AUDIT REPORT TIMELINESS OF UNITED STATES LOCAL GOVERNMENTS: AN INVESTIGATION OF ENTITIES EXCEEDING REPORTING DEADLINES

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Abstract

Audit report delay in municipal governments is a condition that has worsened, on average, over the past few decades. The purpose of this study is to identify variables that influence audit timeliness in governments. The data analyzed in this study are from a state that has historically had longer delays in reporting (currently an average of 420 days from fiscal year-end until the date the audit report is submitted). This research utilizes ordinary-least-squares regression to estimate the effect of several variables on the time it takes to file audit reports with the state auditor's office. The research also utilizes logistic regression to estimate the effects of those variables on the incidence of filing reports after state-mandated deadlines.

Variables found to be associated with both longer audit report delay and late audits include the number of audit findings and the receipt of an adverse or qualified audit opinion. Travel distance between the auditor's office and the client's office was also found to play a role in timeliness. A greater amount of long-term debt carried by the governmental entity was not found to be associated with shorter audit delays but was found to be somewhat associated with audits filed on time.

1. Introduction

For auditors' reports to be relevant, they must be prepared and made available to the public in a timely manner. The purpose of this study is to examine variables that influence audit timeliness for local governments. Since the state of Mississippi requires audits to be filed with the Office of the State Auditor (OSA) within a one-year window, this study examines the determinants of late audit filings in that state. The study also examines the variables that influence audit delay, as measured by the number of days between the government's fiscal year end and the date in which the audit is submitted.

GASB Concepts Statement No. 1: Objectives of Financial Reporting lists timeliness, along with relevance, reliability, understandability, comparability, and consistency, as one of the six qualitative characteristics necessary for effective financial reporting. The GASB further states within that Concepts Statement that "if financial statements are to be useful, they must be issued soon enough after the reported events to affect decisions" (GASB 1987, p.24). In a 1998 position paper, the National Federation of Municipal Analysts (NFMA), stated that outdated financial information is, at best, worthless, and, at worst, materially misleading with respect to the current condition of the issuer (NFMA 1998). In a 2011 Research Brief, the GASB published the results of a survey of users of governmental financial statements concerning the usefulness of reported financial information as time progresses. Findings from that study indicated that financial information retains some of its usefulness for up to six months after fiscal year end, but the relative usefulness of that information diminishes quickly as time progresses within those six months.

However, the timeliness objective has not often been achieved in governmental financial reporting. In the mid-1990s, the GASB conducted a series of focus-group sessions, which resulted in interviewees complaining that municipal audit delay had become a significant problem for financial statement users (Crain & Bean 1998). In 2005, the GASB, as part of an extensive study of the needs of users of governmental financial information, interviewed more than 250 financial-statement users and found an overwhelming concern that audited financial statements needed to be issued in a more

timely manner (Mead 2011). Findings from Merritt (2010) and Mead (2011) provided evidence that even with the concern expressed by various financial statement users, the timeliness of the preparation and subsequent audit of governmental financial statements is not improving. In fact, comparing the audit delay[1] findings from Dwyer & Wilson (1989) to the findings from Merritt (2010) and Mead (2011), the delay has increased by approximately two months since that earliest study of governmental audit timeliness. [2] Dwyer & Wilson (1989) noted an average audit delay for municipalities of approximately 107 days, while Merritt (2010) and Mead (2011) each noted an average audit delay of around 170 days.

This study examines audit timeliness in Mississippi, as a great concern currently exists in that state. Cagle & Pridgen (2012), in their examination of counties in Mississippi, reported an average audit delay of 420 days. In contrast, Mead (2011) reported an average audit delay of around 244 days for similar-sized counties in other states. In nine studies of governmental audit timeliness, examining data during the periods from 1982 to 2009, the mean audit report delay ranged from a low of 100 days to a high of 8.13 months (approximately 244 days). The mean audit report delay in Mississippi for fiscal year 2007 was 403 days for counties and 267 days for municipalities.[3] Additionally, Payne & Jenson (2002) examined audit delay among eight southeastern states and observed that Mississippi had the longest audit delay of any of the sampled states. Given that timely completion of audits has become an important issue in the

[1] Audit delay has been defined in prior empirical studies as the number of days from the governmental entity's fiscal year end to the date of the audit report, although Dwyer & Wilson (1989) performed additional analysis of the time from the entity's fiscal year end to the date the audit report was actually mailed to the appropriate agency. In this current study, audit delay is defined as the number of days from the governmental entity's fiscal year end to the date the audited financial statements were received by the office of the state auditor since that date is closer to the time in which the financial statements are available to the public.

[2] An examination of these studies is presented in Section 2.

[3] Audit report delay in these prior studies was defined as the number of days from the government's fiscal year end to the date on the audit report. In fiscal-year 2007, for Mississippi entities, the average number of days from the fiscal year end to the date on the audit report was 403 days for counties and 267 days for municipalities, while the average number of days from fiscal year end to the date the Office of the State Auditor received the report was 489 days for counties and 344 days for municipalities.

state, new consequences have been introduced to help ensure that future timeliness will be enhanced. The *Mississippi Municipal Audit Guide*, dated July 2010, dictates that municipalities failing to file timely audits may ultimately incur 150 percent of the cost of the audit, as contracted for by the state auditor.

This research utilizes logistic regression to estimate the effects of several variables of interest on the incidence of filing the audit report after the state-mandated one-year filing deadline versus filing on time.[4] The research also utilizes ordinary-least-squares (OLS) regression to estimate the effects of several variables of interest on the time it takes to file the audit report with the OSA.[5] The results of the study indicate that a higher number of audit findings, a variable that has been previously unexamined in municipal audit delay, was significantly associated with longer reporting delays as well as with late audits. Also, entities receiving an adverse or qualified opinion were significantly associated with late audits as well as longer audit delays. With the exception of Payne & Jenson (2002), prior studies of governmental audit delay (Dwyer & Wilson, 1989; Rubin, 1992; and McClelland & Giroux, 2000) did not find a significant association between the audit opinion and audit delay. The finding in this study is consistent with Payne & Jenson (2002) and provides further evidence to support their finding.

Results further indicate that while a greater amount of long-term debt carried by the entity was not associated with shorter audit delays, it was found to be somewhat associated with audits filed within the state-mandated one-year window. Results of the study also provided evidence that the travel distance between the auditor's office and the audit client's office, a variable that has not been examined in prior studies of governmental audit delay, plays a role in audit timeliness. A greater travel distance was

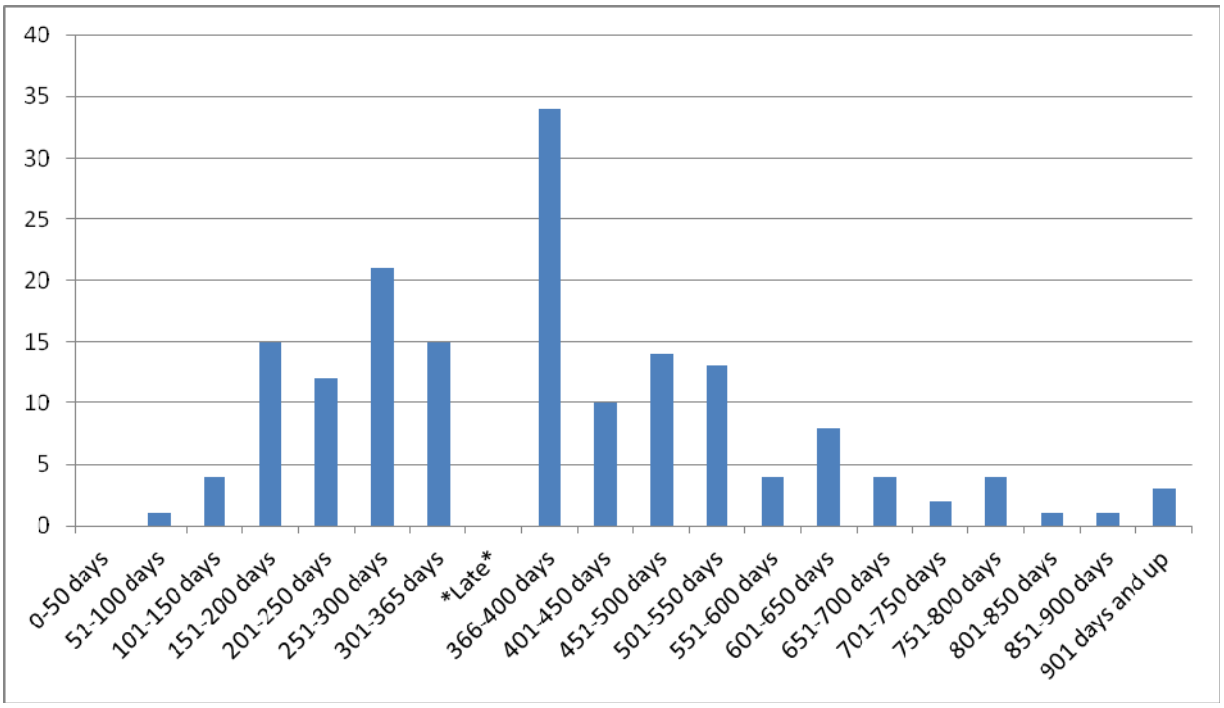
[4] According to the Mississippi Code, audit engagements shall be completed before the close of the next succeeding fiscal year.

[5] The majority of the prior studies of governmental audit delay measured audit delay as the number of days between the governmental entity's fiscal year end and the date on the audit report. In this study, audit delay is measured as the number of days between the entity's fiscal year end and the date the audit or compilation was received by the state auditor's office. This measure is perceived to be superior, as it more closely represents the date in which the reports are made available to the public.

not associated with longer audit delay but was associated with late audit filings, particularly when focusing on audit firms with multiple governmental audit clients. Also, consistent with findings from prior research (Johnson 1998), counties in this study were associated with significantly longer reporting delays when compared with municipalities as well as with late audits.

The results of this study have important implications for entities wishing to file audits on or before the mandated deadlines. Figure 1 presents a histogram illustrating the frequencies in which Mississippi governments completing audits for fiscal-year 2007 filed those audits during specific ranges of time with the Mississippi Office of the State Auditor. The most populated category in the histogram is the window of time from 366 days to 400 days. This indicates that many governments in Mississippi missed the filing deadline by approximately a month or less. With a better understanding of the factors that affect audit timeliness, these entities may better be able to decrease reporting time and avoid the ramifications of the newly established consequences set forth in the *Mississippi Municipal Audit Guide*.

Figure 1: Frequencies in Which Full-Scope Audit Reports Were Submitted to the Mississippi Office of the State Auditor for Fiscal-year 2007



The findings from this study are important not only to governmental entities but also to governmental auditors, state auditors, and other third parties, such as creditors and federal granting agencies, that use governmental financial statement information. Governmental entities desiring a more timely audit for any reason, such as the desire to obtain grant monies, can use the information to help determine if selection of an auditor with different characteristics than their current auditor might aid in timeliness. The study may also highlight areas of potential improvement within the governmental entity that might aid in audit timeliness. For governmental auditors concerned with audit timeliness, this study may provide information concerning client-specific attributes that affect the timeliness of completing the audit. Knowledge of these variables may help these auditors in determining whether to accept a certain audit client for a future engagement and whether that engagement may be completed in a timely manner. As parties become more aware of the types of variables that influence audit timing, steps can be taken to improve overall timeliness.

This study adds to the existing literature in a number of ways. A major contribution of this study is that it is the first study of governmental audit delay to examine differences between entities that file audits in a timely manner versus entities that fail to meet audit reporting deadlines. The study measures audit delay as the time between fiscal year end and the date the report is received by the state auditor's office. This measure more closely captures the time in which the reports are made available to the public. This study also includes several variables that prior studies have not considered. These include financial statement ratios measuring financial position and performance, audit findings, number of reported major funds, and travel distance between the auditor's office and the audit client's office.

The remainder of this paper is organized as follows. Section 2 discusses the previous literature. Section 3 discusses the development of the hypotheses. Section 4 discusses the data collection and method. Section 5 discusses the results. Section 6 discusses additional procedures, and Section 7 summarizes the findings and comments on the study's implications.

2. Literature Review

Several studies have addressed the issue of audit delay as it relates to governmental entities. Each study established audit delay, measured as the number of days from the governmental entity's fiscal year end to the date on the audit report, as the dependent variable and utilized ordinary-least-squares (OLS) regression to gather evidence about the effects of a number of independent variables.[6] Beginning with Dwyer & Wilson (1989), each study incorporated different combinations of independent variables, often removing some of the variables from the prior studies, retaining others, and adding new variables not considered in prior studies. Key characteristics and mean audit report delays from these prior studies are summarized in Table 1, while a summary of key findings concerning governmental audit report delay is presented in Table 2.

Also pertinent to this research are the findings of Carslaw et al. (2007) in a study of audit delay in school districts. In that study, the authors examined results from 36,367 audits during the five-year period from 1998 to 2002. The authors noted an average audit delay of anywhere from 245 days to 432 days in the five years analyzed and also noted that the percent of late filers ranged from 9.7 percent to 15.6 percent.

In that study, the authors noted that audit delay was positively associated with the level of expenditures for the year, the use of a sole-practitioner auditor rather than a larger firm, the presence of reportable conditions in the audit report, and the presence of material noncompliance in the audit report. The authors noted that audit delay was negatively associated with the use of a private-sector auditor rather than the use of a state auditor, audit reports having an unqualified audit opinion, the issuance of an unqualified opinion on the report of major programs, the government's receipt of the Government Finance Officers Association (GFOA) Certificate of Achievement for Excellence in Financial Reporting, the auditor's experience in similar audit engagements, and the classification of the audit client as a low-risk client.

[6] Merritt (2010) and Mead (2011) are exceptions, as they were descriptive studies.

Table 1 - Prior Studies of Local Government Audit Delay

Study	n	Fiscal Year	Sample Characteristics	Mean Audit Report Lag
Dwyer and Wilson, 1989	142	1982	U.S. cities with available time series bond data; Population > 25,000	3.56 months (approx. 107 days)
Rubin, 1992	79	1986	Ohio cities; Population > 10,000	8.13 months (approx. 244 days)
Johnson, 1996	192	1993	U.S. cities with CAFRs; Population > 50,000	115 days
Johnson, 1998	289	1993	U.S. cities with CAFRs and U.S. counties Population > 20,000	121 days
McLelland and Giroux, 2000	164	1996	U.S. cities; Population > 100,000	125 days
Johnson et al., 2002	302	1993	U.S. cities with CAFRs and U.S. counties Population > 20,000	122 days
Payne and Jenson, 2002	410	1992	Cities in eight states; Population > 5,000 or Expenditures > $100,000	100 days
Merritt, 2010	450 250	2007-2009	U.S. cities issuing bonds U.S. counties issuing bonds	168 days 172 days
Mead, 2011	294 276 130 131	2006-2008	Largest U.S. cities Largest U.S. counties Cities: Revenues between $10 million and $100 million Counties: Revenues between $10 million and $100 million	182 days 172 days 187 days 244 days

Table 2: Variables Prior Studies Have Shown to be Significantly Associated with Audit Delay	
Decreases Audit Delay	**Increases Audit Delay**
Receipt of GFOA Certificate of Achievement for Excellence in Financial Reporting [a, b, d, e, f, g]	Audit responsibility divided among two or more auditors [c, d, e, f]
Preparation of CAFR rather than general purpose financial statements [e, g]	Municipal year end coincides with auditor's busy season [c, d, f, g]
Government finance officer is a certified public accountant [f]	Variable rather than fixed fee arrangement with auditor [f]
Auditor is experienced in governmental audits [g]	Large amount of municipal expenditures for the fiscal year [g]
City-form of government rather than other form of government [d]	Presence of state-mandated accounting or auditing requirements [a, d]
Larger number of employees at audit firm that performs the audit [g]	State ban on solicitation or competitive bidding for audit engagements [g]
Presence of bonded indebtedness [g]	Use of public-sector (state) auditor rather than private-sector auditor [a, b, e]
Governmental entity has a web page [e]	Total revenue is made up of a larger portion of intergovernmental revenue [e]
Governmental entity voluntarily includes additional reports [e]	Auditor issued a qualified audit opinion [g]

[a] Dwyer & Wilson (1989)
[b] Rubin (1992)
[c] Johnson (1996)
[d] Johnson (1998)
[e] McLelland & Giroux (2000)
[f] Johnson et al. (2002)
[g] Payne & Jenson (2002)

3. Hypothesis Development

In this study, audit report timeliness is modeled as a function of three groups of factors, as shown in the following model:

Audit delay = f (Report message content and managerial competency, Accountability, Audit environment)

3.1. Report Message Content and Managerial Competency:

Dwyer & Wilson (1989) developed hypotheses based on the premise that timely reporting is a device employed by municipalities to signal highly competent financial management. Administrators and elected officials are expected to signal fiscal competence and stewardship to the citizens, investors, and other users (McLelland & Giroux 2000). One circumstance in which management has incentive to signal competent performance is when there exists a favorable message to be reported. One element of a favorable message is strong financial performance. Givoly & Palmon (1982) noted that delayed financial reporting is often a precursor to the receipt of bad news. Hirshleifer (1993) suggested that managers' incentives are to advance the arrival of good news and delay the arrival of bad news.

Dwyer & Wilson (1989) proxied strong financial performance with a measure of financial viability (the ratio of the general fund balance to general fund revenues). The ratio of general fund balance to general fund revenues is a widely used indicator of operating fund liquidity (Dwyer & Wilson 1989). In the prior studies of municipal audit timeliness, this is the only ratio that has thus far been examined, and the researchers did not find evidence that it was significantly associated with audit delay. The current study examines other key governmental financial statement ratios as suggested by Pridgen & Wilder (*Accounting Horizons*, forthcoming) to be relevant indicators of underlying debt ratings. Those ratios include the following:

(1) Total Net Assets / Total Revenues
(2) Change In Net Assets / Total Net Assets

Equation (1) is a measure of financial position (POSITION) that measures the extent to which cumulative revenues exceed cumulative costs. Equation (2) is a measure of financial performance (PERFORMANCE) that measures how much of the current year's surplus or deficit contributed to the cumulative net assets. These two key financial ratios provide a measure of favorable or unfavorable report content. It is expected that

favorable report content (good news) will be reported in a more timely manner. This effect is expected for two reasons. First, management has a signaling incentive to report good news as quickly as possible, as report delay, itself, may be interpreted as a signal of bad news. Also, favorable report content is an indication of competent management. A competent management staff is expected to have stronger internal controls and a more extensive and well-organized record-keeping function. These characteristics will aid the audit process, have a positive impact on the auditor's assessment of risk, and contribute to a more timely audit. In contrast, it is expected that the reporting of unfavorable content (bad news) will be delayed and will also be associated with less competent management. A less competent management staff can be reasonably expected to have weaker internal controls and a less extensive and more unorganized record-keeping function. These characteristics will hinder the audit process, have a negative impact on the auditor's assessment of risk, and contribute to a less timely overall audit. Based on these arguments, the following are hypothesized:

H1a: A favorable report message, as measured by key financial statement ratios, will be negatively associated with audit report delay.

H1b: A favorable report message, as measured by key financial statement ratios, will be associated with audit reports meeting state-mandated filing deadlines.

Another element of a favorable governmental audit report message is the lack of audit findings. Prior studies of governmental audit timeliness have not addressed audit findings. In a study of differences between private-sector auditors and public-sector (state government) auditors in Mississippi, Cagle & Pridgen (2011) noted that the number of audit findings issued in the audit report is positively associated with audit delay. Also, Hammersley et al. (2012) found that companies that fail to correct previously issued audit findings are more likely to miss filing deadlines for their annual reports. Audit findings are issued when the auditee fails to comply with laws or regulations and when the auditor notes problems with internal controls. These issues, especially internal control problems, will lead to increased assessment of risk, increased audit procedures, and increased audit time. In contrast, the lack of audit findings, like favorable financial statement ratios, is a measure of good news that is expected to be

reported in a more timely manner. Lack of audit findings may also be considered an indication of competent management. In contrast, a large number of audit findings could be perceived as bad news and could be an indication of less competent management, both of which could lead to less timely reporting. In this study, FINDINGS is defined as the total number of findings issued by the auditor on the audit report. The following are hypothesized:

H2a: The total number of reported audit findings will be positively associated with audit report delay.

H2b: A higher number of reported audit findings will be associated with audit reports failing to meet state-mandated filing deadlines.

Although many prior studies (Dwyer & Wilson 1989, Rubin 1992, McLelland & Giroux 2000) have found no significant relationship between the type of audit opinion and audit timeliness, Payne & Jenson (2002) found that unqualified audit opinions were significantly associated with decreased audit time. Also, Laitinen & Laitinen (1998) found a significant association between qualified audit reports and timeliness of filing by commercial entities. Bamber et al. (1993) suggests that qualified opinions are not likely to be issued until after the auditor has spent considerable time and effort pursuing additional audit procedures and other reporting alternatives in an effort to avoid qualification. In this study, the variable OPINION is coded 1 if the government entity received an other-than-unqualified audit opinion, and 0 otherwise. Taking into consideration the findings of Payne & Jenson (2002) and Laitinen & Laitinen (1998) and that suggested by Bamber et al. (1993), the following are hypothesized:

H3a: An other-than-unqualified audit opinion will be associated with increased audit report delay.

H3b: An other-than-unqualified audit opinion will be associated with audit reports failing to meet state-mandated filing deadlines.

3.2. Accountability:

Differing levels of accountability may also influence the timing of the audit report. For example, the presence of debt is expected to increase monitoring of municipal

performance (Evans & Patton 1987). Bondholders' primary concerns are the solvency of the municipality and its ability to repay the required debt service (Payne & Jenson 2002). Payne & Jenson (2002) noted that bondholders would view an unusual delay in financial reporting as a negative sign. As such, management of entities in which bonded and other long-term indebtedness exist will have an incentive to signal favorable performance through timely reporting. Payne & Jenson found that the presence of bonded indebtedness significantly reduced audit delay. In this study, the DEBT variable is measured as the total dollar amount of long-term debt at fiscal year end. The following are hypothesized:

H4a: The amount of bonded and other long-term indebtedness will be negatively associated with audit report delay.

H4b: A higher amount of bonded and other long-term indebtedness will be associated with audit reports meeting state-mandated filing deadlines.

Payne & Jenson (2002) also included a variable capturing whether the government reported in accordance with the requirements of the Single Audit Act. Governments expending $500,000 or greater of Federal assistance in a single year are subject to additional audit procedures under the Single Audit Act. These additional procedures will increase audit time, and additional audit reports will necessarily be generated. The Single Audit reporting package, which must be submitted to the Federal Audit Clearinghouse, includes not only the audited financial statements, but also a schedule of expenditures of federal awards, the auditor's opinion on the fair presentation of the schedule of federal expenditures of awards, an auditor's report on internal control findings and an opinion on compliance pertaining to major programs, an auditor's schedule of findings and questioned costs, a summary schedule of prior audit findings, a summary of planned and completed corrective actions regarding those findings, and a data collection form summarizing the results of each audit (Carslaw et al. 2007). Payne & Jenson (2002) found a marginally significant positive association between the existence of a Single Audit and audit delay.

Although Single Audits lead to additional audit requirements and time, entities subject to those requirements are also subject to additional filing deadlines by the Office of

Management and Budget (OMB). Specifically, the Single Audit reporting package must be submitted no later than nine months after the end of the auditee's fiscal year. In this study, the SINGLEAUDIT variable is coded 1 if the government is subject to the requirements of the Single Audit Act, and 0 otherwise. As a result of the additional level of accountability and the Single Audit filing deadline occurring earlier than Mississippi's state-mandated filing deadline, the following are hypothesized:

H5a: Governmental entities subject to the Single Audit Act will be associated with decreased audit report delay.

H5b: Governmental entities subject to the Single Audit Act will be associated with audit reports meeting state-mandated filing deadlines.

3.3. Audit Environment:

The various complexities of an audit can lead to potential delays in the timing of the audit report. Payne & Jenson (2002) used as a measure of audit complexity the number of separate funds reported on the government's financial statements. The variable was coded 1 for any entity that reported three or more separate funds and 0 if otherwise. Approximately 81 percent of the observations in that study reported three or more separate funds, and the findings indicated no significant correlation with audit timing. Since that study, the enactment of GASB Statement No. 34 changed the method of reporting individual funds. Current rules require reporting only "major funds" separately rather than reporting all funds separately. Major funds include the general fund and any other fund in which total assets, liabilities, revenues, or expenditures/expenses of the fund are at least ten percent of the total of all funds of its category (governmental or enterprise) and at least five percent of the total for all governmental and enterprise funds combined. All non-major funds are allowed to be combined and reported in a single column.

In the current study, a variable, FUNDS, is included to capture the number of reported major funds. As a greater number of major funds will require a greater amount of audit effort, the following are hypothesized:

H6a: The total number of reported major funds will be positively associated with audit delay.

H6b: A higher number of reported major funds will be associated with audit reports failing to meet state-mandated filing deadlines.

The physical distance between the auditor's office and the auditee's office is a variable not considered in prior studies. While the distance between the auditor and client is not a direct measure of audit complexity, the mileage the auditors must travel to complete field work can be reasonably expected to have a bearing on the amount of time required to complete the audit. The theoretical basis for including this variable relies on anecdotal evidence from a number of governmental auditors. An auditor situated farther from the audit client will require additional travel time that an auditor situated nearer to the client would not be required to incur. Additionally, it is easier to coordinate travel when the audit clients are in closer proximity. For example, for those engagements that are closer in proximity, audit team members might separately travel to and from the client's office as needed. In contrast, for those audit engagements that are situated further away, fieldwork will likely be scheduled on a day in which the entire audit team can travel together, which would require a day in which each team member has no scheduling conflict.

Also, prior research has suggested that geographic proximity lowers information asymmetry by facilitating information flows and monitoring (Choi et al. 2012). In this study, the DISTANCE variable is defined as the total number of miles[7] between the auditor's office and the auditee's office. The following are hypothesized:

H7a: The total number of miles between the auditor and the audit client will be positively associated with audit report delay.

H7b: A higher number of miles between the auditor and the audit client will be associated with audit reports failing to meet state-mandated filing deadlines.

An audit of governmental entities differs from an audit of for-profit companies. Generally Accepted Government Auditing Standards (GAGAS), issued by the

[7] Alternative models were computed after substituting travel distance measured in miles with travel time measured in minutes. The models were unaffected by this substitution.

Government Accountability Office (GAO), apply to financial and performance audits of governmental agencies. As such, a degree of specialization is required to perform governmental audits. In this study, the variable, EXPERTISE, is measured as the total number of governmental audit and compilation clients for each audit firm in the sample. Audit firms that specialize in audits and compilations of governmental entities are expected to be better equipped to perform a timely audit of a local governmental entity. However, since all governmental engagements in Mississippi are due on the same date, auditors with multiple governmental clients may experience time constraints as a result of increased workload. As such, no direction is predicted regarding the following hypotheses:

H8a: The total number of governmental attestation engagements performed by the audit firm will be associated with audit delay.

H8b: The total number of governmental attestation engagements performed by the audit firm will be associated with whether audit reports meet state-mandated filing deadlines.

The data obtained for this study includes audits of both counties and municipalities. Each of the report choices will require differing amounts of auditor effort. County audits are expected to differ from municipal audits in the organization of operations and the degree of audit complexity. Johnson (1998) included a categorical variable for counties and found that counties were significantly associated with longer audit delays when compared with municipalities. It is expected that counties in the sample from this study will have longer audit delays when compared with municipalities, therefore regression models will include a control variable (COUNTY) coded 1 if the entity is a county and 0 if otherwise. This variable is used to control for the potential effect of organizational differences on the time to file the audit.

4. Data Collection and Method

Ordinary-least-squares (OLS) regression and logistic regression are used to test hypotheses in this study. The dependent variable, DELAY, is used to test the set of hypotheses dealing with report delay (the A-set of hypotheses). That variable is defined

as the number of days from the entity's fiscal year end (September 30, 2007) to the date the audit report was received by the Mississippi Office of the State Auditor, and is log transformed for analysis, as visual inspection of the residual distribution using untransformed data revealed a violation of the normality assumption. The following OLS regression model is used for tests of full-scope audit engagements:

DELAY = f (POSITION, PERFORMANCE, FINDINGS, OPINION, DEBT, SINGLEAUDIT, FUNDS, DISTANCE, EXPERTISE, COUNTY)

The majority of the data used in the study was obtained from the audited financial reports of each county and municipality. The variable names, expected impact on audit delay, and variable descriptions have been previously discussed. Table 3 presents a summary of the variables along with sources of data.

The dependent variable, LATE, was used to test those hypotheses dealing with whether the governmental entity met or failed to meet the reporting deadlines (the B-set of hypotheses). That variable is coded 1 if the audit is filed beyond the state-mandated filing deadline and 0 if the audit is filed on or before the state-mandated filing deadline. The following logistic regression is used for full-scope audit engagements:

LATE = f (POSITION, PERFORMANCE, FINDINGS, OPINION, DEBT, SINGLEAUDIT, FUNDS, DISTANCE, EXPERTISE, COUNTY)

The data used to examine governmental audit delay were obtained from the audited financial statements of Mississippi governments for the fiscal year ending September 30, 2007,

Table 3: Description of Variables

Variable (Expected Sign)	Description	Source
Dependent Variables:		
DELAY	Number of days from fiscal year end to the date the audit report is received by the state auditor's office	Audited Financial Statements
LATE	=1 if the entity failed to meet the state-mandated reporting deadline, 0 otherwise	Audited Financial Statements
Report Message Content and Managerial Competency:		
POSITION (-)	Total Net Assets/Total Revenues	Audited Financial Statements
PERFORMANCE (-)	Change in Net Assets/Total Net Assets	Audited Financial Statements
FINDINGS (+)	Total number of audit findings issued by the auditor	Audited Financial Statements
OPINION (+)	=1 if entity received other than unqualified audit opinion, 0 otherwise	Audited Financial Statements
Accountability:		
DEBT (-)	Government's total long-term debt	Audited Financial Statements
SINGLEAUDIT (-)	=1 if the entity is subject to the requirements of a Single Audit, 0 otherwise	Audited Financial Statements
Audit Environment:		
FUNDS (+)	Number of major funds reported on the entity's financial statements	Audited Financial Statements
DISTANCE (+)	Number of miles between auditor's office and the audit client's office	mapquest.com
EXPERTISE (±)	Total number of governmental attestation engagements performed by the audit firm during the year	Compiled from Audited Financial Statements
Control Variable:		
COUNTY (±)	=1 if audited entity is a county, 0 otherwise	Audited Financial Statements

which were due on or before September 30, 2008. Fiscal-year 2007 was chosen to ensure that the governments taking the longest to file audited financial statements would be included in the sample. The final sample included entities that took over 1,000 days to submit completed audits.

A listing of Mississippi counties and municipalities was obtained that contained an initial sample of 82 observations and 298 observations, respectively. Financial statements were obtained for each municipality and county either from the website of the Mississippi Office of the State Auditor or directly from that office when financial statements were not present on the website. For Mississippi counties, the final sample included 55 observations, as one was removed from the sample since a final audit had not yet been completed for fiscal year 2007, and 26 were removed from the sample since these audits were completed by the Mississippi Office of the State Auditor rather than by a private accounting firm.

For the 298 Mississippi municipalities, 22 of the entities were removed from the final sample because audited financial statements were not available as of the date of data collection. Another 164 municipalities were not included in the final sample because those entities were not required to complete a full-scope audit in accordance with GAAP. One municipality was removed from the sample because of outlying data. This resulted in a final sample that included 111 municipalities submitting audited financial statements.

5. Results

Table 4 presents descriptive statistics for audits filed on or before the state-mandated deadline and audits filed after the state-mandated deadline. Along with statistics for all 166 governmental entities in the sample (55 counties and 111 municipalities), the table presents statistics for 98 governmental entities that filed late audits and 68 governmental entities that filed timely audits. Preliminary univariate analysis of each independent variable was performed. Differences for continuous variables were

analyzed using t-tests while differences for dichotomous variables were analyzed using chi-squared tests. One-tailed test results are presented for variables in which directional predictions were made, while two-tailed test results are presented for variables in which no directional prediction was made. Results of those tests are also presented in Table 4.

The mean audit delay (DELAY) for all entities in the sample was 399.66 days. For audits filed in a timely manner, the mean delay was 248.57 days. For audits filed past the filing deadline, the mean audit delay was 504.50 days. Results of the t-tests and chi-squared tests reveal several independent variables that differ significantly between timely filers and late filers, mainly in the area of report message content and managerial competency. Specifically, the timely filers and late filers differ on FINDINGS, OPINION, DISTANCE, and the control variable, COUNTY.

The bivariate correlation coefficients among the independent variables included in the model appear in Table 5. The COUNTY variable is positively correlated with FINDINGS (0.337), SINGLEAUDIT (0.175), and DISTANCE (0.225), and it is negatively correlated with FUNDS (-0.171). The OPINION variable (coded 1 when the entity received an other-than-unqualified opinion) is negatively correlated with PERFORMANCE (-0.178), and it is positively correlated with FINDINGS (0.295). DEBT is positively correlated with FUNDS (0.315) and SINGLEAUDIT (0.228), while FUNDS is also positively correlated with SINGLEAUDIT (0.230). The DISTANCE variable is positively correlated with OPINION (0.157) and negatively correlated with FUNDS (-0.158).

Table 4: Descriptive Statistics for Governments Completing Full-Scope Audits and a Comparison of Late and Timely Audits

Variables[a]	Total (n=166)	Late Audits (n=98)	Timely Audits (N=68)
***Dependent Variable*: DELAY**			
Mean (Standard Deviation)	399.66 (172.49)	504.50 (142.48)	248.57 (68.06)
Range	87 to 1046	367 to 1046	87 to 365
Report Message Content and Managerial Competency:			
POSITION			
Mean (Standard Deviation)	2.12 (1.41)	2.07 (1.60)	2.18 (1.10)
Range	0.19 to 7.09	0.19 to 7.09	0.21 to 6.21
PERFORMANCE			
Mean (Standard Deviation)	5.11 (11.44)	4.81 (13.26)	5.53 (8.21)
Range	-70 to 38	-70 to 38	-18 to 34
FINDINGS			
Mean (Standard Deviation)	4.11 (5.18)	5.33***(5.74)	2.37*** (3.62)
Range	0 to 34	0 to 34	0 to 16
OPINION (frequency)	21.08%	28.57%***	10.29%***
Accountability:			
DEBT (millions)			
Mean (Standard Deviation)	$17.66 ($35.82)	$14.22 ($22.41)	$22.61 ($48.90)
Range	$0 to $352.04	$20.8 to $129.2	$0 to $352.0
SINGLEAUDIT (frequency)	51.20%	55.10%	45.59%
Audit Environment:			
FUNDS			
Mean (Standard Deviation)	3.63 (1.49)	3.59 (1.45)	3.69 (1.55)
Range	1 to 8	1 to 8	2 to 8
DISTANCE			
Mean (Standard Deviation)	37.77 (45.75)	45.08** (48.74)	27.22** (39.04)
Range	1 to 238	1 to 170	1 to 238
EXPERTISE			
Mean (Standard Deviation)	6.78 (6.61)	7.16 (7.06)	6.22 (5.90)
Range	1 to 24	1 to 24	1 to 24
Control Variable:			
COUNTY (frequency)	33.13%	46.94%***	13.24%***

[a] See Table 3 for a description of the variables
***p<0.001 one-tailed test
**p<0.01 one-tailed test
Note: For comparisons of governments filing late audits and governments filing timely audits, t-tests were used to determine significant differences for continuous variables, and chi-squared tests were used to

determine significant differences for dichotomous variables

Table 5: Bivariate Correlation Coefficients among Variables
n=166

Variables[a]	DELAY	LATE	POSI-TION	PERFORM-ANCE	FIND-INGS	OPIN-ION	DEBT	SINGLE-AUDIT	FUNDS	DIST-ANCE	EXPERT-ISE	COUN-TY
DELAY	1.000											
LATE	.732**	1.000										
POSITION	-0.061	-0.035	1.000									
PERFORMANCE	0.037	-0.031	-0.170	1.000								
FINDINGS	.421**	.282**	-0.069	-0.072	1.000							
OPINION	.299**	.220**	-0.048	-0.178*	0.295**	1.000						
DEBT	-0.080	-0.116	-0.102	0.004	0.063	-0.095	1.000					
SINGLEAUDIT	0.034	0.094	0.051	0.044	0.012	-0.086	0.228**	1.000				
FUNDS	-0.038	-0.033	-0.049	0.058	0.040	-0.081	0.315**	0.230**	1.000			
DISTANCE	0.108	.193*	-0.037	-0.048	0.014	0.157*	-0.107	0.039	-0.158*	1.000		
EXPERTISE	-0.009	0.070	-0.068	-0.021	0.069	0.022	-0.027	-0.099	-0.071	0.069	1.000	
COUNTY	.366**	.352**	0.074	-0.117	0.337**	-0.019	-0.012	0.175*	-0.171*	0.225**	0.070	1.000

[a] *See Table 3 for a description of the variables*

Pearson Correlations

For the Y/N variables, the Pearson's r is technically a point-biserial correlation coefficient since the variable is a dichotomy

*** Correlation is significant at 0.01 level (two-tailed)*

** Correlation is significant at 0.05 level (two-tailed)*

To assess the presence of multicollinearity, variance inflation factors (VIF) and the condition indexes were examined. No values of VIF were greater than 1.50. The largest condition index (the condition number) was 13.0. Each of these diagnostic measures provides evidence that no strong multicollinearity issues are present in the model.

In the first phase of testing, an OLS model[8] was estimated using as the dependent variable the natural log of the number of days from fiscal year end until the date the audit report was received by the Office of the State Auditor (DELAY). Leverage values were examined and indicated one influential data point, which was removed from the model. An examination of plots of the residuals indicated no problems with heteroskedasticity. Table 6 presents the results of the regression. The model's adjusted R^2 (26.48%) and model F-statistic (6.943, $p<0.001$) compare favorably with prior research of governmental audit delay—Dwyer & Wilson (1989): 12%, Johnson (1996): 17%; Johnson (1998): 21.4%; McLelland & Giroux (2000): 31%; Johnson et al. (2002): 21.6%; Payne & Jenson (2002): 13.1%.

In the second phase of testing, a logistic regression analysis[9] was used to determine how the variables examined in the first phase of the study affected the outcome of whether the audited financial statements were filed within or beyond the state-mandated filing deadline. The dependent variable in the regression (LATE) was coded 0 if the audit was filed in a timely manner and 1 if the audit was filed beyond the state-mandated one-year filing deadline.

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[8] The sample includes clustered data resulting from some governmental entities in the sample being audited by the same audit firm. Ignoring this results in the regression coefficients remaining unbiased (given that the assumptions of OLS are met), however, standard errors are generally underestimated, which inflates the likelihood of Type I error. To counter this, models were estimated using generalized estimating equations (GEE) methods that allow for within-cluster correlation of errors; thus producing clustered robust standard errors. Using this approach, the point estimates are the same as in OLS regression, but the standard errors are different (Ghisletta & Spini, 2004). The OLS and GEE models resulted in the same findings regarding significance.

[9] A GEE model with a robust estimator was computed and resulted in the same findings regarding significance.

Table 6: Results of Ordinary Least Squares Regression of Delay for Audit Engagements

Variables[a]	Predicted Sign	Coefficient Estimate	Standard Error	t-statistic	p-value
Intercept		5.613	0.115	42.424	<0.001
Report Message Content and Managerial Competency:					
POSITION	-	-0.013	0.022	-0.579	0.282
PERFORMANCE	-	0.379	0.273	1.390	0.917
FINDINGS	**+**	**0.021**	**0.007**	**3.088**	**0.001**
OPINION	**+**	**0.245**	**0.081**	**3.033**	**0.002**
Accountability:					
DEBT (millions)	-	-0.001	0.001	-1.226	0.111
SINGLEAUDIT	-	0.029	0.065	0.455	0.676
Audit Environment:					
FUNDS	+	0.013	0.022	0.586	0.280
DISTANCE (hundreds)	+	0.005	0.069	0.068	0.473
EXPERTISE	±	0.000	0.005	0.062	0.951
Control Variables:					
COUNTY	**+**	**0.326**	**0.074**	**4.406**	**<0.001**

[a] *See Table 3 for a description of the variables*

N	166
Model F-statistic	6.943
Prob (F-statistic)	<0.001
R^2	0.309
Adjusted R^2	0.265

Note: One-tailed test for directional predictions, two-tailed test where no prediction was made.

Table 7: Logistic Regression Results Showing Factors Contributing to Late Filings of Audits

Variables[a]	Predicted Sign	β	Standard Error	Wald's χ^2	p-value	Exp(β)
Intercept		1.938	0.977	3.938	0.047	6.947
Report Message Content and Managerial Competency:						
POSITION	-	-0.118	0.134	0.774	0.190	0.889
PERFORMANCE	-	1.240	1.904	0.424	0.743	3.457
FINDINGS	**+**	**0.104**	**0.055**	**3.554**	**0.030**	**1.109**
OPINION	**+**	**1.136**	**0.528**	**4.625**	**0.016**	**0.321**
Accountability:						
DEBT (millions)	**-**	**-0.011**	**0.007**	**2.333**	**0.064**	**0.989**
SINGLEAUDIT	-	0.320	0.395	0.656	0.791	0.726
Audit Environment:						
FUNDS	+	0.115	0.136	0.721	0.198	1.122
DISTANCE (hundreds)	**+**	**0.594**	**0.453**	**1.721**	**0.095**	**1.811**
EXPERTISE	±	0.009	0.030	0.097	0.755	1.009
Control Variables:						
COUNTY	**+**	**1.610**	**0.482**	**11.149**	**0.001**	**0.200**

[a] *See Table 3 for a description of the variables*

n	166
χ^2	43.300, $p<0.001$
Cox & Snell R^2	0.230
Nagelkerke R^2	0.310
McFadden's R^2	0.193

Note: One-tailed test for directional predictions, two-tailed test where no prediction was made.

Table 7 presents the results of the logistic regression. The coefficients indicate that the overall model was significant (χ^2 = 43.30, $p < 0.001$), and the Hosmer and Lemeshow test indicates goodness of fit (χ^2 = 6.72, $p = 0.567$). The model was able to correctly classify 69 percent of government entities that filed audits in a timely manner and 74 percent of those that filed late, for an overall success rate of 72 percent. The model had a Cox & Snell R^2 of 0.230, a Nagelkerke R^2 of 0.310, and a McFadden's R^2 of 0.193. The following sections discuss the results of the OLS regression and the logistic regression based on hypothesis grouping.

Report Message Content and Managerial Competency

Hypothesis 1a predicts that a favorable report message, as measured by key financial statement ratios, will be negatively associated with audit report delay. The coefficient for POSITION was in the predicted direction but was not significant (Table 6), suggesting that financial statement position has no major effect on external audit report timing. The coefficient for PERFORMANCE was in the opposite direction predicted. There is no evidence that the good or bad news associated with financial-statement content has any significant bearing on the timing of the audit report. Hypothesis 1a is not supported by the results of the regression.

Hypothesis 1b predicts that a favorable report message, as measured by the key financial statement ratios POSITION and PERFORMANCE, would be associated with audit reports meeting state-mandated filing deadlines. Similar to the results from Hypothesis 1a, the coefficient for POSITION was in the predicted direction but was not significant, while the coefficient for PERFORMANCE was in the opposite direction predicted (Table 7). There is no evidence that good or bad news associated with financial-statement content has any bearing on the incidence of late filing of audit reports. Hypothesis 1b is not supported.

Hypothesis 2a predicts that the total number of findings reported by the auditor will be associated with longer audit delay. In this study, the variable, FINDINGS, was positive

and significant with respect to audit report delay (p=0.001, one-tailed) (Table 6), thus providing support for Hypothesis 2a.

Hypothesis 2b predicts that a higher number of reported audit findings will be associated with audit reports failing to meet state-mandated filing deadlines. The results of the logistic regression analysis provides evidence that the number of audit findings is significantly associated with audit reports that are not filed in a timely manner (p=0.03, one-tailed) (Table 7). For each one-unit increase in the number of audit findings, the odds of a late audit increase by a factor of 1.109. Hypothesis 2b is supported.

Hypothesis 3a predicts that the opinion rendered by the auditor will have an effect on audit delay, specifically that an other-than-unqualified audit opinion will be associated with longer audit delays. The results of the OLS regression indicate that OPINION is significantly associated with increased audit delay (p=0.002, one-tailed) (Table 6). H3a is supported. This finding is consistent with the finding of Payne & Jenson (2002).

Hypothesis 3b predicts that an other-than-unqualified audit opinion will be associated with audits that are filed with the state beyond the mandated filing deadline. Results of the logistic regression provide evidence that OPINION is significantly associated with audits that are filed late (p=0.016, one-tailed) (Table 7). Hypothesis 3b is supported.

Accountability

Hypothesis 4a predicts that the amount of bonded or other long-term indebtedness will lead to decreased audit delay. DEBT was not found to be significantly associated with decreased audit report delay (Table 6). Hypothesis 4a is not supported.

Hypothesis 4b predicts that a higher amount of long-term debt will be associated with governments that file timely financial reports with the state. Results of the logistic regression provide some evidence that DEBT is associated with timely financial statements (p=0.064, one-tailed) (Table 7). This has important implications in that it appears that either the auditor or the governmental entity are making a conscious effort

to complete certain audits (i.e. ones in which the governmental entities have added accountability to creditors) in a timely manner.

Hypothesis 5a predicts that governments required to report according to the requirements of the Single Audit Act will be associated with decreased audit delay due to the earlier filing deadline for such audits. SINGLEAUDIT was not found to be significantly associated with decreased audit report delay (Table 6). In fact, the coefficient for SINGLEAUDIT was not in the predicted direction. Hypothesis 5a is not supported, which provides evidence that neither the additional accountability of those entities required to file under the Single Audit act nor the narrower filing window lead to decreased audit report delay.

Hypothesis 5b predicts that governments required to report according to the requirements of the Single Audit Act will be associated with audit reports that are filed in a timely manner. The results of the logistic regression indicate that SINGLEAUDIT is not significantly associated with timely filing of financial reports (Table 7). Hypothesis 5b is not supported.

It was noted that only 27.5 percent of Mississippi entities required to file Single Audit reports did so before the nine-month deadline. Of those entities, the majority (77.3 percent) managed to file their full audit report with the state auditor before the one-year deadline. Of those filing timely Single Audit reports but late full-scope audit reports to the state, only one city filed its full-scope audit report more than three weeks after the one-year deadline. Of the 72.5 percent of Mississippi entities that filed late Single Audit reports, the majority (81.0 percent) also filed late audits with the state auditor.

Hypothesis 6a predicts that the total number of reported major funds will increase audit report delay. The results of the OLS regression indicate that the total number of reported major funds is not significantly associated with longer audit report delay (Table 6). Hypothesis 6a is not supported.

Hypothesis 6b predicts that a higher number of reported major funds will be associated with audits filed beyond the state-mandated filing deadline. Results of the logistic regression indicate that FUNDS is not significantly associated with untimely financial reporting (Table 7). Hypothesis 6b is not supported.

Hypothesis 7a predicts that a greater total travel distance between the auditor's office and the audit client's office will be associated with longer audit report delays. Prior research of governmental audit delay has not examined this variable with regard to audit timeliness. The results of the OLS regression provide no evidence that as the mileage traveled increases, so does the amount of delay in filing the audited financial statements (Table 6). Hypothesis 7a is not supported.

Hypothesis 7b predicts that a greater travel distance between the auditor's office and the audit client's office will be associated with audit reports failing to meet state-mandated filing deadlines. The results of the logistic regression provide minimal evidence that greater travel distance is associated with untimely financial statement reports ($p<0.095$, one-tailed) (Table 7)[10].

Hypothesis 8a predicts that the total number of governmental attestation engagements performed by an audit firm will be associated with audit delay. Regression results indicate that auditor expertise, as measured by the total number of clients, is not significantly associated with audit report delay (Table 6). Hypothesis 8a is not supported.

Hypothesis 8b predicts that the total number of governmental audit and attestation engagements performed by the audit firm will be associated with whether audit reports

[10] The variable for travel distance was measured by the number of miles between the auditors' office and the audit client's office. The models were essentially unaffected when travel time, measured in minutes (obtained from mapquest.com) was substituted for travel distance, measured in miles. For audit clients that were in compliance with the audit deadline, the average travel distance was 27.2 miles, and the average travel time was 30.2 minutes. For audit clients that were not in compliance with the audit deadline, the average travel distance was 45.1 miles, and the average travel time was 49.8 minutes.

meet state-mandated audit-filing deadlines. The results of the logistic regression indicate no significant relationship between the number of audit clients and timely financial reporting (Table 7). Hypothesis 8b is not supported.

Both the OLS and logistic regression results indicated that the control variable, COUNTY, was significantly associated with longer audit delays (Table 6) and with late audits (Table 7). This result is consistent with the findings of Johnson (1998).

6. Additional Analysis

Regarding the DISTANCE variable, it is reasonable to assume that the amount of auditor procrastination due to travel considerations might be more pronounced for auditors having multiple governmental audit clients. As such, the OLS and logistic regressions were recomputed after omitting all observations from the sample that had auditors with only one governmental attestation client in fiscal-year 2007. This reduces the sample to 139 observations. For this reduced sample, the mean total travel distance between the auditor's office and the audit client's office was 40.42 miles. For governmental entities that filed timely audits, the mean travel distance was 27.38. For governmental entities that filed late audits, the mean travel distance was 49.23.

Table 8: Logistic Regression Results Providing Further Evidence on How Travel Distance Contributes to Late Filings of Audits

Variables[a]	Predicted Sign	β	Standard Error	Wald's χ^2	p-value	Exp(β)
Intercept		1.182	1.037	1.300	0.254	3.262
Report Message Content and Managerial Competency:						
POSITION	-	0.004	0.147	0.001	0.510	1.004
PERFORMANCE	-	1.767	2.085	0.718	0.802	5.852
FINDINGS	**+**	**0.111**	**0.059**	**3.548**	**0.030**	**1.118**
OPINION	**+**	**1.265**	**0.553**	**5.240**	**0.011**	**0.282**
Accountability:						
DEBT (millions)	-	-0.008	0.008	0.904	0.171	0.992
SINGLEAUDIT	-	0.383	0.430	0.793	0.814	0.682
Audit Environment:						
FUNDS	+	0.163	0.156	1.097	0.148	1.177
DISTANCE (hundreds)	**+**	**0.763**	**0.465**	**2.691**	**0.051**	**2.146**
EXPERTISE	±	0.028	0.032	0.761	0.383	1.029
Control Variables:						
COUNTY	**+**	**1.511**	**0.513**	**8.684**	**0.002**	**0.221**

[a] *See Table 3 for a description of the variables*

N	139
χ^2	37.472, $p<0.001$
Cox & Snell R^2	0.236
Nagelkerke R^2	0.319
McFadden's R^2	0.200

Note: One-tailed test for directional predictions, two-tailed test where no prediction was made.

Again, the results of the OLS regression (not tabulated) provide no evidence of a positive relationship between travel distance and audit report delay. The results of the logistic regression model (Table 8), however, indicate a stronger relationship between travel distance and untimely filing of financial audits (p=0.051, one-tailed). These results provide some support for Hypothesis 7b.

7. Summary and Conclusions

Full-scope audits of governmental entities are complex, and many factors affect the timing and timeliness of those audits. The overall results from this study indicate that report message content and managerial competency, accountability, and the audit environment all play a role in explaining audit timeliness. Specifically, a greater number of audit findings and the issuance of a qualified or adverse audit opinion result in longer delays and later audits. Reasons for this result could be due to a large number of audit findings and/or an other-than-unqualified audit opinion being perceived as bad news, thus providing incentive for the governmental entity to delay reporting. The result could also be an indication of less competent management, which could delay the audit process for many reasons, such as the auditor not being able to obtain needed records because they are either incomplete or poorly executed and maintained. Findings and/or a qualified or adverse opinion could also be issued as a result of the discovery of inadequate internal controls, for which the auditor will, as a result, be required to perform additional procedures.

Also, while the results of the study provided no evidence that magnitude of debt is associated with decreased audit delay, the results did show a marginally significant association of the magnitude of debt with audits that were filed on time. This result is interesting. As the magnitude of debt increases, this does not lead to shorter audit delays. However, governmental entities carrying larger amounts of long-term debt typically manage to submit their audited financial statements to the state auditor before

the deadline. This result is possibly due to the creditors' expectations of timely information regarding the government's ability to make payments on debt when they become due and to assess the government's long-term debt-paying ability. This has important implications in that it appears that either the auditor or the governmental entity is making a conscious effort to complete certain audits (i.e. ones in which the governmental entities have added accountability to creditors) in a timely manner.

Greater travel distance between the auditor's office and the audit client's office was also found to be marginally significant with regard to late audits. This relationship becomes much more pronounced when audit firms with only one governmental attestation client are removed from the sample. This result could be due to the facilitation of information flows due to closer proximity or it may provide some indication that audit firms might have an element of procrastination regarding clients that require more travel time, especially when they have other audit clients that are closer in proximity. This finding could also be indicative of auditors wishing to ensure that the audits of the county or municipality in which they reside be completed in a more timely manner, whether it be due to pressure from the local government officials or the auditor's desire to maintain a personal image in his or her own hometown.

There are a number of actions governments can take to improve the timeliness of their audits. Governments wishing to obtain a more timely audit should take steps to ensure that past audit findings are corrected as soon as possible. Corrections of internal control findings would result in less risk assessment by the auditor in future audits. Corrections of findings regarding insufficient records would result in a more efficient audit in the future. Fewer reported audit findings coupled with an unqualified audit opinion would be perceived as good news by the governmental entity, and that entity would have incentive to accelerate the reporting of that news.

The results of this study are subject to some important limitations. The sample for this study was not randomly obtained but instead uses the entire population data from counties and municipalities from one state. As such, caution should be used in generalizing these results to other geographic regions. Also, the smaller populations of

the observations in this study are not comparable to the larger populations of the samples examined in prior studies. Since this study examines several variables not addressed in prior studies, the findings regarding those variables may not be generalizable to entities with larger populations. Also, at the time of data collection, there still existed some governmental entities in Mississippi that had yet to file an audited or compiled financial report to the Office of the State Auditor, and these extreme cases might have had an influential effect on the results.

Since this study captures data in Mississippi prior to the state's enactment of rules that establish ramifications for late audits filed after 2010, the findings from this study will provide a reference point for a future study concerning the success of these steps after they have been instituted in Mississippi. This study is an important first step in determining whether "the goal of increasing the availability of timely information has been hampered by the absence of a filing deadline" (NFMA 1998).

REFERENCES

Bamber, E., Bamber, L., Schoderbek, M., 1993. Audit Structure and Other Determinants of Audit Report Lag. *Auditing: A Journal of Practice and Theory* 12 (1): 1-23.

Cagle, C., Pridgen, A., 2012. Audit Quality in County Governments: Evidence from Audit Findings. Working Paper.

Carslaw, C., Mason, R., Mills, J., 2007. Audit Timeliness of School District Audits. *Journal of Public Budgeting, Accounting & Financial Management* 19 (3): 290-316.

Choi, J., Kim, J., Qiu, A., Zang, Y., 2012. Geographic Proximity between Auditor and Client: How Does It Impact Audit Quality? *Auditing: A Journal of Practice & Theory* 21(2): 43-72.

Crain, G., Bean, D., 1998. What Users Think of the New Reporting Model for Governments: The Results of the GASB's Focus Group Sessions. *Government Finance Review* 14(1), 9-12.

Dwyer, P., Wilson, E., 1989. An Empirical Investigation of Factors Affecting the Timeliness of Reporting by Municipalities. *Journal of Accounting and Public Policy* 8: 29-55.

Evans, J., Patton, J., 1987. Signaling and Monitoring in Public Sector Accounting. *Journal of Accounting Research* 25 (Supplement), 130-158.

Givoly, D., Palmon, D., 1982. Timeliness of Annual Earnings Announcements: Some Empirical Evidence. *The Accounting Review* 57(3): 486-508.

Governmental Accounting Standards Board (GASB), 1987. GASB Concepts Statement No. 1. Objectives of Financial Reporting. Stamford, CT: Governmental Accounting Standards Board.

Hammersley, J., Myers, L., Zhou, J., 2012. The Failure to Remediate Previously Disclosed
Material Weaknesses in Internal Controls. *Auditing: A Journal of Practice & Theory* 31(2): 73-111.

Hirshleifer, D., 1993. Managerial Reputation and Corporate Investment Decisions. *Financial Management* 22(2): 145-160.

Johnson, L., 1996. Factors Influencing Municipal Audit Delay. *Accounting Enquiries* 6(1): 121-148.

Johnson, L., 1998. Further Evidence on the Determinants of Local Government Audit Delay. *Journal of Public Budgeting, Accounting & Financial Management* 10(3): 375-397.

Johnson, L., Davies, S., Freeman, R., 2002. The Effect of Seasonal Variations in Auditor Workload on Local Government Audit Fees and Audit Delay. *Journal of Accounting and Public Policy* 21: 395-422.

Laitinen, E., Laitinen, T., 1998. Qualified Audit Reports in Finland: Evidence from Large Companies. *The European Accounting Review* 7(4): 639-653.

McLelland, A., Giroux, G., 2000. An Empirical Analysis of Auditor Report Timing by Large Municipalities. *Journal of Accounting and Public Policy* 19: 263-281.

Mead, D. 2011. GASB Research Brief: The Timeliness of Financial Reporting by State and Local Governments Compared with the Needs of Users. Norwalk, CT: Governmental Accounting Standards Board.

Merritt Research Services, 2010. Just How Slowly do Municipal Bond Annual Audit Reports Waddle in after the Close of the Fiscal Year? <http://www.bondbuyer.com/pdfs/1103DISC.pdf> (5 April 2011).

Mississippi. Office of the State Auditor. *Municipal Audit and Accounting Guide*. Jackson: State of Mississippi, 2010.

Mississippi. 2004. *Revised Code, Annotated*. Section 21.

National Federation of Municipal Analysts (NFMA), 1998. Position Paper on 1994 Amendments to Rule 15C2-12. <http://data.memberclicks.com/site/nfma/15c2-12position.pdf> (29 March 2011).

Payne, J., Jensen, K., 2002. An Examination of Municipal Audit Delay. *Journal of Accounting and Public Policy* 21: 1-29.

Pridgen, A., Wilder, W., 2011. Relevance of GASB No. 34 to Financial Reporting by Municipal Governments. *Accounting Horizons*, forthcoming.

Rubin, M., 1992. Municipal Selection of a State or External Auditor for Financial Statement Audits. *Journal of Accounting and Public Policy* 11: 155-178.