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A STUDY OF THE EFFECTS OF ACCOUNTABILITY AND ENGAGEMENT RISK ON AUDITOR MATERIALITY DECISIONS IN PUBLIC SECTOR AUDITS

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ABSTRACT. Public administration theory suggests that increased accountability in the public sector influences the auditor to lower materiality levels; thereby increasing the audit sample size; which decreases the likelihood of an inappropriate opinion. Accounting theory posits that engagement risk leads the auditor to lower materiality levels to decrease the likelihood of rendering an inappropriate opinion, in an effort to avoid litigation. The results of this study indicate, that in public sector entities, accountability guides the auditors' materiality decisions.

INTRODUCTION

This study evaluates factors that may affect an auditor's materiality decision when the client is a government entity. The study of materiality and the interrelated audit strategies is important for several reasons. First, a desire to lower the level of audit risk, which is the risk that an auditor will fail to modify the opinion when a material misstatement occurs, may require the auditor to lower the materiality level. Generally Accepted Government Auditing Standards (GAGAS) specifically address a lower materiality level for government entities relative to for-profit entities due to accountability and legal and regulatory issues (Government Auditing Standards, 1994: 4.9).

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Second, the General Accounting Office (GAO) has found sufficient and competent evidence in public sector audits to be inadequate (GAO, 1986). The GAO did not identify the specific nature of these evidentiary problems, and insufficient evidence may be the result of several causes. For example, insufficient sampling or poor audit planning may account for insufficient evidence, or it is possible that materiality levels were inadequately set in the audit engagement. Therefore, evaluation of factors which may affect evidence may improve our understanding of the decision process during the audit. Such an analysis is essential in understanding the potential problems suspected in public sector audits.

Third, an additional reason to examine materiality is that some auditors believe GAGAS should mandate materiality thresholds for audits of government entities (Raman and Van Daniker, 1994). These proposals may be premature, and require an understanding of the materiality decisions made during public sector audits.

Materiality is the focus of this study because of the importance of such judgments to the audit process. While GAGAS instruct auditors to make materiality decisions based on accountability and legal and regulatory issues, a primary concern to the auditor in making these decisions is "engagement risk." The engagement risk approach to auditing, as identified in a 1992 ***Audit Risk Alert*** (American Institute of Certified Public Accountants, 1992), asserts that throughout the audit process the auditor should consider the client's business risk, audit risk, and the auditor's business risk (Kinney, 1994). Consequently, audit strategy decisions resulting from engagement risk assessment may be evidenced by the auditor's materiality decision (AU 312.12, 312.17).

The auditor's materiality decision is manifested in the selection of a "materiality level," which is defined in this study as the minimum dollar value where potential financial statement misrepresentations, policy and procedure changes, and significant accounting disclosures are judged to influence the decisions of financial statement users. The materiality level is selected during the planning stage of the audit, but may be modified due to circumstances discovered during the audit.

The final materiality decisions are evident at the audit's conclusion. At that point, the auditor must arrive at materiality decisions regarding (1) which errors or irregularities must be corrected, (2) the type of

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opinion to be issued, and (3) audit report disclosure of significant issues and accounting policy changes. When auditors identify an accounting principle change, they are required to modify the audit report if the accounting change effect on the balance sheet or income statement is material.[1]

Auditors' judgments of when an accounting principle change is considered material have been the subject of several previous research studies. Chewning, Pany, and Wheeler (1989) evaluated 284 audit reports for private-sector firms issued during the years 1980-1983 for three different accounting principle changes. They found that 96% of the sample audit reports included a modification for an accounting principle change when the dollar value effect was greater than 10% of net income. When the dollar value effect was between 4% and 10% of net income, 89% of the opinions were modified. Finally, 61% of the audit reports included a modification when the effect of the change was between 0% and 4% of net income. Chewning, Pany, and Wheeler identify significantly lower materiality thresholds than those documented in prior research (e.g., Frishkoff (1970) found a materiality level of 25% of net income). This study extends Chewning, Pany, and Wheeler's study by (1) using government hospitals and universities as examples of government entities and (2) studying a recently mandated accounting change, GASB Statement 16, *Compensated Absences*, to determine if the propensity to modify the audit report is dependent upon the client's accountability or engagement risk.

GASB Statement 16 requires that state and local government entities, including public benefit corporations and authorities, governmental utilities, governmental hospitals and other healthcare providers, and governmental colleges and universities, accrue a liability for absences for which employees will be paid, such as vacations, sick leave, and sabbatical leave. It is believed that GASB Statement 16 is representative of accounting principle changes that require the auditor to make a decision regarding whether the impact of the change in principle is material with respect to the financial statements.

Recent changes in GASB and FASB standards have eliminated the requirement that material changes in accounting principles be designated in the auditor's report. This study utilizes the reporting of changes in

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accounting principle as an indication of the auditor's decision process as it relates to materiality at the conclusion of the audit. As such, the recent changes in these standards have no effect on the constructs and conclusions of this study.

The remainder of this paper will develop the theory and hypotheses used in this study, describe the methodology employed, analyze the results, and provide a summary conclusion.

THEORY AND HYPOTHESIS DEVELOPMENT

Audit Theory

Recently, voters/citizens (principals) have placed intense pressure for accountability on government-owned entities and their elected officials (agents). Legislative bodies, executive branch departments, and courts act as principals that impose standards and procedures on public organizations that act as their agents. Where principals believe agents may be acting in their own self interest, the principal may require more credible reports as a means of justifying their actions (Rainey, 1983). Auditing is a monitoring technique which evaluates and reports on management's financial assertions and the underlying accounting mechanisms used to reach those assertions. If the cost of such monitoring is less than the cost of punitive actions taken by principals when uncertainty exists regarding the validity of agents' assertions, then agents will select monitoring as a means of maximizing their overall compensation (Jensen and Meckling, 1976).

These agency considerations play an important role in the decision to use external auditing (Palmrose, 1984), and are purported to influence the decision regarding whether to hire an auditor with a prominent reputation for quality (Francis and Wilson, 1988). For-profit entities with greater agency costs are more likely to employ a big-six audit firm than those with lower agency costs (Palmrose, 1984). In addition, Ettredge, Simon, Smith, and Stone (1994) demonstrate that companies with higher internal and external agency costs are more likely to purchase timely quarterly reviews. It is contended that the addition of a quarterly review provides a year-round monitoring presence which improves internal control and financial information. The continual audit involvement (Ettredge et al.,

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1994) and/or the use of a name-brand (i.e. big-six) auditor (Chow, 1982) improve credibility with principal users where internal and external agency relationships are deemed costly.

Public sector principal-agent conflicts may arise in several instances. A primary conflict may arise between the goals of the department/bureau head (bureaucrat) and the goals of the resource providers' representative (elected official) during the budget process. The goals of the bureaucrat may be to maximize the bureau's operating budget in order to consume perquisites or due to an altruistic belief in the importance of the bureau's mission. The elected official is often concerned with public accountability at election time for the funding and operation of multiple bureaus. This public accountability expectation may be especially rigorous when the resource provider is not a direct consumer of the services or product provided (e.g., welfare, mass transit), and has been indicated as the predominant reason for municipalities to engage auditors (Wallace, 1988). In addition, resource providers have little control over their investment contributions (i.e. taxes) regardless of the policies and performance of the governmental entity.

Principal-agent relationships may affect the audit in two ways. First, public administration theory indicates that indirect benefits and lack of control over investment compel the government entity's owners (i.e. taxpayers) to demand more accountability for their funding. This increase in accountability directs the auditors to require additional assurance that financial statements are fairly presented. These assurances may require the auditor to lower the materiality level during the audit and at the conclusion of the audit when audit reporting decisions are being made. A discussion of accountability in public sector audits is presented later.

Second, audit theory indicates that some principal-agent relationships impose a greater risk than others. Environmental factors may impose risks on both the taxpayer as principal and on the auditor as an agent of the taxpayer/principal. These risks, which are described in detail below, increase the engagement risk of the audit. This increased engagement risk may compel the auditor to increase testing and/or lower the materiality level of the audit testing and reporting to reduce the engagement risk to an acceptable level.

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Engagement Risk Across Economic Sector

As previously noted, engagement risk is a function of the client's business risk, audit risk, and the auditor's business risk (Kinney, 1994). It has been shown that auditors' liability is highly associated with client financial distress (Palmrose, 1987). The insurance hypothesis posits that the auditor provides an additional funding source which can be targeted during litigation activities arising as a result of client business failure (Wallace, 1985). The investment level in both the private and public sector has increased such that entity failures often involve hundreds of millions of dollars and have far reaching repercussions. For example, failures of savings and loans associations have cost investors, consumers, taxpayers, and related auditors hundreds of millions of dollars. Even small cities and counties have multi-million dollar budgets. These higher funding levels have increased the consequences of financial mismanagement. The bankruptcy of Orange County, California, has left large financial obligations for the taxpayer and has resulted in unemployment, higher interest rates, and an escalating distrust in government's ability to handle funds. In most cases, lawsuits by investors and bondholders have included the auditor as a defendant. As funding levels have increased, investors have demanded increased auditing, not only to help protect their investment, but also as an additional litigation target in the event of financial collapse.

A second component of engagement risk is audit risk, "the risk that the auditor may unknowingly fail to appropriately modify his opinion on financial statements that are materially misstated" (AU 312). This aspect of engagement risk can be controlled by performing an audit of appropriate quality for the specific engagement. By increasing the timing, nature, and extent of audit tests, the auditor can provide additional evidence to increase the level of assurance regarding the appropriateness of the audit opinion. If the auditor perceives that principal-agent relationships are increasing the audit risk, and, therefore the engagement risk, the auditor may require this increased level of assurance.

The auditor's business risk is the third component of engagement risk. The auditor's business risk includes the costs, monetary and reputational, from an alleged audit failure. Therefore, the engagement

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risk approach introduces the risk of potential auditor litigation into the audit process (Kinney 1994). Testimony before the Brooks Committee (General Accounting Office, 1986) demonstrated that CPA firms perceive government audits as lower in risk than private sector audits. Comments such as "firms are seldom, if ever, sued as a result of performing substandard government audits" led the committee members to note a "lackadaisical" and "cavalier" attitude on the part of some CPA firms (Hardiman, Squires, and Smith, 1987). If auditors believe that there is reduced probability of a lawsuit by the principals in government audits, they may assess engagement risk as low for government audits and may not vary materiality due to auditor's business risk.[2]

It is expected that audits of entities with greater engagement risk will require modification of the audit strategy in order to utilize more extensive testing. This change in the extent of audit testing may dictate a lower materiality level. Therefore, an actual or a perceived lower auditor's business risk may result in higher materiality levels for audits of government entities. This higher materiality level may result in fewer explanatory paragraphs for accounting principle consistency in audit reports.

Accountability Differences Across Economic Sectors

Kearns (1994) states that elements of accountability are the core differences between government and for-profit organizations. The importance of accountability is recognized in the Government Accounting Standards Board's *Financial Concepts Statement No. 1, "Objectives of Financial Reporting."*

> Accountability is the cornerstone of all financial reporting in government... Accountability requires government to answer to the citizenry -- to justify the raising of public resources and the purpose for which they are used.

This demand for accountability in the public sector is further emphasized by former Secretary of Defense James Forrestal: "The difficulty of government work is that it not only has to be well done, but the public has to be convinced it is well done" (Lynn, 1981: 119).

Government management is subject to more public scrutiny by the media and special interest groups (Allison, 1980). This political

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sensitivity heightens public awareness and increases the entity's need for credible reporting. Auditors rate the political sensitivity of the area under audit and the media as major risk factors considered in determining the extent of audit testing (Raman and Van Daniker, 1994). The GAO has recognized that these factors may affect the risk and materiality of government audits.

> In an audit of the Financial Statements of a government entity or an entity that receives government assistance, auditors may set lower materiality levels than in audits in the private sector because of the public accountability of the entity, the various legal and regulatory requirements, and the visibility and sensitivity of governmental programs, activities, and functions (Government Auditing Standards, 1994: 34).

The political sensitivity that surrounds public sector entities derives, in part, from the contrast of profit and government entities' objectives. Since governmental entities fill market needs where profitability is not expected, there are few measurements available for evaluating effective asset utilization (Henry and Cleary, 1989). In the for-profit sector, one measure of effective resources use is the "bottom line." Companies that effectively utilize assets will generate a net income which can be evaluated in comparison to alternative investment opportunities by using measures such as return on assets and return on equity.

If a for-profit corporation fails to utilize assets efficiently, competitors will provide consumers goods and services at a lower price, or provide higher rates of returns to their owners. Either situation should induce management to attempt improved efficiency to not only meet, but exceed the standards set by competitors in order to obtain its own competitive edge. In a governmental entity there is no competition to force optimum capital usage.(3) For these reasons, public sector principals have demanded an increased emphasis on operational effectiveness (FASB Statement of Financial Accounting Concepts No. 4, para 42).(4)

Principals also have different informational demands based on their unique ownership characteristics. In today's global market, for-profit corporations are owned by investors worldwide who demand independent monitoring of business activity to ensure their investment is protected. These investors expect direct benefits from the enterprise and may liquidate their investment if the entity's policies and performance are

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judged to be inadequate. In contrast, owners in the government sector (defined as the resource providers) may see only indirect benefits since not all owners use services in proportion to their ownership (FASB Statement of Financial Accounting Concepts No. 4, para 18). Also, resource providers have little control over their investment contribution (i.e. taxes) regardless of the policies and performance of the entity. Indirect benefit and the lack of control over investment compel the governmental entity's owners to demand more accountability for their funding.

The differences in purpose and ownership described above require public sector elected representatives, referred to here as administrators, to exhibit different characteristics and pursue different objectives in fulfilling their responsibilities (FASB Statement of Financial Accounting Concepts No. 4, para 21). Corporate directors are generally placed on the board because of a familiarity with the company or with similar businesses and technology. Some board members may work with the company on a daily basis and are positioned to make primary policy decisions regarding business direction and funding of company activities.

Elected officials are asked to be administrators of many vastly different enterprises. For example, a mayor may function as the director of law enforcement, fire safety, health care, transportation, welfare, pension funds, taxing agencies, and investment plans which require policy direction. In many government jurisdictions the preeminent administrator of a hospital or university may be the governor or legislative committee. Often administrators have little daily contact with a particular enterprise, placing the administrator at an information disadvantage regarding major policy decisions. The administrator typically relies on the bureaucrat in direct charge to provide sufficient information to facilitate decisions (Allison, 1980). As previously discussed, the bureaucrat may have incentive to misrepresent information requiring the administrator to monitor the information's accuracy. Because of the lack of expertise and daily contact with the entity, government administrators may demand more accountability from the entity's direct management. The demand for accountability may compel the auditor to ensure that the government administrators, as well as the general public, receive greater assurance and additional disclosures. This may be accomplished through increased testing and lower materiality levels in the testing and reporting phases of the audit.

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Hypothesis Development

As previously discussed, any differences found in the materiality decisions may be due to two factors, accountability or engagement risk. Hypotheses 1 and 2 attempt to isolate the accountability and engagement risk aspects to determine if either or both of these factors are a significant influence on the auditor's materiality decision.

One measure of accountability might be an indication of the number of individuals relying on the financial statements. These individuals include taxpayers, product/service users, creditors, financial analysts, potential investors/donors/creditors, other government agencies, or unions, for example. Since it is not practical to obtain such a measure, it is assumed that larger entities have more taxpayers, provide more products or services, have more creditors, etc. Also, it is intuitively appealing that agency costs, and its accountability component, are related to entity size since as entities grow, the attention of the public, media, and public interest groups usually escalate.

The auditor's propensity to modify the report due to a change in accounting principle should be directly related to the size of the entity. Stated in the null form Hypothesis 1 is:

H_1: The materiality level is independent of the accountability, as proxied by size, associated with the entity.

If the null can be rejected, the accountability factor should be a statistically significant influence on the auditor's materiality decision. Based on prior discussions, the alternative hypothesis is that greater accountability for clients will cause the auditors to take a more conservative approach with larger entities and ensure that principle changes are more readily disclosed in the government entity's audit report.

In addition to the public accountability, when engagement risk is assessed as high, the audit process may be modified to adapt to this additional risk. It is hypothesized that as engagement risk varies the probability of an audit report modification for a change in accounting principles will vary. Stated in the null form Hypothesis 2 is:

H_2: The materiality level is independent of the engagement risk, as proxied by bond rating, associated with the entity.

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In contrast, the alternative hypothesis is that a higher perceived engagement risk will result in a higher probability of modifying the audit report.

Examples of traditional proxies used to measure client business risk include beta, variance of market return, and various ratios. Since this study utilizes entities that are not publicly traded firms, these measures are inappropriate. Simunic and Stein (1989) established analytically that the auditor's loss exposure from an engagement is related to the risk of the client's securities. In addition, prior studies in the public sector have used bond ratings found in Moody's Bond Index as a proxy for engagement risk (Copley, 1989; 1991). These bond ratings have been shown to be related to the financial reporting variables in the entities financial reporting system (Wallace, 1981; Wilson and Howard, 1984). Specifically, Wilson and Howard (1984) found that cities with poor financial operating and substandard reporting practices have lower ratings and higher interest costs.

METHODOLOGY

Variable Definition

The hypotheses are tested using a logit regression model where the dependent variable is coded 1 if the auditor indicates in the audit report that the entity adopted GASB Statement 16, and 0 if no modification is made for the adoption of this principle. Those entities that do not reference GASB Statement 16 in the body of the financial statements, or which indicate that the standard is not applicable, are not included in the sample.

Independent variables of interest will measure those factors hypothesized to affect materiality judgments. These variables are size, S; and client business risk, CBR. Size will proxy for the accountability issues related to the number of individuals relying on the financial statements. If the probability of a modified audit report varies in relation to the size of the entity, hypothesis 1 can be rejected. Size will be measured using the natural log of the entity's revenues in the year of the adoption of GASB Statement 16.

Client business risk will be measured as a dichotomous variable where 1 represents entities with bond ratings lower than "Aa". These

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entities are presumed to have discernible business risk. If the probability of modifying the auditor's report varies in relation to client business risk, hypothesis 2 can be rejected.

The regression includes control variables for the dollar value of the principle adoption and audit risk. The dollar value of the principle adoption, V, will proxy for the quantitative aspect of the decision to modify the audit report. The dollar value of the principle adoption is measured as the accrued liability for compensated absences deflated by the total assets of the entity.

Audit risk will be controlled in this study by using a proxy for the quality of the audit performed. Past studies have assumed that big-six auditors provide a higher quality audit when compared to non-big-six auditors due to the availability of resources, training, personnel, and reputation capital (e.g. DeAngelo, 1981; Palmrose, 1986; 1988). Other studies observed auditor choice and found that it is likely that the big-eight (now big-six) group are perceived as offering higher quality audits (Dopuch and Simunic, 1980; Simunic and Stein, 1987). Additional studies have indicated a fee premium linked to the big-six audit quality (Francis, 1984; Francis and Simon, 1987). Similarly, this study will control for audit quality using a dummy variable for big-six/non-big-six auditors. Audit risk is measured using a dummy variable which is equal to 1 when the auditor is a big-six auditor and is zero if the auditor is not a big-six auditor.

Logit Regression Model

The logit regression which will be used is:

$$M = \alpha_0 + \alpha_1 V + \alpha_2 S + \alpha_3 CBR + \alpha_4 AR + \varepsilon$$

where:

M = Audit report indicator
(M = 1 if modified, M = 0 if not modified)

V = Natural log of the dollar value of the principle change deflated by total assets

CBR = Client business risk as a dummy variable
(Ratings $\geq$ Aa, R = 0; all other ratings, R = 1)

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S = Size as measured by the natural log of revenues
AR = Audit risk as a dummy variable
(AR = 1 if the auditor is a big-six auditor, otherwise AR = 0)

The projected sign and significance of variables in the model is indicated in Table 1.

TABLE 1
Predicted Sign and Interpretation of Variables

Variable	Predicted Sign	Interpretation of Variable
V	+	The dollar value of the principle change for a NFP entity is directly related to the probability of an audit report modification
CBR	+	The risk of a NFP entity is directly related to the probability of an audit report modification
S	+	The accountability of a NFP entity will be directly related to the probability of receiving a modified audit report

Sample Selection

This study is designed to determine if there are audit process differences based on the client's economic sector. As such, the population of entities includes all government entities that receive an annual audit. To facilitate the analysis, this study uses entities where the public sector accounts for the entity as an enterprise. The entities selected are hospitals and universities. Each of these industries is dominated by large, financially stable entities. Accordingly, in order to obtain a sample which represents the economic environment of the industry, the largest firms in each industry were selected.

Hospitals were selected from *The American Hospital Association Guide to the Health Care Field* (American Hospital Association, 1993). Fifty hospitals of the largest government hospitals based on total expenses

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were selected. Each hospital has total expenses greater than $160 million. Colleges and Universities were selected from *American Universities and Colleges-14th Edition* (American Council on Education, 1992). One-hundred of the largest government schools, based on total revenues, were selected. Each university has total revenues greater than $100 million.

Data Collection

It is required that financial statements, including the footnotes and the auditor's report, be obtained for the year in which the entity adopted GASB Statement 16. Since the adoption of this standard varies among entities depending on fiscal year end and early adoption decisions, the most recent four years of financial statements were requested.

Letters requesting these financial statements were sent to the controller of each hospital and university selected during the last three months of 1995. Second requests were made if a response was not received within six weeks of the first request. If no response was obtained within six weeks of the second request, a third request was sent to hospital administrators. The response rate for universities, using only two requests to controllers, was higher than that of the hospital entities, therefore, no third requests were sent to universities. Further, it is believed that request to university presidents would not produce significant additional results. In the case of hospitals, additional requests for financial statements were made to the various state health administration agencies.

The results of the sample collection process are displayed in Table 2. Responses were received from 23 (46%) of the hospitals contacted. Of those hospitals which responded, 10 adopted the accounting principles under investigation. Responses were received from 67 (67%) of the universities contacted. Of those universities which responded, 34 adopted GASB Statement 16. The total sample consists of 44 entities.

ANALYSIS OF RESULTS

Descriptive statistics for the data set are presented in Table 3. The data set was analyzed using the logistic regression model previously

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TABLE 2
Sample Collection

	Hospitals	Universities	Total
Initial Sample	50	100	150
Responses Received	23	67	90
Percent Response	46	67	60
Negative responses*	2	0	2
Usable Financial Statements	21	67	88
No Standard Adoption	11	33	44
Final Sample	10	34	44

*Response received indicating that financial statements would not be made available

TABLE 3
Sample Statistics, N = 44
(Dollar values in millions)

	Mean	Median	Min	Max
Assets	695.8	478.5	66.6	2,950.2
Revenue	433.1	304.5	54.1	1,624.7
Change Value	13.9	9.2	0.9	16.7

described. The regression was performed using SAS version 6.0. The chi-square value of 18.342 (p-value of .001) indicates that the regression model is statistically significant. The R^2 value of .303 is high relative to similar logistic regression models used in accounting and auditing studies.

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The client's business risk (CBR) was dichotomized using Moody's bond ratings for hospitals and universities. Twenty-four entities with bond ratings of Aa or Aaa were categorized as relatively low-risk entities. Twenty entities with ratings lower than Aa were categorized as relatively high-risk entities.

Table 4 presents the results of the regression equation. The coefficient for the dollar value of the principle change (V) is significant with a p-value of .011. The sign is positive, as predicted, indicating that as the V increases, the probability of receiving a modified auditor's report increases. Therefore, the value of the accounting principle change, measured as a percent of total assets, significantly influences the probability of receiving a modified audit report. This result indicates that the auditors are utilizing the dollar value of the accounting principle change in assessing their decision to modify the audit report.

TABLE 4
Regression Results

Variable	Predicted Sign of Coef	Value of Coef	P Val of Coef
Sample	---	44	---
Chi-Sq	---	18.342	0.001
R^2	---	0.303	---
Inter	---	- 2.46	0.010
V	+	1.1553	0.011
CBR	+	-2.2032	0.060
S	+	1.4367	0.020
AR	---	-1.7685	0.125

M = Modified audit report (M = 1 if modified, otherwise M = 0)

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The results also indicate that the coefficient for size is positive and statistically significant with a p-value of .020. This denotes that as size increases, the probability of receiving a modified audit report increases. This result illustrates that an increased level of accountability may enter into the auditor's materiality decision

In addition to the dollar value of the accounting principle change, the engagement risk of the entity appears to enter into the auditor's decision. While the coefficient of the CBR variable is significant with a p-value of .06, the sign of the coefficient is negative. The sign of the coefficient is not as predicted and indicates that if the entity is a relatively high-risk client the probability of a modified audit report decreases. It is difficult from this result to conclude that auditors are using engagement risk as a factor in determining materiality levels in the audits of government entities.

SUMMARY AND CONCLUSIONS

The findings of this study are consistent with the predictions made from the theoretical constructs. There is a variation in the probability of the auditor modifying the auditor's report which appears to be related to the auditor's incorporation of accountability in the materiality decision.

The evidence regarding engagement risk as an influence of audit materiality decisions is inconclusive. While the data shows the variable used to proxy for engagement risk as moderately significant, there is no convincing explanation for the direction of the sign.

While the findings in the study are consistent with the hypothesis, several limitations of this study must be noted. First, the independent variables are very broad indicators of the issues which they represent. At the present time, these variables are the best measures available. It is hoped that future studies will extend this research by including variables which are better indicators of accountability and engagement risk and which include additional factors that may influence the auditor's decision process. Second, the use of hospitals and universities as representative of private and public entities reduces the external validity of this study. Caution must be exercised in extending these conclusions beyond these sectors.

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It should be noted that, to the author's knowledge, this is the first study which has addressed this issue. It is hoped that this study will initiate additional research into the auditors' decision process in government sector audits. Since changes in GASB standards have eliminated the modification of the auditors' report for changes in accounting principle, this specific methodology may have limited use in the future. However, as new reporting standards are issued, an increase in the availability of financial data and the comparability of the data across entities may provide new opportunities to evaluate this issue.

NOTES

1. Recent changes to auditing standards have eliminated the requirement to modify the auditor's report when changes in accounting principles have been applied to the financial statements. However, the data base used in this study is from a time period prior to this change.

2. A few municipalities and government entities may have limited immunity from liability. However, "virtually all jurisdictions, either judicially or by legislative fiat, have abolished or substantially abridged the doctrine of government immunity" (43 ALR 4th 19 §2a).

3. Efficiency is measured as production of economic return. Some NFP and government managers' efficiency objectives may be different [e.g. asset utilization (even where costs exceed revenues), service, etc.].

4. Rainey (1991) states that the gap in efficient resource utilization exists, but is not as extensive as previously believed. Many public managers strive to maximize asset utilization in a manner that is comparable with for-profit organizations due to a dedication to their managerial responsibilities.

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