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The Effect of Internal Audit on Governance: Maintaining Legitimacy of Local Government

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THE EFFECT OF INTERNAL AUDIT ON GOVERNANCE: MAINTAINING LEGITIMACY OF LOCAL GOVERNMENT

By

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I dedicate this dissertation to my wife and family as they stood by me throughout this process and made it possible to work effectively and complete this project.

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ABSTRACT

The purpose of internal audit, according to the Institute of Internal Auditors (IIA), is to evaluate and improve the effectiveness of an organization's risk management, control, and governance processes. Weaknesses in any of these areas pose a threat to the organization's legitimacy with its stakeholders. Many organizations worldwide are required to adopt internal audit. However, other institutions, like American municipalities, are not.

A municipality's decision to adopt internal audit is the responsibility of local leadership. Current economic pressures require that leaders consider a cost/benefit analysis before making a decision. Defining the costs of internal audit is relatively easy, but measuring its benefits is more elusive. The purpose of this research is to examine whether the results of external audits may be used as an objective measure of internal audits' benefits. The literature on internal audit quality does not identify externally derived measures that are independent of the function. This dissertation fills this gap.

A logit model is used with data from 162 Florida cities to determine whether the presence of an internal audit reduces the likelihood of a city receiving findings in the independent external annual audit of their financial reports. The results are evaluated using legitimacy theory. Examining internal audit through this framework explains the difficulty in measuring the effectiveness of internal audit. The results indicate that objectively defining the benefits of internal audit may not be possible. They indicate instead that internal audit benefits, while real, may largely be abstract or symbolic.

The internal audit role is best viewed as deterrent in nature. This poses challenges to those attempting to identify objectively measurable benefits. The implication is that municipal leadership should seek to understand the conceptual nature of the internal audit function before

making resource allocation decisions. The loss of benefits from cuts to or elimination of the internal audit function may not be evident until sometime after making those funding decisions. The results of this research demonstrate the importance of internal audit, as well as the need for more investigation to further understand the nature of its effects.

CHAPTER 1

INTRODUCTION

Failure of governance poses a serious risk to organizational legitimacy, especially for public entities operating in modern democracies (Deegan, 2006; Ingraham & Lynn, 2004). This increased risk exists because the public expects them to operate transparently and offer a greater degree of accountability (Power, 1997). Organizations that suffer a loss of legitimacy frequently encounter diminished support among their stakeholders, the potential for reduced flow of needed resources, and threats to achieving strategic objectives (Galang, Elsik, & Russ, 1999; Hybels, 1995; Terreberry, 1968). Therefore, it is important to understand the nature of the institutional mechanisms designed to protect legitimacy.

Organizational legitimacy is generally described as the condition whereby an entity's behavior is in alignment with the expectations of the environment within which it operates (Suchman, 1995). When misalignment occurs, the entity's legitimacy is frequently affected. Governance systems are typically designed to maintain alignment between management's interests, those of the owners/taxpayers, and those of other interested stakeholders (Triole, 2001). Lapses in governance have occurred in both public and private sector settings, but reforms have focused on those involving publicly traded private corporations (MacLean & Behnam, 2010; NACUBO, 2003). These reforms included requiring boards of directors to create audit committees and for corporations to adopt internal audit functions.

Internal audit is one of the primary mechanisms employed by organizations to help monitor governance and manage legitimacy (Humphrey & Owen, 2000; Pasewark, Shockley, & Wilkerson Jr, 1995; Pentland, 2000; Power, 2003). Organizational theory research examining legitimacy questions frequently focuses on private sector settings and has tended to involve environmental and social disclosures as part of financial and regulatory reporting (Cho & Patten, 2007; Deegan, 2002; Tilling, 2004). Legitimacy theory has also been employed to study the adoption of ethics programs (Friedberg, 1998; MacLean & Behnam, 2010; Rendtorff, 2009). The purpose of this dissertation is to fill a gap in the literature on internal audit and legitimacy theory by examining the nature of internal audit's oversight of governance systems and its protection of organizational legitimacy (Chiang, 2009).

This research focuses on the public sector internal audit function. It explains the nature of the oversight by studying whether the presence of internal audit reduces the likelihood of findings being included in the independent audit of the municipal comprehensive annual financial reports (CAFR). The public sector setting has not received much attention in legitimacy research, nor has the internal audit function (Power, 2003). Research involving reporting and disclosure has distinguished between voluntary and coercive reporting requirements indicating that legitimacy is affected more through voluntary actions (Lindblom, 1994). Therefore, this research involves municipal internal audit within the state of Florida because they presently have no requirements for cities to adopt internal audit as part of their overall system of governance.

If the research indicates that the presence of internal audit is related to a reduced likelihood of the occurrence of reported findings, stakeholders will be in a stronger position to argue support for spending public funds on the internal audit function. If not, opponents would be better situated to seek cuts or elimination of this function. This research is important to scholars because it advances understanding of how elements of organizational governance oversight influences legitimacy, and to practitioners because it provides some support for making budgetary decisions when resources are scarce. The overall results illustrate whether internal audit provides substantive protection to a local government's system of governance and to its legitimacy among stakeholders.

The remainder of the first chapter is organized into the following sections: (1) the problem statement, (2) the nature of the study, including the research question, and the proposed hypotheses and controls, (3) the purpose of the study, (4) an outline of the theoretical framework, (5) operational definitions of terminology, (6) limitations and assumptions of the study, (7) the study's significance, and (8) appendices at the end of the paper containing the proposed questionnaire, the advance notice letter for the survey, a list of cities identified as having adopted an internal audit function, and a list of all cities included in the population. This dissertation is intended to begin a more substantive and empirical examination of internal audit's role in municipal government and more clearly define the nature of the monitoring and oversight elements in systems of governance.

Problem Statement

Using a framework built around legitimacy, decoupling, and stakeholder theories, this dissertation examines whether experience with an internal audit function influences the results of external audits of municipal governments reported in the CAFR. Findings reported in the CAFR arise from two sources; the municipality's financial statement audit and its federally mandated Single Audit Act (OMB Circular A-133 or A-133) audit. Both types of audit include an evaluation of an entity's internal controls (Rezaee, 2007; "Single Audit Act Amendments of 1996," 1996; "Single Audit Act of 1984," 1984). When operating effectively, these controls protect against noncompliance with program laws, regulations, and rules. Internal controls are part of an organization's overall system of governance. The internal audit function is intended to provide monitoring and feedback on that system with specific emphasis on those controls (Finkler, 2010; Rezaee, 2007).

An organization's system of governance is designed to protect its stakeholders by promoting the alignment of management's strategy and actions with stakeholder preferences (Rezaee, 2007; Triole, 2001). Achieving and maintaining this alignment closely ties governance and any related institutional mechanisms to organizational legitimacy (Scott, 2003). Misalignment then becomes a threat that might lead to diminished levels of legitimacy. Organizations rely on the perception of legitimacy to obtain resources and support needed to achieve their strategic objectives. Therefore, understanding the role of institutional mechanisms in protecting legitimacy by maintaining an effective governance system is critical.

Internal audit contributes to the maintenance of legitimacy through its participation in the external audit process (including financial statement and federal Single Audit). Audit firms engaged to perform the municipality's financial statement and Single Audit follow professional standards that require them to at least consider the efforts of the internal auditor. The financial statement audit is intended to provide stakeholders with assurance that the financial reports of the municipality are prepared in accordance with generally accepted accounting principles, and are accurate and complete. The purpose of the Single Audit (also referred to as an A-133 audit) is to evaluate the legal and regulatory compliance of local government's management of federal grant and loan funds, and the effectiveness of their system of internal control over financial reporting, compliance and operations (Finkler, 2010; Jakubowski, 1995; "Single Audit Act of 1984," 1984).

These audits are conducted by independent certified public accounting (CPA) firms engaged by the local governments and performed in accordance with standards established by the American Institute of Certified Public Accountants (AICPA) and the President's Office of Management and Budget (OMB). CPA firms are required to maintain independence and objectivity as part of their professional practice[1], and while they may rely on the work of the internal audit function, they are not supervised or controlled by it (Stewart & Subramaniam, 2010). The results of these audits are communicated through audit reports that contain findings identified by the independent auditor. An audit finding is a deficiency identified by the independent auditors related to the objectives of the audit and the practices and system of the local government (Whittington & Pany, 2012).

Internal audit provides assurance to management about the condition of the local government's system of governance and internal controls through the completion of audits and reviews (Asare, 2009). The system of governance and the internal controls are designed to address the needs of private and public stakeholders at all levels: federal, state, and local (Power, 1997, 2003; Rezaee, 2007).

Therefore, because of their focus on internal controls, a direct linkage exists between the results of the financial statement and Single audits and the role and objectives of the internal audit function (Jakubowski, 1988). This linkage validates the use of the reported audit results in the CAFR to evaluate the contribution of internal audit to effective organizational governance and organizational legitimacy.

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[1] Professional practice of auditing is generally governed by the professional or regulating bodies that auditors typically belong to. Internal Auditors through the Institute of Internal Auditors, Public Accountants through the State Boards of Accountancy and their state institutes of public accounting and the American Institute of Public Accounting. Finally those working with public companies are monitored by the Public Company Audit Oversight Board.

Nature of the Study

Research Question

In order to understand how officials attempt to maintain the entity's legitimacy among many stakeholders, it is important to understand the role and function of the specific institutional mechanisms employed by local government. The question addressed here is whether internal audit positively influences local government's system of governance. This is accomplished by examining the way internal audit affects a key component of governance, the sub-system containing all the key internal controls of the local government. The analysis first examines whether a difference exists between cities that have and those that do not have an internal audit function, and then evaluate the influence of experience with internal audit among those cities that report they have adopted this function. The following is a brief explanation of the setting, methods, and data used to examine the research question (discussed in more detail in chapter 3).

Setting

Previous research established that legitimacy is influenced more by voluntary rather than involuntary actions (Lindblom, 1994). Therefore, the setting for this research focused on identifying a state that had no requirements for municipalities to adopt an internal audit function (Eckhart, Widener, & Johnson, 2001). While there is no research indicating which states have mandates or not, the Florida Constitution stipulates that Clerks of the Court are to provide internal audit services to counties; however, no similar requirement exists for cities.[2] Selecting a single state for the setting provides control over variation in the laws, regulations, and rules governing municipalities.

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[2] www.governmentauditors.org (Beth Brier, City Audit Manager and President of NALGA during 2010/2011, personal communications, June 30, 2011 through July 6, 2011)

The state has also been focusing attention on local governance issues in recent years. Two grand jury reports contained results of hearings and investigations into corruption and abuse by local public officials across the state (State of Florida, 2009, 2010). The investigations disclosed many instances where officials were reported to have violated the trust placed in them by the electorate. The reports contained recommendations that among other actions, governments should consider adopting sound internal audit functions to detect and prevent this type of behavior. These factors make Florida a favorable site to examine the influence of internal audits.

Methodology and Data

The methodology used is panel data analysis, also referred to as pooled time series cross section or pooled cross section time series (Chatterjee & Hadi, 2006; Hair, Black, Babin, Anderson, & Tatham, 2006; Tsay, 2010). The data have both spatial and temporal characteristics: a cross section of Florida cities and longitudinal data on internal audit and audit results for those cities (Yaffee, 2003). Panel data analysis is appropriate given the structure of the data and the short time frame being considered. Time-series data covering a period from 2007-2011 is used.

Data is being gathered through an examination of each city's web site, municipal charter, ordinances, and organizational charts. This is supplemented using a short survey designed to collect additional information on the local governments' internal audit function and basic descriptive information (Arena & Azzone, 2009). Other demographic information is obtained from the Florida Office of Economic and Demographic Research's archival records (EDR) and the U.S. Census (U.S. Census Bureau, 2009). In order to be included in the survey sample, a city must have a population of at least 10,000. It is believed that cities below that level, while numerous, will not have the resources to adopt internal audit and therefore bias the results. Based on the 2011 population estimates there are 410 incorporated communities (including cities, towns, and villages) and 162 with populations of at least 10,000, all of which are included in the survey.

The dependent variable relies on audit results reported in the municipal CAFR's. These reports are available from two sources; web sites of each municipality and the local government section of the Florida Auditor General. These reports contain the summarized results of each annual financial statement and A-133 audit indicating whether any findings were reported and the nature of those findings. The two primary independent variables are derived from the survey using two questions: (1) "Has your city adopted an internal audit function?" and (2) "What year was the internal audit function adopted?" A series of control variables, explained briefly below, focus on form and structure of government, relative size of internal audit, relative sizes of primary governments, and ratios measuring financial performance and condition are being used to evaluate other possible sources of variation.

Hypotheses and Controls

Legitimacy is said to have "no material form" and is described in the literature as being a generalized perception, an amalgam of elements that evaluated together lead one to ascribe a legitimate status on an organization, administration, policy, or program (Hybels, 1995, p. 243). Legitimacy is tied to an organization's ability to achieve strategic objectives, maintain stability within its operating environment, and attract support and resource flows critical to its survival, and thereby, it is also related to its system of governance (Asare, 2009). One of the keys to effective governance is monitoring, and organizations address this need through adoption of an internal audit function.

Since its rise to prominence in the 1940's as a sub-field within accounting, internal audit has taken center stage among institutional mechanisms designed for monitoring and controlling organizational behavior (Friedberg, 1998). Foremost, it functions as a critical monitoring mechanism of an entity's internal control system, providing assurance and evaluation services to management and the governing body of the organization. The Institute of Internal Auditors (IIA) defines internal auditing as

> an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes (Asare, 2009, p.16).

The other factor to consider, given that a particular local government has an internal audit function, is the amount of experience with that function. The internal audit function has evolved over time. Practitioners and academics consider the field young, at around 75 years old, and still going through the process of defining itself (Meigs, 1951; O'Regan, 2001; Ramamoorti, 2003). Thinking pragmatically, it makes sense to consider the effect that a government's experience with internal audit has on the system of internal controls. Therefore, the two primary hypotheses being tested are as follows:

> Hypothesis 1: Local governments that adopt an internal audit function (IAF) are less likely to receive audit findings related to their financial statement and A-133 audits than those that do not adopt an internal audit function.

> Hypothesis 2: Local governments that adopted internal audit earlier are less likely to receive audit findings related to their financial statement and A-133 audits than those that adopted an internal audit function later.

While these two variables are of primary interest, other factors may influence variation in the audit results: form of government, internal audit reporting hierarchy, size of government, and measures of financial performance and condition of government.

Form of government is believed to be related to fiscal policy choices of local government (Copley, 1991; Giroux & McLelland, 2003). The research in public administration, however, has not been able to provide overwhelming evidence of this (Carr & Karuppusamy, 2010). Yet a recent study in economics, using a cross sectional panel study of data, found spending in mayor-council cities was less than in council-manager cities (Coate & Knight, 2011). Therefore, since form matters in policy decisions, it should be considered as a control in evaluating the outcomes of audits involving municipal internal control systems.

City growth and size may affect the demand for services and the resources available to provide them (Baber, 1983; Deis & Giroux, 1992; Friedberg & Lutrin, 2001). A city's internal controls are designed to operate on a transactional level and protect its resources from inefficient and ineffective operations. Systems of governance may be eroded, including breakdowns in internal controls, under the strain of demand from larger or more rapidly growing populations. It is prudent to include variables measuring population, change in population, per capita revenue, spending, and long-term debt to account for possible influence population growth and size may have on audit results (Lewis, 2003, 2007).

The influence that internal audit might have on governance and the city's internal controls may be affected by the reporting structure for managing the function and communicating the results of audits (Goodwin, 2004). Internal audit's effectiveness in protecting the system of internal controls is influenced by factors that include its reporting level within the organization and the degree of politicization of the office. A dichotomous variable (0/1) is included representing the reporting arrangement for internal audit disclosed by cities in the survey instrument.

The relative size of the internal audit unit may also influence the degree to which it has any effect on the results of municipal external audits (Friedberg & Lutrin, 2001; Goodwin, 2004; Lewis, 2003, 2007). The primary resource used by internal audit is manpower. Other resources include technology and software applications that improve the efficiency and effectiveness of the audit function and allow fewer auditors to accomplish greater workloads. Therefore, it is important to consider factors such as the relative size of the internal audit budget to the total budget, and the ratio of internal audit staff to total city employment.

Finally, a city's financial condition and performance may influence audit results (Lewis, 2003, 2007). Factors such as working capital needs, availability of unrestricted fund balances, long-term capital financing arrangements, and outside revenue sources from other levels of government may affect the operating efficiency and effectiveness of the city (Deis & Giroux, 1992; Lewis, 2003). Any conditions indicating financial stress or distress, rapid growth, or deteriorating conditions put a strain on the city's system of internal control and should be carefully monitored. Internal audit should be performing procedures and reporting results to management so that appropriate actions can be taken to maintain an effective system of governance. These conditions are monitored through the use of various financial ratios. (See Table 1.1 on the next page for a list of included ratios).

This section provided merely an overview of the factors considered important. See chapter three for a more detailed explanation.

Table 1.1: Select Financial Ratios

Ratio Name	Definition
Current ratio	Current assets divided by current liabilities
Revenues per capita	Total revenues divided by total population
Expenditures per capita	Total expenditures divided by total population
Intergovernmental revenues	Intergovernmental revenues divided by total revenues
Long-term debt ratio	Long-term debt divided by total assets
Debt service ratio	Debt service expenditures divided by total expenditures
Unrestricted fund balance ratio	Unrestricted fund balance divided by total revenues

Purpose of the Study

The purpose of this dissertation is to explore the relationship between internal audit and an organization's system of governance. This is accomplished by testing the relationship between the presence of an internal audit function within municipal governments and their systems of internal control as measured through the results of audits summarized and reported in the CAFR. The literature's definition of governance includes as an important sub-element, the entity's system of internal controls (Rezaee, 2007). These are safeguards designed and adopted to operate at a transactional level to protect the resources of the entity from behavior such as fraud, waste, and abuse.

Organizations are encouraged by regulators and professional associations to adopt practices that safeguard the system of governance, and specifically the system of internal controls (Government Finance Officers Association, 2006a). The maintenance of a system of governance is a factor that stakeholders consider in their evaluation of the legitimacy of organizations (Ashforth & Gibbs, 1990). One of the mechanisms proffered toward that end is the internal audit function. There have been few studies that have evaluated the effect that internal audit has on governance through the monitoring and oversight of the system of internal controls. This study seeks to fill that gap in the literature. The importance of the question is linked to the relationship between trust and legitimacy, and the continuing failure of governance systems.

Theoretical Base

To develop an understanding of internal audit's role as a legitimating institution, it is important to define the relationships between legitimacy, governance, internal controls, and internal audit. This is accomplished using a theoretical base that includes literature addressing governance, organizational legitimacy, and symbolic versus substantive action. Chapter two contains a more thorough discussion of this theoretical base. What follows is a brief overview of the base as it relates to the research question.

This dissertation examines the degree to which a municipal government's internal audit function influences its system of internal controls. These controls are meant to provide a framework within which program and operational decisions are made (Downs, 1967). The maintenance of a system of internal controls is important to the municipality's overall system of governance (Adams, 1994). This system is intended to maintain proper alignment of management's goals and those of the municipality's diverse stakeholders (Triole, 2001).

The literature generally associates the maintenance of governance with maintaining organizational legitimacy (Richardson, 1987). Internal audit is said to be a legitimating institutional mechanism; therefore, of interest to practitioners and academicians (Pasewark et al., 1995).

Organizational theory posits that organizations are formed to facilitate social order and the accomplishment of various types of activities (Scott, 2003). Organizations benefit society because they possess three basic features: durability, reliability, and accountability. Each of these are enhanced by an organization adopting an effective system of governance containing strong internal controls. Failure of any part of a system of governance threatens to diminish an organization's legitimacy (Farber, 2005). Since organizations rely on legitimacy for support and resources, it is important to understand the mechanisms that are designed to protect it.

An organization's system of governance is a framework within which all decisions are made, and a component of stakeholders' assessment of its legitimacy (Scott, 2003). Legitimacy is described as not having a material form but rather exists as a perception (Hybels, 1995). Stakeholder perception of an organization's legitimacy lies on several dimensions: political/legal, economic, social, and cultural (Weber, 1978). This may include factors such as the legal or regulatory framework of society, the system of economic exchange, the process of establishing goals and objectives, or the larger social context including the social values and morals of the society. An organization's legitimacy depends upon the degree with which its actions align with the expectations of the diverse stakeholders (Parsons, 1960; Suchman, 1995).

Stakeholders pay attention to the form and substance of an organization's system of governance. This is most recently evidenced by their response to the corporate scandals that resulted in the passage of Sarbanes-Oxley in 2002 (NACUBO, 2003). This Act requires that public corporations adopt certain features and certain processes within their system of governance. Examples include provisions designed to reinforce the independence of financial statement auditors, requiring public corporations to adopt a code of ethics for senior management, and requiring boards of directors to form standing audit committees. All types of organizations took heed of the passage and implementation of Sarbanes-Oxley (NACUBO, 2003). The Act, in seeking to enhance public company institutional accountability and responsibility, also resulted in an examination of similar issues within other types of organizations; private, non-profit, and all levels of government (Elson & Dinkins, 2009).

Private, public, and non-profit organizations differ in the focus of their strategic and operating goals. Private organizations (whether publicly traded or not) tend to focus on maximizing return on investment for owners. Public organizations (mainly governmental) are generally concerned with the fair and equitable provision of public goods and services to citizens. Non-profit organizations fit between these two groups and are increasingly entering arrangements to offer services traditionally provided by governmental entities. These organizations are typically concerned with mission accomplishment since there are no shareholders.

Public sector service provision involves considering issues of coordination, collaboration, and associational networks, whereas private sector transactions involve property rights, contracts, and discrete economic calculations (Ingraham & Lynn, 2004; Williamson, 1996). However, increasingly, the literature recognizes a congruence of their governance processes.

The similarities begin with the definition of governance. In the economic literature governance is defined as the "design of institutions that induce or force management to internalize the welfare of stakeholders" (Triole, 2001, p. 4). In public administration it is conceptualized as linking "constitutional institutions with the realities of policy making and public management" (Hill & Lynn Jr, 2004, p. 6). New Public Management (NPM) and reinventing government adherents use language and concepts that are parallel to those used by the private sector (D. Osborne & Gaebler, 1992). Chief among them is the focus on accountability and transparency, and the importance of evaluating performance. It is the presence of these common features that facilitates using the broader governance and control literature when examining the influence of municipal internal audit on the system of internal controls.

Although the specific strategic and operating goals may differ, all organizations are designed in both form and function to achieve goals (Downs, 1967; Scott, 2003; Weber, 1978). The organization's system of controls is designed to manage discretion within organizations and align decisions with the operating and strategic goals (Downs, 1967). Performance failures generally lead to calls for increased controls; however, the growth in controls results in increased costs to the organization and may ultimately lead to further performance problems. The growth in controls and the perverse effect they have on performance leads to the need to evaluate the appropriate balance between controls and managerial discretion (Downs, 1967).

This problem increases the importance of understanding the influence of internal audit on the control environment and governance overall. Like governance itself, goal achievement is important in maintaining an organization's legitimacy with its stakeholders. This problem also creates some incentive for management to design elements of the governance process that have the appearance of a control, but are hollow, serving more like a scarecrow in the farmer's field. This should not imply that these mechanisms have no value. Instead, these controls may be more deterrent in nature rather than having some measureable direct effect. This may be the case with the design and function of internal audit, thereby increasing the need for academic research examining the influence internal audit has on governance.

Operational Definitions

The following list of operational definitions contains terminology used in addressing the nature and function of audits. Some terms were used here while others are provided because they relate to those terms and provide the reader a greater level of understanding into the subject matter.

A-133 Circular: The President's Office of Management and Budget (OMB) publishes the rules governing the conduct of Single Audit Act audits. These rules are issued in circulars and are designated as A for audit followed by a number. Circular A-133 explains the conduct of Single audits of state and local governments. The OMB also publishes compliance supplements with detailed audit guidance (Office of Management and Budget, 2011).

Audit: An independent examination of something. The nature of the audit may be financial, compliance, operational, or performance (Shafritz, 2004). Financial statement audits are conducted to provide assurance that financial statement reports are accurate and complete.

Assurance: Involves the reduction of uncertainty and doubt. Audits serve to provide assurance to users regarding the object of the audit (Whittington & Pany, 2012).

Attestation: The act of signing to verify correctness, accuracy, and representational faithfulness. The value of the audit is in the attesting signature of the auditor on the written report (Whittington & Pany, 2012).

Assertion: A representation or declaration made by a responsible party, typically management of an entity in the case of audits (Whittington & Pany, 2012).

Certified Public Accountant (CPA): An individual licensed to attest to the results of independent financial statement audits by a state through education, examination, and experience. CPAs are regulated by State Boards of Accountancy. Other audits may require the attestation of a CPA depending on laws, rules, and regulations of governing bodies (Whittington & Pany, 2012).

Comprehensive Annual Financial Report (CAFR): A financial report that includes the financial statements of the government entity, as well as other material for the external stakeholders. It generally has three broad sections; introduction, financial, and statistical. It is the basis for award of the Government Finance Officers Association (GFOA) Certificate of Achievement for Excellence in Financial Reporting Program.

External Audits: Audits generally performed by audit firms (operated by certified public accountants) that are engaged (or contracted) by the entity. These audits are intended for use by external stakeholders whereas internal audits are intended for use by management and staff of the entity.

Financial Statement Audit: See Audit.

Finding (audit): An audit finding or deficiency is a condition where the results of an audit procedure demonstrates a deviation from the stated objective, standard, or expected condition (Whittington & Pany, 2012).

Governance: A process affected by legal, regulatory, contractual, and market based mechanisms and best practices to create substantial stakeholder value (Shafritz, 2004).

Internal Audit: An independent, objective assurance and consulting activity intended to improve an organization's operations and reduce risk of failing to meet strategic and operational goals and objectives. It fills this function by examining an organization's risk management, control, and governance processes and reporting on the results of these audits and reviews to management and governing boards or stakeholders (The Institute of Internal Auditors, 2006).

Internal Controls: Institutional mechanisms designed to protect assets, secure the accuracy and reliability of data and reports, promote operational efficiency and achievement of organizational goals and objectives. Internal audit monitors their design, implementation, and operation (Whittington & Pany, 2012).

Single Audit Act (SAA) Audit: (A-133 or Single Audit) Audit required of entities that expend $500,000 or more in federal financial assistance (contracts, grants, and/or loans). The SAA was passed by Congress in 1984 and subsequently amended to provide accountability over the spending of federally provided public funds by non-federal entities. The audit focus is on compliance and internal controls but does take into account the financial statement audit as well ("Single Audit Act Amendments of 1996," 1996).

Stakeholder(s): One with a stake in an enterprise. A stake represents an interest or share in some undertaking or enterprise. In corporate governance, a narrow definition includes owners or shareholders. Broader definitions may include any individual or group affected by the existence of the entity. In public administration, it may include citizens, corporations, interest groups, and others with an interest in a public policy or decision (Merriam-Webster, 2004).

Yellow Book: Government Auditing Standards (GAS) published by the Government Accountability Office (GAO) (U.S. Government Accountability Office, 2011).

Assumptions and Limitations

Assumptions

All the hypotheses within this dissertation are derived from the research literature. There are no additional assumptions made in the problem statement, research question, or the theoretical base that have not been addressed in other sections of this chapter. The relationships between internal audit, internal controls, governance, and legitimacy are all based on contributions within the literature. This study seeks to contribute to the body of work by demonstrating the theoretical and practical influence of internal audit as a legitimating institutional mechanism through an empirical analysis using data which is not self-reported.

Limitations

All research contains limitations because of the nature of methods, data, and the research process itself. Several limitations have been considered in the research design. Good research should disclose any limitations, their potential effects, and any mitigating controls.

There are inherent problems with census data, but it is generally accepted that it provides reasonable estimates of populations. The setting chosen is Florida cities with populations of at least 10,000 people. The discussion of the results is limited to those cities within the sample; however, it is possible to draw some comparisons of Florida cities to other U.S. cities subject to the admonition that additional research is needed to confirm these comparisons. Smaller cities may have smaller budgets with fewer functions. They may be less likely to have a separate internal audit unit. Including smaller communities in the population would increase the sample size but introduce possible bias. These cities are also less likely to spend enough federal funds and require an A-133 audit. This reduces the usefulness of any similar size comparison.

Data is being obtained from the CAFR, the Census of Governments, and a survey submitted to the sample municipalities. Reliability of the survey results is subject to the accuracy of the answers submitted. The power of the analysis is related to the survey response rates. These limitations are being mitigated by designing the survey in consultation with practitioners to enhance comprehension.

An electronic format is used for distribution and presentation of the survey. This format ensures respondents only receive questions relevant to their situation which minimizes response time and facilitates the possibility of higher response rates and respondent accuracy. Hard copy letters on Florida State University letterhead containing instructions and mailed to respondents in advance of the delivery of the electronic survey are designed to encourage completion. Follow-up e-mails and letters are sent along with phone calls after initial delivery of the survey to encourage participation. The use of multiple contacts through various mediums are frequently mentioned as an effective way to mitigate the limitations inherent in survey research (Salant & Dillman, 1994).

Significance of the Study

This dissertation contributes to organizational theory and internal audit by presenting an explanation of their linkage. Internal audit informs organizational theory by influencing an organization's legitimacy through its effect on internal controls and governance. This linkage is demonstrated using external audit results reported through their CAFR. These audits are conducted by independent certified public accounting firms and focus on objectives related to an entity's system of internal controls facilitating accurate and complete financial reporting and compliance with federal program requirements.

This differs from previous research on internal audit that primarily relied on self-reported data obtained through interviews and surveys of internal auditors, chief audit executives, and their constituents (Gramling & Vandervelde, 2006). The present study uses a more objective design to evaluate the relationship between the presence and experience with internal audit and internal controls. Understanding internal audit's contribution toward maintenance of organizational legitimacy is important to public administration generally and local governments specifically given the current economically challenging environment.

Stakeholders of local government have been increasingly focused on operational and reporting problems (Wheat, 1991). The process of identifying solutions to these types of problems would be greatly enhanced through the presence of an internal audit function. The prevalence of internal audit is a relatively new phenomenon tied closely to the expansion and growth of local governments in terms of overall size and operational scope.

Relevant studies have found that since the 1970's, local governments have been increasingly adopting internal audit as a monitoring mechanism but that the total proportion of cities with an internal audit function may still be less than 50% (Eckhart et al., 2001; Friedberg & Lutrin, 2001). Identifying the specific benefits of internal audit may prove useful to stakeholders of local governments that have not yet adopted the function but are considering whether to heed the advice of the GFOA and others.

Local governments have struggled with difficulties in maintaining revenue collections sufficient to keep pace with the spending levels needed to provide their portfolio of services (Thomas, 2002). These municipalities face continued and mounting pressure from stakeholders to reduce tax burdens which may be accomplished partially through efficiencies, but more likely through reductions in spending and elimination of services. These pressures increase the need for city managers to build cases justifying their budget proposals. Cities are increasingly adopting performance measurement systems that require the reporting of operational and strategic results against past performance and benchmarks. The results of this study may provide proponents of internal audit with an objective defensible measure of its contribution to the municipality.

CHAPTER 2

LITERATURE REVIEW

The purpose of this chapter is to critically analyze literature germane to understanding internal audit's effect on the system of governance in local government. The content of this review includes an evaluation of the literature addressing governance systems and the role of internal audit within those systems. Understanding its effect requires considering how performance of internal audit has been traditionally defined by practitioners and academics. Since most of the research on internal audit focuses on the private sector it is important to understand the relationship between the private and public sectors, thus making it possible to rely on this body of work.

The review was developed through a systematic search of the literature using searches of relevant databases (JSTOR, ProQuest, Sage, and Emerald) individual journals (*Managerial Auditing Journal, Accounting Horizons, American Review of Public Administration*), scanning cited references in papers and books, and inquiries of experts on the topic. Literature used in the review includes *peer reviewed* empirical research, theoretical or conceptual papers, and *professional oriented* articles and books. This last category is important because of the applied nature of the topic.

The balance of this chapter is organized into three sections. The first section reviews the research literature related to the application of legitimacy theory to organizational governance, giving specific consideration to internal audit's role in organizations. The second section evaluates the research literature examining the use of legitimacy theory to study social accounting and reporting issues and the value of internal audit to organizational governance.

This review identifies the gap in the literature establishing the importance of the present problem statement. The third section examines the relevant research literature supporting other factors that might explain the phenomena being examined and the general methodology used in this dissertation.

Legitimacy Theory and Organizational Governance

Using Legitimacy Theory

A recent book edited by Baker and Anderson (2010b) presents a detailed and thoughtful discussion of the current state of literature and practice related to corporate governance. A search of the index and a reading of the first chapter, in which all subsequent chapters are summarized, is silent on the role and importance of internal audit on this topic. Another book by Rezaee (2007) addressing the issue of corporate governance after Sarbanes-Oxley, while including coverage of internal audit, does not mention it among the four key gate-keepers essential to any meaningful reform of corporate governance. A similar finding is made when reviewing literature on public sector governance and accountability (Behn, 2001; Hill & Lynn Jr, 2004; Ingraham & Lynn Jr., 2004). This gap in the literature raises a question of internal audit's importance to organizational governance (Lenz & Sarens, 2012). The focus of this dissertation, as stated in the first chapter, is to examine this gap by testing the relationship between the presence of an internal audit function and the results of external audits among municipal governments in Florida.

Organizations rely on capital resources for their current operations and future growth (Baker & Anderson, 2010a). One of the chief roles of leadership is to establish operational legitimacy with stakeholders because they provide these needed resources (Perrow, 1970). Legitimacy is established by demonstrating that organizational actions align with higher order social norms (Dowling & Pfeffer, 1975). Leadership adopts complex systems of governance to establish and communicate this alignment. The governance process consists of principles (i.e., accountability and transparency), mechanisms (i.e., board, internal controls, markets, and regulations), and functions (i.e., oversight, compliance, and monitoring) (Rezaee, 2007).

The traditional economic view of corporate governance focuses on the relationship between owners (shareholders) and managers (Triole, 2001). Governance is generally described as a process intended to control opportunistic behavior of management. For example, Rezaee (2007, p. 22) defines corporate governance as "a process affected by legal, regulatory, contractual, and market-based mechanisms and best practices to create substantial shareholder value while protecting the interests of other stakeholders." Triole (2001, p. 4) defines it more broadly as "the design of institutions that induce or force management to internalize the welfare of stakeholders." This broader or reformed view of governance has evolved with the rise of the study and practice of corporate social responsibility and sustainability (Chiang, 2009; Rendtorff, 2009). This expanded description of governance has been employed in the public administration (Hill & Lynn Jr, 2004) and organizational theory literatures (Scott, 2003) tying together a common framework that may be applied to any organizational setting.

The present research describes internal audit's importance using legitimacy theory instead of the popular agency theory applied by many authors studying organizational governance. Agency theory dates back to Adam Smith in 1776 and 200 years forward to Jensen and Meckling (1976) and has been widely used to address questions about the behavior and control of management within organizations (Besley, 2006). The growth of firms has resulted in the need for owners (principals) to contract with managers (agents) to run them. Agency theory holds that managers without a vested financial interest in the firm will act in their own best interests. The theory builds on the assumptions that firms are designed to make a profit for owners and that they incur costs in building in mechanisms to align management's interests with their own including the strong and independent board of directors. Recently other theories have been used to examine governance such as stewardship and stakeholder theories, but few studies have employed legitimacy theory (Hoque, 2006).

The reason other theories are being developed is because of a growing dissatisfaction with agency theory's primary assumptions about efficiency and diffused interests. Stewardship theory (Davis, Schoorman, & Donaldson, 1997; L. Donaldson & Davis, 1991) assumes that the individual interests of management are aligned more closely with those of the organization, and therefore owners, than traditionally assumed by agency theory. Managers are viewed as stewards of collective resources, seeking to ensure the success of the entity so as to achieve their own individual success. Stakeholder theory (T. Donaldson & Preston, 1995) assumes a broader definition of stakeholder than agency theory. Agency theory focuses on shareholders or owners as the primary principal stakeholder, whereas stakeholder theory assumes a broad number of stakeholders. These stakeholders are assumed to have their own interests in the performance of the organization, but they are not always aligned with the goals of the organization or congruent among themselves.

Legitimacy theory attempts to explain the survival and growth of organizations based on the need to acquire and maintain the support of its constituent stakeholders. It links stakeholder support with the alignment of organizational goals and those of groups and society in general. The concept of requiring support is similar to the idea of external control as described in resource dependency theory (RDT) (Hillman, Withers, & Collins, 2009). The chief difference between them is that legitimacy is more a state of mind or a perception, which is difficult to measure apart from its consequences. RDT, instead, links material resource needs of the organization to its behavior, such as merger and acquisition behavior. Legitimacy theory is increasingly being applied in accounting and auditing research particularly in situations involving the public disclosure of information (Deegan, 2006; Power, 2003). Most recently a number of papers have employed this framework with environmental and social accounting issues and corporate sustainability reporting (Chiang, 2009). Legitimacy theory is more appropriate to the current study because it facilitates an expanded definition of stakeholders, and it supports a substantive or symbolic explanation of internal audit's influence over organizational governance.

Legitimacy Theory and the Public Sector

Government relies on legitimacy to govern (The Institute of Internal Auditors, 2006). However, failures of governance frequently result in stakeholders questioning whether the governing authority is trustworthy and accountable, leading to an erosion of legitimacy (Perrow, 1970). Democracies are particularly sensitive to this because of their reliance on participative mechanisms in order to achieve consensus in the decision making process. The Declaration of Independence, like the Magna Carta before it, recognized that power emanates from the people governed. If the government fails to maintain proper alignment of its goals and objectives with those of the people it purports to represent, the foundations upon which it is built may erode and threaten its ability to continue governing effectively (Dowling & Pfeffer, 1975).

The architects of government typically build in mechanisms to promote accountability and transparency in government so as to maintain stakeholder legitimacy (Meyer & Scott, 1983). Likewise private sector firms are encouraged and in some cases required to adopt similar types of mechanisms in an effort to ensure the accuracy and completeness of information used by the investing public (Rezaee, 2007). Investors' perceived legitimacy of an organization's governance process is critical to the proper functioning of private capital markets. This same need is applicable to the proper functioning of a democratic system of government. The literature, while recognizing some key differences between public and private sectors (Bozeman, 2004), recognizes that both have a need for building and maintaining legitimacy among their key stakeholders. The common need for legitimacy and its close linkage to governance make it an appropriate framework for examining the question posed in this dissertation.

Defining Legitimacy Theory in Context

There is a large body of work defining and describing legitimacy theory generally from one of two approaches, either strategic or institutional (Suchman, 1995; Tilling, 2004). The strategic approach involves operational decisions and actions and builds on the work of Dowling and Pfeffer (1975) who describe legitimacy as involving the alignment of goals between an organization and its stakeholders. The institutional approach, as its name suggests, is derived from institutional theory (DiMaggio & Powell, 1983; Suchman, 1995). Its definition of legitimacy focuses on a broader cultural or environmental context. The legitimacy framework presented by Tilling is divided into a micro and macro approach similar to that found in economics.

Suchman's framework describes three types and a number of subtypes of organizational legitimacy. First, pragmatic legitimacy relies on a quid pro quo calculation, a "what's in it for me" approach to ascribing legitimacy. Second, moral legitimacy focuses on whether something is right or not and involves examining the relationship between means and ends. This type includes consequential legitimacy (ends), procedural legitimacy (means), structural legitimacy (structure and function), and personal legitimacy (charisma or personality). Third, cognitive legitimacy involves the decision making processes and consists of two dimensions, an affirmative decision to support or a passive acceptance. Finally, Suchman examines strategies typically employed for gaining, maintaining, and repairing legitimacy.

He notes that pragmatic legitimacy is gained "by conforming to instrumental demands," moral legitimacy "by conforming to altruistic ideals", and cognitive legitimacy "by conforming to established models or standards." He also concludes that some organizations must meet higher expectations in order to gain legitimacy because of the nature of the product or service that they provide. When issues of trust or fiduciary responsibility are present, these organizations are held to a higher standard of accountability. Local government, which attracts resources using both voluntary and coercive means, it may be argued, falls into this category of organization. Suchman chooses to view legitimacy theory through a lens that combines both approaches rather than separating them because organizations are influenced by both the stakeholders and the broader environment.

Legitimacy theory is popular in research examining environmental and social reporting. This literature defines legitimacy using systems and political economy theories (Deegan, 2002, 2006). Organizations are generally described using terms and phrases that evoke visions of systems. Scott (2003) defines organizations using three perspectives; rational, natural and open systems. He describes the first two types of systems as closed systems, disconnected from the broader external environment, whereas open systems include this context in thinking about organizations. All three perspectives define organizations as collectives or aggregates of stakeholders or participants set on achieving goals. Deegan's description of legitimacy recognizes the influence of stakeholders and environmental context, and the distribution and influence of power differences among stakeholders.

Organizations require legitimacy for survival and growth. Hybels (1995) and Terreberry (1968) both state that while legitimacy has no physical form of its own, it affects an organization's ability to conduct economic exchange for needed resources. This linkage incentivizes organizations to develop control mechanisms that ensure the ability to manage stakeholder relationships and ensure the maintenance of their perceptions of the organization's legitimacy (Pasewark et al., 1995). Williamson (1996) states that organizations failing to perform leads to stakeholder demand for increased levels of control. Performance failure, or more generally a failure to maintain the alignment between the goals of the organization and the key stakeholders, may lead to loss of legitimacy. This, in turn, would lead to the possible loss of critical strategic and operational resources.

Scott (2003) notes that procedural and structural controls are intended to protect an organization's legitimacy, and that accounting systems are an important control mechanism particularly when it involves the linkage between technical activities and belief systems. Accounting is frequently described as a legitimating institution (Richardson, 1987). The rules governing the accounting and reporting process are considered critical to maintaining legitimacy and are designed to result in performance information that promotes the legitimacy of an organization's operations (Pasewark et al., 1995). Their breakdown or failure will ultimately result in a loss of legitimacy and, as Habermas (1992) states, a legitimation crisis.

The application of legitimacy theory in the present research focuses on the influence of internal audit on the internal controls of an organization. These controls are part of the governance process that is considered by academics and practitioners to be crucial to building and maintaining organizational legitimacy (Scott, 2003). There are several frameworks used to describe the classification of controls, but they are generally in agreement as to their function.

For example, Scott describes two types of controls; institutional controls and technical controls. The former are designed to ensure compliance along procedural or regulatory lines while the latter are designed to influence quality and timeliness issues. Likewise, O'Bryan (2010) describes two types of internal controls, those designed to prevent fraud, waste, abuse, and unintentional errors and another to detect when they may have already occurred. While classifying controls differently, both point toward their role in compliance. Bryan further describes five basic control activities available to every organization: (1) segregation of duties, (2) proper authorizations, (3) physical safeguards, (4) independent checks, and (5) sufficient and adequate documentation. He notes that the first three are preventive mechanisms and the later two detection mechanisms as described in the framework.

Internal audit provides management with assurance over the design and operation of the internal controls (Government Finance Officers Association, 2006a; Light, 1993; Pollitt et al., 1999; Shah, 2007; The Institute of Internal Auditors, 2003, 2004, 2006) and thereby acts as a mechanism supporting the basis of legitimacy ascribed to the organization by its stakeholders. Internal audit may be thought of as an organization's mechanism intended to provide assurance that these controls are in fact present and functioning properly. This in turn is intended to protect the resources of the organization and channel actions toward goal achievement. This dissertation makes the case that this relationship is best examined through the lens of legitimacy theory using a mixture of both approaches as suggested by Suchman.

The relationship examined in this present study is similar to research on environmental compliance reporting and sustainability. The next section relates previous research applying legitimacy theory to reporting on the behavior and performance of organizations and tie this literature stream to the relationship between internal audit and internal controls. Although this research stream focuses on only a narrow application of legitimacy theory, its inclusion provides important context for the problem being addressed here.

Legitimacy Theory, Internal Audit, and Social Accounting and Reporting

Stakeholders frequently obtain the information that informs their perceived legitimacy from various documents including the organization's annual report. Ashforth and Gibbs (1990) state that organizations seek legitimacy through either substantive or symbolic management actions. Substantive means include "real, material change in organizational goals, structures, and process" while symbolic means refer to a simple portrayal of change that transforms the meaning of the organization's actions. This distinction is important because this research examines whether the presence of an internal audit function has any effect on an organization's internal controls, which are an important element of its governance process. The ability of an organization to maintain legitimacy hinges on its ability to convince stakeholders of the credibility of its governance process. This is partly accomplished through adoption of appropriate mechanisms like internal audit and partly through reporting performance results. Stakeholders assessment of legitimacy influences how they decide to allocate their investments.

Social and Environmental Accounting Research (SEAR)

A narrow band of research exists addressing the role of social and environmental reporting in building and maintaining legitimacy (Lindblom, 1994). This literature is a segue to the current dissertation's focus on internal audit reporting of internal controls. Deegan (2002) labels this literature as social and environmental accounting research (SEAR) and explains that most of the work in this area involves constructing our understanding of management's decision to report certain information reflecting the performance of their organizations. The literature on

SEAR focuses on understanding the relationship between the reporting of social and environmental accounting information and stakeholders' perception of legitimacy.

Much of the research over the past two decades focused on SEAR has been either descriptive or normative, but a growing number of positive/empirical papers have been published as well. Generally the questions have sought to identify or explain what is being reported, how it is being reported, and why (Deegan, 2002). Fewer studies have focused on explaining the relationship between the reporting and actual corporate performance. Research on SEAR in many ways reflects the condition of research on internal auditing. The subsection below contains a review of the literature on internal audit and concludes by restating the importance of this research for organizational governance.

Research on social and environmental accounting finds that whether disclosures are voluntary or not matters when it comes to its importance in building or maintaining legitimacy. When organizations report disclosures that are required under law or regulation, they have little influence over perceptions of legitimacy held by stakeholders. Lindblom (1994, p. 8), in addressing corporate social performance and disclosure (CSD), states that "the status of legitimacy must be recognized by corporations as separate from the condition of legality." Specifically, only voluntary disclosures are thought to be related to an organization's attempt to gain legitimacy among stakeholders (Cho & Patten, 2007).

The body of research examining the relationship between disclosure and performance comes from a variety of settings. Patten (2002) studied environmental performance and disclosure of U.S. companies and noted the existence of a relationship between the two. Companies found to have higher levels of toxic release also had increased levels of subsequent information disclosure. Cho and Patten (2007) later found similar results using a different population of companies. This article argued that support demonstrating the linkage between performance and disclosure is positive evidence that organizations use disclosure as a legitimizing mechanism.

Chiang (2009) interviewed private and public sector auditors in New Zealand to determine whether their perceptions of the legitimacy of an organization influenced the outcomes of audits they performed on private sector firms. Chiang's results support earlier findings that audits and subsequent disclosures of their results, when legislatively mandated, are not tied to perceptions of legitimacy. Chiang notes that rather than legitimacy influencing audit behavior, they were following the lead of others already conducting these audits in other nations. The conduct of the environmental audits was mimetic in nature as opposed to being driven by some problem threatening the legitimacy of individual organizations or the field in general.

The literature on social and environmental accounting supports the view that disclosure is a mechanism used by organizations to manage legitimacy. Legitimacy is considered a resource in the literature and therefore subject to being used and managed (Tilling, 2004). Hybels (1995) argues that resources are the medium through which the effects of legitimacy are measured. He classifies constituents (stakeholders) as state (governmental), the public (including interest groups), the financial community (investors and creditors), and the media. He states that any theory of legitimacy must take into account the various stakeholder groups and their ability to influence the flow of resources into and out of the organization.

Tilling (2004) builds on this notion by explaining various stages that organizations pass through that affect the need for and level of legitimacy. New organizations typically have a need to establish legitimacy with stakeholders, whereas mature organizations need to focus on maintaining it. Organizations that are growing often need to extend legitimacy with new groups of stakeholders, while others that are embattled for various reasons must defend their legitimacy. Organizations in severe decline often lose legitimacy and attempt to reestablish it. The importance of these observations is that organizations must consider legitimacy in their strategic and operational planning.

A general legitimacy framework has emerged from the literature on SEAR (Deegan, 2006). The framework explains strategies available to organizations desiring to manage legitimacy. To address differences between popular expectations and the organization's operations or strategy there are four strategies available. Dowling and Pfeffer (1975) describe three alternatives: the organization may (1) consider altering its own behavior to align with expectations, (2) influence stakeholder perceptions through communication, or (3) associate with something that itself is considered legitimate. A fourth remedy, added by Lindblom (1994), suggests an organization may attempt to manage the expectations of the stakeholders. These strategies suggest that organizations sometimes take substantive action to influence legitimacy, while at other times a more abstract approach is selected.

The literature illustrates the delicacy of legitimacy as a resource. Because it has no form, is based on perceptions, and is measured through its influence on other resource flows, managing legitimacy poses problems for organizations. Richardson (1985) and Ashforth and Gibbs (1990) employ frameworks of legitimacy theory that use two rather than three or four strategies: (1) substantive and (2) symbolic. These two strategies encompass all the other individual strategies previously introduced in the literature (Berrone, Gelabert, & Fosfuri, 2009; Bowerman, 2002; Brown, 1994; MacLean & Behnam, 2010; Weaver, Klebe Trevino, & Cochran, 1999; Westphal & Zajac, 1994). Substantive action involves meaningful material changes on the part of the organization. Symbolic strategies, on the other hand, may involve either immaterial changes or perception modifications, sometimes referred to as window dressing (Weaver et al., 1999). Literature focusing on the legitimacy of organizational actions frequently involves considering the relationship between the actions taken and the functions of the organization.

This relationship involves the relative balance between the strategies employed by the organization. Richardson (1985) addresses the dilemma of balance among the professions referring to it as a paradox. He explains how professionals operate along the boundaries of institutionalized knowledge and as they resolve client problems they must balance their own legitimacy while securing the clients. Ashforth and Gibbs (1990) describe the double-edged nature of legitimacy theory when used to examine organizational decision making. The double-edge refers to the inherent conflict between the need for legitimacy and the actions designed to fill that need. It is possible that they both may operate to negate each other. They also observe that managers and stakeholders frequently prefer opposite strategies. They state that managers prefer symbolic as opposed to substantive actions because it conserves resources and preserves flexibility, while many stakeholders prefer substantive action. The literature demonstrates the difficulty involved in managing and controlling this fragile resource.

Managing legitimacy requires the use of an effective mixture of strategies. The reliance on too much of either type may result in either over employment of resources, in the case of using substantive strategies, or the failure to convince stakeholders of the organization's sincerity through employment of too many symbolic gestures (Berrone et al., 2009). Neither of these strategies is inherently good or bad. The real issue is how they are utilized and the intentions of those making the decisions (Richardson, 1985). Several studies have addressed this balance in different areas of organizational life. Literature addressing environmental sustainability have been touched on already (Berrone et al., 2009; Chiang, 2009; Tilling, 2004), but others have focused on corporate ethical practices (Weaver et al., 1999), market research (Brown, 1994), executive compensation plans (Westphal & Zajac, 1994), and governance, internal controls, and auditing (Bowerman, 2002; MacLean & Behnam, 2010; Power, 1997).

Bowerman (2002) examines the adoption of a European business excellence model and the effects of isomorphism and legitimacy. Organizations feel pressure to adopt particularly in the face of potential legitimacy issues if they fail to do so. Institutional mechanisms are frequently developed and employed that provide more form over function but become synonymous with organizational effectiveness and legitimacy. In effect these mechanisms are decoupled from actual organizational operations and are designed purely for appearance, i.e., window dressing (Weaver et al., 1999). These types of examples also point out the importance of communication and information as they relate to legitimacy (Ashforth & Gibbs, 1990; Richardson, 1985).

Role of Reporting in Securing Legitimacy

Auditing, a subfield of accounting, involves the legitimation of information communicated through various means to external and internal stakeholders, thus making legitimacy theory a strong candidate for examining its adoption and practice. Power (1997) questions whether financial audit reporting functions as a symbol of organizational attention to quality or performs a more meaningful substantive role in informing and educating the users. Others argue that the broad field of accounting is an important legitimizing function (Richardson, 1987; Scott, 2003). This section briefly examines literature involving the disclosure of audit findings, primarily in the private and nonprofit sectors as little research exists on governments.

Recent work by Ashbaugh-Skaife, Collins, and Kinney Jr (2007) and Doyle, Ge, and McVay (2007) examine factors relating to the presence and reporting of various types of audit deficiencies in publicly traded companies. These authors conclude that the presence of deficiencies and their likelihood of being reported are influenced by structural, operational, and managerial factors. The key variables identified include organizational complexity, degree of structural change ongoing, organizational size and growth patterns, resource allocations to internal control, and inherent exposure to accounting risks. Ge and McVay (2005) examine publicly traded companies and find deficiencies are related to weak internal controls and the level of management's commitment to providing resources to strengthen them.

Petrovits, Shakespeare, and Shih (2011) report similar results using a large sample of nonprofit charities. Indicating a shortage of research on nonprofits, they extended their own research to include questioning whether the presence of deficiencies related to changes in donor support. Their results indicated that increased reporting of deficiencies was negatively related to donor contribution levels. Lopez and Peters (2010) research on city and county government disclosures found private CPA firms were more likely than governmental auditors to report deficiencies in the Single Audit Act audit reports. No specific reason was given, but it may be suggested that private CPA firms have more recent experience with deficiency reporting under the Sarbanes-Oxley Act which has made them more sensitive to this area of reporting.

These findings, along with the literature on SEARS and the prior section's discussion of legitimacy and organizational governance, reinforces the importance of examining the influence of internal audit on the internal controls of local government and more broadly on the governance process. Several conceptual articles and book chapters, previously cited within this dissertation, point out the general belief among academics and practitioners that oversight and monitoring (compliance and reporting) mechanisms such as accounting and auditing, are important institutional mechanisms supporting organizational legitimacy (Weaver et al., 1999).

The next subsection closes out this section of the chapter reviewing a selection of the literature on internal audit and examining the issue of measuring the effect or quality of it in the organization.

Value of Internal Audit

The Institute of Internal Auditors (IIA) states that internal audit is a critical function that supports and promotes organizational governance (Ramamoorti, 2003). Holt and DeZoort (2009, p. 62) state that internal audit's role in corporate governance is to monitor risks and ensure financial reporting reliability. Internal audit supports the monitoring and oversight functions filled by management, the board, and external auditors by providing independent and objective assurance over strategic and operational aspects of corporate governance such as the system of internal controls (Anechiarico, 2010; Asare, 2009; Montondon, 1995; Rezaee, 2007). The activities of the internal audit function help ensure the veracity of the information used by investors in making resource allocation decisions (Gramling, Maletta, Schneider, & Church, 2004; Prawitt, Smith, & Wood, 2009).

Studies of internal audit (IA) have focused on different nations and industry sectors (Sarens, 2009). However, this does not reduce the usefulness of the research in developing an overall understanding of IA or applying the broader body of literature to a specific setting. Goodwin (2004) argues that reforms of organizational governance has lessened any possible differences resulting from variances in these factors. The expansion of the definition of governance has broadened the applicability of the body of IA research. This phenomenon makes it possible to rely on the complete body of work applicable to IA in developing our understanding of this important function (Deis & Giroux, 1992; Goodwin, 2004).

Current IA research calls for increased focus on the effectiveness of internal audit (Soh & Martinov-Bennie, 2011). A key ongoing challenge in the research on internal audit includes being able to explain the value-added by IA to the organization and its broader groups of stakeholders (Sarens, 2009). A key to achieving this objective is finding "evidence that IAF[3] quality has a positive impact on the quality of corporate governance." Sarens (pg 3) suggests the following research question: "given the current corporate governance context, what are the aspects of corporate governance on which the IAF can have a positive influence?"

The Institute of Internal Auditing (IIA) currently defines internal audit as "an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes" (Ramamoorti, 2003, p. 12). This definition focuses the work of the internal auditor on issues related to the three key areas affecting current and future operations and the perceived legitimacy of the organization; risk management, control, and governance (Arena & Azzone, 2009; Dittenhofer, 2001). It also points toward the fact that internal audit, while being both independent and objective, is also disciplined, performing its services according to professional standards. Internal audit's value in maintaining organizational legitimacy rests in stakeholders believing it to be credible. Holt and DeZoort (2009) state that IA credibility relies on the stakeholder's perception of it being both objective and competent.

Based on a review of the professional literature, there is no universal requirement that organizations adopt an internal audit function (Council of Europe, 2007; The Institute of Internal Auditors, 2006). In the United States publicly traded companies are generally required to do so, but there are no specifications provided for the office so that scope, structure, and resourcing of

[3] IAF is frequently used as an abbreviation for internal audit function.

the function varies among organizations (Rezaee, 2007). There is no similar requirement affecting private businesses and nonprofit entities. The federal and state governments generally require that public agencies maintain an inspector general (IG) function (Light, 1993). This is a hybrid office that houses internal audit and investigative staff and is able to issue subpoenas compelling individuals to turn over information or submit to interviews and interrogations. The IG function, while similar to internal audit, has its origins in military history. The literature, supported by inquiries made to appropriate professional organizations, indicates that local governments in the U.S. are not required to maintain an internal audit function (Eckhart et al., 2001). Given the number of organizations within each classification, it appears there are far more organizations operating without the requirement to maintain an internal audit function.

Absent an affirmative requirement to create and maintain an internal audit function, convincing arguments are essential to establish a need for organizations to adopt this function, particularly in light of the current economic conditions. Many of the professional organizations that work with business entities (private and/or public) support the adoption of internal audit. The Institute of Internal Auditors (IIA), formed in 1941, works with all organizations interested in IA. The IIA notes that the contemporary business environment makes having internal audit essential for accountability and transparency purposes (Ramamoorti, 2003). Organizations have grown in scope, size, and complexity, including greater relational distances between owners, managers, and labor. These changes have increased the need for more sophisticated internal control systems including improved oversight and monitoring capabilities. Ramamoorti (2003, p. 14) states that "one of the key premises today in any organization is that the presence of a strong internal audit function can go a long way in supporting and promoting effective organizational governance."

No single way of measuring internal audit's value[4] is available. Instead, several definitions of audit quality are present in the literature. DeAngelo (1981a) defines audit quality in terms of the likelihood that an auditor will identify and report on deficiencies resulting from an audit. Deis and Giroux (1992) define it in terms of a proxy measure, audit hours. Other studies focusing on internal audit have defined audit quality in terms of auditor competence (measured itself by many sub-factors) and audit contribution to the financial reporting process (Mohamed, Mat Zain, Subramaniam, & Wan Yusoff, 2012). The present study defines audit quality or influence in terms of the outcomes of external audits. Specifically, it is defined and measured using reported internal control deficiencies revealed in the comprehensive annual financial reports of municipalities.

According to The Institute of Internal Auditors (2006, p. 3) "governmental auditing is a cornerstone to good public sector governance." They differentiate between internal and external auditing. The external audit involves engaging the services of a private public accounting firm to conduct a financial statement audit. Financial reports are used by investors making decisions about the allocation of resources in addition to others contemplating entering contractual relationships with an organization. Internal audit is focused on risk management and governance which includes the system of internal controls meant to ensure that the organization's goals and objectives are achieved. The two are related in that IA provides assurance over the systems through which the information is obtained to prepare the financial reports that external auditors provide assurance over. Prawitt et al. (2009) note that the IIA specifically identifies internal audit as one of four cornerstones in corporate governance.

Much of the research examining the value or quality of internal audit relies on surveys, interviews, and case studies. There have been some empirical work conducted using archival

[4] The terms value, quality, and influence are used interchangeably throughout this paper.

data that might be considered independent of the internal audit function. Studies focusing on internal audit have examined its influence on investor decisions, identification of factors indicative of audit quality, and on various characteristics of the internal audit function (Sarens, 2009). Sarens notes that an adequate understanding of internal audit requires answers to all these types of questions.

The examination of audit quality began in earnest during the 1980's and 90's with research focusing on external audits. Deis and Giroux (1992) reviewed the literature of that time assessing the quality of audits. Using a regression model of data on audits of Texas independent school districts, they found among other things that firm size matters in assessing audit quality (DeAngelo, 1981b), that audit quality is related to audit timeliness, and that measures of audit timeliness may be a valid measure of audit quality in the absence of other more direct measures. At the time few studies of audit quality had been conducted, but the profession understood the importance of audit quality on financial reporting quality. The premise in the present paper is that interest in the quality or value of internal audit partially stems from the definition of internal audit (which includes the concept of value-added), but also is a natural outgrowth of the interest in audit quality in general. It is the desire to improve the credibility or legitimacy of financial reporting among stakeholders that drives the need to understand the role of audit, and particularly internal audit, in this process.

External auditors are often required and in most cases encouraged to consider the work of the internal auditor when planning their own work and in assessing the internal control environment of the engaging organization. Gramling and Vandervelde (2006) examined the influence of perceived internal audit quality on external audit results. Using a case study based experimental method with data on publicly traded companies, the authors found that perceptions of low quality internal audit functions resulted in lower assessments of an organization's internal control system. External auditors relate the internal audit function closely with an organization's system of internal controls.

The value (quality or performance) of internal audit may be measured in any number of ways. Dittenhofer (2001) notes in a conceptual analysis of internal audit effectiveness the importance of being able to measure performance of IA because it is a mechanism critical to the overall success of the organization. The chief aim of IA is to prevent control failure which results in the failure of the organization's achievement of the strategic goals and objectives. While much of the literature focuses on the private sector, this aim is equally important to the public sector (Gendron, Cooper, & Townley, 2001). Stakeholders of all organizations in all settings are increasingly demanding accountability for results. One of the ways often mentioned for evaluating internal audit is an external assessment based on some generally accepted set of standards (Marais, 2004). This is a process used by many internal audit shops following standards such as the IIA International Professional Practices Framework (Institute of Internal Auditors, 2012)

Recently increased attention has focused on identifying factors or drivers of internal audit quality (Cristina & Cristina, 2009). Arena and Azzone (2009) tied audit quality to resources, competence, and participation (measured as acceptance of internal audit findings by management) within Italian companies using a logit model and survey data. This study's finding also points toward the importance of the audit outcomes in assessing audit quality. In this case the audit outcome was internal, while the current study proposes an externally derived audit outcome. Mohamed et al. (2012) using a cross-sectional regression model of data on Malaysian publicly traded companies found similar results. Their results indicated that internal audit quality is related to competency and participation (defined as IA contribution to the financial reporting process). All these results indicate the importance of internal audit's contribution to the condition of internal controls of the organization.

In addition to examining drivers of audit quality, some recent studies have examined questions regarding the effect of internal audit quality on various forms of organizational performance. Prawitt et al. (2009), using data on organizations from the IIA, conducted a statistical analysis that indicated organizations with higher quality internal audit functions were less likely to exhibit evidence of earnings management. Holt and DeZoort (2009) found that investor confidence in external financial reporting is influenced by the perceived quality of internal audit. They noted this as part of an experiment involving graduate business student responses to questions based on corporate information presented through the internet.

Lin, Pizzini, Vargus, and Bardhan (2011), using SEC Edgar data on public companies and the IIA GAIN survey, found there is a relationship between the work of the internal auditor and that of the external auditor in assessing the organization's internal controls and reporting of material weaknesses. The authors conclude that the effective internal audit helps strengthen the internal controls within an organization over time.

Lastly, Sarens and Abdolmohammadi (2011) find that the environment established by management influences the effectiveness of the internal audit function. This includes resourcing the function adequately and the tone set by senior management of the entity. The importance of the recently published literature points toward the relationship between external stakeholders' assessment of organizational performance, their assessment of legitimacy on the organization, and the efforts of the internal audit function.

Other Explanatory Factors and Methodology Considerations

Other Factors Considered

Aside from considering the strict presence or absence of internal audit as a contributing factor to the reporting of deficiencies in external audit reports, other factors were suggested based on the literature. These other factors included audit tenure, form of government, municipal growth and size, reporting structure, relative investment in internal audit, and municipal financial condition. Brief explanations for most of those factors were provided in chapter one and is addressed again in chapter 3, but the following additional explanation is provided related to auditor tenure. Auditor tenure refers to the length of time an organization has had experience with internal audit as a function and not specifically the qualifications and experience of the individuals employed within the function. It is this more general level of experience with the function that is being argued may influence the working relationship between the organization and its internal audit regardless of the persons employed.

It is possible that not only would the mere presence of an internal audit function influence the quality of the internal controls of an organization, but this may also be affected by the degree of experience the entity has in working with that function. Much of the research on auditor tenure focuses on the work of the external auditor because of the importance placed on independence between the auditor and management (Ghosh & Moon, 2005). As noted earlier, the external auditor's role is to provide assurance to stakeholders considering decisions over resource allocation of the financial performance and condition of the organization. Research on external audit has examined whether the tenure of the auditor/organization relationship affects various aspects of audit and organizational performance (Mgbame, Eragbhe, & Osazuwa, 2012).

More recently, similar questions have been asked about the relationship between internal audit and the rest of the organization (Mohamed et al., 2012).

Studies that include auditor tenure as a factor provide mixed support of its effect on organizational performance and audit outcomes. Deis and Giroux (1992) examined audit outcomes in Texas school districts and found that, as auditor tenure increases, the quality of outcomes decreases. Their finding supports the literature (DeAngelo, 1981b) indicating that as auditor tenure increases there is pressure to manage costs and reduce quality, because familiarity builds between the auditor and the client. Audit quality in this context is generally defined in terms of the likelihood that the auditor will find and report on deficiencies (Lin et al., 2011; Lopez & Peters, 2010). However, their results also found auditor competency is linked with improved organizational control over financial reporting. This particular aspect of general audit quality provides support for a different conclusion when it comes to internal audit.

Internal audit quality is defined as composing two factors; (1) auditor competence, and (2) contribution to the financial statement audit process (Mohamed et al., 2012). The IIA definition of internal audit communicates the important role that internal audit fills in regard to monitoring the systems that are used to collect, store, organize, and report on financial operating results. Further, auditor competence is linked to stakeholder confidence in the credibility of financial reporting of the organization (Holt & DeZoort, 2009). This confidence is what legitimacy is ultimately based on, and the competence of internal auditors is partially a factor of the experience an organization has with its internal audit function (Arena & Azzone, 2009; Deis & Giroux, 1992; Dittenhofer, 2001; Gramling & Vandervelde, 2006; Prawitt et al., 2009). Therefore, it is reasonable, based both on practice and research, to consider the possibility that the amount of time an organization has been working with an internal audit function may affect the number of findings related to internal controls in their externally generated audit reports.

Method Selection

As noted earlier, previous research involving internal audit has employed a variety of methods. These include interviews, case studies, conceptual analysis, surveys, and statistical methods, which generally use data gathered applying the former methods (Gramling & Vandervelde, 2006). However, based on a present review of the literature, increasingly empirical research involving the use of archival data is being employed to help answer some of the basic questions about internal auditing helpful in constructing our overall understanding of this function. The selection of an appropriate methodology in research is driven by the nature of the question, the data available, and previous research (Singleton & Straits, 2005).

The next chapter covers in much greater detail the methodology and data used to conduct this research, however, a brief statement explaining the selection of that method seems appropriate in this chapter. The current research involves the use of data obtained from three primary sources: first, data on the results of audit findings are obtained from the comprehensive annual reports (CAFR) published by each of the cities in the population; second, data are obtained through the use of a short questionnaire and follow-up semi-structured interviews; third, data for some control variables are obtained using demographic information from sources such as the Florida EDR and the U.S. Census. The same data is collected for each of the cities in the population. The analysis of CAFR's for these cities involves a period of five years. Based on the current literature, and a general understanding of methods, a cross-sectional time series regression is used.

The empirical papers reviewed in this dissertation employ either logistic regression (Lin et al., 2011; Lopez & Peters, 2010) or OLS regression (Petrovits et al., 2011; Prawitt et al., 2009). The decision of which to choose is based on the definition of the variables. Generally, if the dependent variable is binary or categorical, then logistic regression is employed. If the dependent variable is metric (interval or ratio) then OLS regression is used. Additionally, many of these studies involve panels or cross-sections of organizations and some element of time requiring the use of pooled or cross-sectional methods with time series. The following chapter addresses this in more detail.

This dissertation, as discussed in chapter 1, addresses a gap in the current literature by investigating the relationship between the presence of the internal audit function and the results of external audits performed by independent certified public accounting firms for Florida cities. The results of these audits indicate the condition of the internal controls of the organization which has been linked to stakeholders perceptions of legitimacy in the literature. Research involving the performance of internal audit within municipal organizations may help us to better understand how the presence of this function serves to influence stakeholder legitimacy given the challenges currently facing local governments.

CHAPTER 3

METHODOLOGY

The purpose of this chapter is to explain the research methods used and the nature of the analyses of the data. The chapter is divided in four main sections describing the research design, the choice of setting and definition of the population, data sources and variables used, the data analysis, and a brief summary. The decisions addressed in this chapter are based on the nature of the research question examining the relationship between internal audit and the outcomes of external financial statement audits and the theoretical framework explained in the second chapter.

Research Design

The research problem examined expands stakeholders' understanding of the role of the internal audit function within public organizations. Using a framework constructed around legitimacy theory, the research question seeks to identify whether the presence of internal audit is related to the outcomes of local government external audits that include evaluations of their systems of controls. This type of research question lends itself to a quantitative design using a form of multiple regression analysis. The specific technique used is determined based on the nature of the dependent variable and the characteristics of the data collected (Wooldridge, 2006).

Two models are employed to evaluate this research question. The models, developed using the theoretical analysis in chapter 2, are in the form of pooled cross section with time series:

$$AudR_{i,t} = \beta_0 + \beta_1 IAF_{i,t} + \beta_2 FOG_{i,t} + \beta_3 Pop + \beta_4 ChngPop_{i,t} + \beta_5 RevPerCap_{i,t} + \beta_6 CR_{i,t} + \beta_7 IGRev_{i,t} + \beta_8 LTDratio_{i,t} + \beta_9 DSR_{i,t} + \beta_{10} UFBratio_{i,t} + \varepsilon_{i,t}$$

$$AudR_{i,t} = \beta_0 + \beta_1 ExpIAF_{i,t} + \beta_2 SizeIAF_{i,t} + \beta_3 BudgetIAF_{i,t} + \beta_4 FOG_{i,t} + \beta_5 Pop + \beta_6 ChngPop_{i,t} + \beta_7 RevPerCap_{i,t} + \beta_8 CR_{i,t} + \beta_9 IGRev_{i,t} + \beta_{10} LTDratio_{i,t} + \beta_{11} DSR_{i,t} + \beta_{12} UFBratio_{i,t} + \varepsilon_{i,t}$$

Where:

β represents the coefficient.

i and t represent the individual city and the year.

AudR represents the outcome of the external audit of city i for year t.

IAF represents whether the city has an internal audit function.

FOG represents Form of Government.

Pop represents the current population.

ChngPop represents the change in population.

RevPerCap represents the revenue per capita.

CR represents the current ratio.

IGRev represents the intergovernmental revenues.

LTDratio represents the long-term debt ratio.

DSR represents the debt service ratio.

UFBratio represents the unrestricted fund balance ratio.

ε represents the error term.

The first model examines whether the presence of internal audit influences the outcomes of the external audits of the cities in the population. The second model seeks to determine whether the length of experience a city has with internal audit influences the outcomes of their external audits (ExpIAF). The second model includes two additional variables related to the physical size of the internal audit function (SizeIAF), and the budget for internal audit (BudgetIAF). The second model may be modified depending the nature of the results of running the first model. See Chapter 4 for an explanation of the results and any modifications made.

The data are in the form of a panel or cross-section with a short time-series. The data collected covers a period of five years from 2007 to 2011. This period was selected because the data are readily available. The use of this type of method is justified because the group of cities used in the study is the same from year to year and the influence of internal audit on the results of external audits is a relationship that is more likely to be noted over time as opposed to a single year.

Setting and Population

An important consideration in designing and executing this study involved determining the appropriate organizational sector. Much of the existing research related to internal audit focuses on private sector organizations that are publicly traded because data on these organizations is readily available and stakeholders are interested in them because of the recent history involving financial accounting and reporting scandals and fraud. However, the financial health of local governments has also been the focus of much recent attention in popular media due to the economic recession that began in 2007. Therefore, the current study was designed to examine the role of internal audit within the public sector, focusing specifically on local municipal government.

The population consists of municipalities in Florida with a population of at least 10,000. Cities with smaller populations were excluded because it was considered unlikely they would have sufficient budgetary resources to consider including an internal audit function. Limiting the analysis to a single state addresses two issues. The first is pragmatic in that the researcher both has institutional knowledge of the state and has access to the information needed to conduct this study. Second, no studies were identified summarizing the laws and rules governing the organization and operation of municipal governments by state. Limiting the setting to cities in a single state controls the influence of different legal and regulatory environments affecting municipal use of internal audit and performance of external financial audits. The next section describes the procedures used to identify which of the cities operate an internal audit function and which do not and the methods employed for data collection.

Data Collection

Several methods are employed to collect the data. The population data for the cities is obtained from the Florida Office of Economic and Demographic Research's (EDR) archival records (Florida Office of Economic & Demographic Research, 2011). Descriptive data about the individual cities is available through examination of each city's web site. Finally, any remaining data are obtained through a brief questionnaire administered to cities identified as having an internal audit function. A second questionnaire is administered to the remaining cities to collect some descriptive information for use in the final chapter. The following paragraphs describe the instruments and methods used.

The Florida Office of Economic and Demographic Research (EDR) web site (http://edr.fl.us/content/) contains links to files containing population data for different levels of government in the state. The EDR prepares population estimates for use by the Legislature in the budgeting process. The file selected for use is named FLmypops_2011.xls. It contains municipal population estimates for the years 2007, 2008, 2009, and 2011. No estimates are available for 2010. The determination of whether a city is included in the population is based on the population estimates for 2011. This year was selected because it is the first of five years for which data are collected. The EDR data indicates that 162 municipalities in Florida had populations of at least 10,000 during 2011 and are therefore included in the population for testing purposes.

The remaining data are obtained through either the examination of each city's web site or the survey questionnaire. The Florida League of Cities maintains a web site that provides links to each of the municipalities home pages (http://www.floridaleagueofcities.com/director.aspx). Each city's web site contains links to descriptions of each operating department, organization charts, directories of elected or appointed officials and employees, and access to the city charter and municipal ordinances. Contact information for the questionnaires is obtained through this examination.

The questionnaires are designed using guidance contained in Dillman, Smyth, and Christian (2009). The goal is to collect publically available descriptive information about each city's internal audit function. It includes both open and closed ended questions (see appendix A) and is designed and administered through Survey Monkey (www.surveymonkey.com). This application includes controls that facilitate completion of the survey such as question and page logic to guide the user through the questionnaire. Page and question logic allows the designer of the survey instrument to direct users to questions and new pages based on the responses to specific questions. This ensures that users only see those questions that apply to their city's situation based on answers to previous questions.

The process includes an advance letter of introduction (Appendix B) delivered through U.S. postal mail to introduce the survey to the recipients from each of the cities identified as having an internal audit function in place or authorized to have one through the city's charter. Approximately 7 days after the letter is sent an electronic mail message containing the survey link and addressed to the city manager, the city director of finance, and if appropriate the individual responsible for the audit function (or some combination depending on the staffing in each city) is sent. Cities that do not respond to the survey initially are sent a follow-up message containing the link approximately 10 days after the first message. Those that have not replied after the second message are contacted by telephone and asked to participate.

The validity and reliability of the questionnaire was checked using feedback from practitioners. The manager of the internal audit function with the City of Tallahassee volunteered to review the questionnaire and provide feedback. The questionnaire was reviewed several times and edits made. The City Auditor, the audit manager, and members of the City's audit committee all examined the questionnaire and provided feedback throughout the design phase.

Data Analysis

This section contains the description of the variables used in the models. Each of them is defined and their measurement explained. The first subsection includes the dependent variable and the second subsection the independent variables, and the third subsection describes the control variables.

Dependent Variable

The dependent variable identifies whether or not the auditors have included any findings in the city's annual financial statement audit. It is a binary variable 1/0 simply indicating whether any findings were cited. The variable is measured over a five year period so each year could be either 1 or 0. The data are obtained from the auditor's report contained within the city's comprehensive annual financial report or CAFR (Government Finance Officers Association, 2006b).

Independent Variables

The first independent variable identifies whether the city has an internal audit function or not. This variable is used in the first model. It is a binary variable measured as 1 (internal audit function exists) or 0 (no internal audit function exists). The data are obtained through an examination of each city’s CAFR, web site, charter, and ordinances. The second independent variable represents the length of time in years and months that a city has operated an internal audit function. The data for this variable are obtained from a questionnaire administered to those cities that were identified as having an internal audit function. This variable is used in the second model.

Control Variables

Form of government (FOG): This independent variable represents the specific governance arrangement utilized by each city. It is a binary (1/0) variable. The data are obtained through an examination of the each city's web site and charter. All cities included in the population were one of four forms: council-manager, commission-manager, or mayor-council, or mayor-commission. These forms are combined into two groupings.

City size and growth: These are independent variables intended to consider the effect of population size and general growth of cities on audit results. Population is a categorical variable. As previously noted, population data are obtained from the Florida EDR. Population growth is a percentage change between major census years. In addition one other variable measured on a per capita basis examine changes in revenue over time. The source for the data for this variable comes from the Comprehensive Annual Financial Reports (CAFR).

Reporting structure: This independent variable is a dichotomous variable intended to classify the reporting relationship of the internal audit function. Initially the intention was to indentify internal reporting arrangements. Several variations were noted including IAF reporting to the mayor, commission/council, manager, or finance department. However, the small population of cities with internal audit made it difficult to use this variable. Instead the variable used measures whether the IAF is an internally operated function or one that is outsourced. The data for this variable are derived from an examination of the city charter and ordinances, and a survey submitted to the individual cities.

Resources: This independent variable examines the effect of variation in resource commitment to the internal audit function in terms of budget and staffing. The data are obtained through the survey submitted to the individual cities. The budgetary figures are converted to a ratio with total municipal budgeted expenditures. A ratio of internal audit staffing to total municipal employment staffing is employed. Both these conversions improve comparability of the resources across different size jurisdictions.

Financial condition: A series of independent variables designed to measure the financial condition of the city (Lewis, 2003, 2007). The source of the data to calculate these ratios are the city's CAFR.

a. The current ratio is calculated by dividing current assets to current liabilities. It is intended to give an assessment of the organizations solvency over time.
b. Revenues per capita is calculated by dividing the total revenues from the changes in net assets table in the CAFR by the population from the Florida EDR data.
c. Expenditures per capita is calculated by dividing the total expenditures from the changes in net assets table in the CAFR by the population from the Florida EDR data.
d. Ratio of intergovernmental revenues measures the proportion of the amount of revenue obtained outside the local city from other governments.
e. The long-term debt ratio is measured as long-term debt divided by total assets and is a measure of the amount of debt used to finance the purchase of assets.

f. The debt service ratio is the debt service expenditures divided by the total expenditures and is intended to identify the proportion of expenditures required to service the city's debt.
g. The unrestricted fund balance ratio measures the proportion of revenue that is unrestricted as to use by the city.

Summary and Conclusion

This chapter presents a discussion of the research design, data collection, and construction of variables used in the analysis of the research question. The data collected is organized in a Microsoft Excel spreadsheet facilitating analysis using the statistical tools in Excel and other appropriate statistical software packages. As noted earlier, the dependent variable for both models is a dichotomous binary variable. Therefore, the method being used to evaluate the data is logit regression (Cohen, Cohen, West, & Aiken, 2003). The results of that analysis are presented in the next chapter.

CHAPTER 4

RESULTS

This chapter reports the results of the empirical analysis described in Chapter 3, evaluating whether the presence of internal audit has a positive influence on government's system of governance. Based on that question two hypotheses are proposed in Chapter 1. First, local governments that adopt an internal audit function are less likely to receive audit findings related to their annual independent audit, which includes both the financial statement and A-133 federal expenditures audits, than those without an internal audit function. Second, local governments with a greater degree of experience working with internal audit are less likely to receive findings related to their annual independent audit than those with less experience. The chapter is organized into three sections. The first reviews data collected using the research methods explained in chapter 3 and the descriptive statistics; the second presents the empirical results of both hypotheses; and the third section presents a brief discussion of the analysis involving some of the control variables involved.

General Results

Using the collection methods explained in Chapter 3, data for all 162 cities was obtained. The data examined indicated that 32 cities adopted internal audit functions between 1950 and 2012. Table 4.1, on the follow page, contains a summary of the adoptions by decade. The data collected indicates that most of the adoptions occurred over a 40 year period between 1970 and 2009. The most active decade occurred between 1980 and 1989. This period coincided with the passage of federal laws requiring federal agencies to adopt inspector general functions. Since the recession of the mid-2000's fewer adoptions have occurred.

Table 4.1: Municipal Adoption of Internal Audit Function Over Time

	1950's	1960's	1970's	1980's	1990's	2000's	2010's
IAF	1	2	5	13	4	5	2
Total	1	3	8	21	25	30	32

The data also disclosed a variety of reporting arrangements. As of 2012, four cities reported outsourcing of the function while the remaining 28 indicated the position responsible for internal audit was a city appointment or employee (see Table 4.2 below). Three of the 28 reported to a director of finance, three were part of a budget office, and two cities included the duties of internal audit in the city clerk's office. The remaining 20 cities reported having a separate internal audit function titled something equivalent to city auditor. The average internal audit function was staffed with three positions and a budget of just over $300,000. The staffing ranged from one to 18 with a mode of one and a median of two positions.

Table 4.2: Internal Audit, Internally Managed Versus an Outsourced Function

Organization of IAF	2007	2008	2009	2010	2011
Outsourced (0)	2	2	3	3	3
Internal (1)	28	28	27	27	27
Total	30	30	30	30	30

The remaining 130 cities were classified as not having an internal audit function. No evidence was obtained that indicated the presence of a position or office equivalent to internal audit. Several cities reported having a city auditor in their survey response, but upon further review and inquiry, it was determined their response was not accurate. In addition several other cities reported having a city auditor on the organizational charts available in their CAFR and on their web sites. However, scrutiny indicated this referred to their independent certified public accountant and not an internal audit function.

This reporting confuses the distinction between a true city auditor acting as an internal auditor and the requirement of cities to have an independent auditor conduct the annual financial statement audit. Cities such as Destin, Dunedin, Cocoa Beach, Eustis, and Holly Hill all indicated the presence of an internal auditor either in the survey or on their organization chart. However, no additional evidence of its existence was identified. Additional evidence included reports, web site page, name and contact information of the person occupying the position, or presence of powers and duties in the city charter and ordinances.

There were two cities that adopted internal audit functions after 2007. They had not adopted an internal audit function until 2011 and 2012 respectively. Table 4.3 below presents the breakdown of the cities reporting whether or not they had an internal audit function during the period 2007 through 2011. The data for evaluating the second research question was limited to those cities that had an internal audit function for each of the five years in question (30 cities). Therefore the two late adopting cities were included in the analysis of the first research question, but excluded from the second. Table 4.4, on the next page, displays the descriptive statistics of all the variables in the first model.

Table 4.3: Presence of Municipal Internal Audit

Internal Audit Function	2007	2008	2009	2010	2011
No	132	132	132	132	131
Yes	30	30	30	30	31[1]
Total	162	162	162	162	162

Note 1: Pembroke Pines adopted internal audit in 2011.

Table 4.4: Model 1, Descriptive Statistics of Continuous Variables

Independent Variables	Mean [a]	Standard Deviation [a]	Min. and Max. [a]
Current Ratio (curratio)	7.950	7.012	-120.997 to 44.022
Long Term Debt Ratio (ltdratio)	.273	.145	.001 to.734
Debt Service Ratio (dsratio)	.073	.275	0 to 3.657
Unrestricted Fund Balance Ratio (urfbalratio)	.413	1.098	-24.357 to 3.614
Revenue per Capita (revpercap)	1973.69	1187.55	422.75 to 8970.31
Expenditures per Capita (exppercap)	1779.78	1082.67	172.32 to 8653.91
Intergovernmental Revenues Ratio (igrev)	.123	.064	.004 to .495
Population (pop)	54,503.84	84,746.46	9,318 to 859,421
Population Change (popchg)	.006	.032	-.078 to .334

Note: 810 observations (162 cities over 5 years; 2007 to 2011).
[a] Ratios rounded to ten thousands for presentation purposes.

The descriptive statistics of the first model's variables show a negative current ratio as the minimum value. This was the result of one city for one fiscal year making a legitimate adjustment to their financial statements. The outlier was not removed because adjustments to financial statements are not uncommon, but occasionally result in anomalous ratios. A similar circumstance involved the unrestricted fund balance ratio and the outlier was left in the data. The maximum values for revenue and expenditure per capita are also high. The data contain several cities that consistently reported higher levels of revenue and spending relative to their population size resulting in the higher per capita figures. Further inquiry revealed these cities were generally considered wealthier cities relative to the others in the population and were not a cause for concern in the data analysis.

The population of cities included in the study predominantly employed the council-manager or commission-manager forms of government (88%). Fewer of them used the mayor-council or mayor-commission forms (12%). Table 4.5 on the next page contains the breakdown of form of government over the five year period included in the study. The examination of the cities audit reports disclosed that most of their reports contained some form of finding or comment for each of the years involved (see Tables 4.6 and 4.7 on the following page). The analysis indicated that the number of findings and comments dropped in 2011 from the previous four years. No explanation is offered for this observation at this time, but may indicate a potential research question for further exploration. More data would be needed to understand the trends in findings over time. The data obtained indicates that generally more than 55% of the cities in the population issued annual reports containing findings or comments each year covered by the study. It was also noted that approximately 80% of the cities identified with an internal audit function issued annual reports containing findings or comments.

Table 4.8, on the next page, displays the descriptive statistics of the variables used in the second model. The first model analyzes all 162 cities identified as having populations of at least 10,000 in 2011. The second model focuses on a subset of 30 cities from the original total that were determined to have maintained an internal audit function during each of the five years covered by the study. As noted earlier two cities were excluded because they did not adopt internal audit until 2011 and 2012 respectively. The average age of an internal audit function is 324 months or 27 years (year of adoption 1984) which is consistent with the adoption history noted in Table 4.1. The data for the second model disclosed that the average population of cities with internal audit is 142,870, compared to 54,504 for all 162 cities included in the study. This difference may be important in considering the overall model results.

Table 4.5: Form of Government

Form of Government	2007	2008	2009	2010	2011
Council/Commission Manager	143	143	143	143	143
Mayor Council/Commission	19	19	19	19	19
Total	162	162	162	162	162

Table 4.6: CAFR - Audit Findings and Comments (All Cities)

Findings/Comments	2007	2008	2009	2010	2011
No	49	37	53	52	73
Yes	113	125	109	110	89
Total	162	162	162	162	162

Table 4.7: CAFR - Audit Findings and Comments (Cities with IAF)

Findings/Comments	2007	2008	2009	2010	2011
No	7	5	5	6	6
Yes	23	25	25	24	24
Total	30	30	30	30	30

Table 4.8: Model 2, Descriptive Statistics Continuous Variables

Independent Variables	Mean [a]	Standard Deviation [a]	Min. and Max. [a]
Age of IAF in number of months [b] (experience)	324.08	156.82	48 to 732
Internal or outsourced IAF (iaorg)	.001	.001	0 to .004
Long-term Debt Ratio (ltdratio)	.314	.142	.051 to.734
Revenue per Capita (revpercap)	2,702.90	1,346.80	1,020.45 to 6,716.60
Population (pop)	142,870.30	160,718.40	16,515 to 859,421

Note: 150 observations (30 cities over 5 years; 2007 to 2011).
[a] Ratios rounded to ten thousands for presentation purposes.
[b] Cities must have had IAF for all 5 years to be included.

Model Results

As noted earlier, the primary interest of this research is to determine whether internal audit reduces the likelihood of a local government being cited with findings or comments in their annual independent audit. The model developed to study this question includes a limited dependent variable (LDV). The dependent variable is measured as a discrete limited response of yes (1) or no (0) to the question of whether any findings or comments are present. To accommodate this form of model each of the research hypotheses noted in the first paragraph of this chapter were evaluated using logit[5].

This technique is a multiple least squares (MLS) form of regression appropriate for models employing binary (dichotomous) dependent variables (Cohen et al., 2003; J. W. Osborne, 2006; Pampel, 2000; Walsh, 1987; Wooldridge, 2006). The effects of the independent variables on the LDV dependent variable are being evaluated with data obtained on a short time-series panel of cities in Florida. Wooldridge (2006) notes that limited dependent variable models like binary response models are often used for time-series, panel, or cross-sectional data.

The dichotomous nature of a dependent variable assuming only two values of 1 or 0 are often represented by an S-shaped curve when evaluating the proportion of observations that are cases (Cohen et al., 2003; Wooldridge, 2006). These nonlinear relationships[6] are not well suited to traditional OLS regression techniques. Their nonlinearity results in violations of the OLS assumptions of normality and homoscedasticity. Rather than predicting specific values of Y based on some value of X, the logit instead deals with odds and probabilities of belonging within

[5] Panel logit, as used in this study, modeled the probability of a city getting an audit finding in a given year. Additionally, the model was run using a Poisson and Negative Binomial Distribution. These techniques model the probability of a city getting an audit finding during the five year period. The criteria for deciding which method to use indicated either was appropriate. The results of both were consistent with the panel logit model.

[6] Wooldridge (2006) notes that there are linear probability models (LPM), but they are subject to limitations making them unattractive to use in the case of a binary response model or dichotomous dependent variable. The linearity allows for fitted probabilities less than 0 and greater than 1.

one "group" or another. Because of these differences, care must be taken interpreting the results of logit regressions (Wooldridge, 2006).

The first research question proposed in this dissertation asks whether the presence of an internal audit function (independent variable) within the municipality reduces the likelihood of the occurrence of a finding or comment being reported in its independent external audit of its financial statements and statements of federal and state financial assistance. The results of the logit regression for this model are displayed in Table 4.9 on the next page. The results of the logit reveal that for the population of cities studied, no significant relationship exists between the presence of internal audit and the occurrence of findings or comments in each city's audit report.

The logit output reports an LR chi-square of 56.64 with a p-value of less than .001 for the overall model. Dividing the log-likelihood by the number of observations gives a value of .489, while a predicted probability given only two outcomes, and assuming no independent variables, is .5 (50%) (Gould). Overall the models predictive accuracy is not much better than the null model.

The results displayed in Table 4.9 on the next page show that the dependent variable representing the presence of internal audit is not significant (p-value > .05). The odds-ratio is reported as .891 and a $p > |z|$ of .859. The internal audit function variable is not significant in the model measuring the effect on the occurrence of findings and comments. The importance of this result is that it points away from the existence of internal audit as the explanatory variable when evaluating governance mechanisms protecting the organization from the assignment of negative audit findings and comments during their independent external audits.

A series of control variables were also included in the model. While separate hypotheses were not offered, some explanation for their inclusion was provided. A series of financial ratios were included in the model based on the work of Lewis (2003, 2007) to assess the fiscal stress present among the cities. The argument proposed is that increased levels of fiscal stress would increase the likelihood of occurrence of negative findings and comments in their independent external audit reports.

Table 4.9: Model 1, Internal Audit Presence and Control Variables

Independent Variables[a]	Coefficient	Significance	Odds-Ratio
Internal Audit Function	-0.12	.859	.891
(iaf)	(.65)		(.58)
Current Ratio	-0.03	.334	.973
(curratio)	(.03)		(.03)
Long-term Debt Ratio	5.30**	.001	2.012[b]
(ltdratio)	(1.5)		(3.04)
Debt Service Ratio	-5.61	.064	.003
(dsratio)	(3.0)		(.01)
Unrestricted Fund Balance Ratio	-0.44	.351	.644
(urfbalratio)	(.47)		(.30)
Revenue per Capita	0.001*	.037	1.001
(revpercap)	(.0005)		(.0005)
Expenditures per Capita	-0.001	.075	.999
(exppercap)	(.0006)		(.0006)
Intergovernmental Revenue Ratio	-2.69	.304	.067
(irgrev)	(2.6)		(.18)
Population	.00001*	.041	1.000
(pop)	(5.59e-06)		(5.59e-06)
Population Change	2.01	.582	.075
(popchg)	(3.66)		(.27)
Form of Government	-0.49	.458	.610
(fog)	(.67)		(.41)

Note: Entries are Logit coefficients, standard errors are in parentheses.
[a] Whether findings were reported in independent external audit (DV).
[b] Divided 201.2 by 100 to adjust for unit of measure.
*p<.001
**p<.05

Several measures examining current conditions were included (current ratio, revenue and expenditure per capita, unrestricted fund balance ratio, and intergovernmental ratio) along with two that focused on more long-term fiscal stress (debt-service ratio and long-term debt ratio). The expectation is that if these measures indicated increasing fiscal stress, then it would be more likely that the cities' audit reports would contain negative findings and comments (Deis & Giroux, 1992).

Other measures examining population, population change, and form of government were included based on the literature. No specific expectations were developed with regard to form of government. However, the literature seemed to point toward growth in population as a stress that might result in negative findings and comments in the cities' audit reports, so they were included to help with an alternative explanation involving fiscal stress.

While the logit results indicate that the specified model is no more likely to predict accurately than the null model, it is worth taking a closer look at a few of the control variables. The logit results indicated population (pop), long-term debt ratio (ltdratio), and revenues per capita (revpercap) appeared to have statistically significant relationships with the presence of audit findings and comments. The odds ratio for the long-term debt ratio indicates that a one unit change in the ratio results in the city's annual report being two times as likely to contain negative findings or comments.The long-term debt ratio is a measure of how much of the cities assets are funded through debt as opposed to non-debt sources of financing. If a city is highly leveraged with long-term debt, it may indicate pressures on the city to meet current operating responsibilities as well as current portions of long-term debt and the interest associated with it. Some cities may even be in the practice of funding current operations with portions of long-term debt. The odds ratios for population and revenues per capita were virtually 1. Odds ratios near 1 indicate one unit changes in the independent variables do not result in any greater or lesser chance of being included in the group of cities reporting findings and comments (Cohen et al., 2003).

The second research question examines whether a municipality's length of experience with an internal audit function decreases the likelihood of the city's annual independent external audit report containing any negative findings or comments. Included in the second model[7] is a variable examining the relative size of the internal audit function to the total government. Size is measured by comparing the relative proportion of expenditures on internal audit to total expenditures of the city. An additional variable included compares cities managing their own internal audit function internally as opposed to those outsourcing the function to private firms. The three control variables found to be individually significant in the first model are carried over to the second model as well.

The hypothesized relationship between experience and the presence of findings and comments is negative. The test is meant to determine whether cities with greater amounts of experience operating an internal audit function, measured in months, is negatively associated with the presence of audit findings and comments. No specific hypotheses were posed in the earlier chapters for the control variables. However, it is reasonable, based on the literature, to expect that greater resource investment in internal audit would be related to a reduced likelihood of findings and comments being reported in the annual independent audit (Barua, Rama, & Sharma, 2010). Also, intuitively, it is thought that internal audits that are outsourced may report fewer findings and comments due to issues such as organizational distance and familiarity.

The logit results for the second model are displayed in Table 4.10 on the following page. The overall model was not significantly different than the null model. The LR chi-square is 7.78

[7] As noted in chapter 3, the second model was modified in consultation with a member of the dissertation committee to drop those variables with no statistical significance in the first model.

and the p value is greater than .1. The results also indicate that, for cities included in this study, experience with internal audit, as measured in months, is not a statistically significant predictor of whether a city will receive findings and comments in their annual independent external audit. This may partially be explained by the small number of cities (30) in the population. A more expanded study of cities with internal audit coupled with a more rigorous dependent variable may be more useful in studying this phenomena. However, the present state of the literature does not provide an appropriate measure, and additional data collection efforts are required. None of the control variables in the second model were significant explanatory factors.

The second model evaluated in this chapter differs from the model originally defined in the third chapter. The original second model included all the control variables proposed with the first model. However, after running the first model, only three of the control variables were noted to be statistically significant. Therefore the second model was modified to include only those three control variables. None of the three control variables maintained their significance in the revised second model.

Table 4.10: Model 2, Internal Audit Experience with Control Variables

Independent Variables	Coefficient	Significance	Odds Ratio
Age of IAF in number of months	.005	0.142	.331
(experience)	(.003)		(.003)
Internal or outsourced IAF	-1.107	.487	.331
(iaorg)	(1.591)		(.53)
IAF to Total City Expenditures Ratio	448.247	.343	4.7e+194
(piaextotot~x)	(472.794)		(2.2e+197)
Long-term Debt Ratio	5.581	0.189	265.404
(ltdratio)	(4.248)		(1127.51)
Revenue per Capita	-0.00005	0.892	1.000
(revpercap)	(.0004)		(.0004)
Population	.000012	0.281	1.000
(pop)	(7.98e-06)		(7.98e-06)

Note: Entries are Logit coefficients, standard errors are in parentheses.

Simple Analytics and Concluding Thoughts

The initial hypothesis involved testing whether the presence of internal audit was negatively related to the presence of findings and comments in the independent external audits of Florida cities with populations of at least 10,000. The logit analysis indicated the model was not statistically significant and was therefore not of any use for evaluating the question. We are unable to conclude that the relationship exists, or that it does not exist. Additional research may be necessary to determine the answer to the question posed in this dissertation.

A starting point for future research may involve examining the distribution of the internal audit function within the population of cities used in this study. Table 4.11 on the next page presents a stratified distribution of cities indicating whether or not they operated an internal audit function for each of the years included in this study. The simple statistics displayed indicate that larger cities are more likely to have an internal audit function than smaller cities. This is consistent with some of the observations within the literature.

All the cities with populations of at least 225,000 maintained an internal audit function during each of the five years studied. When cities with populations of at least 100,000 are evaluated in this way approximately 75% of all cities operate an internal audit function. The percentage drops precipitously for cities with populations under 100,000. Less than 25% of the cities with populations under 100,000 operated an internal audit function with the number dropping to less than 5% for those considered small (populations between 25,000 and 10,000). This may indicate that a larger sample of cities across the U.S. with populations ranging from around 75,000 to around 225,000 may be a more appropriate to study this question.

Table 4.11: Distribution of Internal Audit Function by Population, Years 2007 through 2011

Population (2007)	No	Yes	Total
> 25,000	72	3	75
25,000 >= and < 50,000	32	5	37
50,000 <= and < 100,000	23	7	30
100,000 < = and < 225,000	5	11	16
>= 225,000	0	4	4

Population (2008)	No	Yes	Total
> 25,000	69	3	72
25,000 >= and < 50,000	34	5	39
50,000 <= and < 100,000	24	7	31
100,000 < = and < 225,000	5	9	14
>= 225,000	0	6	6

Population (2009)	No	Yes	Total
> 25,000	70	3	73
25,000 >= and < 50,000	33	5	38
50,000 <= and < 100,000	24	8	32
100,000 < = and < 225,000	5	8	13
>= 225,000	0	6	6

Population (2010)	No	Yes	Total
> 25,000	69	3	72
25,000 >= and < 50,000	33	5	38
50,000 <= and < 100,000	25	8	33
100,000 < = and < 225,000	5	8	13
>= 225,000	0	6	6

Population (2011)	No	Yes	Total
> 25,000	69	3	72
25,000 >= and < 50,000	34	5	39
50,000 <= and < 100,000	24	7	31
100,000 < = and < 225,000	4	10	14
>= 225,000	0	6	6

Note: Total of 162 cities were identified as having populations of at least 10,000 in 2011.

Table 4.12, on page 76, illustrates that to a similar, but lesser extent, a stratification of the population also influences the way reported findings may be viewed. Larger cities, while being more likely on a percentage basis, to have an internal audit function, are also more likely to have received a reported finding or comment in their independent external audit report. The divisions are not as stark, but similar in that cities divided along the 100,000 population line seem to exhibit different characteristics at least on a percentage basis. While not conclusive, it will drive the author to conduct additional research controlling for these observations.

A simple statistical test was performed and the results are presented below. Cross-tabulations were prepared to examine two groups of cities by year, those that operate internal audit and those that don't. They were compared using the cross-tabulation on whether they reported the existence of findings and comments in each of the five years under study. Table 4.13, on page 77, presents the results of the analysis. The cross-tabulations illustrate that in both groups, a majority of the cities reported findings in their annual audit reports for each year. Using a simple Chi-square test it is noted that in 2007, 2008, and 2010 no significant difference is found. However, in 2009 and 2011 the analysis indicates that cities with internal audit have a greater proportion of cities reporting findings than those without internal audit (Pearson chi-squares of 4.3083 with $p < .05$ and 7.8263 with $p < .05$). This adds further support to the need to continue reexamining the question of internal audit's influence on the outcomes of independently performed external audits.

Besides population, the revenue per capita measure and long-term debt ratio both showed some significance individually in the first model. They were included as part of a group of measures to determine whether fiscal stress might influence the presence of findings and comments. Factors considered that might possibly influence revenue per capita involve the size of the city measured by population and by the number of services offered. It may also be influenced by the wealth of the citizens in the city. Similarly the long-term debt ratio seems related to the size of the city as well. Figure 4.1, on page 78, displays a plot of the long-term debt ratios of the cities included in the study along with their populations. While not tested for statistical significance, a linear trend line created in the graph shows an increasing linear trend from left to right for cities with populations between 10,000 and 100,000. Larger cities were excluded because they biased the trend line by increasing its slope. These observations indicate further work examining local government fiscal measures and governance is necessary.

The results presented in this chapter demonstrate first that for the population of cities selected, internal audit is not a factor in reducing the likelihood of the city having findings and comments issued in their independent external audit. The results of the study also find that for the population in question we are unable to conclude that cities with more mature internal audit functions are less likely to be issued findings and comments. What this says about internal audit's influence over governance is discussed in more detail in the last chapter, but it is important to note that some observations in the simple statistics and analysis indicate the need for continued research in this area. Because city governments will remain under fiscal pressure for the foreseeable future, investigations of an academic and practitioner nature will be necessary to provide information to decision makers forced to make tough decisions on the budgeting and expenditure of public finds and on the design and operation of controls necessary to protect the operating and capital resources of local government from fraud, waste, and abuse.

Table 4.12: Distribution of Audit Finding Occurrence by Population, Years 2007 through 2011

Population (2007)	No	Yes	Total
> 25,000	26	49	75
25,000 >= and < 50,000	12	25	37
50,000 <= and < 100,000	8	22	30
100,000 < = and < 225,000	3	13	16
>= 225,000	0	4	4

Population (2008)	No	Yes	Total
> 25,000	19	53	72
25,000 >= and < 50,000	12	27	39
50,000 <= and < 100,000	5	26	31
100,000 < = and < 225,000	1	13	14
>= 225,000	0	6	6

Population (2009)	No	Yes	Total
> 25,000	28	45	73
25,000 >= and < 50,000	16	22	38
50,000 <= and < 100,000	7	25	32
100,000 < = and < 225,000	2	11	13
>= 225,000	0	6	6

Population (2010)	No	Yes	Total
> 25,000	29	43	72
25,000 >= and < 50,000	13	25	38
50,000 <= and < 100,000	7	26	33
100,000 < = and < 225,000	2	11	13
>= 225,000	1	5	6

Population (2011)	No	Yes	Total
> 25,000	42	30	72
25,000 >= and < 50,000	18	21	39
50,000 <= and < 100,000	10	21	31
100,000 < = and < 225,000	3	11	14
>= 225,000	0	6	6

Note: Total of 162 cities were identified as having populations of at least 10,000 in 2011.

Table 4.13: Cross-tabulations by Year: Reported Findings to Internal Audit Adoption

Reported Findings?	Operates Internal Audit No (0)	Operates Internal Audit Yes (1)	Total
2007			
No (0)	42	7	49
	(39.9)	(9.1)	(49)
Yes (1)	90	23	113
	(92.1)	(20.9)	(113.0)
Total	132	30	162
	(132.0)	(30.0)	(162.0)
2008			
No	32	5	37
	(30.1)	(6.9)	(37.0)
Yes	100	25	125
	(101.9)	(23.1)	(125.0)
Total	132	30	162
	(132.0)	(30.0)	(162.0)
2009			
No	48	5	53
	(43.2)	(9.8)	(53.0)
Yes	84	25	109
	(88.8)	(20.2)	(109.0)
Total	132	30	162
	(132.0)	(30.0)	(162.0)
2010			
No	46	6	52
	(42.4)	(9.6)	(52.0)
Yes	86	24	110
	(89.6)	(20.4)	(110.0)
Total	132	30	162
	(132.0)	(30.0)	(162.0)
2011			
No	66	7	73
	(59.0)	(14.0)	(73.0)
Yes	65	24	89
	(72.0)	(17.0)	(89.0)
Total	131	31	162
	(131.0)	(31.0)	(162.0)

Note: 810 observations (162 cities over 5 years; 2007 to 2011). Expected Frequencies are in parentheses.

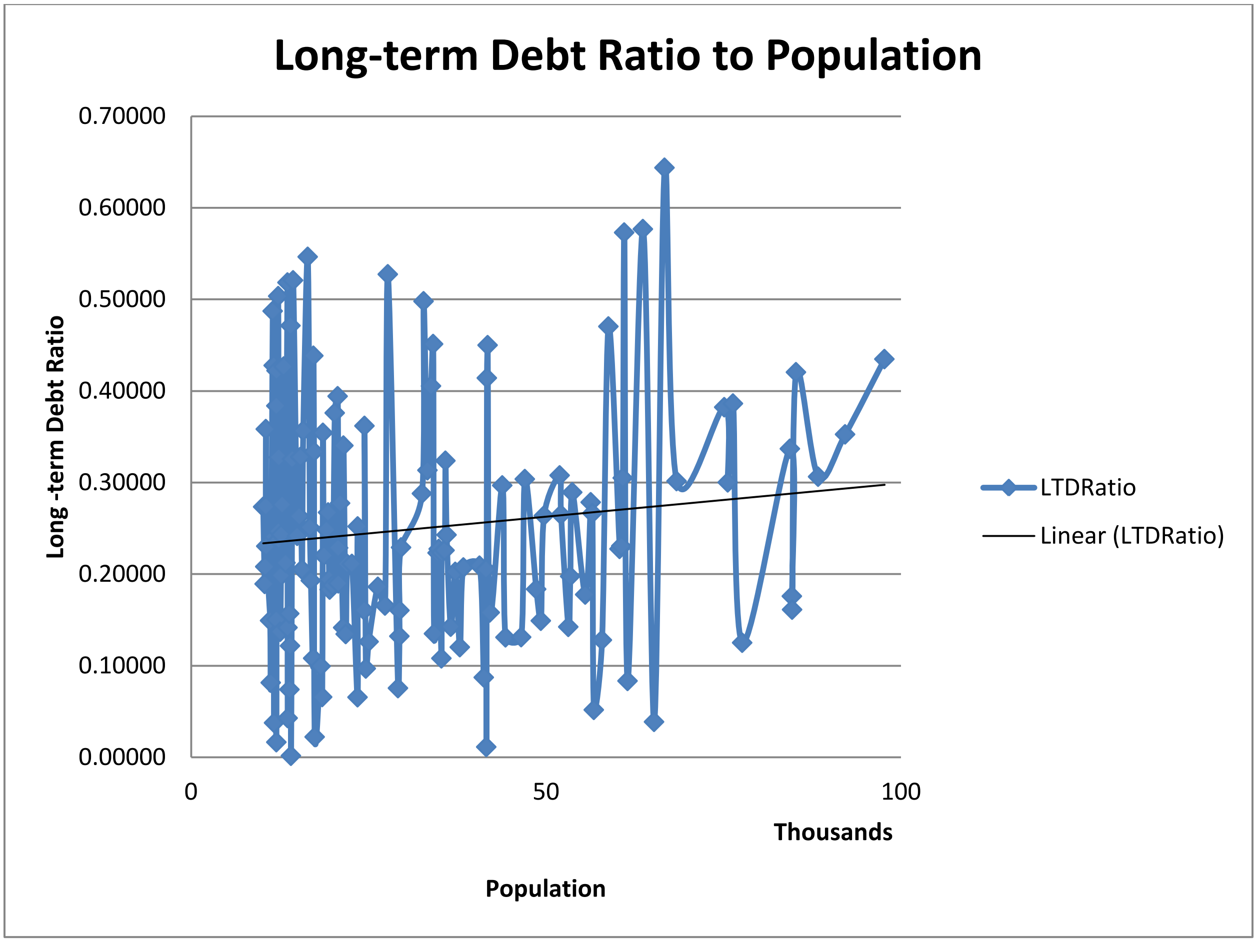

Figure 4.1: Comparing Long-term Debt Ratio to City Population (FY 2011)

CHAPTER 5

SUMMARY AND DISCUSSION

This final chapter presents a discussion of the results within the theoretical and methodological context employed in the earlier chapters. It is organized into two sections. The first briefly restates the proposed research problem, reviews the methodology employed, and summarizes the results. The second presents a discussion of the results in light of the theoretical framework presented in chapter 2 and the methodological issues arising from choices made and presented in chapter 3. This second section also serves to summarize the results and address the implications for further research involving municipal internal audit and governance systems.

Summary

The importance of internal audit to an organization has not been well defined in the literature. Those most closely associated with it argue its virtues and have developed a framework to evaluate its contribution (Asare, 2009; Government Finance Officers Association, 2006a; Holt & DeZoort, 2009; Institute of Internal Auditors, 2006). Others more generally writing on governance do not always recognize the function as a key component of an organization's system of governance (Baker & Anderson, 2010b; Rezaee, 2007). The importance of this topic is that an organization's legitimacy with stakeholders has been linked to the effectiveness of their system of governance. Legitimacy, a perception or state of mind, is not directly measureable, but is visible through its effect on the level of support an organization receives from its stakeholders (Ashforth & Gibbs, 1990; Deephouse & Suchman, 2008; Galang et al., 1999; Hoque, 2006; Hybels, 1995; Suchman, 1995).

This dissertation does not link the work of internal audit directly to an organization's legitimacy. Instead the focus of this research is to evaluate the nature of its influence on the organization's system of governance. That system is considered by the literature to be a critical factor used by stakeholders in forming their assessment of an organization's legitimacy (Farber, 2005; Hybels, 1995; Richardson, 1987). The primary vehicle through which this assessment is made involves the periodic reports communicating the organization's financial and operational performance (Deegan, 2002; Guthrie & Parker, 1989, 1990). Internal audit is closely associated with the evaluation of the core systems and processes necessary in producing these reports (Spraakman, 1997).

Therefore, this paper examines whether internal audit has a substantive effect on the system of governance or, if not, whether the influence is more subtle or nuanced, and best considered intangible or symbolic. The balance of this section will summarize the conduct of this research, while the next section will address the results from both a theoretical and methodological point of view. Embedded in that discussion will be consideration of some limitations of this study.

Statement of the Problem

As stated in previous chapters, the focus of this research is on identifying the effect of internal audit on a municipality's system of governance. Effective governance is considered critical to an entity's ability to maintain legitimacy with stakeholders, from whom an organization receives the support needed to achieve strategic and operational goals and objectives (Scott, 2003). The literature on internal audit frequently cites as one of its purposes the safeguarding of an entity's system of governance.

One of internal audit's chief contributions is its monitoring and oversight of the system of internal controls implemented by management (Holt & DeZoort, 2009). Internal controls, as with governance in general, are intended to ensure that decisions and actions of internal stakeholders are aligned with the strategic plan of the entity (Suchman, 1995). The goals and objectives of the organization, communicated through the strategic plan, are important to the external stakeholders because their perception of the entity's legitimacy is based on the alignment of its goals with their own (Rezaee, 2007).

Internal audit serves to test that system of governance and the internal controls to ensure that they are properly designed and implemented, and functioning as intended to maintain the desired alignment (Holt & DeZoort, 2009; Marais, 2004). The question this research examines involves whether internal audit's existence has a substantive effect on the system of governance as measured through an external measure of performance. Specifically it tests whether cities with internal audit are less likely to have reported findings. While previous research focused on self-reported or survey-based measures of internal audit's quality and performance, this study uses the results of independently performed audits conducted by certified public accountants to measure the potential influence exerted by internal audit (Gramling & Vandervelde, 2006).

The use of external audit outcomes is possible because of the symmetry between the focus of both external and internal audits. External audits focus on providing assurance over the reporting of financial position and results of operation, while internal audit seeks to monitor the systems within the organization directly and indirectly necessary for the production of those reports. Because of this relationship, it stands to reason that if internal audit has a substantive effect on those systems, it should result in more favorable external audit outcomes as measured by the occurrence of audit findings and comments.

Review of the Methodology

To determine the nature of the effect of internal audit's presence on the entity's system of governance and internal controls an empirical analysis using logit (discussed in more detail in chapters 3 and 4) was performed on a panel of 162 cities over a five year period. Descriptive and financial data for each of the 162 cities in the population was collected from a review of their comprehensive annual financial reports (CAFR), and from survey responses, e-mail responses, interviews, and web site examinations. The population selected included cities of 10,000 or more in Florida.

This State does not require cities to operate an internal audit function but has a recent history of governance failures that resulted in state officials encouraging cities to examine and strengthen their systems of governance and internal controls (State of Florida, 2010). The State's Auditor General maintains an accessible database of all city CAFR files online ensuring that data for all cities included in the analysis was available over the period examined.

Summary of the Results

The empirical analysis reported in chapter 4 indicates that internal audit within the cities studied does not appear to have a substantive effect on their governance systems when measured using the outcomes of their annual independent audits. At first glance, this may not be very interesting; however, when viewed through the theoretical lens of legitimacy theory it actually points toward something important. In the next section the results are discussed in light of both theoretical and methodological considerations that might help readers understand the relevance of this finding to practice and theory. This research also implies that further inquiry needs to be conducted to better understand the nature of the effect of internal audit on governance.

Rather than finding any substantive effects of internal audit on the outcomes of external audits, the analysis points toward the size of the city as a possible explanatory factor. Both population size and long-term debt used to finance growth and operations appear to be related to the adoption of internal audit and to occurrence of audit findings. This indicates that more research is needed to understand how these factors influence a city to adopt internal audit, the role of fiscal stress on that decision, and why they are related to the outcomes of their external audits. The absence of a substantive effect by internal audit on the external audit outcomes leads one to ask how internal audit influences municipal governance?

Discussion

Theoretical Importance

The absence of a negative relationship between the presence of internal audit and the occurrence of findings reported in the independent audit reports of city CAFR's may be the result of an overstated importance assigned to the internal audit function by those most closely associated with the function. That is not to say that the function has no purpose or is not important, but it is more a statement that the purpose it actually serves is different in nature and scope than that which the profession wants others to believe it serves (Institute of Internal Auditors, 2006). The profession does not claim to have a goal of improving the outcomes of external independent audits specifically; however, it is not an unreasonable outcome given the modern definition of internal auditing advanced by the profession (Ramamoorti, 2003).

A challenge to demonstrating the effects of internal audit without reference to inputs (resources) or outputs (reports, presentations, findings), is that outcomes are difficult to define and measure (Hatry, 2006). This is evidenced through research sponsored by the profession itself. The IIA sponsored a survey study that sought to measure the value of the internal audit function (Chen, 2011).

The report lists the most common methods employed to measure performance of internal audit. These methods include several output based measures such as the percentage of the audit plan completed, recommendations reported as accepted and implemented, and survey feedback from those subjected to audits. Several input related measures focus on the comparison of budgeted to actual hours spent auditing and cycle times for completing audits. Other measures that some may think of as outcome oriented include self-reported estimates of amounts saved due to the prevention and detection of fraud, waste, and abuse. None of the measures contained in the report are outcome oriented based on independently derived objective information. Many service type functions suffer from this same dilemma, particularly those that focus on deterrence or discouragement of particular types of behavior.

It is possible that the absence of any substantive effect is tied to the design of internal audit. Internal audit as implemented may operate at a micro rather than macro-level within an organization. As noted in chapter 2, not all governance literature recognizes internal audit as one of the key guardians of an organization's system of governance (Baker & Anderson, 2010b; Rezaee, 2007). Raghavan (2011) recounts and summarizes a recent history of local government fiscal failures and addresses the need to strengthen local government's system of governance. One of the important reforms discussed is the adoption of strong audit committees; however, no mention of internal audit is made among the recommendations proffered.

Farber (2005) examines the association between credibility of financial reporting systems and the quality of governance mechanisms. Farber finds that corporations that are involved in fraudulent financial reporting scandals have weak governance mechanisms and that if subsequently improved, regain some of their lost credibility. Again, internal audit is not mentioned as one of the mechanisms focused on in making improvements or combating fraud.

When its importance for accountability is addressed in the literature, authors still puzzle over its influence on organizational governance. Penini and Carmeli (2009, p. 43) state that "organizations attempt to build mechanisms that will deter inappropriate acts or misbehaviors that have the potential to damage the organization." However, they also note that auditing as a gatekeeper and risk manager has failed to protect the public from some very high profile governance failures. These failures frequently involved cases of window-dressing and creative accounting techniques being employed that ultimately resulted in financial fraud, but were not discovered or reported on by the auditors. Their review of the literature pointed to a possible gap between the public's perception of internal audit's role and the auditor's own understanding of it.

Professional organizations such as the Government Finance Officers Association (GFOA) and the Institute of Internal Auditors (IIA) both promote the need for local governments to adopt internal audit as a way to combat fraud, waste, and abuse, and guard against ineffective or inefficient management of public resources. The former supports the function as part of its financial certification process of local governments, while the later does so as the field's professional association representing the interests of those practicing internal audit (Government Finance Officers Association, 2006a; Institute of Internal Auditors, 2006; Ramamoorti, 2003).

The IIA (Institute of Internal Auditors, 2006, p. 8) states that "the erosion of public trust if public information and actions are not reliable undermines a government's legitimacy and ability to govern." However, a recent article from *Governing*, a magazine on government practice, notes a trend that troubles those promoting the adoption of internal audit by local government. Barrett and Greene (May, 2012) report that local governments are increasingly reducing or eliminating their internal audit offices as a result of budgetary pressures. The article cites the primary reason explaining this trend as the lack of a direct measureable relationship between the costs of the function and the benefits to taxpayers. The answer for internal audit, according to the article, is to make a better case for the function through enhanced communication of its benefits to stakeholders.

However, as previously noted, the measures and data supporting enhanced communication of internal audit's benefits to stakeholders are elusive. Internal audit is a support function and not involved in the direct provision of goods and services to constituents. The chief output of the audit process is information in the form of reports and presentations making it difficult to identify the benefits derived from its activities. The value chain framework used in management literature divides activities into those that are directly involved in the provision of value to stakeholders, defined as individual citizens and businesses, and those that support those direct activities (Ray, 2009).

A management objective in private enterprises is to carefully manage and control the costs of those indirect support activities. This may include the reduction or elimination of certain functions or activities when circumstances necessitate it to prevent a failure in conducting the value added activities. This may partly explain the observations noted in the *Governing* article discussed above. Measuring the costs associated with indirect support functions like internal audit is relatively easy compared to measuring their monetary benefit.

Downs (1967), in his book on bureaucracy, addresses the challenges of implementing adequate oversight and monitoring. He notes that increased levels of monitoring are associated with real costs. Those costs are typically associated with the need to employ sufficient monitoring resources to adequately cover the organization's operations. One of the challenges of designing and implementing internal audit is its scope and boundary limitations. In order to provide enough monitoring and oversight a significant investment in human capital is needed relative to the size of the entity. As a form of control itself, the decision of whether a local government adopts internal audit will at least partly depend on whether the benefits accruing from its existence exceed its costs.

Given the difficulties in measuring internal audits contribution relative to its costs and the elusiveness of identifying and measuring the direct tangible benefits, it may be argued that rather than a tangible substantive benefit, the benefit of internal audit may be more symbolic or intangible. That argument is plausible given the results of the current study. Local governments might adopt internal audit simply to meet the expectations of their stakeholders, which includes individual citizens, businesses, associated special interest groups, as well as higher level governments, creditors, investors, and the markets. This would be consistent with the trend noted earlier in the data of Florida cities with larger jurisdictions being more likely to adopt internal audit than smaller ones. It is also similar to the practice of publicly traded organizations adopting oversight mechanisms viewed as credible by their shareholders and required by the private equity markets (Rezaee, 2007).

Larger cities are answerable to a greater number of stakeholder groups. They possess and use more financial resources than smaller cities, creating an environment with increased incentives and opportunities for misappropriation of assets as well as the adoption of reporting conventions that do not accurately reflect current financial position and operating performance. The literature argues that internal audit's chief value to the organization is tied to its role in monitoring operational and strategic risks and ensuring the reliability of financial reporting (Holt & DeZoort, 2009).

One of the risks facing local government is stakeholder support. If the values and norms associated with the decisions and actions of the local government are misaligned with those of its various citizen stakeholder groups, this could be a threat to the organization (Dowling & Pfeffer, 1975). It is believed that legitimacy poses a problem for organizations, requiring them to adjust their mission and practices. Private companies face this same threat. Rendtorff (2009) states that firms should be focused on both economic performance and corporate citizenship since their stakeholder groups are paying attention to more than just profit and loss. The use of legitimacy theory rather than agency or transaction cost theories facilitates an expanded definition of stakeholders and their relative powers. This expanded definition makes it easier to understand the changes in corporate mission and performance measurement to include the firm's corporate social responsibility.

Rendtorff also relates legitimacy to organizational communication and the promotion of an organization's brand and image with its stakeholders. Corporations use various forms of communication to manage their image with stakeholders. Entity's face challenges on many fronts; not just those related to economic performance. Today, stakeholders focus on social, economic, and environmental issues involving corporate responsibility and behavior. If a firm violates social norms or values important to stakeholders they risk temporary or permanent loss of support (legitimacy) which would threaten their ability to continue operating effectively. Therefore, credible institutional mechanisms are necessary to communicate to stakeholders the entity's efforts at ensuring it operates in a responsible manner (Holt & DeZoort, 2009).

Power (1997, p. 385) also addresses the importance of impression management when he states "agency theory reminds us that the emphasis on appearances and process as quality proxies is to be expected where observability of the quality of output is problematic."

Scott (2003, p. 29) describes the different ways organizations may be defined. As an open system, organizations are "congeries of interdependent flows and activities linking shifting coalitions of participants embedded in wider material-resource and institutional environments." Municipal governments must manage relationships with many different stakeholder groups. Scott's definition of the open system organization captures this complexity and reinforces the need for institutional mechanisms designed to monitor the system of governance through which the entity attempts to achieve its strategic and operational goals and objectives. The organization as an open system and the concept of corporate citizenship coupled with legitimacy theory make it likely to envision that internal audit's major contribution to corporate governance is largely intangible or symbolic.

Scott's description of organizations as open systems is reflected in Suchman's discussion of legitimacy and the relationship between managers within organizations and their external environments. Suchman (1995), in discussing the tension between symbolic and substantive action, is skeptical of those that think of managers as autonomous. Suchman (1995) notes that in responding to stimuli, organizational stakeholders prefer substantive action be taken while managers will usually choose symbolic responses because they prefer the flexibility and economy resulting from those types of responses. In the face of this tension Suchman argues that even if managers choose symbolic responses to situations, that stakeholders will not be convinced of their efficacy unless the managers believe it themselves.

The adoption of internal audit may be viewed in light of the various types of organizational legitimacy discussed by Suchman. Pragmatic legitimacy is satisfied because internal audit's existence is consistent with the alignment of the values and norms of stakeholders with those of local leaders, particularly the desire for transparency and accountability in local government. Moral legitimacy is fulfilled because adopting internal audit is considered the right thing to do. Both consequential and procedural legitimacy are supported by internal audit as a means versus ends issue. Organizations are judged both on what they accomplish and how it is achieved.

Internal audit is promoted as a monitoring and oversight mechanism to ensure that the organization is protected against risks resulting in the failure to achieve its strategic goals and mission. It promotes structural legitimacy because setting up internal audit is consistent with the behavior of similar organizations. Regardless of whether any substantive effects may be measured, the mere presence of internal audit fulfills several key types of legitimacy identified in the literature.

Finally, internal audit is a profession and the professions have been studied and associated with symbolic legitimation as opposed to substantive legitimacy. Richardson (1985, pp. 143, 145) defines substantive legitimation as "structural transformation of action to conform to social values," while he defines symbolic legitimation as "the transformation of the identity or meaning of acts to conform to social values." It is important that a profession like auditing maintain its legitimacy because its survival is dependent upon stakeholders relying on their work product. If, as happened with Enron in the early 2000's, there is a failure in the process, legitimacy and therefore trust will be diminished or lost. Once tarnished, it is difficult to repair and resurrect (Suchman, 1995).

According to Richardson (1987, p. 343) accounting is a legitimating process that relies on codes to communicate and "mediate the mapping between action and values." The decoupling of these leads to audit failures, which are viewed as legitimation crises within the profession and the larger community served (Power, 1997).

In the end, these results do not provide evidence of a substantive effect by internal audit on a municipal government's system of governance as measured through independent audits performed by certified public accountants. However, the significance of this research to the literature is the continued importance of studying internal audit through the lens of legitimacy theory. Through that framework we begin to understand the importance of internal audit to the organization and its role in organizational governance.

The foot print of this function may not be as big as the profession promotes, but as part of the oversight and monitoring process, it plays an important role. Internal audit operates to maintain the health of the internal systems, values, and norms necessary to produce the financial and operational information used in assessing operational and strategic performance of the organization. As noted by Holt and DeZoort (2009), internal audit's credibility is reliant upon stakeholders' perception of its independence from management and its competence.

Rather than being based upon some measureable outcome, the importance of internal audit rests in the relationship between its own credibility, based on independence and competence, and the belief that its credibility reinforces the governance and core values of the entity, in this case public entities (Ramamoorti, 2003). Those core values include accountability and transparency in operations and strategy. The IIA promotes the function based upon their belief that trust in information is important to a public entity's ability to govern legitimately, and that internal audit is designed to ensure the relevance and reliability of that information (Institute of Internal Auditors, 2006). This is an intangible definition of value that is very hard to measure, and which might further explain the problems in defending the function during times of fiscal stress and budgetary shortfalls.

The IIA's history of internal audit relates the rise of the function to the growth in scope and complexity of business enterprises and government agencies. This growth increases the distance between managers and organizational segments they are responsible to oversee. This also makes it difficult to control and monitor the activities within those segments and the behavior of employees. The development of internal audit in response to these challenges is intended to provide an objective and competent professional function capable of providing management with assurance over the information important to decision making. It also provides management the ability to oversee operations and protect the entity from risks related to fraud, waste, and abuse (Ramamoorti, 2003).

Scott (2003, p. 138) states that "in order to demonstrate that we are serious about achieving some goal or protecting some value, we are obliged to create an organization to symbolize our commitment." It is through these organizations that collective action occurs resulting in the conduct of economic activity. Governance systems are intended to facilitate managing the processes conducted within organizations fulfilling economic transactions. Carrying on these processes within an effectively designed governance system makes it possible for organizations to supply the products and services desired by stakeholders without violating societal norms and values. Governance involves the establishment of rules constraining behavior and decision making (North, 1993; North, Wallis, & Weingast, 2009). These rules manifest themselves in the form of controls. Scott (2003, p. 140) states that controls are "intended to garner legitimacy and to guarantee accountability." Internal audit is intended to be the mechanism responsible for managing risks that might reduce the effectiveness of those controls.

Establishing internal audits credibility becomes the key to its acceptance by the organization's stakeholders. Developing internal audit into a profession with practice standards and certification programs enhances the chances that it will be viewed as credible by those relying on its activities and reports. However, as previously noted there is a risk of decoupling the function's intended purpose from its actual operation (Weaver et al., 1999; Westphal & Zajac, 1994). Management's desire for more symbolic responses to threats on legitimacy might result in a design that allows them to reduce the independence and influence the objectivity of those performing internal audit (Suchman, 1995). The profession's response to this threat involves the independent review and assessment of each individual internal audit operation ensuring they are operating according to the standards of professional practice in place at the time. Scott (2001, 2003) notes that legitimation of professions is achieved through the professionalization of a function and creating a certification or licensing process for individuals in practice.

Whether this measure of performance leads to an effective governance mechanism that protects against risks to the overall system is a subject worthy of continued debate. A future critical discussion examining the professionalization of the audit function and the larger need by the powerful stakeholders in society to ensure that the majority of all stakeholders accept the legitimacy of economic entities (public or private) would be appropriate (deHaven-Smith, 1988; Habermas, 1992). Also as noted in this chapter, further empirical work that focuses on identifying objective factors for measuring the performance of internal audit would benefit both those in academia and in practice by enhancing the explanation of how internal audit influences organizational governance and therefore legitimacy.

Methodology Considerations

Aside from the theoretical implications discussed in the previous section, there are some methodological issues that might provide insight into the results of this study. The primary issue involves the importance and construction of the dependent variable. Previous studies have made use of audit and regulatory outcomes as the dependent variable in examining various elements of governance (Bedard, Hoitash, & Hoitash, 2009; Lin et al., 2011; Lopez & Peters, 2010). The focus of those studies involved the A-133 audit reports of cities and counties, and material weakness disclosures reported by publicly traded private firms as required under Sec. 404 of the Sarbanes-Oxley Act of 2002. Literature using audit outcomes indicated that a similar strategy would be valid for the current research.

The current research uses the outcomes of independent audit reports of a small population of cities in Florida. These audits include the audit of the financial statements performed under Government Audit Standards (GAS or Yellow Book), the Single Audit Act audits (A-133), and comments included in the management letter required under GAS. These audits contain various types of findings and comments covering financial reporting, internal controls, compliance, and other matters coming to the attention of the auditors believed to be important enough to make management aware of through their inclusion in the management letter. Some findings are new, meaning the first occurrence, while others are repeat findings that were initially reported in previous years, but have not yet been adequately addressed by management.

The results of the analysis in this research may indicate that further refinement may be called for in the dependent variable to determine whether internal audit has any appreciable influence over the outcomes of these independent audits. Future research might consider reconceptualizing the dependent variable from a dichotomous variable identifying the presence of any findings or comments to one involving a scale that would take account of the variety of findings that may be present. No previous studies were identified that attempted to develop such a scale measuring audit outcomes so this strategy would require the development of such a measurement device.

It is possible that the results noted in this research were affected by the aggregation of all the findings and comments into one simple dichotomous variable as opposed to several dependent variables. A series of variables might be constructed that take advantage of the differing nature, scope, and severity of the findings and comments reported by the independent auditors. It is feasible that the influence of internal audit may be more acutely felt by some types of outcomes as opposed to others. Examples would include segregating findings and comments based on a classification by type or subject, by whether they represent a first time occurrence or a repeated occurrence, or by their severity as noted in the standards and the literature. Models would then be run for each of the separately constructed dependent variables to determine whether any influence by internal audit's adoption is present.

As noted in chapter 3, the data for this study was obtained from Florida cities with populations of at least 10,000. This definition of the population may have affected the results making it more difficult to determine whether any relationship actually exists between the dependent and independent variables. The analysis of the cities included in chapter 4 for just a single year revealed that as population increased for the cities studied the proportion of cities with internal audit increased and the proportion of those reporting findings increased as well. Future studies examining the effects of internal audit on independent audit outcomes should be designed to address these trends. Future studies at a minimum may stratify the population of cities.

Additionally, a larger sample of cities across different states within a specific population range might be more helpful. The data used in the current research revealed that cities with populations above 225,000 all reported findings and all had internal audit functions. Selecting a population that balances the proportion of cities with internal audit and those reporting findings may be less biased than the data used in this study.

Conclusions

The literature on organizational governance stresses the importance of effective governance systems on stakeholder legitimacy perceptions of the organization. Governance failures pose serious risks to all types of organizations including municipal governments. Therefore it is important to understand the nature of the mechanisms employed by organizations to protect their governance systems. Internal audit is one of the mechanisms often cited within the governance literature because it performs a monitoring and oversight function for management useful in assessing and managing operational and strategic risks.

This dissertation was undertaken to examine whether internal audit's presence within municipal governments influenced the results of their independent external audits. The results indicate that there is no substantive effect; however, when viewed through the literature on organizational legitimacy, this result is not entirely surprising.

The adoption of internal audit may have more to do with the expectations of stakeholders and the desire to prevent or deter particular types of behavior by individuals that are deemed harmful to the organization's operational and strategic goals and objectives. The design and function of internal audit may result in a decoupling of the substantive and symbolic importance of internal audit to the organization (Westphal & Zajac, 1994). This may best be viewed when examining the various types of legitimacy and the incentives for managers to employ some symbolic mechanisms to satisfy stakeholders desire for more substantive reactions to breakdowns in governance (Suchman, 1995).

True governance reform is difficult to achieve, but in some respects implementing internal audit, even at the risk that it has no substantive effect, communicates to stakeholders that management is actively engaged in managing risk and protecting the organization. While the profession sees itself as a critical protector of governance, there exists some room for discussion on this point given the coverage noted in the practitioner and academic literature that leaves internal audit out of the discussion.

APPENDIX A

TEXT OF CAE SURVEY

Introduction to Survey

Thank you in advance for completing this survey. The results will be used to inform practitioners about the current state of governance and internal audit in incorporated communities.

Your city has been selected to participate in this survey because your web site indicates the existence of an active internal audit function.

The survey should take no more than 30 minutes to complete. Your responses will be kept anonymous. Only aggregate results will be discussed in any written product derived from the survey data. While I would appreciate complete survey responses, even partially completed responses will be helpful in this research. Please attempt to compete as many questions as you are able.

Survey Monkey has some very helpful navigation tools to move around the survey and to submit your responses when completed.

If you have any question about the survey, please contact me at (XXX)XXX-XXXX or at (insert email address). You may also contact the dissertation chair (insert name and title) at (XXX)XXX-XXXX or (insert email address).

Thank you again for your participation.

Sincerely

Internal Audit Function

1. What year did your city adopt the internal audit function?

2. What were the primary motivations for adopting the internal audit function?
    a. Reliability of financial information.
    b. Oversight of federal expenditures (compliance).
    c. Prevention and detection of fraud, waste, and abuse.
    d. Efficiency and effectiveness of program and operational processes.
    e. Risk management.
    f. Monitoring the system of internal controls.
    g. Other (please specify).

3. During the past five years (or since inception if shorter), approximately how long has the function been vacant?
    a. Occupied over the entire period referenced.
    b. Vacant less than 6 months.
    c. Vacant more than 6 months, less than 2 years.
    d. Vacant 2 years or more.
    e. Never filled.

Internal Audit Governance

The following questions are asked to obtain information on the scope and authority of the internal audit function.

4. What is the legal authority establishing the city's internal audit function?
    a. City charter.
    b. Council/Commission ordinance.
    c. Executive order of Mayor.
    d. Administrative decision within division/department.
    e. Other (please specify).

5. To whom does the internal audit function report?
    a. City Council/Commission only.
    b. Mayor only.
    c. City Manager/Administrator only.
    d. Division or Department Director.
    e. Audit Committee.
    f. Other Committee.
    g. Other (please specify).

6. How does your city staff the internal audit function?
    a. Staffed using city employees.
    b. Staffed using a contracted private firm.

Internal Audit Budget Questions

The following questions are meant to obtain information about the city's budget for internal audit.

7. What was the annual budget for internal audit during each of the following years?
    a. 2007.
    b. 2008.
    c. 2009.
    d. 2010.
    e. 2011.

8. How many positions were authorized for internal audit during each of the following years?
    a. 2007.
    b. 2008.
    c. 2009.
    d. 2010.
    e. 2011.

Contracted Internal Audit Function

The following questions are meant to obtain information about the city's internal audit function if outsourced.

9. What year did the city engage the private firm?

10. What is the annual budget for audit services under the terms of the contract?

11. What is the name of the firm that your city engaged for internal audit services?

Audit Committee Information

The following questions are meant to obtain information the use of committees for monitoring and oversight of the internal audit function.

12. Does the city have a committee that is responsible for review of internal and external audits?
    a. Yes.
    b. No.

13. What is the title or name of that committee?

14. How many members serve on the committee?

15. How are committee members selected?

16. Please indicate the composition of membership on the committee from the choices below.
    a. Citizens/taxpayers.
    b. Mayor.
    c. Council/Commission members.
    d. City Manager.
    e. Others (please specify).

17. What is the length of the term for those serving on this committee?

18. IS there a requirement that any of the members of the committee be knowledgeable on matters of finance/accounting and audit?
    a. Yes.
    b. No.

19. Please indicate below what functions the committee performs relative to the audit function of the city.
    a. Review the Comprehensive Annual Financial Report.
    b. Review the external auditors report.
    c. Review internal auditors reports.
    d. Review corrective action status reports on past audit findings.
    e. Participate in the process for hiring the external auditor.
    f. Participate in the process for hiring the internal auditor.
    g. Supervise directly the work of the internal auditor.
    h. Recommend audit topics.
    i. Other (please specify).

Executive Management of City

The questions in this section involve developing an understanding of the position of mayor and city manager/administrator.

20. How is the mayor selected?
    a. Independent election by the citizens.
    b. Appointed member of the city council.
    c. Other (please specify).

21. Does the mayor have independent veto power over council actions?
    a. Yes.
    b. No.

22. Is the mayor required to submit an executive budget proposal independent of the legislative budget proposal?
    a. Yes.
    b. No.

23. Does the city employ a city manager/administrator?
    a. Yes.
    b. No.

24. How is the city manager/administrator selected?
    a. Appointed by Mayor only.
    b. Appointed by Council or Commission only.
    c. Appointed jointly by the Mayor and Council or Commission.
    d. Other (please specify).

25. To whom does the city manager/administrator report?
    a. Mayor.
    b. Council/Commission.
    c. Both.
    d. Other (please specify).

Respondent Information

Please answer the following short questions to help identify your community and your professional role and contact information.

26. Please provide the following contact information:
    a. Name:
    b. Address:
    c. Address2:
    d. City/Town:
    e. State:
    f. Zip:
    g. Email Address:
    h. Phone Number:

27. What is the job title for your current position?

End of Survey

Thank you for your participation in this survey. The results of this research will be made available to all cities sometime in the near future through an appropriate outlet.

28. Do you have any comments or suggestions for the researcher regarding the survey or the topic in general?

APPENDIX B

SURVEY ADVANCE NOTICE LETTER

September 27, 2012

First Name MI. Last Name, Title
City of Xxx
Address_1
City, State, Zip

Dear Ms or Mr. Xxx:

The internal audit function is an important part of organizational governance, providing assurance on systems and processes designed to manage risk. There are significant gaps in our knowledge of its influence in municipal government. Accordingly, it would be very helpful if you would complete a brief email questionnaire which you will receive within the next 10 days.

The survey is part of a dissertation designed to increase our understanding of internal audit's influence on municipal governance processes in Florida. Specifically, it seeks to determine its effect on the system of internal controls.

I would greatly appreciate your taking the few minutes necessary to provide your responses to the questionnaire when it is received. I would be pleased to send you a summary of the findings once the research is complete.

Thank you in advance for your help.

Sincerely,

Name and Title
Florida State University, Askew School of Public Administration and Policy
(XXX)XXX-XXXX
(insert email address)

cc: Auditor Name, Auditor Title

APPENDIX C

LIST OF CITIES WITH INTERNAL AUDIT BY DATE ADOPTED

City Name	Est. Year Adopted
Wellington	2012
Pembroke Pines	2011
Miramar	2007
Fort Lauderdale	2004
Coral Springs	2004
Homestead	2003
Cape Coral	2002
Hialeah	1999
Pinellas Park	1999
Sunrise	1992
Jacksonville Beach	1990
West Palm Beach	1989
Lake Worth	1985
Pompano Beach	1984
Tarpon Springs	1983
Miami Beach	1982
Gainesville	1981
Ocala	1981
Miami	1980
Tampa	1980
Orlando	1980
Clearwater	1980
Melbourne	1980
Titusville	1980
Tallahassee	1979
Bartow	1978
Lakeland	1977
St. Petersburg	1972
DeLand	1970
Jacksonville	1968
Coral Gables	1967
Sarasota	1950

APPENDIX D

LIST OF CITIES INCLUDED IN POPULATION

Year	City Name	IAF	Findings	FOG	Population
2011	Jacksonville	1	1	0	822,038
2011	Miami	1	1	0	406,385
2011	Tampa	1	1	0	337,368
2011	St. Petersburg	1	1	0	246,293
2011	Orlando	1	1	0	241,978
2011	Hialeah	1	1	0	226,545
2011	Tallahassee	1	1	1	182,482
2011	Fort Lauderdale	1	1	1	166,205
2011	Cape Coral	1	1	1	156,369
2011	Pembroke Pines	1	0	1	154,889
2011	Gainesville	1	1	1	124,379
2011	Miramar	1	1	1	122,982
2011	Coral Springs	1	0	1	121,651
2011	Clearwater	1	1	1	107,805
2011	West Palm Beach	1	1	0	100,801
2011	Pompano Beach	1	1	1	100,319
2011	Lakeland	1	1	1	97,690
2011	Miami Beach	1	1	1	88,349
2011	Sunrise	1	0	1	84,375
2011	Melbourne	1	0	1	76,354
2011	Homestead	1	1	1	61,503
2011	Ocala	1	1	1	56,545
2011	Sarasota	1	1	1	52,114
2011	Pinellas Park	1	0	1	49,286
2011	Coral Gables	1	1	1	47,031
2011	Titusville	1	1	1	43,852
2011	Lake Worth	1	1	1	34,901
2011	DeLand	1	0	1	27,330
2011	Tarpon Springs	1	1	1	23,465
2011	Jacksonville Beach	1	0	1	21,441
2011	Bartow	1	1	1	17,323
2011	Port St. Lucie	0	1	1	166,041
2011	Hollywood	0	1	1	140,930
2011	Miami Gardens	0	0	1	107,091
2011	Palm Bay	0	1	1	103,504
2011	Davie	0	0	1	92,151
2011	Deltona	0	1	1	85,233
2011	Plantation	0	0	0	84,687
2011	Boca Raton	0	0	1	84,652
2011	Largo	0	1	1	77,653
2011	Palm Coast	0	1	1	75,617
2011	Deerfield Beach	0	1	1	75,125
2011	Boyton Beach	0	1	1	68,409
2011	Lauderhill	0	1	1	66,709
2011	Weston	0	0	1	65,237

Year	City Name	IAF	Findings	FOG	Population
2011	Fort Myers	0	1	1	63,662
2011	Daytona Beach	0	1	1	61,031
2011	Delray Beach	0	1	1	60,831
2011	Tamarac	0	0	1	60,619
2011	Kissimmee	0	1	1	60,375
2011	North Miami	0	1	1	58,806
2011	North Port	0	0	1	57,893
2011	Wellington	0	1	1	56,752
2011	Port Orange	0	1	1	56,313
2011	Jupiter	0	1	1	55,542
2011	Margate	0	0	1	53,714
2011	Sanford	0	1	1	53,422
2011	Coconut Creek	0	0	1	53,155
2011	Pensacola	0	1	0	51,939
2011	Bradenton	0	1	0	49,724
2011	Palm Beach Gardens	0	0	1	48,630
2011	Doral	0	1	1	46,516
2011	Bonita Springs	0	0	1	44,307
2011	Apopka	0	0	0	42,089
2011	Fort Pierce	0	0	1	41,789
2011	North Miami Beach	0	1	1	41,680
2011	Altamonte Springs	0	0	1	41,600
2011	Oakland Park	0	1	1	41,549
2011	North Lauderdale	0	0	1	41,248
2011	Cutler Bay	0	0	1	40,644
2011	Ormond Beach	0	1	1	38,376
2011	Greenacres	0	0	1	37,873
2011	Hallandale Beach	0	1	1	37,229
2011	Panama City	0	1	1	36,590
2011	Ocoee	0	0	1	36,005
2011	St. Cloud	0	1	1	35,844
2011	Aventura	0	0	1	35,723
2011	Dunedin	0	1	1	35,307
2011	Winter Garden	0	0	1	35,281
2011	Plant City	0	1	1	34,746
2011	Royal Palm Beach	0	0	1	34,234
2011	Winter Haven	0	1	1	34,112
2011	Oviedo	0	0	1	33,815
2011	Winter Springs	0	0	1	33,314
2011	Lauderdale Lakes	0	1	1	32,766
2011	Riviera Beach	0	1	1	32,535
2011	Dania Beach	0	1	1	29,596
2011	Miami Lakes	0	1	1	29,369
2011	Clermont	0	0	1	29,358
2011	Cooper City	0	0	1	29,159

Year	City Name	IAF	Findings	FOG	Population
2011	Winter Park	0	1	1	27,727
2011	Casselberry	0	1	1	26,321
2011	Rockledge	0	1	1	25,026
2011	Key West	0	0	1	24,626
2011	Temple Terrace	0	1	1	24,442
2011	Parkland	0	0	1	24,391
2011	Palmetto Bay	0	1	1	23,477
2011	New Smyrna Beach	0	1	1	22,668
2011	Sebastian	0	0	1	21,995
2011	Hialeah Gardens	0	0	0	21,794
2011	Crestview	0	1	0	21,474
2011	Sunny Isles Beach	0	0	1	21,007
2011	Venice	0	1	1	20,752
2011	Edgewater	0	1	1	20,734
2011	Haines City	0	1	1	20,661
2011	Leesburg	0	0	1	20,251
2011	Sweetwater	0	1	0	19,963
2011	Fort Walton Beach	0	0	1	19,534
2011	Naples	0	0	1	19,451
2011	DeBary	0	1	1	19,315
2011	Palm Springs	0	0	1	19,082
2011	West Melbourne	0	1	1	18,712
2011	Lynn Haven	0	0	1	18,585
2011	Eustis	0	0	1	18,483
2011	Pinecrest	0	0	1	18,255
2011	Belle Glade	0	1	1	17,426
2011	Cocoa	0	1	1	17,238
2011	Seminole	0	0	1	17,215
2011	Safety Harbor	0	0	1	16,881
2011	Punta Gorda	0	0	1	16,741
2011	Marco Island	0	1	1	16,443
2011	Maitland	0	0	1	15,808
2011	Stuart	0	0	1	15,636
2011	Opa-locka	0	1	1	15,403
2011	Vero Beach	0	0	1	15,256
2011	New Port Richey	0	1	1	14,959
2011	Callaway	0	1	1	14,383
2011	Lake Wales	0	0	1	14,261
2011	West Park	0	0	1	14,078
2011	Tavares	0	0	0	14,015
2011	Lady Lake	0	0	1	13,946
2011	Lake Mary	0	0	1	13,868
2011	Miami Springs	0	0	1	13,844
2011	Longwood	0	0	0	13,620
2011	Oldsmar	0	0	1	13,597

Year	City Name	IAF	Findings	FOG	Population
2011	Auburndale	0	0	1	13,593
2011	Zephyrhills	0	0	1	13,317
2011	St. Augustine	0	1	1	13,053
2011	Niceville	0	1	1	12,834
2011	Palmetto	0	1	0	12,708
2011	Atlantic Beach	0	0	1	12,670
2011	Mount Dora	0	0	1	12,557
2011	Key Biscayne	0	0	1	12,363
2011	South Miami	0	0	1	12,363
2011	Destin	0	0	1	12,319
2011	South Daytona	0	0	1	12,285
2011	Lake City	0	1	1	12,052
2011	North Palm Beach	0	0	1	12,033
2011	Panama City Beach	0	1	1	12,025
2011	Gulfport	0	1	1	12,022
2011	Wilton Manors	0	1	1	11,743
2011	Florida City	0	0	0	11,704
2011	Holly Hill	0	1	1	11,652
2011	Ferandina Beach	0	0	1	11,510
2011	Cocoa Beach	0	1	1	11,233
2011	Orange City	0	0	1	11,143
2011	Miami Shores	0	0	1	10,608
2011	Sebring	0	1	1	10,540
2011	Palatka	0	1	1	10,522
2011	Lantana	0	0	1	10,466
2011	Lighthouse Point	0	0	0	10,377
2011	Satellite Beach	0	1	1	10,166

Notes:
(1) IAF - 0/1 indicator of whether city adopted internal audit.
(2) Findings - 0/1 indictor of whether city had findings in 2011
(3) Form of Government - 0/1 indicator of whether city adopted Mayor/Council or Council/Manager form.

APPENDIX E
IRB HUMAN SUBJECTS APPLICATION REVIEW OUTCOME

Human Subjects Application - For Full IRB and Expedited Exempt Review

PI Name: Carl Joseph Gabrini

Project Title: The Effect of Internal Audit on Governance: Maintaining Legitimacy of Local Government

HSC Number: 2012.8432

Your application has been received by our office. Upon review, it has been determined that your protocol does not fit the definition of a human subject(45cfr46.102F) pursuant to the federal regulations governing the protection of research subjects and no further review by the IRB is necessary.

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BIOGRAPHICAL SKETCH

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Carl Gabrini is originally from Long Island, New York. He earned a B.A. in Political Science from Stony Brook University in 1985, an M.B.A. from Dowling College in 1989, and an M.S. in Taxation from the University of Central Florida in 1998. He took and passed the C.P.A. exam in Florida in November of 1998. In 2003 he was admitted as a Ph.D. student to Florida State University in the Askew School of Public Administration and Policy. He reached candidacy status in April of 2010 and defended his dissertation in June of 2013.

Carl's research interests include organizational governance, internal auditing, and local government accounting and finance. Carl's professional experience includes 12 years in contract and grants management in various settings, and 12 years in professional accounting as an auditor in both the private and public sectors. More recently he has assumed a tenure track position as Assistant Professor of Accounting at the College of Coastal Georgia. He is very interested in merging his practitioner experience with his academic career to benefit his teaching, service, and professional development activities.