

Factors Influencing the Decision of Companies to use Audit Committees in Financial
Management

Dissertation Manuscript

Submitted to Northcentral University

School of Business

in Partial Fulfillment of the

Requirements for the Degree of

DOCTOR OF BUSINESS ADMINISTRATION

By

Emmanuel Hongtar Reounodji

La Jolla, California

July, 2020

ProQuest Number:28151056

All rights reserved

INFORMATION TO ALL USERS

The quality of this reproduction is dependent on the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if material had to be removed, a note will indicate the deletion.



ProQuest 28151056

Published by ProQuest LLC (2020). Copyright of the Dissertation is held by the Author.

All Rights Reserved.

This work is protected against unauthorized copying under Title 17, United States Code
Microform Edition © ProQuest LLC.

ProQuest LLC
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106 - 1346

Approval Page

Factors Influencing the Decision of Companies to use Audit Committees in Financial Management

By

Emmanuel Hongtar Reounodji

Approved by the Doctoral Committee:

DocuSigned by:
Thanasak Ruankaew
8037A53F3E4E4C3...
PhD
10/28/2020 | 12:25:14 MST
Dissertation Chair: Thanasak Ruankaew Degree Held Date

DocuSigned by:
Marie Bakari
8F10EBB525784DB...
DBA, MBA
11/02/2020 | 06:26:23 MST
Committee Member: Marie Bakari Degree Held Date

DocuSigned by:
Leila Sopko
1F89B29081C9435...
Ph.D., MBA
10/28/2020 | 13:18:08 MST
Committee Member: Leila Sopko Degree Held Date

Abstract

It is acknowledged that there is potential for higher costs in using an audit committee. The use of audit committees can increase administrative and direct costs; and the costs can include the compensation given to audit committee members. The use of audit committee predicts increased restatements of public financial reports and associated costs. The need for restatements may be due in part to more stringent auditing procedures. The purpose of this quantitative meta-analysis was to explore the perspectives and experiences of companies regarding their decision-making processes as to how and why audit committees were (not) chosen and utilized. Sampling was done through a meta-analysis from 34 studies. Statistical tests were based on the Chi-square test of independence. The variables of interest were responses to Likert scale questions, in which the mean and standard deviation were provided in relation to opinions regarding the use of audit committee for the prevention of fraud, obtaining better financial statements, increased shareholder trust, improved transparency, and better oversight of accounting policies and activities. Likert scale statements of interest were regarding the high cost, the belief of the effectiveness of the current policy, the current use of internal controls, and the lack of requirement to use audit committees, and regarding preference of using audit committees to meet legal standards. It was found that the factors influencing the use of audit committees were not statistically significant when companies were making decisions about the use or lack of use of audit committees in their internal operations. Implications of the study are that audit committee usage is based on internal operation efficacy. It is recommended that management consider a regular evaluation of currently used internal operations for auditing, if any, prior to the implementation of an audit committee. It is also recommended that future studies be conducted qualitatively regarding how audit committees are used.

Acknowledgements

First and foremost, praises and thanks to the God, the Almighty, for His showers of blessings throughout my research work for successful completion. I would like to express my gratitude to my chair research supervisors, Dr. Ole Ruankaew Thanasak, Dr. Stephanie S. J. Menefee and Dr. Marie Bakari for the invaluable guidance provided throughout the research process. Dr. Ole Ruankaew's dynamism, vision, sincerity, and motivation have deeply inspired me. He has taught me the methodology to carry out the research and to present the research works as clearly as possible. My completion of this project could not have been accomplished without the support of Mr. Tom O'Donnell, Ms. Shelley Gordon, and Ms. Addie G. Wilson. Thank you for allowing me time away from you to research and write. I cannot express enough thanks to my committee for their continued support and encouragement. I offer my sincere appreciation for the learning opportunities provided by my committee. I wish to place on record my best regards and deepest sense of gratitude to Dr. Nathanael Modjirom Ndoutabe, Dr. Lodoungoto Bekingalar, and Dr. Moza Laounodji Mbairessem for their careful and precious guidance, which were extremely valuable for my study both theoretically and practically.

Finally, to my caring, loving, and supportive wife, Irene Telbei Nangue: my deepest gratitude. Your encouragement when the times got rough are much appreciated and noted. It was a great comfort and relief to know that you were willing to provide management of our household activities while I completed my work and also my mother, Clemence Bekam, for giving birth to me at the first place and supporting me spiritually throughout my life.

Emmanuel Hongtar Reounodji

Table of Contents

Chapter 1: Introduction	1
Statement of the Problem	4
Purpose of the Study	5
Conceptual Framework	5
Nature of the Study	6
Research Question	7
Research Hypothesis	7
Significance of the Study	8
Definitions of Key Terms	9
Summary	10
Chapter 2: Literature Review	12
Conceptual Framework	13
Overview of Roles and Functions of Audit Committees	17
Evaluations of Auditing: Audit Quality	34
Audit Quality and External Auditing	36
Regulation of Auditing and Audit Committees	37
Summary	44
Chapter 3: Research Method	46
Research Methodology and Design	46
Population and Sampling	47
Materials	50
Operational Definitions of Variables	50
Study Procedures	51
Data Collection and Analysis	51
Assumptions	52
Limitations	53
Delimitations	53
Ethical Assurances	53
Summary	54
Chapter 4: Findings	55
Description of Populations Used	55
Treatment of Data for Hypothesis Testing	57
Hypothesis Testing	63
Evaluation of the Findings	66
Summary	67
Chapter 5: Implications, Recommendations, and Conclusions	68
Implications	69

Recommendations for Practice	77
Recommendations for Future Research	77
Conclusions.....	78
References.....	80
Appendix A: Quality Assessment Matrix	92
Appendix B: Study Data	97

List of Tables

Table 1	<i>Data Search Outcomes</i>	48
Table 2	<i>Operational Definition of Variables</i>	50
Table 3	<i>Study Participants</i>	55
Table 4	<i>Demographic Information Descriptive Statistics</i>	56
Table 5	<i>Confidence Intervals for Implementation of Audit Committees</i>	58
Table 6	<i>Confidence Intervals for No Implementation of Audit Committees</i>	59
Table 7	<i>Study Weighs</i>	60
Table 8	<i>Weighted Confidence Intervals for Implementation of Audit Committees</i>	61
Table 9	<i>Confidence Intervals for No Implementation of Audit Committees</i>	62
Table 10	<i>Averaged Confidence Intervals for Hypothesis Testing</i>	63
Table 11	<i>Chi Square Test of Independence</i>	65

Chapter 1: Introduction

Researchers and stakeholders consider audit committees as potential mechanisms for the oversight of financial reporting in the private and public sectors (Knechel, 2015; Malik, 2014). Audit committees audit by providing independent reconciliation and evaluation of audit reports, as mandated, in part, by the Government Financial Officers Association (GFOA) (Abbott et al., 2016; GFOA, 2018). Some of the roles of audit committees are to interact with auditors, board members, and company management during an audit and post-audit (GFOA, 2018). Audit committee members can resolve conflicts between two stakeholders and bring issues to their attention (Zhang & Rich, 2016). Potentially, audit committees are useful for maintaining sound financial control, offering advice, providing guidance, and reporting fraud (Vollmer, 2016; Zager et al., 2016). However, how company management decides to use audit committees or not is not well-understood and documented (Fitzgerald & Giroux, 2014). Public attention to high-profile cases of malfeasance and fraud in the private and public sectors (Deis & Byus, 2016; Elder & Yebba, 2017) has increased regulators and researchers' attention to audit committee governance in the private sector (such as through the Sarbanes-Oxley Act (SOX) of 2002 and the US Government Accounting Office (GAO)) (Franzel, 2014; GAO, 2016).

Under the United States' SOX regulations for the private sector, federal regulations require companies to use audit committees. However, some state regulations have different requirements (Fitzgerald & Giroux, 2014; Sneed et al., 2018). Furthermore, these differences may influence decisions about whether to use an audit committee or not (Fitzgerald & Giroux, 2014; GFOA, 2018). Nevertheless, positive outcomes have from audit committee oversight in the private sectors (Elder et al., 2015; Sneed et al., 2018).

It is acknowledged that there is potential for higher costs in using an audit committee (Alzeban & Sawan, 2015). The use of audit committees can increase administrative and direct

costs (Baber et al., 2013; Fitzgerald & Giroux, 2014); and the costs can include the compensation given to audit committee members (Elder et al., 2015). The use of audit committee predicts increased restatements of public financial reports and associated costs (Rich & Zhang, 2014). The need for restatements may be due in part to more stringent auditing procedures (Fitzgerald & Giroux, 2014). Restatements are costly due to completion of re-audit with revised reports (Zhang & Rich, 2016). Negative public perceptions can result from restatements, as these were indicators of financial risks (Henke & Maher, 2016; Modlin, 2016; Park et al., 2017). Thus, costs of bond issues can increase after a restatement; however, these results were inconsistent across individual companies (Zhang & Rich, 2016).

Although some particular costs, such as the expenses of restatements may increase, some companies with audit committees tend to have lower debt costs and fewer restatements (Baber et al., 2013; Elder et al., 2015; Zhang & Rich, 2016). Companies with audit committees tend to have fewer auditing exceptions and qualified expertise and subsequently lower costs (Fitzgerald & Giroux, 2014; Zhang & Rich, 2016). Audit committees are also associated with improved internal accounting procedures and controls, as well as with greater public trust of the process (Fitzgerald & Giroux, 2014; Rich & Zhang, 2014; Zhang & Rich, 2016). In some cases, few costs are added by using more rigorous accounting practices, despite the lack of uniformity across the United States (Spren & Cheek, 2016). Audit committee members are expected to be independent of an organization's internal financial process and contribute to rigorous oversight regardless of the accounting methods used (Zhang & Rich, 2016). The independence of audit committees is associated with decreased fraud and costs of fraud (Beckett-Camarata & Grizzle, 2014; Elder et al., 2015).

Audit committees are recommended because of the presumed association with quality auditing (Cagle & Pridgen, 2015). There is a fixed evidence as to how stakeholders view audit

committee effects on auditing and reporting quality. Some companies perceived no relationship between audit committee oversight and audit quality (Badara & Saidin, 2014; Fitzgerald & Giroux, 2014). In contrast, some companies associate higher quality audits with audit committees (Phillips & Dorata, 2013; Zhang & Rich, 2016). There is no uniform definition of audit quality. In practice, quality is associated with subjective beliefs of the stakeholders and audit committee members (Kilgore et al., 2014; Knechel, 2015). The choice to form an audit committee is likely based in part on idiosyncratic perceptions of decision-makers about audit committee audit quality evaluations. Good corporate governance involves better-informed decision-making, accountability for the stewardship and control of resources, and the efficient use of these resources. As such, the existence of an independent audit committee is recognized internationally as an important aspect of good corporate governance. In past studies, over 50% of companies did not find audit committees as necessary (Badara & Saidin, 2014). Recent results suggested that these perceptions likely depend on the context of each financial system (Cagle & Pridgen, 2015; Modlin, 2014; Reinstein et al., 2014). A conflict of interest may exist where companies decide to implement audit committees, but audit committees also have oversight over management (Aikins, 2015).

In summary, the issues influencing the decision-making process include costs, fraud, financial stability, political and public pressure, company management conflicts of interest with audit committees, and the potential availability of candidates (Rich & Zhang, 2014; Samelson et al., 2006). Company management can judge audit quality subjectively or rationally, but it was unclear how they choose to have an audit committee or not (Fitzgerald & Giroux, 2014). Audit committees are critical for helping the company to protect itself and stakeholders from financial issues that may arise.

Statement of the Problem

The problem to be addressed by this study was company management decision-making processes for (not) using audit committees (Fitzgerald & Giroux, 2014). Even though audit committees may provide some advantages in financial auditing (Fitzgerald & Giroux, 2014; Rich & Zhang, 2014), it was unclear why and how some companies make decisions to forego an audit committee oversight. Without an audit committee, a company may experience poor financial performance, such as budget deficits and instability (Fitzgerald & Giroux, 2014; Rich & Zhang, 2014). This understanding led to the need to understand the decision to use an audit committee or not, which can be viewed through a conceptual framework of practical decision-making contingent on the intersection of these competing considerations. Moreover, some companies with audit committee experience have fewer financial problems (Fitzgerald & Giroux, 2014; Zhang & Rich, 2016). Surveys of company management revealed competing considerations in decision-making for audit committee use (Cagle & Pridgen, 2015; Modlin, 2014). For example, audit committee oversight may increase or decrease costs of report restatements and related costs of financing (Elder et al., 2015; Zhang & Rich, 2016).

Effective audit committee oversight appears to be useful to companies because audit committees were associated with decreased fraud and sound financial statements (Zhang & Rich, 2016). Without a clearer understanding of companies' decision-making in using an audit committee or not, then use of audit committees may be de-incentivized. Given the complexity and context-dependence of the issues, there is a need for quantitative research to assess the motivations and experiences of companies concerning their decision-making processes in specific contexts (Fitzgerald & Giroux, 2014).

Purpose of the Study

The purpose of this quantitative meta-analysis was to explore the perspectives and experiences of companies regarding their decision-making processes as to how and why audit committees were (not) chosen and utilized. This study sought to understand the perspective of company management about what motivated them to authorize an audit to review. The study was also undertaken to understand the decision-making processes and reasons each company used as a basis for choosing, forming, or authorizing an audit committee. The variables of interest were responses to Likert scale questions, in which the mean and standard deviation was provided in relation to opinions regarding the use of audit committee for the prevention of fraud, obtaining better financial statements, increased shareholder trust, improved transparency, and better oversight of accounting policies and activities. Likert scale statements of interest were regarding the high cost, the belief of the effectiveness of the current policy, the current use of internal controls, and the lack of requirement to use audit committees, and regarding preference of using audit committees to meet legal standards. The statements of interest were used to test hypotheses using the Chi-square test of independence regarding the decision (not) to use audit committees based on statistical analysis. The sample of 34 studies was obtained from journal articles and other prior reports. Data were gathered by hand through reviewing the studies and entering the needed information into Microsoft Excel for the analysis.

Conceptual Framework

The rational planning model for public management (Ahmed et al., 2014), contingency models for decision-making (Ahmed et al., 2014; Otley, 2016) and decision theory to understand the problem (Parsons & Wooldridge, 2002) were used in this study. The practice of rational planning involves using objective performance measures as the basis for formulating goals and making decisions. Contingency models of decision-making derive from contingency theory

which states that there was no one best way of organizing a system; therefore, no one best way to make a decision (Otley, 2016; Parsons & Wooldridge, 2002). Thus, contingency models leave open the possibility that some decisions may be made by intuitive, descriptive, and heuristic thinking, or by normative and rational thinking, as well as some combination of all these. Because of the significance of this study, attributes of stakeholders and particular behaviors were considered the formation of audit committees (Aikins, 2012; Cagle & Pridgen, 2015; Modlin, 2014).

There is debate among researchers about the effectiveness of rational planning in the public sector (Cagle & Pridgen, 2015). Moreover, financial decisions and auditing oversight are performed under contexts which are distinct across different companies, such as differing accounting and auditing procedures, size, and financial status (Cagle & Pridgen, 2015; Carslaw et al., 2012; Modlin, 2014). Based on the rational planning method, the decision criteria must be well-defined and adequate measurements made available (Ahmed et al., 2014; R. Walker et al., 2013). It is recognized that some companies may not have adequate systems in place to acquire the information. At the organizational level, the rational planning model is used in management, planning and strategic decision-making in performance evaluation mode (George et al., 2016). A more thorough discussion of the conceptual framework within the models and theories are discussed in chapter 2 of this study.

Nature of the Study

The purpose of this quantitative meta-analysis was to explore the perspectives and experiences of companies regarding their decision-making whether to use an audit committee or not. The study was conducted using existing empirical data and hypothesis testing was included. It was recognized that different companies likely have differing challenges in decision-making styles, as well as in their perceptions of audit quality and audit committees (Kilgore et al., 2014;

Knechel et al., 2013). This methodology was believed to be the most effective for the topic of interest due to the vast amount of information available in previously published sources that can be combined to derive concise conclusions based on existing work. The quantitative meta-analysis was most effective in the context of the present study because it enabled information to be gathered regarding many different types of companies, which helped improve the findings through an increased understanding of different types of companies and their perspectives regarding the use of audit committees (Kilgore et al., 2014). This approach was beneficial because it allowed for the use of existing research and allowed for a larger collection of research.

Research Question

The research question was devised to address the problem of decision-making in whether to use audit committees or not by companies. The goal was to understand whether the decision-making process used by each company is related to rational or intuitive styles of decision-making. It was also to understand how contextual issues influenced whether company management supported the use of an audit committee.

RQ1. What factors were most statistically significant to companies in making decisions about the use or lack of use of audit committees in their internal operations?

Research Hypothesis

The research hypothesis set was:

H1₀. The factors influencing the use of audit committees were not statistically significant when companies were making decisions about the use or lack of use of audit committees in their internal operations.

H1_a. The factors influencing the use of audit committees were statistically significant when companies were making decisions about the use or lack of use of audit committees in their internal operations.

Significance of the Study

This study is significant because there is a need for insight into how companies make decisions concerning the use of audit oversight via formation of audit committees (Fitzgerald & Giroux, 2014). The decision to use an audit committee can have far-reaching consequences on issues such as internal accounting control, financing of debt, and prevention of fraud (Beckett-Camarata & Grizzle, 2014; Rich & Zhang, 2014; Vollmer, 2016; Zager et al., 2016). The recession of the late 2000s led to decreasing tax base in many areas, and this created a need to be conservative in the management of public funds (Denison & Gibson, 2013; Fitzgerald & Giroux, 2014). Thus, monitoring financial reporting and procedures can be significant. There are many competing considerations for companies to make decisions about financial oversight (Cagle & Pridgen, 2015). Little is known about how these companies make decisions (Fitzgerald & Giroux, 2014). This study can contribute to know why and how decisions are made.

The GAO (2016) has produced steady reports over the last several decades as a part of instituting and monitoring audit quality and financial oversight. Moreover, concerns over low quality audits have been continuing. There has been less study of the quality of auditing used in the private sector (Alzeban & Sawan, 2015; Modlin, 2014). This study may contribute more information as to know how companies make decisions that may be far-reaching regarding audit committees. Because financial oversight regulations of states can vary a great deal (Cagle & Pridgen, 2015; Elder et al., 2015), understanding gained through this study contributed to greater insight into best practices for financial control, and particularly, for the use of audit committees (Fitzgerald & Giroux, 2014; Rich & Zhang, 2014).

Without direct regulatory requirements for the use of audit committees, companies can make decisions as to when to use this form of oversight. Furthermore, companies may have requirements and mechanisms in place that are peculiar to the circumstances and needs of the

financial jurisdiction that influences the decision to work with audit committees or not (Baber et al., 2013; Fitzgerald & Giroux, 2014). The distinctiveness of context in which these decisions are made suggests that a qualitative study yielded more effective details. Much of what was known about decision-making that pertains to fraud and saving of resources was found through of well-described cases of fraud or financial mismanagement (Elder & Yebba, 2017; Phillips & Dorata, 2013; Sneed et al., 2018). Through this study, some knowledge may be gained as to know how decisions were made when there was not yet a crisis. This may give valuable insight into how to avoid extreme financial circumstances through use of an audit committee.

Definitions of Key Terms

Audit Committee. An audit committee provides independent review and oversight of company financial reporting processes, internal controls, and independent auditors. A committee should help the management to properly develop and adhere to an acceptable system of internal accounting controls that are in place to assess the management's practices, as well as to conduct independent audits of company financial reporting practices (GFOA, 2018).

Audit Committee independence. In financial management, an audit committee independence means a lack of conflict of interest and bias for those involved in oversight mechanisms (Baber et al., 2013).

Audit Exceptions. Audit exceptions are unexpected or deviated results from an audit test of internal controls and procedures (Rich & Zhang, 2014).

Auditor Recommendations. Auditor recommendations are courses of action suggested by the auditor in line with the objectives of the audit based on data collected during the audit (Aikins, 2012).

Financial Reporting Oversight Role. A role in which an individual is in a position to, or does, exercise influence over the contents of the financial statements or anyone who prepares

them, such as when the individual is a member of the board of directors or similar management or governing body, etc. (Cagle & Pridgen, 2015).

Higher Audit Quality. More technical abilities and industry knowledge can be raised from the audit expertise. Demanding for audit expertise leads to higher audit quality (Craswell, Francis, & Talyor, 1995), and thereby, enhances auditor's reputation. In addition, audit tenure may affect audit quality positively or negatively.

Internal Auditor. An internal auditor provides an independent, objective assurance designed to improve and add value to an organization's operations (Institute of Internal Auditors, 2020).

Performance Evaluation. Performance Evaluation is defined as a formal and productive procedure to measure an employee's work and results based on their job responsibilities (George et al., 2016).

Quality Control. Quality control is a process through which a business seeks to ensure that product quality is maintained or improved (Twin, 2019). Quality control requires the business to create an environment in which both management and employees strive for perfection.

Regulatory Compliance Requirements. Although there is no specified set of requirements for regulatory compliance per se but companies, irrespective of their size, age and specialization need to take careful steps so that their operations are at par with the regulatory norms and laws specified by the authorities (George et al., 2016; Otley, 2016).

Summary

Audit committees are formed to help oversee auditing and accounting procedures. These committees often consist of professionals with credentials that allow them to contribute to the mission of ensuring transparency in reporting and oversight. Moreover, these committees are

charged with intermediaries between management, auditors, and board members, both during an audit and in the post-audit period, for review of audit reports (GFOA, 2018). Many companies are not required to form audit committees even though committees have been proved useful (Carslaw et al., 2012; Elder et al., 2015; Fitzgerald & Giroux, 2014; Pridgen & Wang, 2012; Rich & Zhang, 2014). The purpose of this quantitative meta-analysis was to explore the perspectives and experiences of companies about their decision-making styles, such as rational or intuitive, and contextual challenges under which they undertake the formation of an audit committee.

This study is significant because there are motivations for companies to improve their financial control, including the potential for fraud reduction. Therefore, the results of this study may better inform other researchers and companies of the reasons for using audit committees. Using a conceptual framework related to rational versus intuitive decision-making and contingencies may contribute to understanding practical decision-making styles of companies. Chapter 2 contains discussions and assessments of the conceptual framework, overview roles and functions of audit committees as well as discusses the evaluations and regulation of auditing.

Chapter 2: Literature Review

There are complex and competing considerations for determining whether and how to use an audit committee for financial oversight (Cagle & Pridgen, 2015). Some researchers have called for qualitative and quantitative research on company perceptions of audit committees and how management makes decisions about the use of audit committees (Fitzgerald & Giroux, 2014). Therefore, the purpose of this proposed study was to explore company perspectives about decision-making processes they use to decide to use or to not use audit committees. Since the implementation of an audit committee is not mandatory for some companies (Sneed et al., 2018), some stakeholders are able to influence whether audit committees are instituted and how they are used (Fitzgerald & Giroux, 2014; Rich & Zhang, 2014).

Stakeholders' views of audit quality and their perceptions of audits can include subjective interpretations by key decision-makers in company management (Fitzgerald & Giroux, 2014). The decision to use an audit committee can be viewed through a conceptual framework where decisions are contingent on the many considerations of financial oversight and the complex intersections of these competing considerations; a contingency model includes decision-making that is descriptive, intuitive, as well as rational. The framework of this proposed study includes for contrast, rational planning methods that include the goal of obtaining an optimal decision through objective measure (George et al., 2016).

Topics discussed in the literature review include issues that may influence the perceptions and decisions of companies: a) roles and functions of audit committees; b) factors influencing auditing and accounting management; c) regulatory controls; d) costs and debt financing; e) incidence and impacts of fraud; e) audit committee use; f) history of financial stability; g) oversight of management and conflict of interests with audit committees; h) public and political pressure; and i) audit committee member characteristics and experience (Rich & Zhang, 2014).

The conceptual framework for the study includes decision-making and management models. Companies may judge audit quality subjectively or intuitively, and objectively or rationally, yet it is unclear how they make a choice to have an audit committee (Fitzgerald & Giroux, 2014).

Using the NCU library databases and online search engines, a search was conducted for peer-reviewed articles and other scholarly sources. The search focused on information related to the problem for this study as related to how and why companies may or may not use audit committees. The databases included were Google Scholar, ProQuest, Science Direct, ERIC, Journal Storage (JSTOR), SAGE Journals Online, EBSCOhost, Taylor & Francis Online, Sage Research Methods, and Web of Science. Keywords and phrases used in the search were audit committees, auditing governance, decision theory, rational planning, financial oversight, auditing quality and effectiveness, internal audit, public auditing, public finance, external audit, audit satisfaction, audit reports and recommendations, financial restatements, private sector auditing, SOX Act (2002), federal regulation of auditing, Single Audit Act (1984), and fraud in public finance.

Conceptual Framework

Several models and related practices are useful to incorporate into the framework for this study such as: rational planning model for public management, contingency models for decision-making, and decision theory contribute to understanding the problem (George et al., 2016). The practice of rational planning involves using objective performance measures as the basis for formulating goals and making decisions (R. Walker et al., 2013). Whereas, contingency models of decision-making derive from the concept of contingency theory that there is no one best way of organizing a system, which means that there is no one best way to make a decision (George et al., 2016). Contingency models leave open the possibility that some decisions may be made by intuitive, descriptive, and heuristic thinking, or as normative and rational thinking, or some

combination of these. In order to make decisions related to audit committee use, leadership depend on contextual circumstances that are distinct across companies (Ahmed et al., 2014; Fitzgerald & Giroux, 2014; Modlin, 2014; Rich & Zhang, 2014).

Given the variety and challenges of these factors, companies may approach these issues in diverse ways, but details found in the lived experiences of these individuals remain little described. Decisions related to accounting, auditing, and financial management were rooted in an objective measure used in rational style decision-making, which may as well be linear in nature due to the quantitative aspects of these activities (George et al., 2016; Otley, 2016). Furthermore, there is an assumption that these functions and activities leave little room for subjectivity of optimizing management and oversight (George et al., 2016; Otley, 2016). In practice, assessments of auditing quality and audit committee reports can be subjectively based and require feedback loops.

Particular behaviors and attributes of stakeholders can be significant to the development of audit opinions/exceptions in audit reports as well as assessment of quality of audits and internal controls (Cagle & Pridgen, 2015; Modlin, 2014). Even where quantitative-rational approaches are implemented, many of the decision criteria are likely contingent on contextual circumstances that are distinct across individual companies that implies that multiple decision styles may be useful. For example, financial decisions and auditing oversight functions can be particular, as were accounting procedures, company size, and financial status and history (Cagle & Pridgen, 2015; Carslaw et al., 2012; Fitzgerald & Giroux, 2014; Modlin, 2014; Rich & Zhang, 2014; Samelson et al., 2006). However, some decisions may be better made using objective information. For example, long-term debt financing was a complex decision that requires detailed information and planning (Baber et al., 2013).

There is much debate among researchers about the effectiveness of rational planning in the public sector (George et al., 2016). There is little evidence to support that in practice rational planning produces better decisions and facilitates strategic planning (Sanger, 2013). Considering rational planning as a facet of the conceptual framework for this study may provide a stark contrast as to how many companies make decisions given that it was unclear how widely use the framework was and whether better quality decisions were made with rational planning (George et al., 2016; Sanger, 2013). Participants in this study, include company management who has competing issues to consider, including the use of audit committees. They are not immune from issues such as political pressures and public opinion. Moreover, financial decisions and auditing oversight are performed under contexts that were distinct to a company, such as differing accounting and auditing procedures, company size and financial status (Fitzgerald & Giroux, 2014; Modlin, 2014; Rich & Zhang, 2014).

At the organizational level, the rational planning model is used in management, planning and strategic decision-making in performance evaluation mode (George et al., 2016). Under rational planning model, it is assumed that quality decisions ensured if practitioners used a rational process rather than an intuitive or emotionally-loaded processes (George et al., 2016). As relevant to this study, companies that stress the use of performance measures as consistent with the model may attempt to impose on companies a rational decision-making style (Ahmed et al., 2014). To practice a rational planning method, decision criteria must be well-defined and adequate measurements made available (Ahmed et al., 2014; R. Walker et al., 2013). Some companies may not have adequate systems in place to acquire information (George et al., 2016). However, where performance measurement methods are not imposed then unquantifiable factors affect decisions, and some companies may depend on intuitive and descriptive decision-making or fall back on irrational thinking (Ahmed et al., 2014; George et al., 2016).

Qualitative contextual factors that steer decision-making include public opinion concerning risks and costs, perceived lack of rigor in accounting and management procedures, and political pressures such as influence over selecting individual audit committee members. Ahmed et al. (2014) suggested that evidence supports, and that companies endorse a hybrid approach to practical strategic decision-making using both rational and non-rational approaches. These authors argued that decisions on complex planning and evaluation issues such as oversight are by nature iterative and like an intuitive rather than a rational process. These authors and others suggested a hybrid model including feedback loops similar to the process that audit committees promote in their feedback to company management and auditors (Ahmed et al., 2014; George et al., 2016).

Because internal issues potentially influence decision styles and outcomes, the perspectives and experiences of individual companies can enrich the building of a conceptual framework for understanding how stakeholders make decisions in practice. Under the conceptual framework of this study, the outcome of a decision and the process by which it is made depends on the balance of competing issues that must be considered by the organization or an individual. As these issues are considered, the framework becomes related to the contingency model decision-making. As an alternative to rational planning, this concept is based on the idea that there is no one best process or structure for an organization to base its decision-making and planning (George et al., 2016; Otley, 2016).

The decision-making approach of companies may include elements of the rational planning framework regarding strategic planning, accounting, and auditing practices in as much as decisions must be based on data or information. For example, it has been assumed that rational planning is valuable because it represents a shift to normative decision-making and may take heuristics out of company decisions (George et al., 2016). Thus, it might be expected that

company stakeholders are accustomed to making some decisions in a framework such as rational planning, and they might extend the data-based decision-making to issues like audit committee use (George et al., 2016). However, there were few studies that point out the effectiveness of other evidence suggesting that rational planning was often implemented in a mechanistic way that does not allow for flexibility (George et al., 2016; Mala & Chand, 2015).

Overview of Roles and Functions of Audit Committees

The value of audit committees as a particular form of governance and oversight has been well-studied in the private sector (DeFond & Zhang, 2014; Franzel, 2014). Public auditing has received less research attention than the private corporate sector has, and specifically the use of audit committees has received less study attention (Baber et al., 2013; Rich & Zhang, 2014). For both the public and private sectors, ideal audit committees are expected to be unbiased evaluators of an entity's financial soundness, mediators for the various types of audits, auditors, upper-level management, reviewers of external financial statements, and overseers of management practices (Baber et al., 2013). Specifically, activities of audit committees can include oversight of internal control systems, risk management, meetings with external auditors (Baber et al., 2013; Zhang & Rich, 2016).

Although the GFOA, a leading professional organization has endorsed the use of audit committees for several decades, some states do require it, but there is no federal mandate for the use of audit committees (Carslaw et al., 2012; Fitzgerald & Giroux, 2014; Sneed et al., 2018). Repeated recommendations for company audit committee function have become increasingly similar to federal regulations for the private sector; however, lack of legal mandate for adherence to many of the details of accounting, auditing, and financial reporting leaves flexibility for meeting the needs and prescribed roles as identified by GFOA and researchers (Khumawala et al., 2014; Ruppel, 2017; Zhang & Rich, 2016). Although there is little evidence as to how

companies may specifically use audit committee, particularly since company needs likely carry more weight for stakeholders decisions (Rich & Zhang, 2014; Vermeer et al., 2009), especially where there are no requirements as to how or whether to use a committee.

Before more recent studies, results from seminal studies supported that audit committees are sometimes used in ways that are more active than in the advisory capacities as suggested by GFOA (2018) and the GAO (2016). For example, in a survey study, some companies indicated that their audit committees had wide-ranging roles including developing financial information for company management rather than just an oversight role with financial statements. Evidence from quantitative survey studies supported that committee influence can reach as far as to make suggestions for improved services that were more efficient and effective (West & Berman, 2003). West and Berman(2003) reported that in addition to oversight duties, company use of committees sometimes extends to advice concerning legal compliance and improvement initiatives that are broader than those of financial management. Since early studies, other authors have provided some evidence that audit committee played a role in fraud prevention practices (Bruynseels & Cardinaels, 2014; Elder & Yebba, 2017; Kilgore et al., 2014; Phillips & Dorata, 2013; Vollmer, 2016) by monitoring internal accounting controls. However, other reports suggest that fraud in companies is stable or growing slowly (Sneed et al., 2018).

As part of the federal regulation of publicly held companies, these entities are expected to inform investors of the details of their audit committee charter. However, publicly held companies often reveal details of their audit committees' roles and responsibilities at a cursory level (Böhm et al., 2016). Thus, stated roles per regulatory requirements for the private sector are sometimes not matched with actual practices and to the federal requirements (Böhm et al., 2016; Martinov-Bennie et al., 2015). Lack of transparency in the actual functions of audit committees for the private and public sectors sometimes makes analysis of the roles and functions of

committees difficult; however, in some cases, company management suggested that committee charters might improve the oversight structure (Rich & Zhang, 2014). More information, as envisioned by this proposed study, may contribute to resolving issues of how these committees are used.

The remainder of this section includes discussion of research concerning several of the proposed roles that are typical for audit committees and how these are compared in the private and public sectors. However, some functions and roles of private sector audit committees and their impacts which are well-documented through federal and state regulations and by researcher can be explored to understand the possibilities for public sector to better use committees. The suggested characteristics for audit committees also reflect those set for the corporate sector; they include audit committee size, independence, and financial expertise (Alzeban & Sawan, 2015; Elder et al., 2015; Rich & Zhang, 2014). The needs and regulations for accounting and auditing differ across states, and these differences may impinge on company considerations of ideal roles and characteristics proposed for committees (Carslaw et al., 2012; Fitzgerald & Giroux, 2014). One reason suggested as to why audit committees are recommended in the reporting structure governance is the need for added expertise (Alzeban & Sawan, 2015; Rich & Zhang, 2014). Added expertise could be needed in any of the functional roles discussed below.

Oversight of Internal Accounting, Auditing, and Reporting. Suggested goals related to the core functions of accounting, auditing, reporting for company audit committees are similar to those set out for the private sector by the SOX legislation (Zhang & Rich, 2016). These include overseeing a sound set of internal auditing controls, and in this case, these would be based on the Government Accounting Standards Board (GASB). The GASB is a private non-profit organization that is tasked with setting up accepted accounting principles (GAAP). The GASB sets these standards, however, state and local regulators choose how closely they expect

adherence to GAAP reporting requirements and auditing (Khumawala et al., 2014; Ruppel, 2017). That means that states can take latitude and allow for local deviances to meet standards that may deviate from GAAP and in how they also report through auditing. However, it is unclear how closely those requirements are enforced state to state, especially in locations where GAAP is not mandatory (Khumawala et al., 2014; Ruppel, 2017).

When a smaller company has the choice to comply with GAAP, a decision use reduced adherence to GAAP may be due partly to lack of accounting expertise and lack of expertise on an auditing committee (Alzeban & Sawan, 2015; Rich & Zhang, 2014). Another factor impinging on the decision to adopt GAAP adherence could be due to cost burdens on smaller organizations. Thus, costs may be a driver for company decision-making as to GAAP adherence, but the relationship may be less clear as to how the imposition of GAAP standards directly affects the decision to use audit committees (Fitzgerald & Giroux, 2014; Khumawala et al., 2014; Modlin, 2014, 2016; Zhang & Rich, 2016).

Contrary to results concerning smaller companies, there were cost savings for some larger jurisdictions with audit committee oversight due to their internal accounting and reporting (Rich & Zhang, 2014; Zhang & Rich, 2016). However, in other studies, no such cost advantages were found for companies or non-profit companies subject to federal single audit reporting and which formed audit committees voluntarily that means those organizations which qualify as “larger” per the Single Audit Act. Some results showed that higher costs for financial management and oversight were correlated with stricter adherence to GAAP and GAS standards. In jurisdictions that had higher costs, companies less often chose to use audit committees (Elder et al., 2015; Fitzgerald & Giroux, 2014).

Rich and Zhang (2014) found that audit committees were used less often in states where GAAP was required, and this suggests that committee oversight could substitute for GAAP

adherence. Single audit oversight and reporting include some conformity to GAAP standards but reporting for single audits differs from many of the diverse procedures that companies follow accounting and auditing procedures (GAO, 2016). These factors may make comparisons among entities engaged in single audits with others unclear.

Relationships between increased oversight, benefits, and costs associated with lack of strong internal controls are complex (Fitzgerald & Giroux, 2014). For example, the presence of weak internal controls is associated with lower adherence to standards, and these conditions are associated with higher debt cost financing for a company (Park et al., 2017). Similarly, higher adherence to standards led to reporting of fewer exceptions, indicating the likelihood of higher quality auditing but this was not strongly associated with audit committee presence. Companies with audit committees tend to have lower debt costs (Zhang & Rich, 2016).

The long-term implications suggest that cost considerations for companies as to whether to have an audit committee oversight include more than short-term costs, but also costs that extend into the future solvency of the company. This proposed study may provide contextual details from companies to help explain why and how company management chooses to use audit committees as part of their regulatory process. Some researchers argued that the use of audit committees might ensure best practice for meeting GAAP standards and that this would promote higher overall levels of financial performance for companies, regardless of any change in costs associated with regulatory requirements (Elder et al., 2015; Spreen & Cheek, 2016; Zhang & Rich, 2016). Keefe et al. (1994) found that industry specialization or expertise corresponded with fewer GAAS reporting standard violations; this result suggested that adherence to GAAP might improve financial reporting as well as overall performance. Spreen and Cheek (2016) found that state oversight to ensure GAAP use did not improve the financial performance of companies.

Furthermore, the use of GAAP or GAAS standards did not improve the financial status, such as

the costs of debt and financing for companies versus those that did meet the standards (Spren & Cheek, 2016).

The use of GAAP standards may be much beneficial for standardizing practices rather than audit procedure for the states purposes (Spren & Cheek, 2016). In a survey study of company stakeholders indicated that use of audit committees improved auditing and accounting practices regardless of whether GAAP standards were applied (Matkin, 2010). The perceptions that stricter implementation of accounting standards does not improve performance may be related to the net impacts of cost-benefits of additional structure. However, it appears that company stakeholders do not perceive relationships in a way that was beneficial to their overall performance (Spren & Cheek, 2016).

How different accounting standards and levels of use may affect stakeholder perspectives to influence choices of whether and how to use audit committees has been understudied (Elder et al., 2015; Rich & Zhang, 2014; Zhang & Rich, 2016). Although higher costs seem to be associated with GAAP use and costs may have relationship with audit committee use, the study results cited above did not contain information concerning stakeholder perspectives on whether or how the use of GAAP directly influences the choice for audit committee use. Moreover, collective idiosyncrasies of company management, which include reporting other than that for single audits, may dictate how committees will be used (Rich & Zhang, 2014). Nevertheless, audit committees potentially serve a valuable function to provide opinion on reporting issues irrespective of the rigor and type of standards on which they advise (Elder et al., 2015; Rich & Zhang, 2014; Zhang & Rich, 2016).

Financial statements and debt costs. Despite the fact that company financial management tend not to associate audit committee use with lower costs and higher performance (Spren & Cheek, 2016), audit committees are often assumed to be an important mechanism to

significantly improve the quality of financial reporting in the corporate and public sectors (Baber et al., 2013; Fitzgerald & Giroux, 2014; Rich & Zhang, 2014). The roles of an audit committee oversight of financial statement reporting and internal control are related to the level of standards for internal accounting to which a company adheres. High level of adherence to GAAP and GAS requirements reflect the rigor necessary to make financial statements and tax reporting as required (Beattie et al., 2014; Böhm et al., 2016). Thus, the application of stricter accounting standards carries over to the need for staffing, expertise, and oversight of financial statements (Keefe et al., 1994). These considerations include the potential for cost burdens associated with rigor but also burdens of lack of rigor however, there may be cost advantages for the use of audit committees (Khumawala et al., 2014).

In a quantitative study, Zhang and Rich (2016) found that use of an audit committee was predicted by lower debt financing and a more conservative approach to fiscal management. Using a multiple regression analysis, Zhang and Rich (2016) compared companies that raised revenues through taxes and direct service charges to those who made bond issues and received state or federal funding. These authors found that the presence of an audit committee predicted lower overall costs, including new debt issues, and tended to have lower taxes and direct costs to taxpayers. Companies with an audit committee tended to have lower overall amounts of debt issue regardless of costs for bond issues (Baber et al., 2013; Zhang & Rich, 2016). These results point to the use of audit committees for advisement in structuring debt as it is related to risk management. Some company stakeholders perceive that audit committee oversight have the opportunity for more favorable financing (Baber et al., 2013; Elder et al., 2015; Fitzgerald & Giroux, 2014; Zhang & Rich, 2016).

In contrast to the potential for decreased financing costs, there is the potential for higher debt costs. When adhering to higher accounting standards as well as rigors of making accurate

financial statements, there is an increased opportunity for error if expertise is not available (Baber et al., 2013; Rich & Zhang, 2014). If inaccuracies occur then financial reports will be re-issued, and these restatements can lead to increased costs of bond issues (Baber et al., 2013; Zhang & Rich, 2016). Discrepancies in financial reports are impactful on debt costs when fraud is involved, but even less serious circumstances such as slowness in reporting can influence costs (Blankley et al., 2015; Pizzini et al., 2015; Zhang & Rich, 2016). Fewer restatements (Rich & Zhang, 2014) and lower costs are associated with the presence of an audit committee (Fitzgerald & Giroux, 2014; Zhang & Rich, 2016). Although some companies have indicated that they would prefer committee members with some accounting, management, or finance background, some do not feel that committee oversight is necessary. One of the chief impetuses cited for forming and maintaining a formal audit committee is that of preventing and detecting fraud in both the private and public sectors (Vollmer, 2016).

Major corporate fraud cases drew much attention before regulatory efforts such as SOX, to alleviate potential for fraud; cases of corporate frauds also led to a shift of attention towards the public sector to preventing fraud and malfeasance (Sneed et al., 2018). Analysis of cases in the public sector has led to continuing interest in potential regulation of these entities (Denison & Gibson, 2013; Elder & Yebba, 2017). Cases of fraudulent activity originate from malfeasance by external and internal auditors, lack of oversight and internal controls, and whether audit committees provide an appropriate solution (Elder & Yebba, 2017).

Case studies of companies with systemic fraud highlight the need for sufficient advice regarding companies financing (Sneed et al., 2018). Leaders were expected to exercise auditing practices and set internal controls. A desire for business development and community growth led to attempts to keep tax rates reasonable by comparison to other companies. Lower revenues

combined with the county's high leverage position eventually led to several billion dollars in losses after interest rates turned in an unfavorable way (Matkin, 2010; Park et al., 2017).

The costs of installing and maintaining inadequate internal controls can give opportunistic individuals room to commit fraud for personal gain (Jensen & Payne, 2005). Such was the case in the District of Columbia property tax scandal where inadequate funding of accounting and auditing functions led to understaffing (Wells & McFadden, 2010). An employee was personally responsible for falsifying records that allowed the embezzlement of more than \$50 million in revenues. The activity occurred over a 20-year span, and this pointed to both the criminal intentions of the individual who set up the scam and the continuing lack of oversight. Lack of internal checks and balances encouraged this activity even though the district is a highly visible, if not scrutinized, financial regulatory system. Furthermore, it seems unlikely that there was potential for inadequate expertise in the vicinity of Washington, D.C. (Sneed et al., 2018; Wells & McFadden, 2010).

As clearly pointed out in the examples above, lack of oversight quality, of internal controls, auditing procedures, and oversight may underlie scandal and fraud. However, an individual's criminal activity may subvert even the most secure and effective accounting procedures and organizational structures. Some companies appear to be particularly vulnerable to politics, deliberate fraud, and malfeasance due to reasons that include lack of financial expertise and inadequate budgets to cover the costs of oversight (Huefner, 2011). This lack of expertise may extend to company financial officers as well as to internal, external, and state auditors; however, state auditors appeared to be more accurate in terms of finding a greater number of audit exceptions (Carslaw et al., 2007).

An argument can be made for audit committees with proper expertise as a means to forestall malfeasance and fraud (Rich & Zhang, 2014; Wilbanks et al., 2017). In the private

sector, restatement and fraud are negatively associated with high activity level, and experienced audit committees (Abbott et al., 2004); thus, audit committees positively affect financial reporting and internal controls (Franzel, 2014). In a survey of audit committee members from 134 private sector companies, Wilbanks et al. (2017) found that independent audit committees were consistent with decreased fraudulent financial reporting. Similarly, accurate and improved financial reporting indicates the absence of fraudulent financial statements. Companies with audit committees are associated with stronger internal controls, lower incidences of financial restatements and inaccuracies. Similar to the results of private sector studies, these results suggested that companies with fewer restatements have less risk for fraud and malfeasance (Aikins, 2013; Rich & Zhang, 2014).

Given the numbers of both large and smaller companies that do not have audit committees in place and the wide publicity of fraud cases, it is unclear why some companies may not push to have audit committee oversight to forestall fraud and corruption (Fitzgerald & Giroux, 2014; Rich & Zhang, 2014). Some insight into why these decisions are difficult may be gained from the knowledge that many cases of fraud have multiple underlying reasons as to how and why malfeasance may thrive. Beckett-Camarata and Grizzle (2014) analyzed the circumstances in Harrisburg, Pennsylvania's bankruptcy case and found that deliberate malfeasance, costs of oversight, a shrinking tax base, poor management of debt, lack of oversight, and poor oversight all contributed to a financial 'meltdown' of the city.

Recommendations that grew from this analysis included oversight through an independent committee that should be free of political cronyism. As was the case with Harrisburg, political relationships between elected officials and oversight boards or committees can affect the financial management of a company (Beckett-Camarata & Grizzle, 2014; Matkin, 2010). For example, pressures from both elected officials and internal politics of company employees can

affect the composition of an audit committee. If an audit committee's composition provides balanced views and expertise unfettered by outside influences then conceivably protects a company from political influences both internal and external (Beckett-Camarata & Grizzle, 2014; Matkin, 2010; Rich & Zhang, 2014; Zhang & Rich, 2016).

Much research on audit committee independence from influence is related to the private sector analysis. However, findings from both the private and public sectors have supported that even in the post-SOX regulatory environment, the ability of an audit committee to conduct oversight activities with independence is essential to its effectiveness (Alzeban & Sawan, 2015; Malik, 2014; Sneed et al., 2018). In companies where there are some committee members who are independent (i.e., have no financial or personal conflicts of interest), the implementation of auditor recommendations is perceived to occur more effectively (Alzeban & Sawan, 2015).

Regardless of committee composition, audit committees can have a direct influence on levels of an organization. For example, in the public and private sectors, committees can determine external auditor independence through oversight of rotation of firms that provide audits (Elder et al., 2015; Elder & Yebba, 2017; Malik, 2014). Similarly, rotation of audit committee members may encourage unbiased financial advice as well as support for the selection and appointment of future committee members (Beckett-Camarata & Grizzle, 2014; Malik, 2014). Elder et al. (2015) demonstrated that intentional rotation of auditors and audit committee members are related to the auditor's independent function and audit quality.

Committee Oversight of Differing Audit Types and Goals

Audit committees can potentially support assessments and decisions around several kinds of audits. Support for these audit functions includes an examination of internal auditing, internal control processes, accounting procedures, external auditing, and financial statements. Under the Single Audit Act, there are distinct federally mandated audits once per year for qualifying

companies (Cagle & Pridgen, 2015). Regardless of the audit type or reporting oversight in question, audit committees can act as mediators between these groups and the management level to provide an independent assessment. Although audit committees are suggested as internal and external mediators, the GFOA (2015) stresses that audit committees should provide an independent opinion on the quality of audits, as well as on other procedures and functions mentioned above.

Independence is an important cornerstone of best practices in auditing and financial reporting (Elder et al., 2015). It can be defined differently depending upon auditing and oversight contexts. For example, there is an apparent need for independence among those who are external auditors versus internal auditors and the management, and similarly between audit committee members and other stakeholders. Independence also implies lack of conflicts of interest between these groups. Baber et al. (2013) defined independence of an audit committee as lack of bias and conflict of interest as involved in oversight. As part of an effective internal auditing control, independence represents freedom of internal auditors to conduct their duties apart from those companies to whom they report.

Issues related to audit committee independence have been studied extensively in the private sector but less so in the public sector (Elder et al., 2015; Fitzgerald & Giroux, 2014; Rich & Zhang, 2014; Zhang & Rich, 2016). If the independence of the audit committee fits the accepted definitions, then it is assumed that members can facilitate the oversight of the auditing if committee members do not play dual roles within an entity. However, some have argued that expertise in auditing is singular for specialized knowledge needed for accounting and financial practice, and the duality of roles for committee members and other stakeholders in this context is beneficial (Aikins, 2012; Rich & Zhang, 2014; Zhang & Rich, 2016). For example, financing of operations peculiar to the nonprofit public sector is quite distinct from the raising of capital and

debt structure of private sector concerns. Some evidence supports that those with specific knowledge, such as internal auditors, may provide more effective oversight than outsiders can (Aikins, 2012; Elder et al., 2015; Rich & Zhang, 2014; Zhang & Rich, 2016). Furthermore, some survey evidence supported that organizational knowledge is preserved if committee members also have an integral role in accounting or auditing (Samelson et al., 2006).

The presence of an effective audit committee can moderate the influence of auditor experience level on audit outcomes (Badara & Saidin, 2014); that is, an audit committee appears to enhance the influence of auditor expertise on audit quality such that committees can augment whatever level of experience is available. If the presence of an audit committee improves audit outcomes, then potentially less experienced auditors may have more influence on audit outcomes. In a seminal study of audit quality, Samelson et al. (2006) provided evidence to support that audit committees with members who serve in oversight roles as well as internal department roles are associated with departments that have higher perceptions of audit quality. Rich and Zhang (2014) found that completely independent audit committees were not associated with fewer reports of internal weaknesses in accounting and reporting. In other words, independence may not always be advised where expertise for audit committees is limited. However, in a more recent study, Zhang and Rich (2016) found that debt costs for a company is lower and costs tend to be lowest among those where there is demonstrable independence for an audit committee. Expertise can contribute to cost saving despite some issues with committee members' lack of broader knowledge.

Oversight of managerial practices. Another function suggested for audit committees is to assess managerial practices. Whether the decision to form an audit committee and how that may affect the functional roles, it may likely depend on the organizational structure (Aikins, 2012; Bloch et al., 2015; Rich & Zhang, 2014). If the committee is to oversee management

effectiveness, there may be an inherent conflict of interest where company management plays a decisive role in the decision to use a committee and have some responsibilities for appointing committee members (Aikins, 2015; Baber et al., 2013). If there are sufficient independent checks and balances in an organizational structure, then managerial and oversight levels beyond the company may help to alleviate potential conflicts of interest between the audit committees and management who decide to employ them (Aikins, 2012, 2013, 2015).

Companies have much variability in how they are structured for organizational oversight and internal management. Empirical evidence regarding committee use may be difficult to generalize because organizational structure dictates distinctions between company board committees (Aikins, 2012, 2013; Rich & Zhang, 2014; Samelson et al., 2006). In cases where there have been multiple levels of internal oversight, the audit committee can still play a valuable independent and unbiased role as “go-between” for company management and boards of directors and mayors or CEOs (Baber et al., 2013). This is similar to the proposed rules for audit committees in the private sector (Franzel, 2014). Alternatively, Rich and Zhang (2014) found that where audit committees are in place, the process of forming, chartering the mission, and integrating into the company can all improve the organizational structure and internal accounting structure.

There has been a movement in company management and the use of system-wide performance management that is consistent with rational planning model, which includes global evaluation of company management and organizational structures (Aikins, 2015; Bianchi & Williams, 2015; Sanger, 2013), performance management of discrete functions as well as monitoring of internal auditing. These performance measurement systems are often dedicated to meeting statutory and mandated systems of reporting to state and federal regulators. In a study of system-wide use of performance management processes, Sanger (2013) found little relationship

between the quality of the formal performance management system used and the company management's "buy-in" for the use of performance management systems. Furthermore, there was no significant correlation between high-performing companies and use of quality performance management strategies. These kinds of performance management systems have not been associated with effective cost-control efforts (Bianchi & Williams, 2015; Sanger, 2013).

Consistent with other studies, Aikins (2015) found that company decision-making depends little on jurisdiction or agency-wide performance measurement. Aikins (2015) showed that the quality of formal performance report of audits and the use of these reports are key to management decision-making concerning financial decisions. Regarding quality, the author emphasized that companies found reports with performance measures included versus those that merely report findings and exceptions alone as more useful for decision-making. Company management acceptance and follow-through with audit report recommendations tend to be higher where audit committees mediate relations between company management and auditors (Aikins, 2012, 2015). However, in some cases, company management has reported that where there have been multiple levels of structure for performance measurement that even the added presence of an audit committee can give company management the impression of having too much supervision (Aikins, 2012; Matkin, 2010). Aikins (2015) also demonstrated that conflicts of interest could arise where company management has the dual role of forming, selecting, and interacting with audit committee members after their appointment. These issues should be compensated if the audit committee is to be effectively used.

The effective use of audit committees to mediate relationships among stakeholders involved in financial management has important implications for perceptions of audit quality. Auditors, audit procedures, and produced audit reports are perceived to be of higher quality when audit committees are involved (Cagle & Pridgen, 2015; Modlin, 2014, 2016; Pridgen & Wang,

2012; Samelson et al., 2006). These outcomes hinge on the behaviors of all stakeholders; for example, auditors who are more communicative are perceived as more competent, and companies who interact with auditors and respond to benchmarks set in audit reports are perceived as more effective. Because audit committee members can play a direct role in facilitating these communications, the committee may be pivotal to enhancing audit quality (Aikins, 2012; Cagle & Pridgen, 2015). Moreover, company financial management are moving away from the use of overall performance management systems due to costs of installing and maintaining complex systems (Sanger, 2013). However, evidence supports that formation of an audit committee alone can affect the quality of financial management through enhancing the company's organizational structure. This suggests that the use of an audit committee may well serve as a lower cost partial solution for improved performance (Rich & Zhang, 2014).

Researchers have begun to seek solutions that are based on dynamic models of performance management for companies (Bianchi & Williams, 2015). This is opposed to the system-wide models of performance measurement used to meet static regulatory requirements (Aikins, 2015; Sanger, 2013; Simon & Bernardo, 2015). These dynamic models include shifts in organizational structure, and significantly, behaviors of stakeholders. Bianchi and Williams (2015) criticized static, whole organization performance management systems in practice and as an empirical-theoretical research approach because these systems do not capture a key component: changing behaviors of employees and other stakeholders in response to performance measurement. Furthermore, these authors assert that such systems fail because they do not capture the full context of decision-makers in responses to changing participants' behaviors.

Part of the issue for the public sector may be the challenge of dealing with the diversity of stakeholders and their agendas. For example, the outcomes of performance measures may be communicated with stakeholder voters, customers, employees and appointed officials – all of

whom may need to be informed and adaptively involved with performance measures and change their behaviors (Bianchi, 2012). For instance, benchmarks of financial status such as budgets are often short-term and in practice, performance measures for budgeting do not reflect the underlying behavioral interactions of stakeholders. Vakkuri and Meklin (2006) showed that a performance tool such as budget setting can become a game by which companies gain political control of employees at a work setting. It may be that communicative behaviors of audit committee members and key stakeholders are critical to successful use of an audit committee as a dynamic tool to govern financial accountability (Aikins, 2012; Cagle & Pridgen, 2015).

Summary of audit committee functions. The audit committee functions for the public sector include improvement of company fiscal control (Baber et al., 2013; Fitzgerald & Giroux, 2014; Rich & Zhang, 2014; Zhang & Rich, 2016), reduction and prevention of fraud through added oversight and more favorable government financing. Rather than viewing audit committee as a group which acts on discreet and independent activities, some experts have proposed that the role of audit committees in the public sector is that of a “gatekeeper” in which a balance is maintained to hold companies to accuracy and accountability in financial statements and tax reporting while maintaining flexibility to meet the mission of the organization (Beattie et al., 2014). An audit committee may play a pivotal role in helping to maintain sound financial control, offering advice, and guidance, and reporting potential fraud (Bruynseels & Cardinaels, 2014; Kilgore et al., 2014; Phillips & Dorata, 2013).

As described above, the level of independence is a measure used to indicate whether an audit committee is positioned to provide impartial assessments to maintain balance and unbiasedness as a key characteristic for committees. To summarize this discussion, the circumstances and environment of individual jurisdictions, even across those within a single state, can contribute to unique factors for decisions related to use and functions of an audit

committee. The crucial idea is that participants in this study have a clear definition of what constitutes audit quality.

Evaluations of Auditing: Audit Quality

Issues of how and when to uniformly use or require audit committees are also confounded by a lack of consistent definition of audit quality (Cagle & Pridgen, 2015; Kilgore et al., 2014; Knechel, 2015). If the audit committee is to oversee the fundamental function of auditing, first and foremost, then an accepted definition of audit quality would be useful for ensuring a configuration for an effective committee. For example, the more well-defined uses of the term quality might include a measure of adherence to GAAP, GASB, and GAS policies as applicable to the circumstances (Samelson et al., 2006). Even so, as indicated above, how these standards are used at organizational levels can be variable, and methods to compare actions to standards has been considered as inadequate in capturing some important aspects of quality (Kilgore et al., 2014; Knechel, 2015). These other measures and qualitative-descriptive assessments used include counts of auditing exceptions revealed in audit reports as a way to operationalize quality, incidence of financial restatements, and the related factor of malfeasance or fraud rotation or independence of auditors and the audit committee, as well as auditor credentials and financing (Aikins, 2012; Beckett-Camarata & Grizzle, 2014; Deis & Byus, 2016).

The problem is further confounded by researchers and practitioners who may use the terms effectiveness, quality, and satisfaction interchangeably with quality or distinctively without consistent context for its use (Kilgore et al., 2014; Knechel, 2015). Thus, there are some inconsistencies in trying to compare studies using different definitions and then to empirically analyze how companies may evaluate audit quality (Cagle & Pridgen, 2015; Carslaw et al., 2012; Khumawala et al., 2014; Ruppel, 2017). Several definitions of quality include multiple

dimensions, such as counts of audit exceptions and stakeholder perceptions of quality dimensions.

Some researchers have found that these measures of audit quality are comparable to the measures of stakeholder satisfaction even without considering the many potential complex relationships between quality and satisfaction (Böhm et al., 2016; JV Carcello, 2012). For example, in a seminal study of company audit satisfaction, Samelson et al. (2006) found that the attributes of quality and satisfaction predicted stakeholder perceptions of quality equally well; thus, allowing some use of the terms interchangeably. These attributes included behaviors related to communicativeness and service-oriented efforts as well as procedural behaviors and field audit practices by the auditors and the auditees (Aikins, 2012). The role of audit committees also includes reconciling or mediating differences through relationships between management and external or state auditors (GFOA, 2018). Therefore, the quality of communications, behaviors, and relationships among parties can become a part of overall perception of a high-quality audit in the public sector (Aikins, 2012; Modlin, 2014).

The acceptance of audit report recommendations by the auditee is one of the constructs associated with both quality and satisfaction by auditees. Audit committees can play a pivotal role in the acceptance of audit findings and the successful responses to audit exceptions that are found. Audit quality and satisfaction perceptions can be enhanced by the presence of an audit committee (Aikins, 2012; Cagle & Pridgen, 2015; Modlin, 2014). Thus, the benefit of an audit committee may be seen through the potential to gain acceptance of findings by the auditee and through increased perceptions of quality. The perception of quality in this circumstance has been considered as a mark of audit committee effectiveness (Cagle & Pridgen, 2015).

Attempts to benchmark standards for evaluation of audit quality audit committee effectiveness are problematic due to differences in auditing requirements and procedures (Aikins,

2012; Cagle & Pridgen, 2015; Carslaw et al., 2012; Rich & Zhang, 2014). Many studies about quality and use of audit committees use populations within a state or county to minimize these controllable variables, or in the case of qualitative research, to maximize transferability by having defined bounds and details of study explicit (Cagle & Pridgen, 2015; Elder et al., 2015). Comparing results between studies, concerning audit quality, which used different but discrete geographic regions, or those where large samples were drawn over widespread areas, leads to apparently conflicting results that are difficult to interpret. For evaluations of internal auditing and reporting, some researchers have identified differences in procedures and requirements across jurisdictions as an underlying issue when attempting to evaluate audit quality (Cagle & Pridgen, 2015). In studies concerning audit quality, where sampling was performed from a restricted area or region, indications of higher audit quality may have been due to specific knowledge held by auditors (Cagle & Pridgen, 2015; Carslaw et al., 2007, 2012). Thus, irrespective of how quality is assessed, it may be that individual variables must be considered when determining the quality of auditing; this circumstance will affect an audit committee's ability to provide oversight and opinion unless sufficient expertise is available (Elder et al., 2015; Zhang & Rich, 2016). Specific details of auditing are potentially so diverse that it becomes daunting. However, mandated regulations that have some effect can be examined due to their relative transparency. To begin examining distinctions in the regulatory environment for private and public sectors helps to make comparisons of the operating environments for auditing committees more straightforward.

Audit Quality and External Auditing

Some results showed that audit quality tends to be higher that use external auditors who have auditing experience (Elder et al., 2015). In these studies, audit quality was measured as compliance of external auditors with professional standards, thus, the numbers of exceptions to

following these standards found upon review of external auditors' reports would decrease the estimation of audit quality. The problem with generalizing these kinds of results is that there are quality measures used by external auditors, but due to wide differences in accounting and reporting (Khumawala et al., 2014; Ruppel, 2017), ascertaining a consistent audit quality definition to make comparisons across studies becomes less clear consensus definition of audit quality among researchers (Cagle & Pridgen, 2015; Kilgore et al., 2014; Knechel, 2015). For example, in studies where audit quality was based on management perceptions of quality or satisfaction, companies tended to associate auditors and audit committees with industry experience with higher satisfaction and quality of audits (Aikins, 2012; Samelson et al., 2006). In those studies, the perception of audit quality and satisfaction were based on multiple factors, some of which are based on the behavior of auditors and committee members, which are distinct from quality factors such as numbers of exceptions.

Because researchers use these and other distinct definitions for audit quality, it is often unclear to compare results across studies such as those mentioned above. Audit committees are tasked with evaluating auditor performance, and this implies that the committee should adopt a definition that they can apply to audit reports (Elder et al., 2015) and that the committee carries the expertise to make these evaluations. However, inconsistency in definitions of audit quality makes the interpretation of empirical studies about associations between auditor performance, audit quality, and the use of audit committees unclear. Thus, it is unclear how much industry expertise of auditor or audit committee members weighs on the management decisions concerning the use of audit committees (Rich & Zhang, 2014).

Regulation of Auditing and Audit Committees

Because there has been more research concerning regulation of auditing and audit committees used in the private sector in contrast to the public sector (DeFond & Zhang, 2014;

Franzel, 2014), comparisons of research in the two sectors may provide insights into public sector auditing. In both sectors, the presence of fraud and incompetence has been a motivation for regulation and oversight. For discussion in this section, the SOX Act is described, as in the debate concerning its effectiveness and the potential for similar regulations for the public sector. In the context of this proposed study, the most relevant aspect of the analysis of SOX impacts is that federal regulations require the implementation of audit committees (Sneed et al., 2018). The Single Audit Act was enacted to standardize federal audits; however, as discussed below, the regulations present limitations for auditing and effective use of audit committee oversight at the organizational level (Beckett-Camarata & Grizzle, 2014; Elder et al., 2015; Phillips & Dorata, 2013). As explained in the next section, regulation under the Single Audit Act does not necessarily contribute to oversight at the organizational level.

The Single Audit Act. Congress enacted the Single Audit Act to improve the oversight of federal funding allocated to companies. After the passage of this act, it was demonstrated that auditing might not be of sufficient quality. In a nationwide sample, these agencies found that about half of all audits sampled were of substandard quality; reports from the GAO (2016) and Carslaw et al. (2012) found that the problem has continued. Auditing under the Single Audit Act was performed to oversee the allocation and use of federal funds for non-profit organizations that receive at least \$750,000 in funding per year. Those companies meeting the standards for a single audit were required within some voluntary parameters to follow GAAP and GAS standards in their financial reporting. These regulations make financial reporting a complicated endeavor in which audit committees could be useful for oversight at many levels.

Those subjected to single federal audits but have no state-level requirements for GAAP and GAS standards must submit adjusted financial statements that meet Single Audit GAAP requirements when reporting to the federal regulators (GAO, 2016). The federal Single Audits

must be performed by independent external auditors who bear the responsibility to determine the level to which companies have met GAAP standards, based on the Office of Management and Budget (OMB). In addition to federal obligations as in single audits, across the states, there are widely differing requirements for audits (Khumawala et al., 2014; Ruppel, 2017). Given the many permutations that exist across these levels of regulation, the implications are that auditing can be quite complex and external CPA firms were challenged to provide adequate expertise for these services (Elder et al., 2015; Khumawala et al., 2014).

Financial Health and Audit Committees. Audit committee members may need to be well-versed in the distinctions between different requirements; however, evidence supports that a majority of companies may lack sufficient financial expertise on committee (Rich & Zhang, 2014). Some audit committees may not contain members who have insufficient background in accounting or finance to provide oversight, and in particular, to support GAAP standards (Aikins, 2012). However, expertise from committee members who are internal to a company may contribute valuable insights (Rich & Zhang, 2014). The composition and independence of an auditing committee are related and are important considerations. Overall, the requirements for adherence to the federal Single Audit regulations do not necessarily encourage additional oversight by use of an audit committee.

The question of whether auditing has improved would have implications for whether the financial management has improved and by extension whether companies should consider audit committee use (Fitzgerald & Giroux, 2014; Rich & Zhang, 2014; Zhang & Rich, 2016). There is no consensus on whether the quality of audits has improved since the implementation of the Single Audit Act (Cagle & Pridgen, 2015; Carslaw et al., 2012; GAO, 2016; Modlin, 2016; Rich & Zhang, 2014). There is no decisive evidence that fraud in has decreased (Sneed et al., 2018).

The presence of confounding variables such as differences in accounting methods and

differences in how audit quality is assessed, makes comparisons of the effectiveness of management and auditing difficult (Cagle & Pridgen, 2015; Elder et al., 2015). Using data collected over the first 10 years after the Act was implemented, Jakubowski (1995) found that the number of internal control weaknesses found in audits declined in the first four years.

The comparison of data within a state reduces some of the confounding differences in between states. In a longitudinal study of audits that were conducted before 2000, in the state of Florida, audit quality improved across the state for both single audits and other auditing requirements (Cagle & Pridgen, 2015). Another showed improved auditor performance for private external auditors. In a recent study, findings indicated that reporting errors and audit exceptions did not depend on whether the company was also subject to federal single audits. Companies that were not subject to single audits had the same rates of audit issues as did those that were not subject to extensive federal requirements (Modlin, 2016). Modlin's (2016) recommendations were limited because these were explicit to requirements with no mention of oversight through audit committee. The results of this study do not confirm that single audits performed by external auditors provide more effective determination of company fiscal status.

In the recent study conducted by Rich and Zhang (2014), there is indirect evidence that there may be some improvement; survey results from a national sample showed that companies of the size requiring single audits were more likely to have audit committees, and these companies are associated with fewer audit exceptions. In a similar study, improved audit quality was associated with improved fiscal management and the presence of an audit committee (Fitzgerald & Giroux, 2014). Moreover, since those initial years after enactment, the regulatory environment has changed in ways that make evaluation of single audits and other types of public audits less clear. For example, López & Peters (2010) found that in a post-SOX period, independent external CPA auditors found more internal control issues than did internal auditors.

Under the federal SOX regulations for the private sector, external auditors have been held to rigorous standards with legal repercussions if these standards are not met. The SOX regulations for the private sector were enforced in the years after 2002, but these apparently had some “spill-over” effect on public sector auditing. The results suggested that external auditors are more effective in carrying out these mandatory audits than they were before SOX was implemented for the private sector.

Because external auditors’ performance may have improved post-SOX, López and Peters (2010) results implied that external CPA audits may have been improved due to rigorous requirements placed on CPA firms. This interpretation is consistent with some results from the pre-SOX era evaluations of single audits where external auditors found audit exceptions than company-led audits did (Carslaw et al., 2007). Furthermore, because the Single Audit Act requires independent external audits, then these results suggest that public sector auditing may have been improved post-Single Audit and post-SOX. However, in a more recent study where post-SOX data were collected, Carslaw et al. (2012) found that internal auditors tended to uncover more reportable items than external auditors did when performing single audits. In a study of non-profit hospitals subject to single audits, the presence of audit committees and quality external auditors predicted a low incidence of audit exceptions (Cagle & Pridgen, 2015). Thus, it is unclear whether the auditing quality has improved post-SOX or if financial reporting and financial health of companies have improved over time.

SOX for Private Sector Regulation. There has been extensive analysis of post-SOX impacts on corporate performance including the influence of the mandated audit committee use, but debate on its effectiveness and impacts has not reached consensus (Malik, 2014; Sneed et al., 2018). This debate concerning influences of SOX regulation on financial reporting, auditing, and fraud reduction has translated from the private sector into research in the public sector. Some

researchers have advocated the use of SOX-type regulations in the public sector, but others have disagreed (Baber et al., 2013; Sneed et al., 2018). Some of the considerations for use of these regulations include costs, reduction of fraud, improved internal auditing controls, and institution of independent audit committees.

Evidence for dubious and uncertain financial reporting, auditing, and accounting practices in the private sector before 2002 led to the creation of the SOX requirements (Deis & Byus, 2016; Franzel, 2014; Malik, 2014; Sneed et al., 2018). Some specific reasons cited as needs for regulation included public awareness of the increasing scandals and fraud in corporate accounting practices; increased frequency of audit failures as evidenced by financial restatements; increased numbers of bankruptcies in the decades just preceding SOX enactment; and the general problem of how to define audit quality, and its insurance (DeFond & Zhang, 2014). The GAO (2016) issued a specific call to Congress for greater oversight. Some of the most stringent requirements implemented through SOX were the requirements for CEOs, CFOs, and board of directors to have legal fiduciary and personal responsibility for financial statement accuracy and mandatory use of independent external auditors (Franzel, 2014; GAO, 2016; Sneed et al., 2018).

During the framing of the legislation, a need for audit committee supervision was recognized. Mechanisms to alleviate existing oversight issues, as well as those related to the new regulations themselves were needed, and in particular oversight by an independently functioning committee (Franzel, 2014). The need for independent oversight was heightened by the regulatory requirement that independent external audits would be required. Thus, the independence of an audit committee was a key part of the institution of oversight.

In a meta-analytic review of literature, Malik (2014) found evidence that in the post-SOX environment, private sector audit committees' effectiveness, perceived quality and fraud

reduction, and influence with corporate management and boards have grown. An argument for additional regulation similar to those included in SOX is that the growth of fraud in the private sector has decreased post-SOX implementation, but there is no clear evidence that fraud in companies has decreased over this period and may be rising (Sneed et al., 2018). Some examples of fraud in school boards demonstrate that requirements of audit committees have been effective in reducing fraud and restoring public confidence (Elder & Yebba, 2017; Phillips & Dorata, 2013). These kinds of case studies of companies provide insight into potential benefits of audit committees, but the caveat remains that distinctions in financial practices and regulations across states make comparisons between studies unclear.

In a survey of company management, participants ranked auditor and audit committee independence as specified in SOX regulations as important. Furthermore, these participants ranked monitoring of internal controls, fraud, and penalties for destruction of records as important issues that could be regulated by companies since these are for the private sector through SOX (Reinstein et al., 2014). In the corporate sector, audit committees are shown to contribute to successful oversight of these functions (Malik, 2014). Some survey results indicated that company management did not perceive a need for audit committees since they believed that the internal controls they had were sufficient (Matkin, 2010). There have been no recent studies that surveyed company management as to how and why they may choose to form audit committees.

An initial concern raised after SOX implementation was that direct costs might increase due to increased mandatory external audits (Rich & Zhang, 2014). While cost burdens may have been greater for smaller publicly held entities in the early years following implementation, costs across the board for firms of varying sizes have decreased over time. The potential for increased costs for companies is an argument against additional regulations (Franzel, 2014). Oversight

through regulation even at the organizational level may lead to differences in tax costs through costs of restatements, issuing debt, and external auditor fees (Baber et al., 2013; Elder et al., 2015; Rich & Zhang, 2014). The costs associated with increased oversight can be formidable for companies; however, Matkin (2010), in a national level study, did find that use of oversight committees introduced an improvement in financial control.

Costs of maintaining oversight structure and lack of expertise are issues that may impinge on formation of an audit committee (Elder et al., 2015). As noted in the discussion of Single Audit Act's effectiveness and impacts on company financial management, there may be some effects post-SOX on external auditing quality from which companies have benefited (Carslaw et al., 2012; López & Peters, 2010). The interpretation of these findings does not lead to a clear conclusion that imposition of similar regulations on the external auditing in companies would contribute to improving financial control. Companies indicated that SOX-type regulations could be implemented in companies to regulate issues related to internal financial control and independence in auditing and oversight by the committee but these results did not reveal how and why companies may decide to use audit committee oversight voluntarily (Reinstein et al., 2014).

Summary

Oversight or audit committees contribute to the monitoring of quality by providing independent reconciliation/evaluation of auditor reports and increasing the perceived quality of the audit for the auditees, auditors, and potentially the public (Kilgore et al., 2014; Phillips & Dorata, 2013). Audit committee oversight is recognized for both the public and private sectors and is needed to monitor audit quality, reduce potential fraud, and refine regulatory procedures (Deis & Byus, 2016; Sneed et al., 2018). The ability of an audit committee to conduct oversight activities with independence is essential to its effectiveness. However, some experts have

questioned whether audit committees need to be fully independent because internal auditing is specialized in nature (Alzeban & Sawan, 2015; Malik, 2014; Rich & Zhang, 2014; Sneed et al., 2018).

Despite some apparent advantages of audit committee use, many companies do not have full-time committees in place (Fitzgerald & Giroux, 2014; Rich & Zhang, 2014). It remains unclear whether current federal regulatory acts have contributed to company auditing quality and motivations for using audit committees. It is also unclear as to whether fraud has been reduced by regulations. Due to the complex differences in auditing practices across the country, comparisons to how well audit committees may contribute to an oversight remains unclear. Interest in audit committees has developed due to fiscal concerns in the private sectors public sectors, and with the federal and state regulatory developments (Sneed et al., 2018). The aim of this proposed study was to gain some understanding of how and why company financial management may choose to use audit committee oversight as a tool. Chapter 3 describes the purpose of the study as well as the quantitative research design, and methods used to help fill that gap.

Chapter 3: Research Method

Even though audit committees may provide some advantages in financial auditing, it is unclear why and how some companies make decisions to forego an audit committee oversight. Without an audit committee, a company may experience poor financial performance, such as budget deficits and instability (Fitzgerald & Giroux, 2014; Rich & Zhang, 2014). Moreover, some companies with audit committee experience have fewer financial problems (Zhang & Rich, 2016). The purpose of this quantitative meta-analysis was to examine the positions and experiences of companies regarding decision-making processes as to how and why audit committees were (not) chosen and utilized. The researcher sought to understand the perspective of companies about what motivated them to authorize an audit to review. The study was also being undertaken to understand the decision-making processes and reasons each company used as a basis for choosing, forming, or authorizing an audit committee. This chapter comprises a description of the design and research methodology. The description is followed by a justification of why the design and research methods were chosen for this study. Other information contained in the present chapter also includes study procedures, assumptions, limitations, ethical assurances, and delimitations.

Research Methodology and Design

The present study was being conducted as a quantitative meta-analysis. Meta-analyses are beneficial because they utilize the results of multiple studies, leading to a more advanced and comprehensive analysis, as opposed to a singular analysis. The use of the meta-analysis has several advantages. To begin with, meta-analyses are beneficial because they allow the results to be generalized for a larger population. Second, because more data were used (through the inclusion of multiple studies) the estimate accuracy is improved. Third, inconsistent results that may exist within the individual studies can be quantified and analyzed effectively. Fourth,

hypothesis testing can be applied on summary estimates. Fifth, the variation between individual studies can be explained using moderators. Sixth, publication bias can be investigated more easily (Greenland & O'Rourke, 1998; E. Walker et al., 2008).

Meta-analyses are beneficial because of the ability to engage in quantitative analysis for the systematic assessment of prior research studies. While individual conclusions can be drawn from the sample, comprehensive conclusions can also be drawn from continuing quantitative analysis (Greenland & O'Rourke, 1998; E. Walker et al., 2008). Meta-analysis outcomes may yield a more precise estimate of the phenomenon of interest – such as criteria for (not) using an audit committee – through pooled analysis techniques. Heterogeneity and variability in the study results from the comprehensive study represents a critical outcome, as does the consolidation of a large sample. Erroneous conclusions may be drawn if there was not a sufficient number of studies (Greenland & O'Rourke, 1998; E. Walker et al., 2008). The goal of the proposed study was to understand whether the decision-making process used by each company was related to rational or intuitive styles of decision-making. It was also to understand how and if issues influenced company management support of the use of an audit committee. A quantitative study was appropriate for the research because it allowed for a larger sample size, increasing understanding of the factors that impact decision-making (Greenland & O'Rourke, 1998).

Population and Sampling

The present study was based on secondary data obtained from prior studies. *Google Scholar* was used for the primary search. The time frame was from 1994 to 2019 to allow for a large time period (25 years). In the following table, the first column shows the search term and/or phrase. The second column shows the number of possible inclusions based on the search term and/or phrase alone. The third column shows the number of possible inclusions based on the search term and/or phrase using the Boolean operator 'and.' The final column shows the number

of possible inclusions based on the search term and/or phrase using the Boolean operator ‘or.’ In each of these columns, the values were in thousands. Table 1 represents the population for the present study.

Table 1
Data Search Outcomes

Search Term/Phrase	I	BO (AND)	BO (OR)
Decision for audit committee	312.2	513.9	546.4
Impact of audit committee	389.8	590.4	473.1
Characteristics of audit committee	493.6	381.3	570.4
Board of director characteristics audit committee	599.6	301.3	380.9
Audit committee company earnings	334.5	466.3	499.1
Risk management audit committee	553.3	313.8	502.5
Risk management company earnings	575.0	411.1	418.7
Risk management corporate governance	585.3	300.2	367.6
Audit committee fraud	554.8	512.7	498.9
Financial statement fraud audit committee	548.1	493.8	562.7
Audit committee quality	384.4	585.4	336.0
Audit committee internal control	565.0	516.5	374.3
Audit committee independence	363.0	335.9	421.8
Audit committee impact earnings	323.0	322.0	485.0
Audit quality impact	323.3	574.0	307.7
Totals	6,904.9	6,618.6	6,745.1

To be considered for inclusion, the full-text PDF had to be available. This eliminated an estimated 60% of the possible inclusions from 202,686,000 to 81,074,000. These titles were checked for being in the English language, leading to a reduction of 5% of the 81,074,000 to 77,021,000. Next, the abstracts were reviewed to determine the type of study, where the studies considered for inclusion were quantitative or empirical in nature. Due to this requirement, 75% of the 77,021,000 were excluded, making the possible pool 19,255,000.

For each of the search terms and/or phrases (and combinations thereof), the first 10 valid possibilities based on being full-text and in English, were considered. This led to a potential selection of 450. The titles of the articles were entered into Microsoft Excel. First, the articles were sorted alphabetically. Next, using the *rand ()* function, a random number was placed in the

next column for each of the articles. Finally, the articles were re-sorted based on smallest to largest by the random number generated. With this random selection, a quality assessment matrix was completed.

The quality assessment matrix was modified from Downs and Black (1998) tool used within the medical field. This assessment tool was beneficial because it collects information about independent studies and provides a score based on the number of ‘yes’ responses to each question. The questions were shown below.

- Was the study published between 1994 and 2019?
- Was the study related to the topic of audit committees and decision-making relating to the use of audit committees?
- Does the study contain empirical/quantitative data?
- Was the study written in a clear and logical manner?
- Were the different sections of the study clearly titled and separated?
- Was the purpose/objective of the study clear?
- Does the author provide a transparent methodology that can be replicated?
- Were the findings presented in an easy-to-follow way?
- Were the findings presented based on the preceding methodology?
- Does the author offer clear conclusions and recommendations?

As can be seen, each of these questions may be answered with a ‘yes’ (worth one point) or ‘no’ (worth zero points). Upon answering each question, the number of ‘yes’ responses were totaled for each source; the quality ranges possible were 0 to 3 (low quality), 4 to 6 (moderate quality), and 7 to 10 (high quality). In order to be included in the present study, the individual sources had to have a quality score of at least 6. The first 34 studies that met this requirement were included

in the present study as the sample (see Appendix A). The average quality score was 7.6, representing an overall high quality of sources.

Materials

The materials for the proposed study were secondary data sources from prior researchers. These materials, specifically, were prior research studies conducted. The studies were found based on the procedures in the prior section. No permissions were required as the studies were previously published and were publicly available.

Operational Definitions of Variables

The means and standard deviations were obtained for Likert scale statements (referring to studies where participants provided opinions regarding specific statements) regarding the variables: use of audit committee for the prevention of fraud, obtaining better financial statements, increased shareholder trust, improved transparency, and better oversight of accounting policies and activities. The scales found in the studies were based on 1 to 5 scale, where 1 meant the participant strongly disagreed and 5 meant the participant strongly agreed. Likert scale statements of interest were regarding the high cost, the belief of the effectiveness of the current policy, the current use of internal controls, and the lack of requirement to use audit committees, and regarding preference of using audit committees to meet legal standards. The operational definitions of variables were described below.

Table 2
Operational Definition of Variables

Variable	Operational Definition	Type
Prevention of fraud	Measured through a Likert scale of 1 to 5 (strongly disagree to strongly agree) and is based on the perceptions of the participant regarding audit committees and their impact on prevention of fraud	Ordinal
Obtaining better financial statements	Measured through a Likert scale of 1 to 5 (strongly disagree to strongly agree) and is based on the perceptions of the participant regarding audit committees and their impact on obtaining better financial statements	Ordinal

Better oversight of accounting policies and activities	Measured through a Likert scale of 1 to 5 (strongly disagree to strongly agree) and is based on the perceptions of the participant regarding audit committees and their impact on better oversight of accounting policies and activities	Ordinal
High cost	Measured through a Likert scale of 1 to 5 (strongly disagree to strongly agree) and is based on the perceptions of the participant regarding the high cost of implementing an audit committee	Ordinal
Effectiveness of the current policy	Measured through a Likert scale of 1 to 5 (strongly disagree to strongly agree) and is based on the perceptions of the participant regarding how audit committees are not needed because of the effectiveness of the current policy	Ordinal
Current use of internal controls	Measured through a Likert scale of 1 to 5 (strongly disagree to strongly agree) and is based on the perceptions of the participant regarding how audit committees are not needed because of the current use of internal controls	Ordinal
Lack of requirement to use internal controls	Measured through a Likert scale of 1 to 5 (strongly disagree to strongly agree) and is based on the perceptions of the participant regarding how audit committees are not needed because there is a lack of requirement to use internal controls	Ordinal
Meet legal standards	Measured through a Likert scale of 1 to 5 (strongly disagree to strongly agree) and is based on the perceptions of the participant regarding of how audit committees are not needed to meet legal standards	Ordinal

Study Procedures

Data were collected based on the terms identified in the population and sampling section. The collected data were synthesized for the creation of a single data set for answering the hypothesis. This is described in the following section.

Data Collection and Analysis

Data were obtained, as discussed previously, for the studies of interest. Descriptive statistics were obtained from the individual studies. This includes the number of participants and the factors impacting the decision to (not) implement an audit committee. The statistics obtained were the mean and standard deviation.

A forest plot was constructed to provide a graphic representation of the estimated results from the meta-analysis and the individual studies (Lalkhen & McCluskey, 2008). The forest plot includes the measure of effect, typically the odds ratio, for the individual studies. When engaging in plotting, the studies were ordered chronologically, where no significance was based on the order of individual studies. The measure of effect was used to show symmetrical results without emphasizing the ratio differences (Lewis & Clarke, 2001). The difference being considered was the standardized mean difference, leading to the calculation of confidence intervals. It was recognized that less reliable data may be found if the confidence intervals have greater range. Forest plot weights were based on the percentage derived from number of individual study participants against total participants in all studies. Next, the descriptive statistics were combined to create a single set of descriptive statistics for the present study based on all remaining studies after eliminating outliers – resulting in a mean, standard deviation, kurtosis and skewness, coefficient of variation, minimum, and maximum. The standardized residuals were determined to see if the data were normalized. If not, the data were normalized through using the natural log of the values collected – a common mechanism used for normalization purposes (Greenland & O'Rourke, 1998; E. Walker et al., 2008). The weights were recalculated based on the finalized data set. Hypothesis testing was conducted using the chi square test of independence based on the confidence intervals.

Assumptions

Despite the many benefits of the meta-analysis, there were also some limitations. To begin with, the use of several smaller studies within a meta-analysis does not allow for comprehensive predictions of a large study. Moreover, it may not be possible to control bias in the comprehensive study, nor can the researcher correct any bias that may have been found in individual studies. It was assumed that the data from the studies are accurate. The normalization

of data assisted in correcting this limitation, as did the inclusion of methodologically sound studies (LeLorier et al., 1997).

Limitations

Some opponents of the meta-analysis recognize that there were concerns relating to publication bias. Individual studies with no expected publication bias were found within the normalized plots on the forest plot – meaning, they were not outliers. The exclusion of outliers assisted in reducing publication bias (Rosenthal, 1979). Secondary data are limited in that it is based on the original researcher’s interpretation. Meta-analyses are also limited in relation to the procedures that must be followed.

Delimitations

Because the data obtained were based on summary data, hypothesis testing was being conducted using the Chi square. Thus, only one weight method was used. The previously described method of determining weights based on participants were used for the chi square test (Greenland & O’Rourke, 1998). Another limitation was the time frame of 1994 to 2019.

Ethical Assurances

The study was based on secondary data. Moreover, IRB confirmed that the study does not involve human subjects. Therefore, no ethical requirements exist in relation to the sample. The researcher treated all data with the same viewpoints and which were unbiased in data selection and analysis. The data were stored as an encrypted file on a password-protected USB drive and will remain there for at least 3 years. While it was assumed that the original authors followed the appropriate ethical procedures when conducting their studies, the present author continued to ensure that data are kept confidential through ensuring that summary statistics were used and the data were kept secured.

Summary

The meta-analysis was being used for the completion of the present study and was based on quantitative data from up to 75 sources. The original 75 sources were treated and checked for outliers. Sources that were outliers were eliminated from the final sample size. The meta-analysis approach was beneficial because accurate results cannot be obtained through one study because all studies have different outcomes. The meta-analysis allows similar studies to be compared and a comprehensive set of results to be established. The important consideration is that secondary data has already been interpreted, so it is important to treat the data fairly and without bias, even as it is recognized that the prior interpretation may be inaccurate. The next chapter contains the outcomes of the methodology process.

Chapter 4: Findings

This quantitative meta-analysis was designed to assess the decision-making processes regarding how and why audit committees were chosen and used. The present study contributed to the understanding of motivations for audit committee implementation and the decision-making process. The research question utilized in the present study was designed for addressing the problem associated with decision-making in the use of audit committees in financial management. This particular study is of important because it provides insight into the decision-making process regarding audit committees and audit oversight (Fitzgerald & Giroux, 2014). This significance is derived from the far-reaching consequences that are possible from the decision to or to not utilize an audit committee on different issues, such as debt financing and internal accounting control and fraud prevention (Beckett-Camarata & Grizzle, 2014; Rich & Zhang, 2014; Vollmer, 2016; Zager et al., 2016; Zhang & Rich, 2016). The remainder of the present chapter contains information regarding how the study was conducted and the outcome of that procedure.

Description of Populations Used

Study data may be found in Appendix B. Much of the analysis was based on the number of participants per each study. This information is summarized in the following table.

Table 3
Study Participants

Study	Number of Participants
Abdullah (2006)	643
Aikins (2015)	515
Badara and Saidin (2014)	321
Beasley (1996)	339
Beattie et al. (2014)	198
Bédard and Paquette (2010)	972
Benjamin and Karrahem (2013)	460
Böhm et al. (2016)	222
Bradbury and Mak (2004)	614
Carcello et al. (2006)	192

Christ et al. (2015)	825
Christensen et al. (2019)	970
Cohen et al. (2014)	128
DeZoort et al. (2002)	287
Dionne and Triki (2005)	661
Emeh and Appah (2013)	292
Enofe et al. (2013)	579
Hayek (2015)	482
Islam et al. (2010)	163
Ittonen et al. (2010)	382
Klein (2002)	396
Lennox and Park (2007).	725
Li et al. (2012)	273
Mangena and Tauringana (2008)	665
Matkin (2010)	333
Owolabi and Dada (2011)	511
Qi and Tian (2012)	541
Scarborough and Raghunandan (1998)	388
Srinivasan and Richardson (2005)	764
Sutopo et al. (2017)	391
Wilbanks et al. (2017)	638
Wu et al. (2016)	365
Zager et al. (2016)	491
Zain et al. (2006)	195

The total sample size was 15,923 participants across 34 studies. This leads to an average of 468.3 participants per study. The following table shows the descriptive statistics (mean (M), standard deviation (SD), kurtosis (K), skewness (S), coefficient of variation (CV), minimum (MIN), and maximum (MAX)) of the demographic information collected. The second column of the table also shows mean (M) and standard deviation (SD). This denotes the mean and standard deviation of the variable under consideration, of which descriptive statistics were obtained.

Table 4
Demographic Information Descriptive Statistics

		M	SD	K	S	CV	MIN	MAX
Decision to use audit committees	M	0.46	0.29	-0.74	0.40	62.94%	0.03	0.99
	SD	0.48	0.30	-1.00	-0.10	62.71%	0.00	0.97
Decision to not use audit committees	M	0.53	0.29	-1.08	-0.37	54.55%	0.01	0.92
	SD	0.45	0.27	-0.78	0.47	59.23%	0.01	0.99
Improved	M	0.49	0.25	-0.38	-0.04	52.20%	0.00	0.96

earnings	SD	0.50	0.31	-1.20	0.08	62.22%	0.02	1.00
No	M	0.56	0.30	-1.24	-0.17	53.98%	0.02	0.99
improved earnings	SD	0.61	0.28	-0.92	-0.47	46.12%	0.04	1.00
Asset size	M	12.52	1.80	-1.33	0.28	14.37%	10.15	15.82
	SD	4.34	2.62	-1.01	-0.23	60.47%	0.16	8.78

There was a higher decision to not use audit committees (0.53) than there was to use audit committees (0.46) per the means of the studies. However, the standard deviations in both cases were similar (0.48 as compared to 0.45), suggesting that there was little variance. The kurtosis and skewness in both categories (decision to use audit committees and decision to not use audit committees) both show a distribution that was normal at -3 to 3. The coefficient of variation for the decision to use audit committees was higher than the decision to not use audit committees. It was also noted that the mean for no improved earnings (0.56) was higher than that of improved earnings (0.49). Again, in both cases, the kurtosis and skewness showed a normal distribution. The coefficient of variation was higher in the case of improved earnings than the case of no improved earnings. Finally, the asset size has a normal distribution through the kurtosis and skewness, where the largest asset size was 15.82 and the smallest was 10.15.

Treatment of Data for Hypothesis Testing

The collected data from the studies were the mean and standard deviation, which may be used to determine the upper and lower confidence interval. Using Microsoft Excel, the confidence interval may be calculated as: $X \pm C$. In this case, X represents the sample mean and C refers to the outcomes of the function $=confidence(A,SD,X)$, where A represents the alpha of 0.05 (a standard value used for hypothesis testing purposes), SD represents the standard deviation, and X represents the sample size (number of participants) (Lalkhen & McCluskey, 2008). The upper confidence intervals (UCI) and lower confidence intervals (LCI) were shown in the following two tables, where the variables were simply listed as A to E for space conservation

reasons but can be seen in Table 3. Table 5 shows the confidence intervals for the implementation of audit committees.

Table 5
Confidence Intervals for Implementation of Audit Committees

Study	A		B		C		D		E	
	UCI	LCI	UCI	LCI	UCI	LCI	UCI	LCI	UCI	LCI
1	2.87	2.78	1.03	1.01	1.97	1.82	1.58	1.45	4.37	4.36
2	4.17	4.17	2.29	2.27	1.94	1.88	5.04	4.90	3.13	3.01
3	2.44	2.42	3.62	3.56	3.64	3.56	5.04	4.96	3.91	3.89
4	1.51	1.31	4.17	4.01	3.62	3.41	2.31	2.12	4.92	4.88
5	5.31	5.17	1.64	1.46	4.25	4.13	2.39	2.11	1.47	1.31
6	1.30	1.27	2.71	2.62	3.91	3.80	3.07	3.06	1.99	1.92
7	3.55	3.43	1.92	1.78	3.54	3.51	1.63	1.50	1.25	1.08
8	2.97	2.73	1.67	1.57	1.33	1.23	1.32	1.28	5.31	5.19
9	1.76	1.63	1.56	1.43	4.57	4.55	1.26	1.18	4.98	4.93
10	4.54	4.35	4.72	4.50	2.15	2.11	4.58	4.35	4.81	4.76
11	4.32	4.19	4.59	4.46	4.24	4.21	4.19	4.08	2.69	2.61
12	2.75	2.75	4.33	4.29	2.26	2.21	2.04	1.98	4.23	4.21
13	1.47	1.37	1.83	1.53	3.17	2.88	2.21	1.96	3.02	2.73
14	1.20	1.05	2.42	2.22	4.87	4.65	2.96	2.82	2.75	2.73
15	3.58	3.49	4.84	4.71	3.42	3.31	2.72	2.60	4.36	4.33
16	2.92	2.83	3.10	3.03	1.58	1.41	4.02	4.02	1.56	1.41
17	2.49	2.37	2.82	2.76	1.83	1.79	1.86	1.76	4.39	4.29
18	3.89	3.75	4.04	3.98	5.76	5.74	4.33	4.21	3.52	3.42
19	2.09	1.95	4.76	4.68	4.30	4.16	3.14	2.84	2.63	2.34
20	3.11	2.94	4.77	4.73	1.52	1.51	4.47	4.33	3.66	3.51
21	4.57	4.48	1.24	1.13	1.73	1.57	3.41	3.35	4.23	4.14
22	3.47	3.36	2.73	2.60	3.88	3.79	2.72	2.59	1.18	1.11
23	2.11	2.07	2.87	2.83	3.24	3.14	2.19	2.19	1.80	1.60
24	2.96	2.93	2.94	2.80	3.90	3.80	2.55	2.44	4.99	4.93
25	1.30	1.12	4.41	4.21	2.88	2.86	5.82	5.80	4.45	4.37
26	2.17	2.16	4.94	4.77	3.47	3.41	2.81	2.70	2.53	2.41
27	3.47	3.45	2.62	2.61	3.77	3.68	4.02	3.95	3.66	3.60
28	3.07	3.02	3.92	3.85	4.23	4.09	4.00	3.90	1.19	1.01
29	1.57	1.55	4.69	4.68	1.04	0.97	2.53	2.50	2.81	2.79
30	3.36	3.28	5.14	5.02	5.33	5.29	2.63	2.61	2.88	2.80
31	3.40	3.40	5.87	5.73	2.05	2.01	4.42	4.40	4.98	4.88
32	5.05	4.89	2.82	2.80	3.41	3.39	2.13	1.99	2.59	2.55
33	3.73	3.65	2.01	1.87	1.39	1.35	4.17	4.07	2.19	2.07
34	4.22	4.21	3.15	2.95	3.07	3.01	3.99	3.84	4.47	4.33

Table 6
Confidence Intervals for No Implementation of Audit Committees

Study	A		B		C		D		E	
	UCI	LCI	UCI	LCI	UCI	LCI	UCI	LCI	UCI	LCI
1	1.68	1.66	2.43	2.41	3.78	3.67	2.44	2.40	3.18	3.13
2	4.97	4.93	5.50	5.44	2.27	2.19	3.74	3.58	3.63	3.61
3	2.96	2.86	2.75	2.55	5.87	5.67	5.05	4.99	4.71	4.57
4	3.65	3.53	1.09	1.01	4.74	4.62	3.19	3.16	3.76	3.68
5	5.76	5.66	3.09	2.85	3.10	3.08	1.33	1.17	4.61	4.45
6	4.01	3.99	2.61	2.59	1.11	1.07	2.87	2.85	3.23	3.13
7	4.83	4.75	1.42	1.35	1.92	1.88	1.95	1.86	4.09	4.03
8	1.30	1.24	2.56	2.48	1.69	1.69	2.72	2.56	2.88	2.82
9	3.11	3.01	3.05	2.90	1.06	0.97	3.38	3.24	2.11	2.01
10	3.94	3.69	1.98	1.96	1.57	1.43	3.00	2.88	2.05	1.98
11	3.09	3.09	4.11	4.04	4.98	4.93	1.19	1.14	2.12	2.06
12	4.66	4.63	1.06	0.98	3.48	3.38	4.20	4.08	4.66	4.56
13	3.12	3.09	2.68	2.51	1.13	0.92	1.72	1.72	4.08	3.91
14	2.24	2.08	4.46	4.36	3.66	3.57	4.65	4.64	4.90	4.82
15	2.37	2.31	4.34	4.28	4.64	4.63	1.47	1.44	2.55	2.52
16	3.78	3.63	3.29	3.27	1.72	1.61	1.70	1.67	1.63	1.59
17	1.62	1.48	2.38	2.38	3.17	3.12	2.92	2.82	4.80	4.71
18	5.06	4.98	3.06	3.00	1.44	1.40	3.44	3.30	1.73	1.63
19	4.16	4.11	3.34	3.06	4.98	4.96	2.78	2.70	4.17	3.89
20	1.64	1.62	1.61	1.42	4.52	4.34	2.94	2.75	4.50	4.31
21	2.04	1.92	3.31	3.21	3.52	3.40	4.29	4.13	2.83	2.76
22	1.53	1.40	1.25	1.24	4.30	4.18	2.79	2.66	4.14	4.04
23	2.89	2.80	1.58	1.35	4.30	4.26	3.16	2.94	1.91	1.84
24	4.73	4.62	2.92	2.91	3.35	3.24	3.27	3.25	1.62	1.48
25	4.03	3.95	4.82	4.66	3.50	3.40	4.60	4.42	3.21	3.19
26	4.70	4.69	2.52	2.45	2.03	1.87	3.36	3.28	2.89	2.73
27	2.72	2.62	2.97	2.87	4.94	4.92	3.55	3.46	4.36	4.28
28	4.39	4.22	2.72	2.70	4.76	4.59	2.27	2.16	3.77	3.71
29	1.91	1.88	3.26	3.13	5.05	4.94	1.21	1.11	2.06	1.92
30	3.53	3.51	5.92	5.80	1.10	0.94	4.47	4.29	5.74	5.70
31	5.49	5.49	3.81	3.75	2.21	2.13	4.82	4.80	3.25	3.17
32	3.51	3.44	2.13	2.03	4.93	4.89	1.34	1.21	2.61	2.49
33	1.97	1.89	3.41	3.27	3.43	3.29	3.87	3.83	2.95	2.83
34	4.35	4.35	1.63	1.52	3.19	2.95	2.78	2.72	2.75	2.53

The confidence intervals were weighted based on the sample size contribution to the total sample. The weights were shown in the following table.

Table 7

Study Weights

Study	Weights
1	4.04%
2	3.23%
3	2.02%
4	2.13%
5	1.24%
6	6.10%
7	2.89%
8	1.39%
9	3.86%
10	1.21%
11	5.18%
12	6.09%
13	0.80%
14	1.80%
15	4.15%
16	1.83%
17	3.64%
18	3.03%
19	1.02%
20	2.40%
21	2.49%
22	4.55%
23	1.71%
24	4.18%
25	2.09%
26	3.21%
27	3.40%
28	2.44%
29	4.80%
30	2.46%
31	4.01%
32	2.29%
33	3.08%
34	1.24%

The next table shows the weighted confidence intervals for the implementation of audit committees.

Table 8

Weighted Confidence Intervals for Implementation of Audit Committees

Study	A		B		C		D		E	
	UCI	LCI	UCI	LCI	UCI	LCI	UCI	LCI	UCI	LCI
1	0.12	0.11	0.04	0.04	0.08	0.07	0.06	0.06	0.18	0.18
2	0.14	0.13	0.07	0.07	0.06	0.06	0.16	0.16	0.10	0.10
3	0.05	0.05	0.07	0.07	0.07	0.07	0.10	0.10	0.08	0.08
4	0.03	0.03	0.09	0.09	0.08	0.07	0.05	0.05	0.10	0.10
5	0.07	0.06	0.02	0.02	0.05	0.05	0.03	0.03	0.02	0.02
6	0.08	0.08	0.17	0.16	0.24	0.23	0.19	0.19	0.12	0.12
7	0.10	0.10	0.06	0.05	0.10	0.10	0.05	0.04	0.04	0.03
8	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.07	0.07
9	0.07	0.06	0.06	0.06	0.18	0.18	0.05	0.05	0.19	0.19
10	0.05	0.05	0.06	0.05	0.03	0.03	0.06	0.05	0.06	0.06
11	0.22	0.22	0.24	0.23	0.22	0.22	0.22	0.21	0.14	0.14
12	0.17	0.17	0.26	0.26	0.14	0.13	0.12	0.12	0.26	0.26
13	0.01	0.01	0.01	0.01	0.03	0.02	0.02	0.02	0.02	0.02
14	0.02	0.02	0.04	0.04	0.09	0.08	0.05	0.05	0.05	0.05
15	0.15	0.14	0.20	0.20	0.14	0.14	0.11	0.11	0.18	0.18
16	0.05	0.05	0.06	0.06	0.03	0.03	0.07	0.07	0.03	0.03
17	0.09	0.09	0.10	0.10	0.07	0.07	0.07	0.06	0.16	0.16
18	0.12	0.11	0.12	0.12	0.17	0.17	0.13	0.13	0.11	0.10
19	0.02	0.02	0.05	0.05	0.04	0.04	0.03	0.03	0.03	0.02
20	0.07	0.07	0.11	0.11	0.04	0.04	0.11	0.10	0.09	0.08
21	0.11	0.11	0.03	0.03	0.04	0.04	0.08	0.08	0.11	0.10
22	0.16	0.15	0.12	0.12	0.18	0.17	0.12	0.12	0.05	0.05
23	0.04	0.04	0.05	0.05	0.06	0.05	0.04	0.04	0.03	0.03
24	0.12	0.12	0.12	0.12	0.16	0.16	0.11	0.10	0.21	0.21
25	0.03	0.02	0.09	0.09	0.06	0.06	0.12	0.12	0.09	0.09
26	0.07	0.07	0.16	0.15	0.11	0.11	0.09	0.09	0.08	0.08
27	0.12	0.12	0.09	0.09	0.13	0.13	0.14	0.13	0.12	0.12
28	0.07	0.07	0.10	0.09	0.10	0.10	0.10	0.10	0.03	0.02
29	0.08	0.07	0.22	0.22	0.05	0.05	0.12	0.12	0.13	0.13
30	0.08	0.08	0.13	0.12	0.13	0.13	0.06	0.06	0.07	0.07
31	0.14	0.14	0.24	0.23	0.08	0.08	0.18	0.18	0.20	0.20
32	0.12	0.11	0.06	0.06	0.08	0.08	0.05	0.05	0.06	0.06
33	0.11	0.11	0.06	0.06	0.04	0.04	0.13	0.13	0.07	0.06
34	0.05	0.05	0.04	0.04	0.04	0.04	0.05	0.05	0.06	0.05

The next table shows the weighted confidence intervals for no implementation of audit committees.

Table 9

Confidence Intervals for No Implementation of Audit Committees

Study	A		B		C		D		E	
	UCI	LCI	UCI	LCI	UCI	LCI	UCI	LCI	UCI	LCI
1	0.07	0.07	0.10	0.10	0.15	0.15	0.10	0.10	0.13	0.13
2	0.16	0.16	0.18	0.18	0.07	0.07	0.12	0.12	0.12	0.12
3	0.06	0.06	0.06	0.05	0.12	0.11	0.10	0.10	0.09	0.09
4	0.08	0.08	0.02	0.02	0.10	0.10	0.07	0.07	0.08	0.08
5	0.07	0.07	0.04	0.04	0.04	0.04	0.02	0.01	0.06	0.06
6	0.24	0.24	0.16	0.16	0.07	0.07	0.18	0.17	0.20	0.19
7	0.14	0.14	0.04	0.04	0.06	0.05	0.06	0.05	0.12	0.12
8	0.02	0.02	0.04	0.03	0.02	0.02	0.04	0.04	0.04	0.04
9	0.12	0.12	0.12	0.11	0.04	0.04	0.13	0.12	0.08	0.08
10	0.05	0.04	0.02	0.02	0.02	0.02	0.04	0.03	0.02	0.02
11	0.16	0.16	0.21	0.21	0.26	0.26	0.06	0.06	0.11	0.11
12	0.28	0.28	0.06	0.06	0.21	0.21	0.26	0.25	0.28	0.28
13	0.03	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.03	0.03
14	0.04	0.04	0.08	0.08	0.07	0.06	0.08	0.08	0.09	0.09
15	0.10	0.10	0.18	0.18	0.19	0.19	0.06	0.06	0.11	0.10
16	0.07	0.07	0.06	0.06	0.03	0.03	0.03	0.03	0.03	0.03
17	0.06	0.05	0.09	0.09	0.12	0.11	0.11	0.10	0.17	0.17
18	0.15	0.15	0.09	0.09	0.04	0.04	0.10	0.10	0.05	0.05
19	0.04	0.04	0.03	0.03	0.05	0.05	0.03	0.03	0.04	0.04
20	0.04	0.04	0.04	0.03	0.11	0.10	0.07	0.07	0.11	0.10
21	0.05	0.05	0.08	0.08	0.09	0.08	0.11	0.10	0.07	0.07
22	0.07	0.06	0.06	0.06	0.20	0.19	0.13	0.12	0.19	0.18
23	0.05	0.05	0.03	0.02	0.07	0.07	0.05	0.05	0.03	0.03
24	0.20	0.19	0.12	0.12	0.14	0.14	0.14	0.14	0.07	0.06
25	0.08	0.08	0.10	0.10	0.07	0.07	0.10	0.09	0.07	0.07
26	0.15	0.15	0.08	0.08	0.07	0.06	0.11	0.11	0.09	0.09
27	0.09	0.09	0.10	0.10	0.17	0.17	0.12	0.12	0.15	0.15
28	0.11	0.10	0.07	0.07	0.12	0.11	0.06	0.05	0.09	0.09
29	0.09	0.09	0.16	0.15	0.24	0.24	0.06	0.05	0.10	0.09
30	0.09	0.09	0.15	0.14	0.03	0.02	0.11	0.11	0.14	0.14
31	0.22	0.22	0.15	0.15	0.09	0.09	0.19	0.19	0.13	0.13
32	0.08	0.08	0.05	0.05	0.11	0.11	0.03	0.03	0.06	0.06
33	0.06	0.06	0.11	0.10	0.11	0.10	0.12	0.12	0.09	0.09
34	0.05	0.05	0.02	0.02	0.04	0.04	0.03	0.03	0.03	0.03

Finally, the upper confidence intervals and lower intervals for each variable were averaged, as seen in the following table. The top rows indicate the variables again with A to J.

Table 10

Averaged Confidence Intervals for Hypothesis Testing

Study	A	B	C	D	E	F	G	H	I	J
1	0.11	0.04	0.08	0.06	0.18	0.07	0.10	0.15	0.10	0.13
2	0.13	0.07	0.06	0.16	0.10	0.16	0.18	0.07	0.12	0.12
3	0.05	0.07	0.07	0.10	0.08	0.06	0.05	0.12	0.10	0.09
4	0.03	0.09	0.07	0.05	0.10	0.08	0.02	0.10	0.07	0.08
5	0.07	0.02	0.05	0.03	0.02	0.07	0.04	0.04	0.02	0.06
6	0.08	0.16	0.24	0.19	0.12	0.24	0.16	0.07	0.17	0.19
7	0.10	0.05	0.10	0.05	0.03	0.14	0.04	0.05	0.06	0.12
8	0.04	0.02	0.02	0.02	0.07	0.02	0.04	0.02	0.04	0.04
9	0.07	0.06	0.18	0.05	0.19	0.12	0.11	0.04	0.13	0.08
10	0.05	0.06	0.03	0.05	0.06	0.05	0.02	0.02	0.04	0.02
11	0.22	0.23	0.22	0.21	0.14	0.16	0.21	0.26	0.06	0.11
12	0.17	0.26	0.14	0.12	0.26	0.28	0.06	0.21	0.25	0.28
13	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.03
14	0.02	0.04	0.09	0.05	0.05	0.04	0.08	0.07	0.08	0.09
15	0.15	0.20	0.14	0.11	0.18	0.10	0.18	0.19	0.06	0.11
16	0.05	0.06	0.03	0.07	0.03	0.07	0.06	0.03	0.03	0.03
17	0.09	0.10	0.07	0.07	0.16	0.06	0.09	0.11	0.10	0.17
18	0.12	0.12	0.17	0.13	0.11	0.15	0.09	0.04	0.10	0.05
19	0.02	0.05	0.04	0.03	0.03	0.04	0.03	0.05	0.03	0.04
20	0.07	0.11	0.04	0.11	0.09	0.04	0.04	0.11	0.07	0.11
21	0.11	0.03	0.04	0.08	0.10	0.05	0.08	0.09	0.10	0.07
22	0.16	0.12	0.17	0.12	0.05	0.07	0.06	0.19	0.12	0.19
23	0.04	0.05	0.05	0.04	0.03	0.05	0.03	0.07	0.05	0.03
24	0.12	0.12	0.16	0.10	0.21	0.20	0.12	0.14	0.14	0.06
25	0.03	0.09	0.06	0.12	0.09	0.08	0.10	0.07	0.09	0.07
26	0.07	0.16	0.11	0.09	0.08	0.15	0.08	0.06	0.11	0.09
27	0.12	0.09	0.13	0.14	0.12	0.09	0.10	0.17	0.12	0.15
28	0.07	0.09	0.10	0.10	0.03	0.10	0.07	0.11	0.05	0.09
29	0.07	0.22	0.05	0.12	0.13	0.09	0.15	0.24	0.06	0.10
30	0.08	0.12	0.13	0.06	0.07	0.09	0.14	0.03	0.11	0.14
31	0.14	0.23	0.08	0.18	0.20	0.22	0.15	0.09	0.19	0.13
32	0.11	0.06	0.08	0.05	0.06	0.08	0.05	0.11	0.03	0.06
33	0.11	0.06	0.04	0.13	0.07	0.06	0.10	0.10	0.12	0.09
34	0.05	0.04	0.04	0.05	0.05	0.05	0.02	0.04	0.03	0.03

Hypothesis Testing

The hypothesis set was:

H1₀. The factors influencing the use of audit committees were not statistically significant when companies were making decisions about the use or lack of use of audit committees in their internal operations.

H1_a. The factors influencing the use of audit committees were statistically significant when companies were making decisions about the use or lack of use of audit committees in their internal operations.

The hypothesis were tested using the weighted confidence intervals from Table 9, which were determined from data from the Abdullah (2006), Aikins (2015), Badara and Saidin (2014), Beasley (1996), Beattie et al. (2014), Bédard and Paquette (2010), Benjamin and Karrahem (2013), Böhm et al. (2016), Bradbury and Mak (2004), Carcello et al. (2006), Christ et al. (2015), Christensen et al. (2019), Cohen et al. (2014), DeZoort et al. (2002), Dionne and Triki (2005), Emeh and Appah (2013), Enofe et al. (2013), Hayek (2015), Islam et al. (2010), Ittonen et al. (2010), Klein (2002), Lennox and Park (2007), Li et al. (2012), Mangena and Tauringana (2008), Matkin (2010), Owolabi and Dada (2011), Qi and Tian (2012), Scarbrough and Raghunandan (1998), Srinivasan and Richardson (2005), Sutopo et al. (2017), Wilbanks et al. (2017), Wu et al. (2016), Zager et al. (2016), and Zain et al. (2006) studies.

The Chi-square test of independence was being used for this analysis at the 0.05 level and was based on observed values (O) and considered to be the averaged confidence intervals, expected values (E),¹ and the test statistic (T).² The final table in this section shows the individual test statistics, the cumulative test statistic and p value. The acceptance or rejection of the null hypothesis is shown after the last table in this section.

Table 11

Chi Square Test of Independence

A	B	C	D	E	F	G	H	I	J
0.00	0.04	0.01	0.01	0.05	0.01	0.00	0.02	0.00	0.01
0.01	0.02	0.03	0.02	0.00	0.01	0.04	0.02	0.00	0.00
0.01	0.00	0.00	0.01	0.00	0.01	0.01	0.01	0.01	0.00
0.02	0.00	0.00	0.01	0.01	0.00	0.03	0.01	0.00	0.00
0.02	0.01	0.00	0.00	0.01	0.02	0.00	0.00	0.01	0.01
0.04	0.00	0.04	0.01	0.02	0.03	0.00	0.06	0.00	0.00
0.01	0.01	0.01	0.01	0.03	0.04	0.01	0.01	0.00	0.02
0.00	0.00	0.01	0.01	0.04	0.01	0.00	0.00	0.00	0.00
0.01	0.02	0.06	0.03	0.07	0.00	0.01	0.04	0.01	0.01
0.01	0.00	0.00	0.01	0.01	0.00	0.00	0.01	0.00	0.01
0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.02	0.07	0.03
0.00	0.01	0.02	0.03	0.01	0.02	0.08	0.00	0.02	0.02
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01
0.02	0.01	0.01	0.00	0.00	0.01	0.01	0.00	0.01	0.01
0.00	0.02	0.00	0.01	0.01	0.02	0.02	0.01	0.04	0.01
0.00	0.00	0.01	0.02	0.01	0.01	0.01	0.01	0.00	0.01
0.00	0.00	0.01	0.01	0.02	0.02	0.00	0.00	0.00	0.04
0.00	0.00	0.04	0.01	0.00	0.01	0.00	0.04	0.00	0.03
0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0.00	0.01	0.02	0.01	0.00	0.02	0.02	0.01	0.00	0.01
0.02	0.03	0.02	0.00	0.01	0.01	0.00	0.00	0.01	0.00
0.01	0.00	0.02	0.00	0.05	0.03	0.03	0.03	0.00	0.03
0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.02	0.00	0.00
0.00	0.00	0.00	0.01	0.03	0.02	0.00	0.00	0.00	0.04
0.03	0.00	0.00	0.02	0.00	0.00	0.01	0.00	0.00	0.00
0.01	0.02	0.00	0.00	0.01	0.02	0.00	0.02	0.00	0.00
0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00
0.00	0.00	0.01	0.00	0.04	0.00	0.00	0.01	0.01	0.00
0.01	0.07	0.04	0.00	0.00	0.01	0.01	0.09	0.03	0.01
0.00	0.00	0.01	0.01	0.01	0.00	0.03	0.06	0.00	0.02

¹ $E = (R \times C) / T$, where R was the row observed value total; C was the observed column total; and T was the total of all observed values.

² $T = \sum \{(O - E)^2 / E\}$, where O was the observed value and E was the expected value.

0.00	0.02	0.04	0.00	0.01	0.01	0.00	0.04	0.01	0.01
0.04	0.00	0.00	0.01	0.00	0.00	0.00	0.02	0.02	0.00
0.01	0.01	0.02	0.02	0.01	0.01	0.01	0.00	0.01	0.00
0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
T statistic									3.922
p value									1.00

The null hypothesis cannot be rejected. The factors influencing the use of audit committees were not statistically significant when companies were making decisions about the use or lack of use of audit committees in their internal operations.

Evaluation of the Findings

In a quantitative study, Zhang and Rich (2016) discovered that usage of an audit committee was predicted by lower financial debt funding and an extra conservative technique to fiscal management. Utilizing a several regression analysis, Zhang and Rich (2016) contrasted companies that increased revenues with tax obligations and straight solution fees to those who made bond concerns and got state or federal financing. These writers found that the presence of an audit committee anticipated lower overall costs, consisting of new financial obligation issues, and tended to have lower tax obligations and straight costs to taxpayers. Companies with an audit committee often tended to have lower overall amounts of financial obligation concern no matter expenses for bond problems (Baber et al., 2013; Zhang & Rich, 2016). These outcomes indicate using audit committees for advisement in structuring financial debt as it relates to take the chance of monitoring. Some company stakeholders view that audit committee oversight has the chance for extra positive financing (Baber et al., 2013; Elder et al., 2015; Fitzgerald & Giroux, 2014; Zhang & Rich, 2016). This finding indicates that the null hypothesis cannot be rejected. The factors influencing the use of audit committees were not statistically significant when companies were making decisions about the use or lack of use of audit committees in their internal operations.

Summary

It was found that the null hypothesis was retained. In comparison to the possibility for reduced financing expenses, there was the possibility for higher financial obligation costs. When sticking to greater audit criteria in addition to roughness of making precise financial declarations, there was a raised chance for mistake if knowledge was not offered (Baber et al., 2013; Rich & Zhang, 2014). If mistakes take place after that financial records were re-issued, these restatements can lead to increased prices of bond problems (Baber et al., 2013; Zhang & Rich, 2016). Discrepancies in financial reports were impactful on financial obligation costs when scams were involved, however even much less serious circumstances such as slowness in coverage can affect prices (Blankley et al., 2015; Pizzini et al., 2015; Zhang & Rich, 2016). Less restatements (Rich & Zhang, 2014) and lower expenses related to the presence of an audit committee (Fitzgerald & Giroux, 2014; Zhang & Rich, 2016). Some companies have indicated that they would prefer committee members with some accounting, management, or finance background; some do not feel that committee oversight was necessary. One of the chief impetuses mentioned for creating and keeping an official audit committee was that of preventing and spotting scams in both the public and private fields (Vollmer, 2016).

Chapter 5: Implications, Recommendations, and Conclusions

Major business fraudulent instances drew much attention before governing initiatives such as SOX (Sneed et al., 2018). Analysis of cases in the general public market has resulted in continuing rate of interest in possible policy of these entities (Denison & Gibson, 2013; Elder & Yebba, 2017). Cases of illegal activity stem from malfeasance by exterior and internal auditors, absence of oversight and interior controls, and whether audit committees give a suitable solution (Elder & Yebba, 2017).

Study of companies with systemic fraudulence highlight the demand for adequate guidance pertaining to companies funding (Sneed et al., 2018). Leaders are expected to exercise bookkeeping techniques and established interior controls. A need for company advancement and neighborhood growth led to attempts to keep tax obligation prices affordable by contrast to other companies. Reduced revenues combined with the region's high leverage setting at some point led to billions in losses after rates of interest turned in a negative means (Matkin, 2010; Park et al., 2017). The costs of installing and maintaining inadequate internal controls can give opportunistic individuals room to commit fraud for personal gain (Jensen & Payne, 2005). Some crimes have occurred over a 20-year span, and this pointed to both the criminal intentions of the individual who set up the scam and the continuing lack of oversight. It seems unlikely that there was potential for inadequate expertise in the vicinity of Washington, D.C. (Sneed et al., 2018; Wells & McFadden, 2010).

Some companies appear to be particularly vulnerable to politics, deliberate fraud, and malfeasance due to reasons that include lack of financial expertise and inadequate budgets to cover the costs of oversight (Huefner, 2011). This lack of expertise may extend to company financial officers as well as to internal, external, and state auditors. However, state auditors appeared to be more accurate in terms of finding a greater number of audit exceptions (Carslaw

et al., 2007). An argument can be made for audit committees with proper expertise as a means to forestall malfeasance and fraud (Rich & Zhang, 2014; Wilbanks et al., 2017). In the private sector, restatement and fraud are negatively associated with high activity level, and experienced audit committees (Abbott et al., 2004); thus, audit committees positively affect financial reporting and internal controls (Franzel, 2014). In a survey of audit committee members from 134 private sector companies, Wilbanks et al. (2017) found that independent audit committees are consistent with decreased fraudulent financial reporting. This chapter will cover the implications, conclusions, and recommendations.

Implications

Given the numbers of both large and smaller companies that do not have audit committees in place and the wide publicity of fraud cases, it was unclear why some companies may not push to have audit committee oversight to forestall fraud and corruption (Fitzgerald & Giroux, 2014; Rich & Zhang, 2014). Pressures from both elected officials and internal politics of company employees can affect the composition of an audit committee. If an audit committee's composition provides balanced views and expertise unfettered by outside influences then conceivably protects a company from political influences both internal and external (Beckett-Camarata & Grizzle, 2014; Matkin, 2010; Rich & Zhang, 2014; Zhang & Rich, 2016).

Much research on audit committee independence from influence was related to the private sector analysis. Findings from both the private and public sectors have supported that even in the post-SOX regulatory environment, the ability of an audit committee to conduct oversight activities with independence is essential to its effectiveness (Alzeban & Sawan, 2015; Malik, 2014; Sneed et al., 2018). In companies where there are some committee members who are independent (i.e., have no financial or personal conflicts of interest), the implementation of auditor recommendations is perceived to occur more effectively (Alzeban & Sawan, 2015). There

is an apparent need for independence among those who are external auditors versus internal auditors and the management, and similarly between audit committee members and other stakeholders. Baber et al. (2013) defined independence of an audit committee as lack of bias and conflict of interest as involved in oversight. As part of an effective internal auditing control, independence represents freedom of internal auditors to conduct their duties apart from those companies to whom they report.

Issues related to audit committee independence have been studied extensively in the private sector but less so in the public sector (Elder et al., 2015; Fitzgerald & Giroux, 2014; Rich & Zhang, 2014; Zhang & Rich, 2016). If the independence of the audit committee fits the accepted definitions, then it is assumed that members can facilitate the oversight of the auditing if committee members do not play dual roles within an entity. However, some have argued that expertise in auditing was singular for specialized knowledge needed for accounting and financial practice, and the duality of roles for committee members and other stakeholders in this context was beneficial (Aikins, 2012; Rich & Zhang, 2014; Zhang & Rich, 2016). For example, financing of operations peculiar to the nonprofit public sector was quite distinct from the raising of capital and debt structure of private sector concerns. Some evidence supports that those with specific knowledge, such as internal auditors, may provide more effective oversight than outsiders can (Aikins, 2012; Elder et al., 2015; Rich & Zhang, 2014; Zhang & Rich, 2016). Furthermore, some survey evidence supported that organizational knowledge is preserved if committee members also have an integral role in accounting or auditing (Samelson et al., 2006).

The presence of an effective audit committee can moderate the influence of auditor experience level on audit outcomes (Badara & Saidin, 2014); that is, an audit committee appears to enhance the influence of auditor expertise on audit quality such that committees can augment whatever level of experience was available. Potentially less experienced auditors may have more

influence on audit outcomes if the presence of an audit committee improves audit outcomes. In a seminal study of audit quality, Samelson et al. (2006) provided evidence to support that audit committees with members who serve in oversight roles as well as internal department roles were associated with departments that have higher perceptions of audit quality. Rich and Zhang (2014) found that completely independent audit committees were not associated with fewer reports of internal weaknesses in accounting and reporting. In other words, independence may not always be advised where expertise for audit committees was limited. In a more recent study, Zhang and Rich (2016) found that debt costs for a company was lower and costs tend to be lowest among those where there was demonstrable independence for an audit committee. Expertise can contribute to cost saving despite some issues with committee members' lack of broader knowledge.

The effective use of audit committees to mediate relationships among stakeholders involved in financial management has important implications for perceptions of audit quality. Auditors, audit procedures, and produced audit reports were perceived to be of higher quality when audit committees are involved (Cagle & Pridgen, 2015; Modlin, 2014, 2016; Pridgen & Wang, 2012; Samelson et al., 2006). These outcomes hinge on the behaviors of all stakeholders; for example, auditors who are more communicative are perceived as more competent, and companies who interact with auditors and respond to benchmarks set in audit reports are perceived as more effective. Because audit committee members can play a direct role in facilitating these communications, the committee may be pivotal to enhancing audit quality (Aikins, 2012; Cagle & Pridgen, 2015). Company financial management are moving away from the use of overall performance management systems due to costs of installing and maintaining complex systems (Sanger, 2013). However, evidence supports that formation of an audit committee alone can affect the quality of financial management through enhancing the

company's organizational structure. This suggests that the use of an audit committee may well serve as a lower cost partial solution for improved performance (Rich & Zhang, 2014).

Some costs, such as the expenses of restatements may increase, some companies with audit committees tend to have lower debt costs and fewer restatements (Baber et al., 2013; Elder et al., 2015; Zhang & Rich, 2016). Companies with audit committees tend to have fewer auditing exceptions and qualified experience and consequently reduced costs (Fitzgerald & Giroux, 2014; Zhang & Rich, 2016). Audit committees are additionally connected with boosted inner accountancy treatments and controls, along with better public trust fund of the procedure (Fitzgerald & Giroux, 2014; Rich & Zhang, 2014; Zhang & Rich, 2016). In some cases, few prices are included by using even more extensive accountancy methods, despite the lack of uniformity across the United States (Spreen & Cheek, 2016). Audit committee members are expected to be independent of a company's internal financial procedure and add to rigorous oversight no matter the accountancy techniques utilized (Zhang & Rich, 2016). The independence of audit committees is linked with lowered fraudulence and costs of scams (Beckett-Camarata & Grizzle, 2014; Elder et al., 2015).

Some companies perceived no relationship between audit committee oversight and audit quality (Badara & Saidin, 2014; Fitzgerald & Giroux, 2014). The choice to form an audit committee was likely based in part on idiosyncratic perceptions of decision-makers about audit committee audit quality evaluations. A conflict of interest may exist where companies decide to implement audit committees, but audit committees also have oversight over management (Aikins, 2015). In summary, the concerns affecting the decision-making procedure consist of prices, scams, financial security, public and political stress, company management disputes of rate of interest with audit committees, and the prospective accessibility of candidates (Rich & Zhang, 2014; Samelson et al., 2006). Company administration can evaluate audit high quality

subjectively or logically; but it was unclear just how they choose to have an audit committee or not (Fitzgerald & Giroux, 2014). The findings of the present study confirmed these results.

This study was considerable since there is a requirement for insight into how companies choose making use of audit oversight using development of audit committees (Fitzgerald & Giroux, 2014). The decision to utilize an audit committee can have far-reaching consequences on problems such as interior bookkeeping control, funding of financial obligation, and prevention of scams (Beckett-Camarata & Grizzle, 2014; Rich & Zhang, 2014; Vollmer, 2016; Zager et al., 2016). The economic downturn of the late 2000s caused decreasing tax obligation base in lots of locations, and this produced a demand to be traditional in the management of public funds (Denison & Gibson, 2013; Fitzgerald & Giroux, 2014). Therefore, keeping track of financial coverage and procedures can be substantial. There are lots of competing factors to consider for companies to make choices regarding financial oversight (Cagle & Pridgen, 2015).

The GAO (2016) has created constant reports over the last numerous years as a component of setting up and keeping an eye on audit top quality and financial oversight. Concerns over low quality audits have been continuing. There has been much less research study of the high quality of auditing used in the economic sector (Alzeban & Sawan, 2015; Modlin, 2014).

Related practices and several models work to integrate right into the structure for this research study such as: sensible planning model for public management, contingency designs for decision-making, and decision concept add to comprehending the trouble (George et al., 2016). The technique of sensible planning includes utilizing unbiased efficiency actions as the basis for developing goals and making decisions (R. Walker et al., 2013). Whereas backup designs of decision-making originate from the idea of backup concept that there is nobody ideal method of arranging a system, which indicates that there was no one best method to choose (George et al.,

2016). Contingency models leave open the possibility that some decisions might be made by user-friendly, detailed, and heuristic thinking, or as rational and normative reasoning, or some combination of these. In order to make choices associated with audit committee usage, management depends on contextual conditions that were distinct across companies (Ahmed et al., 2014; Fitzgerald & Giroux, 2014; Modlin, 2014; Rich & Zhang, 2014). The findings of the present study confirmed these studies.

Decisions related to accounting, auditing, and financial management were rooted in an objective measure used in rational style decision-making, which may as well be linear in nature due to the quantitative aspects of these activities (George et al., 2016; Otley, 2016). In practice, assessments of auditing quality and audit committee reports can be subjectively based and require feedback loops. Behaviors and attributes of stakeholders can be significant to the development of audit opinions/exceptions in audit reports as well as assessment of quality of audits and internal controls (Cagle & Pridgen, 2015; Modlin, 2014). Financial decisions and auditing oversight functions can be particular, as were accounting procedures, company size, and financial status and history (Cagle & Pridgen, 2015; Carslaw et al., 2012; Fitzgerald & Giroux, 2014; Modlin, 2014; Rich & Zhang, 2014; Samelson et al., 2006).

There was much debate among researchers about the effectiveness of rational planning in the public sector (George et al., 2016). There was little evidence to support that in practice rational planning produces better decisions and facilitates strategic planning (Sanger, 2013). Considering rational planning as a facet of the conceptual framework for this study may provide a stark contrast as to how many companies make decisions given that it was unclear how widely use the framework was and whether better quality decisions were made with rational planning (George et al., 2016; Sanger, 2013). Participants in this study, includes company management who have competing issues to consider, including the use of audit committees. They were not

immune from issues such as political pressures and public opinion. Financial decisions and auditing oversight were performed under contexts that were distinct to a company, such as differing accounting and auditing procedures, company size and financial status (Fitzgerald & Giroux, 2014; Modlin, 2014; Rich & Zhang, 2014).

As relevant to this study, companies that stress the use of performance measures as consistent with the model may attempt to impose on companies a rational decision-making style (Ahmed et al., 2014). To practice a rational planning method, decision criteria must be well-defined and adequate measurements made available (Ahmed et al., 2014; R. Walker et al., 2013). Where performance measurement methods were not imposed then unquantifiable factors affect decisions, and some companies may depend on intuitive and descriptive decision-making or fall back on irrational thinking (Ahmed et al., 2014; George et al., 2016).

The value of audit committees as a form of governance and oversight has been well-studied in the private sector (DeFond & Zhang, 2014; Franzel, 2014). Public auditing has received less research attention than the private corporate sector has, and specifically the use of audit committees has received less study attention (Baber et al., 2013; Rich & Zhang, 2014). For both the private and public sectors, ideal audit committees were expected to be unbiased evaluators of an entity's financial soundness, mediators for the various types of audits, auditors, upper-level management, reviewers of external financial statements, and overseers of management practices (Baber et al., 2013). Specifically, activities of audit committees can include oversight of internal control systems, risk management, meetings with external auditors (Baber et al., 2013; Zhang & Rich, 2016).

Although the GFOA, a leading professional organization has endorsed the use of audit committees for several decades, some states do require it, but there was no federal mandate for the use of audit committees (Carslaw et al., 2012; Fitzgerald & Giroux, 2014; Sneed et al., 2018).

Repeated recommendations for company audit committee function have become increasingly similar to federal regulations for the private sector; however, lack of legal mandate for adherence to many of the details of accounting, auditing, and financial reporting leaves flexibility for meeting the needs and prescribed roles as identified by GFOA and researchers (Khumawala et al., 2014; Ruppel, 2017; Zhang & Rich, 2016). There was little evidence as to how companies may specifically use audit committee, particularly since company needs likely carry more weight for stakeholders decisions (Rich & Zhang, 2014; Vermeer et al., 2009), especially where there were no requirements as to how or whether to use a committee.

Before more recent studies, results from seminal studies supported that audit committees were sometimes used in ways that were more active than in the advisory capacities as suggested by GFOA (2018) and the GAO (2016). For example, in a survey study, some companies indicated that their audit committees had wide-ranging roles including developing financial information for company management rather than just an oversight role with financial statements. Evidence from quantitative survey studies supported that committee influence can reach as far as to make suggestions for improved services that were more efficient and effective (West & Berman, 2003). West and Berman (2003) reported that in addition to oversight duties, company use of committees sometimes extends to advice concerning legal compliance and improvement initiatives that were broader than those of financial management. Since early studies, other authors have provided some evidence that audit committee played a role in fraud prevention practices (Bruynseels & Cardinaels, 2014; Elder & Yebba, 2017; Kilgore et al., 2014; Phillips & Dorata, 2013; Vollmer, 2016) by monitoring internal accounting controls. However, other reports suggest that fraud in companies was stable or growing slowly (Sneed et al., 2018). The factors influencing the use of audit committees were not statistically significant when

companies were making decisions about the use or lack of use of audit committees in their internal operations.

Recommendations for Practice

Practically, it is recommended that companies engage audit committees. However, it is also acknowledged that not all companies will be willing to do so. As a result, it is suggested that companies establish effective internal controls that allow for auditing. Further actions involve a thorough understanding of audit rules and legislation, which will help companies engage in their activities in an appropriate manner. Other practical recommendations involve evaluating the use of audit committees based on different circumstances (Vollmer, 2016). These efforts would be beneficial because they would provide indications to companies when and how audit committees would be most beneficial. While audit committees are seen as being invaluable (Elder & Yebba, 2017), there are also indications that in-house audit departments may be more effective. Not only may this save time, but it may save money in the long run through establishing procedures that would assist in protecting the company. Other suggestions involve the possibility that audit committees may not be beneficial for all companies in the long run. Therefore, it may be indicated that some companies only need to engage an audit committee part-time. This, too, may be more cost effective for many smaller companies.

Recommendations for Future Research

Future research should be conducted based on primary data from companies that engage in audit committees. Moreover, future research should be based on quantitative and qualitative data from primary or secondary sources. For example, the present study focused on studies that were already completed. New studies can focus on specific companies within a specific country (or multiple countries) or industry. This would help in showing better information regarding the decision to engage in an audit committee. By engaging in this form of research, it will be

possible to obtain information that justifies decision-making regarding the use of audit committees. In fact, this type of this study would provide further information regarding the types of companies regarding their decision to use audit committees. A qualitative study would also be highly beneficial in the present study through the indications of how the company makes the decision to engage audit committees.

Conclusions

Researchers have begun to seek solutions that are based on dynamic models of performance management for companies (Bianchi & Williams, 2015). Bianchi and Williams (2015) criticized static, whole organization performance management systems in practice and as an empirical-theoretical research approach because these systems do not capture a key component: changing behaviors of employees and other stakeholders in response to performance measurement (Vakkuri and Meklin, 2006) showed that a performance tool such as budget setting can become a game by which companies gain political control of employees at a work setting. It may be that communicative behaviors of audit committee members and key stakeholders were critical to successful use of an audit committee as a dynamic tool to govern financial accountability (Aikins, 2012; Cagle & Pridgen, 2015).

Researchers and stakeholders consider audit committees as potential mechanisms for the oversight of financial reporting in the private and public sectors (Knechel, 2015; Malik, 2014). Audit committees audit by providing independent reconciliation and evaluation of audit reports, as mandated, in part, by the Government Financial Officers Association (GFOA) (Abbott et al., 2016; GFOA, 2018). Some of the roles of audit committees are to interact with auditors, board members, and company management during an audit and post-audit (GFOA, 2018). Under the United States' SOX regulations for the private sector, federal regulations require companies to use audit committees. These differences may influence decisions about whether to use an audit

committee or not (Fitzgerald & Giroux, 2014; GFOA, 2018). It is acknowledged that there is potential for higher costs in using an audit committee (Alzeban & Sawan, 2015). The use of audit committees can increase administrative and direct costs (Baber et al., 2013; Fitzgerald & Giroux, 2014); and the costs can include the compensation given to audit committee members (Elder et al., 2015). The use of audit committee predicts increased restatements of public financial reports and associated costs (Rich & Zhang, 2014).

References

- Abbott, L., Brown, V., & Higgs, J. (2016). The effects of prior manager-auditor affiliation and PCAOB inspection reports on audit committee members' auditor recommendations. *Behavioral Research in Accounting*, 28(1), 1–14. <https://doi.org/10.2308/bria-51314>
- Abbott, L., Parker, S., & Peters, G. (2004). Audit committee characteristics and restatements. *Auditing: A Journal of Practice & Theory*, 23(1), 69–87. <https://doi.org/10.2308/aud.2004.23.1.69>
- Abdullah, S. (2006). Board composition, audit committee and timeliness of corporate financial reports in Malaysia. *Corporate Ownership and Control*, 4(2), 33–45.
- Ahmed, A., Bwisa, H., Otieno, R., & Karanja, K. (2014). Strategic decision making: Process, models, and theories. *Business Management and Strategy*, 5(1), 78.
- Aikins, S. (2012). Determinants of Auditee Adoption of Audit Recommendation: Local Government Auditors' Perspectives. *Journal of Public Budgeting, Accounting and Financial Management*, 24(2), 195–220.
- Aikins, S. (2013). Government Internal Audits: The Determinants of Quality Supervisory Review of Audit Documentation. *International Journal of Public Administration*, 36(10), 673–685. <https://doi.org/10.1080/01900692.2013.791309>
- Aikins, S. (2015). Performance Management in Government Internal Audits: Critical Success Factors. *Journal of Public Administration and Governance*, 5(3), 46–79.
- Alzeban, A., & Sawan, N. (2015). The impact of audit committee characteristics on the implementation of internal audit recommendations. *Journal of International Accounting, Auditing and Taxation*, 24, 61–71.

- Baber, W., Gore, A., Rich, K., & Zhang, J. (2013). Accounting restatements, governance and municipal debt financing. *Journal of Accounting and Economics*, 56(2–3), 212–227.
<https://doi.org/10.1016/j.jacceco.2013.08.003>
- Badara, M., & Saidin, S. (2014). Empirical Evidence of the Moderating Effect of Effective Audit Committee on Audit Experience in the Public Sector: Perception of Internal Auditors. *Mediterranean Journal of Social Sciences MCSER Publishing*, 5(10), 2039–2117.
<https://doi.org/10.5901/mjss.2014.v5n10p176>
- Beasley, M. (1996). An empirical analysis of the relation between the board of director composition and financial statement fraud. *Accounting Review*, 1996, 443–465.
- Beattie, V., Fearnley, S., & Hines, T. (2014). Boundary spanning and gatekeeping roles of UK audit committees. *Accounting and Business Research*, 44(3), 315–343.
<https://doi.org/10.1080/00014788.2014.898434>
- Beckett-Camarata, J., & Grizzle, C. (2014). The Financial Crisis in Harrisburg, Pennsylvania. *Public Finance & Management*, 14(1).
- Bedard, J., Falsetta, D., Krishnamoorthy, G., & Omer, T. (2010). Voluntary disclosure of auditor-provided tax service fees. *Journal of the American Taxation Association*, 32(1), 59–77. <https://doi.org/10.2308/jata.2010.32.1.59>
- Benjamin, S., & Karraheemi, K. (2013). A Test of Audit Committee Characteristics and Free Cash Flows. *Corporate Ownership & Control*, 10(2), 611–626.
- Bianchi, C. (2012). Enhancing Performance Management and Sustainable Organizational Growth Through System-Dynamics Modelling. In *Systemic management for intelligent organizations* (pp. 143–161). Springer. https://doi.org/10.1007/978-3-642-29244-6_8
- Bianchi, C., & Williams, D. (2015). Applying system dynamics modeling to foster a cause-and-effect perspective in dealing with behavioral distortions associated with a city's

- performance measurement programs. *Public Performance and Management Review*, 38(3), 395–425. <https://doi.org/10.1080/15309576.2015.1006471>
- Blankley, A., Hurtt, D., & Macgregor, J. (2015). Are Lengthy Audit Report Lags a Warning Signal? *Current Issues in Auditing*, 9(2), 19–28. <https://doi.org/10.2308/ciia-51215>
- Bloch, R., Issa, H., & Peterson, A. (2015). The DATA Act. *The CPA Journal*, 85(6), 36.
- Böhm, F., Bollen, L., & Hassink, H. (2016). Audit Committee Charter Scope: Determinants and Effects on Audit Committee Effort; Audit Committee Charter Scope: Determinants and Effects on Audit Committee Effort. *International Journal of Auditing*, 20(2), 119–132. <https://doi.org/10.1111/ijau.12060>
- Bradbury, M., & Mak, Y. (2004). *Board Characteristics, Audit Committee Characteristics and Abnormal Accruals*.
- Bruynseels, L., & Cardinaels, E. (2014). The audit committee: Management watchdog or personal friend of the CEO? *Accounting Review*, 89(1), 113–145. <https://doi.org/10.2308/accr-50601>
- Cagle, C., & Pridgen, A. (2015). Accountability in County Governments: Is Auditor Type Related to Audit Quality? *Journal of Leadership, Accountability & Ethics*, 12(1).
- Carcello, J., Hollingsworth, C., & Neal, T. (2006). Audit committee financial experts: A closer examination using firm designations. *Accounting Horizons*, 20(4), 351–373. <https://doi.org/10.2308/acch.2006.20.4.351>
- Carcelle, JV. (2012). What do investors want from the standard audit report? *The CPA Journal*, 82(1), 22.
- Carslaw, C., Mason, R., & Mills, J. (2007). Audit timeliness of school district audits. *Journal of Public Budgeting, Accounting & Financial Management*, 19(3), 290.

- Carlsaw, C., Pippin, S., & Mason, R. (2012). Are public sector auditors more effective than private sector audit firms when auditing governmental entities? Some evidence from United States counties. *Public and Municipal Finance*, 1(1), 49–57.
- Christ, M., Mali, A., Sharp, N., & Wood, D. (2015). Rotational internal audit programs and financial reporting quality: Do compensating controls help? *Accounting, Organizations and Society*, 44(2015), 37–59. <https://doi.org/10.1016/j.aos.2015.05.004>
- Christensen, B., Omer, T., Shelley, M., & Wong, P. (2019). Affiliated Former Partners on the Audit Committee: Influence on the Auditor-Client Relationship and Audit Quality. *Auditing: A Journal of Practice & Theory*, 38(3), 95–119. <https://doi.org/10.2308/ajpt-52288>
- Cohen, J., Gaynor, L., Krishnamoorthy, G., & Wright, A. (2014). *The Effects of Professional and Social Ties Between the CEO and the Audit Committee on Investor Decision Making*.
- DeFond, M., & Zhang, J. (2014). A review of archival auditing research. *Journal of Accounting and Economics*, 58(2–3), 275–326.
- Desi, D., & Byus, K. (2016). Who audits America’s local governments? Government clients move downstream to regional and local audit firms. *SAM Advanced Management Journal*, 81(2), 21.
- Denison, D., & Gibson, J. (2013). A Tale of Market Risk, False Hope, and Corruption: The impact of adjustable rate debt on the Jefferson County, Alabama Sewer Authority. *Journal of Public Budgeting, Accounting & Financial Management*, 25(2).
- DeZoort, F., Hermanson, D., Archambeault, D., & Reed, S. (2002). *Audit Committee Effectiveness: A Synthesis of the Empirical Audit Committee Literature*.
- Dionne, G., & Triki, T. (2005). *Risk Management and Corporate Governance: The Importance of Independence and Financial Knowledge for the Board and the Audit Committee*.

- Downs, S., & Black, N. (1998). The feasibility of creating a checklist for the assessment of the methodological quality both of randomised and non-randomised studies of health care interventions. *Journal of Epidemiology & Community Health*, 52(6), 377–384.
<https://doi.org/10.1136/jech.52.6.377>
- Elder, R., Lowensohn, S., & Reck, J. (2015). Audit Firm Rotation, Auditor Specialization, and Audit Quality in the Municipal Audit Context. *American Accounting Association*, 4(1), 73–100. <https://doi.org/10.2308/ogna-51188>
- Elder, R., & Yebba, A. (2017). The Roslyn school district fraud: Improving school district internal control and financial oversight. *Issues in Accounting Education*, 32(4), 25–39.
<https://doi.org/10.2308/iace-51753>
- Emeh, Y. (2013). Audit committee and timeliness of financial reports: Empirical evidence from Nigeria. *Journal of Economics and Sustainable Development*, 4(20), 14–25.
- Enofe, A., & Aronmwan, E. (2013). Audit committee report in corporate statements: Users' perception in Nigeria. *European Journal of Accounting, Auditing and Finance*, 1(1), 16–28.
- Fitzgerald, B., & Giroux, G. (2014). Voluntary formation of audit committees by large municipal governments. *Research in Accounting Regulation*, 26(1), 67–74.
- Franzel, J. (2014). A decade after Sarbanes-Oxley: The need for ongoing vigilance, monitoring, and research. *Accounting Horizons*, 28(4), 917–930. <https://doi.org/10.2308/acch-50868>
- GAO. (2016). Annual Report: Additional Opportunities to Reduce Fragmentation, Overlap, and Duplication and Achieve Other Financial Benefits. In *Budget.senate.gov*.
- George, B., Desmidt, S., & De Moyer, J. (2016). Public Money & Management Strategic decision quality in Flemish municipalities. *Public Money & Management*, 36(5), 317–324. <https://doi.org/10.1080/09540962.2016.1194073>

- GFOA. (2018). *Audit Committees*. GFOA. <https://www.gfoa.org/audit-committees>
- Greenland, S., & O'Rourke, K. (1998). *Meta-analysis*.
- Hayek, C. (2015). *The Effect of Audit Committee Compensation on the Procurement of Non-audit Services*.
- Henke, T., & Maher, J. (2016). Government Reporting Timeliness and Municipal Credit Market Implications. *Journal of Governmental & Nonprofit Accounting*, 5(1), 1–24.
<https://doi.org/10.2308/ogna-51601>
- Huefner, R. (2011). Internal control weaknesses in local government. *The CPA Journal*, 81(7), 20.
- Institute of Internal Auditors. (2020). *The Institute of Internal Auditors*. Institute of Internal Auditors. <https://na.theiia.org/Pages/IIAHome.aspx>
- Islam, M., Islam, M., Bhattacharjee, S., & Islam, A. (2010). Agency Problem and the Role of Audit Committee: Implications for Corporate Sector in Bangladesh. *International Journal of Economics and Finance*, 2(3), 177–188.
- Ittonen, K., Miettinen, J., & Vähämaa, S. (2010). Does female representation on audit committees affect audit fees? *Quarterly Journal of Finance and Accounting*, 2010, 113–139.
- Jakubowski, S. (1995). Reporting on the Control Structures of Local Government Under the Single Audit Act of 1984. *Public Budgeting & Finance*, 15(1), 58–71.
<https://doi.org/10.1111/1540-5850.01031>
- Jensen, K., & Payne, J. (2005). Audit procurement: Managing audit quality and audit fees in response to agency costs. *Auditing: A Journal of Practice & Theory*, 24(2), 27–48.
<https://doi.org/10.2308/aud.2005.24.2.27>

- Keefe, T., King, R., & Gaver, K. (1994). Audit fees, industry specialization, and compliance with GAAS reporting standards. *Auditing*, 13(2), 41.
- Khumawala, S., Marlowe, J., & Neely, D. (2014). Accounting Professionalism and Local Government GAAP Adoption: A National Study. *Journal of Public Budgeting, Accounting & Financial Management*, 26(2).
- Kilgore, A., Harrison, G., & Radich, R. (2014). Audit quality: What's important to users of audit services. *Managerial Auditing Journal*, 29(9), 776–799. <https://doi.org/10.1108/MAJ-08-2014-1062>
- Klein, A. (2002). Audit committee, board of director characteristics, and earnings management. *Journal of Accounting and Economics*, 33(3), 375–400.
- Knechel, W. (2015). Audit research in the wake of SOX. *Managerial Auditing Journal*, 8–9(2015), 706–726.
- Knechel, W., Krishnan, G., Pevzner, M., Shefchik, L., & Velury, U. (2013). Audit quality: Insights from the academic literature. *Auditing: A Journal of Practice & Theory*, 32(sp1), 385–421. <https://doi.org/10.2308/ajpt-50350>
- Lalkhen, A., & McCluskey, A. (2008). Statistics V: Introduction to clinical trials and systematic reviews. *Continuing Education in Anaesthesia, Critical Care & Pain*, 8(4), 143–148.
- LeLorier, J., Grégoire, G., Benhaddad, A., Lapierre, J., & Derderian, F. (1997). Discrepancies between meta-analyses and subsequent large randomized, controlled trials. *The New England Journal of Medicine*, 337(8), 536–542. <https://doi.org/10.1056/NEJM199708213370806>
- Lennox, C., & Park, C. (2007). Audit Firm Appointments, Audit Firm Alumni, and Audit Committee Independence. *Contemporary Accounting Research*, 24(1), 235–258. <https://doi.org/10.1506/f024-6861-7233-n62j>

- Lewis, S., & Clarke, M. (2001). Forest plots: Trying to see the wood and the trees. *BMJ (Clinical Research Ed.)*, 322(7300), 1479–1480. <https://doi.org/10.1136/bmj.322.7300.1479>
- Li, J., Mangena, M., & Pike, R. (2012). The effect of audit committee characteristics on intellectual capital disclosure. *The British Accounting Review*, 44(2), 98–110.
- López, D., & Peters, G. (2010). Internal control reporting differences among public and governmental auditors: The case of city and county Circular A-133 audits. *Journal of Accounting and Public Policy*, 29(5), 481–502.
- Mala, R., & Chand, P. (2015). Judgment and decision-making research in auditing and accounting: Future research implications of person, task, and environment perspective. *Accounting Perspectives*, 14(1), 1–50. <https://doi.org/10.1111/1911-3838.12040>
- Malik, M. (2014). Audit committee composition and effectiveness: A review of post-SOX literature. *Journal of Management Control*, 25(2), 81–117. <https://doi.org/10.1007/s00187-014-0188-4>
- Mangena, M., & Taurigana, V. (2008). Audit Committees and Voluntary External Auditor Involvement in UK Interim Reporting. *International Journal of Auditing*, 12(1), 45–63. <https://doi.org/10.1111/j.1099-1123.2008.00369.x>
- Martinov-Bennie, N., Soh, D., & Tweedie, D. (2015). An investigation into the roles, characteristics, expectations and evaluation practices of audit committees. *Managerial Auditing Journal*, 30(8–9), 727–755. <https://doi.org/10.1108/MAJ-05-2015-1186>
- Matkin, D. (2010). In The Shadow Of Corporate Scandal: The Use Of Audit Committees In U.S. Local Governments. *Journal of Public Budgeting, Accounting & Financial Management*, 22(2), 206–226. <https://doi.org/10.1108/jpbafm-22-02-2010-b003>

- Modlin, S. (2014). Local government staff involvement in the external audit process: Reassessing independent auditee satisfaction levels among professionally administered county. *Public Administration Quarterly*, 246–272.
- Modlin, S. (2016). Increasing Transparency and Efficiency: An Examination of County Government Note Disclosures. *Public Administration Research*, 5(2), 59.
- Otley, D. (2016). The contingency theory of management accounting and control: 1980-2014. *Management Accounting Research*, 31, 45–62.
- Owolabi, S., & Dada, S. (2011). Audit Committee: An Instrument of Effective Corporate Governance. *European Journal of Economics, Finance and Administrative Sciences*, 35(35), 174–183.
- Park, Y., Matkin, D., & Marlowe, J. (2017). Internal Control Deficiencies and Municipal Borrowing Costs. *Public Budgeting and Finance*, 37(1), 88–111.
<https://doi.org/10.1111/pbaf.12120>
- Parsons, S., & Wooldridge, M. (2002). Game Theory and Decision Theory in Multi-Agent Systems. *Autonomous Agents and Multi-Agent Systems*, 5(3), 243–254.
<https://doi.org/10.1023/A:1015575522401>
- Phillips, C., & Dorata, N. (2013). School district boards, audit committees, and budget oversight. *The CPA Journal*, 83(3), 19.
- Pizzini, M., Lin, S., & Ziegenfuss, D. (2015). The impact of internal audit function quality and contribution on audit delay. *Auditing: A Journal of Practice & Theory*, 34(1), 25–58.
<https://doi.org/10.2308/ajpt-50848>
- Pridgen, A., & Wang, K. (2012). Audit committees and internal control quality: Evidence from nonprofit hospitals subject to the single audit act. *International Journal of Auditing*, 16(2), 165–183. <https://doi.org/10.1111/j.1099-1123.2012.00448.x>

- Qi, B., & Tian, G. (2012). The Impact Of Audit Committees' Personal Characteristics On Earnings Management: Evidence From China. *Journal of Applied Business Research*, 28(6), 1331–1344.
- Reinstein, A., Abdolmohammadi, M., Tate, S., & Miller, C. (2014). Auditors' and governmental financial officers' views on expanding the Sarbanes–Oxley Act provisions to state and local governments. *Advances in Accounting*, 30(1), 75–80.
- Rich, K., & Zhang, J. (2014). Does Audit Committee Monitoring Matter in the Government Sector? Evidence from Municipal Internal Control Quality. *American Accounting Association*, 3(1), 58–80. <https://doi.org/10.2308/ogna-50832>
- Rosenthal, R. (1979). The file drawer problem and tolerance for null results. *Psychological Bulletin*, 86(3), 638–641. <https://doi.org/10.1037/0033-2909.86.3.638>
- Ruppel, W. (2017). *Wiley GAAP for Governments 2017: Interpretation and Application of Generally Accepted Accounting Principles for State and Local Governments*. John Wiley & Sons.
- Samelson, D., Lowensohn, S., & Johnson, L. (2006). The determinants of perceived audit quality and auditee satisfaction in local government. *Journal of Public Budgeting, Accounting & Financial Management*, 18(2), 139.
- Sanger, M. (2013). Does Measuring Performance Lead to Better Performance. *Journal of Policy Analysis and Management*, 185–203. <https://doi.org/10.1002/pam>
- Scarbrough, D., & Raghunandan, K. (1998). Diffusion of advanced management accounting practice View project. *Accounting Horizons*, 12(1), 51–62.
- Simon, A., & Bernardo, M. (2015). Exploring the Impact of Integrated Management Systems Audits on Business Performance. *9th International Quality Conference*.

- Sneed, C., Sneed, J., & Boozer Jr., B. (2018). Should State and Local Governments Adopt Provisions of the Sarbanes-Oxley Act. *Business Journal for Entrepreneurs*, 2018(4).
- Spreen, T., & Cheek, C. (2016). Does Monitoring Local Government Fiscal Conditions Affect Outcomes? Evidence from Michigan. *Public Finance Review*, 44(6), 722–745.
<https://doi.org/10.1177/1091142115611743>
- Srinivasan, S., & Richardson, S. (2005). Consequences of financial reporting failure for outside directors: Evidence from accounting restatements and audit committee members. *Journal of Accounting Research*, 43(2), 291–334. <https://doi.org/10.1111/j.1475-679x.2005.00172.x>
- Sutopo, B., Wulandari, T., Adiati, A., & Saputra, D. (2017). E-government, audit opinion, and performance of local government administration in Indonesia. *Australasian Accounting, Business and Finance Journal*, 11(4), 6–22.
- Vakkuri, J., & Meklin, P. (2006). Ambiguity in Performance Measurement: A Theoretical Approach to Organisational Uses of Performance Measurement. *Financial Accountability and Management*, 22(3), 235–250. <https://doi.org/10.1111/j.0267-4424.2006.00401.x>
- Vermeer, T., Raghunandan, K., & Forgione, D. (2009). Audit fees at U.S. non-profit organizations. *Auditing*, 28(2), 289–303. <https://doi.org/10.2308/aud.2009.28.2.289>
- Vollmer, S. (2016). How audit committees can help deter fraud. *Journal of Accountancy*, 221(5), 20.
- Walker, E., Hernandez, A., & Kattan, M. (2008). Meta-analysis: Its strengths and limitations. *Cleveland Clinic Journal of Medicine*, 75(6), 431–439.
- Walker, R., Jung, C., & Boyne, G. (2013). Rational Planning, Organizational Structure and Performance: Perceptual Agreement between Politicians and Senior Managers. In *Ipmn2013.unisi.it*.

- Wells, J., & McFadden, G. (2010). A Property Tax Scam: Washington DC \$48 Million Embezzlement. *Journal of Business Case Studies (JBSC)*, 6(3).
- West, J., & Berman, E. (2003). Audit committees and accountability in local government: A national survey. *International Journal of Public Administration*, 26(4), 329–362.
<https://doi.org/10.1081/PAD-120019224>
- Wilbanks, R., Hermanson, D., & Sharma, V. (2017). Audit committee oversight of fraud risk: The role of social ties, professional ties, and governance characteristics. *Accounting Horizons*, 31(3), 21–38. <https://doi.org/10.2308/acch-51695>
- Wu, C., Hsu, H., & Haslam, J. (2016). Audit committees, non-audit services, and auditor reporting decisions prior to failure. *The British Accounting Review*, 48(2), 240–256.
- Zager, L., Malis, S., & Novak, A. (2016). The Role and Responsibility of Auditors in Prevention and Detection of Fraudulent Financial Reporting. *Procedia Economics and Finance*, 39(2), 693–700. [https://doi.org/10.1016/S2212-5671\(16\)30291-X](https://doi.org/10.1016/S2212-5671(16)30291-X)
- Zain, M., Subramaniam, N., & Stewart, J. (2006). Internal Auditors' Assessment of their Contribution to Financial Statement Audits: The Relation with Audit Committee and Internal Audit Function Characteristics. *International Journal of Auditing*, 10(1), 1–18.
<https://doi.org/10.1111/j.1099-1123.2006.00306.x>
- Zhang, J., & Rich, K. (2016). Municipal Audit Committees and Fiscal Policies. *Journal of Public Budgeting, Accounting & Financial Management*, 28(4), 436–466.

Appendix A: Quality Assessment Matrix

The following table contains the completed quality assessment matrix, showing the studies utilized in the present study.

Source	Quality Assessment Matrix										Sum
	1	2	3	4	5	6	7	8	9	10	
Abdullah, S. (2006). Board composition, audit committee and timeliness of corporate financial reports in Malaysia. <i>Corporate ownership and control</i> , 4(2), 33-45.	1	1	1	1	1	0	1	0	1	0	7
Aikins, S. (2015). Performance Management in Government Internal Audits: Critical Success Factors. <i>Journal of Public Administration and Governance</i> , 5(3), 46-79.	1	1	1	1	1	0	1	1	0	1	8
Badara, M., & Saidin, S. (2014). Empirical Evidence of the Moderating Effect of Effective Audit Committee on Audit Experience in the Public Sector: Perception of Internal Auditors. <i>Mediterranean Journal of Social Sciences MCSER Publishing</i> , 5(10), 2039-2117.	1	1	1	1	1	1	1	0	0	1	8
Beasley, M. (1996). An empirical analysis of the relation between the board of director composition and financial statement fraud. <i>Accounting review</i> , 443-465.	1	1	1	1	0	1	1	1	1	1	9
Beattie, V., Fearnley, S., & Hines, T. (2014). Boundary spanning and gatekeeping roles of UK audit committees. <i>Accounting and Business Research</i> , 44(3), 315-343.	1	1	1	1	1	0	1	0	1	1	8
Bédard, J., & Paquette, S. (2010). Perception of auditor independence, audit committee characteristics, and auditor provision of tax services. <i>Audit Committee Characteristics, and Auditor Provision of Tax Services (July 20, 2010)</i> .	1	1	1	0	0	1	0	1	1	1	7
Benjamin, S., & Karraheemi, K. (2013). A test of audit committee characteristics and free cash flows. <i>Corporate Ownership & Control</i> , 10(2), 611-626.	1	1	1	1	0	0	0	1	1	1	7
Böhm, F., Bollen, L., & Hassink, H.	1	1	1	1	1	0	1	0	1	0	7

(2016). Audit Committee Charter Scope: Determinants and Effects on Audit Committee Effort; Audit Committee Charter Scope: Determinants and Effects on Audit Committee Effort. <i>International Journal of Auditing</i> , 20(2), 119–132.												
Bradbury, M., & Mak, Y. (2004). Board characteristics, audit committee characteristics and abnormal accruals.	1	1	1	1	0	1	1	1	0	0		7
Carcello, J., Hollingsworth, C., & Neal, T. (2006). Audit committee financial experts: A closer examination using firm designations. <i>Accounting Horizons</i> , 20(4), 351-373.	1	1	1	1	1	1	0	0	1	0		7
Christ, M., Masli, A., Sharp, N., & Wood, D. (2015). Rotational internal audit programs and financial reporting quality: Do compensating controls help?. <i>Accounting, Organizations and Society</i> , 44, 37-59.	1	1	1	1	1	1	0	1	1	1		9
Christensen, B., Omer, T., Shelley, M., & Wong, P. (2019). Affiliated former partners on the audit committee: Influence on the auditor-client relationship and audit quality. <i>Auditing: A Journal of Practice & Theory</i> , 38(3), 95-119.	1	1	1	0	1	0	0	1	1	1		7
Cohen, J., Gaynor, L., Krishnamoorthy, G., & Wright, A. (2014). <i>The effects of professional and social ties between the CEO and the audit committee on investor decision making.</i>	1	1	1	1	0	1	0	1	1	0		7
DeZoort, F., Hermanson, D., Archambeault, D., & Reed, S. (2002). Audit committee effectiveness: A synthesis of the empirical audit committee literature. <i>Audit Committee Effectiveness: A Synthesis of the Empirical Audit Committee Literature</i> , 21, 38.	1	1	1	1	1	1	1	1	1	1		10
Dionne, G., & Triki, T. (2005). Risk management and corporate governance: The importance of independence and financial knowledge for the board and the audit committee.	1	1	1	1	1	1	1	1	1	0		9
Emeh, Y., & Appah, E. (2013). Audit committee and timeliness of financial reports: Empirical evidence from Nigeria. <i>Journal of Economics and sustainable</i>	1	1	1	1	1	1	1	0	1	0		8

<i>Development</i> , 4(20), 14-25.												
Enofe, A., Aronmwan, E., & Abadua, H. (2013). Audit committee report in corporate financial statements: Users' perception in Nigeria. <i>European Journal of Accounting, Auditing and Finance</i> , 1(1), 16-28.	1	1	1	0	1	1	0	0	0	1		6
Hayek, C. (2015). <i>The Effect of Audit Committee Compensation on the Procurement of Non-audit Services</i> .	1	1	1	0	1	0	0	0	1	1		6
Islam, M., Islam, M., Bhattacharjee, S., & Islam, A. (2010). Agency problem and the role of audit committee: Implications for corporate sector in Bangladesh. <i>International journal of Economics and Finance</i> , 2(3), 177-188.	1	1	1	1	0	0	0	1	1	0		6
Ittonen, K., Miettinen, J., & Vähämaa, S. (2010). Does female representation on audit committees affect audit fees?. <i>Quarterly Journal of Finance and Accounting</i> , 113-139.	1	1	1	0	1	1	1	1	0	0		7
Klein, A. (2002). Audit committee, board of director characteristics, and earnings management. <i>Journal of accounting and economics</i> , 33(3), 375-400.	1	1	1	0	1	1	1	1	0	0		7
Lennox, C., & Park, C. (2007). Audit firm appointments, audit firm alumni, and audit committee independence. <i>Contemporary Accounting Research</i> , 24(1), 235-258.	1	1	1	1	0	1	1	0	0	1		7
Li, J., Mangena, M., & Pike, R. (2012). The effect of audit committee characteristics on intellectual capital disclosure. <i>The British Accounting Review</i> , 44(2), 98-110.	1	1	1	1	0	0	0	1	1	0		6
Mangena, M., & Taurigana, V. (2008). Audit committees and voluntary external auditor involvement in UK interim reporting. <i>International Journal of Auditing</i> , 12(1), 45-63.	1	1	1	1	1	1	1	1	0	0		8
Matkin, D. (2010). In The Shadow Of Corporate Scandal: The Use Of Audit Committees In U.S. Local Governments. <i>Journal of Public Budgeting, Accounting & Financial Management</i> , 22(2), 206–226.	1	1	1	0	1	0	1	1	1	1		8
Owolabi, S., & Dada, S. (2011). Audit committee: An instrument of effective corporate governance. <i>European Journal</i>	1	1	1	0	1	1	1	1	1	0		8

<i>of Economics, Finance and Administrative Sciences</i> , 35(35), 174-183.													
Qi, B., & Tian, G. (2012). The impact of audit committees personal characteristics on earnings management: Evidence from China. <i>Journal of Applied Business Research (JABR)</i> , 28(6), 1331-1344.	1	1	1	1	1	1	1	1	1	1	1	1	10
Scarbrough, D., & Raghunandan, K. (1998). Audit committee composition and interaction with internal auditing: Canadian Evidence. <i>Accounting Horizons</i> , 12(1), 51-62.	1	1	1	1	0	0	1	1	1	1	1	1	8
Srinivasan, S., & Richardson, S. (2005). Consequences of financial reporting failure for outside directors: Evidence from accounting restatements and audit committee members. <i>Journal of Accounting Research</i> , 43(2), 291-334.	1	1	1	0	1	1	1	1	1	1	0	0	8
Sutopo, B., Wulandari, T., Adiati, A., & Saputra, D. (2017). E-government, audit opinion, and performance of local government administration in Indonesia. <i>Australasian Accounting, Business and Finance Journal</i> , 11(4), 6–22.	1	1	1	1	1	1	1	0	1	1	0	0	8
Wilbanks, R., Hermanson, D., & Sharma, V. (2017). Audit committee oversight of fraud risk: The role of social ties, professional ties, and governance characteristics. <i>Accounting Horizons</i> , 31(3), 21–38.	1	1	1	1	1	0	1	0	1	1	0	0	7
Wu, C., Hsu, H., & Haslam, J. (2016). Audit committees, non-audit services, and auditor reporting decisions prior to failure. <i>The British Accounting Review</i> , 48(2), 240-256.	1	1	1	1	1	1	0	1	0	1	0	1	8
Zager, L., Malis, S., & Novak, A. (2016). The Role and Responsibility of Auditors in Prevention and Detection of Fraudulent Financial Reporting. <i>Procedia Economics and Finance</i> , 39(2), 693–700.	1	1	1	1	1	1	1	1	1	1	0	0	9
Zain, M., Subramaniam, N., & Stewart, J. (2006). Internal auditors' assessment of their contribution to financial statement audits: The relation with audit committee and internal audit function characteristics. <i>International Journal of Auditing</i> , 10(1), 1-18.	1	1	1	1	1	0	1	1	1	1	0	0	8

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Appendix B: Study Data

The following three tables provide study related information. The first table provides the number of participants and mean (M) and standard deviation (SD) of demographic data (the decision to use an audit committee, earnings improvement after implementing an audit committee, and asset size).

Study	N	Decision to use audit				Improved earnings after audit				Asset Size ³	
		Yes		No		Yes		No		M	SD
		M	SD	M	SD	M	SD	M	SD	M	SD
1	643	0.47	0.58	0.92	0.15	0.41	0.47	0.88	0.52	10.15	4.86
2	515	0.39	0.20	0.14	0.30	0.41	0.21	0.75	0.76	10.68	6.87
3	321	0.63	0.87	0.08	0.21	0.48	0.38	0.70	1.00	13.71	3.73
4	339	0.20	0.05	0.52	0.18	0.78	1.00	0.11	0.91	15.44	4.35
5	198	0.36	0.59	0.92	0.67	0.71	0.85	0.33	0.36	13.38	6.49
6	972	0.13	0.80	0.51	0.10	0.06	0.79	0.02	0.38	10.52	5.63
7	460	0.50	0.32	0.52	0.97	0.18	0.47	0.79	0.88	12.34	5.16
8	222	0.11	0.00	0.83	0.54	0.40	0.82	0.80	0.38	10.32	8.78
9	614	0.18	0.44	0.62	0.26	0.93	0.36	0.83	0.25	13.70	5.98
10	192	0.93	0.42	0.41	0.20	0.58	0.11	0.25	0.58	15.82	4.76
11	825	0.36	0.80	0.33	0.21	0.68	0.14	0.28	0.86	14.95	7.20
12	970	0.38	0.92	0.17	0.21	0.93	0.49	0.43	0.59	11.52	6.79
13	128	0.85	0.01	0.90	0.43	0.53	0.68	0.45	0.32	10.65	4.50
14	287	0.99	0.26	0.66	0.41	0.46	0.56	0.66	0.89	15.23	3.43
15	661	0.67	0.37	0.60	0.52	0.47	0.34	0.97	0.92	12.23	3.34
16	292	0.95	0.84	0.60	0.64	0.80	0.32	0.99	0.78	13.03	8.69
17	579	0.57	0.88	0.75	0.89	0.96	0.55	0.55	0.71	12.47	4.24
18	482	0.96	0.03	0.91	0.38	0.28	0.10	0.85	0.35	11.46	5.84
19	163	0.89	0.65	0.35	0.71	0.59	0.65	0.70	0.56	14.25	5.02
20	382	0.59	0.94	0.11	0.71	0.46	0.82	0.05	0.88	12.22	6.13
21	396	0.75	0.59	0.58	0.48	0.66	0.37	0.96	0.89	11.09	6.41
22	725	0.03	0.20	0.24	0.01	0.07	0.39	0.32	0.94	11.63	8.23
23	273	0.32	0.52	0.67	0.13	0.36	0.05	0.66	0.84	12.10	6.87
24	665	0.03	0.01	0.77	0.81	0.00	0.61	0.89	0.22	10.41	4.16
25	333	0.12	0.97	0.77	0.45	0.26	0.02	0.48	0.43	10.28	4.12
26	511	0.57	0.64	0.84	0.32	0.51	0.51	0.18	0.45	10.81	0.56
27	541	0.28	0.57	0.06	0.27	0.44	0.08	0.93	0.64	14.27	0.86
28	388	0.43	0.53	0.84	0.48	0.40	1.00	0.29	0.04	14.66	0.90
29	764	0.35	0.26	0.61	0.83	0.77	0.15	0.42	0.17	14.64	0.42
30	391	0.44	0.50	0.40	0.99	0.74	0.79	0.44	0.86	11.14	0.16
31	638	0.34	0.04	0.01	0.79	0.40	0.88	0.11	0.86	11.47	1.00

³ Asset size was presented as the natural log. This treatment was continued for the present study.

32	365	0.03	0.36	0.47	0.34	0.03	0.88	0.58	0.69	10.18	0.18
33	491	0.28	0.57	0.06	0.27	0.44	0.08	0.93	0.64	14.27	0.86
34	197	0.43	0.53	0.84	0.48	0.40	1.00	0.29	0.04	14.66	0.90

The second table provides the mean (M) and standard deviation (SD) for the reasons for implementing an audit committee.

Study	Fraud Prevention		Improved Financial Statement Reporting		Improved Investor Trust		Improved Transparency		Improved Accounting Oversight	
	M	SD	M	SD	M	SD	M	SD	M	SD
1	2.83	0.55	1.02	0.10	1.89	0.96	1.52	0.86	4.36	0.06
2	4.17	0.05	2.28	0.11	1.91	0.39	4.97	0.77	3.07	0.70
3	2.43	0.13	3.59	0.30	3.60	0.35	5.00	0.34	3.90	0.12
4	1.41	0.92	4.09	0.72	3.52	0.97	2.21	0.89	4.90	0.17
5	5.24	0.48	1.55	0.63	4.19	0.45	2.25	0.99	1.39	0.57
6	1.29	0.23	2.66	0.72	3.86	0.89	3.07	0.08	1.95	0.55
7	3.49	0.66	1.85	0.79	3.53	0.17	1.57	0.68	1.17	0.94
8	2.85	0.95	1.62	0.40	1.28	0.38	1.30	0.17	5.25	0.48
9	1.69	0.80	1.50	0.85	4.56	0.14	1.22	0.51	4.96	0.27
10	4.44	0.69	4.61	0.77	2.13	0.13	4.47	0.79	4.79	0.18
11	4.25	0.99	4.53	0.91	4.23	0.19	4.14	0.77	2.65	0.54
12	2.75	0.01	4.31	0.34	2.23	0.39	2.01	0.47	4.22	0.20
13	1.42	0.29	1.68	0.85	3.02	0.82	2.08	0.72	2.87	0.85
14	1.13	0.63	2.32	0.86	4.76	0.96	2.89	0.60	2.74	0.09
15	3.54	0.56	4.78	0.83	3.36	0.77	2.66	0.77	4.34	0.19
16	2.88	0.39	3.06	0.29	1.50	0.75	4.02	0.00	1.49	0.64
17	2.43	0.71	2.79	0.41	1.81	0.23	1.81	0.55	4.34	0.64
18	3.82	0.81	4.01	0.35	5.75	0.16	4.27	0.68	3.47	0.52
19	2.02	0.46	4.72	0.25	4.23	0.47	2.99	0.96	2.48	0.94
20	3.03	0.89	4.75	0.19	1.51	0.06	4.40	0.69	3.59	0.76
21	4.53	0.47	1.18	0.55	1.65	0.82	3.38	0.31	4.18	0.43
22	3.42	0.72	2.67	0.89	3.83	0.56	2.66	0.91	1.15	0.48
23	2.09	0.17	2.85	0.15	3.19	0.41	2.19	0.01	1.70	0.84
24	2.94	0.14	2.87	0.95	3.85	0.68	2.49	0.73	4.96	0.36
25	1.21	0.88	4.31	0.93	2.87	0.11	5.81	0.12	4.41	0.34
26	2.16	0.07	4.86	0.94	3.44	0.40	2.76	0.59	2.47	0.70
27	3.46	0.10	2.61	0.08	3.73	0.54	3.98	0.45	3.63	0.38
28	3.04	0.25	3.89	0.32	4.16	0.71	3.95	0.48	1.10	0.91
29	1.56	0.13	4.68	0.04	1.01	0.47	2.51	0.16	2.80	0.12
30	3.32	0.37	5.08	0.59	5.31	0.21	2.62	0.07	2.84	0.42
31	3.40	0.05	5.80	0.90	2.03	0.30	4.41	0.14	4.93	0.64
32	4.97	0.78	2.81	0.07	3.40	0.10	2.06	0.68	2.57	0.20

33	3.69	0.40	1.94	0.83	1.37	0.26	4.12	0.51	2.13	0.70
34	4.21	0.03	3.05	0.74	3.04	0.20	3.92	0.53	4.40	0.48

The final table provides the mean (M) and standard deviation (SD) for the reasons for not implementing an audit committee.

Study	High Cost		Effectiveness of Current Policy		Current Use of Internal Controls		Not Required		Prefer to Use Mandated Oversight Requirements	
	M	SD	M	SD	M	SD	M	SD	M	SD
1	1.67	0.11	2.42	0.11	3.73	0.70	2.42	0.25	3.16	0.32
2	4.95	0.21	5.47	0.38	2.23	0.43	3.66	0.94	3.62	0.14
3	2.91	0.45	2.65	0.90	5.77	0.91	5.02	0.29	4.64	0.61
4	3.59	0.59	1.05	0.39	4.68	0.56	3.18	0.14	3.72	0.37
5	5.71	0.39	2.97	0.83	3.09	0.06	1.25	0.60	4.53	0.60
6	4.00	0.17	2.60	0.18	1.09	0.26	2.86	0.19	3.18	0.75
7	4.79	0.44	1.39	0.36	1.90	0.23	1.91	0.50	4.06	0.32
8	1.27	0.22	2.52	0.32	1.69	0.01	2.64	0.64	2.85	0.24
9	3.06	0.61	2.98	0.96	1.02	0.57	3.31	0.93	2.06	0.69
10	3.82	0.88	1.97	0.06	1.50	0.49	2.94	0.42	2.01	0.26
11	3.09	0.01	4.08	0.48	4.96	0.33	1.17	0.42	2.09	0.41
12	4.64	0.28	1.02	0.58	3.43	0.76	4.14	0.89	4.61	0.77
13	3.10	0.08	2.59	0.49	1.02	0.60	1.72	0.00	4.00	0.49
14	2.16	0.68	4.41	0.43	3.61	0.38	4.65	0.02	4.86	0.33
15	2.34	0.37	4.31	0.39	4.64	0.10	1.46	0.25	2.54	0.14
16	3.70	0.66	3.28	0.06	1.67	0.51	1.69	0.12	1.61	0.16
17	1.55	0.81	2.38	0.03	3.15	0.32	2.87	0.60	4.76	0.55
18	5.02	0.50	3.03	0.39	1.42	0.21	3.37	0.73	1.68	0.56
19	4.13	0.16	3.20	0.90	4.97	0.07	2.74	0.26	4.03	0.91
20	1.63	0.11	1.51	0.97	4.43	0.92	2.85	0.96	4.40	0.98
21	1.98	0.60	3.26	0.49	3.46	0.63	4.21	0.80	2.80	0.38
22	1.46	0.85	1.25	0.09	4.24	0.85	2.73	0.89	4.09	0.68
23	2.84	0.36	1.47	0.96	4.28	0.19	3.05	0.93	1.88	0.29
24	4.67	0.74	2.91	0.03	3.30	0.69	3.26	0.13	1.55	0.92
25	3.99	0.37	4.74	0.75	3.45	0.43	4.51	0.88	3.20	0.07
26	4.69	0.04	2.48	0.38	1.95	0.90	3.32	0.45	2.81	0.91
27	2.67	0.57	2.92	0.59	4.93	0.12	3.51	0.53	4.32	0.49
28	4.30	0.85	2.71	0.10	4.67	0.85	2.22	0.54	3.74	0.33
29	1.89	0.27	3.20	0.92	4.99	0.76	1.16	0.74	1.99	0.99
30	3.52	0.09	5.86	0.61	1.02	0.76	4.38	0.89	5.72	0.20
31	5.49	0.01	3.78	0.40	2.17	0.49	4.81	0.12	3.21	0.48
32	3.48	0.37	2.08	0.50	4.91	0.20	1.27	0.63	2.55	0.56
33	1.93	0.44	3.34	0.78	3.36	0.75	3.85	0.18	2.89	0.71

34	4.35	0.00	1.58	0.40	3.07	0.88	2.75	0.20	2.64	0.80
----	------	------	------	------	------	------	------	------	------	------