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## **A Survey Of Attestation Practices**

By: **Kennard S. Brackney** and Glenn L. Helms

### **Abstract**

Presents a survey of American Institute of Certified Public Accountants (AICPA) public accounting professionals to identify the nature of attestation practices. Association of office/firm characteristics with performing attestation services; Expectations on services; Logistic regression of attestation services on practice characteristics variables.

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## PRACTICE NOTES

# A Survey of Attestation Practices

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### SUMMARY

Attestation services, provisions of assurance on assertions other than those in historical financial statements, represent a recently formalized area of accounting practice. This exploratory study surveys AICPA professionals in public accounting to identify the nature and extent of attestation services currently being provided and expected to be provided in the future. It also investigates the association of office/firm characteristics with performing these services.

The study finds the attestation services being performed are concentrated in areas addressed by specific professional standards. The majority of assertions being attested to are financial in nature, and the most common basis for assurance is agreed-upon procedures. Logistic regression findings suggest practices with greater auditing expertise and practices which are part of larger firms are more likely to be involved in performing attest services. The respondents expect attestation services to continue expanding as a percentage of their offices' practices, particularly into non-traditional attest areas.

**Key Words:** Attestation practices, Attestation standards, Scope of CPA services, Assurance

**Data Availability:** Data used in this study are available upon request.

The accounting profession has long been the primary server of the public's need for reliable information concerning companies' financial performance and condition. The profession has capably filled this role through performing audits of companies' financial statements in accordance with the ten generally accepted auditing standards (GAAS). In recent years, significant changes have occurred in the information environment, many of which are being driven by the dramatic advances in information technologies. A major result of these changes is that information about companies is now available from many different sources and in many different forms. Leaders in the accounting profession are of the opinion that investors and other external constituents are increasingly demanding that the profession extend its provisions of assurance to include these new sources and forms of information.<sup>1</sup> The profession has responded to this perceived demand and has moved quickly to formulate general and specific standards of practice that go beyond those

established for traditional historical financial statements to serve as guidance for CPAs in performing these new attest services. To date, though, no investigation into the nature and extent of the demand for and supply of attestation services has been conducted. This study addresses these important issues.

Researchers in auditing (Kinney 1987; Blocher et al. 1988) point out that the attestation services area offers numerous interesting avenues for investigation, and that exploratory studies may be important initially to establishing a framework for future hypothesis testing

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<sup>1</sup> For example, the AICPA has appointed the Special Committee on Assurance Services whose mandate is to determine whether the basic audit service should be changed to meet users' needs in the information age and to recommend changes to the basic auditing service (Pallais 1995).

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related to attestation. This study responds to the need for exploratory research related to attestation and provides a foundation for future research. Specifically, a sample of AICPA members engaged in public accounting practice is surveyed to address the following questions: (1) what is the nature of the attestation services currently being performed; (2) what is the relative importance of attestation services within the portfolio of all services being provided; and (3) what, if any, office- and firm-specific characteristics are associated with the public accounting practices that perform attestation services.

In addition to investigating attestation services, the study contributes to previous research on other areas of public accounting practice (Previts 1985; Read and Tomczyk 1992). Prior studies use only historical data and classify practice into three broad categories: auditing, taxation and management consulting. To assess more fully the impact of attestation services, both historical and prospective data are obtained and analyzed for each of eight major practice areas. This expanded classification scheme facilitates a better understanding than previously available of the breadth of services provided and expected to be provided by CPA firms. Additionally, the study should increase practitioners' awareness of attestation services.

The next section of the paper gives a brief historical review of attestation services and the practice standards which relate to them. The remaining sections present the research method, the findings and conclusions.

## BACKGROUND

Attestation services require a practitioner to provide an appropriate level of assurance on a written assertion prepared by a client or a third-party. The written assertion must be capable of evaluation against reasonable criteria and must also be capable of reasonably consistent estimation or measurement (AICPA 1986, 1993b). Attestation services are not a completely recent development in public accounting practice. Previts (1985) observes that the public accounting profession has been issuing attestation reports on a variety of written assertions since the turn of the century. In the late 1960s, the AICPA

adopted as one of its primary long-term objectives a commitment to expanding the attest function beyond audits of financial statements (Stilwell and Elliott 1985). This objective was incorporated into both the AICPA's bylaws and the charge given to the Auditing Standards Board (AICPA 1984). Since that time, leaders in the profession have made the case that the best way to meet the public's needs and the needs of clients is by offering a wide range of services which includes a broader perspective of the nature and scope of the attest function (Mednick 1985; Winters and Guy 1985; Mednick and Previts 1987; Blocher et al. 1988).

Over the years, professional and academic accountants have claimed there is an increasing demand for new attest services. Blocher et al. (1988) argue that the increasing demand for these services is linked with changes that are occurring in the marketplace, particularly the dramatic technological changes which are taking place in the information environment. For example, because of the increasing availability of financial data bases and the means for manipulating these data, investors and other external constituents now have much greater ability to create individualized, special-purpose reports. These reports can incorporate prospective information, ranges in addition to point estimates and non-financial data. Much of these data originate from sources outside of companies' formal accounting systems. As a result, investors and others may increasingly demand assurances regarding the integrity of these data. In addition, due to changing public preferences, external constituents may increasingly require assurances on a widening array of company representations, including compliance with government regulations, representational faithfulness of social accounting data (e.g., performance in meeting pollution control standards), and fairness of management's discussion and analysis.

Initially, the accounting profession responded to the perceived demand for a broadening of the attest function by issuing practice standards to address specific new attestation services as the services arose. These standards were incorporated into the existing Statements on Auditing Standards (SASs). By the early 1980s,

the AICPA had issued over 20 SASs relating to these new services (Winters and Guy 1985). Winters and Guy (1985) point out that the SASs, as initially conceived, were meant to serve as interpretations of the ten GAAS and to provide additional guidance for audits of historical financial statements. Because the ten GAAS and the SASs were limited in their perspective to audits of historical financial statements, they were not well-suited to providing the guidance needed for broader attest services. Furthermore, Winters and Guy (1985) also point out that the SASs which addressed attest services other than audits of conventional financial statements might not be enforceable under the AICPA's Code of Professional Ethics. As a result, a new set of standards was established to address these attest services and to resolve the authoritative guidance issue.

In 1986, the AICPA issued Statement on Standards for Attestation Engagements—Attestation Standards (SSAE-AS) to serve as the general framework for attestation services beyond audits of historical financial statements. These standards consolidated prior piecemeal standards issued as a special case and eliminated a number of inconsistencies and ambiguities that had been incorporated into the SASs (Winters and Guy 1985; AICPA 1986). In 1993, SSAE-AS was combined with attestation statements on financial forecasts and projections and pro forma financial information to become SSAE No. 1 (AICPA 1993b). SSAE No. 2 was issued in 1993 and addresses reporting on an entity's internal control structure over financial reporting (AICPA 1993c). SSAE No. 3 was approved in 1994 and pertains to certain types of compliance engagements (AICPA 1994).<sup>2</sup> Depending upon the particular SSAE, a practitioner can provide either positive or negative assurance and can also perform agreed-upon procedures engagements. In addition, attest reports can be for either general or restricted distribution.

## RESEARCH METHOD

### Survey Instrument

The survey instrument was constructed for the purpose of obtaining data to address basic questions concerning attestation practices. The

instrument was pretested by its being distributed for comment to CPAs in public practice from various sized firms. The instrument was also reviewed by AICPA staff, including members of its survey group who are experienced in constructing similar questionnaires.

In the questionnaire, attestation services were defined to include all provisions of assurance on representations other than those given in an audit of historical financial statements. The respondents were asked to rate the relative frequency with which specific types of attestation services are performed in their office. A comprehensive list of assertions was compiled based upon a review of the literature (Mednick 1984; Stilwell and Elliott 1985; AICPA 1986, 1993a), input from the AICPA staff, and feedback from pretesting the instrument. Of the total of 37 assertions included, 21 were financial in nature, 15 were non-financial in nature, and one could be classified as financial or non-financial in nature, depending upon the circumstances.<sup>3</sup>

In addition to rating the various assertions, the respondents were asked to provide descriptive information for the most recent year (1993) on the nature of assertions evaluated (i.e., financial or non-financial), the levels of assurance provided (i.e., examination, review or agreed-upon procedures), and the professional status of those performing the services (i.e., CPAs or non-CPA consultants). The respondents were also asked to give information on the percentage of professionals' time in their office allocated or expected to be allocated to each of eight categories of professional services for the years 1985, 1993 and 2000. The categories in-

<sup>2</sup> The newest standard, SSAE No. 4, was issued in 1995, subsequent to the distribution of the survey (AICPA 1995). It eliminates the provision of negative assurance from agreed-upon procedures engagements.

<sup>3</sup> The classification of assertions into financial or non-financial categories is subjective and open to interpretation. An anonymous reviewer suggested that one of the assertions we classified as financial (continued existence) should be reclassified as non-financial and that two others (anti-trust case data; reorganization and bankruptcy plans) could be viewed as financial or non-financial, depending upon the circumstances. All three of these assertions were given relatively low importance ratings by the respondents. Consequently, the effect of the possible misclassifications on the findings is likely minimal.

cluded attestation, audits of financial statements, compilation and bookkeeping, corporate tax, individual tax, management consulting, personal financial planning, and review. Finally, the respondents were asked to provide selected demographic data concerning themselves and their offices.

### Participants

A sample of 971 CPAs were selected at random from all members of the AICPA who indicated that they practice public accounting. The sample data were accumulated by individual offices of CPA firms. Firms with multiple offices conceivably could have been represented multiple times in the set of responses received. The individual respondents were not identifiable. As a result, it was not possible to make second requests to non-respondents. The survey instrument was distributed in early October 1994, with a request that it be returned by month-end.

A total of 145 usable responses were obtained, yielding a response rate of 14.9%. AICPA staff indicated that this response rate fell at the lower end of the range of response rates they typically achieve on surveys sent to their members in public practice. Several factors likely contribute to the low response rate achieved: (1) the instrument was distributed during a particularly busy time for auditors, and they may not have had an opportunity to respond to it by the return due date; (2) CPAs whose practices are primarily tax- and/or consulting-oriented may not have been familiar with or interested in the topic; and (3) some practitioners who do perform traditional audits may not have been very familiar with other attestation services. The latter point was noted by several of the respondents.

The respondents' demographic characteristics are presented in table 1. Their demographic characteristics are very similar to those of the population of all AICPA members engaged in public accounting practice. Partners/shareholders, sole practitioners and senior staff constitute 97.1% of the respondents. A large majority, 68.1%, had been CPAs for 11 years or more. Large, medium and small firms are all well-

represented. Very large firms (over 100 AICPA members) account for 15.2% of the usable responses. Additional analysis revealed that a total of 34 states are represented, indicating that the sample is geographically broad-based.

### Analysis of Data

The nature and extent of attestation services being performed is investigated by analyzing the respondents' ratings on a five-point scale of the frequency with which their offices had attested to the 37 specific assertions provided since the effective date of SSAE-AS (September 30, 1986). The extent of attestation services being performed is further investigated by analyzing the respondents' time allocations to the attestation services category for 1993 relative to their time allocations to other categories of professional services for the same year.

The association of office- and firm-specific characteristics with involvement in providing attestation services is studied by means of both univariate and multivariate analyses. In the absence of any conceptual or empirical guidance from the literature on the selection of variables to examine, this exploratory investigation focuses attention on prominent characteristics of the respondents' offices and firms. The practice-related attributes that are considered include the respondents' time allocations to the seven remaining professional services categories (other than attestation) and the following two demographic factors: the population of the area in which the respondent's office is located, and the number of AICPA members in the respondent's firm (all offices).<sup>4</sup> In the univariate analysis, these variables are compared for two groups of respondents formed on the basis of a respondent's office's involvement (i.e., involved versus not involved) in attestation services. Involvement in attestation

<sup>4</sup> The two demographic characteristics are measured as categorical variables, each having a total of five categories. The category options for the area population variable are: (1) *less than 25,000 people*; (2) *25,000 to 100,000 people*; (3) *100,001 to 500,000 people*; (4) *500,001 to 1,000,000 people*; and (5) *over 1,000,000 people*. The category options for the number of AICPA members variable are: (1) *one*; (2) *2-5*; (3) *6-10*; (4) *11-100*; and (5) *over 100*.

**TABLE 1**  
**Respondent Demographic Characteristics<sup>a</sup>**

<u>Position:</u>	<u>N</u>	<u>Percent</u>
Partner/shareholder	68	49.3
Sole practitioner	35	25.4
Senior staff member	31	22.4
Staff member	4	2.9
	<u>138</u>	<u>100.0</u>
<u>Years as a CPA:</u>	<u>N</u>	<u>Percent</u>
under 1	2	1.4
1-2	2	1.4
3-5	15	10.9
6-10	25	18.2
11-20	61	44.2
over 20	33	23.9
	<u>138</u>	<u>100.0</u>
<u>Population of community where respondents work:</u>	<u>N</u>	<u>Percent</u>
less than 25,000	20	14.7
25,000 to 100,000	24	17.6
100,001 to 500,000	27	19.9
500,001 to 1,000,000	15	11.0
over 1,000,000	50	36.8
	<u>136</u>	<u>100.0</u>
<u>Number of AICPA members in firm (all offices):</u>	<u>N</u>	<u>Percent</u>
one	31	22.5
2-5	48	34.8
6-10	21	15.2
11-100	17	12.3
over 100	21	15.2
	<u>138</u>	<u>100.0</u>

<sup>a</sup> The demographic information presented in this table was self-reported. A total N of less than 145 indicates that some respondents did not reply to the particular item.

services is indicated by the time allocation given to the attestation category.

The multivariate analysis is executed within the framework of a logistic regression of involvement in attestation services on four of the variables identified above, as follows:

$$\text{ATTEST}_i = b_0 + b_1(\text{AUDIT}_i) + b_2(\text{CONSUL}_i) + b_3(\text{AREAPOP}_i) + b_4(\text{MEMBERS}_i)$$

where

$\text{ATTEST}_i$  is a 0-1 dummy variable indicating respondent  $i$ 's office's involvement in providing attestation services in 1993 (0=not involved, 1=involved).

$\text{AUDIT}_i$  is respondent  $i$ 's office's time allocation to audits of financial statements for 1993.

CONSUL<sub>*i*</sub> is respondent *i*'s office's time allocation to management consulting for 1993.

AREAPOP<sub>*i*</sub> is the category (1 to 5) corresponding to the population of the area in which respondent *i*'s office is located.

MEMBERS<sub>*i*</sub> is the category (1 to 5) corresponding to the number of AICPA members in respondent *i*'s firm (all offices).

AUDIT<sub>*i*</sub> is included in the model as a measure of an office's expertise in the attest function. The introduction to SSAE-AS states that the attestation standards are a natural extension of GAAS. Such a relationship suggests that the skills and abilities necessary to performing audits of conventional financial statements may be directly transferrable to performing attestation services. Thus, the likelihood of an office's involvement in performing attestation services is expected to increase with the extent of the office's involvement in performing audits of financial statements.<sup>5</sup> CONSUL<sub>*i*</sub> is included on the basis that management consulting is a second major area of public accounting practice.<sup>6</sup> The expected direction of effect is not obvious. On the one hand, higher levels of consulting may produce a relationship with the client and a knowledge of the client's business that generate attestation opportunities (complimentary relation). On the other hand, consulting and attestation may compete directly for scarce resources to fund expansion of the scope of an office's services (competitive relation). AREAPOP<sub>*i*</sub> is included as a crude indicator of the client demand for attestation services. More populated areas are expected to generate greater demand for these services. Finally, MEMBERS<sub>*i*</sub> is included as a measure of firm size. Larger firms, due to their greater number of audit clients and their greater base of financial resources, are expected to be in a better position than other firms to take on the potential additional third-party liability exposure that may accompany involvement in attestation services.<sup>7</sup> In summary, AUDIT<sub>*i*</sub>, AREAPOP<sub>*i*</sub> and MEMBERS<sub>*i*</sub> are expected to be positively related to ATTEST<sub>*i*</sub>, while the coefficient on CONSUL<sub>*i*</sub> is left unspecified.

The future growth opportunities in attestation services are investigated by comparing the ratings of specific assertions for two groups: those respondents anticipating greater growth in attestation services during the period 1993 to 2000, and those respondents anticipating less growth. The attestation growth opportunities are identified as those for which the signed difference in mean ratings of assertions between the higher and lower growth groups is largest. In other words, the assertions identified are those which are being attested to significantly more frequently by the respondents anticipating greater growth in attestation services.

## RESULTS AND DISCUSSION

Slightly more than half of the survey respondents (83 of 145, 57.2%) indicated their office had performed one or more attestation services engagements since the effective date of SSAE-AS. These respondents were then asked to rate each of the 37 specific types of assertions in terms of the frequency with which their office had attested to them (1 - Not Very Frequently, 5 - Very Frequently). The mean ratings for the assertions ranged from a low of 1.00 (accuracy of college textbooks) to a high of 3.24 (information supplementary to financial statements). Table 2 lists the ten assertions having

<sup>5</sup> As an alternative measure of expertise in the attest function, the time allocations to audits of financial statements and review are summed for each respondent. The findings based upon this measure are virtually identical to those reported in the paper.

<sup>6</sup> Traditionally, accounting practice has been divided into three main areas: auditing, taxation and management consulting (Previts 1985). This analysis includes management consulting on the basis that it represents one of these three main areas. Taxation is excluded, though, because it likely captures much the same effect as the auditing variable, except that it measures this effect in an inverse manner. The decision to exclude taxation is supported by the finding of a significantly negative Spearman rank correlation between the 1993 time allocations to audits of financial statements and individual tax ( $\rho = -0.63$ ).

<sup>7</sup> Unlike taxation services, management consulting services, and many other services CPAs provide, attestation services often involve the potential for liability exposure to third parties. When attestation services are provided on the basis of an examination or a review, the liability exposure extends to third parties who, though not privy to or identified in the attestation engagement, might reasonably rely on the assurance the CPA gives.

**TABLE 2**  
**Most Frequently Attested to Assertions<sup>a</sup>**

<u>Assertion</u>	<u>N<sup>b</sup></u>	<u>Mean Rating<sup>c</sup></u>	<u>Financial/ Non-Financial (F/NF)</u>	<u>Referenced in SASs (Yes/No)</u>
1. Information supplementary to financial statements	76	3.24	F	Yes
2. Compliance with debt covenants when financial statements have been audited	72	2.96	F	Yes
3. Financial forecasts and projections	77	2.78	F	Yes
4. Compliance with statutory, regulatory and contractual requirements	76	2.68	F,NF	Yes
5. Descriptions of systems of internal accounting control	76	2.59	NF	Yes
6. Pro forma financial information	72	2.49	F	Yes
7. Management discussion and analysis	70	2.26	F	No
8. Segment or interim reports	72	2.22	F	Yes
9. Inventory quantities and locations	69	2.13	NF	No
10. Contract costs	69	2.06	F	No

<sup>a</sup> The time frame for the ratings of assertions is the period from the effective date of SSAE-AS (September 1986) to the survey date (October 1994).

<sup>b</sup> The number of responses is less than 83 and varies across assertions due to missing values. Deleting the observations with responses to fewer than half of the total of 37 assertions (N=12) does not materially affect the findings reported.

<sup>c</sup> The ratings are based on a five-point scale where 1 is *Not Performed Very Frequently* and 5 is *Performed Very Frequently*.

the highest mean rating. Seven of these assertions are classified as primarily financial in nature. An eighth one (compliance with statutory, regulatory, and contractual requirements) may be financial or non-financial in nature, depending upon the circumstances. The remaining two assertions (descriptions of systems of internal accounting control; inventory quantities and locations) are primarily non-financial in nature. In contrast, of the other 27 assertions in the survey listing, only about half (14) are classified as primarily financial in nature. Seven of the ten highest rated assertions were addressed in SASs issued prior to the issuance of SSAE-AS. In sharp contrast, only two of the remaining 27 assertions were addressed in SASs (continued existence; royalties). On the whole, these findings suggest that the attest services being

performed most frequently are disproportionately financial in nature and the subject of guidance initially given in SASs. The majority of these services are historically closely associated with audits of conventional financial statements.

The predominance of financial assertions is further supported by the respondent's allocation of 100 points to describe the nature of assertions their practices attested to during the most recent year. They allocated an average of 86.4 of the 100 points to financial assertions, a number more than six times the mean allocation to non-financial assertions. The respondents reported that the most common basis for assurance was agreed-upon procedures (43.9 points), followed by an examination (34.3 points), followed finally by a review (21.8 points). The finding pertaining to agreed-upon procedures is



somewhat surprising. It suggests that although attest services historically have been closely linked with the audit process, these services are now often being executed within a limited-scope setting distinct from the formal audit engagement. This finding in part may be a natural result of the establishment of attestation standards separate from the auditing standards. However, it is also consistent with CPAs attempting to limit their third-party liability exposure where circumstances dictate and standards of practice permit. Faced with dramatic increases in third-party liability exposure in the performance of audits (see Arthur Andersen & Co. et al. 1992), CPAs may view attest engagements which limit third-party liability exposure as an effective means for managing their firms' malpractice risk. Agreed-upon procedures engagements restrict report distribution to parties identified in the engagement contract. The result is that the CPA's third-party liability exposure does not extend beyond the identified parties. The finding that a review is the least common basis for assurance is not surprising given that two of the three SSAEs issued as of the survey date (SSAEs 2 and 3) specifically prohibit reliance upon a review engagement. Finally, the respondents indicated that attest services are being executed overwhelmingly by CPAs (93.1 points).

The profile of professional services provided by the respondents' offices is summarized in table 3. On average, the respondents allocated 2.82 of the total of 100 points to attestation to describe the percentage of professionals' time spent in attestation services during the most recent year. Additional analysis indicates that the median allocation is 0.00 and, in fact, that 59.1% of the observations are zero. The maximum allocation to attest services is 20.00. Approximately one-third of the allocations to attestation (40 of 132) are 5.00 or higher; 15 are 10.00 or higher. Based upon the mean allocation, attestation services ranks lowest of the eight service categories (excluding *Other*). This low ranking may reflect the fact that attestation is still a relatively newly defined area of practice. The top four service categories are individual tax (26.16 points), compilation and bookkeeping (19.88 points), corporate tax

(16.40 points), and audits of financial statements (15.97 points).

An important objective of this study is to investigate office and firm characteristics which may be associated with providing attestation services. In addition to professional services profile characteristics, two demographic characteristics of interest are the population of the area in which the respondent's office is located and the number of AICPA members in the firm (all offices). As reported in table 1, the median (modal) category for the area population variable is (3) *100,001 to 500,000 people* ((5) *over 1,000,000 people*). The median and modal category for the number of AICPA members variable is (2) *2-5*.

Table 4 reports the results of univariate tests of association of practice professional services and demographic variables with performance of attestation services. The survey responses are classified into two groups for the purpose of investigating the effects of these variables. The first group consists of the respondents who assigned a positive value to attestation services (Positive Attestation offices). The second group consists of the respondents who assigned a value of zero to attestation services (Zero Attestation offices). The Positive group includes 52 observations, and the Zero group includes 72 observations. The mean percentage allocated to attestation services in the Positive Attestation group is 6.90. This is significantly different from the mean for the Zero Attestation group, 0.00 (.01 significance level). On average, Positive Attestation offices appear to do significantly more auditing and consulting, be located in significantly larger population centers, and be part of firms with a significantly larger number of AICPA members. These offices do significantly less individual tax work and compilation and bookkeeping work.

The univariate findings are supported by the multivariate logistic regression results reported in table 5. Because of the large proportion of zero observations for attestation services indicated in table 3 (59.1%), ordinary least squares regression based on a continuously defined dependent variable is not appropriate. To overcome this problem, logistic regression,

**TABLE 3**  
**Profile of Professional Services (1993)**  
**(N=132)<sup>a</sup>**

<u>Service Type</u>	<u>Mean Allocation<sup>b</sup></u>	<u>Standard Deviation</u>	<u>Median</u>	<u>%&gt;0</u>
Attestation	2.82	4.52	0.00	40.9
Audits of financial statements	15.97	16.41	11.00	74.2
Compilation and bookkeeping	19.88	16.08	19.50	89.4
Corporate tax	16.40	8.97	15.00	97.7
Individual tax	26.16	17.55	20.00	99.2
Management consulting	7.65	9.93	5.00	68.9
Personal financial planning	3.01	4.39	1.00	50.8
Review	5.32	6.21	5.00	65.2
Other	2.79	7.31	0.00	24.2
	<u>100.00</u>			

<sup>a</sup> A total of 13 observations are deleted from this analysis because of missing or incomplete data.

<sup>b</sup> The respondents were asked to allocate 100 points across the nine service categories in the way that best described the use of professionals' time in their office. The mean allocation is the cross-sectional mean allocation of points for each category.

**TABLE 4**  
**Results of Univariate Tests of Relation Between 1993 Attestation Services**  
**Level (Positive versus Zero) and Practice Characteristics Variables<sup>a</sup>**  
**(N=124)<sup>b</sup>**

<u>Variable</u>	<u>(N=52)</u> <u>Mean</u> <u>Response—</u> <u>Positive</u> <u>Attestation</u> <u>Offices</u>	<u>(N=72)</u> <u>Mean</u> <u>Response—</u> <u>Zero</u> <u>Attestation</u> <u>Offices</u>	<u>t-stat.</u> <u>(Positive</u> <u>- Zero)</u>	<u>p-value</u> <u>(two-</u> <u>tailed)</u>
Attestation	6.90	0.00	10.56	.000
Audits of financial statements	26.19	7.64	7.63	.000
Compilation and bookkeeping	12.31	24.90	-5.05	.000
Corporate tax	16.50	16.89	-0.24	.814
Individual tax	16.56	33.93	-6.77	.000
Management consulting	9.65	5.74	2.34	.021
Personal financial planning	2.98	3.00	-0.03	.980
Review	6.08	4.83	1.09	.278
Other services	2.83	3.07	-0.18	.860
Area population	3.77	3.03	2.80	.006
Number of AICPA members (all offices)	3.46	1.85	7.76	.000

<sup>a</sup> The practice characteristics variables include the respondents' point allocations to professional services other than attestation for the year 1993 plus the following two practice demographic characteristics: area population and number of AICPA members (all offices). The category options for the practice demographic characteristics are given above in footnote 4.

<sup>b</sup> The sample size for the univariate and multivariate tests of the practice characteristics variables is reduced to include only those survey responses for which all of these variables are available. Restricting the sample to this set of observations does not materially affect the descriptive findings reported in table 3.

**TABLE 5**  
**Results of Logistic Regression of 1993 Attestation Services Level**  
**(Positive versus Zero) on Practice Characteristics Variables**

$$ATTEST_i = b_0 + b_1(AUDIT_i) + b_2(CONSUL_i) + b_3(AREAPOP_i) + b_4(MEMBERS_i)$$

Variable	Predicted Sign	Coefficient Estimate	Standard Error	Chi- Square	p-value
Intercept	?	-4.152	0.860	23.33	.000
AUDIT	+	0.061	0.023	6.77	.009
CONSUL	?	-0.013	0.032	0.17	.678
AREAPOP	+	0.305	0.176	3.01	.083
MEMBERS	+	0.782	0.273	8.21	.004

Sample Size: Positive = 52, Zero = 72  
 Model Significance: .0001  
 Concordant Pairs: 88.9%

which allows for a dichotomous (i.e., 0-1) dependent variable, is employed.  $ATTEST_i$  takes on a value of 1 when the allocation made to attestation services is positive and a value of 0 when the allocation made is zero. The findings show that the variables  $AUDIT_i$  and  $MEMBERS_i$  are significantly positive in explaining involvement in attestation services (.01 significance level). The variable  $AREAPOP_i$  is marginally significantly positive (.10 significance level). In contrast,  $CONSUL_i$  is insignificantly negative and close to zero. The finding for  $CONSUL_i$  does not support either the complementary relation or the competitive relation as dominating the other. Overall, the results show that offices which do more auditing work and offices which are part of larger firms are more likely than other offices to be involved in performing attestation services.

Table 6 reports mean changes in the point allocations to service types for the periods 1985 to 1993 and 1993 to 2000. An analysis of the changes for the 1985 to 1993 period reveals that the mean allocation to attestation increased by 1.04 points, the second largest amount of increase. In other words, the respondents estimate that, from the issuance of SSAE-AS to the present, attestation services have increased from an average of 1.78% of offices' professional time to an average of 2.82%. The only service type with a larger mean increase in allocation of points over this period is management consult-

ing (2.04 points). Audits of financial statements and compilation and bookkeeping services experienced the largest point allocation decreases (-2.40 and -1.71, respectively). Analysis of the changes for the 1993 to 2000 period reveals that the reported changes in point allocations over the 1985 to 1993 period are expected to continue, with a few differences. The mean increase in the allocation to attest services for the 1993 to 2000 period is 0.88 points. The only larger expected increases are for management consulting (3.10) and personal financial planning (1.67). The largest expected decreases are for compilation and bookkeeping (-2.68) and individual tax (-1.81). The auditing category is expected to decrease by 0.82 points.

Overall, the findings in table 6 provide evidence of a continued broadening of the scope of services offered by CPA firms. Specifically, the findings suggest that attestation has increased and will continue to increase gradually, along with management consulting and personal financial planning, at the expense of more traditional services (compilation and bookkeeping; audits of financial statements; and individual taxes).<sup>8</sup>

<sup>8</sup> The inter-temporal analyses reported in table 6 show the point allocations to attestation increasing and those to audits of financial statements decreasing during both time periods. This evidence should not necessarily be viewed as being contrary to the finding of a positive relation between  $ATTEST_i$  and  $AUDIT_i$  reported in tables 4 and

*(Continued on next page)*

**TABLE 6**  
**Changes in Professional Services Profile (1985-1993 and 1993-2000)<sup>a</sup>**

Service Type	(N=95) <sup>b</sup>	(N=116) <sup>b</sup>
	Mean Change in Allocation 1985-1993	Mean Change in Allocation 1993-2000
Attestation	1.04	0.88
Audits of financial statements	-2.40	-0.82
Compilation and bookkeeping	-1.71	-2.68
Corporate tax	0.80	-0.53
Individual tax	-0.42	-1.81
Management consulting	2.04	3.10
Personal financial planning	0.98	1.67
Review	0.26	0.28
Other	-0.60	-0.09

<sup>a</sup> The change in each service type for each period is computed as the point allocation for the later year minus the point allocation for the earlier year. Thus, a positive (negative) difference indicates a reported increase (decrease) in the service type.

<sup>b</sup> Observations are lost in a pair-wise comparison of years if a complete allocation of points to service types is missing for either of the two years being compared. Not surprising, for the 1985-1993 analysis, respondents with relatively less experience as a CPA (i.e., those indicating under 1, 1-2, or 3-5 years of CPA experience) account for a disproportionately high percentage of the observations that are lost. Excluding all the respondents with five or fewer years of CPA experience from this analysis does not materially alter the findings reported.

Finally, an issue of interest to both the academic and professional communities is which attestation areas are expected to be in high demand in the future. To address this issue, the ratings for the 37 specific assertions are compared for two groups of respondents. The first group, defined as the "Growth" offices, consists of the 24 responses indicating an anticipated increase in attestation services from 1993 to 2000. The second group, the "No-Growth" offices, consists of the remaining responses, four of which anticipated a decrease and 88 of which anticipated no change. This analysis addresses the issue of future demand by identifying the specific attestation services currently being performed significantly more by Growth offices than by No-Growth offices.

Table 7 lists the assertions having the largest difference in mean rating between the Growth and No-Growth groups. The listing includes five assertions from the list of the ten most frequently attested to assertions in table 2. The remaining five assertions appear to be receiving attention primarily by the Growth offices. These five in-

clude descriptions of computer software, software and hardware performance, reorganization and bankruptcy plans, current values of real estate and management audits. Interestingly, the first two of these five assertions, ranked first and sixth in the listing, and the last one, ranked tenth, are non-financial in nature. Assertions related to reorganization and bankruptcy plans, ranked eighth in the table 7 listing, may be non-financial as well, depending upon the circumstances. Thus, the areas of growth in attestation services appear to be concentrated in non-traditional areas related to details of company's operations.<sup>9</sup>

Footnote 8 (Continued from previous page)

5. Read and Tomczyk (1992) find that during the period 1982 to 1988, audit revenues of CPA firms declined as a percentage of their total revenues. Mednick and Previts (1987) make a similar claim; they simultaneously suggest that because of rapidly occurring advances in technology and its applications, the broader attest services area may experience tremendous growth in the years ahead.

<sup>9</sup> The analyses presented in the paper are replicated for the subsample of respondents indicating they are firm principals.  
 (Continued on next page)

**TABLE 7**  
**Assertions of Greatest Interest to Offices Anticipating Growth in**  
**Attestation Services Relative to Offices Anticipating**  
**No Growth in Attestation Services (1993-2000)<sup>a</sup>**

<u>Assertion</u>	<u>N</u> <u>(Growth/ No-Growth)</u>	<u>Difference in</u> <u>Mean Rating</u> <u>(Growth -</u> <u>No-Growth)</u>
1. Descriptions of computer software	22 / 30	0.845
2. Information supplementary to financial statements	21 / 34	0.730
3. Financial forecasts and projections	22 / 34	0.727
4. Compliance with debt covenants when financial statements have been audited	19 / 32	0.669
5. Compliance with statutory, regulatory and contractual requirements	21 / 35	0.667
6. Software and hardware performance	21 / 30	0.638
7. Pro forma financial information	21 / 31	0.601
8. Reorganization and bankruptcy plans	21 / 30	0.567
9. Current values of real estate	20 / 30	0.467
10. Management audits	21 / 32	0.454

<sup>a</sup> The sample size for the No-Growth group falls short of 92 in the above analysis because the data are available only for those respondents whose offices had actually performed attestation services.

### CONCLUSIONS

A principal contribution of this study is that it provides descriptive information on the nature and extent of attestation services being performed. The findings suggest that attest services represent a relatively small area of current practice, though one which has increased at a gradual pace since attestation standards were issued and which is expected to continue increasing gradually over the next few years. Despite this evidence of a rather modest growth trend, the attestation area remains one that professionals believe will offer tremendous opportunity over the longer term for continued expansion and development of accounting practice (Mednick and Previts 1987; Craig 1994a, 1994b). Another interesting finding of the study is that the most common basis for assurance is agreed-upon procedures. This finding may be attributable to the fact that agreed-upon procedures engagements generally offer the greatest protection from growing third-party liability ex-

posure. Lastly, the study finds that attestation services currently are concentrated in larger firms and in firms which devote more professional time to the audit function.

The findings are subject to certain limitations and should be interpreted in light of them. The first is that the survey achieves a comparatively low response rate. This may be due to attestation being an area of practice which seg-

Footnote 9 (Continued from previous page)

cipals (i.e., partners/shareholders and sole practitioners). These respondents probably have the broadest perspective of their offices' activities and thus may provide the most reliable data. Overall, the subsample findings are very similar to those presented in the paper. The one exception is the identification of future growth areas in table 7. The principals' five highest rated assertions include software and hardware performance (third) and ad valorem and realty tax bases (fifth) in place of compliance with debt covenants when financial statements have been audited and compliance with statutory, regulatory and contractual requirements. Despite these differences, though, the general conclusion that the future growth in attest services appears to be concentrated in non-financial areas continues to be supported.

ments the public accounting profession. Large numbers of smaller firms that have tax- and/or consulting-oriented practices may have little knowledge of or interest in attestation services. However, as the study points out, the effect of any potential non-response bias on the findings is difficult to determine. A second issue is that the data are somewhat soft. Many of the survey questions asked the respondents for estimates, and several of these estimates covered fairly long time periods (e.g., multiple years). While the majority of respondents are principals with considerable professional experience, harder data on the numbers and dollar amounts of attestation engagements would prove very useful in clarifying the nature and extent of services being provided. Future research could address this matter. Lastly, because this study is exploratory in nature, it was necessary to make certain subjective assessments and classifications. Examples include the specific assertions chosen for inclusion in the listing, the classification of these assertions as financial or non-financial, and the factors selected for consideration of their effects on involvement in attestation services. Future studies could investigate the effects of each of the issues on the findings reported.

Several other promising avenues for future research exist as well. The most important of these may be a study of the effects of performing attest services on firms' malpractice risk. Because attest services include a range of possible bases for assurance, the answer to this question is not apparent from a surface evaluation. Some thoughts on the potential effects of these services on malpractice risk are offered, but are not tested. Future studies could explore these in a more formal setting. Another potentially interesting avenue for future research may be a study of rejected attestation engagements. A study of these might provide additional insights into the nature and extent of the demand for attest services, including possibly the demand which is not being filled. Such a study might also provide insight into the liability exposure related to attestation engagements. Areas of greatest exposure could perhaps be identified and eventually managed through issuance of additional professional standards or other means. Finally, the engagements declined may provide information concerning additional skills that are required for the profession to supply value-adding services in the marketplace. As a consequence, accounting curricula could be modified to help provide the needed skills.

#### REFERENCES

- American Institute of Certified Public Accountants. 1984. *AICPA Professional Standards Volume II*. Chicago, IL: Commerce Clearing House.
- . 1986. *Statement on Standards for Attestation Engagements—Attestation Standards*. New York: AICPA.
- . 1993a. *Comparing Attestation and Consulting Services: A Guide for the Practitioner*. New York: AICPA.
- . 1993b. *Statement on Standards for Attestation Engagements No. 1—Attestation Standards*. New York: AICPA.
- . 1993c. *Statement on Standards for Attestation Engagements No. 2—Reporting on an Entity's Internal Control Structure Over Financial Reporting*. New York: AICPA.
- . 1994. *Statement on Standards for Attestation Engagements No. 3—Compliance Attestation*. New York: AICPA.
- . 1995. *Statement on Standards for Attestation Engagements No. 4—Agreed-Upon Procedures Engagements*. New York: AICPA.
- Arthur Andersen & Co., Coopers & Lybrand, Deloitte & Touche, Ernst & Young, KPMG Peat Marwick, and Price Waterhouse. 1992. *The Liability Crisis in the United States: Impact on the Accounting Profession: A Statement of Position*.
- Blocher, E., R. Rousling, and B. Ward. 1988. The subject matter of auditing. In *Research Opportunities in Auditing: The Second Decade*, edited by A. Abdel-khalik and I. Solomon, 133–153. Sarasota, FL: American Accounting Association.

- Craig, J. 1994a. Serving the profession's assurance function (An Interview with AICPA Vice President Dan Guy). *The CPA Journal* (January): 36-40.
- . 1994b. Robert Elliott: Leading the profession. *The CPA Journal* (October): 18-24.
- Kinney, W. 1987. Attestation research opportunities: 1987. *Contemporary Accounting Research* (Spring): 416-425.
- Mednick, R. 1984. Call for new standards of attestation. *The CPA Journal* (August): 13-16.
- . 1985. Proposed attestation standards—a major step forward. *The CPA Journal* (May): 10-17.
- , and G. Previts. 1987. The scope of CPA services: A view of the future from the perspective of a century of progress. *Journal of Accountancy* (May): 220-238.
- Pallais, D. 1995. Positioning the audit function for growth. *Journal of Accountancy* (July): 14-15.
- Previts, G. 1985. *A Study of the Development of the Concept of Independence and the Profession's Role in Society*. New York: John Wiley and Sons.
- Read, W., and S. Tomczyk. 1992. An examination of changes in scope of services performed by CPA firms. *Accounting Horizons* (September): 42-51.
- Stilwell M., and R. Elliott. 1985. A model for expanding the attest function. *Journal of Accountancy* (May): 66-78.
- Winters, A., and D. Guy. 1985. The proposed attestation standards: Rationale and purpose. *Corporate Accounting* (Spring): 72-76.