).

Higher values on the scale indicate greater relevancy.

### *Dependent Variables*

The following criterion variables were used to capture subjects' quality attitudes concerning the work performed in the engagement.

**Review Decision.** An overall review opinion about the work performed in the special inventory engagement was measured on an eleven-point scale, anchored by "totally unacceptable" (=1) and "the highest quality beyond criticism" (=11).

**Engagement Quality Attitude.** Each subject's judgment of "quality of the engagement work performed" was captured on a seven-item scale. The individual items making up the scale were as follows (\*=reverse coded items): (1) The work performed reflects good inventory engagement procedures. (2) The audit work conducted does not meet overall GAAS standards (\*). (3) The audit procedures selected in this engagement would be acceptable to most auditors. (4) The auditors did not exercise "due care" in the conduct of the special inventory engagement (\*). (5) Based on the information presented in the case, I would have reached the same conclusions as the auditors. (6) The auditors' judgment in this engagement is subject to question (\*). (7) The auditors' work reflects a high degree of professionalism.

Each item was accompanied by a seven-point, agree-disagree scale ranging from plus three to minus three. Individual items were summed, such that higher values on the scale reflected a more positive attitude toward engagement quality.

**Procedures Quality Attitude.** Subjects were presented with a list of ten individual audit procedures described in the scenario. For each procedure, they indicated how confident they were that it would have found those kinds of irregularities that it was intended specifically to uncover. The confidence rating for each procedure was given on a 11-point scale (0 to 100) anchored by "absolutely no confidence" (=0) and "total confidence" (=100).

## **Results**

### *Attention and Manipulation Checks*

Four questions about minute details of the engagement were included in the latter part of the experimental

materials to assess subjects' attentiveness to the facts presented in the scenario. Seventy-five percent of these questions were answered correctly, which we considered well within an acceptable range given the detailed nature of the questions posed.

The effectiveness of the manipulation (lawsuit versus control) was assessed by listing three potential reasons for the peer review request: a lawsuit, an ethics allegation, and a periodic peer review. Ninety-five percent of the control group answered correctly that it was a periodic peer review, and 88 percent of the lawsuit group correctly identified the lawsuit as the reason for the request. These results support subjects' attentiveness to their respective manipulation.

### *Procedures Interpretations*

The confidence ratings for the ten audit procedures used to measure procedures quality attitudes were factor analyzed (varimax rotation, 1.00 Eigenvalue cut-off), and three factors emerged. The results of the factor analysis are given in Table 1. Individual procedures that loaded heavily with each factor (loadings > .60) were used to define three new scales to represent procedures quality attitudes. These scales are procedures quality attitudes relating to (a) trust-in-records procedures, (b) inventory records procedures, and (c) physical inventory procedures. The individual procedures comprising each scale are listed in Table 1. Each scale was measured as the sum of item responses for the individual procedures making up the scale.

### *Multiple Item Scales*

Responses to the seven-item GAAS attitude scale range from -14 to 15. The mean (standard deviation) is 3.57 (7.96). Its internal reliability (Cronbach's alpha) is .82. The seven-item engagement quality attitude scale range from -9 to 16 and has a mean (standard deviation) of 7.16 (6.98). Its internal reliability is .86.

### *Testing of Hypotheses*

**Hypothesis 1.** The first hypothesis predicts that auditors from big-6 firms will judge the relevancy of GAAS for small business audits to be higher than will local firm auditors. The results support this hypothesis. The mean response on the GAAS relevancy scale is 6.65 for big-6 auditors and 0.36 for local auditors, a difference that is statistically significant ( $t=2.86$ ,  $df=43$ ,  $p<.007$ ).

**Hypothesis 2.** The second hypothesis predicts that auditors from big 6 firms will rate the work performed in the engagement as supporting higher quality than will

**Table 1**  
**Factor (Varimax) Analysis Results of Confidence Responses**  
**for Audit Procedures Used**  
(N=45; final communality = 6.49, 65%)

Factors	Factor Loadings			Communality Estimates
	1	2	3	
<b>1. Trust-in-Records Procedures (Eigenvalue = 2.23, 34%)</b>				
Review and testing of direct labor and overhead rates	.88	-.01	.11	.78
Review of internal controls	.84	.17	-.16	.75
<b>2. Inventory Records Procedures (Eigenvalue = 2.23, 34%)</b>				
Review of shipping and receiving records	.29	.60	.35	.57
Comparison of market values to recorded values	.27	.77	.33	.77
Consultation with experts concerning marketability of model A capacitors	-.07	.91	-.07	.84
<b>3. Physical Inventory Procedures (Eigenvalue = 2.04, 31%)</b>				
Observation of the counting of inventory	-.11	.09	.80	.66
Test counts of the inventory and reconciliation with the general ledger	.09	.11	.81	.67
<b>Other Items:</b>				
Review of production and purchasing records	.53	.47	.34	.61
Comparison of inventory balances against production and sales activity	.44	.31	.47	.52
Examination of vendor invoices	.33	.28	.36	.31

auditors from local firms. Table 2 presents the ANOVA results that were used to test this hypothesis. ANOVA was applied to two factors in a 2x2 design. The two factors are the firm size variable (big-6 versus local) and the manipulation variable (lawsuit versus control). A firm size main effect was found for engagement quality attitude ( $F=4.14$ ,  $p<.049$ ), and the difference in means is in the predicted direction ( $M_{big-6}=9.17$  versus  $M_{local}=5.05$ ). Big-6 auditors also tended to reach a more favorable peer review decision than local auditors ( $M_{big-6}=7.90$  versus  $M_{local}=7.23$ ), but the difference was not large enough to achieve customary significance levels ( $F=2.38$ ,  $p<.131$ ). The inability to achieve significance for the decision variable may be due to the very narrow range of responses obtained for this query. Seventy-five percent of the responses fell within the range of seven to nine on the scale.

The only other criterion variable to evidence a firm size main effect in the hypothesized direction was the

procedures quality attitude scale for physical inventory procedures. This measure indicates a subject's confidence in the physical inventory procedures to detect those kinds of irregularities it was intended to uncover. Big-6 auditors indicated a significantly ( $F=5.36$ ,  $p<.028$ ) greater confidence in the physical inventory procedures ( $M=158$ ) than did local firm auditors ( $M=131$ ). In sum, these ANOVA results provide partial support for hypothesis 2.

**Hypothesis 3.** The third hypothesis predicts that the lawsuit information will have a greater effect on big-6 auditors than on local firm auditors. This would be supported by a significant interaction effect between the lawsuit manipulation variable and the firm size variable. The significance of the ANOVA interaction effects are also reported in Table 2 for each criterion variable. This hypothesis is not supported. None of the interaction effects is significant. Lawsuit main effects were significant for several of the criterion variables, albeit some at  $p<.10$ . These main effects are in the direction which suggests that

**Table 2**  
**2x2 ANOVA Results for Testing Hypothesis 2 and Hypothesis 3**

	Criterion Attitude Variables				
	<u>Dec.</u>	<u>Engagement Quality</u>	<u>Trust-in-Records Proc.</u>	<u>Inv. Records Proc.</u>	<u>Phys. Inv. Proc.</u>
SSM	12.76	372.4	5617	6732	9990
SSE	74.03	1773.5	39642	58734	60156
<b>F Statistics<sup>1</sup></b>					
Overall	2.30 (.093)	2.87 (.048)	1.94 (.139)	1.57 (.212)	2.27 (.095)
Lawsuit Main Effect	3.77 (.060)	4.14 (.049)	3.93 (.054)	2.71 (.107)	0.13 (.578)
Bigsmall Main Effect	2.38 (.131)	4.14 (.049)	1.52 (.225)	0.21 (.651)	5.36 (.028)
Interaction Effect	.38 (.543)	.06 (.801)	.31 (.579)	2.00 (.165)	.79 (.381)
<b>Cell Means</b>					
<b>Control Group</b>					
Big-6 Firms	8.18	11.00	144	223	156
Local Firms	7.80	7.50	150	244	140
<b>Lawsuit Group</b>					
Big-6 Firms	7.64	7.50	120	220	160
Local Firms	6.75	3.00	137	209	123

<sup>1</sup>Statistical significance levels are reported parenthetically below the F values. For each criterion variable except "decision", the overall F test used 3 degrees of freedom for the numerator and 41 degrees of freedom for the denominator. There were 40 degrees of freedom for the denominator for the "decision" criterion variable due to a missing value.

knowledge of the pending lawsuit lowered the quality judgments of auditors equally from both sizes of firm. These findings give support to those who argue for the universal existence of hindsight-like bias effects in decision making.

### Discussion and Implications

This study explored the possibility of a perceptions gap between auditors from large and small U.S. accounting firms concerning the relevancy of GAAS to audit work performed by auditors from small firms. Evidence of a

perceptions gap was found in terms of a direct measure of attitudes held (hypothesis 1) and in terms of peer review judgments of the quality of work performed by a small firm (hypothesis 2). In comparison to auditors from small firms, auditors from large firms viewed GAAS as more relevant to small business audits and attached higher quality assessments to small business audit work.

Auditors from large and small U.S. firms also reached different quality assessments for the procedures applied in the audit. However, this finding was restricted to one group of procedures, those relating to the physical count of

inventory. A potentially questionable practice was added to the physical count procedures. The physical count was performed over two days but with a weekend between wherein the auditor may have lost control over the count. This practice may have been viewed as a more serious audit deficiency by auditors from small firms, since they are intimately aware that a prevalent internal control weakness of small business is owner/manager domination of all facets of the business. If owners/managers are prone to falsification, there are fewer controls to deter their actions. For instance, it would be relatively easy to physically shift inventory over the intervening weekend to hoodwink auditors during the physical count.

The support found for hypotheses 1 and 2 indicates the existence of a perceptions gap and suggests an explanation for the reluctance of the profession to adopt move away from a philosophy of "one GAAS for all." Auditors from large firms may be less inclined to support moves by auditors from small firms to convince the profession to adopt stronger measures to solve their auditing problems. At a minimum, the findings demonstrate a need for additional study. Small firms form the nucleus of the accounting profession. If a perceptions gap has prevented the profession from satisfactorily addressing the problems facing small firms when auditing small businesses, then the viability of small U.S. firms to continue to provide audit services may be at stake.

What can the U.S. profession do? It can help by better informing auditors from large firms of the audit problems faced by auditors from small firms. Educational programs may be a useful start. Some professional publications have made strides in that regard (e.g., Anderson et al., 1982; Raiborn, 1982; Raiborn et al., 1983; Marino, 1986; Karnes et al., 1992). But, many auditors from large firms may not read these publications when their practice is confined to larger business clients.

The U.S. profession can also reassess the adequacy of their remedies for the audit problems encountered when auditing small companies to determine if current conclusions and recommendations adequately address the needs of small accounting firms. As long as a perceptions gap exists, the profession may need to listen more closely to views of the practicing auditors from local firms when setting policy that affects them directly and possibly allow them greater latitude to find their own remedies. The PCPS may provide a useful vehicle in that regard. Dopuch and Simunic (1980, 1982) maintain that the two-tier audit market structure may be justified on the basis of market demand for differentiated product quality, if small firms provide a lower quality audit. This study suggests that differential quality may exist due at least partially to the characteristics of the client served. However, the makeup

of the PCPS membership is quite diverse in terms of the size of audit client served. If the PCPS membership is dominated by firms with relatively large non-SEC clients, which may comprise a large proportion of the member firms, then the problems of meeting GAAS when auditing small business clients may continue unabated. There is a propensity for the collective voice of larger member firms to dominate, since these firms have the economies of scale to allow their auditors greater opportunity to become involved.

There is also a message for researchers. There seems to be a common belief that small firms are perceived by others as providing a subordinated audit service. As noted by Ettredge et al. (1988, p. 29), users of financial information widely assume that audits by small firms are inferior in quality to audits by international firms. Some have attributed lower quality to economic incentives to provide high quality audits (e.g., DeAngelo, 1981, p. 184). The absence of economies-of-scale characteristics in many small accounting firms - which would include (a) fewer library resources, (b) a lack of in-house training programs, (d) inadequate number of supervisory personnel to supervise staff auditors and (e) an absence of in-house expertise to deal with esoteric auditing matters that may arise during an audit engagement (e.g., Mars, 1982, pp. 62-63; Raiborn, 1982, p. 65) - are *a priori* indications of lower quality audits. Some tangential evidence has been found to support the existence of differentiable quality due to firm size (e.g., National Commission on Fraudulent Financial Reporting, 1987; Finn et al., 1988; Schaefer and Welker, 1994).

The existence of a perceptions gap provides additional tangential evidence of lower quality audits by small firms. But the explanation for the lower quality is very different from the ones previously presented, since it does not attribute lower quality to general deficiencies of small firms or their auditors or to auditor reaction to economic incentives. The differential in audit quality may be attributed, instead, to the nature of the audit client that small accounting firms attract due to their size. Competent, well prepared auditors from smaller firms still face an audit quality issue, since they are serving small businesses with inherent weaknesses in their internal control systems.

The profession, including researchers, may be judging the quality of audit service provided by small firms on existing GAAS without adequate adjustment for the fact that existing GAAS may not adequately embody the auditing characteristics unique to these size businesses. Studies that examine the comparative quality of small firms may need to control for this aspect. For instance, formal study of the user perception of a differentiable



quality due to firm size (e.g., Simunic, 1980; Nichols and Smith, 1983; Shockley and Holt, 1983; Francis, 1984; Palmrose, 1986; Ettredge et al., 1988; Wyer et al., 1988) has generated inconclusive findings, thus leaving the question unsettled (see Simunic and Stein, 1986, for a similar conclusion). Goetz et al. (1991) even found tangential evidence to support an opposite conclusion. Based on their questionnaire study, they suggested that "... increasing firm size may have an adverse impact on professionalism" (1991, p. 164). A clearer picture of user perceptions may emerge if researchers better delineate the nature of small firms. A perception of lower audit quality may be expected for small firms with small business clients if the inherent internal control weaknesses of their clients prevent their auditors from meeting GAAS.

The conclusions that can be drawn from this study were weakened by an inability to find two hypothesized results. First, in hypothesis 3, the lawsuit information was expected to have a greater effect on auditors from large firms than on auditors from small firms. It was thought that auditors from large firms would view the lawsuit as a consequence of poor quality audit work and show strong hindsight-like bias effects by rating audit quality low. In contrast, it was thought that local auditors would view the lawsuit as an expected consequence of trying to apply less relevant GAAS. Since this interpretation is not related to the actions of the auditor, less hindsight-like bias was expected when evaluating the auditors' work. Auditors from both large and small firms demonstrated equally strong hindsight-like effects. This result may further demonstrate the ubiquity of hindsight bias effects. Auditors from small firms may have been equally swayed to reconstruct the facts consistent with the allegations raised in the suit.

A second instance where statistical support of hypothesized effects was not attained relates to the peer review decision. Consistent with the findings for the overall quality attitude, auditors from small firms rendered a more unfavorable peer review decision. This effect failed, however, to achieve statistical significance. The insignificance of the difference in decision may be attributed to the lack of response variation in the measure used. It may also indicate the relative size of the differential between the quality judgments of auditors from large and small firms. The difference in quality perceptions for the audit situation described in the scenario may have been insufficient to manifest in the peer review decision made by the two groups.

### Suggestions for Future Research

Auditing problems confronting small firms, while discussed in the practitioner literature, have not been

studied extensively by empiricists. Conditions that may contribute to the research inactivity are the absence of databases of information pertaining to small firms and their clients and an inability to entice overly taxed auditors from small firms for participation in behavioral studies. Another possible explanation for the dearth of research is the general weakness of small firms as a constituent bloc and their ineffectiveness in airing the nature and seriousness of their problems through professional outlets. By showing the potential existence of a perception gap and raising the possibility of inadequate attention to auditing problems facing small firms, this study underscores the importance of conducting more research to further our understanding of the problems of small firms. Possible topics deserving study include whether the explosion of auditing standards has had a disproportionate effect on small firms and whether small firms are having to bear a disproportionate share of malpractice insurance costs to cover the substantial risk exposure of large firms. Answers to such questions may have a bearing on the small firm's continued survival in the specialty of auditing. □

### \*\*\* Endnotes \*\*\*

1. The package of experimental materials also contained a Rosenberg's (1957) five-item faith-in-people scale. The scale was included as a test for differences in the general level of skepticism between big-6 and local auditors. No significant differences (all  $p > .30$ ) between the two groups were detected, either for the scale or for individual items comprising the scale.
2. The sets of experimental materials were randomized prior to their delivery to the coordinators. The coordinators did not know which experimental materials contained the lawsuit manipulation and which contained the control condition.

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