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Complementarity of Politics and Administration: An Empirical Examination

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COMPLEMENTARITY OF POLITICS AND ADMINISTRATION:

AN EMPIRICAL EXAMINATION

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ABSTRACT

COMPLEMENTARITY OF POLITICS AND ADMINISTRATION: AN EMPIRICAL EXAMINATION

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This dissertation is designed to examine the impact of the complementarity of politics and administration on local governments' fiscal performance. The study adopts Svara's *Politics-Administration Complementarity Model*, which explains the mutual interdependence and reciprocal influence of administrative relationships between the elected and appointed officials of local governments towards a *General Management City* (a traditional mayor-council city that appoints a professional city manager to conduct the city's administration without formally adopting the council-manager form).

By adopting the politics-administration complementarity model to a general management municipal administrative structure, this thesis hypothesizes that cities with general management administrative structures achieve measurable fiscal performance of a higher order compared to cities without professional management (as in traditional strong mayor cities), or cities with a clear separation of powers (as in the council-manager forms of government).

This study employs a cross-sectional research design on the 1997 Census of Government's data of 1,166 cities that had populations of 25,000 or more. This analysis employs four most commonly used dependent variables of municipal fiscal performance: namely the composite fiscal stress index, revenue capacity per capita, per capita general expenditures, and FTE employee rate. An ordinary least square regression model is used to isolate the impact of the municipal management structure on dependent variables while controlling for the exogenous effects of identified socioeconomic and fiscal condition variables.

Results of this study support the hypothesis that the general management cities have better fiscal performance levels, as evidenced by lower revenue capacity per capita, per capita general expenditures and the FTE employee rates than the strong mayor cities. However, the composite fiscal stress index was lower in the strong mayor cities when compared with the general management cities. Thus, three out of four research hypotheses were not rejected based on the results of regression analyses.

Exploratory analyses of the general management cities show that they have great fluctuations in population growth. The cities that have recently adopted general management structure struggle financially. Though the findings did not support claims based on Svara's politics-administration complementarity model, still this study contributes substantially to the theory and practice of public administration, especially municipal government administration.

For my beloved parents

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CHAPTER I

INTRODUCTION

This dissertation is designed to examine the impact of complementarity of politics and administration on local governments' fiscal performance. This study adopts Svara's *Politics-Administration Complementarity Model*, which explains the mutual interdependence and reciprocal influence of administrative relationships between elected and appointed officials of local governments toward a *general management city*. The International City/County Management Association (ICMA) defines a general management city as a traditional mayor-council city that appoints a professional city manager to conduct the city's administration without formally adopting the council-manager form.

This study examines the impact of a general management city's administrative structure on its fiscal performance. To assess this impact, fiscal performance indicators fiscal stress, revenue, and expenditure data of general management cities were compared with those indicators in cities organized in more common forms of municipal management, namely, mayor-council (also known as strong mayor) and council-manager forms of government. To assess the impact of different forms of municipal management structures on fiscal performance, this study uses a cross- sectional research design. It uses the 1997 Census of Government's database of 1,166 cities that had populations of 25,000 or more. The findings of this study will contribute to the

continuing development of theory and practice of public administration, especially to professional management in municipal government administration. The effect of different administrative structures of municipal governments and the impact of professional administration over municipal fiscal performance are the major contributions by this research to the theory and practice of public administration.

Background

Generally, U.S. city governments are structured in one of two major forms: strong mayor (or mayor-council) or council-manager form. Other less common forms of government, such as the commission form or town meeting and representative town meeting forms, are still followed by some cities. This study's major intent is to analyze the impact of strong mayor and council-manager cities' administrative structures impact on their municipal fiscal performance. Therefore, this research will not address the other less common forms of municipal administrative structures. The government structure of strong mayor cities consist of an executive branch with a popularly elected mayor who has the authority to hire and fire other city officials outside the merit system, and a legislative branch with elected council members.

The government structure of council-manager cities is similar to private businesses in that the voters, the council, and the city manager play the roles of stockholders, board of directors, and chief executive officer, respectively. The main characteristics that differentiate the two major forms are: how the city's daily operations are conducted and to what degree authority is granted

either to an appointed professional city manager or to an elected mayor in conducting municipal operations. An analysis of the impact of professional management on policy formulation, implementation, and evaluation of the policy outcome is of great interest to practitioners and researchers of public administration.

When comparing different forms of government, researchers usually classify city governments according to the formal municipal administrative structures adopted by the municipalities (Morgan and Watson 1992, Nunn 1996, and Ihrke 2002). This approach explores the impact of different 'forms of municipal government' on cities. Researchers of this approach generally compared strong mayor cities (denoted as SMC in this study) with council-manager cities (denoted by the acronym CMC). The underlying assumption of this approach is that strong mayor cities do not have professional managers as chief executive officers and that council-manager cities use appointed professional city managers as chief executive officers in conducting municipal administration.

The striking drawback of this approach is the oversimplified classification of municipal administrative structures (Renner 1988, Renner and DeSantis 1998, Desantis and Renner 2002, and Frederickson et al. 2002). Recent literature suggests that cities today may be adopting a variety of structural arrangements that do not follow the traditional, simple forms of government classification.

As early as the 1960s, the profile of local governments began to show significant change. Some strong mayor cities began using an appointed professional manager for overall administrative affairs without formally adopting the council-manager plan (ICMA, 1997). This resulted in a hybrid municipal administrative structure. Starting in July 1969, the ICMA established criteria to recognize the hybrid forms of municipal government. In order to distinguish the new hybrid municipalities from those recognized as traditional council-manager governments, they were designated as *General Management Cities* (called GMC in this study).

Based on the National League of Cities' 1996 data, Svara (1999a) estimated that 35% of strong mayor cities with populations of 10,000 – 49,999 people had appointed professional managers. Similarly, 39% of strong mayor cities with populations of 50,000 people or above had an appointed professional manager. Technically, these cities fall under the ICMA's classification of 'general management cities.' Svara (1999a) compared the characteristics of professional management within strong mayor forms of government and council-manager forms of government and found that the managers of strong mayor cities had less formal administrative authority over city management, but also had less conflict and a higher level of cooperation with the mayor and council than found within a council-manager style of governance.

Theory

Svara (1998) argues within the politics-administration dichotomy model that separation of administrative power and political neutrality, the founding principles of public administration and the council-manager form of government, are an aberration of the founders' original intent of governance. More recently, Svara (1999b and 2001) proposed the politics-administration complementarity model to explain the mutual interdependence and reciprocal influence of an administrative relationship between elected and appointed officials of local governments. Svara claims that the complementarity of politics and administration, as outlined in his model, is a legitimate alternative to the classical dichotomy model, which delineates separation and insulation of administrators from political interference.

By analyzing the nature of a professional manager's appointment to a position in city administration, and the formal authority and administrative relationship between appointed and elected officials in a general management city, one can argue that the politics-administration complementarity administrative relationship is more predominantly present in a hybrid form of general management cities than in a politics-administration dichotomy based council-manager form of government. As of 2002, a review of the literature found no published empirical research on the politics-administration complementarity model proposed by Svara. This will be the first such study.

The basic question guiding this research is: does adopting a particular form of municipal administrative structure result in significant and visible

changes in a city's fiscal behavior? One could assume that changes in the structural characteristics of city government might have fiscal policy consequences. The impact of the management structure and its practices over municipal fiscal performance is the primary focus of this study. Therefore, to understand the impact of the general management city's administrative structure on municipal fiscal performances, this study adopts Svara's politics-administration complementarity model to explain mutually interdependent reciprocal influences in the administrative relationship between elected and appointed officials within the general management cities.

Hypothesis

By applying the politics-administration complementarity model to general management city functions, it is hypothesized that general management cities exhibit a more efficient fiscal management than the strong mayor and council-manager cities. In this study, the term 'municipal fiscal performance' generally represents a local government's financial condition. Based on the types of administrative relationships present in these cities, this thesis hypothesizes that general management cities are more likely to have lower composite fiscal stress index, revenue capacity per capita, per capita general expenditure, and full-time equivalent rate of employees than the strong mayor and council-manager cities.

If the financial indicators differ between cities without a corresponding change in the quality of service to the citizen's satisfaction, then it can be assumed the city with lower fiscal stress, general revenue and expenditures,

and FTE employee ratios is better managed. Therefore, if a city is considered to be managed with fiscal efficiency, then it should have lower fiscal stress, revenue capacity per capita, general expenditures, and FTE rates.

The objective of this study is to empirically test the politics-administration complementarity model. Building an analytical model and generating statistical evidence in support of this model is imperative to support the theoretical assumptions of enhanced fiscal performance with a general management city. To understand the impact of a general management city's administrative structure on a city's fiscal performance, the fiscal performance indicators of those cities were compared with the fiscal performance indicators of mayor-council and council-manager cities.

Limitations

This study includes only cities with populations of 25,000 or above in its analysis. This restricts the generalizability of analytical outcomes and makes these inapplicable to cities with populations of less than 25,000. The results of this study will explain the impact of different types of administrative relationships among elected and appointed city officials on municipal fiscal performance. The effect of different administrative structures of municipal governments and the impact of professional administration over municipal fiscal performance are the major contributions by this research to the theory and practice of public administration. Therefore, the importance of this study is that its findings can contribute substantially to the theory and practice of public administration, especially to the professional municipal government

administration. The literature review clearly shows that a need exists to analyze the impact of a general management city's administrative structure on its fiscal performance. Thus, by investigating one of the structural prescriptions for municipal fiscal performance, this study warrants both interest and concern by political leaders, scholars, and practitioners in the field.

This chapter introduced the research question and discussed its importance by identifying the gap in current literature. The following Chapter "Municipal Government in the United States," describes the profile of U. S. cities and their municipal administrative structures in detail. Chapter 3, "Theoretical Framework," explores the underlying theories of this study and provides a literature review. Chapter 4, "Research Methods," covers the sources and types of data, variables included, analytical techniques, and statistical procedures employed in this study. Chapter 5, "Data Analysis and Results," explains the findings of the data analysis. Finally, Chapter 6, "Discussion," explores the results of the study in light of urban literature and provides suggestions for future research.

CHAPTER II

MUNICIPAL GOVERNMENT IN THE UNITED STATES

Introduction

This chapter will briefly explore the history of professional management, provide a profile of municipal governments in U.S., and discuss the most common forms of municipal administrative structures adopted by municipal governments. American cities have a rich history of local government administration. American cities evolved through experimentation from their colonial beginnings and continue to experiment with new administrative approaches. Frisby (1999) summarizes this evolution thus: "From the aldermen and councilors of colonial America to the mayors, council members, commissioners and managers of the 20th century, local government in the United States has passed through a variety of incarnations. The history of city and county management is rooted in parliamentary England, but it has evolved into an uniquely American balancing act between elected and appointed officials."

In fact, 'city' is an honorary title granted to the traditional English boroughs that had a cathedral. These first American cities operated under a unicameral council consisting of an alderman and councilors. These cities were legal corporations with special charters granted by the governor who represented the English Crown (Frisby, 1999).

History of Professional Management

During the late 19th century, local government corruption and its accompanying partisan politics led the citizens, especially an emerging middle class, to distrust their local government. In this atmosphere, the middle class voters enthusiastically embraced the introduction of the council-manager plan. In an attempt to eradicate corruption, reformers supported the formulation of charters that centralized bureaucratic responsibility in the mayor's office.

The National Municipal League, established in 1895 by bringing the reformers' groups across the country together, endorsed the model city charter that concentrated municipal power in the elected executive. In 1908, Staunton, a small city of Virginia, hired Charles Ashbumer as the country's first city manager (Stillman, 1974). In the early council-manager plans, the manager was granted administrative authority that, in theory, enabled functioning free from the elected body's interference.

This city manager plan, as it is traditionally called, has characteristics similar to those of business models, specifically of the business corporation. This gave the plan "validity in terms of the middle-class values of economy and efficiency and the dichotomy between politics and administration," and the plan guaranteed, "administrative expertise divorced from political considerations" (Banovetz, 1994). Hayes and Chang (1990) describe this as "an institutional guarantee against a possible stalemate between the executive and legislative branches of government."

During 1914-24, the city manager profession established its identity and during 1924-38, the profession reflected the values of the scientific management philosophy and the politics-administration dichotomy with a clear distinction between the policy-forming council and policy-implementing and policy-administering professional management. Whereas, these two periods reflected support for a limited government, subsequently public mood toward government has changed in expecting greater responsiveness to citizen needs. The city manager's role has been transformed to that of a community leader and managers are expected to be actively involved in submitting policy proposals to the council and providing advice on policy matters (Stillman, 1974 and Nalbandian, 1991).

Even from its colonial beginnings, local government in America has struggled through a history of experimentation. "The twentieth century could well be called the century of local government in American democracy" (Hansell, 2000). Tracing the evolution of the city management profession, Stillman (1974) relates the municipal structural changes to changing public expectations of the government.

Profile of U.S. Municipal Governments

Government Units In 2002

As of June 30, 2002; of the 38,971 general-purpose local government units in the U.S. recognized by U.S. Census Bureau, 3,034 are county governments, 19,431 are municipal governments, and 16,506 are township

governments. These figures are nearly identical to the distribution of local governments in 1992. This corresponds generally to the incorporated places recognized in the Census Bureau reporting of population and housing statistics. In 2002, there are 2,624 more municipal governments than in 1952, a 16 percent increase. According to 2002 Census of Governments GC02-1 (P) publication (issued July 2002), the 19,431 municipal governments reported in 2002 reflects a net increase of 59 municipalities since 1997, primarily as a result of new incorporations (USDOC, 2002b). According to the Census Bureau data, the U.S. has nearly 164 million people living in areas with municipal governments. As population grows in small cities, the cities opt for professional administrative help to conduct routine business (Adrian, 1988) in order to meet the demands of the growing community.

Out of the 19,431 municipal governments enumerated in 2002, the total number of cities with more than 25,000 of people (based on the 1996 estimated population) in all the 50 states, including Washington DC, was 1,166. Of these cities, the State of California had more cities with populations over 25,000. Nearly as many as 20% of the cities (N=238) were present in the State of California. This was followed by the State of Texas (7% or N=86). The State of Illinois and the State of Florida were tied in third place with about 6% of the total U. S. cities with populations of 25,000 or more (N=75 and N=67 respectively). Generally, the southern states present in the warmer temperatures had more cities except for the State of Illinois. On average, each state had 23 cities with more than 25,000 people. The median number

of cities with more than 25,000 people in each state was 14 (see Appendix-A, Profile of U.S. Cities and their Forms of Administrative Structures section for more details).

Cities and Their Form of Municipal Administrative Structures

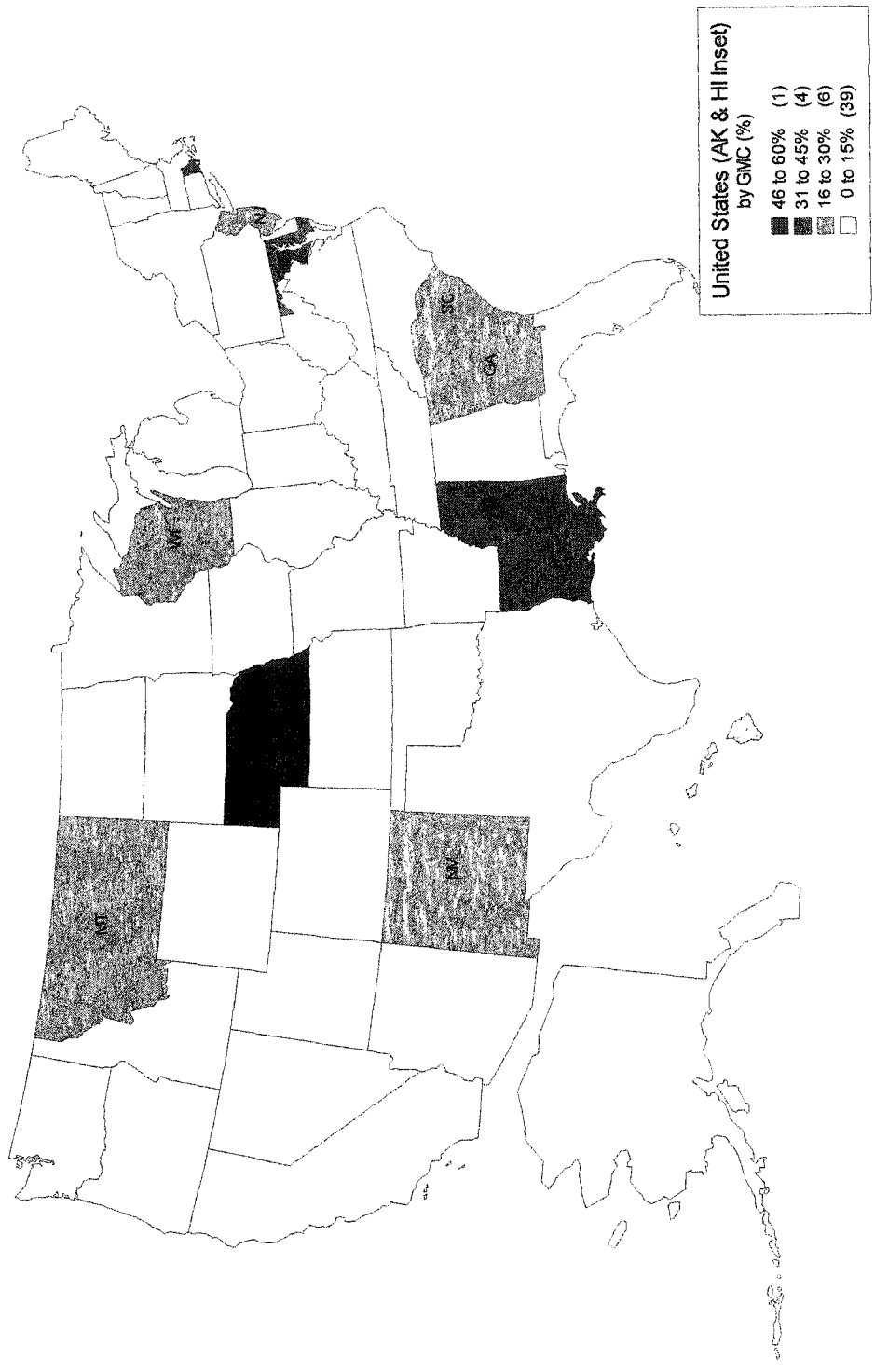
The predominant form of municipal administrative structure among the cities was the council-manager form of government. This was followed by the strong mayor form of government and then by the general management municipal administrative structure. However, the cities of each of the states had a tendency to adopt a form of municipal administrative structure that closely resembled the one in neighboring cities.

The States of South Dakota, Vermont, and Indiana had more strong-mayor cities than any other states. More than 90% of cites within each of these states were strong mayor cities. A majority of the states in the U.S. had cities that followed the council-manager form of municipal administrative structure. In the States of Alaska, Arizona, Delaware, Iowa, Maine, Nevada, North Carolina, Oklahoma, Virginia, California, and Texas, more than 95% of the cities within each state had adopted the council-manager form of government.

The general management municipal administrative structure was the type of administrative structure least preferred by most cities in each state. But, a minimum one-third (33%) of the cities located in the States of Nebraska, Louisiana, Maryland, Mississippi, and Rhode Island followed the general management administrative structure (See Figure 1).

Figure 1:

States with a Percentage of General Management Cities



In 1998, of the 1,166 cities that had populations 25,000 or more (based on the 1996 estimated population), 20% (N=228) were strong mayor cities, 66% (N=767) council-manager cities, and 12% (N=144) general management cities while the remaining 2% (N=27) had adopted some other forms of municipal administrative structures.

Of the 1,166 cities, 968 maintained the same administrative structure consistently from 1993 through 1998. Of the 968 cities, 18% (N=179) were strong mayor cities, 75% (N=719) were council manager cities and the remaining 7% (N=70) were general management cities. Of the 968, the majority of the cities, 82% (N=792), were small cities with populations of 25,000 to 99,999. The medium-size cities (with populations of 100,000 to 249,999) were 13% (N=125), and 5% (N=51) were big cities with populations of 250,000 and above (see Table 1). Appendix A provides detailed information on the city size and regional distribution of different municipal administrative structures across the country.

Table 1:
Percentage of Cities in Each City Size Group
(Cities over 25,000 Persons)

City Size	N	%
Small Cities	792	82
Medium-Size Cities	125	13
Big Cities	51	5

Of the 968 cities with populations of 25,000 or more, 11% (N=106) were located in the Northeast region, 29% (N= 285) in the Southern region, 26% (N=251) were in the Midwestern part of the country, 7% (N=65) in the Mountain region, and 27% (N=261) in the Pacific region. More cities were present in the Southern and Pacific regions of the country. The Mountain region had fewer cities when compared with other regions (see Table 2). Of the 968 cities, only 31% (N=296) were located in the metropolitan statistical area (MSA) and the remaining 69% (N=672) were not in the MSA.

Table 2:
Percentage of Cities in Each Regional Location (Cities over 25,000 Persons)

Region	N	%
Northeast	106	11
South	285	29
Midwest	251	26
Mountain	65	7
Pacific	261	27

Form of Municipal Governments

American city governments use a variety of formal administrative structures. There are generally five basic municipal forms; strong mayor, council-manager, commission, town meeting, and representative town meeting forms. Out of these five, the most common forms of governments are the strong mayor and council-manager forms. Other less common government structures such as commissions, town meetings, and representative town

meetings are still followed by some cities.

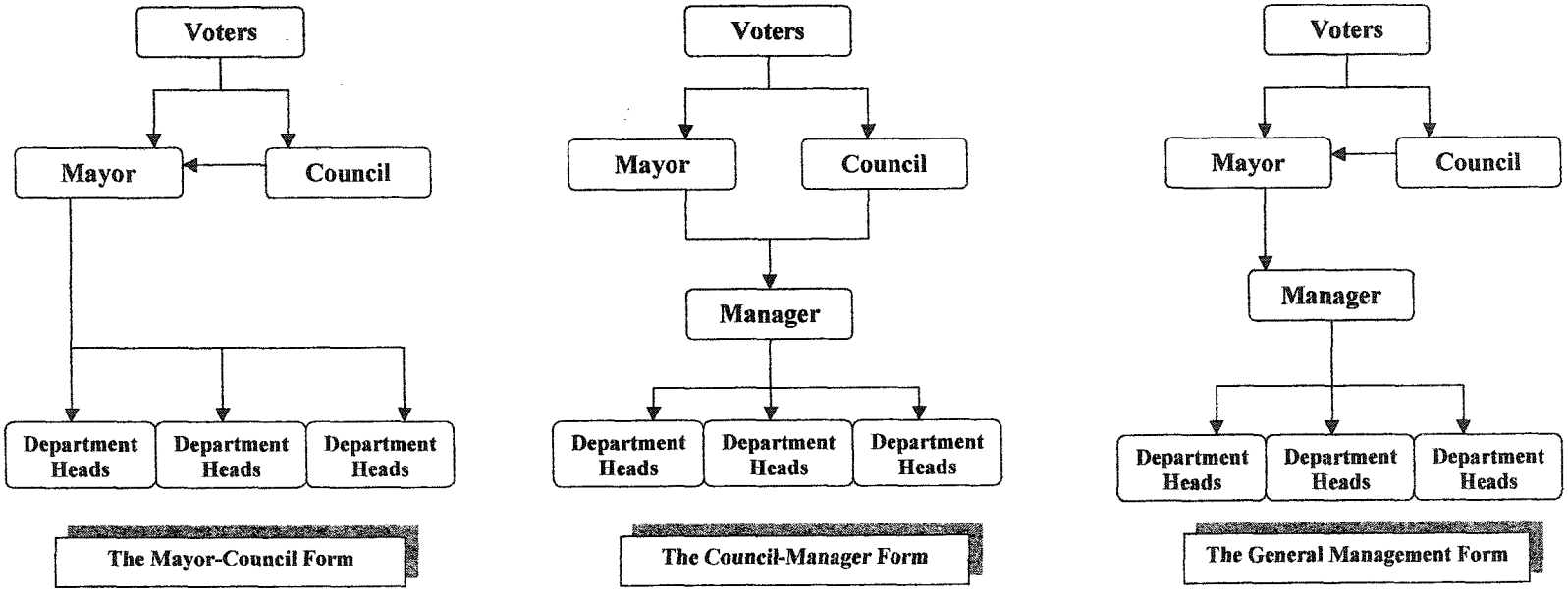
Home rule gives the citizenry the right to form its own government: the opportunity to choose the form of government that best meets their needs. The citizenry frames its own local government. U.S. municipal governments use a variety of formal structures. Though many types of municipal forms of government have been developed and tried by city governments throughout history, this study discusses only two forms that are currently very popular with city governments. The strong mayor (also called the mayor-council) and the council-manager forms are the ones adopted by most of the municipalities, regardless of the size of the city. Other forms such as, town meetings, representative town meetings, and commissions are on the verge of extinction.

Strong Mayor Form of Municipal Governments

In general, the traditional strong mayor municipality or mayor-council forms of government are characterized by a local government that has a direct, at-large election for a mayor (see Figure 2). The elected mayor is responsible for the political, policy, and administrative leadership of the municipal government. In classical strong mayor governments, the council represents a law-making body that has a limited influence over administration, except for the budget-adopting process. A strong mayor is given the power to appoint department heads without council confirmation and other duties that include preparing the budget for submission to council and providing policy leadership. The mayor also has the power to veto council decisions, but the council may override the veto by a special majority.

Figure 2:

The Common Forms of Municipal Administrative Structures



The major advantages of the strong mayor form of government may be an efficient centralized power in the mayor and strong policy leadership and responsiveness of the mayor to the public needs. The main shortcoming of this form is the single-person domination of administration, which could result in patronage. Another disadvantage is the potential administrative burden on a mayor that could result in an inefficient administration (ICMA 1997).

Council-Manager Form of Municipal Governments

As mentioned earlier in the review of history of American cities, the council-manager form of municipal management was devised in the early 1900s to overcome the so-called deficiencies of the mayor-council form of government. In the classical council-manager form of government, the council is the law-making body. The council also plays a major role in policy direction and political leadership. The mayor is either elected at-large by the public or selected by fellow-members of the council (see Figure 2). The mayor has a voice and a vote in council decisions but no veto power. The mayor acts as the chair of the council and as an executive representative of the city government. The mayor also performs ceremonial duties. Generally, the power of the mayor in a council-manager form of government is less than the power of a mayor in a mayor-council form of government. The mayor may or may not have the power to appoint the city manager, city boards, and committees. If the mayor has the power to appoint, then the final approval is subject to confirmation by the council (ICMA 1997).

Policy directions provided by the council are implemented by an appointed professional city manager, who maintains political neutrality while providing professional advice on policies under consideration. In addition to the administration of council policies, the city government budget is also under the full control of the qualified professional city manager. However, the council retains the power of final approval on a budget. The appointed city manager has the power to appoint and dismiss department heads and other officials without consulting or seeking approval from the council. The appointed city employees report to the city manager. The charters of the municipal government expressly restrict the interference of the mayor or council in the city manager's administrative duties and decisions (ICMA 1997).

The International City/County Management Association, which recognizes professionalism in municipal administration, has devised and revised, many times, criteria for formal acknowledgement of the professional managers and professional management in local governments. Appendix B reproduces the ICMA Local Government Recognition Criteria and Guidelines for Recognition. This document spells out, in detail, the council-manager position and the authority given to professional city managers for successful conduct of municipal business.

The proponents of this form of government claim that efficiency, effectiveness, and economy result from conducting a city government administration in a business-like manner with an appointed professional manager. The centralized administrative power, authority, and decision-

making power of a professional manager are considered an advantage in streamlined operation of municipal business. Also, the political neutrality of the council-manager form of government allegedly promotes government administration without the corruption that can result from the spoils and patronage system. This proponents claim, the financial resources of the government are utilized for the programs needed rather than wasted on programs selected out of political favoritism. However, possible drawbacks include dispersed political leadership and reduced responsiveness to community needs, since the city manager is not necessarily responsive to the public since the manager's reporting requirement restricted to mayor.

The General Management Cities / Hybrid Form of Municipal Management

Very rarely, an at-large mayoral election, in a strong mayor form of government, results in the election of an official who handles complex administrative responsibilities. In order to compensate for possible deficiencies of the mayor, some municipal government charters empower the elected mayor to appoint a chief administrative officer or a professional business manager to conduct the daily operations of municipal government and supervise various departments.

As early as the 1960s, the profile of local governments began to show these administrative changes. Some mayor-council municipalities began using an appointed professional manager for overall administrative affairs without adopting the council-manager plan. The International City Manager's Association recognized this change in tradition. From its analysis of this new

approach and administrative affairs conducted in this hybrid form government structure, the ICMA concluded that these newly developed city manager positions did not significantly vary from the traditional professional city manager positions provided for in the council-manager form of government. But the formal administrative authority of the manager was dispersed when compared with that of their council-manager counterparts (ICMA, 1997).

In July 1969, the ICMA began the process of recognizing municipalities that provided positions of professional managers while retaining a mayor-council form of government. In order to distinguish the new hybrid municipalities from those recognized as traditional council-manager governments, these new hybrid governments were designated as "general management" municipalities. The ICMA (1997) also established criteria to recognize the hybrid form of municipal governments (see Appendix A). In his study, Banovetz (1994) also observed this new trend in the administration of the local government. He recalled that the 1988 Municipal Yearbook had noted a convergence of the council-manager and mayor-council plan, "excellent prospects for the further interchange of aspects of structure and function."

On the basis of the National League of Cities' 1996 data, Svara (1999a) estimates that approximately 35% of the strong mayor cities with populations of 10,000 – 49,999 had appointed professional managers. Similarly, 39% of the strong mayor cities with populations of 50,000 and above had appointed professional managers. Technically, these cities fell under the

ICMA's "general management cities" classification. DeSantis (1998) observed this trend and stated that "the large number of localities that have adopted hybrid forms of government signals the growing acceptance of this organizational relationship."

However, scholars do not enthusiastically pursue the idea of this new "general management" reorganization. Bill Hansell (1999), then executive director of the ICMA, observed that "our 30 - year effort to introduce the idea of a 'general management' position into non-council-managers government still has meaning only for a limited number of members." A scanning of municipal government literature can support this statement. Only a handful of studies are analyzing the non-traditional hybrid form of administration in municipal management (Renner, 1988, Renner and DeSantis, 1998 and Svara 1999a). Of those studies, the most notable one is by public administration scholar James Svara (1999a). While comparing the characteristics of professional management of mayor-council and council-manager forms of government, Svara found that the mayor-council city managers have less formal administrative authority over city management, but they have less conflict and higher cooperation with the mayor.

Most of the duties performed by these managers are similar to the city managerial functions performed by the city manager of a council-manager form of government. This is an attempt by the local governments to blend the best of both the strong mayor and council-manager forms of government. However, this results in an organizational structure with an unclear line of

authority and responsibility.

Svara (1999a), in one of his studies on city management, takes this difference in professional management one step further by using specific terminology to distinguish the professional managers of council-manager form of government from general management city managers. For the sake of simplicity, he refers to all appointed city management officials, regardless of different municipal forms of government, as "*Chief Administrators.*" However, the terms "*City Manager*" and "*City Administrator*" are used by Svara (1999a) to refer to the top appointed administrator in council-manager and general management cities respectively (see Table 3).

Table 3:
James Svara's Taxonomy on City Administrators

Administrative Forms	Terminology of the Professional Managers
All professional city managers	Chief Administrators
Council-Manager City's city manager	City Manager
General Management City's manager	City Administrator

Thus, according to Svara's terminology, "the City Manager" of council-manager cities provides facilitative leadership but is not an executive. The "City Administrator" of general management cities serves along with the mayor, whereas the mayor is the chief executive officer for the city.

Recent Trend

Large cities of the U.S. generally prefer strong mayor city municipal administrative structures. Declining property values, increasing racial

tensions, and the resulting political turmoil in the city are all factors contributing to a continued confrontation between the political and administrative structures in city hall leading to an abandonment of the council-manager form of government. The city of Hartford, Connecticut is the latest city to abandon five decades of council-manager tradition as of the November 2002's election.

Another example of this municipal administrative change is the city of Dallas, Texas, and its return to the strong mayor form of municipal government. Oakland, California is another example. With the citizens' supporting abandonment of the city's 68-year-old council-manager government, the city entrusted responsibility for day-to-day administration to a nationally recognized professional manager (Massad, 1995).

After their transformation into strong mayor cities, these cities have still retained professional city managers operating alongside the mayors who are the chief executives in power. This move affords the mayors more time to focus on political, as well as, mayoral ceremonial duties and policy developments without relinquishing control over the coordination of administrative departments. This results in a non-traditional hybrid form of municipal government or general management city form as described by the ICMA.

Box (1993) observes, in some council-manager cities, "Where there is significant disagreement over goals or where many people (or a few very powerful people) see their ability to influence the policy process as more important than efficient and professional management, the community is likely

to resist professionalism in the form of a general-management professional."

Conclusion

This study intends to analyze another less familiar administrative structure that is called the 'general management' form. The ICMA defines a general management city as a traditional mayor-council city that appoints a professional city manager to conduct the city's administration without formally adopting the council-manager form.

From the early reform movement efforts to make cities more efficient have been more focused on the structure of local government. However, no study has attempted to analyze the benefit and impact of the hybrid administrative arrangement on the general management city's daily functioning. Thus, there is a gap in our understanding of the influence of a general management city's manager on its efficient fiscal management, a gap that has to be filled by more research.

This study adopts Svara's politics-administration complementarity conceptual framework to general management cities in order to examine the politics-administration complementarity model empirically. By doing so, the hybrid nature of the administrative authority of the general management city's impact on municipal performance can be analyzed. The next section presents the theoretical framework on municipal administrative structures to present the current study in a theoretical perspective.

CHAPTER III

THEORETICAL FRAMEWORK

Introduction

This chapter explores the administrative theories in current research including recent research findings of municipal fiscal performance and factors influencing municipal fiscal performance. Then it explores the research question in the context of the Complementarity of Politics and Administration model. Theoretical importance of this study is two-fold. Its critical nature can be stated simply by quoting the following statements from scholars of public administration and urban services management. In Svara's (1999 b) view, the "relationship of administration to the political process is the key issue in defining the scope and nature of public administration." Stumm and Corrigan (1998) state: "Debate over the virtues of one or another form of municipal government has raged since the early days of the reform movement." Adopting these two statements as guidelines, this research addresses (a) theories on the administrative relationship between elected and appointed officials and (b) theories on measures of municipal government fiscal performance.

This approach to the theory discussion can be justified by citing Dobel's (2001) observation: "The entire constitutional question about governance boils down to discretion within a context of institutional accountability and operational effectiveness." Though the prescriptions of political process and

efficiency models are interlaced and target a similar outcome (better performing government in the field of public administration), here they are presented under separate classifications. These classifications are mainly arbitrary, and an attempt to analyze underlying theories in detail. The roles, functions, and powers of managers have been the subject of extensive analysis by scholars interested in local government issues (Deno and Mehay, 1987; Hayes and Chang, 1990; Davis and Hayes, 1993; Massad, 1995; and Stumm and Corrigan, 1998). Therefore, this theoretical framework highlights the importance of institutional tradition, especially institutional structures, for local governance in urban research.

Administrative Theories

Theories on Administrative Relationship Between Elected and Appointed Officials

According to Svara (2001), the nature of the relationship between elected and appointed administrators, as well as the proper role of administrators in the political process, has been the subject of considerable debate in the theory and practice of public administration. At the city level, the council depends on the expertise and knowledge of its appointed professional city manager to function effectively and to implement the council's policy successfully. Gabris et al. (2000) state: "One of the most pivotal relationships in the public sector occurs when governing boards and professional staff interface." They add: "...the success of most governmental programs and

services hinges on how well these two key players build on each other's strengths and minimize the other's weakness. Normally, success depends on cooperative interactions based on high trust, high openness, low risk, and high owning."

The following review of literature on the subject highlights the prominent facets of theories that deal with the relationship between elected and appointed officials.

(i) Politics-Administration Dichotomy Model as a Founding Theory

Selden et al. (1999) state: "The separation of administration from policies gave birth to public administration as an intellectual field." The predominant view in public administration literature is that bureaucracy is best subjected to political control through democratic governance. The underlying concepts of the politics-administration dichotomy in public administration, such as administrative-structural prescriptions for efficiency and businesslike professionalism, can be traced back to Wilson (1887).

Wilson (1887) argues: "The field of administration is a field of business. It is removed from the hurry and strife of politics . . . Administration lies outside the proper sphere of politics. Administrative questions are not political questions. Although politics sets the tasks for administration, it should not be suffered to manipulates its offices." Wilson suggests that stable and businesslike principles of administrative management should be permitted to guide the operations of public agencies. In order to achieve some measure of efficiency in the operations of government, Wilson also suggests that we

should look to the private sector for models of administrative management. The two prominent themes of Wilson's work, the distinction between politics and administration and the search for scientific principles of administrative management that would assist in attaining organizational efficiency, continue to be central ideas in the mainstream interpretation of public administration.

Taylor (1912) states that "the best management is a true science, resting upon clearly defined laws, rules, and principles," and that the responsibility of the manager is to make the organization more efficient. Taylor's 'principles of scientific management' approach prescribes the division of responsibilities between the management and workers and recommends delegation of administrative responsibilities for finding the best way of performing organizational tasks to professionally trained managers.

Thus, according to the traditional public administration paradigm, the underlying principle of the separation of powers and the political neutrality of professional administrators are the key to the efficient functioning of government. In a council-manager form of municipal government, the elected mayor and council use a variety of hierarchical controls to influence policy implementation and these include the appointment of a professional city manager to conduct municipal businesses. The executive authority is vested in a city manager appointed by a council, similar to a chief executive in a corporate board of directors. Richard Childs, considered the father of the city manager system, explains that, "the resemblance of the (city manager) plan to the private business corporation with its well-demonstrated capacity for

efficiency," was an intentional modification introduced in the municipal administration structure to reflect the politics-administration dichotomy principle (Stillman, 1974).

(ii) Principal-Agent Model to Explain Administrative Authority

The most commonly used model in studying administrative authority is the principal-agent model (Stein, 1990). This model is applied either implicitly or explicitly in research on administrative authority. The model views the elected officials as principals and appointed administrators as agents. It assumes a goal conflict and information asymmetry in the relationship between bureaucrats and politicians (Meier, Polinard and Wrinkle, 1999). This model is based on the assumption that appointed administrators and elected officials disagree over the goals and means of public policy. Another assumption is that the political control over bureaucrats is made more difficult by the fact that bureaucrats have access to policy-relevant information that elected officials do not. This model is more applicable in regulatory policy area than in distributive policy.

The majority of municipal policy outcomes are distributive in nature. The relationship between elected officials and appointed administrators in a municipal government management is essentially cooperative with shared goals and fewer problems generated by information asymmetry. Thus, municipal government administration generally does not fit the assumptions of the principal-agent model. Based on these observations, Svara (2001) questions the applicability of the principal-agent model in analyzing the

administrative relationship and its impact on policy outcome in a municipal organization environment.

(iii) Complementarity of Politics and Administration

Contemporary literature on public administration has addressed extensively the myth of the policy-administration dichotomy where the distinction between policy and administration has increasingly become blurred (Kirlin, 2001; Lynn, 2001; Rosenbloom, 2001; Dobel, 2001; Riccucci, 2001 and Svara 1990, 1995a, 1998, 1999b and 2001). In fact, the most extensively analyzed issues of administrative relationship and administrative responsibility relate to the city manager's involvement in policy formulation (Ammons and Newell, 1988; Box, 1992; Nalbandian, 1989, 1995a & 1995b; Newell and Ammons, 1987; Newell, Glass and Ammons, 1995; Svara 1988,1991& 1995b and Selden et al. 1999). Many studies claim that there is a great deal of change occurring in the leadership roles of both the manager and the mayor. The city managers' involvement in policy-making has long been recognized and their political neutrality in city governance has been challenged time and time again throughout the last century (Nalbandian, 1989 and 1991).

Many academicians have discredited the notion of a dichotomy between politics and administration on these grounds. Banovetz (1994) summarizes this trend thus:

> Many local government administrators and scholars have . . . suggested that Woodrow Wilson's politics-administration dichotomy was invalid, and predicted a growing political-policy role for city and county managers in the future (Frederickson, 1989) ...Even the best contemporary discussions of the city management profession have reiterated this evolutionary

> process: Ammons and Newell (1989) recently noted that the "politics-administration dichotomy...continues to erode in practice...in constant quest for the leadership necessary to solve the problems of the nation's cities", and Svara (1990) predicted that 'a continuing shift toward the policy and political roles (for city managers) is likely.'

Ammons and Newell (1989) documented that this shift was also reported by city managers as well. Nalbandian (1989) sees a trend toward the city manager becoming a "broker" of competing interests of political groups and elected officials.

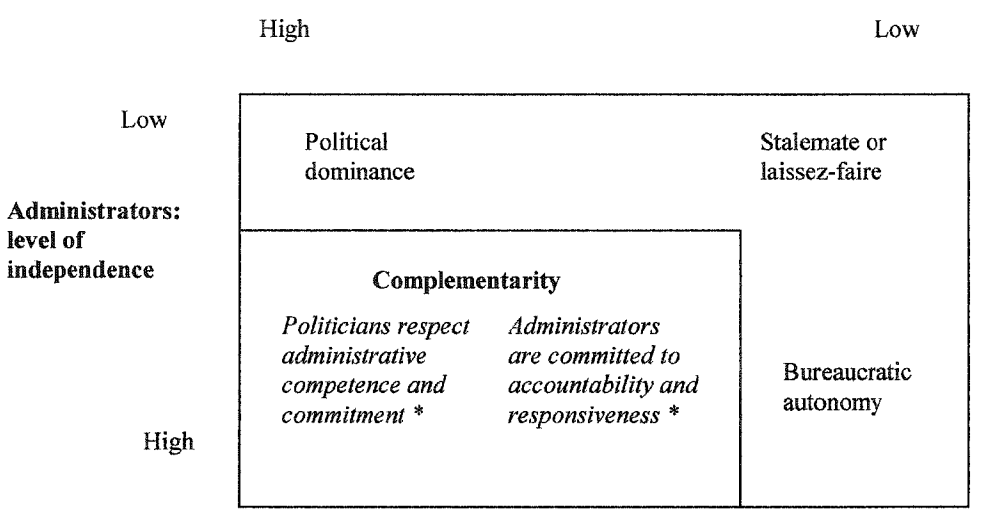
Svara (1998) argues that the politics-administration dichotomy model, commonly recognized as the founding theory of public administration, is "simplistic" and should be viewed as an aberration that departs from the intention and ideas of the 'founders' of the field. Svara (2001) reminds us that "it should be recognized that the idea of the strict dichotomy does have a historical basis in the United States, even though it was not the normative model proposed during the founding period of American public administration." Svara (2001) points out that the early contributors to the field such as Wilson, Goodnow and Leonard White, favored and acknowledged a policy role for administrators.

These early public administration scholars' works show a simultaneous emphasis on separation and insulation of administrators from political interference on one hand, and interaction and incorporation of administrative contributions in the design and the implementation of public policy on the other. However, their acknowledgement of the administrators' policy role,

according to Svara, has been ignored over time. The main reason for the persistence of the dichotomy model in public administration, according to Svara, is the absence of a satisfactory alternative model. In order to eradicate this deficiency, Svara proposes a politics-administration complementarity model. As shown in Figure 3, Svara's conceptual complementarity model framework includes differentiation along with interaction of politics and administration as an alternative to a dichotomy model.

Figure 3:

Politics – Administration Complementarity Model



* *Reciprocating values that reinforce the position of other set of officials*

Understanding the Interaction between Politicians and Administrators

(Source: Svara, 2001)

The relationship between elected and appointed officials could be seen as the interaction between political control and professional independence. Svara explains that the control involves the capacity to set direction and maintain oversight, while independence involves asserting professional perspectives in policy formation and adhering to professional standards in implementation. These relationships include the reciprocating values of respect for administrators by elected officials and commitment to accountability by administrators that add balance to the relationship. The zone of complementarity results from high political control and high administrative independence. This results in key reciprocating value in administrative decision-making.

Svara (2001) rejects the classical dichotomy model as too "simplistic" to help understand the theory and practice of public administration that emphasizes commitment to public serving values, substantive ends as well as technical means, and procedural fairness in public service. He builds his politics-administration complementarity model on the following premise:

> Elected officials and administrators join together in the common pursuit of sound governance. Complementarity entails separate parts, but parts that come together in a mutually supportive way. One fills out the other to create a whole. Complementarity stresses interdependence along with distinct roles; compliance along with independence; respect for political control along with commitment to shape and implement policy in ways that promote the public interest; deference to elected incumbents along with adherence to the law and support for fair electoral competition; and appreciation of politics along with support for professional standards.

Svara (2001) further stresses: "Complementarity recognizes the interdependence and reciprocal influence among elected officials and administrators. Elected officials and administrators maintain distinct roles based on their unique perspectives and values and the differences in their formal positions, but the functions they perform necessarily overlap . . . The reconciliation comes from recognizing the reciprocating values that underlie complementarity." Further, Svara asserts that "most interactions among officials reflect complementarity, and evidence from local government in 14 countries supports this generalization" (Mouritzen and Svara, 2001).

If we consider the underlying democratic theory and administrative philosophy of strong mayor cities as a thesis and the council-manager politics-administration dichotomy philosophy as an antithesis, then we can reasonably interpret that the hybrid general management city with the proposed politics-administration complementarity model is the synthesis in municipal management theories.

Municipal Fiscal Performance Measurement

The fiscal performance of a municipality, in general terms, refers to a "government's ability to generate enough revenues over its normal budgetary period to meet its expenditures and not incur deficits" (Groves and Valente, 1994). More specifically, fiscal performance refers to a government's ability to maintain existing service levels, withstand local and regional economic disruptions, and meet the demands of natural growth, decline and change.

This is commonly called the "budgetary solvency" of a government.

Municipal governments are expected to serve the needs of their citizens in many diverse but traditional ways. Fire protection, police services, storm water drainage, sewage collection, water supply, parks and recreation facilities services are a few common traditional services provided by cities. Also, these services are expected to be provided in an efficient and cost-effective way to meet the citizens' satisfaction (Stumm and Corrigan, 1998). Stumm and Corrigan (1998) state that taxpayers define efficiency as less government spending and taxes. Further, the scholars emphasize the importance of the municipality's functional efficiency concept by stating that, "as taxpayers at the local level continue to demand more services without accompanying tax increases, the quest continues for greater efficiency in city government."

The scholars of municipal research have applied many different models to measure the municipal fiscal performance. The input measures are the fiscal expenditure on services and labor. However, public service output levels are not directly measurable (Hayes and Chang, 1990). Therefore, if the financial indicators differ between cities without corresponding changes in the quality of service at the citizen's satisfaction level, then the city with a low taxation and an optimal expenditure level can be credited with better management. In other words, if two cities have an equal quality of life, then the city that spends less can be recognized to be more efficient. However, Hayes and Chang (1990) report that the literature on the relative efficiency of professional management cities is inconclusive about which form of municipal

administrative structure contributes to efficiency.

Davis and Hayes (1993) find that the presence of a city manager has no significant impact on efficiency, and this finding is consistent with much of the existing literature. They warn, though, that this should not be interpreted to suggest that the government structure is irrelevant. Time series analysis of 22 cities over 11 years, done by Morgan and Pelissero (1980), show that changes in the city government structure has no impact on changes in taxing and spending levels. According to their research, there is no apparent difference between the efficiency levels of the two different municipal government structures. Similarly, Deno and Mehay (1987) found no apparent difference between the efficiency levels of the two municipal government structures. Hayes and Chang (1990) also found no differences when examining expenditures for police, fire, and sanitation services in the cities listed in the 1981 ICMA Municipal Yearbook.

However, after analyzing the Census Bureau data on municipal governments and data from the Places Rated Almanac, Massad (1995) finds that large cities managed by city managers appear to be more efficient than those managed by mayors. This cost-benefit analysis significantly favors the council-manager form as more efficient than the mayor-council or strong mayor forms. Massad (1995) defines the efficiency of municipal government as a function of two factors: the financial factor, including per capita spending and taxation, and quality of life. His finding is that large cities managed by city managers appear to be more efficient than those managed by mayors;

however, Massad finds no significant difference in efficiency between the mayors and the managers of small cities. Massad concludes that, "city managers are demonstrably more responsible fiscally" than the mayor-council system.

Feiock and Kim (2000) state that a government's structure affects its responsiveness to economic and organizational forces that will eventually influence the local economic development policies and development programs. Though the form of government does not have a direct effect on policy outcomes, they found evidence that the form of government has an interactive effect that mediates the effect of certain economic conditions and administrative arrangements on development policy.

Following are the measures generally used by urban scholars to measure municipal fiscal performances. The most common indicators used by many studies dealing with the analysis of municipal fiscal performance have been adopted for this study. These indicators are: municipal fiscal stress (operationalized as composite fiscal stress index), municipal revenue capacity (operationalized as revenue capacity per capita), general expenditures (operationalized as per capita general expenditures), and municipal productivity [operationalized as full-time equivalent employee rate (FTE employee rate)].

(i) Municipal Fiscal Stress

Municipal fiscal stress is a measure of economic distress of a locality. It measures the fiscal conditions of a local government in terms of revenues and

expenditures. Fiscal stress may exist in a city when there is an imbalance between the municipality's revenue raising capacity and its expenditure need. Fiscal stress is a relative measure that explains a locality's financial strain in relation to other local governments' performance in a given comparison group. The fiscal stress score comprises the level of revenue capacity per capita, the degree of revenue effort, and the magnitude of median household income of a locality.

The composite fiscal stress index reflects the cumulative conditions of other fiscal indicators, most commonly the locality's fiscal indicators such as revenue capacity, revenue effort, median adjusted gross income etc., This index identifies those cities experiencing high fiscal stress compared to other cities across a given group. Researchers attempted to measure composite fiscal stress index in many different methodological approaches (Badu and Li, 1994 and Clark, 1994).

According to Pammer (1990), several theoretical approaches have been used in an attempt to understand the causes of municipal fiscal stress. Pammer also points out that, though most of these theories have been developed independently of one another, none of them offers a complete explanation for causes for a municipal fiscal stress. However, the socioeconomic decline model is considered the best approach to explain a fiscal stress condition. The socioeconomic decline model attempts to explain how changes in economic, social, and structural conditions affect municipal fiscal problems. According to this model, cities are in financial difficulty

because of (1) declining populations, (2) rising costs of public services, and (3) lagging growth in revenues.

Stanley (1976) and Martin (1982) proposed an internal-management perspective that claims unsound financial management leads to revenue shortfalls or at least contributes to the inability of cities to foresee and adequately manage budget problems. Martin (1982) argues that revenue problems are exacerbated by inept managers who create fiscally strained budgets.

It is evident that the prevailing theories of the causes of urban fiscal stress each offer different explanations. Stonecash and McAfee (1981) proposed a fiscal stress model that combines elements from both models. According to Stonecash and McAfee (1981), cities respond differently to changes in resource level. The variations in responses are attributable to the political decision-making process characteristic of cities. The combination of administrative decision-making and socioeconomic factors contribute to influence municipal fiscal conditions.

(ii) Revenue Capacity

Municipal revenues include funds received from both local sources, such as local taxes and user fees, and external sources, such as intergovernmental revenue. The principal form of local revenue for a municipality consists of local property taxes. The revenue capacity of a locality measures the degree of a municipality's capability to raise potential revenue. Revenue capacity per capita of a locality shows changes in

revenues relative to changes in population size. As population grows, revenues and the need for municipal services may be expected to increase proportionately. The assumption is that the cost of services is directly related to population size. The revenue capacity determines the capacity of a local government to provide services (Groves and Valente, 1994).

Since the fiscal position of a local government is affected by the growth in its revenue base over time, it is an important dimension of a local government's fiscal position. If the revenue base does not grow at a rate that is consistent with the demand for services, then the local government could be faced with increasing taxes, increasing user charges, or reducing services. However, if a city's revenue capacity exhibits strong growth, the city is in a better position to continue to provide existing services without increasing taxes or other revenue-raising mechanisms (Williams, et al., 2002).

(iii) Municipal Expenditures

A city's general fund is the source of routine general expenditures for city services and the general operation of the government. Schneider and Teske (1992), following Peterson's (1981) classifications, divided local government expenditures into three categories: allocational, developmental, and redistributive. Allocational expenditures are generally routine operational expenditures. Hayes and Chang (1990) observe, from the Census of Government data, that police protection, fire protection, and refuse collection account for 40% of the total general expenditure, a major portion of the operating budget. Developmental expenditures, such as capital outlay and

debt repayment, are incurred on major projects that cover extended periods of time and service long-term debts. Municipal spending on health, education, and the welfare of citizens fall under redistributive expenditures. Unlike in the case of allocational expenditures, city administrators have little control over the decisions of developmental and redistributive services expenditures. Thus, if city officials prefer to show their efficiency in administration, allocational expenditures normally covered by general fund expenditures are their only option of influence (Schneider and Teske, 1992).

Stumm and Corrigan (1998) found no statistically significant difference in total expenditures for different municipal forms of government. However, they find that professionally managed cities have substantially and statistically significant, lower general expenditures. Stumm and Corrigan (1998) state that, "while many other variables affected municipal expenditures, the effects of having a professional manager were clearly most substantial, resulting in per capita savings in the general fund of nearly $90 per capita in local general fund expenditures." This result should be expected in professionally managed cities when considering the short tenure of professional managers and the nature of general funds. A conflict-free working environment and the opportunity for professional advancement determine the average tenure of a professional city manager. Thus, if an effort is made by professional city management to show its impact on administration, then general expenditures should be the preferred choice of indicator for efficiency analysis.

(iv) Municipal Productivity

"Local governments in the United States are expensive," states Schneider (1988). The labor intensiveness of municipal services can be translated as high cost for service provision. The cost of local government is largely a function of the size of the workforce and corresponding salaries and benefits. Bergman (2002) states that, according to the Census Bureau's 2001 Annual Survey of State and Local Government Employment and Payroll, state and local governments employed 15.4 million full-time equivalent employees (FTE) in 2001, a 2 % increase over 2000. Local governments alone reported 11.2 million FTE; and most full-time equivalent employees worked in education, hospitals and police protection.

The number of full-time equivalent employees is equal to the number of hours worked by part-time employees divided by the standard number of hours for a full-time employee. The result is then added to the number of full-time employees. When a city provides quality service with a minimal number of employees, it results in enhanced productivity. Research conducted by urban scholars on municipal productivity shows that growing human resources budgets contribute more to a city's debt than other socioeconomic factors (Nivola, 1982, Adams and Nathan 1989). The expanded payrolls in the form of average employee salaries and expense of employee pension plans are significantly correlated with strained municipal fiscal conditions (Pammer, 1990).

Factors Influencing Fiscal Performance

According to Groves and Valente (1994), evaluating a municipality's fiscal performance is a complex process. A municipality's fiscal condition is affected by a number of factors ranging from the national economy, socioeconomic characteristics of the population, the local government's fiscal policies, political culture, and administrative practices. The relations between these factors add to the complexity. The changes in socioeconomic or environmental factors are the primary forces that influence the organizational factors (administrative decisions and actions) that, in turn, determine municipal financial conditions.

Groves and Valente (1994) state that: "Management practices and legislative policies are often regarded as the most critical influences on financial condition because a local government can theoretically adjust to environmental changes by changing its expenditure patterns." Further, Groves and Valente (1994) claim that, "in theory, any government can remain in good financial condition if it makes an appropriate organizational response to changing environmental conditions." The underlying assumptions of these arguments are that the local government has adequate notice of problems, understands their nature and extent, makes appropriate and necessary decisions, and implements them in order to lessen adverse financial outcomes. Another critical factor that contributes to this assumption is that management practices and policies are under the government's control, which they can use wisely to manage municipal fiscal performance.

In studies focused on a comparative analysis of the fiscal condition of localities, and aimed at understanding the relative fiscal performance of the municipal administrative structures on municipal functioning, the municipality is modeled as a *multi-product* firm, where the outputs are a vector of services provided by the city (Hayes and Chang, 1990). These socioeconomic, environmental factors may create a service demand or provide revenue for operation or may create both demand and provide resources. Therefore, the municipal fiscal management is an effect in a cause-and-effect relationship. These socioeconomic/environmental and municipal fiscal control variables are *independent variables* and their effects on municipal fiscal performance *dependent variables* are controlled in analysis to understand the impact of municipal administrative structure *explanatory variables*. These *control variables* are discussed below separately as socioeconomic factors that influence municipal fiscal performance and as indicators of existing municipal fiscal conditions that influence municipal fiscal performance.

(i) Socioeconomic Factors That Influence Fiscal Performance

The community needs and resources indicators (the supply and demand) encompass the socioeconomic factors. The economic, demographic characteristics include factors such as population, personal income, employment, and property values. The tax base of a municipality determines its wealth and ability to raise revenue to support service provision. Also, the socioeconomic characteristics of a locality indicate its demand for services such as public safety, social services, and infrastructure maintenance. Other

factors, such as the localities' sensitivity to local economic cycles, the size and regional advantage of a locality, and the presence in a larger economic region such as a metropolitan area, also impact municipal fiscal performance.

All of the economic and demographic factors are closely related. Theoretically, any change in community needs and resource factors impact other factors since the community's demand and supply factors are interrelated to each other economically. Similarly, other financial conditions prevailing in municipalities affect spending patterns and service provision.

In a hypothetical recession, a decrease in employment opportunities results in an outward migration of population that has job skills and an earning potential. This would, ultimately, result in a lower demand for real estate and a corresponding decline in the property value of housing that would eventually result in a slump in the property revenues of a locality. Besides impacting property values, the employment loss would result in less personal income for residents with a reduced buying power that would affect retail sales. This, in turn, would have a negative effect on local sales taxes and shrink local governments revenues further (Groves and Valente 1994).

The domino effect forces a local government into an unbalanced budget due to increased welfare service demands along with fixed local services that cannot be scaled down proportionately according to the decline in population. Many primary services such as education, health and welfare and, to some extent, public safety and public works are need-driven. Therefore, many local governments have little discretionary control over whether services are to be

provided. The possible option to balance the budget is to increase taxes and that would burden the remaining population. This financial struggle of the city makes it unattractive for any business relocation and a less attractive place to live. This could result in a further decline of the population.

(ii) Municipal Financial Factors That Influence Fiscal Performance

Most governments are *required* to have a balanced budget. The ongoing fiscal pressures are reflected in the fiscal budget actions that localities have to take in order to control expenditures and to balance the budget. If local governments are struggling with inadequate revenues or a weak revenue growth, then budget actions to control expenditure growth are often taken (Groves and Valente 1994). For example, faced with an inadequate or a slowing revenue growth, local governments may decide to reduce fringe benefits, salaries, or even the number of staff they employ. They may eliminate positions through attrition or by freezing job vacancies.

Other budget controls frequently used by local governments include deferral of spending on capital projects and deferral of maintenance on existing equipment, facilities, and programs. On the other hand, localities may increase taxes, or turn to other revenue-raising alternatives in order to increase revenue sources to continue providing necessary services. Though the specific nature and number of budget actions and administrative decisions taken by local governments are important, the subject is beyond the scope of this thesis. We need only to note here that proper budgetary actions help a government maintain a fiscal balance and continue providing basic necessary

services to its residents.

Research Problem

Politics-Administration Complementarity Model and the Contribution of Current Research

To understand the impact of a general management city's administrative structure on a city's fiscal behaviors, the fiscal revenue and expenditure data of those cities should be compared with the revenue and expenditure data of strong mayor and council-manager cities. By analyzing the nature of a professional manager's appointment to a city administrative position and the formal authority and administrative relationship between the appointed and elected officials in a general management city, one can argue that the politics-administration complementarity administrative relationship is more predominantly present in a hybrid form of general management cities than in a politics-administration-dichotomy-based council-manager form of government. Thus, this study has adopted Svara's politics-administration complementarity model, which proposes the mutual interdependence and reciprocal influence in administrative relationships between the elected and the appointed officials of local governments in a general management city.

The adoption of the politics-administration complementarity model suggests that general management cities can be fiscally more efficient than other forms of municipal management. Based on this model, this thesis hypothesizes that the general management cities are more likely to have lower

composite fiscal stress indices, revenue capacities per capita, per capita general expenditures, and full-time equivalent rates of employees than strong mayor and council-manager cities.

It is assumed that the city government decision-maker's objective is to minimize cost, regardless of the structure of the government. Implicit in this analysis is the assumption that all local governments have access to the same technology and skilled personnel and have similar production functions and provide the minimum required services at the citizens' satisfaction level. Another assumption made in this study is that lower property tax collection in a locality is due to an efficient operation and frugal spending that warrants no necessity for more revenue. However, lower spending is not assumed to be due to less available resources and less revenues.

Therefore, this study examines the impact of a general management city's administrative structure on its fiscal performances. The main objective of this study is to test empirically the hypothesis about the superior fiscal performance of general management cities that bear structural similarities to the politics-administration complementarity model in better administrative relationship between elected and appointed officials.

Summary

The impact of management practices over municipal fiscal performance is the primary focus of this study. To understand the influence of different forms of municipal administrative structures over municipal fiscal performance, this study adopts Svara's politics-administration complementarity model. By

applying this model to general management city functions, it is hypothesized that general management cities reveal a more efficient management of fiscal financial measures than strong mayor and council-manager cities. If the financial indicators differ between cities without corresponding changes in the quality of service at the citizen's satisfactory level, then it can be assumed that the city with lower fiscal stress indices, revenue capacities, general fund expenditures, and FTE employee ratios is better managed.

Cities are complex multi-dimensional systems, and attempting to describe and explain cities fiscal performance in terms of a single key factor can be misleading. Therefore, this study uses multiple fiscal performance indicators and a fiscal analysis method that incorporates factors, both internal and external to the municipalities' control. However, it is imperative to build a theoretical model and generate statistical evidence to support the theoretical assumptions of enhanced fiscal performance by a general management city structured as described in the politics-administration complementarity model.

This chapter on the literature review explored the administrative theories including recent research findings of municipal fiscal performance and factors influencing municipal fiscal performance. Then it explored the research question in the context of Complementarity of Politics and Administration model. The next chapter, "Research Methods," covers the sources and types of data, variables included, analytical techniques, and statistical procedures employed in this study.

CHAPTER IV

RESEARCH METHODS

Introduction

While much has been written about municipal administrative organization, new approaches continue to emerge to address continuing questions about alternative local governance arrangements. This study does not attempt to deal with the nature of relationship between elected and appointed officials in local government but analyze the impact of the administrative relationship over municipal fiscal performance. It does, however, contribute new data and a new analytical approach to the fiscal side of the discussion. In order to assess the contributions of a hybrid form of general management municipal administrative structure to the field of public administration, comparisons between the hybrid general management city (GMC) government and other more common strong mayor city (SMC) and council-manager city (CMC) governments are vital.

This study re-examines the impact of different government structures on municipal government's fiscal performance by incorporating the new hybrid form of general management cities into the research design. This study uses the 1997 Census Financial Macrodata of Cities to test the hypothesis that general management cities (GMC) that achieved measurable fiscal performance compared favorably with cities without professional management as in strong mayor cities (SMC) and with cities with a clear separation of

powers as in the council-manager cities (CMC). The effect of different administrative structures of municipal governments and the impact of professional administration over municipal fiscal performance are the major contributions by this research to the theory and practice of public administration. Thus, the findings of this study can provide significant input to both scholars and practitioners of public administration.

Research Objective

The objective of this study is to employ the politics-administration complementarity model to analyze the contributions of the general management city's administrative structure to the field of public administration. This study examines the impact of different government structures on the municipal government's fiscal performance. It uses 1997 Census of Government Data of Cities to test the hypothesis that cities with general management administrative structures achieved measurable fiscal performance of a higher order compared to cities without professional management as in traditional strong mayor cities, and to cities with a clear separation of powers as in the council-manager forms of government.

Statement of the Research Problem

This study examines the impact of municipal administrative structure on city fiscal performance. The study will compare general management cities (GMC) with the more traditional forms of strong mayor cities (SMC) and council-manager cities (CMC).

Research Hypotheses

H1 General management cities are likely to have lower fiscal stress than either strong mayor or council-manager cities

H2 General management cities are likely to have lower revenue capacity per capita than either strong mayor or council-manager cities

H3 General management cities are likely to have lower general fund expenditures than either strong mayor or council-manager cities

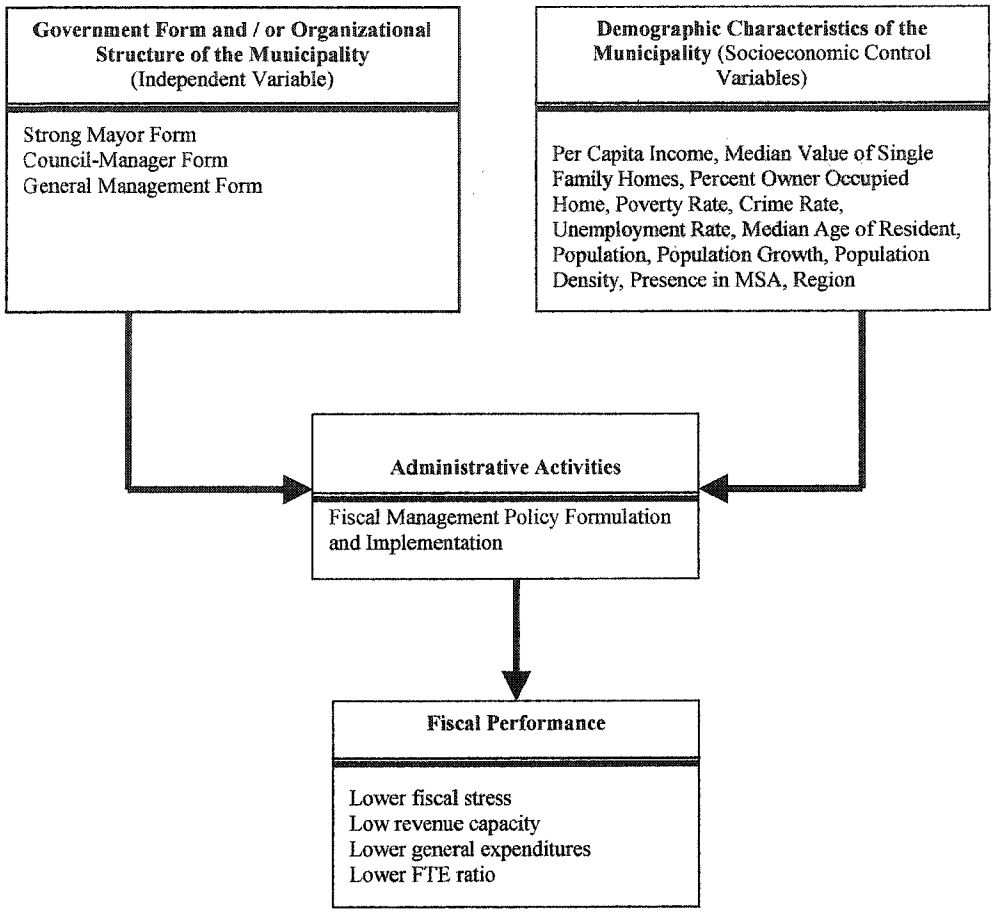
H4 General management cities are likely to have lower full-time equivalent employee rate than either strong mayor or council-manager cities

Research Design

Analytical Model

An analytical model is derived based on the factors representing primary forces that influence a municipal financial condition (see Figure 4). The factors are grouped as environmental/socioeconomic factors and organizational factors. The environmental factors are generally the socioeconomic variables and the existing municipal financial condition that impact municipal fiscal performance.

Figure 4: Analytical Model To Measure Municipal Government Fiscal Performance



The organizational factors include different forms of administrative structures with different level of authorities of decision-making and administrative relationship between elected and appointed officials.

Taken together, they can be used as a guide to the varied issues that must be considered in analyzing municipal financial condition. According to the arrows on the schematic representation, both environmental factors and organizational factors determine outcome of an administrative decision or

fiscal policy decision. The policy decision and resulting administrative activities in turn determine municipal fiscal performance and implies a cause-and-effect relationship.

Environmental Factors: Environmental factors are the external influences on a municipal government. Environmental factors can affect a municipal functioning favorably or unfavorably either by creating demands or by providing resources. For example, an increase in population both increases the revenue sources as well as the demand for services.

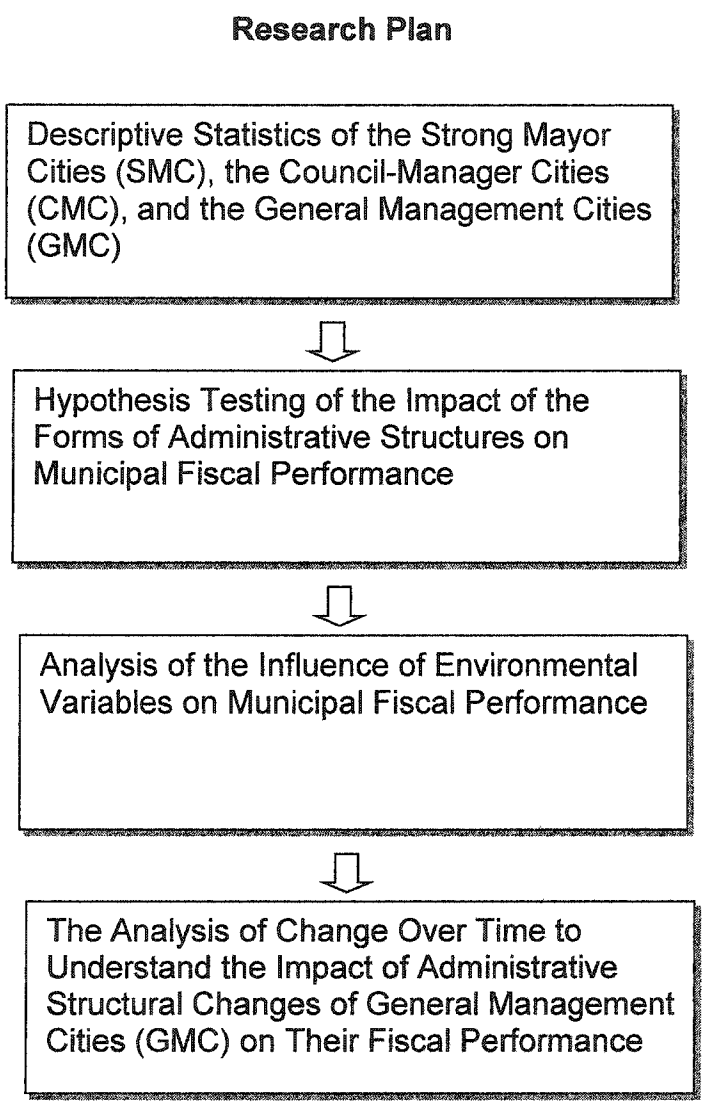
Organizational Factors: The municipal administrative structure determines decision-making authority and administrative relationship on elected and appointed officials. This, in turn, determines the government's response to changes in environmental factors. In theory, any government can remain in good financial condition if it makes appropriate administrative decisions.

Research Plan

The research plan of this study encompasses four separate components to address the basic question under investigation: can different municipal administrative structures affect the fiscal performance of a city? The research design is described in the following data analysis and results section as 1. the descriptive statistics of three types of cities under investigation, 2. the hypothesis testing of fiscal performance of cities with different municipal administrative structures, as illustrated in the analytical model (see Figure 4), 3. the analysis on the influence of environmental/control variables on municipal fiscal performance, and 4. the analysis of change over time to

understand the impact of administrative structural changes of General Management Cities (GMC) on their fiscal performance. This research plan with the sequence of study is schematically represented in Figure 5.

Figure 5:



The first component, the descriptive statistics section, examines the differences in the demographic features of the three types of cities under study (namely, SMC, CMC, and GMC) to ensure that the cities under study are similar in certain fundamental ways and that they are proportionally distributed across the city sizes and regions.

On the contrary, if they have some fundamental differences in distribution, these can help in interpreting the observed variance in municipal fiscal performance. Similarly, a number of comparisons of the cities' socioeconomic and municipal revenue and expenditure patterns are made to ensure the cities with different administrative structures do not differ from each other in any other significant way.

This study addresses the hypothesis testing of the impact of the forms of administrative structures over municipal fiscal performance as the second component and employs a cross-sectional research design to test the basic hypothesis that different municipal administrative structures impact the municipal fiscal management policies which, in turn, impact fiscal performances.

To determine if fiscal behavior differs across cities with different municipal administrative structures, an ordinary least square regression model is constructed using categorical variables to isolate the effect of different municipal administrative structures (SMC, CMC and GMC) on fiscal performance. The municipal fiscal performance is measured in four separate regression equations with (1) composite fiscal stress index, (2) revenue

capacity per capita, (3) per capita general fund expenditures, and (4) the FTE employee rate as dependent variables as described in the following equation:

General Municipal Fiscal Performance Equation:

Fiscal performance measure $\propto$ Form of government + Control variables

A city's general fund is the source for a majority of the routine expenditures incurred on city services and for the general purposes of government. The revenue that replenishes this source makes these services possible. Any imbalance in revenue and expenditure (or budgetary imbalance) exerts fiscal stress. Also, expanded payrolls that denote inefficient operation contribute to financial strain. Therefore, the preferred measures of the outcome of fiscal performance are lower levels of (1) composite fiscal stress index, (2) revenue capacity per capita, (3) per capita general fund expenditures, and (4) the FTE employee rate under efficient municipal functioning.

To capture any underlying differences across cities, as well as differences in cities themselves, variables that impact municipal fiscal performances other than municipal administrative structures are included in the regression equations as control variables. Socioeconomic variables, identified theoretically to impact the municipal fiscal performances such as the per capita income (accounting for variations in municipal services and the related expenditures), the median value of single family homes and the percentage of owner-occupied home (factors that determine municipal taxing

and spending), the percent poverty, the crime rate, the unemployment rate, the median age of residents, the population, the percentage of net change in population, and the density (factors that determine variations in service demands), are employed as controls in the regression equation.

By applying the regression model, the effects of various exogenous factors are accounted for while controlling for other related influences, so that a correct estimate of the effects of administrative structures emerges. As described in Figure 4, the socioeconomic variables and administrative decisions made by a municipality impact municipal fiscal performance outcomes.

The third component of the research analyzes the Influence of environmental variables on municipal fiscal performance. The purpose of this approach is to determine if municipal administrative structures impact fiscal performances in particular environments. Thus, the correlation coefficients of fiscal performances and different city characteristics are computed to understand the differences in the municipal fiscal performance of different administrative structures under different exogenous effects.

Still the circumstances that direct a general management city to either adopt or discontinue a particular form of government structure are not understood well. Therefore, the fourth component of this study analyzes the changes over time to understand the impact of administrative structural changes of general management cities (GMC) on their fiscal performance. The general management cities (GMC) were categorized into three groups of

cities based on either presence or absence of administrative change intervention prior to the point of analysis. The municipal fiscal performance of GMC that retained their administrative structure was compared against the GMC that dropped their status and with cities that were recently adopted GMC status. By exploring socioeconomic indicators and municipal fiscal performances of the cities that have undergone such changes, we further our knowledge of the influence of different factors that prompt a city to change its administrative structure.

Research Variables

The impact of different forms of government was investigated by incorporating three different dummy variables: strong mayor city (SMC), council-manager city (CMC), and general management city (GMC), that assume a value of one for cites with form of government variable under study and zero for all other cases. In this study, the fiscal performance of a city's administration was measured by focusing on the rates of change in the fiscal stress, revenue capacity per capita, total general fund expenditures, and the rate of full-time equivalent employees employed to conduct municipal business. More details on operationalizing and measuring the variables are available in the Appendix (see C. Technical Appendix). Appendix D provides computation steps in operationalizing of the variables used in the study.

The comparison of data between individual units of municipal government must be made with caution and it should be taken into account

that the governmental structure and functional responsibilities vary from state to state. To enable a fair comparison across the cities with variation in demographics, appropriate standardized measures such as ratios, per capita measures, percent change, and relative measures were introduced in the analyses.

In order to mitigate the population's effects on fiscal performance measures, per capita measures are incorporated in the analysis. Similarly, in order to find the effect of the city size on fiscal performance, the cities are divided into three sub-samples: (1) small cities (populations of 25,000 – 99,999); (2) medium-size cities (populations of 100,000 – 249,999); and (3) big cities (populations of 250,000 and above).

A clear understanding of the technical terms used in this study is necessary to interpret the statistical findings properly. This research document uses a number of terms that in other contexts might have different meanings. However, other concepts are self-explanatory or commonly used and easily understood. A glossary of technical terms used in this document is provided (see Appendix E). More details on the variables involved in the study are given in the Appendix Section as data source (see Appendix F).

Dependent Variables /Fiscal Performance Indicators

Measuring fiscal performance is considered to be a complex process by many urban scholars, especially when comparing jurisdictions. The obstacles generally are: (1) the nature of local government as a public entity where service is the focus rather than profit, (2) the impact of many factors on a

municipal fiscal position along with its inter-correlated effect on fiscal condition with no accepted theory to explain the link between the economic base and government revenues, (3) the uniqueness of each local government in its demography and operations, and (4) the lack of complete accounting data with normative standards (Groves and Valente, 1994).

Because of these characteristics, inter-jurisdictional comparisons have not gained authoritative acceptance in urban research. Similarly, Clark (1994) also observed the lack of commonly accepted practice and tools in measuring municipal fiscal performance. In view of this, this study incorporates municipal fiscal measures most commonly identified by other published studies, namely the composite fiscal stress index, revenue capacity per capita, per capita general expenditures, and the municipal productivity levels (by incorporating FTE employee ratio) to measure cities' fiscal performance.

(i) Composite Fiscal Stress Index

In operationalizing the municipal fiscal stress indicator as *composite fiscal stress index*, this study mainly adopted the methodology devised by Virginia's Commission on Local Government, that in turn can be traced back to Virginia's Joint Legislative and Audit Commission, and ultimately back to the U.S. Advisory Commission on Intergovernmental Relations. This methodology of measuring the fiscal strain indicator was modeled after the representative tax system (Williams, et al., 2002).

The process of index construction begins with jurisdictional measures denoting (1) the level of revenue capacity per capita over a designated fiscal

period, (2) the degree of revenue effort throughout the same time span, and (3) the magnitude of median household income among all residents as described in the following equation.

Composite fiscal stress index score = Relative revenue capacity per capita score +
Relative revenue effort score +
Relative median household income score

From each of the raw-score variables, a corresponding z-score distribution was derived (that characterized by a mean of 0 and a standard deviation of 1, with the latter statistical series being computed to ensure measurement equivalence across the several index dimensions). Technical Appendix (Appendix – C) presents the formulae for deriving composite fiscal stress index.

Next, two sets of derivative values (i.e., the jurisdictional z-scores linked to revenue capacity per capita and median household income) were multiplied by -1 in order to create distributions manifesting directional consistency with the local z-score series calculated from the baseline measure of revenue effort. Following this adjustment, every z-score distribution (i.e., relative stress variable) was transformed into a congruent measure with a mean of 55 and a standard deviation of 5 for the purpose of eliminating negative numbers from the array of jurisdictional values. However, this conversion procedure did not alter the relative position and distance of any specified jurisdiction in regard to each of the other localities in a given city size group such as small, medium-size and large cities.

As the final step, a fiscal stress total was generated with respect to any given locality through the addition of its converted z-scores (or relative stress values) on the capacity, effort, and adjusted gross income dimensions. The computed composite stress values, though not indicative of the fiscal strain endured by municipalities in absolute terms, nevertheless served to identify the standing of the various localities relative to one another during the specified time frame. An illustration of the step-by-step computational method appears in Appendix D that uses the city of Norfolk, Virginia, as an example.

(ii)Revenue Capacity Per Capita

Revenue capacity per capita gauges degree of jurisdictional affluence and revenue potential of the locality (from taxes, service charges, regulatory license and privilege fees) relative to changes in population size. As population increases, it might be expected that revenues and the need for services would increase proportionately, and therefore the level of per capita revenues would remain at least constant in real terms. This reasoning assumes that cost of services is directly related population size.

Provided that all the other factors are equal between different forms of local governments, cities that are efficiently functioning need to generate less revenue to provide the same services at citizens' satisfaction level. Therefore, revenue capacity per capita standardizes the municipal revenue indicator and improves comparability across the cities that were computed by dividing total general fund revenues of a locality by its population (See Appendix C).

(iii)Per Capita Measure of General Expenditures

The city's general fund is the major source for routine municipal expenditures allocated for municipal services and the general purposes of government. Provided that all the other factors are equal between different forms of local governments in service provision, cities that are spending less than other cities can be considered efficient cities. *Per capita measure of expenditures* standardizes the expenditures indicator and improves comparability across the cities that were computed by dividing total general fund expenditures of a locality by its population (See Appendix C).

(iv)Full-time Equivalent Employee Rate (FTE)

Full-time equivalent employee rate is a better measure to estimate human resources involved in the provision of municipal services than per capita expenditure in salaries and wages paid to employees. Therefore, the full-time equivalent employee rate (FTE), a relative frequency, is used to standardize the employment data instead of per capita payroll expenditure measures or average earnings rates. This is because salaries and wages are vulnerable to factors including (1) the proportion of highly trained or skilled personnel in the field of technology, (2) the concentration of employees in metropolitan or urban areas where the cost of living is higher, and (3) the exclusion of housing, meals, or other compensation in kind that may be provided to employees. Because of the misleading elements of salary and wage measures, these were not utilized. Instead, the FTE employee rate (per 10,000 population), a standardized measure that increases the comparability

of municipal employment pattern across the cities, was introduced in the analysis (See Appendix C). In this analysis, the rate of FTE was per 10,000 resident populations. This rate was calculated by dividing the frequency of raw full-time equivalent rate by the population of the jurisdiction (i.e., the total frequency count). The base number was then multiplied the resulting figure.

Socioeconomic Control Variables

The socioeconomic factors that may theoretically affect the municipal fiscal performance are operationalized as research variables and discussed in the following section:

- *Population:* The population fluctuations of a locality have a direct impact on municipal government revenues since some taxes are collected on a per capita basis. Also, intergovernmental revenues are distributed according to formulae based on the population figures of a locality. As a basic economic principle, increased population demands more service from the government. However, a decline in population rarely results in proportional reduction and cutback in fixed municipal services.
- *Population density:* The population density measure is represented as persons per square mile. Generally, cities spend substantially more on public safety and public works than on other functions. This is due to the service needs of densely populated areas. Such expenditure needs for urban services include additional law-enforcement, more extensive road and transportation networks and their maintenance, and sewer

and water services for cities. Density increases service efficiency. At the same time, it is a diseconomy of scale due to an increased demand for services and external diseconomies.

- *Percent population net change:* Population growth results in increased service demand. Rapid growth, as well as rapid decline, will result in fiscal budgetary imbalances due to the time needed to adjust for a sudden increase or decrease in service demands.
- *Median age of population:* The life-cycle hypothesis suggests that as the proportion of senior citizens increases, the government service expenditure may increase because the elderly population might need specialized programs in the health and welfare sector. However, senior citizens, spending power and income are limited and this, in turn, contributes towards a decline in municipal revenues.
- *Per capita income and median household income:* Per capita income and/or median household income measure is a proxy measure for a municipality's wealth. It is also a commonly used critical measure in studying municipal financial climate. A higher per capita or a household income of a locality accounts for the spending power of its citizens that stimulates the local economy. It also indicates a community's ability to pay sales, property, business, and income taxes to generate municipal revenues. Per capita income accounts for variations in services and related expenditures. A population with a high per capita income demands less services from the municipality since they can afford such

services and are also less dependent on government welfare services. Therefore, per capita income and median household income account for variations in services and related expenditures and provides a good proxy measure to represent a community's wealth.

- *Poverty rate:* The poverty rate of a locality stands for the number of public assistance recipients who depend on the municipal government for their welfare service needs. An increase in the poverty rate is a warning sign for a local government about a greater need for municipal services for people living below the poverty level.
- *Unemployment rate:* Like the poverty rate, the unemployment rate also indicates an increased level of government-service-dependent population. Unemployment in a locality causes a rippling effect on a local economy, leading to the outward migration of a population with earning potential and to a decline in municipal revenues along with an increase in the number of service-dependent poor residents.
- *Crime rate:* An increase in the crime rate, besides making the locality a less preferable place to live, creates more public safety service demands.
- *Median value of single-family homes/Property value:* The median value of single-family homes impacts municipal property tax revenue. Property taxes constitute a major portion of most local governments' general fund revenues. Therefore, any change in property value directly impacts the property tax. A negative effect results in a decline

in general fund revenues that, in turn, force the municipality to take actions to cut the spending on services.

- *Percentage of owner-occupied home:* The percentage of homeowners represents the population that contributes to property tax revenues. Residents who favor lower property tax negatively impact tax revenue.
- *Presence in metropolitan statistical area (MSA):* Generally, metropolitan areas have experienced similar economic conditions. State laws and federal grants-in-aid formulae regarding welfare and social services are identical for all units of a given type of jurisdiction. Generally, MSA localities face a competition between neighboring cities to attract and retain business and are forced to provide tax benefit packages.
- *Geographic region:* Interregional migration patterns, natural disasters encountered in a geographic region, changes in the nature of employment base, employment sectors such as manufacturing, agricultural and service sectors, climates and many other unspecified regional variations impact a region and many of the regional variations may be unique to a region. The impact of a regional characteristic on municipal fiscal performances may be either direct or indirect.
- *City Size:* The large cities managed by city managers found to be more efficient than those large cities that are managed by mayors. Generally, as the city size gets larger, it increases the complexity of routine operations.

Municipal Fiscal Factors

Municipal fiscal factors that influence the municipal fiscal performance are discussed in detail in the following section:

- *Relative fiscal capacity:* The fiscal capacity measures the localities' financial ability to provide services. It is a ratio of the total city revenues to the total city expenditures regardless of the revenue source and the nature of expenditure. The ratio is calculated by dividing a city's revenue-raising capability by its relative expenditure when compared with groups of similar-sized cities.
- *Relative revenue effort/Tax effort:* The revenue effort measure describes the degree to which municipalities actually utilize the revenue generating potential of its locality by utilizing local taxes, service charges, license fees, etc. The revenue effort denotes the extent to which a particular municipality converts its revenue-generating potential into actual collections through the imposition of revenue sources.
- *Percent total current liabilities:* Percent outstanding debt or current liabilities are defined as the sum of all liabilities due at the end of the fiscal year relative to a municipality's population size. The current liabilities comprise the short-term debts; the current portion of long-term debt, all accounts payable, accrued liabilities, and other current liabilities. Increasing current liabilities at the end of the year as a percentage of net-operating revenue demonstrates the poor financial condition of a city.

Research Models

Ordinary Least Square regression models are constructed to isolate the impact of different municipal structures over municipal fiscal performance dependent variables. This study controlled for the differences in localities by using appropriate intervening or mediating variables. Table 4 describes the research model in detail. The municipal fiscal performance dependent variables employed in this study are composite fiscal stress index, revenue capacity per capita, per capita general fund expenditures and the FTE employee rate. This study controlled for socioeconomic variables, such as per capita income, median value of single family homes, percentage of owner-occupied home, percent poverty (percent people living below the poverty level), crime rate (per 100,000 population), unemployment rate (per 100,000 population), median age of residents, population, percentage of net change in population (population growth was measured as the percent change in population between 1990 to 1996), and density (people per square mile) for their expected impact on municipal fiscal conditions.

The presence of the city in a metropolitan area (located in MSA or non-MSA) was treated as a dummy variable in the model. The unspecified regional factors that could affect fiscal performance were considered by using a series of dummy variables to account for five regions (Northeast, South, Midwest, Mountain and Pacific) that assume a value of '1' for the variable under study and '0' for all other cases. Similarly, the unspecified factors

associated with the size of a city that could affect fiscal performance were considered by using a series of dummy variables to account for three sizes (small, medium-size and big cities) that assume a value of '1' for the variable under study and '0' for all other cases.

Table 4: Regression Analysis by Municipal Administrative Structure

Basic hypothesis:
General management (GM) cities will have a better fiscal performance than either traditional strong mayor and council-manager cities.

	Dependent variables: Municipal fiscal performance indicators	
Hypothesis	**H1: Municipal Fiscal Stress** **H2: Revenue Capacity**	**H3: Municipal Expenditures** **H4: FTE Employee Rate**
Independent variable	Management structure	Management structure
Control variables	• Per capita income • Median value of single family homes • Percent owner-occupied home • Percent poverty • Crime rate • Unemployment rate • Median age of residents • Population • Percent population net change • Density • Presence in MSA • Geographic region • City size • Percent total outstanding debt	• Per capita income • Median value of single family homes • Percent owner occupied home • Percent poverty • Crime rate • Unemployment rate • Median age of residents • Population • Percent population net change • Density • Presence in MSA • Geographic region • City size • Relative fiscal capacity • Relative revenue effort

To examine the comparative fiscal performances of different municipal administrative structures of cities:

Independent variable values: Type of city government: Strong mayor, council-manager, and general management

Dependent variables: Municipal fiscal performance in fiscal stress, revenue capacity, general fund expenditures and FTE employee rate

General Municipal Fiscal Performance Equation: Fiscal performance measure $\propto$ Form of government + Control variable

Along with the socioeconomic control variables, variables that influence a locality's fiscal performance, such as the relative fiscal capacity, the relative

revenue effort, and the percent outstanding liability, were added to the regression equation. Incorporating these measures of financial conditions of a locality in analyses as controls helped in understanding whether the low spending was the result of frugal spending or due to poor financial conditions.

Whenever applicable, the relative fiscal performance measures were used in place of simple fiscal measures. The relative fiscal measure of a given city is its position relative to other cities' average fiscal measure in a given city size group such as small, medium-size or large cities.

Regression Analysis by Municipal Administrative Structure

As hypothesized, a mutual interdependence and reciprocal influence of administrative relationships between elected and appointed officials of local governments of a general management city (GMC) was expected to result better financial condition than other common forms of municipal governments. The underlying assumption is that the combination of the best features of appointed and elected officials should result in measurable fiscal performance than other more traditional forms of government.

Theoretically, an increase in per capita income of the residents of the city that denotes their financial affluence tends to decrease the municipal fiscal stress since affluent citizens contribute more to municipal revenue and demand less social services from the government. Similarly, median home values also represent financial well-being of the residents. That the citizens can afford homes with higher values means increased revenue in the form of property taxes. Percentage of owner-occupied homes is expected to have a

negative association with municipal revenue and spending. Citizens who do not favor taxes in the form of property taxes constrain municipal spending and expect efficient operation by the city government.

Increased crime rates negatively impact municipal financial conditions by costing more in policing services. Percent poverty rates and unemployment rates of a locality negatively impact municipal financial conditions since needy citizens expect more social services and contribute less towards municipal revenue. Similarly, as the median age of residents increases, the older citizens not in the workforce and with less spending power demand more services. Population is expected to impact both positively and negatively since increased population is associated with more revenue as well as the demand for more service provision.

A sudden fluctuation in population growth (either in positive or in negative direction) is expected to impact municipal financial condition negatively. A sudden increase in population demands more service and exerts financial stress on the local government. Conversely, a rapid decrease in population leaves a municipal government to struggle to maintain existing services. Population density negatively impacts municipal financial conditions by increasing the demand for services. Presence in a metropolitan location, particular region, and city size, also impacts the municipal financial condition that is a unique characteristic of the location and size respectively. A municipality's poor financial situation, such as an increased level of outstanding debt, increased revenue effort, and lower fiscal capacity,

negatively impacts the municipal fiscal performance since poor financial conditions restrict the ability of a municipality to raise the revenue needed to maintain existing services.

Statistical Procedure

An Ordinary Least Square (OLS) regression model was used to isolate the impact of the municipal management structure on dependent variables while controlling the exogenous effects of identified socioeconomic and fiscal condition variables. This procedure helped to answer one of the common types of research questions concerning the examination of relationships (Tabachnik and Fidell, 1989) between variables.

The multiple regression model, used for this research, was modeled after Stumm and Corrigan's (1998) study. These researchers reasoned that, since the municipal governments were non-utility enterprises, this regression model was appropriate to study the municipal spending and revenue changes. Beyond understanding the interaction effect of multiple independent variables on municipal fiscal performance variables, beyond asserting that independent variables and dependent variables are related to each other and beyond understanding the strength and nature of the relationship between them, predicting the value of dependent variable from a set of independent variables is important to shed more light on the research questions. Therefore, by estimating a regression model, the interactive effects of various factors can be accounted for while controlling for other related influences.

The multiple regression procedure requires the assumptions that all the observations are independent, that the distribution of values of the variables in the population is normal, that the distributions have the same variance and, most importantly, the assumption of a linear relationship between the dependent and independent variables. The linear model assumes that a straight line can appropriately describe the relationship between the variables and the appropriate linear model can be utilized to calculate the regression equation. From using the computed regression equation model, the unknown dependent variable value can be predicted by plugging in the known independent variable values (Norusis 1997 and O'Sullivan 1995).

Since the variables included in the model were measured in different metrics (per capita, percentage, ratio and raw scores), the beta coefficients results of the regression model were used to interpret the significance and direction of the relationship. List-wise exclusion of the cases technique was used to treat the missing values. This helped in computing the model's correlation coefficient while using only the cases that have valid data for all variables. This approach ensured that the coefficients in the matrix were all based on the same cases.

The resulting beta coefficients from the regression model measured the change in the standard deviation of the fiscal performance measures. This fiscal performance measure score was associated with unit change in the standard deviation of the independent variables. Bohrnstedt and Knoke (1988) and McClendon (1994) state that beta coefficients are useful measures

when the variables are measured according to different metrics like per capita, raw values, ratios, percentages, etc. The empirical relationship of dependent and independent variables was analyzed and the impact of independent variables on fiscal performance measures was studied after controlling for independent influences such as density, population, metropolitan status, and the city's regional location in the country.

A number of comparisons were made among all three different forms of governments. The objective of the comparisons was to ascertain whether the cities with a general management structure differed from those with other traditional forms in any significant way. Descriptive statistical techniques were used to analyze the distributions of other common demographic characteristics of cities within and among the groups.

Similarly, a comparative analysis was conducted to understand the similarities and differences between the fiscal performance measures and socioeconomic characteristics of the following three groups of general management cities: (1) general management cities that consistently maintained the same form of administrative structures from 1993 to 1998, (2) other municipal administrative cities that adopted general management city administrative structure during the 1993-98 period, and (3) the general management cities that dropped the general management structure and adopted some other form of municipal administrative structure during the 1993 -98 period.

The impact of the decision to maintain the GMC status, drop the GMC

status, and adopt the GMC status was investigated by incorporating three different dummy variables: maintained GMC status cities, dropped GMC status cities and adopted GMC status cities, that assume a value of one for the given GMC status variable under study and zero for all other cases.

Statistical Package

The SPSS, or Statistical Package for the Social Sciences, was used to analyze the data. The SPSS/PC (a program version for personal computers), especially SPSS for Windows – Release 8.0.2 (The Standard Version released on September 23, 1998) was used for the data analysis.

Data Sources

Main data sources for this research were compiled from the Census of Government's aggregated 1997-fiscal data on political jurisdictions and the ICMA's 1998 Municipal Year Book data on municipal structures. Many different data tables and/or databases from these two major sources were combined to form the research database (see Table 5).

Census Bureau Data

The Census of Government's 1997 aggregated fiscal data by political jurisdiction were used to generate the fiscal performance measures that were the dependent variables in this study. The 'County and City Data Book: 2000' and Census 2000's summary file- 3 were the source for socioeconomic/control variables.

A more detailed listing of data sources is attached in the Appendix (see

Appendix Tables 8, 9 and 10). The following paragraphs explain the data sources in detail. At the time of the analysis, the latest available data on dependent variables were for 1997 (i.e., for 1996-97 fiscal year) and the latest available data on socioeconomic/control variables were for 1998 and from the Census 2000 decennial data. The compiled database became the foundation of this study.

Table 5: Data Sources

Major Sources	Subsidiary Sources	Data Tables
1. U. S. Census	A. 1997 Census of Governments	Volume 3's Table 2
	B. 1997 Census of Governments	Volume 4's Table 18
	C. County and City Data Book: 1994	Table C
	D. County and City Data Book: 2000	Tables C-2, C-4 and C-7
	E. Census 2000	Summary File 3 - Tables QT-P34, P-53, P-82 and H-85
2. ICMA	A. 1993-Municipal Year Book	Directory 1/9
	B. 1998-Municipal Year Book	Directory 1/9
	C. 1997-1998 Who's Who - in Local Government Management	Directory of Recognized Local Governments

Census data were the sources for (1) municipal fiscal performance dependent variables and (2) socioeconomic/control variables.

Dependent Variables: A Census of Government has been taken every five years since 1957 as required by law under Title 13, United States Code, Section 161. This covers the following four major subject fields of the government: government organization, public employment, taxable property values and government finances. The Census of Government for fiscal year

1997 was this study's source for the data related to government finances and public employment. The census provides data for all individual municipalities with a population of 25,000 or more. There are 1,166 municipal governments in the U.S. that have populations of 25,000 or more according to the 1997 Census of Government data.

The section on the fiscal year of 1996-97 financial statistics covers data on revenue, expenditure, debt, and financial assets of municipalities. Similarly, the section on the employment of major local governments comprises statistics on employment and payroll information for all municipalities that have populations of 25,000 or more. The Census Bureau data were used to analyze the fiscal performance measures (financial and full-time employee rate) that are the dependent variables in this study.

Control Variables: The Census Bureau data were the source for control variables such as population in 1990 and 1996, population growth, area, density, metropolitan status and regional location in the country. The Census 2000 decennial data summary file- 3 and County and City Data Book 2000 were the major sources for control/socioeconomic variables.

Both the Census of Government data and Census 2000 are available and accessible in an electronic format via the Internet at the Census Bureau Website (www.census.gov) as the following publications:

- *Finances of Municipal and Township Governments*, 1997 Census of Governments, Volume 4, Government Finances (GC97 (4)-4) that was issued in September 2000, covers the financial data in a variety of

categories under two major subdivisions of revenue and expenditure (U.S. DOC. 2000b).

- *Employment of Major Local Governments,* 1997 Census of Governments, Volume 3, Public Employment (GC97 (3)-1), issued in February 2000, covers the employment data (U.S. DOC. 2000a).
- *County and City Data Book 2000,* A Statistical Abstract Supplement, 13th Edition, issued in November 2001, covers the financial and socioeconomic data in a variety of categories (U.S. DOC. 2001).

International City/County Management Association's Data

The independent variables used in this study, information as to the form of government, presence of a professional manager and the general management recognition status data, were compiled from two different International City/County Management Association's (ICMA) directories. Since the study targeted the cities that consistently maintained the chosen form of municipal administrative structures prior to the point of study in 1997, data on the form of municipal government were obtained from both the 1993 and 1998 Municipal Year Book Directories. The ICMA's 1993 and 1998 Municipal Yearbooks provided the form of municipal government information and the presence of professional manager in a municipal government (International City/County Management Association 1993 and 1998).

Information on the general management cities' official recognition status was obtained from the ICMA's 1997-1998 Who's Who in Local Government Management Directory (International City/County Management Association,

1997). This directory provided city government data from the 1996 ICMA survey.

Data were extracted from the ICMA's 1998 Municipal Year Book that denoted the cities' forms of government and the presence of a professional manager. The strong mayor cities that had appointed professional managers were coded as general management cities by following the ICMA's city municipal form recognition criteria (see Appendix B). The obtained data of independent variables were then merged with the census data by using the localities' unique identifiers (location name and state). The resultant database became the foundation of this study.

Description of Data

Because of fiscal data availability, other works of research on the policy effects of local government reform rely on data source and variables similar to the ones utilized in this study. Therefore, the resultant sample was judged to be the best available for statistical analysis, given the realities of municipal survey research. The compiled database of the Census and the ICMA consists of descriptive, control, independent, and dependent variables for the U.S. cities with populations of 25,000 or more. To enable a fair comparison across the cities with variations in demographics, appropriate standardized measures were introduced in the analyses.

From the original compiled data, certain standardized measures like per capita financial measures, relative fiscal measures, percent population growth, and full-time equivalent employee rate were derived. These standardized

measurers were then determined and then appropriately calculated by applying the respective standard formulae. These measures and the formulae for calculating the measures are recorded in the appendix (see Appendix C-Technical Appendix).

Assumptions

It was assumed that the city government decision-makers' objective is to achieve better fiscal performance regardless of the structure of the government. Implicit in this analysis is also the assumptions that (1) the application of professional management skills and authoritative power to make and implement fiscal policy decisions could make a difference in the fiscal performance outcome; and (2) all local governments had access to the same technology and skilled personnel and similar production functions. These accesses to different choices included the exercise of the option of contracting private firms for any services deemed to be appropriate. This meant that cities could select the best available cost-efficient service delivery choice to provide services to the citizens' satisfaction. Another main assumption of the study is that all the cities provided the minimum, basic required services at the citizens' satisfaction level.

Limitations of the Study

This study includes only cities with populations of 25,000 or above in its analysis. This restricts the generalizability of analytical outcomes and makes these inapplicable to cities with populations of less than 25,000. According to

the January 1997 data of the Census Bureau, there were 19,372 municipal governments in the U.S.(U.S. DOC.2000c and 2000d). Out of those municipal governments, cities with populations of 25,000 and above account for only 1,166. Therefore, the findings of this study do not apply to more than 6% of the cities under analysis. However, this generalizability issue can be overlooked on the grounds that city managers are most commonly not found in small cities that have populations lower than 25,000 (Scally, 1992).

Another limitation of this study is that the chosen better performance measure of a municipality is restricted only to fiscal measure. Even though fiscal performance measure is critical, it does not reflect the quality of life in a given city. Fiscal performance measure does not account for all the other positive or negative aspects of a municipality that make a city either a preferable place or unfavorable place to live.

The non-sampling errors possible in this study include non-response and response errors and processing errors. The non-response rate for the major local governments for government-public employment data was 17.4 percent and 15 percent for financial data (U.S. DOC. 2000e). To overcome this, imputations were done for these missing data by Census. Although the Census of Governments is designed to achieve a high standard of completeness and accuracy, human and mechanical errors occur in any mass statistical operation. Besides, the Census data are still vulnerable to omissions, errors in reporting, electronic documentation, and other possible

data-processing errors due to human and mechanical errors, like any other secondary data.

Similarly, the ICMA's municipal government structure data were self-reported data collected by the ICMA in 1997 through a mail survey. This approach to data collection makes the ICMA data prone to non-sampling errors that may include non-response and response errors and processing errors.

This one-shot study, on performance for fiscal year 1997, does not account for the impact of fiscal decisions made by the municipality in previous years that might have gone through unique situations. For example, cities like Orlando, FL, might spend beyond their means due to circumstances like anticipated future growth. On the contrary, some cities like Detroit, MI and Pittsburgh, PA, might have been forced to be fiscally wise and responsible by past economic hard times (Massad, 1995). These variations in history are not accounted for in this study and thus there is an absence of control for the threat of history (Campbell and Stanley, 1963; Morgan and Pelissero, 1980).

Conclusion

It is apparent from literature on the subject that there has always been concern about the impact of professionalism and form of government on municipal fiscal performance. The theoretical basis of the present research is that, going by the underlying concepts of the politics-administration complementarity model, the general management cities' fiscal performance

should be superior to that of reformed council-manager or traditional mayor-council cities. This Research Methods chapter covered the Research Hypotheses, Research Design, Research Variables, Research Models, and Data Sources of this study.

Since this study was intended to test empirically the politics-administration complementarity model and to test the superiority of general management cities' fiscal performance, it compared the distributions of each fiscal measure for cities with strong mayor, council-manager, and general management municipal governments. The municipal fiscal performance measures for each government structure were estimated and compared with those for other forms in order to find out if the fiscal performance level varied with the government structure. In order to determine how different forms of municipal government performed, the correlation coefficients for fiscal performance levels and city characteristics were calculated. The following data analysis and results section explains this process in detail.

CHAPTER V

DATA ANALYSIS AND RESULTS

Introduction

General management administrative structures started to appear on the American landscape in the 1960s. However, much still remains to be learned about the effects of the general management structure on municipal fiscal performance in the earlier part of the 21st century. Therefore, this dissertation examines the effect of different management structures on the fiscal performance measures of all U.S. cities in 1997 with populations of 25,000 or more (based on the 1996 estimated population). In the course of this study, relationships among socioeconomic characteristics, municipal financial condition indicators and municipal fiscal performance were examined. Cities were categorized as strong mayor cities, council-manager cities, and general management cities to uncover differences in municipal fiscal performance in terms of the composite fiscal stress index, revenue capacity per capita, per capita general fund expenditures and the FTE employee ratio.

This data analysis section provides the summary statistics and figures on most analyses. The results of more detailed data analyses and statistical information are attached as an appendix to this dissertation (see Appendix -A and Tables 11 through 65 in Appendix-I).

Descriptive Statistics

To ensure a rigorous test, cities that consistently maintained the same form of administrative structure for five years prior to 1998 (1993-1998), were included in the analyses. As mentioned before, of the 1,166 cities, 968 maintained the same administrative structure consistently from 1993 through 1998, and were included in the data analyses carried out to answer the proposed research questions. This approach of filtering out the cities that changed their municipal administrative structures reduced ambiguity in interpreting the impact of different municipal administrative structures on municipal fiscal performance. This approach controlled for the municipal administrative change interventions in the analyses and improved the cross-sectional research design.

Of the resultant 968 cities that were selected for the data analyses, 18% (N=179) were strong mayor cities (SMC), 75% (N=719) were council manager cities (CMC) and the remaining 7% (N=70) were the general management cities (GMC). The observation showed that the council-manager form of municipal administrative structures was the most common one in the U.S. cities; also these cities were the ones that intended to change the least to a different form of administrative structure. Overall about 82% (N= 789) cities with populations of 25,000 or more were maintained by professional administrators (combined council-manager and general management cities).

A Comparison of Socioeconomic Characteristics of Different Municipal Administrative Structures:

Comparative descriptive statistics on the socioeconomic characteristics of different municipal administrative structures are presented in Table 6. More detailed information is presented in the data analysis and the results sections of the appendix (see Appendix Tables 20, 21, 22, and 23).

Table 6: Comparison of Socioeconomic Characteristics of the Cities with Different Municipal Administrative Structures (Population 25,000 or more)

	Strong Mayor Cities (SMC)		Council-Manager Cities (CMC)		General Management Cities (GMC)	
	(N=179)		(N=719)		(N=70)	
Socioeconomic Factors	Mean	Std. Devi.	Mean	Std. Devi.	Mean	Std. Devi.
Population	140213.97	618800.40	77276.72	107104.68	177928.13	292401.11
Population Density	4192.20	4278.41	3703.81	2854.10	4851.52	7267.29
Population Growth	3.20	10.64	10.47	15.17	7.62	18.86
Median Age of Residents	34.40	3.96	34.06	5.09	33.41	3.45
Per Capita Income	20305.82	5521.43	22701.03	8465.74	20988.57	6255.44
Median Household Income	40280.49	12515.39	46734.24	16851.24	42030.99	13343.28
Unemployment Rate	4.24	2.07	3.99	2.57	4.24	1.82
Crime Rate	5882.99	3007.65	5729.39	4248.18	7126.29	3136.87
Percent Owner-Occupied Home	58.20	13.45	60.18	12.93	56.39	13.28

As a general observation, most of the socioeconomic variables did not show much variation between different municipal administrative structures except for population and crime rate. The population of strong mayor cities showed great fluctuations along with the standard deviation. The possible reason for this finding could be the fact that most of the strong mayor cities

were distributed among either small or big cities. As observed in crosstabulation findings, strong mayor municipal administrative structures were more common in big cities; especially the Northeast region of the country had more big cities with strong mayor form of municipal administrative structures. Strong mayor municipal administrative structures were also favored by most small cities, especially the small cities located in the Mountain region of the country preferred strong mayor form of municipal administrative structures to any other form of municipal administrative structures (see Appendix A).

Similarly, as an exploratory approach, the socioeconomic characteristics of general management cities that consistently maintained the same form of municipal administrative structures for five years prior to the point of study (N=70) were compared with general management cities that dropped the general management status and adopted some other form of government (N= 67) and other form of cities that adopted general management municipal administrative structures (N=73). Comparative descriptive statistics on the socioeconomic characteristics of 'adopted GMC status' cities, 'dropped GMC status' cities and 'maintained GMC status' cities are presented in Table 7.

Again, the socioeconomic characteristic of groups of cities with different GMC status did not show many variations among them. No particular pattern emerged except for the population growth that showed a large standard

deviation from the mean in cities that recently adopted the GMC administrative structure when compared with other groups of GMC status cities.

Table 7: Comparison of Socioeconomic Characteristics of the Cities with Different GMC Status (Population 25,000 or more)

	Adopted GMC		Dropped GMC		Maintained GMC	
	(N=73)		(N=67)		(N=70)	
Socioeconomic Factors	Mean	Std. Devi.	Mean	Std. Devi.	Mean	Std. Devi.
Population	121103.65	137319.14	117180.33	336294.88	177928.13	292401.11
Population Density	4572.85	3827.57	4736.07	6789.41	4851.53	7267.32
Population Growth	8.79	40.24	6.76	12.52	7.62	18.86
Median Age of Residents	34.22	3.53	34.48	3.34	33.41	3.45
Per Capita Income	20385.51	5574.22	21090.09	6493.84	20988.57	6255.44
Median Household Income	38795.95	11151.54	43084.30	13984.29	42030.99	13343.28
Unemployment Rate	4.26	1.80	4.00	1.87	4.24	1.82
Crime Rate	6312.08	2879.35	5971.41	3519.01	7126.29	3136.87
Percent Owner-Occupied Home	55.54	12.21	60.02	12.72	56.39	13.28

This observation could be interpreted to suggest that the strong mayor cities that experienced sudden great fluctuation in population growth, either positively or negatively, hired a professional manager to handle the expected outcome of sudden fluctuations in population. That is, these newly hired professional managers could have been hired to manage the change rather than to manage the day-to-day routine municipal business.

Hypothesis Testing of Fiscal Performance

The Impact of Forms of Administrative Structures on Municipal Fiscal Performance:

The research questions were linked to empirical relationships with the localities' socioeconomic factors and municipal fiscal indicators in this inferential statistics section. To what extent is the general management administrative structure associated with municipal fiscal indicators? Two methods were used to address this question and to examine the differences among cities with different administrative structures – a comparison of means and an OLS regression analysis. After the cities were stratified by municipal administrative structure and by population size, the differences among various fiscal performance measures were calculated. The findings suggested by the mean differences analyses were further subjected to closer scrutiny in the regression analyses.

As an exploratory approach, first, the means of municipal fiscal performance indicators under study were compared among the different form of municipal administrative structures. The composite fiscal stress index figures did not vary much across the different form of municipal structures. Though they remained almost the same around 165, the strong mayor cities (SMC) showed the lowest stress index level (164), the council-manager cities (CMC) index level was 165 and the general management cities (GMC) had the highest fiscal stress index level (166) (see Table 8).

Table 8: Comparison of Fiscal Indicators Among Different Municipal Administrative Structures						
	Strong Mayor Cities (SMC)		Council-Manager Cities (CMC)		General Management Cities (GMC)	
	(N=179)		(N=719)		(N=70)	
Fiscal Performance Indicators	Mean	Std. Devi.	Mean	Std. Devi.	Mean	Std. Devi.
Composite Fiscal Stress Index	164.18	8.88	165.04	7.84	165.84	7.40
Revenue Capacity Per Capita	$1316.92	$1047.74	$970.93	$536.09	$1161.76	$703.59
Per Capita General Expenditures	$1283.45	$995.50	$954.54	$542.90	$1143.96	$710.49
FTE Employee Rate	162.15	133.08	105.45	84.00	128.28	72.76

However, while comparing the means of revenue capacity per capita, per capita general expenditures and the FTE employee rate indicators across the different forms of city government, the resulting pattern showed that council-manager cities (CMC) spent less ($955) in per capita general fund expenditures and employed fewer employees (105) than other forms of city governments. General management cities (GMC), which spent $1,144 per capita general fund expenditures and employed 128 employees were followed the council-manager cities (CMC). The strong mayor cities (SMC), which spent $1,283 per capita general fund expenditures and employed 162 employees, were the highest spenders among the different forms of city governments (see Table 8 and Figures 6 and 7).

Further analysis of the means of the other municipal financial figures like revenue capacity per capita and per capita revenues from taxes across the different form of municipal administrative structures showed that the strong mayor cities taxed more and spent more than the other forms of city governments (see Table 8).

Figure 6: Comparison of Revenue Capacity Per Capita and Per Capita General Expenditures Among Different Municipal Administrative Structures

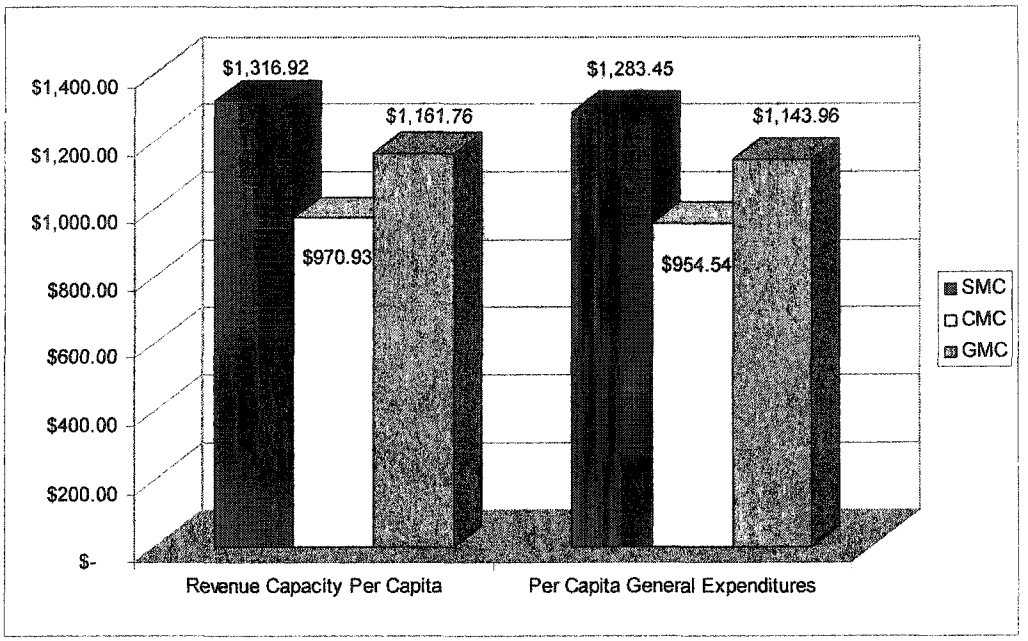


Figure 7: Comparison of Composite Fiscal Stress Index and FTE Employee Rate Among Different Municipal Administrative Structures

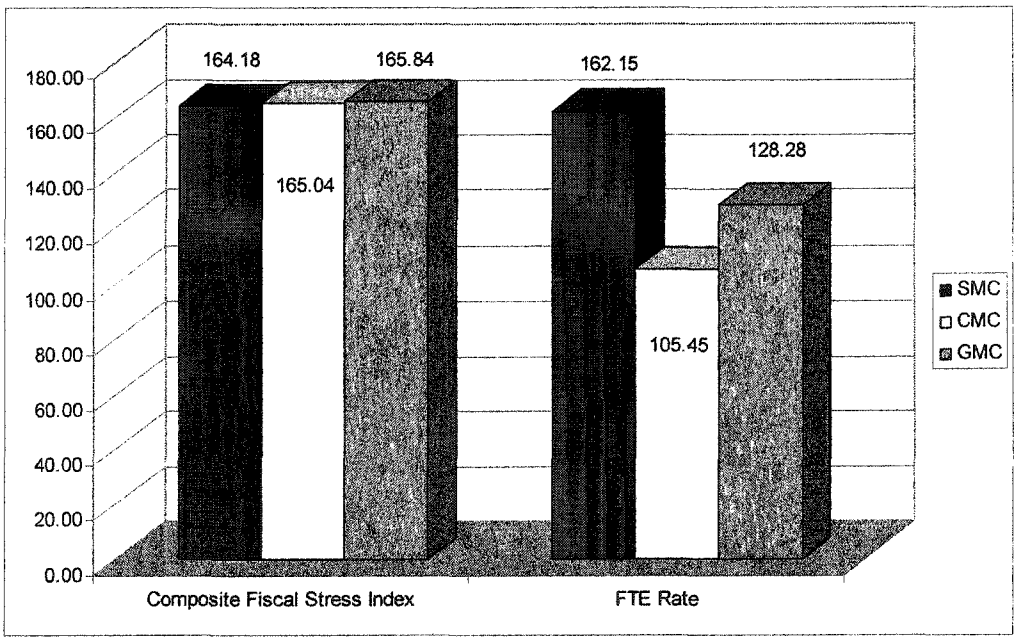
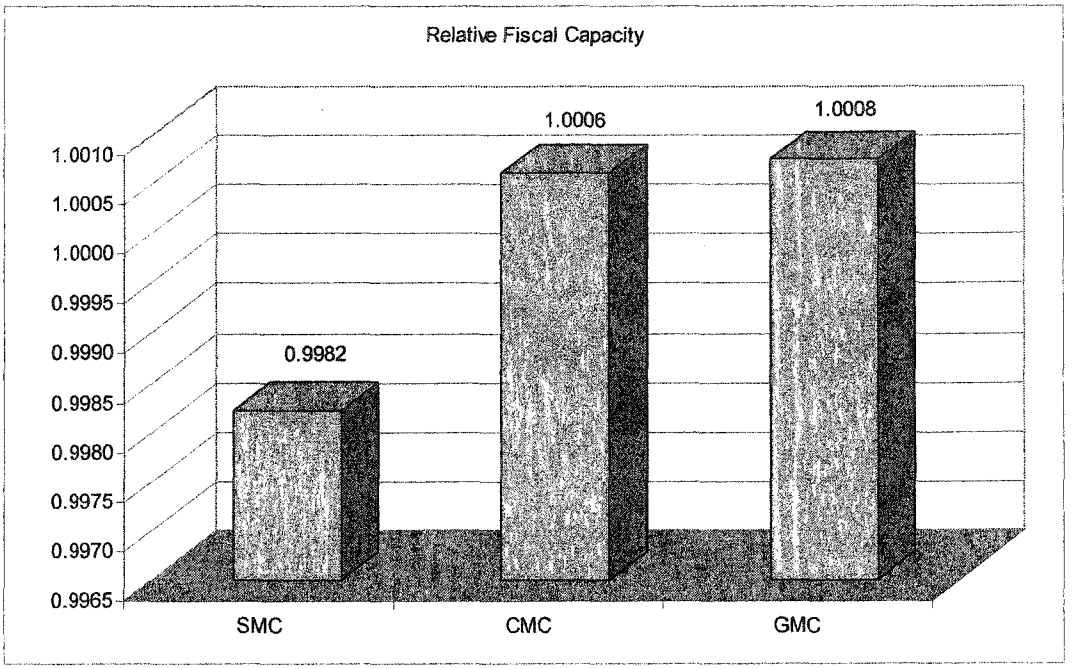


Figure 8: Comparison of Relative Fiscal Capacity Among Different Municipal Administrative Structures



The strong mayor cities (SMC) extracted more in per capita general fund revenues ($1,317) and in per capita tax revenues ($564). Also, the strong mayor cities (SMC) spent more on per capita general fund expenditures ($1,283) and hired more employees (FTE 162) than the other forms of city governments as mentioned before.

Similarly, a further analysis of the means of revenue capacity per capita and per capita revenues from taxes across the different forms of municipal administrative structures showed that the council-manager cities (CMC) taxed less and spent less than the other forms of city governments. The council-manager cities (CMC) extracted comparatively less in per capita general fund revenues ($971) and in per capita tax revenues ($427). Also, the council-

manager cities (CMC) spent comparatively less on per capita general fund expenditures ($955) and hired fewer employees (FTE 105) than other forms of city governments.

The general management cities (GMC) municipal fiscal figures fell in between the strong mayor cities (SMC) and the council-manager cities (CMC) fiscal figures. The general management cities' mean revenue capacity per capita was $1,162 and their mean per capita tax revenue was $494. The per capita general fund expenditure of the general management cities (GMC) was $1,144 and the mean FTE rate was 128.

Generally, all the fiscal performance indicators portrayed the same pattern, with council-manager cities (CMC) revealing better fiscal performance indicators, general management cities (GMC) following the council-manager cities (CMC) in fiscal performance and strong mayor cities (SMC) showing the poor fiscal performance among the group. However, this pattern was not present when the composite fiscal stress index indicators of the different municipal administrative structure groups were compared. Strong mayor cities (SMC) showed a lower fiscal stress index (see Figure 7). This deviation warranted further exploration on the revenue-generating and spending pattern of cities with different administrative structures.

In order to understand the observed revenue-generating and spending fiscal behavior of the cities, the revenue-generating capabilities and spending behavior patterns of different municipal administrative structures were further explored in detail (see Table 9 and Figure 8).

The per capita municipal revenues of eight local government revenue categories were compared among different municipal administrative structures. The per capita measures of (1) total municipal revenues, (2) general revenues, (3) total intergovernmental revenues (IGR), (4) IGR from federal government, (5) IGR from state government, (6) revenues from local governments' own sources, (7) revenue from all taxes, and (8) revenues from local property taxes consistently showed a similar pattern of higher revenue extracting nature of strong mayor cities. This confirmed the previously observed pattern of strong mayor cities' higher revenue-extracting nature among different municipal administrative structures. Similarly, as observed before, the council-manager governments extracted lower revenues that were followed by the general management cities (see Table 9).

Table 9: Comparison of Different Revenue Sources Among Different Municipal Administrative Structures

	Strong Mayor Cities (SMC)		Council-Manager Cities (CMC)		General Management Cities (GMC)	
Revenue Variables	Mean	Std. Devi.	Mean	Std. Devi.	Mean	Std. Devi.
Per Capita Total Revenue	$1,586.55	$1,265.85	$1,230.04	$744.65	$1,441.63	$942.85
Per Capita General Revenue	$1,316.92	$1,047.74	$970.93	$536.09	$1,161.76	$703.59
Per Capita Total IGR	$391.16	$493.90	$173.54	$210.01	$286.51	$310.15
Per Capita IGR from Federal government	$65.23	$254.90	$29.51	$48.60	$49.39	$54.69
Per Capita IGR from State Government	$325.93	$414.66	$144.03	$189.75	$237.13	$281.09
Per Capita General Revenue from Own Source	$892.16	$688.15	$770.14	$410.77	$847.86	$476.15
Per Capita Local Revenue from Taxes	$563.64	$540.71	$427.35	$250.04	$494.32	$268.42
Per Capita Revenue from Property Tax	$378.16	$397.96	$218.35	$222.03	$278.77	$227.74

To understand the spending behavior of different administrative structures, the relative fiscal capacity measure of cities were compared. The relative fiscal capacity is a relative fiscal measure that indicates the ratio of total municipal revenues to total municipal expenditures (regardless of the sources of revenue and regardless spending functions) of a given city size. The measure of 1 and above indicates better fiscal performance relative to other cities in its cohort. However, the strong mayor cities measure of less than one (0.99) when compared with other municipal administrative structures confirmed the bigger spending nature of the strong mayor cities (see Figure 8).

Fiscal changes are highly incremental. It is unlikely that a structural change intervention produces much immediate difference in municipal fiscal behavior, if any. However, exploratory comparisons of the mean of different GMC status cities (cities that maintained, adopted and dropped GMC status) were conducted to identify any possible changes in the dependent fiscal performance variables (see Table 10).

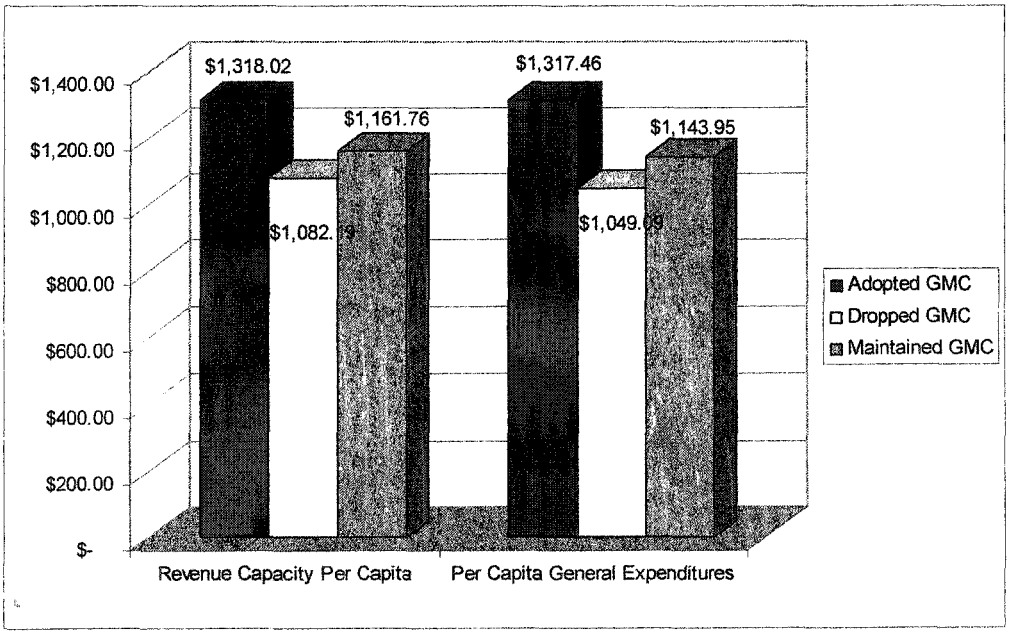
Table 10: Comparison of Fiscal Indicators Among Different GMC Status Municipal Administrative Structures

	Adopted GMC		**Dropped GMC**		**Maintained GMC**	
	(N=73)		(N=67)		(N=70)	
Fiscal Performance Indicators	Mean	Std. Devi.	Mean	Std. Devi.	Mean	Std. Devi.
Composite Fiscal Stress Index	165.68	8.40	165.06	9.15	165.69	7.54
Revenue Capacity Per Capita	$1318.02	$678.34	$1082.19	$643.20	$1161.76	$703.58
Per Capita General Expenditures	$1317.46	$672.33	$1049.09	$638.34	$1143.95	$710.52
FTE Rate	162.64	97.20	120.58	82.15	128.29	72.78

As expected, there were not many differences among different GMC status city groups. However, the comparative analysis of mean fiscal

performance measures showed a general pattern in which the GMC cities that dropped their general management status showed better fiscal performance measures (lower stress index, revenue capacity per capita, per capita general expenditures and lower FTE employee rate) when compared with cities that maintained the GMC status or cities that recently adopted the GMC status. It can be inferred that some GMC cities discontinued the professional management help after reaching some satisfactory fiscal performance level.

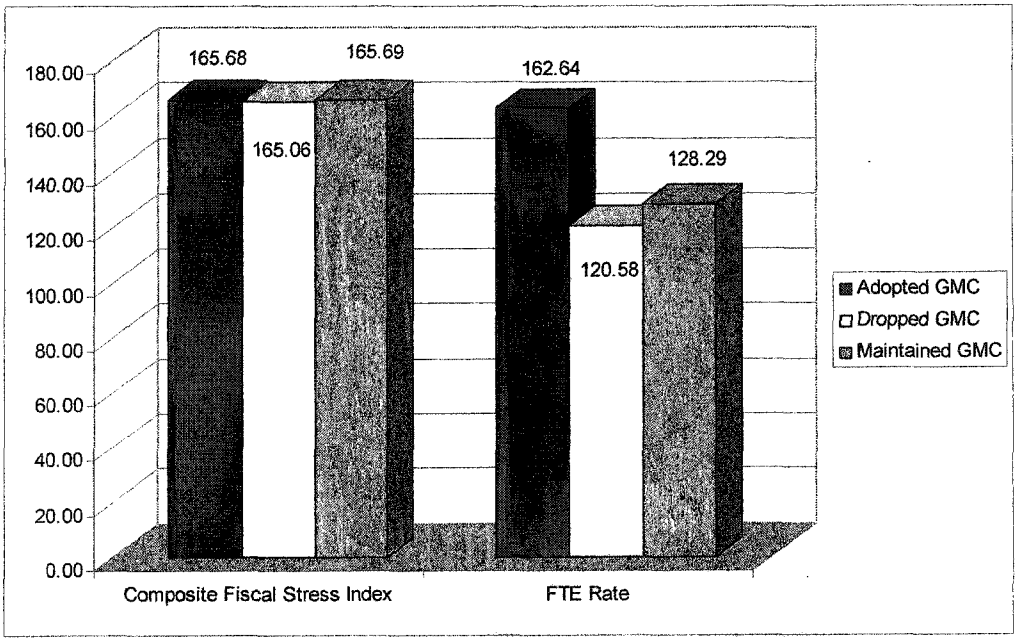
Figure 9: Comparison of Revenue Capacity Per Capita and Per Capita General Expenditures Among Different GMC Status Cities



The cities that adopted the general management administrative structures showed the highest scores on fiscal performance indicators (that indicated poor fiscal performance) and the general management cities that maintained their structures fell in between these two groups (see Figures 9 and 10). A comparison of the means of the socioeconomic factors of cities

differing in their GMC status (see Table 7) previously showed that cities that recently adopted the GMC status showed a great fluctuation in population growth. Probably, the factors associated with sudden fluctuations in population growth might be the causes leading to poor fiscal performance in these cities. Therefore, it can be argued that a sudden fluctuation in population growth may result in poor fiscal performance, leading to the hiring of professional managers in strong mayor cities. However, these data-based assumptions need further scrutiny to confirm these findings.

Figure 10: Comparison of Composite Fiscal Stress Index and FTE Employee Rate Among Different GMC Status Cities



Generally, in the process of comparing means, only main effects that are compared. The main effects are the effects of each of the individual factors, obtained by ignoring other factors and their interaction effects. Testing for interaction of other variables effects is important, and they must be

considered together to come to a conclusion about the data. While differences among the means of the various fiscal performance measures were very informative, they left unanswered the question of whether other urban socioeconomic factors and the current fiscal conditions might have influenced the mean differences discussed above.

Regression Analysis by Different Types of Municipal Administrative Structures

Literature on the municipal financial administration suggests that municipal fiscal performance is a complex phenomenon influenced by a variety of socioeconomic and fiscal factors of the cities (Groves and Valente, 1994). To clarify the effect of these exogenous factors, an ordinary least square (OLS) regression model was constructed to isolate the impact of different municipal administrative structures on municipal fiscal performance measures, while controlling for the other important independent variables. The socioeconomic variables were considered as control vectors and used to control for the most obvious exogenous effects on the dependent variables. The control variables that used were: population, population growth, population density, median age of residents, per capita income, median home value, percent owner-occupied homes, percent poverty, unemployment rate, crime rate, MSA, region, city size, relative fiscal capacity, relative revenue effort and current liabilities of the cities. The different forms of government variables were the main interest of this thesis and they were constructed as categorical variables.

Based on the initial observations on the comparative analysis of the means of municipal financial figures, the council-manager cities (CMC) were considered as the reference category. Mathematically, the reference or baseline category makes no difference, however it allows for more straightforward substantive interpretation since the intercept estimate effectively becomes the baseline category (Lewis-Beck, 1995). Customarily, an extreme value should be selected as the reference category. Therefore, the council-manager category with a better fiscal performance level than other municipal administrative structures has been designated as the reference category.

Thus, two dummy variables were used – one for the strong mayor cities (SMC) and the other for the general management cities (GMC). That is, one for the officially declared traditional strong mayor cities (where the mayor has the complete control over the municipal business) and the other for the general management cities (still the traditional strong mayor cities where the mayor retains the administrative authority but conduct the municipal business with a professional managerial help). In order to "dummy up" the ordinal 'municipal administrative structure' variable (that was originally coded as, 1 = SMC, 2 = CMC, and 3 = GMC), it was recoded into dummy variables by applying the following recoding steps:

SMC = 1, if previous coding was 1; if else 0 (i.e., 2 and 3 recoded to 0)

GMC = 1, if previous coding was 3; if else 0 (i.e., 1 and 2 recoded to 0)

To reflect,

If city = CMC, intercept = $\beta 0$

If city = SMC, intercept = $\beta 0 + \gamma$ SMC

If city = GMC, intercept = $\beta 0 + \gamma$ GMC

The dummy variables introduced in the model to isolate the impact of five different regions were dropped in order to enhance the postulated regression model. Using the postulated regression model, the dummy-variable regression coefficients measured the difference in the municipal fiscal performance dependent variables compared to the council-manager cities. Since the above-mentioned control/independent variables were closely related to each other, the model was scrutinized for multicollinearity. When multicollinearity exists in a postulated model, the regression equation cannot accurately estimate the independent effects on the dependent variable. The strength of the linear relationships among the independent variables was measured by the tolerance statistics. Tolerance is the proportion of the variability of the given variable that is not explained by its linear relationships with the other independent variables in the model. Since tolerance statistics is a proportional measure, its values range from 0 to 1. In that case, a value closer to 1 indicates that an independent variable has little of its variability explained by the other independent variables.

Similarly, the preliminary observation on the collinearity statistics showed that the per capita income, median home value, and percent poverty

rate of a locality were highly correlated with each other. Their linear relationships with the dependent variables could be explained by using one of these three variables as a proxy measure to represent the others. Based on this observation, a decision was made to retain the per capita income variable as the surrogate measure. The proposed model was modified by eliminating the median home value and percent poverty rate of a locality that were highly correlated to the per capita income and measuring the same concept. Thus, due to multicollinearity, independent variables – median home values and percent poverty rate of the localities – were dropped from the equations in order to improve the regression models. This step improved the tolerance statistics of the per capita income variable, but did not affect the standardized beta coefficients of the other independent variables and the R Square values of the regression models. The main point is, however, that including median home values and percent poverty did not significantly increase explained variance and did not affect the sign and the magnitude for the municipal administrative structure variables.

The results of the regression analyses are shown in Tables 11 through 14 that depict the standardized beta coefficients for each of the models. The beta coefficients measured the change in the standard deviation of the dependent variable associated with a unit change in the standard deviation of the independent variable. Beta coefficients were used in the analyses since the analyses were intended to indicate the significance and direction of the relationship rather than the quantitative movement in the variables. Another

reason to employ beta coefficients was that the variables were measured according to different metrics like per capita (per capita income), raw values (population), percentages (percent owner occupied home), ratios (crime rate), and etcetera. This approach was supported by Bohrnstedt and Knoke (1988) and McClendon (1994).

Therefore, beta coefficients of the regression models reported the change in the standard deviation of the municipal fiscal performance dependent variable for a one-unit change in the standard deviation of the independent variable, holding other independent variables constant. For example, with other control variables set at their means, an increase of one standard deviation in the general management cities variable resulted in a -0.006 decrease in the standard deviation of the composite fiscal stress index (see Table 11).

Findings of Postulated Hypotheses Testing: The Influence of Municipal Administrative Structures on Municipal Fiscal Performance:

Overall the OLS regression models' regression coefficients confirmed the findings of the means test about the difference in the 'direction of the relationships' between independent and dependent variables. That is, the composite fiscal stress index was lower in the strong mayor cities (SMC) when compared with the general management cities (GMC) and the council-manager cities (CMC), but the revenue capacity per capita, per capita general expenditures, and the FTE employee rate were higher in the strong mayor cities than both the general management cities and council-manager cities

after controlling for other key variables. The significance of these associations is analyzed in the following paragraphs.

The significance of test results is reported in three ways as suggested by Coolican (1990), based on 'p' the probability level:

- *Significant* ($0.05 \geq p < 0.01$ and represented by *),
- *Highly significant* ($0.01 \geq p < 0.001$ and represented by **), and
- *Very highly significant* ($0.001 \geq p$ and represented by ***).

All probabilities reported are based on two-tailed tests as each comparison had two possible directions.

General Management Cities (GMC) Versus Strong Mayor Cities (SMC)

This thesis hypothesized that the general management cities were more likely to have a lower composite fiscal stress index, revenue capacity per capita, per capita general expenditures, and full-time equivalent rate of employees than strong mayor cities. Table 15 provides the summary statistics on the comparison of municipal administrative structures' influence on the fiscal performance indicators of general management cities and strong mayor cities (as shown in Tables 11 through 14). In sum, general management cities (GMC) had better fiscal performance levels than strong mayor cities (SMC) except for the composite fiscal stress index.

Table 11: Assessing the Impact of Municipal Administrative Structures on Composite Fiscal Stress Index of GMC and SMC

H1 - Dependent Variable: Composite Fiscal Stress Index

Independent Variables	Std. B	t	Sig.
SMC	-0.117***	-3.301	0.001
GMC	-0.006	-0.171	0.864
Population	-0.048	-1.179	0.239
Population Growth	0.022	0.613	0.540
Population Density	0.031	0.803	0.422
Median Age of Residents	0.005	0.118	0.906
Per Capita Income	-0.488***	-10.647	0.000
Percent Owner-Occupied Home	0.113**	2.592	0.010
Unemployment Rate	0.013	0.322	0.748
Crime Rate	-0.063	-1.732	0.084
Current Liabilities	-0.094**	-2.645	0.008
MSA	0.059	1.488	0.137
Medium-Size City	-0.010	-0.280	0.780
Big City	0.018	0.429	0.668
(Constant)	172.497	69.828	0.000

N	693
R	0.476
Adjusted R Square	0.210
Std. Error of the Estimate	7.100
F	14.155
Sig.	0.000

Note: Cell entries are standardized regression coefficients.
* $0.05 \geq p < 0.01$ two-tailed test
** $0.01 \geq p < 0.001$ two-tailed test
*** $0.001 \geq p$ two-tailed test

Table 12: Assessing the Impact of Municipal Administrative Structures on Revenue Capacity Per Capita of GMC and SMC

H2 - Dependent Variable: Revenue Capacity Per Capita

Independent Variables	Std. B	t	Sig.
SMC	0.174***	5.242	0.000
GMC	0.069*	2.093	0.037
Population	0.240***	6.256	0.000
Population Growth	-0.088**	-2.581	0.010
Population Density	-0.049	-1.364	0.173
Median Age of Residents	0.178***	4.269	0.000
Per Capita Income	0.156***	3.625	0.000
Percent Owner-Occupied Home	-0.386***	-9.453	0.000
Unemployment Rate	-0.076*	-2.007	0.045
Crime Rate	0.089**	2.579	0.010
Current Liabilities	0.019	0.584	0.560
MSA	-0.012	-0.334	0.738
Medium-Size City	0.059	1.780	0.075
Big City	0.069	1.720	0.086
(Constant)	1052.177	5.749	0.000

N	693
R	0.565
Adjusted R Square	0.305
Std. Error of the Estimate	525.972
F	22.657
Sig.	0.000

Note: Cell entries are standardized regression coefficients.
* $0.05 \geq p < 0.01$ two-tailed test
** $0.01 \geq p < 0.001$ two-tailed test
*** $0.001 \geq p$ two-tailed test

Table 13: Assessing the Impact of Municipal Administrative Structures on Per Capita General Expenditures of GMC and SMC

H3 - Dependent Variable: Per Capita General Expenditures

Independent Variables	Std. B	t	Sig.
SMC	0.166***	5.268	0.000
GMC	0.072**	2.259	0.024
Population	0.225***	6.109	0.000
Population Growth	-0.089**	-2.712	0.007
Population Density	-0.029	-0.830	0.407
Median Age of Residents	0.170***	4.241	0.000
Per Capita Income	0.183***	4.420	0.000
Percent Owner-Occupied Home	-0.365***	-9.338	0.000
Unemployment Rate	-0.091*	-2.506	0.012
Crime Rate	0.062	1.880	0.060
Relative Fiscal Capacity	0.182***	5.926	0.000
Relative Revenue Effort	-0.225***	-7.010	0.000
MSA	-0.035	-0.994	0.321
Medium-Size City	0.073*	2.262	0.024
Big City	0.084*	2.193	0.029
(Constant)	-2611.691	-2.790	0.005

N	693
R	0.611
Adjusted R Square	0.360
Std. Error of the Estimate	507.347
F	26.914
Sig.	0.000

Note: Cell entries are standardized regression coefficients.
* $0.05 \geq p < 0.01$ two-tailed test
** $0.01 \geq p < 0.001$ two-tailed test
*** $0.001 \geq p$ two-tailed test

Table 14: Assessing the Impact of Municipal Administrative Structures on the FTE Employee Rate of GMC and SMC

H4 - Dependent Variable: FTE Rate

Independent Variables	Std. B	t	Sig.
SMC	0.211***	5.791	0.000
GMC	0.053	1.428	0.154
Population	0.123**	2.883	0.004
Population Growth	-0.099**	-2.647	0.008
Population Density	-0.089*	-2.234	0.026
Median Age of Residents	0.196***	4.246	0.000
Per Capita Income	-0.049	-1.021	0.308
Percent Owner-Occupied Home	-0.327***	-7.337	0.000
Unemployment Rate	-0.131**	-3.126	0.002
Crime Rate	0.056	1.473	0.141
Relative Fiscal Capacity	0.073*	2.050	0.041
Relative Revenue Effort	-0.188***	-5.064	0.000
MSA	0.080	1.921	0.055
Medium-Size City	0.042	1.138	0.255
Big City	0.016	0.352	0.725
(Constant)	34.619	0.200	0.841

N	590
R	0.544
Adjusted R Square	0.277
Std. Error of the Estimate	84.549
F	16.058
Sig.	0.000

Note: Cell entries are standardized regression coefficients.
* $0.05 \geq p < 0.01$ two-tailed test
** $0.01 \geq p < 0.001$ two-tailed test
*** $0.001 \geq p$ two-tailed test

General management cities (GMC) had significantly lower revenue capacities per capita and per capita general fund expenditures than strong mayor cities (SMC). Also, strong mayor cities (SMC) had higher revenue capacities per capita and per capita general fund expenditures than general management cities (GMC) at a very highly significant level.

Table 15: Comparison Fiscal Performance Indicator Between GMC and SMC

Fiscal Performance Indicators	General Management Cities (GMC)	Strong Mayor Cities (SMC)
H1-Composite Fiscal Stress Index	-0.006	-0.117***
H2-Revenue Capacity Per Capita	0.069*	0.174***
H3-Per Capita General Expenditures	0.072*	0.166***
H4-FTE Employee Rate	0.053	0.211***

Note: Cell entries are standardized regression coefficients.
* $0.05 \geq p < 0.01$ two-tailed test
** $0.01 \geq p < 0.001$ two-tailed test
*** $0.001 \geq p$ two-tailed test

The FTE employee rate of general management cities (GMC) was lower than that of strong mayor cities (SMC), but not at a significant level. However, the FTE employee rate of strong mayor cities (SMC) was higher than of general management cites (GMC) at a very highly significant level. Therefore, these three models (i.e., models based on revenue capacity per capita, per capita general fund expenditures and FTE employee rate) supported the research hypotheses that general management cities (GMC) were likely to have better fiscal performance than strong mayor cities (SMC).

The strong mayor cities (SMC) had a lower composite fiscal stress index level at a very highly significant level when compared with the general

management cities' composite fiscal stress index level. Therefore, the hypothesis that the general management administrative structures were likely to have a lower composite fiscal stress index than strong mayor cities -- was rejected on the grounds of the regression analysis findings. The composite fiscal stress index had an inverse relationship with the strong mayor cities. This called for further investigation of the composite fiscal stress index municipal financial measure and will be explored later in this chapter.

General Management Cities (GMC) Versus Council Manager Cities (CMC)

This thesis hypothesized that the general management cities (GMC) were more likely to have a lower composite fiscal stress index, revenue capacity per capita, lower per capita general expenditures, and full-time equivalent employee rate than council-manager cities (CMC).

On contrary, the council-manager cities (CMC) had better fiscal performance levels than general management cities (GMC) except for composite fiscal stress index. Council-manager cities (CMC) had lower revenue capacity per capita, per capita general fund expenditures and FTE employee rate than general management cities (GMC). Therefore, these three models did not support the research hypotheses that claimed general management cities (GMC) would have better fiscal performance than council-manager cities (CMC).

The absolute value of the correlation coefficient (R) for all the models was positive and about 0.5 or above 0.5. The goodness of the fit for the proposed regression equations was at an acceptable level. This showed that

there was an acceptable level of correlation between independent and dependent variables. The adjusted R^2 or the coefficient of determination of the composite fiscal stress index regression model was 0.21. Therefore, the proposed models to test the composite fiscal stress index explained the 21% of variability in the composite fiscal stress index. Similarly, the other proposed regression models explained 31% of the variability in the revenue capacity per capita, 36% of the variability in the per capita general expenditures and 28% of the variability in the FTE employee rate. The small city variables were dropped from the regression equations.

Thus, three out of four research hypotheses were not rejected based on the results of regression analyses. In a nutshell, the overall outcome of the analyses showed that general management cities (GMC) had better fiscal performance than the strong mayor cities (SMC), but council-manager cities (CMC) still had best fiscal performance than the general management cities (GMC) except for the composite fiscal index measure.

In order to understand the observed deviation of the composite fiscal stress index figure from the general pattern of municipal fiscal performance indicators among cities (i.e., strong mayor cities' lowest fiscal stress index level when compared with other municipal administrative structures), the computation of the composite fiscal stress index level should be analyzed and compared with the computation of the other three municipal financial measures (i.e., revenue capacity per capita, per capita general expenditures and FTE employee rate).

The adopted model devised by Virginia's Commission on Local Government that, in turn, can be traced back to Virginia's Joint Legislative and Audit Commission, and ultimately back to the U.S. Advisory Commission on Intergovernmental Relations. This methodology of computing the fiscal stress indicator is a relative measure and computed the stress index level of a municipality to a given city size group (such as small, medium-size and big city). Therefore, this computation accounts for both the size of the population and the size of the city.

The other municipal fiscal performance measures employed in the regression model were computed after the general standardization technique such as per capita measures (as in revenue capacity per capita and per capita general expenditures) and rate of an incident measure (as FTE employee rate). These methods account only for the size of the population. Therefore, the main criterion that differentiated these measures from the composite fiscal stress index was the absence of the computation of a relative measure to a given city size group. That is, city size was not taken into account when operationalizing the fiscal performance measures of revenue capacity, general expenditures, and FTE employees. Thus, the difference in the computation technique might have been the cause for the observed deviation in the fiscal stress index level when compared with the pattern of other fiscal performance measures pattern.

From the regression models that compared the strong mayor cities (SMC) against the general management cities (GMC), it can be concluded that

having a professional city manager helped a city to have better fiscal performance level than a city that had no professional manager. However, when the general management cities (GMC) were compared with council-manager cities (CMC), the council-manager cities (CMC) fared better than general management cities (GMC). This could be inferred from the administrative relationship between elected and appointed officials; and the power of decision-making and implementing authority of the different types of managerial positions. The results suggested that the council-manager cities (CMC) modeled after the politics-administration dichotomy model helped the cities to attain better fiscal performance level. Therefore, a clear separation of powers and authority to make and implement decisions might be necessary for a city manager to guide a city to achieve better fiscal performance levels.

Analysis of the Environmental Variables

The Influence of Socioeconomic Variables on Municipal Fiscal Performance

This study employed population, population growth, population density, median age of residents, per capita income, percent-owner occupied home, unemployment rate, crime rate, current liabilities, relative fiscal capacity, relative revenue effort, MSA status, and size of the city socioeconomic variables as control variables in the regression equations. The following paragraphs discusses only the repeated strength of certain predictors that are statistically significant in the regression equations as shown in Tables 16 through 19.

In general, the variable of percent owner-occupied home and relative revenue effort accounted for most of the variance for all the models except for two or three equations. Customarily, the variables of per capita income and population variables are employed as the surrogate measures to account for variances of revenue and expenditures in studies of municipal governments' efficiency. However, according to this study, the percent owner-occupied home and revenue effort emerged as the variables accounting for most of the variances that city can face.

Population

Population is a useful surrogate measure for other variations that may account for municipal fiscal performance outcomes and it was either statistically highly significant or at a very highly significant among most of the municipal fiscal performance measures. Especially populations of strong mayor cities had highly significant impact on municipal revenue and expenditures. This showed that strong mayor cities with larger populations raised and spent more than other administrative structures. Big cities that were lead by the strong mayors showed the similar trend.

Population Growth

Population growth had the same basic effect in the regression models based on the revenue capacity per capita, per capita general fund expenditures, and the FTE employee rate. It reflected a negative sign at a highly significant and a very highly significant level. This indicated that growing cities tended to raise and spend slightly less and employ fewer employees on an average than

those with slower growth regardless of their municipal administrative structure. Particularly the growing general management cities had fewer employees than other types of cities at a significant level. Another possible explanation can be that cities with the fastest growth in population need time in filling the gap in increased service demands associated with growth sprout.

Population Density

Generally, population density bore an inverse relationship to the revenue capacity per capita, per capita general expenditures and the FTE employee rate. This meant that, when the density increased 1%, the cities could provide cost-efficient service provision to their citizens by spending less in per capita expenditures and by hiring fewer employees. The density impacted the FTE employee rate negatively at a significant level, and this effect was very highly significant in council-manager cities.

Median Age of Population

When the median age of a population increases, it generally increases the cost of service provision at a very highly significant level. This was shown by an increase in the municipal per capita expenditures and also resulted in more FTE employee rate in response to the increased service demands. However, the median age of residents was also positively related to revenue capacity per capita at highly significant levels. This could be because more adults were employed and active in the workforce, and their spending power stimulating the local economy that could generate a high revenue capacity per capita for the city.

Table 16: Assessing the Influence of Socioeconomic Control Variables on Composite Fiscal Stress Index

DV: Composite Fiscal Stress Index	All cities	SMC	CMC	GMC
Control Variables	Std. B	Std. B	Std. B	Std. B
Population	-0.064	-0.150	-0.081	0.154
Population Growth	0.035	-0.047	0.005	0.183
Population Density	0.038	0.059	0.051	0.115
Median Age of Residents	-0.004	-0.249	0.037	-0.204
Per Capita Income	-0.471***	-0.156	-0.549***	-0.749***
Percent Owner Occupied Home	0.118**	0.447**	0.067	0.415*
Unemployment Rate	0.023	0.125	-0.004	-0.146
Crime Rate	-0.062	-0.157	-0.065	-0.121
Current Liabilities	-0.078*	0.161	-0.107**	-0.426*
MSA	0.056	0.075	0.050	0.120
Medium Size City	-0.005	0.137	-0.023	0.112
Big City	0.022	0.188	0.050	-0.073
(Constant)	171.663	168.122	173.414	190.230
N	693	112	534	47
R	0.462	0.440	0.519	0.696
Adjusted R Square	0.200	0.096	0.252	0.302
Std. Error of the Estimate	7.147	8.636	6.699	6.468
F	15.396	1.985	15.981	2.659
Sig.	0.000	0.033	0.000	0.012

Note: Cell entries are standardized regression coefficients.
* $0.05 \geq p < 0.01$ two-tailed test
** $0.01 \geq p < 0.001$ two-tailed test
*** $0.001 \geq p$ two-tailed test

Table 17: Assessing the Influence of Socioeconomic Control Variables on Revenue Capacity Per Capita				
DV: Revenue Capacity Per Capita	All Cities	SMC	CMC	GMC
Control Variables	Std. B.	Std. B.	Std. B.	Std. B.
Population	0.261***	0.348***	0.019	-0.013
Population Growth	-0.108**	-0.011	-0.070	-0.263
Population Density	-0.054	-0.060	-0.097*	-0.081
Median Age of Residents	0.193***	0.314**	0.176***	0.205
Per Capita Income	0.130**	0.064	0.201***	0.430*
Percent Owner Occupied Home	-0.394***	-0.596***	-0.405***	-0.629***
Unemployment Rate	-0.091*	-0.088	-0.084	-0.057
Crime Rate	0.091*	0.073	0.116**	0.122
Current Liabilities	-0.006	-0.207*	0.049	0.195
MSA	-0.006	-0.171	0.055	-0.009
Medium Size City	0.053	0.107	0.091*	-0.093
Big City	0.077	0.160	0.053	0.306
(Constant)	1151.540	1308.942	1087.934	615.722
N	693	112	534	47
R	0.538	0.715	0.459	0.723
Adjusted R Square	0.277	0.453	0.192	0.354
Std. Error of the Estimate	536.481	669.500	460.148	609.755
F	23.049	8.647	11.568	3.099
Sig.	0.000	0.000	0.000	0.005
Note: Cell entries are standardized regression coefficients. * $0.05 \geq p < 0.01$ two-tailed test ** $0.01 \geq p < 0.001$ two-tailed test *** $0.001 \geq p$ two-tailed test				

Table 18: Assessing the Influence of Socioeconomic Control Variables on Per Capita General Expenditures

DV: Per Capita General Expenditures	All Cities	SMC	CMC	GMC
Control Variables	Std. B	Std. B	Std. B	Std. B
Population	0.244***	0.257*	0.009	0.096
Population Growth	-0.112***	-0.122	-0.073	-0.194
Population Density	-0.032	0.005	-0.064	0.012
Median Age of Residents	0.185***	0.293**	0.163***	0.127
Per Capita Income	0.162***	0.168	0.220***	0.356
Percent Owner Occupied Home	-0.376***	-0.561***	-0.363***	-0.548***
Unemployment Rate	-0.103**	-0.019	-0.106*	-0.203
Crime Rate	0.062	-0.044	0.087*	0.092
Relative Fiscal Capacity	0.173***	-0.018	0.245***	0.176
Relative Revenue Effort	-0.228***	-0.216*	-0.283***	-0.222
MSA	-0.031	-0.244**	0.031	0.012
Medium Size City	0.066*	0.161*	0.099*	-0.084
Big City	0.090*	0.224*	0.071	0.210
(Constant)	-2249.285	3363.984	-2861.927	-5043.313
N	693	112	534	47
R	0.588	0.723	0.559	0.767
Adjusted R Square	0.333	0.459	0.295	0.427
Std. Error of the Estimate	517.806	658.396	438.173	584.241
F	27.577	8.240	18.150	3.639
Sig.	0.000	0.000	0.000	0.001

Note: Cell entries are standardized regression coefficients.
* $0.05 \geq p < 0.01$ two-tailed test
** $0.01 \geq p < 0.001$ two-tailed test
*** $0.001 \geq p$ two-tailed test

Table 19: Assessing the Influence of Socioeconomic Control Variables on FTE Employee Rate				
DV: FTE Rate	All Cities	SMC	CMC	GMC
Control Variables	Std. B.	Std. B.	Std. B.	Std. B.
Population	0.150***	0.098	-0.021	0.044
Population Growth	-0.122**	-0.113	-0.088*	-0.344*
Population Density	-0.096*	-0.031	-0.150***	-0.006
Median Age of Residents	0.215***	0.180	0.216***	0.335
Per Capita Income	-0.074	0.021	-0.062	0.302
Percent Owner Occupied Home	-0.346***	-0.437**	-0.355***	-0.498*
Unemployment Rate	-0.144***	-0.034	-0.172***	0.099
Crime Rate	0.054	-0.066	0.068	0.225
Relative Fiscal Capacity	0.060	-0.049	0.101*	-0.049
Relative Revenue Effort	-0.197***	-0.236*	-0.207***	-0.012
MSA	0.084*	-0.237	0.191***	-0.080
Medium Size City	0.028	0.049	0.092*	-0.144
Big City	0.016	0.200	-0.002	0.291
(Constant)	119.303	889.381	-13.932	190.965
N	590	93	455	42
R	0.504	0.536	0.540	0.666
Adjusted R Square	0.237	0.170	0.271	0.184
Std. Error of the Estimate	86.864	128.043	72.215	68.995
F	15.078	2.454	13.982	1.713
Sig.	0.000	0.007	0.000	0.113

Note: Cell entries are standardized regression coefficients.
* $0.05 \geq p < 0.01$ two-tailed test
** $0.01 \geq p < 0.001$ two-tailed test
*** $0.001 \geq p$ two-tailed test

Per Capita Income

When the per capita income of a locality increased, it resulted in a lower fiscal stress index score for a city at very highly significant levels. Especially, in the council-manager cities, an increase in their citizens' wealth enabled the cities to raise more revenue and spend more on services at a highly significant level.

Unemployment Rate

As a general observation on the results, the unemployment rate translated into less revenue generation for cites. When the unemployment rate increased, it increased the cities' fiscal stress index level at significant levels. It also reduced the local revenues at significant levels, the cities' ability to provide services at significant levels, and the cities' ability to employ more employees at significant levels. Particularly, this pattern was present in council-manager cities at significant levels.

Percent Owner-Occupied Home

The variable of percent owner-occupied home had an inverse relationship to all municipal fiscal performance measures in all the municipal administrative structures at a significant to a very highly significant level except for the fiscal stress index measure. The percent owner-occupied home is a surrogate measure for percentage of homeowners. The percentage of homeowners represents the population, which contributes to property tax revenues. This finding showed that residents who favored lower property tax negatively impacted tax revenues and municipal spending, and constrained municipal taxes and spending at significant levels too. Their expectations of low

spending indirectly influenced the cities in employing fewer numbers of employees.

Percent Total Current Liabilities

Increasing current liabilities at the end of the year as a percentage of net-operating revenue demonstrated the poor financial condition of a city. Poor financial conditions affected the strong mayor cities' ability to generate revenues and spend at significantly more than that of any other type of cities.

Relative Fiscal Capacity

The fiscal capacity measures the localities' financial ability to provide service. Especially in council-manager cities, the better fiscal capacity levels enable the cities to spend more on municipal services and hire more employees for service provision at highly significant levels.

Relative Revenue Effort

The revenue effort is the degree to which municipalities actually utilize the revenue-generating potential of its locality by utilizing local taxes, service charges, license fees, etc. A high level of revenue effort of a locality can be translated as the financial struggle to meet the service demands. As expected, a higher revenue effort increased the municipalities' stress index scores significantly, regardless of the type of municipal administrative structures. An increase in revenue effort reduced the cities' ability to raise more revenues, spend more on services and hire more employees to provide services at very highly significant levels. This could be interpreted to mean

that, when revenue efforts increased, it could end in a cutback on municipal services.

Presence in Metropolitan Statistical Area (MSA)

A city's presence in a MSA locality significantly increased the fiscal stress. Especially strong mayor cities present in the MSA faced a reduced capability to raise revenue and spend on services at significant levels. The metropolitan council-manager cities employed more employees than any other form of cities at very highly significant levels.

Analysis of Changes over Time

Exploratory Analysis on the Impact of Administrative Structural Changes of General Management Cities on their Fiscal Performance

This cross-sectional research design restricts the capacity of a study to determine whether a change intervention in government structure affects municipal fiscal performance. A time-series design is clearly preferable if one wishes to assess the consequences of administrative structural changes. However, as an exploratory approach, this study compared the differences in municipal fiscal performance measures of general management cities that consistently maintained the GMC status with other general management cities that opted to drop the GMC status and with the cities that recently adopted the general management municipal structure.

The impacts of such change-intervention cases on municipal fiscal performance levels were compared among the general management cities

that consistently maintained the general management structure for five years, that dropped the GMC status and that recently adopted the GMC status. The initial observations on the comparative analysis of the means of municipal financial figures showed that the general management cities that 'dropped their GMC status' had a better fiscal performance level among the group and these cities were selected as the reference category.

Thus, two dummy variables were used – one for the cities that maintained the GMC status and the other for the cities that adopted the GMC status. In order to "dummy up" the ordinal 'GMC status variable' (that was originally coded as, 1 = dropped GMC, 2 = adopted GMC, and 3 = maintained GMC), it was recoded into dummy variables by applying the following recoding steps:

Adopted GMC = 1, if previous coding was 2; if else 0 (i.e., 1 and 3 recoded to 0)

Maintained GMC = 1, if previous coding was 3; if else 0 (i.e., 1 and 2 recoded to 0)

To reflect,

If city = Dropped GMC, intercept = $\beta 0$

If city = Adopted GMC, intercept = $\beta 0 + \gamma$ Adopted GMC

If city = Maintained GMC, intercept = $\beta 0 + \gamma$ Maintained GMC

Table 20: Assessing the Impact of Change Intervention on the Composite Fiscal Stress Index of Adopted and Maintained GMC Status Cities

Dependent Variable: Composite Fiscal Stress Index

Independent Variables	Std. B	t	Sig.
Adopted GMC	0.042	0.457	0.648
Maintained GMC	0.029	0.272	0.786
Population	0.026	0.246	0.806
Population Growth	0.061	0.779	0.437
Population Density	0.005	0.063	0.950
Median Age of Residents	0.185	1.966	0.051
Per Capita Income	-0.604***	-5.755	0.000
Percent Owner-Occupied Home	0.127	1.299	0.196
Unemployment Rate	-0.039	-0.375	0.709
Crime Rate	0.066	0.693	0.490
Current Liabilities	0.051	0.595	0.553
MSA	-0.111	-1.168	0.245
Medium-Size City	-0.092	-1.082	0.281
Big City	0.009	0.078	0.938
(Constant)	161.469	18.265	0.000
N			143
R			0.529
Adjusted R Square			0.201
Std. Error of the Estimate			7.677
F			3.548
Sig.			0.000

Note: Cell entries are standardized regression coefficients.
* $0.05 \geq p < 0.01$ two-tailed test
** $0.01 \geq p < 0.001$ two-tailed test
*** $0.001 \geq p$ two-tailed test

Table 21: Assessing the Impact of Change Intervention on the Revenue Capacity Per Capita of Adopted and Maintained GMC Status Cities			
Dependent Variable: Revenue Capacity Per Capita			
Independent Variables	**Std. B**	**t**	**Sig.**
Adopted GMC	0.095	1.099	0.274
Maintained GMC	0.045	0.448	0.655
Population	-0.022	-0.220	0.827
Population Growth	-0.155*	-2.097	0.038
Population Density	-0.032	-0.394	0.694
Median Age of Residents	0.033	0.372	0.711
Per Capita Income	0.319**	3.205	0.002
Percent Owner-Occupied Home	-0.382***	-4.102	0.000
Unemployment Rate	0.012	0.116	0.908
Crime Rate	-0.049	-0.543	0.588
Current Liabilities	-0.146	-1.792	0.075
MSA	0.115	1.267	0.207
Medium-Size City	0.112	1.389	0.167
Big City	0.329**	2.971	0.004
(Constant)	1476.417	2.082	0.039
N			143
R			0.592
Adjusted R Square			0.280
Std. Error of the Estimate			615.767
F			4.940
Sig.			0.000
Note: Cell entries are standardized regression coefficients. * 0.05 ≥ p < 0.01 two-tailed test ** 0.01 ≥ p < 0.001 two-tailed test *** 0.001 ≥ p two-tailed test			

Table 22: Assessing the Impact of Change Intervention on the Per Capita General Expenditures of Adopted and Maintained GMC Status Cities

Dependent Variable: Per Capita General Expenditures

Independent Variables	Std. B	t	Sig.
Adopted GMC	0.137	1.619	0.108
Maintained GMC	0.060	0.622	0.535
Population	-0.015	-0.152	0.880
Population Growth	-0.147*	-2.046	0.043
Population Density	-0.046	-0.584	0.560
Median Age of Residents	0.113	1.290	0.199
Per Capita Income	0.298**	3.068	0.003
Percent Owner-Occupied Home	-0.400***	-4.521	0.000
Unemployment Rate	0.011	0.110	0.912
Crime Rate	-0.088	-1.010	0.314
Relative Fiscal Capacity	0.148*	2.077	0.040
Relative Revenue Effort	-0.203**	-2.719	0.007
MSA	0.087	0.988	0.325
Medium-Size City	0.081	1.020	0.310
Big City	0.294**	2.782	0.006
(Constant)	-2731.403	-1.025	0.307

N	143
R	0.629
Adjusted R Square	0.325
Std. Error of the Estimate	602.292
F	5.550
Sig.	0.000

Note: Cell entries are standardized regression coefficients.
* $0.05 \geq p < 0.01$ two-tailed test
** $0.01 \geq p < 0.001$ two-tailed test
*** $0.001 \geq p$ two-tailed test

Table 23: Assessing the Impact of Change Intervention on the FTE Employee Rate of Adopted and Maintained GMC Status Cities

Dependent Variable: FTE Rate

Independent Variables	Std. B	T	Sig.
Adopted GMC	0.129	1.326	0.188
Maintained GMC	0.042	0.378	0.706
Population	-0.009	-0.081	0.936
Population Growth	-0.262**	-3.155	0.002
Population Density	-0.061	-0.695	0.488
Median Age of Residents	0.204*	2.021	0.046
Per Capita Income	0.152	1.297	0.197
Percent Owner-Occupied Home	-0.455***	-4.514	0.000
Unemployment Rate	-0.043	-0.393	0.695
Crime Rate	-0.139	-1.390	0.167
Relative Fiscal Capacity	0.025	0.309	0.758
Relative Revenue Effort	-0.105	-1.225	0.223
MSA	0.113	1.113	0.268
Medium-Size City	0.088	0.955	0.342
Big City	0.183	1.503	0.136
(Constant)	120.336	0.320	0.749

N	123
R	0.581
Adjusted R Square	0.245
Std. Error of the Estimate	80.319
F	3.642
Sig.	0.000

Note: Cell entries are standardized regression coefficients.
* $0.05 \geq p < 0.01$ two-tailed test
** $0.01 \geq p < 0.001$ two-tailed test
*** $0.001 \geq p$ two-tailed test

Using the regression model, the dummy-variable regression coefficients measured the difference in the variables affecting municipal fiscal performance in the 'adopted GMC status' cities and the 'maintained GMC status' cities. The socioeconomic variables that considered control vectors were used to control for the most obvious exogenous effects on the dependent variables. The control variables used were: population, population growth, population density, median age of residents, per capita income, percent owner-occupied homes, unemployment rate, crime rate, MSA, city size, relative fiscal capacity, relative revenue effort, and current liabilities of the cities.

The results of the regression analyses are shown in Tables 20 through 23 that depict the standardized beta coefficients for each of the models. The beta coefficients measured the change in the standard deviation of the dependent variable associated with a unit change in the standard deviation of the independent variable.

Table 24 illustrates the summary statistics on the comparison of change-intervention influence on the fiscal performance indicators of 'adopted GMC status' cities against the 'dropped GMC status' cities (as shown in Tables 20 through 23). In sum, there were no significant differences in fiscal performance levels of different GMC status cities.

Table 24: Comparison Fiscal Performance Indicator Between Different GMC Status Cities		
Fiscal Performance Indicators	**Adopted GMC**	**Maintained GMC**
Composite Fiscal Stress Index	0.042	0.029
Revenue Capacity Per Capita	0.095	0.045
Per Capita General Expenditures	0.137	0.060
FTE Employee Rate	0.129	0.042
Note: Cell entries are standardized regression coefficients. No observation is significant at * $0.05 \geq p < 0.01$ two-tailed test		

That is, cities that maintained the GMC status had lower composite fiscal stress indices, revenue capacities per capita, per capita general expenditures and FTE employee rates when compared with cities that adopted the GMC status recently, but not at significant level. However, the regression models showed that population growth had an inverse relationship with revenue capacity per capita, per capita general expenditures, and the FTE employee rate at significant level.

This can be seen, as previously discussed in the means test results, as a response to a changing need resulting from population growth and an increased service demand resulting from the fluctuations in the population. However, this will be further probed in the following section when analyzing the impact of socioeconomic variables on municipal fiscal performance measures among city groups differing in their GMC status.

The Influence of Socioeconomic Variables on Municipal Fiscal Performance of Different GMC Status Cities:

In order to control the effect of socioeconomic variables in the regression equation, this study employed population, population growth, population density, median age of residents, per capita income, percent-owner occupied home, unemployment rate, crime rate, current liabilities, relative fiscal capacity, relative revenue effort, MSA status, and size of the city. The following paragraphs discusses only the strength of certain predictors that are statistically significant in the regression equations as shown in Tables 25 through 28.

In general, the variable of percent owner-occupied home accounted for most of the variance for all the models except for two or three equations. Fluctuations in population growth significantly affected all types of general management cities' ability to raise revenues and spend on city services. The fluctuations also had an impact on the number of employees these cities hired for service provision inversely. This meant, that population growth brought cost-efficient service provision for general management cities that maintained or dropped their GMC status at significant levels. General management cities that recently hired a professional manager showed the same pattern, but not at a significant level.

General management cities that dropped the GMC status showed that an increase in their population density enabled them to provide cost-efficient municipal services. Per capita income of the residents of all general

management cities reduced the fiscal stress at a very highly significant level. Especially, the cities that adopted GMC status recently showed that their citizens paid more for their services, a sign of those cities' need for more revenues to balance the municipal budget.

The inverse relationship of the percent owner-occupied home with revenue capacity per capita, per capita general expenditures, and the FTE employee rate was at a significant to a very highly significant level. This showed that citizens constrained municipal taxes and spending at significant levels in these cities. The unemployment levels of cities that recently adopted GMC status showed that these cities faced increased expenditure levels at a significant level due to increased unemployment in their jurisdictions. The negative impact of high unemployment rate is another cause for recently adopted GMC status cities' poor financial condition.

Current liabilities of municipalities of all categories of GMC status significantly increased the fiscal stress level. Cities that recently hired professional managers showed that their outstanding debts decreased their ability raise revenue and spend for services at a highly significant level. In sum, the cities that recently adopted GMC status or hired professional managers are in a poor financial condition. Thus, it can be concluded that the main reason for these cities' decisions to turn to professional help is the need to ameliorate their unfavorable financial conditions.

Table 25: Assessing the Influence of Socioeconomic Control Variables on Composite Fiscal Stress Index on Cities with Different GMC Status

DV: Composite Fiscal Stress Index	All Cities	GMC Status		
		Dropped	Maintained	Adopted
Control Variables	Std. B.	Std. B.	Std. B.	Std. B.
Population	0.023	0.055	0.154	-0.269
Population Growth	0.059	-0.115	0.186	0.234
Population Density	0.003	0.460*	0.114	0.115
Median Age of Residents	0.187*	0.403**	-0.201	0.331
Per Capita Income	-0.601***	-0.830***	-0.751***	-0.509**
Percent Owner Occupied Home	0.124	0.103	0.411*	0.197
Unemployment Rate	-0.040	-0.219	-0.149	-0.266
Crime Rate	0.070	-0.073	-0.111	0.247
Current Liabilities	0.050	0.456**	-0.419*	0.122
MSA	-0.114	-0.226	0.113	0.082
Medium Size City	-0.083	0.045	0.123	-0.198
Big City	0.016	-0.279	-0.112	0.546
(Constant)	161.733	152.799	190.557	134.140
N	143	47	47	49
R	0.528	0.778	0.705	0.721
Adjusted R Square	0.212	0.466	0.319	0.360
Std. Error of the Estimate	7.624	6.968	6.525	6.734
F	4.178	4.351	2.799	3.247
Sig.	0.000	0.000	0.009	0.003

Note: Cell entries are standardized regression coefficients.
* $0.05 \geq p < 0.01$ two-tailed test
** $0.01 \geq p < 0.001$ two-tailed test
*** $0.001 \geq p$ two-tailed test

Table 26: Assessing the Influence of Socioeconomic Control Variables on Revenue Capacity Per Capita on Cities with Different GMC Status

DV: Revenue Capacity Per Capita	All Cities	GMC Status		
		Dropped	Maintained	Adopted
Control Variables	Std. B	Std. B	Std. B	Std. B
Population	-0.031	-0.030	-0.013	0.099
Population Growth	-0.159*	0.052	-0.263	-0.209
Population Density	-0.040	-0.551**	-0.081	-0.104
Median Age of Residents	0.039	-0.190	0.205	0.085
Per Capita Income	0.324***	0.358	0.431*	0.412*
Percent Owner Occupied Home	-0.390***	-0.565**	-0.629***	-0.424*
Unemployment Rate	0.011	0.106	-0.057	0.383*
Crime Rate	-0.044	-0.040	0.122	-0.199
Current Liabilities	-0.148	-0.372*	0.195	-0.378**
MSA	0.120	0.143	-0.009	-0.073
Medium Size City	0.131	0.014	-0.093	0.339*
Big City	0.341**	0.462**	0.306	0.155
(Constant)	1505.381	3664.770	614.991	1544.487
N	143	47	47	49
R	0.587	0.711	0.723	0.750
Adjusted R Square	0.284	0.331	0.354	0.417
Std. Error of the Estimate	613.887	581.899	609.720	526.125
F	5.698	2.898	3.100	3.857
Sig.	0.000	0.007	0.005	0.001

Note: Cell entries are standardized regression coefficients.
* $0.05 \geq p < 0.01$ two-tailed test
** $0.01 \geq p < 0.001$ two-tailed test
*** $0.001 \geq p$ two-tailed test

Table 27: Assessing the Influence of Socioeconomic Control Variables on Per Capita General Expenditures on Cities with Different GMC Status

		GMC Status		
DV: Per Capita General Expenditures	All Cities	Dropped	Maintained	Adopted
Control Variables	Std. B	Std. B	Std. B	Std. B
Population	-0.029	-0.009	0.075	0.102
Population Growth	-0.155*	0.070	-0.195	-0.190
Population Density	-0.058	-0.415*	0.019	0.058
Median Age of Residents	0.117	0.066	0.117	0.127
Per Capita Income	0.307**	0.080	0.373	0.449*
Percent Owner Occupied Home	-0.412***	-0.647***	-0.548***	-0.322
Unemployment Rate	0.012	0.020	-0.177	0.370*
Crime Rate	-0.080	-0.218	0.093	-0.219
Relative Fiscal Capacity	0.160*	0.081	0.168	0.120
Relative Revenue Effort	-0.187*	-0.245	-0.218	-0.103
MSA	0.098	0.087	0.015	-0.023
Medium Size City	0.110	-0.032	-0.078	0.308
Big City	0.309**	0.380*	0.227	0.054
(Constant)	-3237.537	2395.592	-4553.209	-2974.497
N	143	47	47	49
R	0.619	0.719	0.767	0.671
Adjusted R Square	0.321	0.326	0.426	0.246
Std. Error of the Estimate	603.758	587.410	585.078	594.293
F	6.172	2.714	3.621	2.204
Sig.	0.000	0.010	0.001	0.032

Note: Cell entries are standardized regression coefficients.
* $0.05 \geq p < 0.01$ two-tailed test
** $0.01 \geq p < 0.001$ two-tailed test
*** $0.001 \geq p$ two-tailed test

Table 28: Assessing the Influence of Socioeconomic Control Variables on FTE Employee Rate on Cities with Different GMC Status

DV: FTE Rate	All Cities	GMC Status		
		Dropped	Maintained	Adopted
Control Variables	Std B	Std B	Std B	Std B
Population	-0.026	0.060	0.046	0.150
Population Growth	-0.265**	-0.539*	-0.340*	0.000
Population Density	-0.071	-0.538*	-0.013	0.136
Median Age of Residents	0.211*	-0.220	0.338	0.528
Per Capita Income	0.162	0.080	0.291	0.216
Percent Owner Occupied Home	-0.477***	-0.487*	-0.492*	-0.411
Unemployment Rate	-0.039	-0.164	0.095	0.215
Crime Rate	-0.138	-0.300	0.222	-0.319
Relative Fiscal Capacity	0.035	0.116	-0.021	0.160
Relative Revenue Effort	-0.092	0.020	-0.015	-0.160
MSA	0.136	0.145	-0.075	0.000***
Medium Size City	0.114	-0.055	-0.141	0.392
Big City	0.197	0.167	0.283	0.009
(Constant)	68.972	147.384	60.694	-857.128
N	123	41	42	40
R	0.572	0.746	0.665	0.683
Adjusted R Square	0.247	0.343	0.183	0.230
Std. Error of the Estimate	80.247	76.690	69.070	88.009
F	4.071	2.605	1.708	1.970
Sig.	0.000	0.017	0.115	0.070

Note: Cell entries are standardized regression coefficients.
* $0.05 \geq p < 0.01$ two-tailed test
** $0.01 \geq p < 0.001$ two-tailed test
*** $0.001 \geq p$ two-tailed test

From a comparison of these findings with those of the impact of population growth on general management cities, it can be inferred that these cites faced this poor financial situation as the result of fluctuations in population growth that could have increased service demands. But this data-based assumption needs further testing to help in an understanding of the changes in the spending pattern of these cities in relation to population growth. An increase in revenue effort reduced the ability of cities of all GMC types to raise more revenues, spend more on services and hire more employees to provide services at very highly significant level.

Conclusion

The objective of this study is to test empirically the politics-administration complementarity model. By adopting the politics-administration complementarity model to a general management municipal administrative structure, this thesis hypothesizes that the general management cities are more likely to have lower composite fiscal stress indices, revenue capacities per capita, per capita general expenditures, and full-time equivalent rates of employees than strong mayor and council-manager cities.

To understand the impact of a general management city's administrative structure on a city's fiscal performance, the fiscal performance indicators of those cities were compared with those of strong mayor and council-manager cities. An initial investigation of the descriptive statistics showed that council-manager cities were more low taxing and low spending

than the other forms of municipal administrative structures such as strong mayor and general management cities. The strong mayor cities had the lowest fiscal stress index but their revenue capacity per capita, per capita general expenditures, and FTE employee rate were higher than those of the general management and council-manager cities. Similarly, council-manager cities had a higher fiscal stress index but lower revenue capacities per capita, per capita general expenditures and FTE employee rates than general management and strong mayor cities. The general management cities' fiscal performance fell between that of strong mayor and council-manager cities.

The council-manager cities that presented a better fiscal performance level were selected as a reference category in the regression model. The regression models confirmed the findings of the difference of the means test. The composite fiscal stress index was lower in strong mayor cities when compared with general management cities but the revenue capacity per capita, per capita general expenditures and the FTE employee rate were higher than the general management cities after controlling for other key variables. Especially, the composite fiscal stress index had an inverse relationship with the strong mayor cities' variable. This warranted further exploration to find the explanations for these outcomes.

Similarly, the composite fiscal stress index was lower in the general management cities when compared with the council-manager cities but the revenue capacity per capita, per capita general expenditures, and the FTE

employee rate were higher than the council-manager cities after controlling for other key variables.

An exploratory analysis of the general management cities of the three different GMC types was carried out by comparing them with each other. These cities had great fluctuations in population growth. The cities that recently adopted general management structure struggled financially. Thus, it was concluded that these cities could have hired managers to manage their financial issues.

Customarily, per capita income and population variables are employed as surrogate measures to account for variances in municipal services in studies of municipal efficiency. However, according to this study, percent-owner occupied home also emerged as another strong measure that accounts for most of the variances that city could face.

The following discussion part of this dissertation will explore the results of the statistical analyses in light of urban literature. The section will also analyze the implication of the findings of the study and recommendations for future research.

CHAPTER VI

DISCUSSION

Introduction

The past few decades have brought an increase in a hybrid form of municipal governments called general management cities. Though the traditional forms of strong mayor cities and reformed council-manager cities are still most prevalent, 12% (N=144) of cities with populations of 25,000 and more across the country now operate under a general management city version of municipal administrative structure. Most of these general management cities are populous enough. Yet almost nothing is known in any comparative or systematic way about the consequences of this lesser known hybrid municipal administrative structure.

A sizeable literature on the subject has analyzed the effects of the urban reform movement on city governments, but we have little understanding of the policy consequences of a general management structure among American cities. A frequently tested hypothesis in the urban policy literature is that different forms of municipal administrative structures have an impact on municipal fiscal performance, but the hybrid-nature of general management cities has always been left out of those analyses.

There has been a recent of interest in analyzing the contribution of non-traditional, hybrid government organizations to public administration theory and practice. This is evident from the latest studies conducted by Koppell

(2001), Moe (2001), and Hoffmann and Cassell (2002). These studies focus on the type of organizations that combine characteristics of public and private sector organizations. While analyzing federal quasi-governments, Moe (2001) raises the following questions; "Hybrid Organizations: Problem or Solution... Does this constitute a positive or negative factor in the performance of effective democratic governance? Should growth in the number and variety of hybrid organizations be encouraged, benignly recognized, or actively resisted?" These questions are not only important in federal-quasi government situations, but also in the atmosphere of hybrid municipal administration and organization.

Hybrid forms of municipal governments such as general management cities raise the same critical issues at the local level as well. While the local governments are experiencing financial stress for the last two decades, this study addresses one of the key questions in this context: what are the special contributions by professional city managers to the fiscal performance of hybrid municipal governments? Findings of this study shed more light on the role of professional management in the fiscal performance of U.S. general management cities. Box (1993) observes: "We seem to be in a period of flux and change characterized by questioning of structural forms of local government, this questioning may well grow more intense before it subsides."

Synopsis of the Research and its Findings

Studies by Stumm (1997) and Stumm and Khan (1996) on the effects of revenue generation and expenditure show that the municipal government structure is related to fiscal management policies that affect municipal property tax revenue and expenditures. Like the other urban researchers who were interested in municipal administrative structures' impact on policies, this study also intends to assess the impact of the general management administrative structure on its policy outcome.

To assess the effects of a general management city's municipal administrative structure, this study employed a cross-sectional research design. The analysis utilized 1997 Census of Governments' aggregated fiscal data on political jurisdiction that covered all the U.S. cities (N=1,166) that had a population of 25,000 or more as of 1996 estimated population. The analyses employed four most commonly used municipal fiscal performances dependent variables: (1) the composite fiscal stress index, (2) the revenue capacity per capita, (3) the per capita general expenditures, and (4) the FTE employee rate. Following are the main findings of this research:

H1. General management cities are likely to have lower fiscal stress than either strong mayor or council-manager cities

Results from this research do not support the hypothesis that general management cities have lower fiscal stress than strong mayor and council-manager cities. Strong mayor cities had the lowest fiscal stress levels compared to the other form of governments.

H2. General management cities are likely to have lower revenue capacity per capita than either strong mayor or council-manager cities

Results of this study support the hypothesis that general management cities have lower revenue capacity per capita than strong mayor cities.

H3. General management cities are likely to have lower general fund expenditures than either strong mayor or council-manager cities

Results of this study support the hypothesis that general management cities have lower per capita general fund expenditures than strong mayor cities.

H4. General management cities are likely to have lower full-time equivalent employee rate than either strong mayor or council-manager cities

Results of this study support the hypothesis that general management cities have lower full-time equivalent employee rate than strong mayor cities.

Thus, results of this study support the hypothesis that general management cities have better fiscal performance, such as lower revenue capacity per capita, per capita general expenditures and the FTE employee rate than the strong mayor cities. But the results failed to support the hypothesis that general management cities have a better fiscal performance levels than council-manager cities. However, the results supported the hypothesis that claimed that the general management cities have a lower fiscal stress index level than the council-manager cities. This research *rejected the null hypothesis of 'no difference'* (based on the two-tailed test) in fiscal stress index levels since the strong mayor cities had a significantly lower fiscal stress index level than general management cities.

To summarize, on the basis of the results, for cities over 25,000 persons the council-manager form of municipal administrative structure results in better fiscal performance level than either the strong mayor and the general management municipal administrative structures. This research hypothesized that general management cities would have better fiscal performance level than either the council-manager and strong mayor cities. Thus, general management cities with an administrative structure resembling the politics-administration complementarity model does not confirm the hypothesized superiority of that model with regard to the management of a municipality's fiscal affairs.

Though the findings did not support claims based on Svara's politics-administration complementarity model, still this study contributes substantially to the theory and practice of public administration, especially to municipal government administration as described in the following paragraphs. In the following section, rather than reviewing each hypotheses outcome, the prominent observations of the data analysis are discussed in the context of the urban literature.

Can Different Municipal Administrative Structures Affect Fiscal Performance of a City?

This is the basic question guiding this research. Does adopting a particular form of municipal administrative structure result in significant and visible changes in a city's fiscal behavior? One could assume that changes in

the structural characteristics of city government might have fiscal policy consequences. The frequently tested hypothesis in urban policy literature on municipal fiscal behavior claims that reform governments (council-manager cities) should tax and spend less than the strong mayor cities. However, as Morgan and Kickham (1999) observe, literature that addressed this fiscal efficiency issue reveals too much ambiguity and the results of such research have been mixed. Some studies (Stumm and Corrigan, 1998 and Massad, 1995) confirm the basic thesis that reformed cities are largely successful in meeting the efficiency criterion. Yet others (Deno and Mehay, 1987; Farnham, 1987; Hayes and Chang, 1990; Morgan and Pelissero, 1980) have found that city government structure has little or no effect on municipal public revenues and expenditures.

However, the literature on urban policies has long suggested that the form of city government should have policy consequences. Therefore, to understand the impact of general management cities administrative structure on municipal fiscal performances, this study adopted Svara's politics-administration complementarity model that theorized a mutually interdependent reciprocal influences in administrative relationship among elected and appointed officials to the general management cities.

In fact, Svara (1999a) distinguishes between chief administrators (all the professional city managers - regardless of form of municipal government) of the U.S. cities as *city managers* (council-manager cities' chief executives) and the *city administrators* (general management cities' chief executives). The

city managers may possess powers of setting the legislative agenda, controlling the budget, appointing department heads, and overseeing general city day-to-day operations.

On the other hand, city administrators of general management cities have much more circumscribed authority. They may have limited appointment and budgetary powers, for example operating under the close supervision of the elected mayor or the governing board. In such cases, the administrators have much less opportunity to shape a city's fiscal policies. Their activities may be restricted primarily to assigned tasks and giving advice at the request of the elected mayor. This is evident in ICMA's criteria for official recognition of council-manager and general management cities. This could mean that GMC's management position is an administrative position without proper authority to perform and make a difference in municipal fiscal policy.

Based on the administrative relationship, this thesis hypothesized that general management cities were more likely to have lower composite fiscal stress index, revenue capacity per capita, lower per capita general expenditures, and full-time equivalent rate of employees than both strong mayor and council-manager cities.

The underlying rationale of this study is the professional managerial training, type of the relationship among the elected and appointed officials, which granted the level of authority and the decision-making power of a municipal administrator, could make an observable difference in municipal fiscal performances.

The Association of Professional Management with Municipal Fiscal Performance

A frequently discussed hypothesis in the urban literature is that professionally managed cities should tax and spend less than non-professionally managed strong mayor cities. Some studies confirm the basic thesis that relying on the professional management and insulating elected executives from administrative authority will protect cities from big spending budget maximizing elected executives. However, some researchers have also found that changing the administrative structures, as prescribed by the reformers in the earlier part of twentieth century, has little, if any effect on taxing and spending policy of the municipal governments.

Massad (1995) claims that the researchers have been unable to answer the recurring question as to whether the council-manager system results in more efficient municipal administration than the mayor-council system with certainty. Furthermore, he states that, to date, empirical evidence regarding the relative merits of council-manager versus mayor-council systems has been ambiguous. More than the lack of definitive findings on the traditional administrative structures' impact on municipal fiscal behavior, the impact of the hybrid form of general management municipal administrative structure is virtually unknown in the urban literature.

Association of Professional Management and Municipal Revenue and Expenditures:

Stumm and Corrigan (1998) found that professionally managed cities have substantial and statistically significant, lower general expenditures. They state that, "while many other variables affected municipal expenditures, the effects of having a professional manager were clearly most substantial, resulting in per capita savings in the general fund of nearly $90 per capita in local general fund expenditures".

After analyzing Census Bureau data on municipal governments and data from the Places Rated Almanac, Massad (1995) found that large cities managed by city managers appear to be more efficient than those managed by mayors. This cost-benefit-perspective analysis significantly favors the council-manager form as more efficient than the mayor-council or strong mayor forms. Massad concludes that "city managers are demonstrably more responsible fiscally" than the mayor-council system. However, Massad finds no significant difference in the efficiency level between mayors and managers of small cities.

On the other hand, Davis and Hayes (1993) found that the presence of a city manager has no significant impact on efficiency. A time series analysis of 22 cities over 11 years, conducted by Morgan and Pelissero (1980), showed that that city government structure has little or no effect on municipal revenues and expenditures and different administrative structures in city government has virtually no effect on cities' fiscal behavior. Also, they find that changes in

city government structure have no impact on changes in taxation and spending levels. Similarly, Deno and Mehay (1987) found no apparent difference in the efficiency levels of the two municipal government structures. Hayes and Chang (1990) also found no differences when examining expenditures for police, fire, and sanitation in the ICMA's 1981 Municipal Yearbook of listed cities.

Contrary to their observations, this study finds significant differences in fiscal performances among the three municipal structures under study. Council-manager cities, which had a clear separation of power among municipal officials, have faired better than the other cities and have shown a better fiscal performance. The general management cities that had managers with a circumscribed authority followed the council-manager cities in fiscal performance. But the strong mayor cities, in the absence of a professional manager to oversee the municipal business, lagged in fiscal performance.

The regression models showed that the strong mayor cities had less fiscal stress index when compared with the general management cities and council-manager cities. But the council-manager cities raised less in revenue capacity per capita, spent less in general fund expenditures, and employed fewer employees than the strong mayor cities and the general management cities. The fiscal performance of general management cities fell in-between the strong mayor and the council-manager cities. These relationships held after controlling for independent influences such as differences in regional location, city size, MSA status, population, density, percent poverty of the

locality, unemployment rate, crime rate, fiscal capacity, and revenue effort of the locality.

Since this study included all the U.S. cities with populations 25,000 or more (from different regions of the country and with different city-sizes), the findings of this study help to settle the rhetoric on the association of municipal administrative structures or professional managements with efficient municipal functioning to considerable extent.

Recommendations for Future Research

The void in the urban literature is obvious when considering the number of studies that address the general management cities of the U.S. Therefore, in the following paragraphs, this study suggests a few angles that could be explored by the urban scholars in the future to fill that void to an extent.

1. A study that analyzes the distribution of general management cities across the country in relation with the state government's policies and roles regarding granting home rule charters that enable the cities to exercise broad powers of self-rule
2. A study that employs a time-series research design to explore the outcome of the change intervention of GMC cities to explain the effect of the change intervention on the general management cities fiscal performances
3. A comparative study that explores the perception of city managers of the council-manager and the general management cities to understand

their administrative role concept that explains their administrative leadership, decision-making authority, and a role in policy influence

4. A time-series study or a study that replicates this study by using the forthcoming 2002 Census of Government's aggregate fiscal data on municipal jurisdiction to understand the impact of general management cities' administrative structure on municipal fiscal performance over the time
5. Also, a study that employs a fiscal stress index computed on some other model (other than representative tax system that had been used in this study) could confirm the results of this study's findings on the association between fiscal stress index and municipal administrative structures

Implications for Future Research and Practice

For Research

Generally, most works of research on municipal fiscal performance use population and/or per capita income as a proxy measure to account for variations in municipal service demands. However, this study finds that the percent owner-occupied home also could be used as an excellent proxy measure to account for variations in municipal service demands. The variable, percent owner-occupied homes showed very highly significant level correlation with most of the regression equations. The percent owner-occupied home bears an inverse relationship to all municipal fiscal performance measures in

all the municipal administrative structures at a significant to a very highly significant level except for the fiscal stress index measure

Percent owner-occupied home is a surrogate measure for percentage of homeowners. Percentage of homeowners represents the population that contributes to property tax revenues. The property tax has continually been cited as the least favored type of taxation at local level (Stumm and Corrigan, 1998). This finding shows that residents who favor less property tax negatively impact tax revenues and municipal spending, and constrain municipal taxes and spending at significant levels too. Their expectations of low spending indirectly influence the cities into employing fewer numbers of employees.

Davis and Hayes (1993) study supports this observation. They applied frontier estimation techniques and constructed efficiency measures that could be used to examine the extent to which efficiency is influenced by the presence of a professional city manager. Their research resulted in the "theory of optimal monitoring" which indicated that tax rates and city size affected the citizen monitoring of municipal bureaucrats. Thus, the intensity of citizen monitoring along with other institutional factors influence the efficiency of government.

For Practice

The city managers of council-manager cities enjoy more independence in setting the legislative agenda, controlling the budget, appointing department heads, and overseeing the city's general operation in comparison with city

mangers of the general management cities (see Appendix – B). On the other hand, the administrators of general management cities have much more circumscribed authority. They have limited appointment and budgetary powers, for example, operating under the close supervision of the elected mayor. In such cases, administrators of general management cities would surely have much less opportunity to shape the city's fiscal and other administrative policies.

At least, in ICMA-recognized general management cities, the managerial authority and decision-making powers of their managers are documented in order to get the official recognition from ICMA. The other non-ICMA recognized strong mayor cities that follow the general management cities' administrative structure (by hiring professional manager without officially declaring their form of government status) may have no guidelines in defining their managers' role and authority in policy formulation and implementation. Chances are that some of these managers primarily perform tasks and give advice at the request of the elected mayor. Therefore, a convincing test of the policy consequences of general management cities should take into account the degree of authority residing in the office of general management city's manager.

According to the results of this study, the traditional strong mayor cities have poor fiscal performances while the council-manager cities that give clear authority and decision-making powers to their managers have the better fiscal performance outcomes. The general management cities that granted

circumscribed power and authority to their managers were in the middle. Based on this study's results on municipal fiscal performance outcome, it might be advisable for a city to adopt a council-manager form of government modeled after the politics-administration dichotomy model.

The council-manager model was designed to provide greater economy, efficiency, and rational decision-making by granting a clear separation of power and authority to a professional manager. Taylor's "principles of scientific management" approach prescribed the division of responsibilities and recommended delegating administrative responsibilities of searching for the best way of performing organizational tasks to professionally trained managers. The results of this study support the assumptions underlying the council-manager for of government.

The mutually interdependent, reciprocal influence present between the elected and the appointed administrators of general management cities may not results in a better fiscal performance than in the council-manager municipal administrative structure. But it excelled the strong mayor cities' municipal fiscal performance levels. Therefore, this study's results also show that some kind of a professional manager (either with or without power) is better than no manager at all.

In sum, if the cities' objective is a fiscally efficient municipal government, they should opt for a professional manager and should grant power and authority to such a manager in order to make policy formulation and implementation as the way in council-manager cities.

Conclusion

Finally, it is critical to define the potential outcome that might result from adopting any particular form of municipal administrative structure. Should the main concern of a service-oriented city administration be to tax and spend less rather than to provide responsive services to its citizenry? A switch to any other form of municipal administrative structure should consider other factors rather than merely targeting efficiency goals. This study identified that the fluctuations in population growth of the cities were significantly associated with municipal revenues, expenditures, and the FTE employee rate. Rapid growth of a locality can strain existing services and result in an increase in service-related expenditures and increased pressure on tax base. Benton and Menzel (1993) found that a local government's decision to turn to a professional management often comes in response to the increasing service demands stemming from growth and urbanization.

Similarly, Schneider and Park (1989) show that the need for more services, especially social services, results in a strong upward push on spending. All GMC cities of this study also had a significant inverse relationship with revenues, expenditures and FTE employee rate. The cities that adopted the GMC status also showed a poor financial condition in the form of more outstanding liabilities at the fiscal year end. This could be the result of a response to the rising service demands. This response to the increased service demand that resulted due to a sudden population growth

probably compelled the cities to expand services, improve professionalization, and risk higher budgets. Perhaps, those cities with greater service role have turned to professional managers' help to better execute responsibilities that were already in place. A trend in movement towards choosing the option of hiring professional city managers by strong mayor cities when the cities start growing in size was also observed by Adrian, (1988).

This line of reasoning could spell out that hiring a professional manager is a need-driven choice as in the private sector rather than achieving the goals of less taxing and spending. As Wilson suggested, stable and businesslike principles of administrative management might have guided the operations of public agencies. In other words, targeting for the efficiency and economy may not be the main reason behind the decisions to hire a professional manager. It might be as simple as that to attain service effectiveness in response to rising service demands. However, a time-series research design in which the scope of the service is taken into account might help sort out this issue.

On the other hand, chances are that the strong mayor cities' preference of hiring a manager may be the "test-driving" step before actually adopting the council-manager form of government. This study finds that, of 67 cities that had the general management municipal structure in 1993, 24 eventually decided to adopt the council-manager form of government. So there may be an evolutionary process in progress too. That process might have been started with a population growth, more service demands, hiring a professional manager, and finally formalizing the change by adopting council-manager form

of municipal administrative structure. The general management cities' decision to adopt or to drop the GMC status should be analyzed further with a pre-post test to answer this question.

Most of the cities have home rule charters that enable them to exercise broad powers of self-rule and an opportunity for exercise of local discretion. Thus, they are virtually free to adopt any form of municipal administrative structure that they feel suitable for their optimal functioning. As the following quote suggests, "For forms of government, let fools contest. Whatever is best administered is best." –Alexander Pope. (Frisby, 1999). As the demand for public services and global competition among communities grows in this new century, the need for visionary political leadership and effective administrative skills will arise. Therefore, any developing new administrative structure will be the response to the ongoing needs faced by a given community and will be determined by the unique characteristics of the community under evolution of the change process. The better management structure for a given community is the one that is responsive to its community needs.

But continuous analyses and feedback on the municipal management will benefit the cities to select the administrative structure that will fit their need best. For instance, a clear understanding of the administrative relationship between elected and appointed administrators of the general management cities will help cities evaluate the suitability of the hybrid structure for their respective municipal government. In order to understand this administrative relationship clearly, more sophisticated case studies and cross-sectional

surveys are needed.

Especially, as suggested before in the recommendations for future research directions, a survey study on general management city administrators could explain how far these city administrators see themselves as policy leaders. A better understanding of their relationship with the elected mayor could provide some useful strategies for the city managers who often face political perils that are well documented in the academic literature. From the early reform movement onward, the effort to make cities more efficient has been more focused on the structure of local government. Therefore, a gap in understanding the influence of a general management city's city manager on city's fiscal management has to be filled by more research.

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APPENDICES

A. PROFILE OF U.S. CITIES AND THEIR FORMS OF ADMINISTRATIVE STRUCTURES

Based on the 1996-estimated population, the 1,166 cities with populations of 25,000 or more were classified into strong mayor cities and council-manager cities (based on their administrative structure). Based on the ICMA's published municipal government recognition criteria (see Appendix B), the strong mayor cities that had an appointed city administrators were categorized into a new category of general management cities along with the traditional strong mayor cities and council-manager cities.

In 1993, of the 1,166 cities that had a populations 25,000 or more (based on the 1996 estimated population), 23% (N=266) of the cites were strong mayor cities, 62% (N=728) were council-manager cities, 12% (N=138) were general management cities and the remaining 3% (N=34) had adopted some other forms of municipal administrative structure (See Table 1).

Table 1:
Comparison of Forms of Governments in 1993 and 1998 (Cities over 25,000 persons)

	1993		1998	
Form of Government	N	%	N	%
SMC	266	23	228	20
CMC	728	62	767	66
GMC	138	12	144	12
Other Forms	34	3	27	2

More or less the same proportions of administrative structures were observed by the cities in 1998. Of the 1,166 cities, 20% (N=228) were strong mayor cities, 66% (N=767) council-manager cities, and 12% (N=144) general management cities while the remaining 2% (N=27) had adopted some other forms of municipal administrative structures (See Table 1).

Of the 144 general management cities of 1998, 31% (N=44) got official recognition from the ICMA as general management cities. The remaining 69% (N=100) were traditional strong mayor cities that hired professional managers to conduct routine municipal business without formally declaring a general management status (see Table 2).

Table 2:
Official ICMA Recognition Status of 1998 General Management Cities (Cities over 25,000 persons)

Status	N	%
ICMA Recognition	44	31
No ICMA Recognition	100	69

A comparison was done to identify the cities that maintained the same form of administrative structure consistently for five years from 1993 through 1998. The cities that maintained the same administrative structures were coded as 1 and the cities that changed their administrative structure during that period were coded as 0. In general, out of 1,166 cities, 968 consistently maintained the same form of government. Of the 1,166 cities, 15% (N=179) maintained the same strong mayor city administrative structure, 62% (N=719)

the same council-manager administrative structure, 6% (N=70) the same general management form of municipal administrative structure, and 3% (N=30), which followed other forms of administrative structures, their respective administrative structures without changing. However, 14% (N=168) cities changed their 1993 administrative structure and adopted a new form (see Table 3).

Table 3:
Form of Administrative Structure Maintained by the Cities for 5 Years (Cities over 25,000 persons)

Form of government	N	%
SMC	179	15
CMC	719	62
GMC	70	6
Other Forms	30	3
Changed Forms	168	14

Further analysis for the 168 cities that changed their 1993 administrative structures showed that, of the 85 strong mayor cities of year 1993, 15 adopted the council-manager form of government and the remaining 70 hired professional managers to conduct municipal business and thus became general management cities. Of the seven council-manager cities, which adopted a different form of administrative structure within five years from 1993, four adopted the strong mayor city form and the remaining three cities adopted the general management administrative structure (see Table 4).

Of the general management cities of 1993, 67 changed their administrative structure before 1998. Of the 67general management cities

that changed their administrative structure, 43 became strong mayor cities and the remaining 24 formally adopted the council-manager form of government. Overall, before 1998 when compared with 1993, the cities created 38 new municipal management positions. The changes made by other cities, which followed some other forms of municipal administrative structures, were not of main relevance to this thesis and are not discussed in detail (see Table 4).

Table 4:
Tracking the Change in Municipal Administrative Structures (Cities over 25,000 persons)

Form of Government Status-1993	N	Changed in1998 to	N
SMC	85	CMC	15
		GMC	70
CMC	7	SMC	4
		GMC	3
GMC	67	SMC	43
		CMC	24
Other Government Form Changes	9		
Total Changes	168		

The data suggest that the council-manager cities changed less of their form of administrative structure. But the strong mayor and the general management cities hired professional city administrators and dropped them at a higher rate. Overall, 67 cities dropped the general management administrative structures but 73 cities adopted the general management administrative structure during 1993 to 1998 duration.

This approach might have helped the strong mayor cities avoid going through the difficulties of formal procedural steps involved in adopting the council-manager form to get a professional administrator's help. Generally, a change in the municipal administrative structure was accomplished by the charter. A charter, which ordinarily requires a popular vote, allows for basic structural alterations. Therefore, it is understandable that, if and where localities need more than minor changes, then local officials would pursue the charter route rather than rely on statutory provisions or a change in form accomplished by a local ordinance.

Alternatively, a change in the mayoral position also could have contributed towards these changes since the professional managers served at the pleasure of the mayors in the strong mayor cities. This observation was similar to the one that showed that only 31% of the 1998 general management cities got the official general management status from the ICMA (see Table 2).

However, of the 67 general management cities that dropped the GMC status before 1998, 25% (N=17) had previously the official general management city recognition status from the ICMA in 1993. The characteristics of cities that dropped GMC status and adopted GMC status were further explored in detail to understand the possible socioeconomic characteristics that might have triggered the decision of these cities that had changed their administrative form.

To ensure a rigorous test, cities that consistently maintained the same form of administrative structure for five years prior to 1998 (1993-1998), were

included in the analyses. As mentioned before, of the 1,166 cities, 968 maintained the same administrative structure consistently from 1993 through 1998, and were included in the data analyses carried out to answer the proposed research questions. This approach of filtering out the cities that changed their municipal administrative structures reduced ambiguity in interpreting the impact of different municipal administrative structures on municipal fiscal performance. This approach controlled for the municipal administrative change interventions in the analyses and improved the one-shot study approach employed in this study.

Of the resultant 968 cities that were selected for the data analyses, 18% (N=179) were strong mayor cities, 75% (N=719) were council manager cities and the remaining 7% (N=70) were the general management cities (see Table 5).

Table 5:
Form of Municipal Administrative Structures
(Cities over 25,000 persons)

Form of government	N	%
SMC	179	18
CMC	719	75
GMC	70	7

The above results showed that council-manager form of municipal administrative structures was the most common one in the U.S. cities; also these cities were the ones that intended to change the least to a different form of administrative structure. Overall about 82 % (N= 789) cities with

populations of 25,000 or more were maintained by professional administrators (combined council-manager and general management cities).

Crosstabulation Results: Form of Administrative Structures with City Sizes, Regional Distribution and Metropolitan Status of American Cities

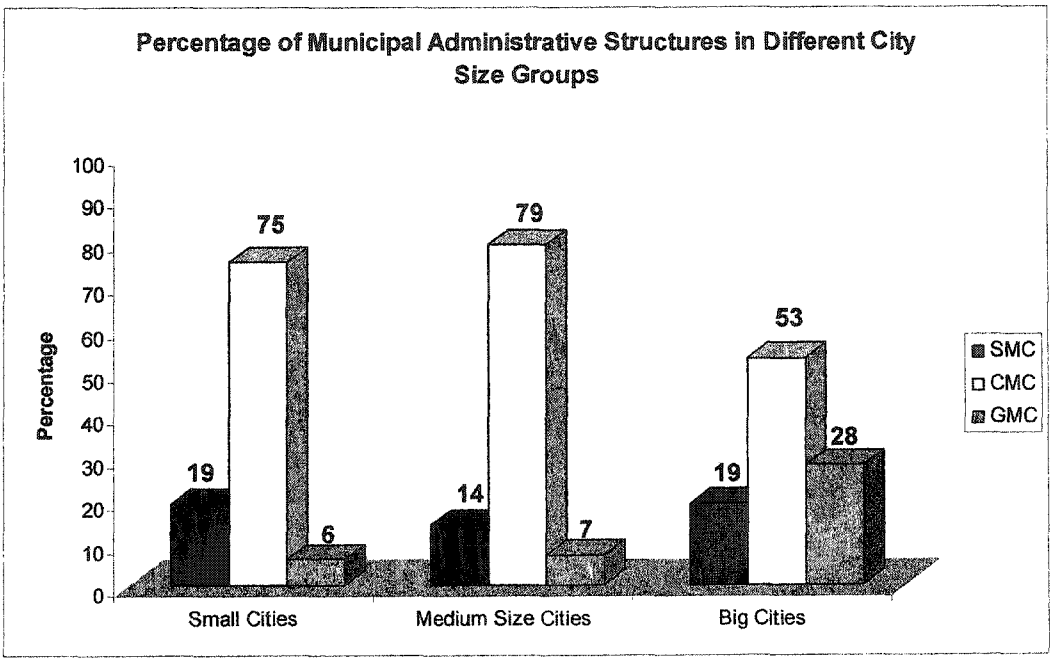
Crosstabulation analyses were performed to understand further in detail the distribution of the forms of municipal administrative structures in cities of different sizes, different regions and the MSA localities.

City Size and the Form of Municipal Administrative Structure: In all city size groups, predominant administrative structure was the council-manager form. Nearly 75% (N=593) of the small cities and 79% (N=99) of the medium-size cities were council-manager cities. But, among the big cities, there was a smaller percentage with the council-manager form of municipal administrative structure. Of the 51 big cities, only 53% (N=27) had adopted the council-manager form of municipal administrative structure.

The strong mayor administrative structure was adopted by nearly 19% of small and big cities, but only 14% of the medium-size cities preferred the strong mayor form of municipal administrative structure. The administrative structure least favored by all city size was the general management administrative structure. Only 6% (N=47) of the small cities and 7% (N=9) of medium-size cities preferred the general management administrative structure. But 28% (N=14) of the big cities hired professional managers without formally adopting the council-manager form of government structure

(See Figure 1). This showed that about 80% of the big cities had professional city administrators (combined CMC and GMC governments).

Figure 1:



Region and Form of Municipal Administrative Structure: Again, the council-manager form of municipal administrative structure was adopted by all the regions of the country except the Northeast. Of the 106 cities in this region, 56% (N=59) were strong mayor cities (see Figure 2).

Figure 2:

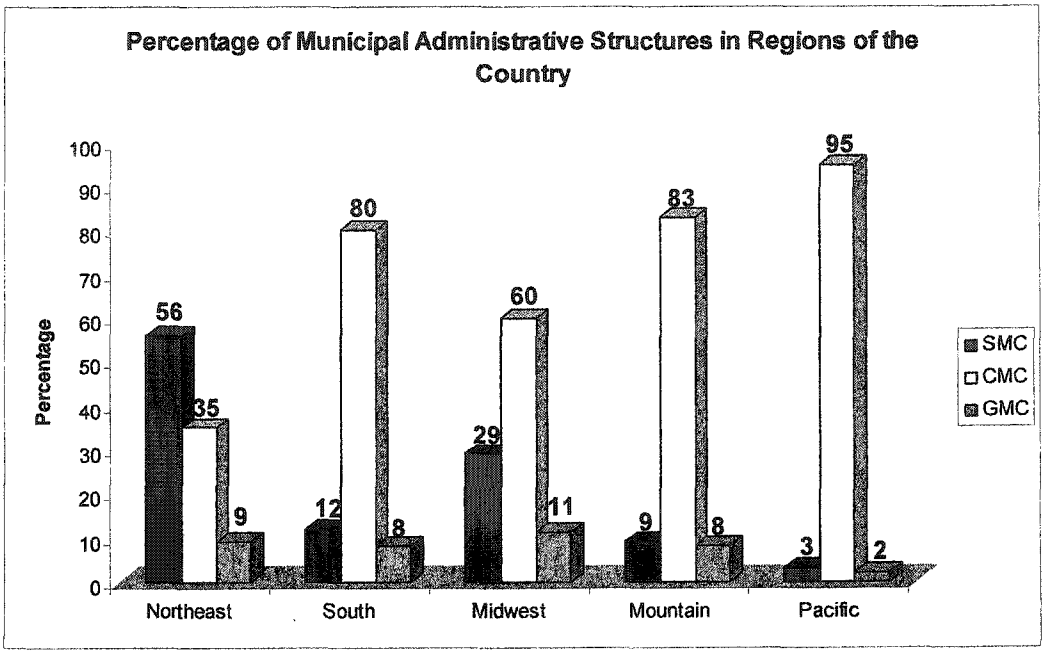
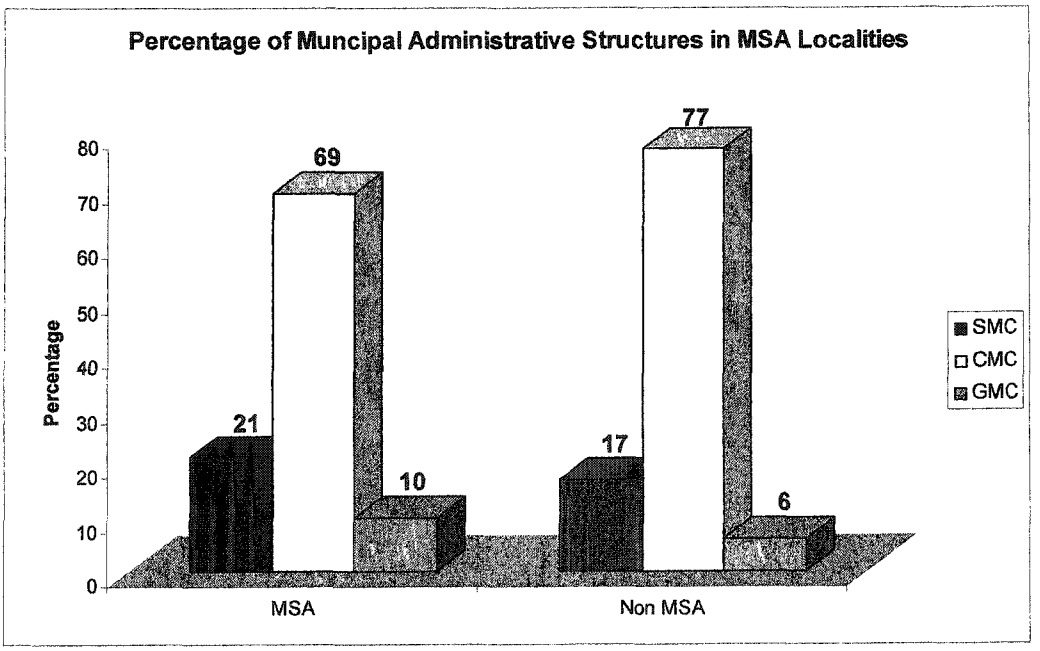


Figure 3:



MSA Status and Form of Municipal Administrative Structure: Crosstabulation of the MSA status and the form of municipal administrative structure did not show much difference from the general pattern of municipal administrative structure distributed at the national level. Most of the cities in both the MSA and non-MSA localities preferred the council-manager form of government, followed by preferences for strong mayor and general management municipal administrative structures (See Figure 3).

The other patterns of distribution of municipal administrative structures, which emerged after the layered crosstabulation of the municipal administrative structure variable with the city size, regional location and MSA status variables, were as follows:

- A majority of the cities in the Northeast region of the country had the strong mayor form of municipal administrative structure and no big cities had the council-manager form of administrative structure.
- A majority of the cities in the Southern region of the country had the council-manager form of municipal administrative structure and all MSA cities of the Southern region had managers.
- In the Midwest region of the country, all the cities in MSA localities had professional management help in conducting routine municipal business.
- In the Mountain region of the country, the strong mayor municipal administrative structure was associated only to the smaller cities. All the medium-size and big cities had professional managers.

- In the Pacific region of the country, all the medium-size cities had the council-manager form of municipal administrative structure.

B. ICMA'S LOCAL GOVERNMENT RECOGNIZATION PROCEDURES

ICMA Local Government Recognition

Procedures for Recognition

This section of *WHO'S WHO* includes cities, counties, councils of governments, and state associations of local governments, recognized by ICMA as having established an appointed position of overall professional management. An ICMA-recognized position is one that has been established through ordinance, referendum, resolution of the governing body, or state law. Recognition means the community is identified as one that provides a legal framework conducive to the practice of professional management.

Introduction. ICMA recognition falls into two categories—council manager and general management. The criteria related to the council-manager government category are less flexible than those for the general-management category. The reasons for this derive from the historical significance and the nature of the council-manager form. In the council-manager form rests the historic basis of the Association's origins, and the membership has come to identify it as a superior form of government organization. It is not seen as the only means of providing for overall professional management, but the intent is to recognize its contribution to local government by maintaining an identity with the wide variety of forms of administrative organization established by democratic governments throughout the world (adopted October 11, 1969).

Process. Recognition takes the form of designating either a council-manager position or a general-management position. The process for council-manager recognition involves the submission of an application for recognition along with supporting documentation to ICMA. The staff reviews the material and approval is extended by the executive director with the concurrence of the state association and the ICMA regional vice president responsible for the applicant's state. General-management recognition also requires the submission of an application and supporting documentation; however, approval is extended by the full ICMA *Executive Board.*

Documentation. Documentation that must accompany an application for recognition includes a copy of legislation and other legal documents relating to the establishment and authority of the appointed chief management position, a copy of the job description for the above, if such exists, and an official organization chart, if such exists. In addition, the completion of a questionnaire is required for processing.

Counties. The review of county recognitions is conducted according to the criteria for council-manager or general-management positions. All applications for recognition of counties that appear to fall under the general-management category are reviewed by the National Association of County Administrators.

Councils of Governments. The review of councils of governments is conducted according to the same criteria and process as general-management positions.

State Associations of Local Governments. The recognition of state/provincial associations of local governments is conducted according to the same criteria and process as general-management positions. The specific criteria are as follows:

- The league must be formally established and the director must be full-time.
- There should be at least one additional professional staff person.
- The league should be involved in the government activities of the area.
- Consideration should be given to the extent to which the league operates programs directly, such as technical assistance, training, and so forth.
- Experience and background of the person filling the position of director should be in public administration.

The by-laws or constitution must conform to the criteria for recognition under the general management criteria.

Review of Recognition Criteria. In October 1987, the ICMA Executive Board charged the *ICMA Assistants Steering Committee* with the task of evaluating ICMA's recognition criteria in relationship to current practices in communities utilizing the council manager and general management forms. The committee's report, which was completed in July 1988, recommended retaining the council-manager and the general management criteria, and it drafted guidelines to help interpret the criteria, much as the Code of Ethics guidelines interpret the Code. The Executive Board discussed these recommendations and possible alternatives with ICMA members during the year, and at the July 1989 board meeting adopted the criteria and guidelines shown on the next page.

* Source ICMA

B. ICMA'S LOCAL GOVERNMENT RECOGNIZATION PROCEDURES (Cont.)

Criteria and Guidelines for Recognition

Recognition of a Council-Manager Position

(Adopted October 11, 1969, and revised July 22, 1989)

Appointment. The manager can be appointed by a majority of the council for a definite or indefinite term and must be subject to termination by a majority vote of the council at any time.

Guideline. It is recognized that the process for appointing the manager may include participation by others in nominating or recommending candidates to be considered. However, the final responsibility or authority of appointment as well as dismissal of the manager must lie with a majority of the council.

Policy formulation and implementation. The position should have direct responsibility in policy formulation as well as policy implementation.

Guideline. Final authority for policy formulation rests with the council, but the manager should play an integral role in developing and analyzing alternatives for the council's consideration and be responsible for implementation of council-approved policy.

Budget. The manager shall be designated by legislation as having responsibility for preparation of the proposed budget for the council's consideration and as having responsibility for implementation of the council approved budget.

Guideline. While the manager should have responsibility for preparing and presenting the budget to the council, it is recognized that many parties often participate in the budget process and may contribute to the development of the manager's recommended budget. Once approved by council, the manager is responsible for implementing and administering the budget.

Appointing authority. The manager shall have authority by legislation for the appointment and removal of at least most of the heads of the principal departments and functions of the local government.

Guideline. The manager's ability to independently select the most qualified personnel for key department head positions and remove them when necessary is essential to his or her administrative effectiveness. Within this context, it is recognized that a manager may choose to consult with and seek consensus from council on the appointment and dismissal of key department heads. Though the preferred arrangement is for the manager to have independent authority to appoint and remove key department heads, recognition in the C-M category will also be extended to those communities in which council is given the authority by legislation to confirm, validate or ratify such personnel actions, as long as responsibility for recommending them remains with the manager.

Organizational relationships. Those department heads whom the manager appoints should be designated by legislation as administratively responsible to the manager.

Qualifications required for position. The qualifications for the position should be based on the educational and administrative background of candidates.

Guideline. Appointment to the manager's position should be based on professional experience, administrative qualifications, and education to ensure that the community is served by a competent, well-trained professional. Political affiliations should not in any way influence appointment.

Recognition of a General-Management Position

(Adopted April 19, 1969, and revised July 22, 1989)

Appointment. The position shall be filled by appointment made by an elected representative and/or representatives and shall be responsible to an elected representative and/or representatives.

Guideline. This criterion relates to the basic concept that overall management is the link between the political leadership and program execution. It is essential that the person filling the position of overall management be appointed by and responsible to the legislative body or the chief elected official of the local government.

Policy formulation and implementation. (Same as for council-manager position.)

Guideline. The position of overall management has a primary characteristic of responsibility for creative initiative in the development of public policy alternatives and recommendations for consideration by elected officials throughout the broad spectrum of the local government's functions. Responsibility for policy formulation means that the person in the position has access to the council and works with its members even though he/she may report directly to the mayor. In the case of a council-appointed administrator, his/her access should be direct.

Budget. The position should have major responsibility for preparation and administration of the operating and capital improvement budgets.

Guideline. Both elements should be present because it is through the administration of the operating budget that basic management control is exercised, and it is the budget preparation process that concerns itself with resource use. In applying this criterion, the term "major responsibility" refers to appointed positions and not elected positions. This may become critical in evaluating the work of a mayor-appointed administrator.

Appointing authority. The position should exercise significant influence in the appointment of key administrative personnel.

Guideline. The direct or legal appointive power will vary considerably. The fact that the position may have authority only to recommend the appointment of department heads should not in and of itself exclude the local government from recognition. Neither is there any fixed formula as to which or how may appointments must be influenced.

It will be necessary to view this in the context of the position's total responsibility, particularly the budget process. One important element is that the position should have authority to appoint a sufficient share of the management staff to control budget preparation and administration.

Organizational relationships. The position should have continuing direct relationships with operating department heads on the implementation and administration of programs.

Guideline. The important factor here is that the position be recognized within the local government organization as the principal general management professional. The relationship is most clear if the position has direct supervision over department heads. The real issue, however, is what day-in and day-out influence the position has over department heads. At a minimum, it should be expected that overall management responsibility includes the status of first peer among administrative peers in a horizontal organization.

Qualifications required for position. (Same as for council-manager position.)

Guideline. This criterion simply means that the person should be chosen on merit and that he/she should have significant administrative experience and educational background. It excludes the strictly "political" appointment. It does not mean, however, that the person must have local government experience per se.

C. TECHNICAL APPENDIX

Table 6: Operationalizing Dependent Variables

Fiscal performance indicator		Formula
*** (A) Composite fiscal stress index score**		(A1) Relative revenue capacity per capita score+ (A2) Relative revenue effort score + (A3) Relative median household income score
***Fiscal stress indicators**	(A1) Relative revenue capacity per capita score	Total general revenues / Population = Raw-score of revenue capacity per capita *Raw-score revenue capacity per capita converted to z-score distribution of revenue capacity per capita
	(A2) Relative revenue effort score	Total revenues from taxes / Total general revenues = Raw-score of revenue effort *Raw-score revenue effort converted to z-score distribution of revenue effort
	(A3) Relative median household income score	*Median household income raw-score converted to z-score distribution of median household income score
(B) Revenue Capacity Per Capita		Total general revenues / Population
(C) Per capita general fund expenditures		Total general expenditures / Population
(D) FTE employee rate		FTE employees / Population of the city X 10, 000

* In order to combine a locality's relative standing in terms of the three measures into a single composite fiscal stress index, the raw scores for each measure were standardized. This standardization was achieved in two stapes. First, each raw score was converted into a corresponding z-score. The z-score is a commonly used statistical transformation, which represents how many standard deviations a raw score value is from its mean value of a given group of city sizes. The second step is to convert each z-score into a number, called a relative stress score, which is positive in all cases. After the standardization was completed, a composite fiscal stress index was calculated for each locality by summing the relative stress scores across the three measures

Table 7: Operationalizing Control Variables

Factors influencing fiscal performance	Formula
Per capita income	Per capita income from census data
Median value of single family homes	Median value of single family homes from census data
Percent owner occupied home	Percent population of a municipality own home from census data
Percent Poverty Level	Poverty rate from census data (percentage of people live below poverty level)
Crime rate	Crime rate from census data (number of reported crime per thousand population)
Unemployment rate	Unemployment rate from census data (unemployed people per thousand population)
Median age of residents	Median age of residents from census data
Population	Population of a municipality from census data (1996 estimated)
Percent population net change	Time 2 Population-Time 1 Population = Population net change $\frac{\text{Population net change}}{\text{Time 1 Population}} \times 100$ = Percent population net change
Population density	$\frac{\text{Population}}{\text{Land area (square mile)}}$
Presence in MSA	Precedence in MSA information of a municipality from census data
Geographic region	Geographic region of a municipality from census data
Percent total outstanding debt / Current liabilities	$\frac{\text{Total debt out-standing at end of fiscal year}}{\text{Total general fund revenues}} \times 100$
Relative fiscal capacity	Raw-score revenue capacity per capita converted to z-score distribution of revenue capacity per capita (1) Raw-score general expenditures per capita converted to z-score distribution of general expenditures per capita (2) $\frac{\text{Relative revenue capacity per capita (1)}}{\text{Relative general expenditures per capita (2)}}$ = Relative fiscal capacity
Relative revenue effort	$\frac{\text{Total revenues from taxes}}{\text{Total general revenues}}$ = Raw-score of revenue effort Raw-score revenue effort converted to z-score distribution of revenue effort

D. COMPUTATIONS

I. Computation of the Fiscal Stress Index

City of Norfolk, VA: An Example

Composite Fiscal Stress Index Score = Relative Revenue Capacity Per Capita (A1)+
Relative Revenue Effort (A2)+
Relative Median Household Income (A3)

Computation of Relative Revenue Capacity Per Capita (A1):

Step 1:
Revenue Capacity Per Capita (Raw Score) = $\frac{\text{Total General Revenues}}{\text{Population}}$

$$= \frac{\$687,807,000}{233,430} = \$2946.52$$

Step 2:
Standardization of Revenue Capacity Per Capita Score within the group of Medium Size Cities (Z Score of Revenue Capacity Per Capita)

$$Z = \frac{X - \mu}{\sigma}$$

X = Raw score of Revenue Capacity Per Capita
μ = Mean Revenue Capacity Per Capita for Medium Size Cities
σ = Standard Deviation

$$= \frac{2946.52 - 1153.74^{*}}{685.36^{*}} = 2.6158$$

Step 3:
Computation of Relative Score from Z Score

$$= [2.6158 \times (-1) \times 5 + 55] = 41.921$$

A1 = 41.92

Computation of Relative Revenue Effort (A2):

Step 1:
Revenue Effort (Raw Score) = Total Revenues From Taxes / Total General Revenues

$$= \frac{\$245,339,000}{\$687,807,000} = 0.3566$$

Step 2:
Standardization of Revenue Effort Score within the group of Medium Size Cities (Z Score of Revenue Effort)

$$Z = \frac{X - \mu}{\sigma}$$

X = Raw score of Revenue Effort
μ = Mean Revenue Effort for Medium Size Cities
σ = Standard Deviation

$$= \frac{0.3566 - 0.4509^{*}}{0.1156^{*}} = -0.8149$$

Step 3:
Computation of Relative Score from Z Score

$$= [-0.8149 \times (1) \times 5 + 55] = 50.9255$$

A2 = 50.925

Computation Relative Median Household Income (A3):

Step 1:
Median Household Income (Raw Score) = $31,815**

Step 2:
Standardization of Median Household Income Score within the group of Medium Size Cities (Z Score of Median Household Income)

$$Z = \frac{X - \mu}{\sigma}$$

X = Raw score of Median Household Income
μ = Mean Median Household Income for Medium Size Cities
σ = Standard Deviation

$$= \frac{31,815 - 43,408.14^{*}}{12750.27^{*}} = -0.9092$$

Step 3:
Computation of Relative Score from Z Score

$$= [-0.9092x\ (-1) \times 5 + 55] = 59.5462$$

A3 = 59.5462

Computation of the Composite Fiscal Stress Index Score:

Composite Fiscal Stress Index Score = Relative Revenue Capacity Per Capita (A1)+
Relative Revenue Effort (A2)+
Relative Median Household Income (A3)

$$= 41.921 + 50.9255 + 59.5462$$

Composite Fiscal Stress Index for Norfolk, VA = 152.3927

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* Statistics obtained by calculating group mean and standard deviation for the Medium Size Cities Group of United States

** Raw Score obtained from United States Census 2000 data (from Summary File 3)

Note: Computation method adopted from the Virginia's Commission on Local Government

II. Computation of the Relative Fiscal Capacity

City of Norfolk, VA: An Example

Raw-score revenue capacity per capita converted to z-score distribution of revenue capacity per capita (1)

Raw-score general expenditures per capita converted to z-score distribution of general expenditures per capita (2)

$$\frac{\text{Relative revenue capacity per capita (1)}}{\text{Relative general expenditures per capita (2)}} = \text{Relative fiscal capacity (3)}$$

Computation of Relative Revenue Capacity Per Capita (1):

Step 1:
Revenue Capacity Per Capita (Raw Score) = $\frac{\text{Total General Revenues}}{\text{Population}}$

$$= \frac{\$687,807,000}{233,430} = \$2946.52$$

Step 2:
Standardization of Revenue Capacity Per Capita Score within the group of Medium Size Cities (Z Score of Revenue Capacity Per Capita)

$$Z = \frac{X - \mu}{\sigma}$$

X = Raw score of Revenue Capacity Per Capita
μ = Mean Revenue Capacity Per Capita for Medium Size Cities
σ = Standard Deviation

$$= \frac{2946.52 - 1153.74^{*}}{685.36^{*}} = 2.6158$$

Step 3:
Computation of Relative Score from Z Score

$$= [2.6158 \times (-1) \times 5 + 55] = 41.921$$

Relative revenue capacity per capita (1) = 41.921

Computation of Relative General Expenditure Per Capita (2):

Step 1:
General Expenditure Per Capita (Raw Score) = Total General Expenditure / Population

$$= \frac{\$703,367,000}{233,430} = 3013.18$$

Step 2:
Standardization of General Expenditure Per Capita Score within the group of Medium Size Cities (Z Score of General Expenditure Per Capita)

$$Z = \frac{X - \mu}{\sigma}$$

X = Raw score of General Expenditure Per Capita
μ = Mean General Expenditure Per Capita for Medium Size Cities
σ = Standard Deviation

$$= \frac{3013.18 - 1137.68^{*}}{710.57^{*}} = 2.63944$$

Step 3:
Computation of Relative Score from Z Score

$$= [2.63944 \times (-1) \times 5 + 55] = 41.8028$$

Relative general expenditures per capita (2) = 41.8028

Computation Relative Fiscal Capacity (3):

Relative revenue capacity per capita (1) / Relative general expenditures per capita (2) = Relative fiscal capacity (3)

$$= \frac{41.921}{41.8028} = 1.002827$$

Relative fiscal capacity (3) = 1.002827

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* Statistics obtained by calculating group mean and standard deviation for the Medium Size Cities Group of United States

E. GLOSSARY OF TECHNICAL TERMS

Composite fiscal stress index: Fiscal stress exists in a city when there is an imbalance between the city's revenue-raising capacity and its expenditure need. A composite fiscal stress index is a relative measure that helps to identify those local governments which are experiencing a higher level of fiscal stress than other local governments of a given city size classification.

Expenditures per capita: Generally, municipal expenditures are considered to be the measure that indicates a municipality's service output. Per capita expenditures of a jurisdiction reflects changes in service expenditures relative to changes in population.

FTE rate: The term "full-time equivalent employment" refers to a computed statistic representing the number of full-time employees that could have been employed if the reported number of hours worked by part-time employees had been worked by full-time employees per 10,000 resident population of a locality. FTE rate is a relative frequency statistic used to standardize the employment figure across the cities.

General management city: Mayor-council municipalities that are using an appointed professional manager for overall administrative affairs without formally adopting the council-manager plan. This results in a hybrid municipal administrative structure. In July 1969, ICMA established criteria to recognize the hybrid forms of municipal government. In order to distinguish the new hybrid municipalities from those recognized as traditional council-manager governments, they were designated as general management municipalities.

Per capita general fund expenditure: Per capita general fund expenditure need is the amount the city must spend to provide adequate public services at citizens' satisfaction level.

Percentage of current outstanding debt: Per capita outstanding debt (also referred to as current liabilities) is defined as the sum of all liabilities due at the end of the fiscal year relative to a municipality's population size. Current liabilities comprise short-term debt; the current portion of long-term debt, all accounts payable, accrued liabilities, and other current liabilities. Increasing current liabilities at the end of the year as a percentage of net operating revenue demonstrates the poor financial condition of a city.

Population density: Population density is the average number of inhabitants per square mile of land area. It is calculated by dividing the total number of residents by the number of square miles of land area of the locality. The census calculated population density data is used in this study.

Population net change: Population net change represents the decrease or increase between 1990 and 1997. Percent change represents simple percent change between these years.

Relative fiscal capacity: This indicator that shows the local government's ability to satisfy fiscal service needs is the ratio of total city revenues to total city expenditures. The fiscal health in terms of the general fund balances of a city depends on its ability to generate enough revenues to meet its expenditure needs. The relative fiscal capacity measure serves to identify the fiscal capacity of a local government that shows the city's ability to raise sufficient revenue to satisfy expenditure needs when compared to other local governments in a given city size category such as small, medium–size and big cities. It is the ratio of total city revenues to total city expenditures regardless of revenue source and nature of expenditure. It is calculated by dividing a city's revenue raising capability by its relative expenditure when compared with its similar size group of cities.

Relative measure: A relative measure serves to identify those local governments which are experiencing a given fiscal performance measure compared to other local governments across a given size group of cities such as small, medium-size and large cities. This means that whether overall local fiscal conditions are good or bad, roughly one-half of all cities will have an above-average fiscal position and approximately one-half will have a below-average fiscal position.

Relative median household income: A locality's ability to raise revenues to provide services is depending on its residents' incomes. Some studies use adjusted gross income as one dimension in calculating local revenue capacity per capita and fiscal stress. This study uses relative median household income data from census as the proxy measure to represent local residents' wealth and spending ability.

Relative revenue capacity per capita: The revenue capacity measures the degree of municipality's potential ability to raise revenue from its own tax sources to meet its service demand. This is an important dimension of the local government's fiscal position. Revenue capacity gauges the degree of jurisdictional affluence in collections that a locality could anticipate from taxes, service charges, regulatory licenses, privilege fees, and various other governmental instruments that open avenues for potential revenue. Revenue-raising capacity of a city is defined as the amount of money a city can raise (per capita) at a given tax burden on its residents. The relative revenue capacity per capita measure explains the municipality's ability to generate revenues from the tax base of a local government when compared to other local governments in a given city size category such as small, medium and big.

Relative revenue effort: A local government's revenue effort is an important indicator of fiscal condition. The term 'revenue effort' means the portion of the tax base that has been tapped as revenue, also called as tax effort. It is the ratio of tax collections of a government to its revenue capacity and it is the measure of the effort put forth by the government to raise needed revenues. The relative revenue effort measure serves to identify the ability to generate tax revenue from the tax base of a local government when compared to other local governments in a given city size category such as small, medium and big. A local government's revenue effort is equal to its actual revenue

from local sources divided by its revenue capacity.

Revenues per capita: Per capita revenues of a locality show changes in revenues relative to changes in population size. As population grows, revenues and the need for municipal services may be expected to increase proportionately. The assumption is that the cost of services is directly related to population size.

z-score: The z-score is a commonly used statistical transformation, which represents how many standard deviations from the mean value for a given group of city sizes is represented by a raw score value.

F. DATA SOURCES

Table 8: Data source for dependent variables:

Variables		*Further computing needed*	*Raw data needed*	*Data time period*	*Source*	*Release date*
A. Composite fiscal stress index score (A1+A2+A3)	A1. Relative revenue capacity per capita score	Yes	1. Total general fund revenues	Fiscal year 1997	1997-Census of Gov.- CG97(4)-4: Vol. 4, Government Finances	September 2000
			2. Population	1996 Estimated	1997-Census of Gov.- CG97(4)-4: Vol. 4, Government Finances	September 2000
	A2. Relative revenue effort score	Yes	1. Total revenues from taxes	Fiscal year 1997	1997-Census of Gov.- CG97(4)-4: Vol. 4, Government Finances	September 2000
			2. Total general fund revenues	Fiscal year 1997	1997-Census of Gov.- CG97(4)-4: Vol. 4, Government Finances	September 2000
	A3. Relative median household income score	Yes, to z-score	Median household income	2000	Census 2000 Summary file 3	July-October 2002
B. Per capita general fund expenditure		Yes	1. Total general fund expenditure	Fiscal year 1997	1997-Census of Gov.- CG97(4)-4: Vol. 4, Government Finances	September 2000
			2. Population	1996 Estimated	1997-Census of Gov.- CG97(4)-4: Vol. 4, Government Finances	September 2000
C. FTE rate		Yes	1. FTE	March 1997	1997-Census of Gov.- CG97(3)-1: Vol.3, Public Employment	February 2000
			2. Population	1996 Estimated	1997-Census of Gov.- CG97(3)-1: Vol.3, Public Employment	February 2000

DATA SOURCES (Cont.)

Table 9: Data source for control variables:

Variables	*Further computing needed*	*Raw data needed*	*Data time period*	*Source*	*Release date*
Per capita income	No	Per capita income	2000	Census 2000 Summary file 3	July-October 2002
Median value of single family homes	No	Median value of single family homes	2000	Census 2000 Summary file 3	July-October 2002
Percent owner occupied home	No	Percent owner occupied	2000	County and City Data Book: 2000	November 2001
Poverty rate	No	Poverty rate	2000	Census 2000 Summary file 3	July-October 2002
Crime rate	No	Crime rate/100,000 population	For year 1998	County and City Data Book: 2000	November 2001
Unemployment rate	No	Percent civilian unemployed to total civilian labor force	2000	County and City Data Book: 2000	November 2001
Median age of residents	No	Median age (years)	2000	County and City Data Book: 2000	November 2001
Population	No	Population	1996 Estimated	1997-Census of Gov.- CG97(4)-4: Vol. 4, Government Finances	September 2000
Percent population net change	Yes	1. 1990 census population	1990	County and City Data Book: 2000	November 2001
		2. 1996 estimated population	1996 Estimated	1997-Census of Gov.- CG97(4)-4: Vol. 4, Government Finances	September 2000
Population density	Yes	1. Land area in square miles	1990	County and City Data Book: 2000	November 2001
		2. Population	1996 Estimated	1997-Census of Gov.- CG97(4)-4: Vol. 4, Government Finances	September 2000

DATA SOURCES (Cont.)

Table 9: Data source for control variables: (Continued)

Variables	*Further computing needed*	*Raw data needed*	*Data time period*	*Source*	*Release date*
Presence in MSA	No	Metropolitan areas	2000	County and City Data Book: 2000	November 2001
Geographic region	No	Northeast, south, Midwest and west regions	2000	County and City Data Book: 2000	November 2001
Percent total outstanding debt / Current liabilities	Yes	1. Total debt out-standing at end of fiscal year	Fiscal year 1997	1997-Census of Gov.- CG97(4)-4: Vol. 4, Government Finances	September 2000
		2. Total general fund revenues	Fiscal year 1997	1997-Census of Gov.- CG97(4)-4: Vol. 4, Government Finances	September 2000
Relative fiscal capacity	Yes	1. Total general fund expenditure	Fiscal year 1997	1997-Census of Gov.- CG97(4)-4: Vol. 4, Government Finances	September 2000
		2. Total general fund revenues	Fiscal year 1997	1997-Census of Gov.- CG97(4)-4: Vol. 4, Government Finances	September 2000
		3. Population	1996 Estimated	1997-Census of Gov.- CG97(4)-4: Vol. 4, Government Finances	September 2000
Relative revenue effort	Yes	1. Total revenues from taxes	Fiscal year 1997	1997-Census of Gov.- CG97(4)-4: Vol. 4, Government Finances	September 2000
		2. Total general fund revenues	Fiscal year 1997	1997-Census of Gov.- CG97(4)-4: Vol. 4, Government Finances	September 2000

Table 10: Data source for independent variables:

Variables	*Further computing needed*	*Raw data needed*	*Data time period*	*Source*	*Release date*
Municipal Management Structure	No, but recoding	Form of government	Year 1992 survey	ICMA-1993 Municipal Year Book	1993
Municipal Management Structure	No, but recoding	Form of government	Year 1997 survey	ICMA-1998 Municipal Year Book	1998

G. DATA CODE BOOK

List of Variables on the Working File	Measurement Level

Identifiers and Descriptive Variables:

State — Nominal

City — Nominal

1996 Population (Estimated) — Ordinal

Value	Label	
1	Small cities	(25,000 – 99,999 inhabitants)
2	Medium size cities	(100,000 – 249,999 inhabitants)
3	Big cities	(250,000 – and above)

ICMA-Year Recognized — Interval

Reorganization Status of GMC — Nominal
(ICMA recognized, Non ICMA recognized, Not Applicable)

Form of Government — Nominal

Value	Label
1	SMC - Strong Mayor City
2	CMC - Council Manager City
3	GMC - General Management City

Dependent Variables:

Fiscal Stress — Ratio

General Expenditures — Ratio

Full-time Equivalent Rate Employees — Ratio

Independent Variable:

Strong Mayor City — Dummy (Yes=1, No=0)

Council Manager City — Dummy (Yes=1, No=0)

General Management City — Dummy (Yes=1, No=0)

DATA CODE BOOK (Cont.)

List of Variables on the Working File	Measurement Level
Control Variables:	
Per Capita Income	Ratio
Median Value of Single Family Homes	Ratio
Percent Owner Occupied Home	Ratio
Percentage of Poverty Level	Ratio
Crime Rate	Ratio
Unemployment Rate	Ratio
Median Age of Resident	Ratio
1996 Population (Estimated)	Ratio
Percent Population Net Change	Ratio
Population Density	Ratio
Presence in MSA	Dummy (Yes=1, No=0)
Region - Northeast	Dummy (Yes=1, No=0)
Region - South	Dummy (Yes=1, No=0)
Region - Midwest	Dummy (Yes=1, No=0)
Region - Mountain	Dummy (Yes=1, No=0)
Region - Pacific	Dummy (Yes=1, No=0)
Relative Fiscal Capacity	Ratio
Relative Revenue Effort	Ratio
Percent Total Outstanding Debt	Ratio

H. SYNTAX OF THE STATISTICAL ANALYSES

Descriptive Statistics Syntax:

```
FREQUENCIES
  VARIABLES=pop1996 density popgroth medinage pcapinc medhoinc unemprat
  poverty crimrate homevalu pntowner  /FORMAT=NOTABLE
  /STATISTICS=STDDEV RANGE MINIMUM MAXIMUM MEAN MEDIAN
  /ORDER  ANALYSIS .


FREQUENCIES
  VARIABLES=pcgenrev pcgenexp pctaxrev revefort fistress refiscap liabilty
  fterate  /FORMAT=NOTABLE
  /STATISTICS=STDDEV RANGE MINIMUM MAXIMUM MEAN MEDIAN
  /ORDER  ANALYSIS .


DESCRIPTIVES
  VARIABLES=pop1996 density popgroth medinage pcapinc medhoinc unemprat
  poverty crimrate homevalu pntowner pcgenrev pcgenexp pctaxrev revefort
  fistress refiscap liabilty fterate
  /STATISTICS=MEAN STDDEV RANGE MIN MAX .
```

Inferential / Hypothesis Testing Syntax

[All cities data file]

H1 Syntax (Fiscal Stress Index):

```
REGRESSION
  /DESCRIPTIVES MEAN STDDEV CORR SIG N
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS CI BCOV R ANOVA COLLIN TOL CHANGE ZPP
  /CRITERIA=PIN(.05) POUT(.10) CIN(95)
  /NOORIGIN
  /DEPENDENT fistress
  /METHOD=ENTER smc gmc pop1996 popgroth density medinage pcapinc pntowner
  unemprat crimrate liabilty msa small medium big
  /RESIDUALS DURBIN
  /CASEWISE PLOT(ZRESID) OUTLIERS(3)
  /SAVE PRED ZPRED ADJPRED SEPRED MAHAL COOK LEVER MCIN ICIN RESID
ZRESID
  SRESID DRESID SDRESID DFBETA SDBETA DFFIT SDFIT COVRATIO .
```

H2 Syntax (Revenue Capacity Per Capita):

```
REGRESSION
 /DESCRIPTIVES MEAN STDDEV CORR SIG N
 /MISSING LISTWISE
 /STATISTICS COEFF OUTS CI BCOV R ANOVA COLLIN TOL CHANGE ZPP
 /CRITERIA=PIN(.05) POUT(.10) CIN(95)
 /NOORIGIN
 /DEPENDENT pcgenrev
 /METHOD=ENTER smc gmc pop1996 popgroth density medinage pcapinc pntowner
 unemprat crimrate liabilty msa small medium big
 /RESIDUALS DURBIN
 /CASEWISE PLOT(ZRESID) OUTLIERS(3)
 /SAVE PRED ZPRED ADJPRED SEPRED MAHAL COOK LEVER MCIN ICIN RESID
ZRESID
 SRESID DRESID SDRESID DFBETA SDBETA DFFIT SDFIT COVRATIO .
```

H3 Syntax (Per Capita General Expenditures):

```
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 /STATISTICS COEFF OUTS CI BCOV R ANOVA COLLIN TOL CHANGE ZPP
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 /NOORIGIN
 /DEPENDENT pcgenexp
 /METHOD=ENTER smc gmc pop1996 popgroth density medinage pcapinc pntowner
 unemprat crimrate refiscap a2 msa small medium big
 /RESIDUALS DURBIN
 /CASEWISE PLOT(ZRESID) OUTLIERS(3)
 /SAVE PRED ZPRED ADJPRED SEPRED MAHAL COOK LEVER MCIN ICIN RESID
ZRESID
 SRESID DRESID SDRESID DFBETA SDBETA DFFIT SDFIT COVRATIO .
```

H4 Syntax (FTE Employee Rate):

```
REGRESSION
 /DESCRIPTIVES MEAN STDDEV CORR SIG N
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 /CRITERIA=PIN(.05) POUT(.10) CIN(95)
 /NOORIGIN
 /DEPENDENT fterate
 /METHOD=ENTER smc gmc pop1996 popgroth density medinage pcapinc pntowner
 unemprat crimrate refiscap a2 msa small medium big
 /RESIDUALS DURBIN
 /CASEWISE PLOT(ZRESID) OUTLIERS(3)
 /SAVE PRED ZPRED ADJPRED SEPRED MAHAL COOK LEVER MCIN ICIN RESID
ZRESID
 SRESID DRESID SDRESID DFBETA SDBETA DFFIT SDFIT COVRATIO .
```

Socioeconomic variable correlations:

H1

```
REGRESSION
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 /DEPENDENT fistress
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 unemprat crimrate liabilty msa small medium big
 /RESIDUALS DURBIN
 /CASEWISE PLOT(ZRESID) OUTLIERS(3)
 /SAVE PRED ZPRED ADJPRED SEPRED MAHAL COOK LEVER MCIN ICIN RESID
ZRESID
 SRESID DRESID SDRESID DFBETA SDBETA DFFIT SDFIT COVRATIO .

H2

REGRESSION
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 /MISSING LISTWISE
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 /NOORIGIN
 /DEPENDENT pcgenrev
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 unemprat crimrate liabilty msa small medium big
 /RESIDUALS DURBIN
 /CASEWISE PLOT(ZRESID) OUTLIERS(3)
 /SAVE PRED ZPRED ADJPRED SEPRED MAHAL COOK LEVER MCIN ICIN RESID
ZRESID
 SRESID DRESID SDRESID DFBETA SDBETA DFFIT SDFIT COVRATIO .

H3

REGRESSION
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 /CRITERIA=PIN(.05) POUT(.10) CIN(95)
 /NOORIGIN
 /DEPENDENT pcgenexp
 /METHOD=ENTER pop1996 popgroth density medinage pcapinc pntowner
 unemprat crimrate refiscap a2 msa small medium big
 /RESIDUALS DURBIN
 /CASEWISE PLOT(ZRESID) OUTLIERS(3)
 /SAVE PRED ZPRED ADJPRED SEPRED MAHAL COOK LEVER MCIN ICIN RESID
ZRESID
 SRESID DRESID SDRESID DFBETA SDBETA DFFIT SDFIT COVRATIO .

H4

REGRESSION
 /DESCRIPTIVES MEAN STDDEV CORR SIG N
 /MISSING LISTWISE
 /STATISTICS COEFF OUTS CI BCOV R ANOVA COLLIN TOL CHANGE ZPP
```

```
 /CRITERIA=PIN(.05) POUT(.10) CIN(95)
 /NOORIGIN
 /DEPENDENT fterate
 /METHOD=ENTER pop1996 popgroth density medinage pcapinc pntowner
 unemprat crimrate refiscap a2 msa small medium big
 /RESIDUALS DURBIN
 /CASEWISE PLOT(ZRESID) OUTLIERS(3)
 /SAVE PRED ZPRED ADJPRED SEPRED MAHAL COOK LEVER MCIN ICIN RESID
ZRESID
 SRESID DRESID SDRESID DFBETA SDBETA DFFIT SDFIT COVRATIO .
```

Exploratory Study Syntax

[GMC cities data file:]
H1 Syntax (Fiscal Stress Index):

```
REGRESSION
 /DESCRIPTIVES MEAN STDDEV CORR SIG N
 /MISSING LISTWISE
 /STATISTICS COEFF OUTS CI BCOV R ANOVA COLLIN TOL CHANGE ZPP
 /CRITERIA=PIN(.05) POUT(.10) CIN(95)
 /NOORIGIN
 /DEPENDENT fistress
 /METHOD=ENTER gotgmc maingmc pop1996 popgroth density medinage pcapinc pntowner
 unemprat crimrate liabilty msa small medium big
 /RESIDUALS DURBIN
 /CASEWISE PLOT(ZRESID) OUTLIERS(3)
 /SAVE PRED ZPRED ADJPRED SEPRED MAHAL COOK LEVER MCIN ICIN RESID
ZRESID
 SRESID DRESID SDRESID DFBETA SDBETA DFFIT SDFIT COVRATIO .
```

H2 Syntax (Revenue Capacity Per Capita):

```
REGRESSION
 /DESCRIPTIVES MEAN STDDEV CORR SIG N
 /MISSING LISTWISE
 /STATISTICS COEFF OUTS CI BCOV R ANOVA COLLIN TOL CHANGE ZPP
 /CRITERIA=PIN(.05) POUT(.10) CIN(95)
 /NOORIGIN
 /DEPENDENT pcgenrev
 /METHOD=ENTER gotgmc maingmc pop1996 popgroth density medinage pcapinc pntowner
 unemprat crimrate liabilty msa small medium big
 /RESIDUALS DURBIN
 /CASEWISE PLOT(ZRESID) OUTLIERS(3)
 /SAVE PRED ZPRED ADJPRED SEPRED MAHAL COOK LEVER MCIN ICIN RESID
ZRESID
 SRESID DRESID SDRESID DFBETA SDBETA DFFIT SDFIT COVRATIO .
```

H3 Syntax (Per Capita General Expenditures):

```
REGRESSION
 /DESCRIPTIVES MEAN STDDEV CORR SIG N
```

```
 /MISSING LISTWISE
 /STATISTICS COEFF OUTS CI BCOV R ANOVA COLLIN TOL CHANGE ZPP
 /CRITERIA=PIN(.05) POUT(.10) CIN(95)
 /NOORIGIN
 /DEPENDENT pcgenexp
 /METHOD=ENTER gotgmc maingmc pop1996 popgroth density medinage pcapinc pntowner
 unemprat crimrate refiscap a2 msa small medium big
 /RESIDUALS DURBIN
 /CASEWISE PLOT(ZRESID) OUTLIERS(3)
 /SAVE PRED ZPRED ADJPRED SEPRED MAHAL COOK LEVER MCIN ICIN RESID
ZRESID
 SRESID DRESID SDRESID DFBETA SDBETA DFFIT SDFIT COVRATIO .
```

H4 Syntax (FTE Employee Rate):

```
REGRESSION
 /DESCRIPTIVES MEAN STDDEV CORR SIG N
 /MISSING LISTWISE
 /STATISTICS COEFF OUTS CI BCOV R ANOVA COLLIN TOL CHANGE ZPP
 /CRITERIA=PIN(.05) POUT(.10) CIN(95)
 /NOORIGIN
 /DEPENDENT fterate
 /METHOD=ENTER gotgmc maingmc pop1996 popgroth density medinage pcapinc pntowner
 unemprat crimrate refiscap a2 msa small medium big
 /RESIDUALS DURBIN
 /CASEWISE PLOT(ZRESID) OUTLIERS(3)
 /SAVE PRED ZPRED ADJPRED SEPRED MAHAL COOK LEVER MCIN ICIN RESID
ZRESID
 SRESID DRESID SDRESID DFBETA SDBETA DFFIT SDFIT COVRATIO .
```

Socioeconomic variable correlations:

H1- GMC Cities

```
REGRESSION
 /DESCRIPTIVES MEAN STDDEV CORR SIG N
 /MISSING LISTWISE
 /STATISTICS COEFF OUTS CI BCOV R ANOVA COLLIN TOL CHANGE ZPP
 /CRITERIA=PIN(.05) POUT(.10) CIN(95)
 /NOORIGIN
 /DEPENDENT fistress
 /METHOD=ENTER pop1996 popgroth density medinage pcapinc pntowner
 unemprat crimrate liabilty msa small medium big
 /RESIDUALS DURBIN
 /CASEWISE PLOT(ZRESID) OUTLIERS(3)
 /SAVE PRED ZPRED ADJPRED SEPRED MAHAL COOK LEVER MCIN ICIN RESID
ZRESID
 SRESID DRESID SDRESID DFBETA SDBETA DFFIT SDFIT COVRATIO .
```

H2- GMC Cities

```
REGRESSION
```

```
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 /MISSING LISTWISE
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 /CRITERIA=PIN(.05) POUT(.10) CIN(95)
 /NOORIGIN
 /DEPENDENT pcgenrev
 /METHOD=ENTER pop1996 popgroth density medinage pcapinc pntowner
 unemprat crimrate liabilty msa small medium big
 /RESIDUALS DURBIN
 /CASEWISE PLOT(ZRESID) OUTLIERS(3)
 /SAVE PRED ZPRED ADJPRED SEPRED MAHAL COOK LEVER MCIN ICIN RESID
ZRESID
 SRESID DRESID SDRESID DFBETA SDBETA DFFIT SDFIT COVRATIO .
```

H3- GMC Cities

```
REGRESSION
 /DESCRIPTIVES MEAN STDDEV CORR SIG N
 /MISSING LISTWISE
 /STATISTICS COEFF OUTS CI BCOV R ANOVA COLLIN TOL CHANGE ZPP
 /CRITERIA=PIN(.05) POUT(.10) CIN(95)
 /NOORIGIN
 /DEPENDENT pcgenexp
 /METHOD=ENTER pop1996 popgroth density medinage pcapinc pntowner
 unemprat crimrate refiscap a2 msa small medium big
 /RESIDUALS DURBIN
 /CASEWISE PLOT(ZRESID) OUTLIERS(3)
 /SAVE PRED ZPRED ADJPRED SEPRED MAHAL COOK LEVER MCIN ICIN RESID
ZRESID
 SRESID DRESID SDRESID DFBETA SDBETA DFFIT SDFIT COVRATIO .
```

H4- GMC Cities

```
REGRESSION
 /DESCRIPTIVES MEAN STDDEV CORR SIG N
 /MISSING LISTWISE
 /STATISTICS COEFF OUTS CI BCOV R ANOVA COLLIN TOL CHANGE ZPP
 /CRITERIA=PIN(.05) POUT(.10) CIN(95)
 /NOORIGIN
 /DEPENDENT fterate
 /METHOD=ENTER pop1996 popgroth density medinage pcapinc pntowner
 unemprat crimrate refiscap a2 msa small medium big
 /RESIDUALS DURBIN
 /CASEWISE PLOT(ZRESID) OUTLIERS(3)
 /SAVE PRED ZPRED ADJPRED SEPRED MAHAL COOK LEVER MCIN ICIN RESID
ZRESID
 SRESID DRESID SDRESID DFBETA SDBETA DFFIT SDFIT COVRATIO .
```

I. DATA ANALYSIS AND RESULTS

Table 11: Distribution of the Cities

Number of Cities in all the states (with population 25,000 and above -1996 estimated)

STATE	CITIES (N)	CITIES (%)
AL	15	1.29
AK	3	0.26
AZ	15	1.29
AR	12	1.03
CA	238	20.41
CO	19	1.63
CT	18	1.54
DE	3	0.26
DC	1	0.09
FL	67	5.75
GA	17	1.46
HI	1	0.09
ID	7	0.60
IL	75	6.43
IN	28	2.40
IA	17	1.46
KS	13	1.11
KY	11	0.94
LA	12	1.03
ME	3	0.26
MD	7	0.60
MA	41	3.52
MI	44	3.77
MN	32	2.74
MS	9	0.77
MO	20	1.72
MT	6	0.51
NE	5	0.43
NV	6	0.51
NH	6	0.51
NJ	31	2.66
NM	10	0.86
NY	29	2.49
NC	22	1.89
ND	4	0.34
OH	51	4.37
OK	14	1.20
OR	14	1.20
PA	22	1.89
RI	6	0.51
SC	13	1.11
SD	3	0.26
TN	17	1.46
TX	86	7.38
UT	14	1.20
VT	1	0.09
VA	17	1.46
WA	27	2.32
WV	5	0.43
WI	26	2.23
WY	3	0.26
	1166	100%

Table 12: Form of Government in 1993

	Year-1993									
STATE	SMC (N)	SMC (%)	CMC (N)	CMC (%)	GMC (N)	GMC (%)	OTHER (N)	OTHER (%)	MISSING (N)	MISSING (%)
AL	7	47	4	27	2	13	2	13	0	0
AK	0	0	2	67	1	33	0	0	0	0
AZ	0	0	13	87	1	7	0	0	1	7
AR	8	67	4	33	0	0	0	0	0	0
CA	3	1	221	93	9	4	0	0	5	2
CO	0	0	16	84	3	16	0	0	0	0
CT	11	61	4	22	3	17	0	0	0	0
DE	0	0	2	67	1	33	0	0	0	0
DC	1	100	0	0	0	0	0	0	0	0
FL	5	7	56	84	5	7	1	1	0	0
GA	3	18	10	59	4	24	0	0	0	0
HI	0	0	0	0	1	100	0	0	0	0
ID	5	71	2	29	0	0	0	0	0	0
IL	20	27	40	53	12	16	3	4	0	0
IN	24	86	0	0	4	14	0	0	0	0
IA	3	18	12	71	1	6	1	6	0	0
KS	1	8	11	85	1	8	0	0	0	0
KY	3	27	7	64	1	9	0	0	0	0
LA	7	58	0	0	4	33	1	8	0	0
ME	0	0	2	67	0	0	1	33	0	0
MD	0	0	4	57	3	43	0	0	0	0
MA	29	71	8	20	4	10	0	0	0	0
MI	12	27	27	61	4	9	0	0	1	2
MN	0	0	25	78	7	22	0	0	0	0
MS	3	33	1	11	4	44	1	11	0	0
MO	3	15	12	60	5	25	0	0	0	0
MT	1	17	4	67	1	17	0	0	0	0
NE	1	20	1	20	3	60	0	0	0	0
NV	0	0	6	100	0	0	0	0	0	0
NH	2	33	4	67	0	0	0	0	0	0
NJ	14	45	6	19	8	26	3	10	0	0
NM	0	0	7	70	3	30	0	0	0	0
NY	17	59	10	34	1	3	1	3	0	0
NC	0	0	20	91	2	9	0	0	0	0
ND	2	50	1	25	0	0	1	25	0	0
OH	24	47	19	37	8	16	0	0	0	0
OK	0	0	13	93	1	7	0	0	0	0
OR	1	7	12	86	0	0	1	7	0	0
PA	12	55	5	23	4	18	0	0	1	5
RI	3	50	1	17	2	33	0	0	0	0
SC	0	0	8	62	5	38	0	0	0	0
SD	1	33	0	0	0	0	2	67	0	0
TN	7	41	6	35	2	12	2	12	0	0
TX	3	3	76	88	5	6	1	1	1	1
UT	6	43	5	36	2	14	0	0	1	7
VT	1	100	0	0	0	0	0	0	0	0
VA	0	0	17	100	0	0	0	0	0	0
WA	7	26	14	52	3	11	0	0	3	11
WV	3	60	2	40	0	0	0	0	0	0
WI	12	46	6	23	8	31	0	0	0	0
WY	1	33	2	67	0	0	0	0	0	0
	266	23%	728	62%	138	12%	21	2%	13	1%

Table 13: Form of Government in 1998

	Year-1998									
STATE	SMC (N)	SMC (%)	CMC (N)	CMC (%)	GMC (N)	GMC (%)	OTHER (N)	OTHER (%)	MISSING (N)	MISSING (%)
AL	7	47	4	27	2	13	2	13	0	0
AK	2	67	1	33	0	0	0	0	0	0
AZ	1	7	13	87	0	0	1	7	0	0
AR	6	50	4	33	2	17	0	0	0	0
CA	1	0	233	98	3	1	0	0	1	0
CO	0	0	18	95	1	5	0	0	0	0
CT	9	50	4	22	5	28	0	0	0	0
DE	1	33	2	67	0	0	0	0	0	0
DC	1	100	0	0	0	0	0	0	0	0
FL	5	7	57	85	3	4	2	3	0	0
GA	2	12	10	59	5	29	0	0	0	0
HI	0	0	0	0	1	100	0	0	0	0
ID	3	43	2	29	2	29	0	0	0	0
IL	14	19	45	60	14	19	2	3	0	0
IN	19	68	1	4	8	29	0	0	0	0
IA	1	6	14	82	1	6	1	6	0	0
KS	2	15	11	85	0	0	0	0	0	0
KY	1	9	7	64	2	18	1	9	0	0
LA	5	42	0	0	6	50	1	8	0	0
ME	0	0	3	100	0	0	0	0	0	0
MD	1	14	4	57	2	29	0	0	0	0
MA	24	59	10	24	7	17	0	0	0	0
MI	10	23	27	61	7	16	0	0	0	0
MN	1	3	27	84	4	13	0	0	0	0
MS	5	56	1	11	2	22	1	11	0	0
MO	3	15	15	75	2	10	0	0	0	0
MT	0	0	4	67	1	17	1	17	0	0
NE	2	40	1	20	2	40	0	0	0	0
NV	0	0	6	100	0	0	0	0	0	0
NH	2	33	4	67	0	0	0	0	0	0
NJ	10	32	6	19	12	39	3	10	0	0
NM	0	0	8	80	2	20	0	0	0	0
NY	16	55	7	24	5	17	1	3	0	0
NC	0	0	22	100	0	0	0	0	0	0
ND	1	25	1	25	1	25	1	25	0	0
OH	25	49	16	31	9	18	1	2	0	0
OK	1	7	13	93	0	0	0	0	0	0
OR	1	7	12	86	0	0	1	7	0	0
PA	8	36	7	32	6	27	0	0	1	5
RI	2	33	1	17	3	50	0	0	0	0
SC	1	8	10	77	2	15	0	0	0	0
SD	1	33	0	0	0	0	2	67	0	0
TN	6	35	6	35	3	18	2	12	0	0
TX	2	2	79	92	4	5	1	1	0	0
UT	3	21	6	43	4	29	0	0	1	7
VT	1	100	0	0	0	0	0	0	0	0
VA	0	0	17	100	0	0	0	0	0	0
WA	5	19	17	63	5	19	0	0	0	0
WV	1	20	3	60	1	20	0	0	0	0
WI	15	58	6	23	5	19	0	0	0	0
WY	1	33	2	67	0	0	0	0	0	0
	228	20%	767	66%	144	12%	24	2%	3	0%

Table 14:
Cities that maintained same form of government for 5 years (1993-1998)

STATE	CITIES (N)	SMC (N)	SMC (%)	CMC (N)	CMC (%)	GMC (N)	GMC (%)
AL	11	6	55	4	36	1	9
AK	1	0	0	1	100	0	0
AZ	12	0	0	12	100	0	0
AR	10	6	60	4	40	0	0
CA	224	1	0	221	99	2	1
CO	17	0	0	16	94	1	6
CT	14	8	57	4	29	2	14
DE	2	0	0	2	100	0	0
DC	1	1	100	0	0	0	0
FL	62	4	6	55	89	3	5
GA	14	1	7	10	71	3	21
HI	1	0	0	0	0	1	100
ID	5	3	60	2	40	0	0
IL	62	13	21	40	65	9	15
IN	17	16	94	0	0	1	6
IA	12	0	0	12	100	0	0
KS	12	1	8	11	92	0	0
KY	9	1	11	7	78	1	11
LA	7	4	57	0	0	3	43
ME	2	0	0	2	100	0	0
MD	6	0	0	4	67	2	33
MA	28	20	71	8	29	0	0
MI	36	7	19	27	75	2	6
MN	29	0	0	25	86	4	14
MS	6	3	50	1	17	2	33
MO	17	3	18	12	71	2	12
MT	5	0	0	4	80	1	20
NE	2	0	0	1	50	1	50
NV	6	0	0	6	100	0	0
NH	6	2	33	4	67	0	0
NJ	18	7	39	6	33	5	28
NM	9	0	0	7	78	2	22
NY	21	14	67	7	33	0	0
NC	20	0	0	20	100	0	0
ND	2	1	50	1	50	0	0
OH	38	19	50	16	42	3	8
OK	13	0	0	13	100	0	0
OR	13	1	8	12	92	0	0
PA	13	6	46	5	38	2	15
RI	3	1	33	1	33	1	33
SC	10	0	0	8	80	2	20
SD	1	1	100	0	0	0	0
TN	14	6	43	6	43	2	14
TX	80	1	1	76	95	3	4
UT	8	2	25	5	63	1	13
VT	1	1	100	0	0	0	0
VA	17	0	0	17	100	0	0
WA	22	5	23	14	64	3	14
WV	3	1	33	2	67	0	0
WI	23	12	52	6	26	5	22
WY	3	1	33	2	67	0	0
	968	179	18%	719	74%	70	7%

Table 15:

City Size and Form of Government Crosstabulation

			Form of Government			
			SMC	CMC	GMC	Total
City Size	Small	Count	152	593	47	792
		% within City Size	19.2%	74.9%	5.9%	100.0%
		% of Total	15.7%	61.3%	4.9%	81.8%
	Medium	Count	17	99	9	125
		% within City Size	13.6%	79.2%	7.2%	100.0%
		% of Total	1.8%	10.2%	.9%	12.9%
	Big	Count	10	27	14	51
		% within City Size	19.6%	52.9%	27.5%	100.0%
		% of Total	1.0%	2.8%	1.4%	5.3%
Total		Count	179	719	70	968
		% within City Size	18.5%	74.3%	7.2%	100.0%
		% of Total	18.5%	74.3%	7.2%	100.0%

Table 16:

Region and Form of Government Crosstabulation

			Form of Government			
			SMC	CMC	GMC	Total
Region	Northeast	Count	59	37	10	106
		% within Region	55.7%	34.9%	9.4%	100.0%
		% of Total	6.1%	3.8%	1.0%	11.0%
	South	Count	34	229	22	285
		% within Region	11.9%	80.4%	7.7%	100.0%
		% of Total	3.5%	23.7%	2.3%	29.4%
	Midwest	Count	73	151	27	251
		% within Region	29.1%	60.2%	10.8%	100.0%
		% of Total	7.5%	15.6%	2.8%	25.9%
	Mountain	Count	6	54	5	65
		% within Region	9.2%	83.1%	7.7%	100.0%
		% of Total	.6%	5.6%	.5%	6.7%
	Pacific	Count	7	248	6	261
		% within Region	2.7%	95.0%	2.3%	100.0%
		% of Total	.7%	25.6%	.6%	27.0%
Total		Count	179	719	70	968
		% within Region	18.5%	74.3%	7.2%	100.0%
		% of Total	18.5%	74.3%	7.2%	100.0%

Table 17:

MSA and Form of Government Crosstabulation

			Form of Government			
			SMC	CMC	GMC	Total
MSA	Non MSA	Count	117	516	39	672
		% within MSA	17.4%	76.8%	5.8%	100.0%
		% of Total	12.1%	53.3%	4.0%	69.4%
	MSA	Count	62	203	31	296
		% within MSA	20.9%	68.6%	10.5%	100.0%
		% of Total	6.4%	21.0%	3.2%	30.6%
Total		Count	179	719	70	968
		% within MSA	18.5%	74.3%	7.2%	100.0%
		% of Total	18.5%	74.3%	7.2%	100.0%

Table 18:

Statistics on Socioeconomic Characteristics of the Cities with Population of 25,000 or more

	N							
	Valid	Missing	Mean	Median	Std. Deviation	Range	Minimum	Maximum
Population (1996)	968	0	96193.42	48098.00	293617.63	7355872	25034	7380906
Population Density	968	0	3877.12	2989.75	3646.33	58591	11	58603
Population Growth	968	0	8.9227	5.2221	15.0055	157.93	-19.27	138.66
Median Age of Residents	882	86	34.082	34.300	4.789	51.8	2.3	54.1
Per Capita Income	968	0	22134.28	20053.50	7910.17	58361	8415	66776
Median Household Income	968	0	45200.72	40702.50	16103.98	124013	15882	139895
Unemployment Rate	880	88	4.055	3.400	2.429	24.6	.9	25.5
Percent Poverty	968	0	12.8535	12.0500	7.7359	46.10	.80	46.90
Crime Rate	735	233	5853.48	5106.00	3997.65	62822	988	63810
Median Home Value	968	0	147829.44	117900.00	107408.19	964300	35700	1000000
Percent Owner Occupied Home	881	87	59.519	59.600	13.094	71.4	21.3	92.7

Table 19:

Statistics on the City Government Fiscal Characteristics of the Cities with Population of 25,000 or more

	N							
	Valid	Missing	Mean	Median	Std. Deviation	Range	Minimum	Maximum
Revenue Capacity Per Capita	912	56	1043.93	860.43	676.21	9062	216	9278
Per Capita General Expenditures	912	56	1024.51	829.79	666.16	8140	176	8317
Per capita Tax Revenues	912	56	455.5085	378.0871	323.8554	4792.25	62.95	4855.20
Revenue Effort	912	56	.4509	.4510	.1325	.93	.04	.97
Composite Fiscal Stress Index	912	56	164.9503	165.8991	7.9987	64.95	120.08	185.03
Current Liabilities	912	56	137.5256	109.7580	122.7440	1313.08	.00	1313.08
FTE Rate	806	162	117.15	90.29	96.03	896	2	898

Table 20:

Descriptives: Socioeconomic Characteristics of Different Forms of Governments

		N	Mean	Std. Deviation	Std. Error	Minimum	Maximum
Population (1996)	SMC	179	140213.97	618800.40	46251.31	25552	7380906
	CMC	719	77276.72	107104.68	3994.33	25034	1171121
	GMC	70	177928.13	292401.11	34948.62	25203	1744058
	Total	968	96193.42	293617.63	9437.23	25034	7380906
Population Density	SMC	179	4192.20	4278.41	319.78	528	33728
	CMC	719	3703.81	2854.10	106.44	11	22176
	GMC	70	4851.52	7267.29	868.61	747	58603
	Total	968	3877.12	3646.33	117.20	11	58603
Population Growth	SMC	179	3.2035	10.6394	.7952	-11.37	73.48
	CMC	719	10.4736	15.1745	.5659	-19.27	134.04
	GMC	70	7.6172	18.8631	2.2546	-14.66	138.66
	Total	968	8.9227	15.0055	.4823	-19.27	138.66
Median Age of Residents	SMC	174	34.396	3.959	.300	22.0	42.9
	CMC	645	34.063	5.093	.201	2.3	54.1
	GMC	63	33.406	3.450	.435	22.4	41.3
	Total	882	34.082	4.789	.161	2.3	54.1
Per Capita Income	SMC	179	20305.82	5521.43	412.69	9815	47187
	CMC	719	22701.03	8465.74	315.72	8415	66776
	GMC	70	20988.57	6255.44	747.67	12925	44021
	Total	968	22134.28	7910.17	254.24	8415	66776
Median Household Income	SMC	179	40280.49	12515.39	935.44	19544	98390
	CMC	719	46734.24	16851.24	628.45	15882	139895
	GMC	70	42030.99	13343.28	1594.83	25085	94609
	Total	968	45200.72	16103.98	517.60	15882	139895
Unemployment Rate	SMC	174	4.245	2.067	.157	1.2	11.4
	CMC	644	3.986	2.566	.101	.9	25.5
	GMC	62	4.244	1.822	.231	1.1	8.1
	Total	880	4.055	2.429	8.188E-02	.9	25.5
Crime Rate	SMC	130	5882.99	3007.65	263.79	1598	15952
	CMC	554	5729.39	4248.18	180.49	988	63810
	GMC	51	7126.29	3136.87	439.25	2396	14551
	Total	735	5853.48	3997.65	147.46	988	63810
Percent Owner Occupied Home	SMC	174	58.196	13.447	1.019	26.0	92.2
	CMC	644	60.182	12.926	.509	21.3	92.7
	GMC	63	56.392	13.285	1.674	23.8	89.0
	Total	881	59.519	13.094	.441	21.3	92.7

Table 21:

Descriptives: Municipal Fiscal Performance Measures of Different Forms of Government

		N	Mean	Std. Deviation	Std. Error	Minimum	Maximum
Composite Fiscal Stress Index	SMC	156	164.1793	8.8776	.7108	139.41	185.03
	CMC	690	165.0396	7.8406	.2985	120.08	184.07
	GMC	66	165.8392	7.4039	.9114	140.40	179.78
	Total	912	164.9503	7.9987	.2649	120.08	185.03
Revenue Capacity Per Capita	SMC	156	1316.92	1047.74	83.89	323	9278
	CMC	690	970.93	536.09	20.41	216	4936
	GMC	66	1161.76	703.59	86.61	440	4733
	Total	912	1043.93	676.21	22.39	216	9278
Per Capita General Expenditures	SMC	156	1283.45	995.50	79.70	305	8317
	CMC	690	954.54	542.90	20.67	176	4552
	GMC	66	1143.96	710.49	87.45	413	4888
	Total	912	1024.51	666.16	22.06	176	8317
FTE Rate	SMC	141	162.15	133.08	11.21	2	898
	CMC	602	105.45	84.00	3.42	3	604
	GMC	63	128.28	72.76	9.17	43	415
	Total	806	117.15	96.03	3.38	2	898

Table 22:

Descriptives: Relative Fiscal Capacity Measure of Different Forms of Government

Relative Fiscal Capacity

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
SMC	156	.99822	2.6575E-02	2.13E-03	.99402	1.00243	.918	1.190
CMC	690	1.00061	2.3188E-02	8.83E-04	.99888	1.00234	.857	1.141
GMC	66	1.00075	1.7587E-02	2.16E-03	.99643	1.00508	.961	1.049
Total	912	1.00021	2.3445E-02	7.76E-04	.99869	1.00174	.857	1.190

Table 23:

Descriptives: Revenue Sources and Different Form of Government

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Per Capita Total Revenue	SMC	156	1586.55	1265.85	101.35	1386.35	1786.75	337	10719
	CMC	690	1230.04	744.65	28.35	1174.38	1285.70	220	5038
	GMC	66	1441.63	942.85	116.06	1209.85	1673.41	537	6357
	Total	912	1306.33	880.13	29.14	1249.13	1363.53	220	10719
Percapita General Revenue	SMC	156	1316.92	1047.74	83.89	1151.21	1482.62	323	9278
	CMC	690	970.93	536.09	20.41	930.86	1011.00	216	4936
	GMC	66	1161.76	703.59	86.61	988.80	1334.73	440	4733
	Total	912	1043.93	676.21	22.39	999.98	1087.87	216	9278
Per Capita Total IGR	SMC	156	391.16	493.90	39.54	313.05	469.28	18	3150
	CMC	690	173.54	210.01	8.00	157.84	189.24	0	2227
	GMC	66	286.51	310.15	38.18	210.27	362.76	5	1780
	Total	912	218.94	297.82	9.86	199.59	238.29	0	3150
Per Capita IGR from Federal government	SMC	156	65.23	254.90	20.41	24.92	105.55	0	3150
	CMC	690	29.51	48.60	1.85	25.87	33.14	0	539
	GMC	66	49.39	54.69	6.73	35.94	62.83	0	229
	Total	912	37.06	115.08	3.81	29.58	44.53	0	3150
Per Capita IGR from state government	SMC	156	325.93	414.66	33.20	260.35	391.51	0	2085
	CMC	690	144.03	189.75	7.22	129.85	158.22	0	1887
	GMC	66	237.13	281.09	34.60	168.02	306.23	5	1584
	Total	912	181.88	258.81	8.57	165.07	198.70	0	2085
Per Capita General Revenue From Own Source	SMC	156	892.16	688.15	55.10	783.33	1001.00	140	5997
	CMC	690	770.14	410.77	15.64	739.44	800.85	128	3776
	GMC	66	847.86	476.15	58.61	730.80	964.91	290	2949
	Total	912	796.64	476.07	15.76	765.70	827.58	128	5997
Per Capita Local revenue from taxes	SMC	156	563.64	540.71	43.29	478.12	649.15	72	4855
	CMC	690	427.35	250.04	9.52	408.66	446.04	63	2153
	GMC	66	494.32	268.42	33.04	428.33	560.30	163	1469
	Total	912	455.51	323.86	10.72	434.46	476.55	63	4855
Per Capita Revenue From Property Tax	SMC	176	378.16	397.96	30.00	318.96	437.37	6	2170
	CMC	714	218.35	222.03	8.31	202.04	234.66	0	2152
	GMC	70	278.77	227.74	27.22	224.47	333.07	27	1359
	Total	960	252.05	270.37	8.73	234.93	269.18	0	2170

Table 24:

Descriptives: Socio Economic Characteristics of Different GMC Status Cities

		N	Mean	Std. Deviation	Std. Error	Minimum	Maximum
Population (1996)	Dropped GMC	67	117180.33	336294.88	41085.0	25228	2721547
	Maintained GMC	70	177928.13	292401.11	34948.6	25203	1744058
	Adopted GMC	71	121103.65	137319.14	16296.8	25696	746737
	Total	208	138963.51	267790.07	18567.9	25203	2721547
Population Density	Dropped GMC	67	4736.07	6789.41	829.46	148	46577
	Maintained GMC	70	4851.53	7267.32	868.61	747	58603
	Adopted GMC	71	4572.85	3827.57	454.25	718	18400
	Total	208	4719.21	6104.88	423.30	148	58603
Population Growth	Dropped GMC	67	6.7630	12.5161	1.5291	-11.64	58.99
	Maintained GMC	70	7.6166	18.8629	2.2545	-14.66	138.66
	Adopted GMC	71	8.7889	40.2383	4.7754	-6.38	326.06
	Total	208	7.7418	26.7726	1.8563	-14.66	326.06
Median Age of Residents	Dropped GMC	62	34.484	3.341	.424	24.9	41.8
	Maintained GMC	63	33.406	3.450	.435	22.4	41.3
	Adopted GMC	71	34.217	3.531	.419	23.5	41.6
	Total	196	34.041	3.457	.247	22.4	41.8
Per Capita Income	Dropped GMC	67	21090.09	6493.84	793.35	8926	43288
	Maintained GMC	70	20988.57	6255.44	747.67	12925	44021
	Adopted GMC	73	20385.51	5574.22	652.41	12874	45708
	Total	210	20811.32	6085.93	419.97	8926	45708
Median Household Income	Dropped GMC	67	43084.30	13984.29	1708.45	23612	83802
	Maintained GMC	70	42030.99	13343.28	1594.83	25085	94609
	Adopted GMC	73	38795.95	11151.54	1305.19	25000	86052
	Total	210	41242.48	12913.66	891.13	23612	94609
Unemployment Rate	Dropped GMC	62	4.003	1.867	.237	1.4	9.9
	Maintained GMC	62	4.244	1.822	.231	1.1	8.1
	Adopted GMC	71	4.262	1.796	.213	1.3	9.5
	Total	195	4.174	1.821	.130	1.1	9.9
Crime Rate	Dropped GMC	49	5971.41	3519.01	502.72	1896	22580
	Maintained GMC	51	7126.29	3136.87	439.25	2396	14551
	Adopted GMC	59	6312.08	2879.35	374.86	3	14032
	Total	159	6468.26	3185.09	252.59	3	22580
Percent Owner Occupied Home	Dropped GMC	62	60.018	12.722	1.616	22.6	88.0
	Maintained GMC	63	56.392	13.285	1.674	23.8	89.0
	Adopted GMC	71	55.542	12.210	1.449	26.6	81.8
	Total	196	57.231	12.806	.915	22.6	89.0

Table 25:

Descriptives: Municipal Fiscal Performance Measures of Different GMC Status Cities

		N	Mean	Std. Deviation	Std. Error	Minimum	Maximum
Composite Fiscal Stress Index	Dropped GMC	64	165.0639	9.1546	1.1443	139.98	179.48
	Maintained GMC	66	165.6870	7.5366	.9277	138.73	179.76
	Adopted GMC	63	165.6816	8.4039	1.0588	145.99	185.28
	Total	193	165.4786	8.3439	.6006	138.73	185.28
Revenue Capacity Per Capita	Dropped GMC	64	1082.19	643.20	80.40	187	3573
	Maintained GMC	66	1161.76	703.58	86.60	440	4733
	Adopted GMC	63	1318.02	678.34	85.46	372	3056
	Total	193	1186.38	679.29	48.90	187	4733
Per Capita General Expenditures	Dropped GMC	64	1049.09	638.34	79.79	233	3330
	Maintained GMC	66	1143.95	710.52	87.46	413	4888
	Adopted GMC	63	1317.46	672.33	84.71	367	3057
	Total	193	1169.13	680.31	48.97	233	4888
FTE Rate	Dropped GMC	59	120.58	82.15	10.70	27	397
	Maintained GMC	63	128.29	72.78	9.17	43	415
	Adopted GMC	55	162.64	97.20	13.11	53	416
	Total	177	136.39	85.51	6.43	27	416

Table 26:H1- Composite Fiscal Stress Index – SMC Vs. GMC Cities

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	172.497	2.470		69.828	.000	167.646	177.347		
	SMC	-2.529	.766	-.117	-3.301	.001	-4.033	-1.025	.915	1.093
	GMC	-.191	1.120	-.006	-.171	.864	-2.390	2.008	.917	1.090
	Population (1996)	.000	.000	-.048	-1.179	.239	.000	.000	.682	1.466
	Population Growth	.013	.021	.022	.613	.540	-.028	.053	.859	1.164
	Population Density	.000	.000	.031	.803	.422	.000	.000	.773	1.293
	Median Age of Residents	.009	.074	.005	.118	.906	-.136	.153	.576	1.737
	Per Capita Income	.000	.000	-.488	-10.647	.000	-.001	.000	.542	1.844
	Percent Owner Occupied Home	.071	.027	.113	2.592	.010	.017	.125	.602	1.662
	Unemployment Rate	.043	.134	.013	.322	.748	-.219	.305	.697	1.434
	Crime Rate	.000	.000	-.063	-1.732	.084	.000	.000	.851	1.176
	Current Liabilities	-.006	.002	-.094	-2.645	.008	-.010	-.001	.907	1.102
	MSA	.988	.664	.059	1.488	.137	-.316	2.291	.732	1.366
	Medium Size City	-.214	.764	-.010	-.280	.780	-1.714	1.287	.900	1.111
	Big City	.572	1.334	.018	.429	.668	-2.047	3.192	.622	1.608

a. Dependent Variable: Composite Fiscal Stress Index

Table 27:H1- Composite Fiscal Stress Index – SMC Vs. GMC Cities

Descriptive Statistics

	Mean	Std. Deviation	N
Composite Fiscal Stress Index	165.1189	7.9889	693
SMC	.16	.37	693
GMC	.07	.25	693
Population (1996)	115724.04	343638.19	693
Population Growth	7.9900	14.0437	693
Population Density	3984.99	3776.36	693
Median Age of Residents	33.887	4.829	693
Per Capita Income	21911.28	8052.33	693
Percent Owner Occupied Home	58.508	12.726	693
Unemployment Rate	4.021	2.420	693
Crime Rate	5838.38	4056.83	693
Current Liabilities	138.2737	129.5976	693
MSA	.34	.48	693
Small City	.76	.43	693
Medium Size City	.17	.37	693
Big City	.07	.26	693

Table 28:H1- Composite Fiscal Stress Index – SMC Vs. GMC Cities

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.476[a]	.226	.210	7.0998	.226	14.155	14	678	.000	1.597

a. Predictors: (Constant), Big City, Population Growth, Per Capita Income, Medium Size City, SMC, Population Density, Current Liabilities, GMC, Crime Rate, MSA, Percent Owner Occupied Home, Unemployment Rate, Population (1996), Median Age of Residents

b. Dependent Variable: Composite Fiscal Stress Index

Table 29:

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9989.139	14	713.510	14.155	.000[a]
	Residual	34176.331	678	50.408		
	Total	44165.470	692			

a. Predictors: (Constant), Big City, Population Growth, Per Capita Income, Medium Size City, SMC, Population Density, Current Liabilities, GMC, Crime Rate, MSA, Percent Owner Occupied Home, Unemployment Rate, Population (1996), Median Age of Residents

b. Dependent Variable: Composite Fiscal Stress Index

Table 30:H2-Revenue Capacity Per Capita – SMC Vs. GMC Cities

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	1052	183.0		5.749	.000	692.852	1411.502		
	SMC	297.5	56.759	.174	5.242	.000	186.087	408.976	.915	1.093
	GMC	173.7	82.965	.069	2.093	.037	10.751	336.550	.917	1.090
	Population (1996)	.000	.000	.240	6.256	.000	.000	.001	.682	1.466
	Population Growth	-3.964	1.536	-.088	-2.581	.010	-6.980	-.948	.859	1.164
	Population Density	-.008	.006	-.049	-1.364	.173	-.020	.004	.773	1.293
	Median Age of Residents	23.298	5.458	.178	4.269	.000	12.582	34.015	.576	1.737
	Per Capita Income	.012	.003	.156	3.625	.000	.006	.019	.542	1.844
	Percent Owner Occupied Home	-19.14	2.025	-.386	-9.453	.000	-23.122	-15.168	.602	1.662
	Unemployment Rate	-19.86	9.894	-.076	-2.007	.045	-39.284	-.431	.697	1.434
	Crime Rate	.014	.005	.089	2.579	.010	.003	.024	.851	1.176
	Current Liabilities	.095	.162	.019	.584	.560	-.224	.413	.907	1.102
	MSA	-16.44	49.184	-.012	-.334	.738	-113.014	80.129	.732	1.366
	Medium Size City	100.8	56.600	.059	1.780	.075	-10.371	211.895	.900	1.111
	Big City	170.0	98.837	.069	1.720	.086	-24.036	364.091	.622	1.608

a. Dependent Variable: Revenue Capacity Per Capita

Table 31:H2-Revenue Capacity Per Capita – SMC Vs. GMC Cities

Descriptive Statistics

	Mean	Std. Deviation	N
Revenue Capacity Per Capita	1072.59	630.76	693
SMC	.16	.37	693
GMC	.07	.25	693
Population (1996)	115724.04	343638.19	693
Population Growth	7.9900	14.0437	693
Population Density	3984.99	3776.36	693
Median Age of Residents	33.887	4.829	693
Per Capita Income	21911.28	8052.33	693
Percent Owner Occupied Home	58.508	12.726	693
Unemployment Rate	4.021	2.420	693
Crime Rate	5838.38	4056.83	693
Current Liabilities	138.2737	129.5976	693
MSA	.34	.48	693
Small City	.76	.43	693
Medium Size City	.17	.37	693
Big City	.07	.26	693

Table 32:H2-Revenue Capacity Per Capita – SMC Vs. GMC Cities

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.565[a]	.319	.305	525.97	.319	22.657	14	678	.000	1.469

a. Predictors: (Constant), Big City, Population Growth, Per Capita Income, Medium Size City, SMC, Population Density, Current Liabilities, GMC, Crime Rate, MSA, Percent Owner Occupied Home, Unemployment Rate, Population (1996), Median Age of Residents

b. Dependent Variable: Revenue Capacity Per Capita

Table 33:

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	87750761	14	6267911.5	22.657	.000[a]
	Residual	1.88E+08	678	276646.477		
	Total	2.75E+08	692			

a. Predictors: (Constant), Big City, Population Growth, Per Capita Income, Medium Size City, SMC, Population Density, Current Liabilities, GMC, Crime Rate, MSA, Percent Owner Occupied Home, Unemployment Rate, Population (1996), Median Age of Residents

b. Dependent Variable: Revenue Capacity Per Capita

Table 34:H3-Per Capita General Expenditures – SMC Vs. GMC Cities

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	-2611.69	936.021		-2.790	.005	-4449.544	-773.838		
	SMC	286.133	54.317	.166	5.268	.000	179.483	392.783	.929	1.076
	GMC	180.713	79.992	.072	2.259	.024	23.650	337.776	.918	1.089
	Population (1996)	.000	.000	.225	6.109	.000	.000	.001	.682	1.466
	Population Growth	-4.007	1.477	-.089	-2.712	.007	-6.907	-1.106	.864	1.157
	Population Density	-.005	.006	-.029	-.830	.407	-.016	.007	.770	1.298
	Median Age of Residents	22.356	5.272	.170	4.241	.000	12.006	32.707	.574	1.742
	Per Capita Income	.014	.003	.183	4.420	.000	.008	.021	.540	1.852
	Percent Owner Occupied Home	-18.167	1.945	-.365	-9.338	.000	-21.987	-14.347	.607	1.648
	Unemployment Rate	-23.965	9.563	-.091	-2.506	.012	-42.743	-5.188	.695	1.440
	Crime Rate	.010	.005	.062	1.880	.060	.000	.020	.841	1.189
	Relative Fiscal Capacity	5244.568	885.022	.182	5.926	.000	3506.851	6982.286	.978	1.022
	Relative Revenue Effort	-29.524	4.212	-.225	-7.010	.000	-37.794	-21.255	.901	1.110
	MSA	-47.312	47.595	-.035	-.994	.321	-140.763	46.139	.727	1.375
	Medium Size City	123.580	54.638	.073	2.262	.024	16.299	230.861	.899	1.112
	Big City	208.325	94.995	.084	2.193	.029	21.805	394.845	.626	1.596

a. Dependent Variable: Per Capita General Expenditures

Table 35:H3-Per Capita General Expenditures – SMC Vs. GMC Cities

Descriptive Statistics

	Mean	Std. Deviation	N
Per Capita General Expenditures	1054.38	634.03	693
SMC	.16	.37	693
GMC	.07	.25	693
Population (1996)	115724.04	343638.19	693
Population Growth	7.9900	14.0437	693
Population Density	3984.99	3776.36	693
Median Age of Residents	33.887	4.829	693
Per Capita Income	21911.28	8052.33	693
Percent Owner Occupied Home	58.508	12.726	693
Unemployment Rate	4.021	2.420	693
Crime Rate	5838.38	4056.83	693
Relative Fiscal Capacity	1.00039	.02203	693
Relative Revenue Effort	55.0628	4.8255	693
MSA	.34	.48	693
Small City	.76	.43	693
Medium Size City	.17	.37	693
Big City	.07	.26	693

Table 36:H3-Per Capita General Expenditures– SMC Vs. GMC Cities

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.611[a]	.374	.360	507.35	.374	26.914	15	677	.000	1.424

a. Predictors: (Constant), Big City, Population Growth, Relative Revenue Effort, Relative Fiscal Capacity, Medium Size City, SMC, Unemployment Rate, GMC, Population Density, Median Age of Residents, Crime Rate, MSA, Population (1996), Percent Owner Occupied Home, Per Capita Income

b. Dependent Variable: Per Capita General Expenditures

Table 37:

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.04E+08	15	6927798.5	26.914	.000[a]
	Residual	1.74E+08	677	257401.075		
	Total	2.78E+08	692			

a. Predictors: (Constant), Big City, Population Growth, Relative Revenue Effort, Relative Fiscal Capacity, Medium Size City, SMC, Unemployment Rate, GMC, Population Density, Median Age of Residents, Crime Rate, MSA, Population (1996), Percent Owner Occupied Home, Per Capita Income

b. Dependent Variable: Per Capita General Expenditures

Table 38:H4 - FTE Employee Rate – SMC Vs. GMC Cities

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	34.619	172.827		.200	.841	-304.832	374.070		
	SMC	57.526	9.934	.211	5.791	.000	38.014	77.038	.925	1.082
	GMC	20.292	14.207	.053	1.428	.154	-7.613	48.197	.908	1.102
	Population (1996)	.000	.000	.123	2.883	.004	.000	.000	.675	1.482
	Population Growth	-.673	.254	-.099	-2.647	.008	-1.172	-.174	.875	1.142
	Population Density	-.002	.001	-.089	-2.234	.026	-.004	.000	.782	1.279
	Median Age of Residents	4.048	.953	.196	4.246	.000	2.176	5.921	.575	1.738
	Per Capita Income	-.001	.001	-.049	-1.021	.308	-.002	.001	.535	1.869
	Percent Owner Occupied Home	-2.627	.358	-.327	-7.337	.000	-3.330	-1.924	.617	1.620
	Unemployment Rate	-5.387	1.723	-.131	-3.126	.002	-8.771	-2.003	.699	1.430
	Crime Rate	.001	.001	.056	1.473	.141	.000	.003	.848	1.179
	Relative Fiscal Capacity	335.38	163.570	.073	2.050	.041	14.109	656.645	.975	1.026
	Relative Revenue Effort	-3.847	.760	-.188	-5.064	.000	-5.339	-2.355	.895	1.118
	MSA	16.572	8.627	.080	1.921	.055	-.371	33.516	.715	1.399
	Medium Size City	11.161	9.804	.042	1.138	.255	-8.095	30.418	.903	1.108
	Big City	5.905	16.756	.016	.352	.725	-27.006	38.816	.613	1.633

a. Dependent Variable: FTE Rate

Table 39:H4 - FTE Employee Rate – SMC Vs. GMC Cities

Descriptive Statistics

	Mean	Std. Deviation	N
FTE Rate	121.89	99.45	590
SMC	.16	.36	590
GMC	.07	.26	590
Population (1996)	122505.53	370770.88	590
Population Growth	8.4905	14.6442	590
Population Density	3927.43	3836.34	590
Median Age of Residents	33.836	4.818	590
Per Capita Income	21883.96	8047.28	590
Percent Owner Occupied Home	58.603	12.387	590
Unemployment Rate	4.004	2.418	590
Crime Rate	5848.52	4234.96	590
Relative Fiscal Capacity	1.00017	.02157	590
Relative Revenue Effort	55.1314	4.8483	590
MSA	.35	.48	590
Small City	.76	.43	590
Medium Size City	.17	.37	590
Big City	.08	.27	590

Table 40:H4 - FTE Employee Rate – SMC Vs. GMC Cities

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.544[a]	.296	.277	84.55	.296	16.058	15	574	.000	1.188

a. Predictors: (Constant), Big City, Population Growth, Relative Revenue Effort, Relative Fiscal Capacity, Medium Size City, SMC, Unemployment Rate, GMC, Population Density, Median Age of Residents, Crime Rate, MSA, Population (1996), Percent Owner Occupied Home, Per Capita Income

b. Dependent Variable: FTE Rate

Table 41:

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1721833.9	15	114788.925	16.058	.000[a]
	Residual	4103266.1	574	7148.547		
	Total	5825100.0	589			

a. Predictors: (Constant), Big City, Population Growth, Relative Revenue Effort, Relative Fiscal Capacity, Medium Size City, SMC, Unemployment Rate, GMC, Population Density, Median Age of Residents, Crime Rate, MSA, Population (1996), Percent Owner Occupied Home, Per Capita Income

b. Dependent Variable: FTE Rate

Table 42: Composite Fiscal Stress Index – Adopted Vs. Maintained GMC Status Cities

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	161.5	8.840		18.265	.000	143.977	178.961		
	Adopted GMC	.750	1.642	.042	.457	.648	-2.498	3.999	.679	1.473
	Maintained GMC	.520	1.912	.029	.272	.786	-3.262	4.303	.511	1.957
	Population (1996)	.000	.000	.026	.246	.806	.000	.000	.506	1.978
	Population Growth	.033	.042	.061	.779	.437	-.050	.116	.931	1.074
	Population Density	.000	.000	.005	.063	.950	.000	.000	.751	1.331
	Median Age of Residents	.473	.240	.185	1.966	.051	-.003	.948	.633	1.581
	Per Capita Income	-.001	.000	-.604	-5.755	.000	-.001	-.001	.511	1.955
	Percent Owner Occupied Home	.091	.070	.127	1.299	.196	-.047	.228	.584	1.711
	Unemployment Rate	-.187	.499	-.039	-.375	.709	-1.175	.801	.510	1.963
	Crime Rate	.000	.000	.066	.693	.490	.000	.001	.626	1.596
	Current Liabilities	.005	.008	.051	.595	.553	-.011	.021	.767	1.304
	MSA	-2.430	2.081	-.111	-1.168	.245	-6.548	1.688	.621	1.610
	Medium Size City	-2.045	1.891	-.092	-1.082	.281	-5.785	1.696	.775	1.290
	Big City	.198	2.547	.009	.078	.938	-4.841	5.237	.415	2.410

a. Dependent Variable: Composite Fiscal Stress Index

Table 43: Composite Fiscal Stress Index – Adopted Vs. Maintained GMC Status Cities

Descriptive Statistics

	Mean	Std. Deviation	N
Composite Fiscal Stress Index	165.0936	8.5873	143
Adopted GMC	.34	.48	143
Maintained GMC	.33	.47	143
Population (1996)	175584.62	312371.07	143
Population Growth	5.3541	15.8705	143
Population Density	4534.88	5915.87	143
Median Age of Residents	33.981	3.370	143
Per Capita Income	20724.19	6308.42	143
Percent Owner Occupied Home	56.460	12.093	143
Unemployment Rate	4.183	1.807	143
Crime Rate	6497.22	2957.02	143
Current Liabilities	120.0184	92.0434	143
MSA	.81	.39	143
Small City	.63	.48	143
Medium Size City	.18	.39	143
Big City	.19	.39	143

Table 44: Composite Fiscal Stress Index – Adopted Vs. Maintained GMC Status Cities

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.529[a]	.280	.201	7.6771	.280	3.548	14	128	.000	1.745

a. Predictors: (Constant), Big City, Per Capita Income, Adopted GMC, Population Growth, Population Density, Medium Size City, MSA, Current Liabilities, Crime Rate, Median Age of Residents, Percent Owner Occupied Home, Unemployment Rate, Maintained GMC, Population (1996)

b. Dependent Variable: Composite Fiscal Stress Index

Table 45:

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2927.281	14	209.092	3.548	.000[a]
	Residual	7543.999	128	58.937		
	Total	10471.280	142			

a. Predictors: (Constant), Big City, Per Capita Income, Adopted GMC, Population Growth, Population Density, Medium Size City, MSA, Current Liabilities, Crime Rate, Median Age of Residents, Percent Owner Occupied Home, Unemployment Rate, Maintained GMC, Population (1996)

b. Dependent Variable: Composite Fiscal Stress Index

Table 46: Revenue Capacity Per Capita – Adopted Vs. Maintained GMC Status Cities

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	1476.4	709.065		2.082	.039	73.411	2879.422		
	Adopted GMC	144.668	131.670	.095	1.099	.274	-115.863	405.200	.679	1.473
	Maintained GMC	68.629	153.346	.045	.448	.655	-234.793	372.051	.511	1.957
	Population (1996)	.000	.000	-.022	-.220	.827	-.001	.000	.506	1.978
	Population Growth	-7.073	3.374	-.155	-2.097	.038	-13.749	-.398	.931	1.074
	Population Density	-.004	.010	-.032	-.394	.694	-.024	.016	.751	1.331
	Median Age of Residents	7.168	19.279	.033	.372	.711	-30.978	45.315	.633	1.581
	Per Capita Income	.037	.011	.319	3.205	.002	.014	.059	.511	1.955
	Percent Owner Occupied Home	-22.930	5.590	-.382	-4.102	.000	-33.990	-11.870	.584	1.711
	Unemployment Rate	4.656	40.050	.012	.116	.908	-74.590	83.903	.510	1.963
	Crime Rate	-.012	.022	-.049	-.543	.588	-.056	.032	.626	1.596
	Current Liabilities	-1.149	.641	-.146	-1.792	.075	-2.417	.119	.767	1.304
	MSA	211.581	166.931	.115	1.267	.207	-118.721	541.883	.621	1.610
	Medium Size City	210.556	151.637	.112	1.389	.167	-89.484	510.595	.775	1.290
	Big City	606.906	204.278	.329	2.971	.004	202.707	1011.104	.415	2.410

a. Dependent Variable: Revenue Capacity Per Capita

Table 47: Revenue Capacity Per Capita - – Adopted Vs. Maintained GMC Status Cities

Descriptive Statistics

	Mean	Std. Deviation	N
Revenue Capacity Per Capita	1321.78	725.58	143
Adopted GMC	.34	.48	143
Maintained GMC	.33	.47	143
Population (1996)	175584.62	312371.07	143
Population Growth	5.3541	15.8705	143
Population Density	4534.88	5915.87	143
Median Age of Residents	33.981	3.370	143
Per Capita Income	20724.19	6308.42	143
Percent Owner Occupied Home	56.460	12.093	143
Unemployment Rate	4.183	1.807	143
Crime Rate	6497.22	2957.02	143
Current Liabilities	120.0184	92.0434	143
MSA	.81	.39	143
Small City	.63	.48	143
Medium Size City	.18	.39	143
Big City	.19	.39	143

Table 48: Revenue Capacity Per Capita – Adopted Vs. Maintained GMC Status Cities

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.592[a]	.351	.280	615.77	.351	4.940	14	128	.000	1.549

a. Predictors: (Constant), Big City, Per Capita Income, Adopted GMC, Population Growth, Population Density, Medium Size City, MSA, Current Liabilities, Crime Rate, Median Age of Residents, Percent Owner Occupied Home, Unemployment Rate, Maintained GMC, Population (1996)

b. *Dependent Variable: Revenue Capacity Per Capita*

Table 49:

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	26223687	14	1873120.5	4.940	.000[a]
	Residual	48533607	128	379168.804		
	Total	74757294	142			

a. Predictors: (Constant), Big City, Per Capita Income, Adopted GMC, Population Growth, Population Density, Medium Size City, MSA, Current Liabilities, Crime Rate, Median Age of Residents, Percent Owner Occupied Home, Unemployment Rate, Maintained GMC, Population (1996)

b. Dependent Variable: Revenue Capacity Per Capita

Table 50: Per Capita General Expenditures – Adopted Vs. Maintained GMC Status Cities

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	-2731.4	2665.302		-1.025	.307	-8005.6	2542.749		
	Adopted GMC	211.331	130.543	.137	1.619	.108	-46.990	469.653	.661	1.513
	Maintained GMC	93.839	150.792	.060	.622	.535	-204.55	392.229	.506	1.978
	Population (1996)	.000	.000	-.015	-.152	.880	.000	.000	.504	1.984
	Population Growth	-6.777	3.312	-.147	-2.046	.043	-13.332	-.223	.924	1.082
	Population Density	-.006	.010	-.046	-.584	.560	-.025	.014	.777	1.286
	Median Age of Residents	24.542	19.026	.113	1.290	.199	-13.107	62.190	.621	1.609
	Per Capita Income	.035	.011	.298	3.068	.003	.012	.057	.504	1.984
	Percent Owner Occupied Home	-24.238	5.361	-.400	-4.521	.000	-34.845	-13.630	.608	1.645
	Unemployment Rate	4.317	39.194	.011	.110	.912	-73.240	81.875	.509	1.965
	Crime Rate	-.022	.022	-.088	-1.010	.314	-.064	.021	.630	1.587
	Relative Fiscal Capacity	5251.93	2528.126	.148	2.077	.040	249.227	10254.6	.942	1.062
	Relative Revenue Effort	-28.594	10.516	-.203	-2.719	.007	-49.403	-7.785	.855	1.170
	MSA	161.587	163.629	.087	.988	.325	-162.21	485.380	.619	1.617
	Medium Size City	152.896	149.951	.081	1.020	.310	-143.83	449.622	.758	1.319
	Big City	547.790	196.887	.294	2.782	.006	158.186	937.395	.427	2.340

a. Dependent Variable: Per Capita General Expenditures

Table 51: Per Capita General Expenditures – Adopted Vs. Maintained GMC Status Cities

Descriptive Statistics

	Mean	Std. Deviation	N
Per Capita General Expenditures	1295.54	732.89	143
Adopted GMC	.34	.48	143
Maintained GMC	.33	.47	143
Population (1996)	175584.62	312371.07	143
Population Growth	5.3541	15.8705	143
Population Density	4534.88	5915.87	143
Median Age of Residents	33.981	3.370	143
Per Capita Income	20724.19	6308.42	143
Percent Owner Occupied Home	56.460	12.093	143
Unemployment Rate	4.183	1.807	143
Crime Rate	6497.22	2957.02	143
Relative Fiscal Capacity	.9983	.0206	143
Relative Revenue Effort	55.0124	5.1983	143
MSA	.81	.39	143
Small City	.63	.48	143
Medium Size City	.18	.39	143
Big City	.19	.39	143

Table 52: Per Capita General Expenditures – Adopted Vs. Maintained GMC Status Cities

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.629[a]	.396	.325	602.29	.396	5.550	15	127	.000	1.419

a. Predictors: (Constant), Big City, Relative Revenue Effort, Adopted GMC, Relative Fiscal Capacity, Per Capita Income, Population Growth, Population Density, MSA, Medium Size City, Percent Owner Occupied Home, Crime Rate, Median Age of Residents, Unemployment Rate, Maintained GMC, Population (1996)

b. Dependent Variable: Per Capita General Expenditures

Table 53:

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	30201621	15	2013441.4	5.550	.000[a]
	Residual	46069998	127	362755.892		
	Total	76271620	142			

a. Predictors: (Constant), Big City, Relative Revenue Effort, Adopted GMC, Relative Fiscal Capacity, Per Capita Income, Population Growth, Population Density, MSA, Medium Size City, Percent Owner Occupied Home, Crime Rate, Median Age of Residents, Unemployment Rate, Maintained GMC, Population (1996)

b. Dependent Variable: Per Capita General Expenditures

Table 54:FTE Employee Rate – Adopted Vs. Maintained GMC Status Cities

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	120.3	375.89		.320	.749	-624.828	865.500		
	Adopted GMC	25.378	19.138	.129	1.326	.188	-12.561	63.316	.653	1.532
	Maintained GMC	8.095	21.392	.042	.378	.706	-34.313	50.503	.510	1.962
	Population (1996)	.000	.000	-.009	-.081	.936	.000	.000	.496	2.017
	Population Growth	-1.487	.471	-.262	-3.155	.002	-2.422	-.553	.900	1.111
	Population Density	-.001	.001	-.061	-.695	.488	-.004	.002	.807	1.239
	Median Age of Residents	5.559	2.750	.204	2.021	.046	.107	11.011	.608	1.645
	Per Capita Income	.002	.002	.152	1.297	.197	-.001	.006	.452	2.211
	Percent Owner Occupied Home	-3.645	.808	-.455	-4.514	.000	-5.246	-2.044	.608	1.646
	Unemployment Rate	-2.200	5.601	-.043	-.393	.695	-13.304	8.903	.510	1.962
	Crime Rate	-.004	.003	-.139	-1.390	.167	-.010	.002	.617	1.620
	Relative Fiscal Capacity	109.0	352.50	.025	.309	.758	-589.772	807.826	.954	1.048
	Relative Revenue Effort	-1.859	1.518	-.105	-1.225	.223	-4.868	1.149	.834	1.198
	MSA	27.106	24.350	.113	1.113	.268	-21.166	75.377	.602	1.660
	Medium Size City	21.526	22.542	.088	.955	.342	-23.161	66.214	.729	1.372
	Big City	41.356	27.507	.183	1.503	.136	-13.174	95.886	.416	2.405

a. Dependent Variable: FTE Rate

Table 55:FTE Employee Rate – Adopted Vs. Maintained GMC Status Cities

Descriptive Statistics

	Mean	Std. Deviation	N
FTE Rate	152.50	92.45	123
Adopted GMC	.33	.47	123
Maintained GMC	.34	.48	123
Population (1996)	188891.77	334020.16	123
Population Growth	5.3849	16.2598	123
Population Density	4446.99	5965.08	123
Median Age of Residents	33.846	3.392	123
Per Capita Income	20694.41	6234.10	123
Percent Owner Occupied Home	56.261	11.551	123
Unemployment Rate	4.155	1.819	123
Crime Rate	6539.41	3068.68	123
Relative Fiscal Capacity	.9980	.0211	123
Relative Revenue Effort	55.2509	5.2449	123
MSA	.82	.38	123
Small City	.62	.49	123
Medium Size City	.17	.38	123
Big City	.21	.41	123

Table 56:FTE Employee Rate – Adopted Vs. Maintained GMC Status Cities

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.581[a]	.338	.245	80.32	.338	3.642	15	107	.000	1.282

a. Predictors: (Constant), Big City, Per Capita Income, Adopted GMC, Relative Fiscal Capacity, Relative Revenue Effort, Population Growth, Population Density, Medium Size City, MSA, Crime Rate, Percent Owner Occupied Home, Median Age of Residents, Unemployment Rate, Maintained GMC, Population (1996)

b. Dependent Variable: FTE Rate

Table 57:

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	352434.783	15	23495.652	3.642	.000[a]
	Residual	690269.965	107	6451.121		
	Total	1042704.7	122			

a. Predictors: (Constant), Big City, Per Capita Income, Adopted GMC, Relative Fiscal Capacity, Relative Revenue Effort, Population Growth, Population Density, Medium Size City, MSA, Crime Rate, Percent Owner Occupied Home, Median Age of Residents, Unemployment Rate, Maintained GMC, Population (1996)

b. Dependent Variable: FTE Rate

Table 58: Composite Fiscal Stress Index – SMC Vs. GMC Cities

DV: Composite Fiscal Stress Index	All cities			SMC			CMC			GMC		
Control Variables	Std. B	t	Sig.	Std. B	t	Sig.	Std. B	t	Sig.	Std. B	t	Sig.
Population	-0.064	-1.571	0.117	-0.150	-1.107	0.271	-0.081	-1.174	0.241	0.154	0.714	0.480
Population Growth	0.035	0.955	0.340	-0.047	-0.387	0.699	0.005	0.117	0.907	0.183	1.339	0.190
Population Density	0.038	0.984	0.325	0.059	0.450	0.654	0.051	1.165	0.244	0.115	0.745	0.461
Median Age of Residents	-0.004	-0.080	0.936	-0.249	-1.744	0.084	0.037	0.747	0.455	-0.204	-1.091	0.283
Per Capita Income	-0.471	-10.269	0.000	-0.156	-1.059	0.292	-0.549	-10.992	0.000	-0.749	-3.465	0.001
Percent Owner Occupied Home	0.118	2.684	0.007	0.447	3.129	0.002	0.067	1.389	0.165	0.415	2.348	0.025
Unemployment Rate	0.023	0.555	0.579	0.125	0.964	0.338	-0.004	-0.091	0.927	-0.146	-0.719	0.477
Crime Rate	-0.062	-1.692	0.091	-0.157	-1.371	0.173	-0.065	-1.632	0.103	-0.121	-0.720	0.476
Current Liabilities	-0.078	-2.209	0.027	0.161	1.453	0.149	-0.107	-2.744	0.006	-0.426	-2.466	0.019
MSA	0.056	1.420	0.156	0.075	0.669	0.505	0.050	1.119	0.264	0.120	0.685	0.498
Medium Size City	-0.005	-0.130	0.896	0.137	1.393	0.167	-0.023	-0.542	0.588	0.112	0.746	0.461
Big City	0.022	0.512	0.609	0.188	1.515	0.133	0.050	0.747	0.455	-0.073	-0.308	0.760
(Constant)	171.663	69.403	0.000	168.122	16.421	0.000	173.414	65.696	0.000	190.230	14.027	0.000
N	693			112			534			47		
R	0.462			0.440			0.519			0.696		
Adjusted R Square	0.200			0.096			0.252			0.302		
Std. Error of the Estimate	7.147			8.636			6.699			6.468		
F	15.396			1.985			15.981			2.659		
Sig.	0.000			0.033			0.000			0.012		

Table 59: Revenue Capacity Per Capita – SMC Vs. GMC Cities

DV: Revenue Capacity Per Capita	All Cities			SMC			CMC			GMC		
Control Variables	Std. B.	t	Sig.	Std. B.	t	Sig.	Std. B.	t	Sig.	Std. B.	t	Sig.
Population	0.261	6.711	0.000	0.348	3.305	0.001	0.019	0.269	0.788	-0.013	-0.060	0.952
Population Growth	-0.108	-3.122	0.002	-0.011	-0.118	0.907	-0.070	-1.669	0.096	-0.263	-2.004	0.053
Population Density	-0.054	-1.471	0.142	-0.060	-0.591	0.556	-0.097	-2.144	0.032	-0.081	-0.549	0.586
Median Age of Residents	0.193	4.526	0.000	0.314	2.823	0.006	0.176	3.417	0.001	0.205	1.142	0.261
Per Capita Income	0.130	2.985	0.003	0.064	0.559	0.577	0.201	3.862	0.000	0.430	2.068	0.046
Percent Owner Occupied Home	-0.394	-9.471	0.000	-0.596	-5.365	0.000	-0.405	-8.027	0.000	-0.629	-3.702	0.001
Unemployment Rate	-0.091	-2.350	0.019	-0.088	-0.873	0.385	-0.084	-1.821	0.069	-0.057	-0.294	0.771
Crime Rate	0.091	2.587	0.010	0.073	0.812	0.419	0.116	2.808	0.005	0.122	0.757	0.454
Current Liabilities	-0.006	-0.178	0.859	-0.207	-2.400	0.018	0.049	1.212	0.226	0.195	1.174	0.248
MSA	-0.006	-0.153	0.878	-0.171	-1.954	0.054	0.055	1.184	0.237	-0.009	-0.054	0.957
Medium Size City	0.053	1.551	0.121	0.107	1.398	0.165	0.091	2.038	0.042	-0.093	-0.646	0.523
Big City	0.077	1.893	0.059	0.160	1.660	0.100	0.053	0.754	0.451	0.306	1.346	0.187
(Constant)	1151.540	6.202	0.000	1308.942	1.649	0.102	1087.934	6.000	0.000	615.722	0.482	0.633
N	693			112			534			47		
R	0.538			0.715			0.459			0.723		
Adjusted R Square	0.277			0.453			0.192			0.354		
Std. Error of the Estimate	536.481			669.500			460.148			609.755		
F	23.049			8.647			11.568			3.099		
Sig.	0.000			0.000			0.000			0.005		

Table 60: Per Capita General Expenditures – SMC Vs. GMC Cities

DV: Per Capita General Expenditures	All Cities			SMC			CMC			GMC		
Control Variables	Std. B	t	Sig.	Std. B	t	Sig.	Std. B	t	Sig.	Std. B	t	Sig.
Population	0.244	6.543	0.000	0.257	2.438	0.017	0.009	0.141	0.888	0.096	0.489	0.628
Population Growth	-0.112	-3.368	0.001	-0.122	-1.406	0.163	-0.073	-1.859	0.064	-0.194	-1.541	0.133
Population Density	-0.032	-0.908	0.364	0.005	0.054	0.957	-0.064	-1.519	0.129	0.012	0.092	0.927
Median Age of Residents	0.185	4.528	0.000	0.293	2.649	0.009	0.163	3.378	0.001	0.127	0.802	0.428
Per Capita Income	0.162	3.846	0.000	0.168	1.420	0.159	0.220	4.531	0.000	0.356	1.774	0.085
Percent Owner Occupied Home	-0.376	-9.436	0.000	-0.561	-5.108	0.000	-0.363	-7.701	0.000	-0.548	-3.566	0.001
Unemployment Rate	-0.103	-2.783	0.006	-0.019	-0.184	0.854	-0.106	-2.443	0.015	-0.203	-1.096	0.281
Crime Rate	0.062	1.846	0.065	-0.044	-0.484	0.629	0.087	2.244	0.025	0.092	0.607	0.548
Relative Fiscal Capacity	0.173	5.525	0.000	-0.018	-0.246	0.806	0.245	6.652	0.000	0.176	1.456	0.155
Relative Revenue Effort	-0.228	-6.969	0.000	-0.216	-2.611	0.010	-0.283	-7.428	0.000	-0.222	-1.772	0.086
MSA	-0.031	-0.840	0.401	-0.244	-2.783	0.006	0.031	0.715	0.475	0.012	0.076	0.940
Medium Size City	0.066	2.021	0.044	0.161	2.044	0.044	0.099	2.358	0.019	-0.084	-0.627	0.535
Big City	0.090	2.331	0.020	0.224	2.291	0.024	0.071	1.091	0.276	0.210	0.959	0.345
(Constant)	-2249.285	-2.360	0.019	3363.984	1.050	0.296	-2861.927	-3.163	0.002	-5043.313	-0.826	0.415
N	693			112			534			47		
R	0.588			0.723			0.559			0.767		
Adjusted R Square	0.333			0.459			0.295			0.427		
Std. Error of the Estimate	517.806			658.396			438.173			584.241		
F	27.577			8.240			18.150			3.639		
Sig.	0.000			0.000			0.000			0.001		

Table 61:FTE Employee Rate – SMC Vs. GMC Cities

DV: FTE Rate	All Cities			SMC			CMC			GMC		
Control Variables	Std. B.	t	Sig.	Std. B.	t	Sig.	Std. B.	t	Sig.	Std. B.	t	Sig.
Population	0.150	3.458	0.001	0.098	0.660	0.511	-0.021	-0.285	0.775	0.044	0.173	0.864
Population Growth	-0.122	-3.180	0.002	-0.113	-0.919	0.361	-0.088	-2.030	0.043	-0.344	-2.115	0.043
Population Density	-0.096	-2.381	0.018	-0.031	-0.208	0.836	-0.150	-3.289	0.001	-0.006	-0.037	0.970
Median Age of Residents	0.215	4.541	0.000	0.180	1.224	0.224	0.216	4.033	0.000	0.335	1.665	0.107
Per Capita Income	-0.074	-1.518	0.130	0.021	0.128	0.898	-0.062	-1.154	0.249	0.302	1.225	0.231
Percent Owner Occupied Home	-0.346	-7.580	0.000	-0.437	-2.712	0.008	-0.355	-6.987	0.000	-0.498	-2.536	0.017
Unemployment Rate	-0.144	-3.355	0.001	-0.034	-0.252	0.802	-0.172	-3.608	0.000	0.099	0.440	0.663
Crime Rate	0.054	1.376	0.169	-0.066	-0.548	0.585	0.068	1.599	0.110	0.225	1.129	0.269
Relative Fiscal Capacity	0.060	1.661	0.097	-0.049	-0.480	0.633	0.101	2.481	0.013	-0.049	-0.310	0.759
Relative Revenue Effort	-0.197	-5.188	0.000	-0.236	-2.151	0.035	-0.207	-4.911	0.000	-0.012	-0.076	0.940
MSA	0.084	1.983	0.048	-0.237	-1.992	0.050	0.191	4.007	0.000	-0.080	-0.362	0.720
Medium Size City	0.028	0.752	0.453	0.049	0.460	0.647	0.092	2.021	0.044	-0.144	-0.821	0.419
Big City	0.016	0.357	0.721	0.200	1.466	0.146	-0.002	-0.032	0.974	0.291	0.983	0.334
(Constant)	119.303	0.674	0.500	889.381	1.324	0.189	-13.932	-0.083	0.934	190.965	0.251	0.804
N	590			93			455			42		
R	0.504			0.536			0.540			0.666		
Adjusted R Square	0.237			0.170			0.271			0.184		
Std. Error of the Estimate	86.864			128.043			72.215			68.995		
F	15.078			2.454			13.982			1.713		
Sig.	0.000			0.007			0.000			0.113		

Table 62: Composite Fiscal Stress Index – Adopted Vs. Maintained GMC Status Cities

DV: Composite Fiscal Stress Index	All Cities			Dropped GMC			Maintained GMC			Adopted GMC		
Control Variables	Std. B.	t	Sig.	Std. B.	t	Sig.	Std. B.	t	Sig.	Std. B.	t	Sig.
Population	0.023	0.216	0.829	0.055	0.392	0.698	0.154	0.722	0.475	-0.269	-1.020	0.314
Population Growth	0.059	0.765	0.445	-0.115	-0.926	0.361	0.186	1.376	0.178	0.234	1.700	0.098
Population Density	0.003	0.035	0.972	0.460	2.567	0.015	0.114	0.749	0.459	0.115	0.717	0.478
Median Age of Residents	0.187	2.010	0.047	0.403	2.717	0.010	-0.201	-1.090	0.283	0.331	1.671	0.103
Per Capita Income	-0.601	-5.798	0.000	-0.830	-4.991	0.000	-0.751	-3.518	0.001	-0.509	-3.057	0.004
Percent Owner Occupied Home	0.124	1.276	0.204	0.103	0.624	0.537	0.411	2.358	0.024	0.197	1.182	0.245
Unemployment Rate	-0.040	-0.380	0.705	-0.219	-1.333	0.191	-0.149	-0.742	0.463	-0.266	-1.640	0.110
Crime Rate	0.070	0.762	0.447	-0.073	-0.520	0.607	-0.111	-0.671	0.507	0.247	1.442	0.158
Current Liabilities	0.050	0.590	0.556	0.456	3.139	0.003	-0.419	-2.457	0.019	0.122	0.885	0.382
MSA	-0.114	-1.463	0.146	-0.226	-1.925	0.063	0.113	0.655	0.517	0.082	0.672	0.506
Medium Size City	-0.083	-1.011	0.314	0.045	0.391	0.698	0.123	0.830	0.412	-0.198	-1.242	0.222
Big City	0.016	0.137	0.891	-0.279	-1.910	0.065	-0.112	-0.482	0.633	0.546	1.876	0.069
(Constant)	161.733	18.607	0.000	152.799	9.507	0.000	190.557	13.928	0.000	134.140	6.582	0.000
N	143			47			47			49		
R	0.528			0.778			0.705			0.721		
Adjusted R Square	0.212			0.466			0.319			0.360		
Std. Error of the Estimate	7.624			6.968			6.525			6.734		
F	4.178			4.351			2.799			3.247		
Sig.	0.000			0.000			0.009			0.003		

Table 63: Revenue Capacity Per Capita – Adopted Vs. Maintained GMC Status Cities

DV: Revenue Capacity Per Capita	All Cities			Dropped GMC			Maintained GMC			Adopted GMC		
Control Variables	Std. B	t	Sig.	Std. B	t	Sig.	Std. B	t	Sig.	Std. B	t	Sig.
Population	-0.031	-0.308	0.759	-0.030	-0.189	0.851	-0.013	-0.061	0.952	0.099	0.394	0.696
Population Growth	-0.159	-2.165	0.032	0.052	0.371	0.713	-0.263	-2.004	0.053	-0.209	-1.591	0.120
Population Density	-0.040	-0.499	0.619	-0.551	-2.744	0.010	-0.081	-0.549	0.587	-0.104	-0.680	0.501
Median Age of Residents	0.039	0.442	0.659	-0.190	-1.144	0.260	0.205	1.143	0.261	0.085	0.450	0.655
Per Capita Income	0.324	3.284	0.001	0.358	1.921	0.063	0.431	2.069	0.046	0.412	2.592	0.014
Percent Owner Occupied Home	-0.390	-4.217	0.000	-0.565	-3.068	0.004	-0.629	-3.702	0.001	-0.424	-2.669	0.011
Unemployment Rate	0.011	0.111	0.912	0.106	0.577	0.568	-0.057	-0.293	0.771	0.383	2.473	0.018
Crime Rate	-0.044	-0.502	0.617	-0.040	-0.256	0.799	0.122	0.757	0.454	-0.199	-1.212	0.233
Current Liabilities	-0.148	-1.823	0.071	-0.372	-2.288	0.028	0.195	1.174	0.249	-0.378	-2.873	0.007
MSA	0.120	1.618	0.108	0.143	1.090	0.284	-0.009	-0.054	0.958	-0.073	-0.625	0.536
Medium Size City	0.131	1.670	0.097	0.014	0.109	0.914	-0.093	-0.645	0.523	0.339	2.227	0.032
Big City	0.341	3.129	0.002	0.462	2.829	0.008	0.306	1.347	0.187	0.155	0.558	0.581
(Constant)	1505.381	2.151	0.033	3664.770	2.730	0.010	614.991	0.481	0.634	1544.487	0.970	0.339
N	143			47			47			49		
R	0.587			0.711			0.723			0.750		
Adjusted R Square	0.284			0.331			0.354			0.417		
Std. Error of the Estimate	613.887			581.899			609.720			526.125		
F	5.698			2.898			3.100			3.857		
Sig.	0.000			0.007			0.005			0.001		

Table 64: Per Capita General Expenditures – Adopted Vs. Maintained GMC Status Cities

DV: Per Capita General Expenditures	All Cities			Dropped GMC			Maintained GMC			Adopted GMC		
Control Variables	Std. B	t	Sig.	Std. B	t	Sig.	Std. B	t	Sig.	Std. B	t	Sig.
Population	-0.029	-0.300	0.765	-0.009	-0.057	0.955	0.075	0.380	0.706	0.102	0.357	0.723
Population Growth	-0.155	-2.157	0.033	0.070	0.460	0.649	-0.195	-1.547	0.131	-0.190	-1.246	0.221
Population Density	-0.058	-0.750	0.455	-0.415	-2.110	0.043	0.019	0.152	0.880	0.058	0.344	0.733
Median Age of Residents	0.117	1.335	0.184	0.066	0.393	0.697	0.117	0.741	0.464	0.127	0.543	0.590
Per Capita Income	0.307	3.178	0.002	0.080	0.448	0.657	0.373	1.873	0.070	0.449	2.460	0.019
Percent Owner Occupied Home	-0.412	-4.667	0.000	-0.647	-3.464	0.001	-0.548	-3.561	0.001	-0.322	-1.819	0.077
Unemployment Rate	0.012	0.124	0.901	0.020	0.109	0.914	-0.177	-0.961	0.344	0.370	2.046	0.048
Crime Rate	-0.080	-0.943	0.347	-0.218	-1.387	0.175	0.093	0.612	0.545	-0.219	-1.176	0.247
Relative Fiscal Capacity	0.160	2.262	0.025	0.081	0.529	0.600	0.168	1.408	0.168	0.120	0.863	0.394
Relative Revenue Effort	-0.187	-2.523	0.013	-0.245	-1.780	0.084	-0.218	-1.728	0.093	-0.103	-0.559	0.580
MSA	0.098	1.351	0.179	0.087	0.638	0.528	0.015	0.092	0.927	-0.023	-0.164	0.871
Medium Size City	0.110	1.424	0.157	-0.032	-0.253	0.802	-0.078	-0.584	0.563	0.308	1.744	0.090
Big City	0.309	2.957	0.004	0.380	2.277	0.029	0.227	1.036	0.308	0.054	0.171	0.865
(Constant)	-3237.537	-1.220	0.225	2395.592	0.485	0.631	-4553.209	-0.761	0.452	-2974.497	-0.649	0.520
N	143			47			47			49		
R	0.619			0.719			0.767			0.671		
Adjusted R Square	0.321			0.326			0.426			0.246		
Std. Error of the Estimate	603.758			587.410			585.078			594.293		
F	6.172			2.714			3.621			2.204		
Sig.	0.000			0.010			0.001			0.032		

Table 65:FTE Employee Rate – Adopted Vs. Maintained GMC Status Cities

DV: FTE Rate	All Cities			Dropped GMC			Maintained GMC			Adopted GMC		
Control Variables	Std B	t	Sig.	Std B	t	Sig.	Std B	t	Sig.	Std B	t	Sig.
Population	-0.026	-0.237	0.813	0.060	0.348	0.731	0.046	0.180	0.858	0.150	0.469	0.643
Population Growth	-0.265	-3.200	0.002	-0.539	-2.707	0.012	-0.340	-2.092	0.046	0.000	0.001	0.999
Population Density	-0.071	-0.822	0.413	-0.538	-2.762	0.010	-0.013	-0.079	0.937	0.136	0.707	0.486
Median Age of Residents	0.211	2.102	0.038	-0.220	-1.061	0.298	0.338	1.683	0.104	0.528	1.941	0.063
Per Capita Income	0.162	1.402	0.164	0.080	0.381	0.707	0.291	1.191	0.244	0.216	1.085	0.288
Percent Owner Occupied Home	-0.477	-4.802	0.000	-0.487	-2.536	0.017	-0.492	-2.511	0.018	-0.411	-1.975	0.059
Unemployment Rate	-0.039	-0.359	0.720	-0.164	-0.801	0.430	0.095	0.422	0.676	0.215	1.086	0.287
Crime Rate	-0.138	-1.437	0.154	-0.300	-1.761	0.090	0.222	1.112	0.276	-0.319	-1.566	0.129
Relative Fiscal Capacity	0.035	0.436	0.664	0.116	0.726	0.474	-0.021	-0.136	0.893	0.160	1.008	0.322
Relative Revenue Effort	-0.092	-1.081	0.282	0.020	0.131	0.897	-0.015	-0.095	0.925	-0.160	-0.776	0.445
MSA	0.136	1.611	0.110	0.145	0.972	0.340	-0.075	-0.339	0.737	0.000	0.000	0.000
Medium Size City	0.114	1.270	0.207	-0.055	-0.413	0.683	-0.141	-0.808	0.426	0.392	1.913	0.066
Big City	0.197	1.627	0.107	0.167	0.928	0.361	0.283	0.957	0.347	0.009	0.025	0.980
(Constant)	68.972	0.185	0.854	147.384	0.219	0.829	60.694	0.083	0.935	-857.128	-1.103	0.280
N	123			41			42			40		
R	0.572			0.746			0.665			0.683		
Adjusted R Square	0.247			0.343			0.183			0.230		
Std. Error of the Estimate	80.247			76.690			69.070			88.009		
F	4.071			2.605			1.708			1.970		
Sig.	0.000			0.017			0.115			0.070		

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