

Disclosure Practices in the Savings and Loan Industry: A Test of the Signaling Hypothesis

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Abstract

Savings and loan institutions (S&Ls) have been able to use specialized regulatory accounting practices (RAP) which typically are more liberal than generally accepted accounting principles (GAAP). This paper examines whether differences exist between S&Ls which disclosed a reconciliation of their RAP and GAAP net worths and S&L which did not. It is predicted that the financially strongest S&Ls would be most likely to disclose this information. Reported results support this signaling hypothesis.

Introduction

The accounting practices used by U.S. savings and loan institutions (S&Ls) were a source of considerable controversy in the late 1980's. The Federal Home Loan Bank Board (FHLBB), which oversees the industry, allowed S&Ls to use regulatory accounting practices (RAP) which differed from generally accepted accounting principles (GAAP). These RAP methods were usually more liberal than GAAP, permitting S&Ls to report higher net worth. This is important because the FHLBB uses net worth in monitoring S&Ls. Those institutions which do not meet their minimum net worth, or capital, requirements face possible intervention by the FHLBB.

RAP was widely criticized for masking the financial problems in the industry (see, for example, *Wall Street Journal*, March 12, 1985; January 8, 1986). Barth and Bradley (1988) provide evidence showing that by relying on RAP, the FHLBB allowed weak institutions to continue to operate long after they had violated their regulatory constraints based on GAAP. These concerns led Congress to pass the Competitive Equality Banking Act (CEBA) in 1987. That law required all S&Ls to switch to GAAP accounting for periods beginning after January 1, 1989. That law also required that certain RAP items continue to be included (i.e. grandfathered) in net worth computed for regulatory purposes and that any differences in GAAP and RAP net worth be reconciled in footnotes after the switch to GAAP was made.(1)

This paper examines whether differences exist between S&Ls which provided this supplemental RAP/GAAP reconciliation earlier than required and those which did not. It is predicted S&Ls which exceed their regulatory net

worth requirements based on GAAP will have incentive to voluntarily provide this information to differentiate themselves from S&Ls which do not exceed their constraints based on GAAP. This signaling hypothesis is tested using a probit model which predicts whether firms will disclose or not. The results support the predicted effect.

The rest of the paper is divided into five more sections. The first section provides background on RAP accounting. The second section develops hypotheses. The third section describes the sample and method. The fourth section contains results, and the last section is a conclusion.

Background

Prior to the Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (FIRREA), S&Ls were regulated by the FHLBB. The FHLBB was, among other things, responsible for monitoring the financial soundness of its member institutions. To do so, the FHLBB enforced minimum net worth or capital (i.e. assets less liabilities) requirements for each S&L. When an S&L did not meet its minimum net worth requirement, the FHLBB could either close the S&L, replace the S&Ls' management, or sell the S&L.

Like many regulated industries in the U.S., S&Ls could use specialized accounting practices.(2) Some of these alternate accounting methods, which were set by the FHLBB, were required, and others were elected for use by the S&L.(3) Because RAP usually produced higher net worth than GAAP, S&Ls which were below their capital requirements based on GAAP could often exceed these

requirements based on RAP.(4)

Four RAP methods were particularly controversial.(5)

1) *Deferred loan losses* - Under RAP issued in 1981, the FHLBB allowed member S&Ls to defer and amortize losses on the sale of certain mortgage loans, mortgage-related securities, and debt securities. This differs from GAAP which requires losses be recognized immediately.

2) *Appraised Equity Capital* - The FHLBB allowed S&Ls to include in net worth the difference in the fair value and book value of certain fixed assets. This was a one time election and the difference was computed for any date between January 1, 1982 and December 31, 1985. This differs from GAAP because under GAAP unrealized gains on fixed assets are not recognized until the item is sold.

3) *Net Worth Certificates* - The Garn-St. Germain Depository Institutions Act of 1982 allowed troubled S&Ls to issue net worth certificates to the FHLBB. The FHLBB would, in turn, issue a promissory note to the S&L. The net worth certificates were redeemed as the S&L earned profits but the FHLBB note was collectible only if the S&L failed. Because the note's benefit depends on the liquidation of the S&L, the FHLBB note does not qualify as an asset under GAAP. Under RAP, this note is included as an asset in computing net worth.

4) *Subordinated Debentures* - Subordinated debentures issued by S&Ls can be included in RAP net worth but under GAAP they are classified as a liability. S&Ls were able to include all subordinated debentures which mature in more than one year in RAP net worth.

The differences caused by RAP accounting were considerable. Based on FHLBB data, at the end of 1986, 597 S&Ls were below their minimum capital requirements based on RAP net worth while 1,004 S&Ls were below their constraints based on GAAP net worth.

These discrepancies were attacked by academics, the media, and politicians for covering up the extent of the S&Ls financial troubles. Rep. John Dingell described RAP as being "extraordinarily curious" at a House hearing. Hill and Ingram (1989) and Blaconiere et al. (1988) provide empirical evidence showing that weaker S&Ls were more likely to utilize RAP.

The CEBA passed in 1987 required S&Ls to switch to GAAP. This law allowed RAP methods to be phased out over the five years beginning in 1989. This law also allowed some RAP items to be included in regulatory net worth until 1993 (e.g., appraised equity capital) and allowed other RAP items to be included in regulatory net worth permanently (i.e., deferred loan losses). Thus even

after the switch to GAAP, RAP net worth and GAAP net worth might not be the same. In accord, the CEBA also mandated the footnote reconciliation of RAP and GAAP net worths. This disclosure is the focus of this paper.

Research Hypothesis

Regulatory intervention by closure or sale of the S&L or by management change can reduce expected future cash flows to the S&L's shareholders. This is because the FHLBB is motivated to reduce the cost to its insurance fund, the Federal Savings and Loan Insurance Corp. (FSLIC), rather than maximize shareholder wealth.(6) Thus, shareholders want to determine the likelihood of FHLBB intervention in assessing share prices.

Because S&Ls will use GAAP for regulatory purposes starting in 1989, levels of GAAP net worth in 1988 and prior years will affect the probability of future FHLBB intervention. For instance, S&Ls which are below their minimum capital requirements based on GAAP in 1988 will have a more difficult time meeting their constraints when the switch to GAAP is made than S&Ls above their constraints based on GAAP in 1988. Moreover, the components composing the RAP/GAAP differential will also affect the probability of future intervention because RAP items are treated differently under the CEBA. For instance, S&Ls with large deferred loan losses and small appraised equity capital would be less affected by the CEBA than S&Ls with large appraised equity capital and small deferred loan losses. The reason is loan losses are permanently included in regulatory capital while appraised equity capital will be eliminated.

Thus, in years after the CEBA was passed and particularly in 1988, information about the RAP/GAAP differential and its composition could be valuable for shareholders. Because the reconciliation was required for periods beginning in 1989 but not 1988, S&Ls had the option of providing this information earlier than required. Forty-three percent of the sample firms used in this study did provide this disclosure voluntarily for fiscal years beginning in 1988. Fig. 1 provides an example of such a disclosure.(7)

The remainder of this section examines the motives managers would have to disclose or not disclose this information.

Beginning with Cerf (1961), accounting researchers have been interested in what factors affect levels of disclosure by firms. The primary hypothesis in this paper is derived from the work of Singhvi and Desai (1971). They predict more profitable firms will disclose more information to differentiate themselves from less profitable firms. This behavior is more commonly known as signaling (Ross, 1979).

Fig. 1
Example of Reconciliation of RAP and GAAP Net Worth

		(in thousands)
December 31, 1988		
Capital calculated under GAAP		\$55,871
Capital notes		19,732
Deferred loan losses		8,193
Appraised equity capital		4,255
General loan loss reserve		5,611
Installment loan add-on interest converted to straight line		93
Retained earnings of subsidiaries		(836)
Capital calculated under RAP		92,919

Source: *BankAtlantic 1988 Annual Report*

To be more exact, assume managers seek to maximize their own wealth. Being so, the manager would have incentive to increase the value of the firm's shares. The reason may be explicit - they may have a compensation plan which includes stock options - or implicit - the ability to increase share value can increase their human capital and the amount of compensation they can demand (Fama, 1980). This desire to maximize share prices produces an incentive for the manager to provide signals about the firm's financial health.

Because shareholders have rational expectations, when shareholders know managers have undisclosed information, they assume the worst and bid share prices down accordingly. Managers will want to disclose information, even bad information, to distinguish it from the worst possible information and to keep share prices from falling. This information acts as a signal which differentiates the firm from other firms. Further, only firms with the worst information will have no incentive to disclose, since providing the information will not increase share prices.

This signaling hypothesis can be applied to S&Ls. The S&L crisis brought widespread attention to S&Ls and their accounting practices. As a result, informed investors would be aware that differences in RAP and GAAP could affect the possibility of future regulatory intervention and, hence, the S&Ls future profitability. Given this investor interest, managers in most S&Ls would have incentive to disclose this information to assure investors that their worst fears are not reality. The incentive to provide this disclosure voluntarily before it is required will vary with the relative healthiness of the S&L based on GAAP. To illustrate, S&Ls which greatly exceed their regulatory capital limits based on GAAP would have the most incentive to voluntarily provide the supplement reconciliation in 1988 because their share prices would decline the most if no disclosure was provided.

The research hypothesis examined in this paper can be formally stated as (in alternative form):

H.1 S&Ls which provided the RAP/GAAP reconciliation before required had GAAP net worths which exceeded their minimum capital requirements by more than firms not disclosing early.

However as the disclosure literature points out, other factors can also affect disclosure decision. In this paper, the effects of two other variables tested by Singhvi and Desai (1971) - stock exchange listing and auditor - are also examined.(8)

Singhvi and Desai (1971) and others (e.g., Firth, 1979) find listed firms (e.g., NYSE or ASE) provide more information than firms traded over-the-counter (OTC). One explanation for this effect is that NYSE and ASE firms must sign listing agreements which, to an extent, dictate the form and content of their annual reports. This argument does not apply here because neither listed or OTC firms were required to provide the net worth reconciliation in 1988. Rather it is expected that OTC firms have more incentive to disclose this supplemental information than listed firms because of differences in the size and sophistication of their investor groups.

NYSE and, to a lesser extent, ASE firms tend to have larger and more sophisticated followings (e.g. brokerage houses, institutional investors). These investors have access to a wider array of information sources. Because all S&Ls submit reports to the FHLBB, information about the differences in RAP and GAAP net worth can be obtained from the regulatory agency. Thus, the NYSE and ASE firms may feel less need to provide this information since their shareholders can obtain this information anyway. On the other hand, OTC firms generally have a less sophisticated following. Their investors may not want to or cannot incur the information search costs to obtain this information from alternative sources. Therefore, OTC firms would have more incentive to disclose information about the RAP/GAAP difference in their annual reports since it is valued more highly by their shareholders.

The effect of the size of the firm auditing a company's records has also been widely tested in the disclosure literature. Though companies are responsible for preparing their own financial reports, auditors may have some influence on the items disclosed. Singhvi and Desai (1971) and Firth (1979) argue that large audit firms (i.e., Big 8) may have more influence over their clients than small audit firms and may require more disclosure.⁽⁹⁾ In particular, because the S&L crisis produced a climate in which litigation against audit firms was likely, big audit firms might try to exert pressure on their clients to provide more, as opposed to less, disclosure.

Two additional variables, which are specific to this study, are also included as control variables. Unlike prior disclosure research which examines the extent of disclosure, this paper examines the disclosure of a particular item. But the extent of disclosure will likely affect the willingness to voluntarily provide the RAP/GAAP reconciliation. That is, firms will disclose at an optimal level. Firms which provide high levels of disclosure do so because the benefit-cost differential is maximized at that point. These firms may take the view that more information is better. Thus, S&Ls which are already reporting at high levels would be expected to be more willing to provide supplemental disclosure in 1988.

Also, the decision to disclose the RAP/GAAP difference may also be a function of the materiality of this difference. S&Ls which have little or no difference between their RAP and GAAP net worths may see little incremental value in the additional information. S&Ls which have large differences may be more willing to disclose this information because it is so big. Note the paper is not interested in the extent to which RAP and GAAP are used (this was considered by Hill and Ingram, 1989; Blacconiere et al., 1988). Rather, given the difference between RAP and GAAP, it is expected that firms with large differences would be more willing to disclose.

Sample and Method

The sample consists of 120 publicly traded S&Ls. Publicly traded S&Ls are used for two reasons: 1) S&Ls which are not publicly traded do not have the same incentives to signal, and 2) Publicly traded S&Ls which meet SEC reporting requirements use GAAP in reporting to the public but use RAP, in varying degrees, in reporting to the FHLBB. This is important because both RAP and GAAP net worths must be known to test H.1. The sample of 120 S&Ls represents 83 percent of all publicly traded S&Ls having 500 or more shareholders. The balance was deleted because of incomplete data. The data for this test are from annual reports for fiscal years beginning in 1988. Recall that the CEBA required the footnote reconciliation for periods beginning after January 1, 1989.⁽¹⁰⁾

The dependent variable for this test is whether the S&L voluntarily provided RAP/GAAP disclosure in footnotes in 1988 or not. When the dependent variable is dichotomous, as it is here, multiple regression cannot be used to test the significance of the independent variables. Instead a probit model is used. Probit is based on the assumption that the dependent variable is an estimate of the likelihood that a case belongs to particular group (see Aldrich and Nelson, 1984). This method, and the similar logit method, has often been used in the accounting choice research (see Watts and Zimmerman, 1986). The probit model used is:

$$Y = b_0 + b_1GAAP + b_2EXC + b_3AUD + b_4DISC + b_5MAT$$

where:

$$\begin{aligned}
 Y &= 1, \text{ if disclosure was provided in 1988; } 0, \text{ if no disclosure provided in 1988;} \\
 GAAP &= \frac{GAAP \text{ net worth} - \text{minimum capital requirement}}{\text{total assets}} \times 100\%; \\
 EXC &= 1, \text{ if NYSE or ASE; } 0, \text{ if OTC;} \\
 AUD &= 1, \text{ if audited by Big 8 firm; } 0, \text{ if audited by non-Big 8 firm;} \\
 DISC &= \text{number pages in footnotes and management discussion and analysis sections of annual report;} \\
 MAT &= \frac{RAP \text{ net worth} - GAAP \text{ net worth}}{\text{total assets}} \times 100\%.
 \end{aligned}$$

GAAP is used to test the signaling hypothesis, H.1. Its expected sign is positive. The more an S&L exceeds its minimum capital requirement based on GAAP, the more likely it should disclose the supplemental reconciliation in 1988.

EXC controls for the exchange listing. Based on the coding scheme described above, *EXC* should have a negative sign since OTC firms are expected to have more incentive to disclose. The *AUD* variable controls for audit firm size and is expected to be positive since Big 8 firms are predicted to require more disclosure. *DISC* controls for extent of disclosure and will be positive if firms which already disclose large amounts of information provide the reconciliation more readily than other firms. Last, *MAT* controls for materiality and should be positive because larger differences between RAP and GAAP net worths should increase the incentive to disclose.

Results

Table 1 provides descriptive statistics, and table 2 provides pairwise correlations for the independent variables.

Table 3 contains the results for the probit regression. Table 3 shows *GAAP* is significant at the 0.05 level ($t = 1.820$) with a positive sign. The interpretation is that S&Ls which were stronger in GAAP terms were more likely to provide the voluntary disclosure when controlling for other factors. This supports the signaling hypothesis.

Three of the four control variables are also significant and correctly signed. *EXC* is significant at the 0.01 level ($t = -2.463$). Its negative sign indicates OTC firms were more likely to provide the supplemental disclosure which supports the view that OTC investors may be less sophisticated and have access to fewer data sources. *DISC* is significant at the 0.01 level ($t = 2.373$) with a positive sign. Hence, as expected, firms which find it optimal to disclose large amounts of information will also provide the supplemental disclosure because more information is better than less information. *MAT* is significant 0.05 level ($t = 2.221$). The positive sign suggests S&Ls which had more material differences in RAP and GAAP net worths were more likely to reconcile these amounts. *AUD* was correctly signed but was not significant. Thus, whether the firm was audited by a Big 8 auditor did not have a systematic effect on the decision to disclose.

The overall model is significant at the 0.05 level. In addition, the model classifies 64 percent of the firms correctly which is somewhat better than the 58 percent correctly classified by a naive model that classifies all firms as non-disclosers.

Because *AUD* was insignificant, two additional analyses

related to this variable were undertaken. *Ex post*, one reason for the insignificance of the auditor variable is that most S&Ls in the sample (84 percent) were audited by Big 8 firms. Consequently, the *AUD* variable not have enough discriminating power to detect any differences. To provide a finer partitioning, the Big 8 firms were subdivided in two ways.

First, Big 8 firms were subdivided by audit technology. Cushing and Loebbecke (1983) argue that Big 8 firms can be classified as structured, intermediate, or unstructured firms based on their audit technology.⁽¹¹⁾ The author is unaware of any research which examines the effect of audit firm structure on disclosure. However, extending the Cushing and Loebbecke's (1983) logic, it can be argued that structured firms would be more likely to standardize both amount and type of information provided. Accordingly, for S&Ls audited by structured audit firms, the relationship between audit firm and the willingness to disclose the RAP/GAAP reconciliation should be significant. To the contrary, because unstructured firms rely more on judgment than on rigid guidelines, it is expected that no systematic effect on disclosure will be found for unstructured audit firms. In a similar fashion, the effect of intermediate audit firms would be expected to fall somewhere between the two extremes.

To test whether audit firm structure affects the disclosure decision, *AUD* is replaced by three new dummy-coded variables. Based on the audit firm classification used by Kinney (1986), *STRUC* is coded 1 for structured firms, and 0 otherwise. *INTER* is coded 1 for intermediate firms, and 0 otherwise. *UNSTRUC* is coded 1 for unstructured audit firms, and 0 otherwise.

Table 4 provides the results of this test. As before *GAAP*, *EXC*, *DISC*, *MAT*, and the overall model are significant. Based on a one-tailed test for *STRUC* and two-tailed tests for *INTER* and *UNSTRUC* (since a relationship is not specifically predicted), all three auditor variables are insignificant at conventional levels. In addition, while both *STRUC* and *UNSTRUC* are positively signed, the t -value for *UNSTRUC* is actually larger than for *STRUC*. This suggests the relationship for unstructured audit firms was stronger than for structured audit firms which is contrary to the expected effect.

Second, the Big 8 firms were subdivided using an individual dummy variable for each audit firm. This approach recognizes that inter-firm differences may exist within each structure classification. The results of this analysis are also shown in table 4. Whether one- or two-tailed tests are used, all eight auditor variables are insignificant.

These additional tests provide further evidence that the audit firm had no influence on the disclosure decision. On

Table 1
Descriptive Statistics for Independent Variables¹

	Disclosed (n = 51)	No disclosure (n = 69)	Total sample (n = 120)
<i>GAAP</i> (percent)			
Mean	2.6631	1.7065	2.1130
Maximum	16.2900	13.2900	16.2900
Minimum	-5.9840	-20.2000	-20.2000
Standard deviation	3.8753	4.5538	4.2553
<i>EXC</i>			
# NYSE/ASE firms	7	24	31
<i>AUD</i>			
# Audited by Big 8	36	46	101
<i>DISC</i> (pages)			
Mean	21.010	18.594	19.625
Maximum	48.000	41.000	48.000
Minimum	7.000	6.000	6.000
Standard deviation	8.031	7.546	7.817
<i>MAT</i> (percent)			
Mean	0.9368	0.4827	0.6757
Maximum	8.3230	4.7680	8.3230
Minimum	-0.9452	-4.6660	-4.6660
Standard deviation	1.4748	1.2904	1.3843

¹ Independent variables:

$$GAAP = \frac{GAAP \text{ net worth} - \text{minimum capital requirement}}{\text{total assets}} \times 100\%$$

$$EXC = 1, \text{ if NYSE or ASE}; 0, \text{ if OTC};$$

$$AUD = 1, \text{ if audited by Big 8 firm}; 0, \text{ if audited by non-Big 8 firm};$$

$$DISC = \text{number pages in footnotes and management discussion and analysis sections of annual report};$$

$$MAT = \frac{RAP \text{ net worth} - GAAP \text{ net worth}}{\text{total assets}} \times 100\%$$

Table 2
Pairwise Correlations Among Independent Variables

	<i>GAAP</i>	<i>EXC</i>	<i>AUD</i>	<i>DISC</i>	<i>MAT</i>
<i>GAAP</i>	1.000				
<i>EXC</i>	-0.189	1.000			
<i>AUD</i>	-0.161	0.152	1.000		
<i>DISC</i>	-0.313	0.231	0.164	1.000	
<i>MAT</i>	-0.129	0.247	0.067	0.171	1.000

Table 3
Probit Results¹

Variable or statistic	Expected Sign	Coefficient	t-value
<i>GAAP</i>	+	0.067	1.820 ^a
<i>EXC</i>	-	-0.776	-2.463 ^b
<i>AUD</i>	+	0.087	0.256
<i>DISC</i>	+	0.041	2.373 ^b
<i>MAT</i>	+	0.268	2.221 ^a
Constant		-1.213	-2.521 ^b
Model chi-squared			16.772 ^c
% Correctly classified			64.17%

¹ The probit model tests whether the independent variables are significantly related to the decision to provide the supplemental RAP/GAAP reconciliation.

Coding for dependent variable:

$Y = 1$ if disclosed RAP/GAAP reconciliation ($n = 51$);
 0 if did not disclose RAP/GAAP reconciliation ($n = 69$).

^a Significant at 0.05 level.

^b Significant at 0.01 level.

^c Significant at 0.005 level.

the other hand, *GAAP*, *EXC*, *DISC*, and *MAT* were consistently significant in all tests.

Conclusion

The use of RAP by S&Ls was widely criticized in the late 1980's. Under the CEBA, S&Ls were required to switch to GAAP and provide a reconciliation of RAP and GAAP net worth. This paper examines whether S&Ls voluntarily provided a footnote reconciliation of their RAP and GAAP net worths before it was required by law. Based on the disclosure and signaling literature, it is expected that S&Ls having high GAAP net worths relative to their capital requirements would have incentive to provide signals to differentiate themselves from firms which have lower GAAP net worths. This is tested while controlling for other factors which could affect the disclosure choice - in particular, the exchange listing, audit firm size, extent of disclosure, and materiality of the RAP/GAAP difference. The results provide support for the signaling hypothesis. The implication is that even in the absence of regulated disclosure, firms will voluntarily provide information which helps to differentiate them from other firms.

Footnotes

1. To be exact, the CEBA required the RAP/GAAP reconciliation for S&Ls with audited statements. Other S&Ls were required to reconcile RAP capital and modified equity capital, i.e. GAAP capital plus some RAP components. The financial statements of all firms used in this study were audited.

2. Other regulated industries using specialized accounting rules include banks, utilities, insurance companies, and railroads.

3. The authority for the FHLBB to set RAP is given by U.S. federal regulation 563.23-1 (12 CFR 563.23-1). The FHLBB can create RAP by adopting a regulation, adopting a resolution, or by issuing a memorandum.

Table 4
Additional Probit Results

Variable or statistic	Expected Sign	Model 1 ¹		Model 2 ²	
		Coefficient	t-value ³	Coefficient	t-value ⁴
GAAP	+	0.067	1.739 ^a	-1.326	2.587 ^a
EXC	-	-0.896	-2.695 ^c	-0.962	-2.601 ^c
STRUC	+	0.081	0.231	—	—
Peat Marwick		—	—	-0.073	-0.196
Deloitte Haskins & Sells		—	—	0.366	0.814
Touche Ross		—	—	0.676	1.135
INTER	?	-0.155	-0.353	—	—
Arthur Andersen		—	—	0.987	0.748
Arthur Young		—	—	0.870	1.126
Ernst & Whinney		—	—	-0.551	-1.089
UNSTRUC	?	0.882	1.534	—	—
Price Waterhouse		—	—	0.955	1.252
Coopers & Lybrand		—	—	0.983	1.221
DISC	+	0.045	2.567 ^c	0.043	2.319 ^b
MAT	+	0.262	2.036 ^a	0.287	2.127 ^a
Constant		-1.287	-2.603 ^c	-1.326	-2.587 ^c
Model chi-squared			20.327 ^c		27.279 ^b
% Correctly classified			65.00%		65.83%

¹ Model 1 is the same as the basic model (table 3) except the Big 8 firms are subdivided by audit technology.

Coding for audit technology variables:

STRUC = 1, if Peat Marwick, Deloitte Haskins & Sells, Touche Ross;
0, otherwise;

INTER = 1, if Arthur Andersen, Arthur Young, Ernst & Whinney;
0, otherwise;

UNSTRUC = 1, if Price Waterhouse, Coopers & Lybrand; 0, otherwise.

² Model 2 is the same as the basic model (table 3) except a separate variable is include for each Big 8 firm. These variables are dummy coded and equal 1 if the particular S&L was audited by that firm and is 0 in all other cases.

³ The significance levels reflect one-tailed tests except for INTER and UNSTRUC. Two-tailed tests were used for the latter two variables since no predictions about the expected sign were made a priori.

⁴ The significance levels reflect one-tailed tests except for Arthur Andersen, Arthur Young, Ernst & Whinney, Price Waterhouse, and Coopers & Lybrand. Two-tailed tests were used for these variables because these firms are classified as intermediate or unstructured firms.

^a Significant at 0.05 level.

^b Significant at 0.01 level.

^c Significant at 0.005 level.

4. However, RAP is stricter than GAAP in some areas. Accounting for troubled debt restructuring is one example.
5. See the appendix to Arnold (1988) for an in-depth review of treatments under RAP and GAAP.
6. This objective is well illustrated by RAP which allows subordinated debt to be included in RAP net worth. The FHLBB views subordinated debt as being a cushion which absorbs losses before the insurance fund is drawn on.
7. A few firms provide the reconciliation as part of the footnote text rather than in a tabular form.
8. Firm size has also been commonly tested in the disclosure literature. However, because firm size and exchange listing are highly correlated, the effect of firm size was not examined in the present study.
9. The test period, 1988, predated the mergers of Ernst & Whinney with Arthur Young and Deloitte Haskins & Sells with Touche Ross. Thus, Big 8 is used for historical correctness.
10. Actually in some cases the data is for fiscal years beginning in 1987. This is the case with firms having 9/30 year ends. This is necessary because the FIRREA was passed on August 9, 1989 and because this law altered the definition of regulatory capital. Under FIRREA, regulatory capital is equal to tangible capital which is a GAAP based amount. Thus FIRREA eliminated the RAP/GAAP differential. Thus 9/30 firms may have been influenced by FIRREA instead of the CEBA in preparing fiscal 1988 reports.
11. Structured firms are Deloitte Haskins & Sells, Peat Marwick, and Touche Ross; intermediate firms are Arthur Andersen, Arthur Young, and Ernst & Whinney; unstructured firms are Coopers & Lybrand and Price Waterhouse (Kinney, 1986).

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