To the Graduate Council:

I am submitting herewith a dissertation written by Russell Gregg Treadway entitled "State-Local Fiscal Centralization in Tennessee : The Impact of "New Federalism"." I have examined the final copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Political Science.

David M. Welborn

David M. Welborn, Ph.D., Major Professor

We have read this dissertation
and recommend its acceptance.

Accepted for the Council:

Associate Vice Chancellor
and Dean of the Graduate School

STATE-LOCAL FISCAL CENTRALIZATION IN TENNESSEE:
THE IMPACT OF "NEW FEDERALISM"

A Dissertation
Presented for the
Doctor of Philosophy
Degree
The University of Tennessee, Knoxville

Russell Gregg Treadway

August 1995

ABSTRACT

This research provides a longitudinal assessment of state-local fiscal relations in Tennessee. It evaluates these relations using measures of centralization developed by Stonecash. In addition, it measures the impact of state and local tax policy using measures of tax burden and tax reliance. The impact of "New Federalism" on state-local fiscal relations is examined. Finally, this research compares state-local fiscal policy in Tennessee to that in other southeastern states using the measures described above.

It is concluded that Tennessee is decentralized in state-local fiscal relations and that there is a slight but noticeable trend toward greater decentralization. When compared to other southeastern states, Tennessee is more decentralized.

TABLE OF CONTENTS

List of Tables

CHAPTER 1

INTRODUCTION

Government at all levels is coming under increasing public scrutiny. One of the main areas of interest is how governments go about raising and spending money. It is broadly perceived that taxes are increasing and that there is a growing need for tax reform. It is also the case that local government is the government closest to the people and that it has the most direct impact upon citizens' quality of life. As creations of the state, local government fiscal policy is affected by state fiscal policy. The purpose of this research is to establish an empirical foundation for the discussion of state and local fiscal affairs by exploring the fiscal relationships between state and local government in Tennessee and, based upon that foundation, to suggest the most relevant directions for future study. The study takes place in the context of a complex system of government in which local government is an important part.

The American political system is made up of over 82,000 governments according to the 1982 Census of Governments. These governments, including the national government, the states, and a broad array of local governments interact frequently in a wide variety of ways. These interactions form the basis for the study of intergovernmental relations.

The history of governance in this country is one of continual reassessment of the proper roles of all levels of government. In these debates, a number of descriptive and prescriptive models have been developed that provide us with numerous frames of reference for discussions of federalism. More recently, "New Federalism," as enunciated by Ronald Reagan, has dominated the discussion. Reagan's "New Federalism" placed considerable importance on the separation of national and state functions. It is close in concept to the more traditional "dual federalism" where each level of government is supreme within its areas of specific responsibility. Reagan's initiatives led to a reduction of federal influence and an increase in state activity in many domestic policy areas.

A federal structure that places more emphasis on the states has implications for local governments. Local government derives its existence from state government. Any action by the federal government that impacts state government potentially impacts local government as well.

Reagan's "New Federalism" brought a resurgence of responsibility to the states and consequently to local government. It has renewed interest in the area of state and local relations. There is reason to believe that the pattern of national-state fiscal relationships has changed from one of centralization in the direction of decentralization (Carnevale, 1988). This decentralization has serious implications for states and their local governments.

The trend toward decentralization of nation-state fiscal relations can be observed by the rise and fall of federal aid as a percentage of total state and local expenditures. According to Census Bureau statistics, between 1958 and 1978 federal aid to state and local government rose from about 11 percent of total state and local budgets to almost 26 percent. From 1978 to 1988, this percentage decreased to about 16 percent. The total dollar value of federal aid to state and local governments (as expressed in 1982 dollars) fell from $106 billion in 1980 to $90 billion in 1987. The decline in federal aid to state and local governments is evident.

A new "fend-for-yourself federalism" (Shannon, 1987) requires state and local governments to meet challenges to their fiscal ability to govern with tax and expenditure actions of their own rather than those of the federal government. They must respond to the lessening fiscal role of the federal government in domestic affairs and to federal mandates that require state and local governments to meet certain performance levels by increasing revenues and/or cutting expenditures or services. Ultimately, the question becomes whether state and local governments have the fiscal capacity to perform the services that the public demands under the conditions that the federal government requires. The taxpayer's revolt of the early 1980's and the subsequent public scrutiny of state and local taxes highlights the political sensitivity of this problem. State and local relations require closer examination in the face of the federal government's declining role.

The mid-term elections of 1994 may mark a sea change in

American politics. The Republican Party has emerged as the majority party in both houses of Congress. The House Republicans used the "Contract with America" as their platform in presenting their views on the proper role of the federal government. The contract calls for a fundamental change in the role of the federal government by reducing its role in domestic public policy. One objective of the contract is achieving a balanced federal budget by the year 2002. It is extremely likely that a balanced federal budget will require a further reduction in federal spending to state and local government.

This sorting out of national and state responsibilities is reminiscent of Reagan's "New Federalism." It may be instructive to examine some of the effects of Reagan's "New Federalism" to gain insight as to what may happen if the federal government reduces its role in domestic policy.

The purpose of this research is to establish an empirical foundation for the discussion of state and local fiscal affairs by exploring the fiscal relationships between state and local government in Tennessee. This examination will determine how state-local fiscal relations changed after the reduction of federal aid in 1982 engineered by Reagan's "New Federalism."

Literature Review

State and local government relationships have changed over the years. This evolution is the product of a plethora of changing social, economic, and political conditions that impact government. This section provides an overview of the literature assessing state-local fiscal relations.

General Trends

Several students of state-local intergovernmental relations have mentioned centralization in varying degrees. State centralization has been of academic interest since the first part of this century (White, 1933 and Wager, 1940). One scholar classifies states on a four-part continuum, from localistic to centralistic in terms of political traditions (Elazar, 1972). Another notes a positive association between current spending by state governments and centralization as well as a tendency of low-income states toward greater centralization (Sharkansky, 1968). Others have noted that, as measured by revenues, expenditures, and state aid to local government, we have experienced movement toward centralization since the turn of the century (Mosher and Poland, 1964). Another scholar developed a centralization continuum from decentralized to centralized based on "manifestations of power" baased upon the determination of which level of government delivers public services for a broad range of governmental activities and the fixing of financial responsibility for public goods and services as well as the analysis of the state-local distribution of personnel (Stephens, 1974).

Fiscal Trends

Considering the declining role of the federal government in federal-state fiscal relations, it is important to examine state-local fiscal relations more closely. Several authors have noted increasingly centralized state fiscal control and decreasing local autonomy.

One scholar observed that our tradition of local self-rule "is becoming more myth and less reality" as a result (Stephens, 1974:48). He asserts that "the states are increasingly providing more direct services, exercising greater control over basic public policy," and "accepting greater financial responsibility" (Stephens, 1974:48). This acceptance of greater financial responsibility is crucial for Stephens. In the realm of power relationships, it is more important to control the resources and their allocations than it is to have the responsibility for the delivery of certain services.

Some years ago, two researchers pointed to the declining role of local government vis-à-vis that of states (Schmandt and Goldblach, 1969). Their typology postulates the city's transition from the "political city" to the "administrative city" to the "dependent city." This transition is one from independence from the state to one of dependence on the state. Fewer decisions are made independently at the local level. Local decisions will increasingly require either authority and/or resources from state government.

Another scholar notes that, "The state's role in the local governance system should be primarily that of facilitator" (Zimmerman, 1983:169). In other words, the state should be concerned primarily with enabling its local governments to provide the range and quality of services required by the public. If the trend toward fiscal dependence accelerates, Zimmerman's notion of the role of the states as facilitators may be endangered.

Local governments are instrumentalities of the state and their ability to perform any function rests with whatever powers and abilities the state may grant. A fundamental question in state-local relations involves the state's role in providing for local problem solving. To return to Zimmerman's formulation, a state can be an "inhibitor," a "facilitator," and/or an "initiator" in local government problem solving (Zimmerman, 1983:14). The state may perform any or all of these roles in a number of policy areas. In a review of Zimmerman's <u>State-Local Fiscal Relations</u>, Whelan notes that issues of state-local relations "raise classic questions of centralization versus decentralization" (Whelan, 1984). That is, to what extent can states permit local self-determination without the danger that local actions may create problems for other localities or may result in the abuse of power?

Zimmerman addresses the question of centralization with the notion of local discretionary authority. He is concerned with the type and amount of discretion given by the states to their units of local government. Zimmerman divides local discretionary authority into four categories: structural, functional, fiscal, and personnel. States often allow varying degrees of local discretionary authority in the different categories but typically allow the most narrow discretionary authority in the category of finance (Zimmerman, 1983). The analysis of the fiscal dimension is critical because local government's ability to generate sufficient funds determines the extent of local discretionary authority.

Typically, states grant more discretionary authority to cities than to counties. When comparing discretionary authority, Zimmerman found that Tennessee cities and counties have similar authority in the categories of function and personnel. Cities possess more authority than counties in the categories of structure and finance (Zimmerman, 1983:39-42).

The trends noted above point to the importance of state-local relations. It can be hypothesized that these relationships are changing, at least in part, as a result of the changing relationships between the national government and the states. Stephens asserted that it was the federal government that had "provisioned" state government to assume greater power vis-à-vis local government (Stephens, 1974: 74). By reducing this provisioning, the federal government has placed additional strain on state and local governments to respond to citizen demands.

Several recent studies support the linkage between changes in federal spending with changes in state and local spending (Gramlich, 1977; Hanson and Cooper, 1980; Benson, 1986). It is reasonable to assume that changing federal-state fiscal relations lead to changing state-local fiscal relations. State-local relationships need to be studied to determine if they are changing and how these changes affect each level of government.

Local government plays a crucial role in the provision of essential public services. County government serves primarily as an administrative subdivision of the state. As a result, its responsibilities typically are limited to acting as the state's agent on matters such as public health, records, and the courts. Cities exist primarily to provide additional services to their citizens such as police and fire, parks and recreation, and planning and zoning. While the powers granted to cities are mostly permissive, it is common for the scope and types of municipal services to expand rather than contract. Since both state and local governments must operate on balanced budgets, they must constantly deal with balancing the complex equation of taxes and revenues against services and demands. Perhaps the most common problem for state and local governments today is how to finance their operations, or more simply put, to balance their budgets.

This study focuses on the State of Tennessee and its fiscal relationships with its local governments. The concept of centralization is used to analyze state-local fiscal relations in Tennessee. Centralization has to do with the concentration of power or responsibility at the state government level. In practice, the state possesses complete responsibility for some activities while local government possesses complete responsibility for other activities. There are some activities that involve a mixture of state and local responsibility. In 1974 (using 1969 data), Stephens characterized Tennessee as a "balanced" state with local domination of eight selected activities and state domination of seven activities (Stephens, 1974:61). On the financial responsibility dimension, Stephens found Tennessee to be "centralized," moving from a low "balanced" rating using 1957 data (Stephens, 1974:76). The state's role as facilitator was in question even at that time.

Data and Methods

Overview

This study draws upon the works of Jeffrey M. Stonecash on state "centralization" in a federal system. According to Stonecash, the centralization of state and local relationships involves two dimensions. The first relates to the degree of "interaction" and refers to the extent of state activity that relates to local government. When the interest is local government and its likely autonomy relative to state government, the concern is the amount of interaction between levels (specifically, the reliance of local governments on revenue from the state). The unit of analysis is local government and the focus is local reliance on the state. The second dimension pertains to "division-of-labor" and refers to the extent to which revenue raising and service delivery are state government activities. When the concern is the domination by the state of the total of state and local revenues and expenditures, the division-of-labor aspect is meaningful and the unit of analysis is total state and local fiscal activity. The concern is the state dominance of that total. When the concern is the overall centralization of the state-local fiscal system, then both indicators are relevant (Stonecash, 1981).

Another dimension of state-local fiscal relationships deals with the effects that state and local taxation has upon the public. One element of this dimension deals with the impact of taxation on the private sector and the other deals with the impact on state and local governments themselves. In this study, these effects are the tax policies of the state as described in terms of tax burden and tax reliance. Many times the outcomes or results of a policy are different from what were intended. Much policy research focuses on describing some distributional or other impact of tax and revenue systems (Phares, 1980, Pechman and Okner, 1974, and Aaron, 1975). A common method of analysis is to describe taxes in terms of regressivity or progressivity. Phares, for example, noted that Tennessee's sales tax is among the most regressive in the nation (Phares, 1980, p. 118-119).

This study is a case study of centralization in Tennessee using Stonecash's measures. These measures will allow for a comparison with Stephens' conclusions about the trend towards centralization. Centralization indicators will also be compared to tax burden and tax reliance indicators to see how they relate. This study will use Stonecash's measures of centralization to assess the impact of Reagan's "New Federalism" on state-local fiscal relations in Tennessee. Tennessee will then be compared to other southeastern states on the centralization and tax and revenue policy dimensions to see how it compares. The result is an in-depth examination of Tennessee state-local fiscal policy that will allow for a comparison with the findings and conclusions of previous studies.

Statement of the Problem

Four key questions are central to the analysis:

1. What are the major characteristics of state-local fiscal policy in Tennessee? The general notion to be operationalized is that of the fiscal interactions between the state and local governments. The nature and extent of these interactions will be examined in relation to the concept of fiscal centralization. The dimensions of centralization that will be examined are the degree to which fiscal resources are exchanged between state and local governments and the degree to which state-local revenue raising and expenditure is a state function.

2. How is centralization related to selected tax policy indicators? Indicators for tax policy will be tax burden and tax reliance. Tax burden questions refer to the extent to which government transfers moneys from the private sector to the public sector. Tax reliance questions refer to the extent that a government uses a specific tax. These indicators will be compared to the centralization indicators

to determine the relationship between centralization and tax policy.

3. What were the effects of "New Federalism" on state-local fiscal relations in Tennessee? Reagan's New Federalism altered the fiscal relations between the federal governments and the states. It is reasonable to assume that the relations between the states and their local governments may have been altered.

4. How does Tennessee's state-local fiscal policy compare to that of other states? Finally, Tennessee will be compared to other states in the area of state-local fiscal relations. The centralization and tax policy indicators will be used to compare Tennessee's state-local fiscal policy to the policies observed in other states. These indicators will be developed for Tennessee and other selected states for 1990 to provide a basis for comparison.

Concepts

The key concept to be operationalized is the dependent variable, centralization. It is the degree to which the state government controls or influences basic public policy by the collection and allocation of resources, and the delivery of public good and services. There are two dimensions of centralization. One is "fiscal interaction," and the other is "division-of-labor." Fiscal interaction refers to the degree of involvement or interaction between the state and local governments. It is measured by the indicators of local reliance and state effort. When the focus is on local government and its relative autonomy, then the fiscal interaction dimension is relevant. Division-of-labor refers to the extent to which revenues and expenditures are handled by the state relative to local government. It is measured by indicators of state revenue raising and state expenditure. When the concern is the state's dominance of the total state-local revenue and expenditure system, then division-of-labor is relevant.

Conceptually, these dimensions are quite distinct. Fiscal exchange between levels deals with the extent of action taken by the state toward local government. The division-of-labor dimension deals with functional responsibility and is conceptually independent of fiscal exchange. That is, one deals with interaction while the other deals with separation of activity.

The other concept to be operationalized is that of tax policy. Tax policy refers to the decisions and non-decisions about how much revenue is to be raised, how it will be raised, from whom it will be raised, and how great a financial burden will be imposed (Dye, 1966, p.178). Levels of revenue refer to the amounts of money raised from all sources. Levels of taxation refer to the amounts of money raised through taxation. Burden refers to the amount of revenues or taxes collected relative to personal income. It is measured by the indicators of combined state-local tax burden, state tax burden, and local tax burden. Reliance refers to the dependence on certain taxes or revenues as compared to other revenue sources. It is measured by the indicators of combined state and local tax reliance, state tax reliance, local tax reliance, combined state-local sales tax reliance, state sales tax reliance, local sales tax reliance, combined income tax reliance, state income tax reliance, combined property tax reliance, and local property tax reliance.

Indicators and Variables

Several indicators will be used to assess the degree of centralization: local reliance, state effort, state revenue raising, and state expenditure. These indicators and the variables used to calculate them are discussed below.

Local reliance (LOCREL) is the extent to which local governments rely on or derive revenue from the state government. It is the total amount of revenue received from the state divided by the total amount of local government general revenue. Local intergovernmental revenue from state government (LOCIGREV) is general revenue received by local governments from the state government, including amounts received from the federal government channeled through the state. Total local government general revenue (TOLOCREV) is all government revenues received by local government except liquor store revenue, insurance trust revenue, and utility revenue. The basis for distinction is not the fund or administrative unit receiving particular amounts, but rather the nature of the revenue sources concerned. The higher the score on local reliance, the greater the dependency of local government on the state for fiscal resources. This suggests greater centralization and a reduction in local autonomy.

State effort (STAEFFRT) is the extent to which the state assists local governments as measured by dollars transferred from the state to local government. It is the proportion of the state budget that is transferred to local governments for general aid and is calculated by dividing state intergovernmental expenditure to local government by total state government general expenditure. State intergovernmental expenditure to local government (STAIGEXP) is the amount paid to local government by the state as fiscal aid in the form of shared revenues and grants-in-aid, as reimbursements for performance of general government activities and for specific services for the paying government, or in-lieu of taxes. Total state government general expenditure (TOSTAEXP) is the total of direct expenditure and intergovernmental expenditure made by the state government. Direct expenditure includes payments to employees, suppliers, contractors, beneficiaries, and other final recipients of government payments, in other words, all expenditures other than intergovernmental expenditures. The higher the score, the greater the degree of centralization (and a reduction in local autonomy) as the state controls the distribution of fiscal resources.

State revenue raising (STAREVRG) is the extent to which the state dominates the collection of revenues. It is the proportion of total state and local general revenues that comes from own-source revenues collected by the state. It does not include intergovernmental revenues. It is calculated by dividing state own-source revenue by combined state and local own-source revenue. State own-source revenue (STAREV) is general revenue of the state from taxes, charges for services, and miscellaneous revenues. It is all state general revenues except intergovernmental revenues. Local own-sources revenue (LOCREV) is general revenue of local government received from taxes, charges for services, and miscellaneous revenues. It is all local general revenue except intergovernmental revenue. Combined own-source revenue (COMBREV) is the total of state own-source revenue and local own-source revenue. The higher the score, the greater the state's dominance in the collection of revenues and consequently the greater the degree of centralization. Greater centralization suggests a reduction in local autonomy.

State expenditure (STAEXP) is the extent to which the state dominates the delivery of services through direct expenditures. It is the proportion of total state-local expenditures from own-source revenues that are made by the state. Intergovernmental expenditures are excluded. It is calculated by dividing state general expenditure by combined state and local general expenditure. State general expenditure (STGENEXP) is total state general expenditures less intergovernmental expenditures. Local general expenditure (LOGENEXP) is total direct expenditure less intergovernmental expenditures made by local government. Combined general expenditure (COMBEXP) is the total of state general expenditures and local general expenditures. The higher the score, the greater the degree of centralization as the state controls the direct expenditures made for public goods and services. This also suggests decreased local autonomy.

Two indicators will be used to measure tax policy. They are: tax burden and tax reliance. Tax burden is the extent to which state and local governments transfer monies from the private sector to the public sector. It is measured as the proportion of total taxes to total personal income. This study involves state and local government fiscal relationships. In examining a state's fiscal climate, state and local government fiscal attributes need to be examined together and separately. In this study, the total state and local tax burden will be termed Combined Tax Burden (COTAXBRD). It is the proportion of state and local taxes (COTAXREV) to total personal income (PERSINC). The tax burden imposed by state government will be called State Tax Burden (STTAXBRD) and that imposed by local government will be called Local Tax Burden (LOTAXBRD). State tax burden is the proportion of state taxes (STTAXREV) to total personal income (PERSINC). Local tax burden is the proportion of local taxes (LOTAXREV) to total personal income (PERSINC).

Tax reliance is the extent to which state and local governments rely on a particular tax for revenues. It is measured as the proportion of revenues from a particular tax to total taxes. Tax reliance will also be examined at several levels. Tax reliance on all taxes (or a specific tax) by both state and local government will be termed

Combined Tax Reliance (COTAXREL) (or Combined Sales Tax Reliance (COSATXRL), Combined Income Tax Reliance(COINTXRL), and Combined Property Tax Reliance (COPRTXRL) for specific taxes). Tax reliance by the state, depending on the particular tax, will be termed State Tax Reliance (STTAXREL), State Sales Tax Reliance (STSATXRL), or State Income Tax Reliance (STINTXRL) depending on the tax. Tax reliance by local government will be term either Local Tax Reliance (LOTAXRL), Local Sales Tax Reliance (LOSATXRL), or Local Property Tax Reliance (LOPRTXRL) depending on the specific tax.

Research Design

Describing centralization and identifying trends involves a multi-step process. First, measures of centralization will be developed for each year of the study period. These measures are local reliance, state effort, state revenue raising, and state expenditure. These measures will be examined to determine how they have changed during the study period. The indicators will be analyzed on a time-series basis to allow for an examination of changes over the course of the study period. Correlation analysis will be performed on the centralization indicators to determine the relationships among them.

Tennessee's state and local tax policy will be described by using the concepts of tax burden and tax reliance. Measures for tax burden and tax reliance will be developed for each year of the study period. Correlation analysis will be performed among the tax policy indicators to determine how they are related. These measures will be examined to determine how they have changed during the study period. The indicators will be examined on a time-series basis. In addition, correlation analysis will be executed between the tax policy indicators and the centralization indicators to determine how tax policy is related to centralization.

Any research that attempts to assess the effect of a policy change needs to employ a longitudinal research design. When the policy change occurs at a specific point in time, a quasi-experimental time-series approach may be used. By comparing fiscal centralization before and after the implementation of "New Federalism", the impact of the change on state-local fiscal relations in Tennessee can be analyzed. The impact of "New Federalism" will be assessed through the following formulation:

$$O_1 \ldots O_8 \; X \; O_9 \ldots O_{16}$$

where O_1, O_2 ... O_{16} are measures of centralization taken at yearly intervals, and X represents the implementation of "New Federalism" in 1982.

Finally, a comparison of Tennessee to other selected states will be made on the centralization and tax burden and tax reliance indicators for the year 1990.

Organization

State and local governments operate in a federal system. The powers accorded to national and state governments are controlled by the federal nature of our national government. Chapter 2 will describe the federal context of state-local fiscal relations, the unitary system of state-local relations, the unique aspects of state-local fiscal policy, and the unique blend of state-local revenue streams in Tennessee.

Changing notions of federalism have resulted in a major restructuring of nation-state relations. Decentralization of nation-state relations has increased the vitality and importance of the states. These changes have led to changing roles of state and local governments as well. these changes have altered state-local fiscal relations. Chapter 3 will describe state-local policy in Tennessee according to the notion of centralization. By doing so, we can see if state-local relations have changed during the study period.

Policy decisions have consequences. The effect of Tennessee's state-local fiscal policy on local government will be explored in Chapter 4. Policy effects will be examined in terms of tax burden and tax reliance. Once again, the interest is how these measures have changed during the study period. In addition, the tax burden and tax reliance indicators will be compared to the centralization indicators developed in Chapter 3 to see how they relate.

Once we have examined the trends present in state-local centralization, it is important to determine what effects Reagan's "New Federalism" had on the centralization indicators. Chapter 5 will examine this impact using multiple regression. We will determine whether the trends for these indicators were significantly altered after the implementation of this policy.

Students of public policy and the makers of that policy are interested in how a particular government compares to another. Chapter 6 will compare the findings in Tennessee to other selected states.

Chapter 7 will present conclusions flowing from the study. It will also point to further research needs in this area.

Conclusion

In a recent book that discussed ways to improve state policies that affect local government, Gold noted that, "Because of the diminished role of the federal government in the federal system, it is incumbent on the state to be more assertive in finding solutions to urgent problems of state-local relations" (Gold, 1989, p. 152). A clearer understanding of the state-local fiscal relationship is crucial.

CHAPTER 2

THE CONTEXT FOR ANALYSIS

State and local fiscal relations take place within a complex system of governance. That system is the result of a constitutional and historical context that must be acknowledged in order to understand state-local fiscal relations.

The purpose of this chapter is to establish the constitutional and historical context within which state-local fiscal relations take place. This will be done by first examining nation-state relations. Then this chapter will examine state-local relations generally. After establishing this general foundation, the chapter focuses on the legal relations between state and local governments in Tennessee. The chapter concludes with an overview of the state-local revenue system in Tennessee.

Governmental Structure

Every government has an unique mixture of historical, social, political, and economic elements that help determine its organization and operations. In addition, the American tradition of constitutional rule places limits on the powers that can be exercised by government. This section will examine the structure of the American system and the impact of that structure on state and local government.

The Federal Context

A distinctive feature of the American system of governance is its federal nature. A federal system is one in which a national, overarching government shares power with subnational, or state governments. A federal system has the following features; (1) a written constitution that divides governmental powers between the central government and the constituent governments, giving substantial powers to each; (2) levels of government, through their own instrumentalities, exercising power directly over their citizens; and (3) a constitutional distribution of powers that cannot be changed unilaterally by any level of government or by the ordinary process of legislation (Shafritz, 1988, p. 213). Nation-state relations in the United States are clearly federal in nature. The presence of a federal system has implications for state-local relations.

A federal system can be highly complicated and affect the ability of state and local government to raise revenues. A brief review of revenue-raising in a federal system and an examination of federal and state constitutions will illustrate this point.

The central political role of revenue raising has been traced to the beginnings of parliamentary democracy. By the time of the American Revolution, the revenue raising role of the legislature was well established. One of the contributing causes of the Revolution was the notion that there should be no "taxation without representation," because "taxation without representation was tyranny."

The original framework for the government of the United States was the Article of Confederation (1781 - 89). Under the Articles, the central government could not compel states to respect treaties, could not regulate interstate and foreign commerce, and could neither collect taxes directly from the people nor compel the states to pay for the costs of the national government. The responsibility for raising revenue was placed on the states. Congress did not have the power to tax and the central government depended on the states for financial support. Obviously, this severely weakened the national government and proved unsatisfactory.

With the adoption of the Constitution, the federal government received the authority to tax. At the same time, the states retained limited authority to tax. The federal government received exclusive taxing authority in certain areas, such as tariffs. States were forced to look to other sources for revenues and increasingly utilized the property tax and excise taxes. Local government relied almost exclusively on the property tax for what little revenue it needed.

During the early nineteenth century, a variety of revenue sources were used by state and local governments. The property tax, taxes on banks, lotteries, sales of land, and extensive borrowing were used to finance government. By the end of the nineteenth century, both state and local governments had come to rely heavily on the property tax for the bulk of their revenue needs.

As state and local government revenue needs grew in the late nineteenth century, they began to look for new revenue sources. Franchise taxes on railroads, liquor license taxes, and inheritance taxes reduced the states' reliance on the property tax. It was during this period that many local governments borrowed heavily and subsequently defaulted on their debt. As a result, states took action to limit local government borrowing. These debt restrictions and other state restrictions on local government finances have helped to define state-local revenue issues in the following years. As a result, the sources of revenue made available to local government are still restricted by the states.

Since the early part of the twentieth century, the federal government has relied heavily on the personal income tax as the major source of revenue. This tax was made possible by the ratification of the Sixteenth Amendment to the Constitution in 1913. The federal government also relies on corporate income, gift, and estate taxes to meet its revenue needs.

Significant changes have taken place in state and local government revenues this century as well. The property tax, for example, while remaining a significant source of local revenue, has almost disappeared as a source of state revenue. Income and general sales taxes have replaced or reduced the dependence on the property tax at the state level. Perhaps the most important development to note in recent years is the decline in the relative importance of all taxes. State and local governments have come increasingly to rely on non-tax sources such as intergovernmental revenues, charges for services, and miscellaneous revenues as alternatives to taxes.

The history of the federal system in this country has been one of defining and redefining the roles of the national and state governments in domestic affairs. The role of local government has been reshaped during this period as well. Clearly, the history of federal-state-local relations is one of adaptation and change.

Constitutional Limitations

There are three levels of government in the United States: national, state, and local. The Constitution enumerates specific powers to the national government and reserves all other powers (not prohibited) to the states or the people. There is no mention of local government in the national constitution. In some areas, for example, taxation, the national and state governments share powers concurrently. There are some powers which states may exercise only with the consent of Congress. Since 1791 the federal sphere of power has been broadened significantly by judicial interpretation, constitutional amendments, and statutory expansion. These broadened federal powers most often come at the expense of the states. They have also impacted local government.

Constitutions are the basic political and legal documents that set forth the rules by which governments operate. In a federal system, there is a national constitution as well as the individual constitutions of the various states. Both the U.S. Constitution and the constitutions of the various states place restrictions on the manner by which governments can raise revenue.

The U.S. Constitution places a variety of restrictions on the revenue-raising powers of the states. Article I, Section 8 gives the Congress the power to regulate foreign commerce. As a result, states are restricted from imposing taxes on imports. State taxation on interstate commerce is also limited. A state may not levy a tax that imposes a substantial burden on interstate commerce. Consequently, neither state nor local governments can tax goods or property used in interstate commerce in a discriminatory fashion.

Article I, Section 10 also restricts the states, without the consent of Congress, from laying imposts or duties on imports or exports except those necessary for executing inspection laws, and these must be reasonably proportionate to the cost of inspection.

Article IV, Section 1, the "full faith and credit" clause, requires each state to respect and honor the legal and judicial proceedings of the other states. This section affects the consideration of tax claims of one state in the courts of another state.

Article IV, Section 2, the "privileges and immunities" clause, protects the citizens of one state from the discriminatory actions of another state. This prohibits discriminatory taxes on individuals based solely on residence.

The organization of state government closely parallels that of the national government. Each state has a constitution similar in content and form to that of the nation. State constitutions typically provide for a separation of powers among the executive, legislative, and judicial branches. State constitutions often include detailed provisions that limit the powers of the executive and legislative branches. These restrictions are often more numerous than enabling provisions. Restrictions on the levying of taxes and on borrowing money are also common. These constitutions also contain sections on the organization and powers of local government, and they establish revenue systems for both the state and its localities. Typically they include specific authorizations (and often limitations) for property taxes, sales taxes, and/or a variety of other revenue sources.

One important limitation on the revenue-raising power of state and local governments is a requirement that taxes must be "uniform and equal." The constitutions of over 40 states have some sort of uniformity clause. The precise wording varies from state to state. Likewise the judicial interpretations and meanings of uniformity vary from state to state. Regardless of the language or its interpretations, such clauses impact the state and local tax structure within a state.

Any examination of a state revenue system must consider the specific constitutional provisions of that state and those of the U.S. Constitution. It must also consider related statutes, judicial interpretations, and custom.

State and Local Relations Generally

Local government may be described as any government that is clearly not state or federal. Such a definition includes general purpose local governments such as counties, municipalities, and towns, as well as special purpose local governments such as school districts and utility districts. Since local government is not mentioned in the U.S. Constitution, it has no inherent federal constitutional rights or protection. Local governments must depend on the states for their existence. The criteria developed by state courts to determine the nature and extent of powers vested in local governments is known as "Dillon's rule."

Unlike the federal relationship of shared powers between the national government and the states, the relationship between the state and their local governments is unitary in nature. That is, local government lacks power apart from the state. Local governments have no sovereignty and therefore no inherent right to exist. The state provides for the existence of local government, its organization, and establishes the limits on its powers.

Counties are ancient institutions descended from the Anglo-Saxon shire (Greene, et al, 1982, p. 236). They are generally provided for in state constitutions, statutes, and custom as the basic unit of administrative decentralization of state government. In legal terms, counties are more properly described as quasi-corporations. The principal distinction of the quasi-corporation is that it serves primarily as an administrative agent of the state. Counties may be chartered although this is not usually the case.

Legally speaking, the city is a municipal corporation. A corporation is an artificial person created by the state. Municipal corporations possess no independent sovereignty at all. They are products of the state and their powers are controlled and limited by the state. Where conflict exists between state and local government, the state courts remain the final judges of what are purely local concerns (Adrian and Press, 1977, p. 129).

Like any other corporation, the municipality derives its powers from the state as granted in the form of a charter. A charter is the fundamental law of a corporation that establishes its structure or form of government, the powers that may be exercised, and the general manner by which the powers may be exercised. A municipal charter is rarely a single document but may include all state laws and judicial opinions that affect the powers of a municipal corporation (Adrian and Press, 1977, p. 129).

Municipal corporations may serve as local agents of the state in addition to performing certain local functions exclusively in the interests of those living within the corporate boundaries (Adrian and Press, 1977, p. 131). The presence of the charter distinguishes the municipal corporation and serves to broaden local powers. There are three types of municipal charters: the special act charter, the general act charter, and the home rule charter. Each will be discussed in turn.

The special act charter was the standard practice in the United States form early colonial times to the late nineteenth century (Adrian and Press, 197, p. 133). A special act charter is passed by the state legislature for a specific municipal corporation. It is unique to that municipality and can be amended only by the state legislature. Often, these amendments require local approval.

The general act charter is designed to provide uniform powers, privileges, and structures for every city in a state or for all cities of a certain class or type. A variation of this is the "cafeteria style" general act charter that provides several optional charters from which a city may choose (Adrian and Press, 1977, p. 135). All amendments to the charter are in the form of general laws passed by the state.

The home rule charter approach delegates the power to frame, adopt, and amend a charter for government to the municipal corporation. This power is subject to the constitution and general laws of the state. Historically, home rule has been viewed as a mean of increasing local power by gaining some independence from the state legislature. In reality, the primary power in home rule is the power to develop the particular form of government a city is to use. Generally, most other functions are controlled by general law. On financial matters, home rule cities have been found to have no advantage over special act or general act charters (Adrian and Press, 1977, p. 140). Home rule is more often an "attitude" toward local government than it is a legal injunction against state legislative action (Adrian and Press, 1977, p. 142). The enactment of a constitutional amendment for home rule places an implied obligation upon the legislature to carry out the spirit of its provisions (Adrian and Press, 197, p. 141).

The subordinate legal status of cities requires that questions related to municipal powers be resolved by the courts. Because the city is a creature of the state and the state is a sovereign body, the courts have tended to rule restrictively on questions of municipal power and permissively on questions of state power (Adrian and Press, 1977, p. 132). Even so, there have been several attempts to limit or restrict the absolute power that states may exercise over their cities.

Besides home rule and other constitutional and statutory constraints, there are additional restrictions that are noteworthy. These are measures to limit the exercise of special legislation by the state legislature. The most common methods are restrictions that: (1) prohibit special legislation where a general law would apply; (2) specifically delineate the areas where the state cannot legislate; (3) mandate local request or approval before special legislation can be adopted; and (4) require that public laws be applicable throughout the state (Freeman, 1985, p. 9).

The degree to which these restrictions reduce the scope of state involvement in local government is unclear. There are several ways for states to avoid prohibitions on special legislation such as passage of laws that purport to be general but are not in fact; by the establishment of special districts; and by misapplying the population device. Following a rule of broad construction, the courts have hesitated to rule against legislatures on questions regarding the validity of special legislation (Adrian and Press, 1977, p. 135). On the other hand, at least two studies suggest that over time most cases are being decided in favor of local governments (Freeman, 1985, p. 17). These findings show that the courts have been most willing to support local authority in the areas of government operations and structure and least willing to uphold local authority in the area of finance and taxation (Freeman, 1985, p.19).

This section has presented a general overview of the legal context of state-local fiscal relations. The next section will focus on these relationships in Tennessee.

State-local Legal Relations in Tennessee

Tennessee has more than 425 local governments. There are 95 counties and over 330 municipalities. In addition to these forms of general local government, there are a number of school districts and other special-purpose districts. The size and wealth of these local governments vary greatly.

According to the 1990 census, Tennessee has a population of 4,877,000. Of that number, 2,970,000, or 61 percent, live in areas classified as urban; 1,907,000, or 39 percent, live in areas classified as rural. The percentage of urban population has increased steadily over the years and came to exceed 50 percent in the 1960 census.

The populations of Tennessee's 95 counties range from 4,548 in Pickett County to 826,300 in Shelby County. Only 15 of Tennessee's 95 counties are classified as urban.

Municipalities in Tennessee range in size from 610,337 in Memphis to 59 in Silerton. Seventy-four cities have a population over 5,000. Only four cities in Tennessee have populations of over 100,000: Memphis, Nashville, Knoxville, and Chattanooga. Almost 30 percent of the state's total population and almost 50 percent of the state's urban population reside in these four cities.

Tennessee's counties and municipalities vary considerably in terms of wealth, population, and revenues available. They also vary in terms of the local political and social climate and history.

Constitutional Matters

Besides providing for the organization of state government and its powers, the Tennessee constitution gives the legislature explicit duties relating to the organization and management of local government. A brief review of the Tennessee constitution and its history will demonstrate this relationship.

Tennessee has had three constitutions (1796, 1835, and 1870). Relative to other states, Tennessee's constitution is shorter and has been amended less often. Tennessee's first constitution was not amended at all. The second constitution was amended twice in relatively minor ways (Thorogood, 1949, p. 23). The present constitution remained unamended from 1870 to 1953. Since 1953, there have been thirty-two constitutional amendments, the last in 1977.

Compared to other state constitutions, Tennessee's is remarkable for its ability to remain largely intact through periods of tremendous social and political change. One reason for this stability is that the Tennessee constitution is less specific or detailed than many and therefore subject to broader interpretation. In addition, it has often been found that there are methods other than amendment for getting around certain constitutional provisions. One author, writing before the 1953 amendments, attributed Tennessee's failure to modify the "hoary" 1870 constitution to the "lethargy of the voters," opposition from special interest groups, and a "mystical view" of the Constitution as a "hallowed work" (Thorogood, 1949, p. 23).

Even so, the age or number of times a constitution has been amended is no indication of its quality or its ability to adapt to changing social conditions. The requirements of the amendment process itself may encourage or discourage the nature and number of amendments considered. It was a fear of instability caused by easy change that prompted the framers of the Tennessee constitution to make it extremely difficult to amend (Greene, et al, 1982, p.11).

There are essentially two methods for amending the

Tennessee constitution. One is by referendum where the legislature proposes and adopts an amendment in two consecutive sessions. The first passage require a simple majority. The second requires a two-thirds majority in both houses. It is then submitted to the people in an election in which the governor is chosen. A majority of those voting for governor is required for the amendment to pass. The second method is by constitutional convention. The legislature may call for a convention to "alter, reform, or abolish" all or any specified part of the constitution (Tennessee Constitution; Article XI, Section 3). The convention call must be approved by the voters. Voters then elect delegates to the convention which meets to consider amendment proposals stated in the call. Any amendments proposed by the convention shall be approved by a majority of those voting in an election as fixed by the convention. Conventions may not be held more often that once every six years.

The 1953 constitutional amendments dramatically altered state-local relationships in Tennessee. Most of the changes were designed to curb the arbitrary exercise of power by the state with respect to local government. One provision prohibits the General Assembly from passing any legislation that would remove incumbent local office holders or abridge their terms of office or reduce their salary before their term ends. The same provision also voids any state legislation passed pertaining to a city or county unless it is approved by a two-thirds vote of the legislative body or by a majority vote in a referendum at the city or county level.

Another of the 1953 amendments allows a city to choose by referendum to be a "home rule city." Home rule cities are free to adopt by referendum their own charters provided that no provision is inconsistent with general law and no power of taxation not permitted by general law is assumed. As a result, as noted previously, this "power" is largely limited to determining the form of government a city may employ. The general powers granted to a home rule city are conferred by the constitution and/or the statutes.

This amendment also provided for the General Assembly to decide by general law the methods by which municipalities may be created, merged, consolidated, and dissolved and the methods by which municipal boundaries may be altered. The potential for such laws to address many of the problems of urbanization is obvious. Consolidation, annexation, and the merger of local governments have long been recognized as workable alternatives to improving the delivery of local government services. Besides increasing the efficiency and effectiveness of local government, political accountability can also be increased by eliminating overlapping and conflicting jurisdictions. Unfortunately, this promise has gone largely unrealized in Tennessee as very few consolidations and mergers have resulted. Annexation law in Tennessee, once considered a model procedure, as it has developed has been substantially weakened by the legislature and adverse judicial decisions.

Another 1953 amendment allowed the General Assembly to provide for the consolidation of city and county governments if approved in separate referenda in both the city and the county. Though attempted on numerous occasions, this has been accomplished only twice, in Nashville-Davidson County and Lynchburg-Moore County. This is primarily a consequence of the dual majority requirement.

The 1953 amendments significantly altered state-local relations in Tennessee, particularly for cities. They largely preempted the state from creating, altering, or abolishing a municipal corporation against its will. The General Assembly must act toward its municipalities with laws that are general in nature and effect. A general law is one that affects or can affect all municipalities. Regrettably, despite the constitution, many general laws with restricted local application have been passed. These laws, while taking the form of general laws, are crafted to apply to only one or a few local governments. This is accomplished with the use of population or some other qualifying characteristic to identify the municipalities to whom the law shall apply. This would appear to contradict the intent of the amendment. It should be noted that many of these laws have been passed or amended at the request of a local government and have gone largely unchallenged in the courts.

In 1977, there were 13 amendments to the Tennessee constitution proposed by the constitutional convention. Twelve were eventually adopted by the electorate. One of the amendments (and the subsequent implementing legislation) restructured county government by providing for an elected county executive and legislative body. It had the effect of providing a separation of powers in county government that had not existed in previous county organization (Hopkins, p. 15). The amendment also set the sheriff's term of office at four years with no limit on reelection. Otherwise, county government in Tennessee remains largely unchanged since 1870. This is because much of the general organizational features of county government are constitutional in origin and the constitution is difficult to amend.

In addition to providing for the organization of state and local government, the state constitution is the source document for all taxing powers enjoyed by the state and its localities. The taxing powers of the legislature are provided for in Article II, Section 28 of the Constitution. The state may tax "property real, personal, or mixed," "merchants, peddlers, and privileges," "gross receipts...on merchants and businesses," and "income derived from stocks and bonds." The taxing powers of local governments are found in Article II, Section 29. These powers are to be determined by the legislature provided that all property will be taxed according to value.

The constitution also provides that the state must have a balanced budget and that expenditure must be pursuant to appropriations made by law (Tennessee Constitution; Article II, Section 24). Tennessee was one of the first states to pass a constitutional amendment to limit the growth of state expenditures (Tennessee Constitution; Article II, Section 24). This provision, adopted in 1978, limits state expenditure increases to no more than the state's growth in personal income. Since state taxes in Tennessee are relatively inelastic (that is, tax collections lag behind economic growth), this provision has been relatively meaningless. In any event, there are procedural measures available to the General Assembly to bypass this restriction.

The state constitution has few restrictions on debt issued by the state or its localities. Debt must be used for a public purpose; however, there are no constitutional limits on the amount of debt that either the state or its localities may incur (Tennessee Constitution; Article II Sections 31 and 29). In addition, the constitution does not require referenda on bond issues, although state statutes provide a mechanism for them under certain circumstances.

The constitution also provides that no general law of the state shall impose increased expenditure costs on cities and counties unless the General Assembly shall provide that the state share in the cost (Tennessee Constitution; Article II, Section 24). The purpose of this is to restrict state mandates that require local funding. This measure has also proved to be rather meaningless.

The constitution provides that the ratio of assessment of all property within the state must be equal and uniform. The legislature determines by statute the value and definition of property within each class. Each taxing authority must apply the same tax rate to all property within its jurisdiction (Tennessee Constitution; Article II, Section 28).

Though amended often since 1953, the Tennessee constitution of 1870 remains largely intact. The most significant changes have been in the area of local government, but even these have not dramatically altered matters since 1953. Tennessee's constitution remains stable, and consequently most political battles are fought in the legislative and judicial arenas rather than in the constitutional amendment arena.

County Government

The county is a basic unit in the organization of government in Tennessee. It is the unit of administrative decentralization for the state for programs such as public health, welfare, public schools, the court system, licensing, settlement of estates, and the preservation of legal papers. It is also a provider of services to its citizens under basic policies established by state law (Greene, et al, 1982, p. 239).

The Tennessee constitution establishes the basic officeholders of county government while the duties and qualifications of each office are prescribed by statute. The voters in each county are to elect a county legislative body, a county executive, a sheriff, a trustee, a register, a county clerk, and an assessor of property (Tennessee Constitution; Article VII, Section 1). These offices are ministerial in nature.

The courts have held that county offices named in the Tennessee constitution can be abolished only by constitutional amendment. The legislature may remove all powers from county offices except those that are constitutionally mandated.

The county lacks the power to pass ordinances comparable to those that a municipality may adopt based on charter or general law. This severely limits the county's power for independent action. The county legislative body may exercise legislative power only within the narrowly defined limits of statutes.

In addition, the constitution allows the general assembly to provide alternative forms of county government, including the right to charter, with the new form replacing the existing form if approved in a referendum. The 1979 act that implements this amendment provides that the legislative body of a chartered county may "pass ordinances related to purely county affairs" (Public Acts, 1979, Chapter 402). In effect, the adoption of a charter allows counties to pass ordinances. So far, only Knox and Shelby counties have adopted a county charter under this provision.

Tennessee statutes mandate that every county is a "corporation." This provision may not be as inclusive as it seems. Tennessee courts have ruled that for some purposes counties are "civil divisions" while for other purposes they are "corporations," but also that they are sometimes "quasi-corporations" (Maxey v. Powers, 117 Tenn. 381, 101 S.W. 181 (1906)). The courts have also held that counties are corporations with limited powers (White's Creek Tpk. Co. v. Davidson County, 82 Tenn. 73 (1884)) and that they stand low down in the scale of corporate existence and are ranked as "quasi-corporations" to distinguish them from private corporation and municipal corporations (Burnett v. Maloney, 97 Tenn. 697, S.W. 689, 34 L.R.A. 541, (1896)).

Though many considered the 1977 amendments as major reform in county government, they did not integrate all the county operations under a single executive. County government in Tennessee essentially remains controlled by the constitutional provisions of 1870.

Municipal Government

A charter is the document that spells out the purposes and powers of a municipal corporation. The municipality can exercise only those powers and perform only those functions that are in the charter or state law.

Historically in Tennessee, municipal charters were granted by the state legislature in the form of private acts. They were subject to amendment at the will of the legislature. The 1953 constitutional amendments provided that such changes were subject to local approval either by the governing board or by referendum of the electorate.

Though the 1953 amendments removed much of the arbitrary authority of the state to modify local government, Tennessee remains one of the few states to use special or local legislation as the principal method of governing municipalities (Greene, et al, 1982, p. 8). This is true because the vast majority of Tennessee municipalities retain their private act charter. The private act charter is subject to amendment by the state legislature within the limitations of local approval noted above. This private act and its amendments constitute the municipality's charter.

The 1953 amendments, discussed previously, also provided the option for municipalities to adopt home-rule charters. Home rule allows a municipality to frame, adopt, and amend its own charter without action by the legislature and prohibits the legislature from adopting private acts that apply to that municipality. Presently only thirteen Tennessee cities have adopted home rule. Twelve of the adoptions took place before 1965 and the last took place in 1972. Except for Memphis, all home rule cities are in East Tennessee.

Besides private act and home rule charters, the statutes provide for three types of municipal government in the form of general acts. These are the mayor-alderman form, the commission-manager form, and the modified commission-manager form. Since 1953, all incorporating municipalities must adopt one of these three statutory charter forms or select home rule.

Regardless of the type of charter a municipality enjoys, the state legislature can pass acts on matters of general concern that are applicable to all cities, including those with home-rule charters. This power has been used in a manner so as to continue substantial legislative control over municipal affairs. The "general act with local application" has been used countless times to allow the state to intervene in specific local matters. Population classifications are the most widely used mechanism for targeting legislation to certain municipalities. Special exemptions of certain counties or municipalities are also used. Many of these have been ruled invalid but they have equally been upheld, when tested. It is difficult to discern a real pattern in the judicial decisions on this matter. A significant number of these local application laws have been passed at the request of the municipality and they are often done as a courtesy to the local legislative delegation. This is most common when the passage of a truly general law might prove to be too controversial or when the issue is of so local a concern that only a single municipality or a few municipalities are interested in the legislative remedy.

Judicial decisions relating to municipalities in Tennessee have tended to be narrow in scope. They have focused on the specific issues involved in the case and have failed to produce a clear judicial theory of local government in the state.

Special Districts

A third form of local government provided for in Tennessee is the special district. Special districts are formed to provide certain services not available from the general local government in the area, typically the county. The most prevalent form of special district in Tennessee is the utility district created to provide water and other services. Special utility districts have no taxing authority and are financed through revenue bonds payable from fees and charges paid by the district's customers.

Metropolitan Government

Another form of local government available in Tennessee is metropolitan government through the consolidation of city and county units. City-county consolidation yields a unique government combing attributes of both types. Many traditional county offices are retained under the "Metro" charter form, although their duties may be modified. Presently only Nashville-Davidson County and Lynchburg-Moore County have adopted the metropolitan form of government.

State and Local Revenues

Governmental revenues can be classified as either intergovernmental revenues, taxes, charges, or miscellaneous revenues. Taxes, charges, and miscellaneous revenues are also considered to be "own-source" revenues to distinguish them from revenues received from other levels of government. Taxes can be classified as either property, sales, or income taxes. These classifications and their relationships can be summarized as follows:

Revenue Classifications

General revenues

A. Intergovernmental revenue

B. Taxes

1. Property
2. Sales

3. Income

C. Charges and Miscellaneous revenue

Intergovernmental revenues are amounts received from other governments as fiscal aid in the form of grants-in-aid and shared revenues (Shafritz, 1988, p. 289). Taxes are compulsory payments assessed by a government for public purposes (Shafritz, 1988, p. 532). User fees or charges are specific sums that users or consumers of a government service pay to receive that service (Shafritz, 1988, p. 566). Miscellaneous revenues are revenues that do not readily fall into another category.

State Revenues

Intergovernmental revenue accounts for almost one-third of total state revenue in Tennessee. In Fy 90 it was just over 31 percent. Over 98 percent of this amount was received from the federal government. Most federal assistance to the state is for public welfare programs. This is followed by aid for education and highways. The rest comes from local government in the form of local matching funds and is used primarily for highways. Intergovernmental revenue is declining in importance as a source of state funds. With this, other revenues are increasing in relative importance. These own-source revenues are taxes and user fees and charges.

Generally speaking, taxes can be levied on property, sales, and income. Property taxes may be on real or personal property. Real property taxes are levied on land and its improvements. Personal property taxes are levied on tangible property such as furniture and automobiles and intangible property such as stocks and bonds. Income taxes are levied on income, usually adjusted by excluding certain types of income such as interest from state and local government bonds. Tax revenues accounted for 53 percent of the state's total general revenue for Fy 90. This percentage has remained fairly constant during the study period.

The state of Tennessee does not levy a statewide property tax. Since 1953, the property tax has been left to counties and cities for "county and corporation purposes respectively" (Tennessee Constitution; Article II, Section 29). The general property tax was the mainstay of state revenue for more than a century and a quarter. It declined in importance after 1923. As a state revenue source, the property tax has been replaced largely by the gasoline sales tax, the general sales tax, and special sales taxes on tobacco, beer, liquor, and other articles (Thorogood, 1949, p. 210).

The constitution confers upon the legislature the power to tax "merchants, peddlers, and privileges, in such a manner as they may from time to time direct," and to "levy a gross receipts tax on merchants and businesses in lieu of ad valorem taxes on the inventories of merchandise held...for sale or exchange" (Tennessee Constitution, Article II, Section 28). The reference to privileges in this provision is of considerable significance in that it is the constitutional basis for all non-property taxes, including taxes on sales, levied by the state (Greene, et al, 1982, p. 176). The state of Tennessee currently levies approximately 20 separate taxes. These taxes and the year they were passed are shown in Table 2.01. Many of them are for the exclusive use of the state and some are shared with local governments according to various formulas. Some state taxes are for general uses while others are earmarked for special usage. Shared state taxes will be discussed in greater detail in a following section.

The most significant source of state tax revenue is the sales tax, which accounts for about 75 percent of all tax collections. The sales tax can be further classed in two groups: general sales and selective sales. In Tennessee, selective sales taxes are levied on such items as motor fuel, tobacco, and alcohol. The general sales tax accounts for approximately 55 percent of total revenues collected while selective sales taxes account for about 22 percent (Fox and Quindry, 1984, p. 8). The general sales tax has shown a steady increase in its importance as a source of state revenue. State sales tax rates have increased twice during the study period, in 1976 and 1984. (State sales tax rates were also increased in 1968, 1971, and 1992, years that are not in the study period.) Tennessee clearly relies very heavily on consumption-based taxes.

Tennessee levies an income tax only on income from certain stocks and bonds. There are no personal or corporate income taxes. Although not universally accepted, the general opinion holds that such taxes are unconstitutional in

Tennessee. This opinion results from the Tennessee Supreme Court's decision in Evans v. McCabe (164 Tenn. 672 (1932)) that invalidated a law levying a tax on individual incomes on a progressive basis and corporate incomes on a flat rate basis. The ruling asserted that the law violated Article II, Section 28 of the constitution that states that property must be taxed uniformly and equally, according to value.

Table 2.01 - Current Tennessee State Taxes

Tax	Year passed
Privilege tax	1799
Inheritance tax	1891
Special petroleum products tax	1899
Motor vehicle registration fees	1905
Corporate excise tax	1923
Gasoline tax	1923
Tobacco tax	1925
Income tax (on interest and dividends)	1929
Beer tax	1933
Franchise tax	1935
Alcoholic beverages tax	1937
Gross receipts tax	1937
Motor vehicle full tax	1942
Crude oil and natural gas severance tax	1943
Sales and use tax	1947
Local option sales tax	1963
Mixed drink tax	1967
Business tax	1971
Coal severance tax	1972
Coin operated amusement tax	1984

Charges for services and miscellaneous revenues made up 15 percent of total general revenues in Fy 90. Charges are made by various state departments and agencies for current services such as fees at state parks. In addition, there are a variety of licenses, fees, and permits that generate revenue for the state. The state also receives interest income from the investment of state revenue. Charges and miscellaneous revenues have steadily increased in importance as a source of revenue.

In summary, intergovernmental revenues have decreased in importance as a source for revenue for state government during the study period. Taxes have remained about the same in importance while charges and miscellaneous revenues have increased in importance.

Local Revenues

Intergovernmental revenues are a significant source of local government revenues. In Fy 90, they accounted for 33 percent of local revenues in Tennessee. Intergovernmental revenues may come from the federal government, the state government, or from another local government. These revenues may take the form of grants-in-aid or shared revenues. A grant-in-aid is a payment made from one level of government to another for a specified purpose and usually is subject to supervision and review by the grantor government. A shared revenue is one that is collected by one level of government and distributed to another level on the basis of some apportionment factor. Shared taxes may be for a specific purpose or they may be for general purpose use.

The majority of intergovernmental revenues to local governments are for education purposes. Almost 80 percent of federal funds received by Tennessee local governments in Fy 90 were for education. Almost 70 percent of state funds to local governments were for education. State aid for education accounted for 21 percent of all county revenues in Fy 90. State aid for education accounted for 15 percent of all municipal revenues in 1990.

Other state funds provided to local government are either allocated for highways and streets or are for general purposes. Much of this revenue comes from state-shared taxes that are allocated to local government on the basis of population or some other characteristic. State revenues for highways and streets represented 4.3 percent of all county revenues in Fy 90. State aid for highways and streets accounted for 2.8 percent of municipal revenues. Over 8.4 percent of municipal revenues were general purpose aid dollars in Fy 90.

Intergovernmental revenues have declined in importance as a source of local government revenues during the study period. Intergovernmental revenue as a percentage of total local revenue was 41 percent in 1975. It reached 42 percent in 1978 and has declined to about 32 percent in 1990.

Since local governments are relying less on intergovernmental revenue, they are turning more and more to revenues that they generate themselves. Funds from taxes, charges, and miscellaneous sources will be discussed in turn.

Taxes have remained fairly constant in terms of importance as a source of total general revenue for local government. Taxes have declined slightly in importance as a source of revenue for counties while increasing slightly in importance as a source of revenue for cities. Local governments are raising revenues from sources other than taxes.

The Tennessee constitution classifies property three ways: real property, tangible personal property, and intangible personal property. Real property is grouped into four sub-classifications and assessed as follows: (1) public utility property, assessed at 55 percent of its value; (2) industrial and commercial property, assessed at 40 percent of value; (3) residential property, assessed at 25 percent of its value; and (4) farm property, assessed at 25 percent of its value. Legislation passed in 1973 required cities to use the county assessments after countywide reappraisal had been completed.

The constitution puts tangible personal property into three sub-classifications and sets their assessments as follows: (1) public utility property, assessed at 55 percent of its value; (2) industrial and commercial property, assessed at 30 percent of value; and (3) all other tangible personal property, assessed at 5 percent of its value; however, the legislature exempts $7,500 worth of such tangible personal property to cover all personal household goods.

The constitution confers on the legislature the power to classify intangible personal property and to establish a ratio of assessment in each subclass. Intangible personal property is classified and taxed at a lower rate, or exempted entirely. A 1977 act directs assessors to presume, in the absence of a tax return to the contrary, that household personal property and all intangible personal property do not exceed the constitutional limits for exemption.

The property tax remains the most important local tax, although it has declined in importance both in terms of total taxes and in terms of total revenues. In Fy 90 property taxes accounted for 29.6 percent of total county operating revenues. On a county-by-county basis, there is a wide variation in property tax dependence. As with counties, the property tax continues to be the primary source of revenues for cities in Tennessee. In Fy 90, 20.6 percent of municipal revenue came from the property tax. Tennessee counties and cities have been below the national average in their dependence on the property tax.

The local option sales tax was adopted by the General Assembly in 1963 with a maximum rate of one-third of the state rate. In 1968, the law was changed to permit local governments to tax at a rate of one-half of the state tax rate. Local governments must use the first 50 percent of the local sales tax on education. The remainder of the money can be spent in any manner the local government chooses. By 1990, all counties in Tennessee levied the local option sales tax in rates ranging from 1 percent to the maximum rate of 2.75 percent. Cities in five of the counties levied local sales tax at rates different from the county. Changes in the state and local tax maximum sales tax rates are presented in Table 2.02.

The local option sales tax allows choice in both adoption and the rate established (subject to the statutory maximum). The local option tax is established at the county level. If county rates are set below the state maximum, then municipalities within that county may choose to levy an additional city only sales tax so long as the combined rates do not exceed the state cap. The local option sales tax is subject to approval by referendum at both the county and city levels.

Table 2.02 - Tennessee Sales Tax Rates

Year	State rate	Maximum local rate
1963	0.0300	0.0100
1968	0.0300	0.0150
1971	0.0350	0.0175
1976	0.0450	0.0225
1984	0.0550	0.0275
1992	0.0600	0.0275

The local option sales tax has shown an overall increase in importance during the period. It is the second major source of revenues for counties. In Fy 90, it accounted for 17.8 percent of total county revenues. Of the 95 counties, 78 used the tax in 1970, 94 in 1981, and all counties used it in 1990. Municipalities receive one-half of the local option sales tax collected by counties within their boundaries. These revenues are often considered to be intergovernmental transfers from counties to cities. They accounted for 13.4

percent of municipal revenues in Fy 90.

Charges and miscellaneous revenues have increased in importance as own-source revenues for local government during the study period. This increase has been relatively constant. Municipalities rely on charges and miscellaneous revenues slightly more than counties.

Shared Revenues

Many state taxes are shared with local governments. Some state taxes are shared exclusively with municipal government, some exclusively with county government, and some are jointly shared with cities and counties. The basis of apportionment may be population, geographic area, situs of collection, or some other factor. Table 2.03 illustrates the distribution of state shared taxes for Fy 90. The numbers are millions of dollars. (Some analyses do not consider wholesale beer tax as a state shared revenue since it is remitted by the wholesaler directly to the county or city government.) Total state shared taxes distributed to local government totaled approximately $526.8 million in Fy 90. State shared taxes will be described according to the state tax, the rate and source of the tax, and the basis of apportionment to local government.

Sales tax - 5.5 percent is the general rate (changed to 6 percent in 1992) that applies to the gross proceeds derived from the retail sale or use of tangible personal property and specific services (TCA 67-6-202). Municipalities receive 4.5925 percent of the gross tax, less the grant to the

Municipal Technical Advisory Service of the University of Tennessee. Apportionment is based on city population proportional to total municipal population in the state. "Premier type tourist resort cities" directly receive 4.5925 percent of what is collected within their boundaries as their share rather than a share based on population(TCA 67-6-103).

Table 2.03 - Fy 90 Distribution of State Shared Taxes

Tax	Cities	Counties
Sales Tax	109.9	0
Gasoline and Motor Fuel Taxes	70.8	142
Special Petroleum Products Tax	7.4	4.6
TVA Gross Receipts Tax	14.1	36.1
Excise Tax	4.1	7.4
Income Tax	26.1	7.2
Beer Excise Tax	1.3	1.3
Beer Wholesale Tax*	54.8	15.7
Mixed Drink Tax	7.1	3.8
Alcoholic Beverage Tax	0	4.8
Severance Taxes	0	4.2
Total	299.7	227.1

Gasoline tax - $0.20 on each gallon of gasoline sold, stored, or transported in the state (TCA 67-3-603, 67-3-604, and 60-4-101). Cities receive approximately 12.7 percent (TCA 54-4-203, 54-4-204, and 67-3-617) based on population. Counties receive approximately 25.4 percent (TCA 54-4-102, 54-4-103, and 67-3-617). One-half of that amount is divided equally among all the counties, one-fourth is distributed on the basis of geographic area (size), and one-fourth is distributed on the basis of county population.

Motor fuel tax - $0.17 on each gallon of diesel fuel not covered under the gasoline tax (TCA 67-3-803). Cities receive approximately 10.7 percent (TCA 67-3-812 and 54-4-204) based on population. Counties receive approximately 21.3 percent (TCA 67-3-812 and 54-4-103). One-half of that amount is divided equally among all the counties, one-fourth is distributed on the basis of geographic area (size), and one-fourth is distributed on the basis of county population.

Liquefied gas tax - $0.14 on each gallon of liquefied gas and an annual vehicle tax ranging from $70 to $114 based on the registered gross vehicle weight (TCA 67-3-1103 and 67-3-1107). Cities receive approximately 11.4 percent (TCA 67-03-1113) based on population. Counties receive approximately 22.9 percent (TCA 67-3-1113). One-half of that amount is divided equally among all the counties, one-fourth is distributed on the basis of geographic area (size), and one-fourth is distributed on the basis of county population.

Special petroleum products tax - $0.01 on each gallon of gasoline and most other volatile fuels inspected (TCA 67-3-904). Cities and counties receive revenues from a local government fund of which 38.1 percent is for county roads and the remainder for city roads, less the grant to the Center for Government Training of the University of Tennessee (TCA 67-3-905). Moneys are apportioned on the basis of population.

Gross receipts TVA - TVA replacement (TCA 67-9-101 through 67-9-103). Cities and counties receive 51.5 percent of the TVA in-lieu of tax payments to the state that exceed state receipts in Fy 77-78, of which approximately 65.9 percent is designated for counties, 28.3 percent for municipalities, and 5.8 percent for impacted areas affected by TVA construction plus an amount equal to that received by local governments in Fy 77-78 ($4.1 million) (TCA 67-9-101 through 67-9-103). Of that amount, 30 percent is distributed to counties based on population, 30 percent to counties based on area, 10 percent to counties containing land owned by TVA, and 30 percent to municipalities based on population.

Excise tax - 6 percent of net earnings of all businesses conducted for profit in the state (TCA 67-4-805 and 67-4-806). Cities and counties receive 3 percent of the net earnings of banks less 10 percent of the ad valorem taxes paid by banks on real property and intangible personal property (TCA 67-4-813). It is apportioned to city or county on the basis of bank location.

Income tax - 6 percent per annum on incomes from dividends on stocks or interest on certain bonds (TCA 67-2-102). Cities and counties receive three-eighths of the revenue collected which is distributed on the basis of the situs of taxpayers (TCA 67-2-119).

Beer excise tax - registration fees imposed on persons selling or manufacturing beer and in addition, a privilege tax of $3.90 per 31 gallon barrel of beer manufactured or sold in the state (TCA 57-5-102 and 57-5-201). Municipalities receive 10.05 percent of collections distributed according to population. Counties receive 10.05 percent of all collections divided equally among all counties (TCA 57-5-205).

Beer wholesale tax - equal to 17 percent of the wholesale price of beer when sold to retailers (TCA 57-6-103). Cities and counties receive 99.48 percent of the taxes collected distributed according to the situs of the retail store (TCA 57-6-103).

Mixed drinks - a license tax of $300 to $1,500 for the privilege of selling alcoholic beverages for consumption on the premises and a 15 percent gross receipts tax on sales (TCA 57-4-301). Cities and counties receive 50 percent of the 15 percent tax distributed on the basis of the situs of collection (TCA 57-4-301 and 57-4-306).

Alcoholic beverage tax - $1.10 per gallon on wine and $4.00 per gallon on spirits, plus license fees for manufacturers, wholesalers, retailers, and their representatives (TCA 57-3-202, 57-3-203, and 57-3-302). Counties receive 17.5 percent of distilled spirit and wine gallonage taxes. Apportionment is based three-fourths on population and one-fourth on county area. In counties with a population of 250,000 or more and a municipality of 150,000 or more, the city receives 30 percent of the county allocation (TCA 57-3-302 and 57-3-306). Cities and counties receive 90 percent of the proceeds from the sale of alcohol confiscated by city agents and 50 percent from the sales of locally captured vehicles associated with the sale of confiscated alcohol (TCA 57-3-306, 57-9-115, 57-9-201, and

57-9-205).

Crude oil and natural gas severance tax - 3 percent of the sales price of severed oil and natural gas in the state (TCA 60-1-301). The county of severance receives one-third of the tax collected.

Coal severance tax - $0.20 per ton of coal severed in the state (TCA 67-7-104). Counties receive 97 percent of the gross tax distributed to the county of severance (TCA 67-7-110).

Conclusion

The fiscal relationships among the fifty states and the more than 83,000 local governments in the United States are diverse and complex and have always been so (Liner, 1989, p. 13). Fiscal relations between cities and counties and their state governments have varied over time depending upon a number of political and economic factors. While generalization is sometimes possible, climate, economic, history, ethnic influence, and the political distribution of labor between a state and its localities differ from state to state and over time (Liner, 1989, p. 14). In addition, different record keeping and reporting practices often make direct interstate comparisons difficult.

Since the beginning of the twentieth century, several trends have emerged at the national level. The property tax has diminished greatly as a state revenue source. Sales taxes, the income tax, intergovernmental revenues and charges and miscellaneous revenues have gained in importance at the state level. Even though non-tax revenues have also increased in importance at the local level, the property tax remains dominant. Local governments, like the state, have developed an increasing reliance on charges for services and miscellaneous revenues.

The Tennessee constitution provides for the basic organizational structure of state and local government. It establishes and restricts the powers of state and local government in the areas of taxation. When compared to other states, the Tennessee constitution is shorter, more general, and places fewer restrictions on state and local government.

Counties are the units of administrative decentralization for the state. They are the principal local government for much of the state. Tennessee has relatively few county subdivisions or taxing districts as are commonly found in other states (Greene, et al, 1982, p. 236).

Municipalities are legal corporations chartered by the state. Their powers are defined by their charters and state law. Municipal taxation powers are established by the constitution, statutes, or the charter.

Special districts are created by the legislature. As opposed to most other states, special districts in Tennessee do not have the power to levy taxes.

Metropolitan government is a unique reform in Tennessee. It has been accomplished only twice. City-county consolidation is likewise rare across the country.

Tennessee taxes most people, most businesses, and most activities through a system that lacks rational design (Bragg and Reynolds, 1984, p. 12). The state's tax policy has evolved in a highly haphazard way and as a consequence the parts of the system do not always work together. Some parts of the system seemingly work at odds with other parts of the system.

It is often better to view state and local revenues and taxes together in the aggregate rather than separately. This is particularly true when interstate comparisons are made or when viewing total tax and service delivery patterns. This chapter described the mix of state-local taxes in Tennessee, focusing first on state taxes, secondly on local taxes, and finally on shared taxes.

Tennessee's tax structure has grown in a highly haphazard way; the main consideration has been to secure revenue from sources that will bear impositions without unduly sharp political or economic reactions (Greene, et al, 1982, p. 180). Tennessee's tax structure has been criticized by several authorities for a variety of reasons. Generally, these criticisms have centered on the fact that the system is regressive, particularly at the lower levels of income, and that the system is fairly unresponsive to economic performance. The Tennessee tax system, both state and local, depends heavily on the property tax and on taxes on the consumer. While Tennessee relies heavily on sales taxes and automobile taxes, it has refused to use the progressive income tax as a major source of revenue.

CHAPTER 3

MEASURES OF CENTRALIZATION

The primary focus of this chapter is on the fiscal relationship between the state and local government in Tennessee. The nature and extent of this relationship will be examined employing the concept of fiscal centralization. Fiscal centralization is the extent to which the state dominates the state-local fiscal system. The dimensions of centralization that will be examined are the extent to which fiscal resources are exchanged between state and local government and the extent to which state-local revenue raising and expenditure is a state function.

Methodology

Financial data for Tennessee state and local government revenues and expenditures are taken from published Census Bureau documents for 1975 through 1990. These data are contained primarily in the bureau's annual Governmental Finances publication.

Analysis of centralization will proceed through examination of the following:

1. Fiscal interaction
    a. Local reliance

b. State effort

2. Division-of-labor

a. State revenue-raising

b. State expenditure

Assessing centralization involves a multi-step process. The steps are as follows:

1. Collect and record the raw data for the study period.

2. Examine the relationships among the raw data for each indicator through regression analysis.

3. Calculate the scores for each indicator.

4. Determine the trend for each indicator through time-series analysis.

5. Examine the relationships among the indicators through regression and correlation analysis.

Centralization has two distinct dimensions: fiscal interaction and division-of-labor. Each of these will be examined in turn along with their component parts.

Fiscal Interaction

Recall that fiscal interaction refers to the degree of involvement between the state and local government. The indicators of local reliance and state effort are used to measure fiscal interaction. Local reliance refers to the extent to which local government relies on or derives revenue from the state. The higher the score on local reliance, the greater the dependency of local government on the state for fiscal resources. This suggests greater centralization. State effort refers to the extent to which the state shares its resources with local government. The higher the score on state effort, the greater the proportion of state revenue going to local government. This also suggests greater centralization.

Local Reliance

The elements of local reliance (LOCREL) are Local Intergovernmental Revenue received from the State (LOCIGREV) and Total Local Government General Revenue (TOLOCREV). These variables and the scores calculated for local reliance are presented in Table 3.01. The variables are expressed in millions of dollars. As can be seen from the table, LOCIGREV increased 216 percent as measured in current dollars. When viewed in constant dollars (1982-84 = 100), the increase is 25 percent. Similarly, TOLOCREV has increased 248 percent in current dollars. In constant dollars, the increase is 38 percent.

A key element in the analysis of the data in this study is regression analysis. Simple linear regression analysis yields a description of the nature of the relationship between two variables. This study assumes the relationships are linear in nature, that is, a particular change in the independent variable is always accompanied by a particular change in the dependent variable and that rate of change is constant. The relationship will be expressed as:

$$y_i = a + bx_i$$

where

a = the value of y when x = 0

b = the slope of the line, and

x = the value of a given case of the independent variable

Table 3.01 - Local Reliance

Year	t	LOCIGREV	TOLOCREV	LOCREL
75	0	624.1	2,012.8	0.310
76	1	674.4	2,203.5	0.306
77	2	703.7	2,389.4	0.295
78	3	820.8	2,772.0	0.296
79	4	887.6	2,982.3	0.298
80	5	966.2	3,316.6	0.291
81	6	1,012.3	3,811.2	0.266
82	7	1,002.5	3,751.7	0.267
83	8	1,057.3	4,292.6	0.246
84	9	1,090.4	4,376.8	0.249
85	10	1,262.3	4,746.9	0.266
86	11	1,393.0	5,231.9	0.266
87	12	1,591.1	5,662.5	0.283
88	13	1,753.2	6,024.1	0.291
89	14	1,834.8	6,615.0	0.277
90	15	1,969.7	7,002.2	0.281

The slope of the line represents the rate of change in y for each unit change in the value of x. The designation of the variable as independent and dependent is somewhat intuitive but has been determined by examining the nature of the variables and their probable relationships. This study also uses time-series regression analysis where the year is considered to be the independent variable. The linear regression line calculated from the variables is called the secular trend line.

The equation for the regression line calculated from the variables of LOCIGREV and TOLOCREV is:

$$y = -95.57 + 3.69x$$

x = LOCIGREV, y = TOLOCREV

LOCIGREV and TOLOCREV have increased over time as indicated by the following secular trend line equations:

$$y_t = 513.88 + 86.84_t$$

$t = 0$ at 1975, t is in years, y = IG Rev from state

and

$$y_t = 1{,}737.82 + 327.89_t$$

$t = 0$ at 1975, t is in years, y = Local revenue

The growth in LOCIGREV and TOLOCREV can be attributed to steady increases in governmental revenues during the study period. These increases can generally be attributed to governmental taxing and revenue raising activity related to increasing economic activity. Economic growth generates additional tax revenue for state and local government.

The variables are used to calculate the scores for local reliance. The score represents the proportion of total local revenue received from the state. The range of scores is from 0.246 to 0.310. The mean is 0.280. The secular trend line as calculated from the scores is:

$$y_t = .296 - .002_t$$

$t = 0$ at 1975, t is in years, y = LOCREL

Local reliance has remained relatively stable during the study period, although it has exhibited a slight but noticeable tendency toward decline. Decreasing local reliance may suggest decreasing fiscal centralization as local government relies less on the state for its revenues and more on own-source revenue. This may also suggest increasing local autonomy.

It is noteworthy how the actual observations compare to the expected observations predicted by the trend line. This can be done by a process called decomposition. Decomposition controls for the trend component of the time-series and isolates the other component parts. A model of a time-series is a specification of the forces that contribute to the movement in a series. It also allows for an analysis of the manner in which the forces interact to influence the series direction and magnitude. This study will assume a multiplicative time-series model as follows:

$$Y = TCI$$

where T = trend, C = cyclical, and I = irregular

The trend component of a time-series is the force that represents the long-term growth or decline in the time-series over an extended period. The cyclical component refers to recurring movements above or below the trend line. The irregular variation is composed of non-recurring, sporadic forces that can not be attributed to trend or cyclical forces.

The CI component of a time-series is assessed by controlling for the trend component. This is done by dividing the actual values of the time-series, y, by the trend estimate y^. Each of the indicators will be examined in this way.

The calculations for determining the CI component for the local reliance time-series are presented in Table 3.02.

The actual values observed for years 1975 through 1980 and for 1987 through 1990 fall above the trend line. The actual values for 1981 through 1986 fall below the trend line. This suggests the presence of cyclical factors affecting local reliance. As noted above, cyclical forces are forces other than the trend that cause the variables to fall above or below the trend line estimate in a regular pattern. At the conclusion of the chapter, after the analysis of all the indicators, there will be a discussion of the influence of cyclical forces.

Table 3.02 - Local Reliance Decomposition

Year	t	y	y^	Actual as % of trend
75	0	0.310	0.296	104.73%
76	1	0.306	0.294	104.08%
77	2	0.295	0.292	101.03%
78	3	0.296	0.290	102.07%
79	4	0.298	0.288	103.47%
80	5	0.291	0.286	101.75%
81	6	0.266	0.284	93.66%
82	7	0.267	0.282	94.68%
83	8	0.246	0.280	87.86%
84	9	0.249	0.278	89.57%
85	10	0.266	0.276	96.38%
86	11	0.266	0.274	97.08%
87	12	0.283	0.272	104.04%
88	13	0.291	0.270	107.78%
89	14	0.277	0.268	103.36%
90	15	0.281	0.266	105.64%

State Effort

The other component of fiscal interaction is state effort (STAEFFRT). The elements of state effort are State

Intergovernmental Expenditures to Local Government (STAIGEXP) and Total State General Expenditures (TOSTAEXP). The variables and scores calculated for state effort are presented in Table 3.03. The variables are expressed in millions of dollars. State Intergovernmental Expenditures to local governments have increased 246 percent when expressed in current dollars. In constant dollars, the increase is almost 38 percent. Total State Expenditures have increased almost 260 percent in current dollars. In constant dollars, the increase is 43 percent for the study period.

The regression equation is calculated at:

$$y = 53.87 + 3.66x$$

$$x = \text{TOSTAEXP},\ y = \text{STAIGEXP}$$

Table 3.03 - State Effort

Year	t	STAIGEXP	TOSTAEXP	STAEFFRT
75	0	638.6	2,188.4	0.292
76	1	657.6	2,433.4	0.270
77	2	719.1	2,552.4	0.282
78	3	798.3	2,846.0	0.280
79	4	866.2	3,106.9	0.279
80	5	974.5	3,543.4	0.275
81	6	1,020.2	3,785.2	0.270
82	7	1,067.7	3,813.0	0.280
83	8	1,065.7	4,061.8	0.262
84	9	1,105.9	4,474.3	0.247
85	10	1,276.1	4,755.3	0.268
86	11	1,430.5	5,670.9	0.252
87	12	1,585.7	6,161.7	0.257
88	13	1,685.4	6,625.2	0.254
89	14	2,092.9	7,268.7	0.288
90	15	2,210.6	7,879.0	0.281

TOSTAEXP and STAIGEXP are strongly related. The variables have increased steadily during the study period as indicated by the following trend line equations:

$$y_t = 475.41 + 96.57_t$$

t = 0 at 1975, t is in years, y = STAIGEXP

and

$$y_t = 1{,}699.50 + 366.45_t$$

t = 0 at 1975, t is in years, y = TOSTAEXP

These increases can be attributed to increasing service delivery costs, increasing revenue availability and economic activity.

The data are used to calculate the scores for state effort. The score represents the proportion of the state budget used for intergovernmental aid to local government. The low score is 0.247, the high score is 0.288. The mean is 0.270. The secular trend for state effort is:

$$y_t = .279 - .001_t$$

t = 0 at 1973, t is in years, y = STAEFFRT

This indicates that state effort is very stable during the study period. It too, shows a slight tendency toward decline. Decreasing state effort may suggest decreasing fiscal centralization. This may also suggest increasing local autonomy as the state is reducing the proportion of its fiscal resources made available to local government.

Calculations for the CI component of state effort are presented in Table 3.04. The data suggests the presence of cyclical factors as well which will be discussed at the conclusion of the chapter. The years 1983 through 1988 are at or below the trend line.

Table 3.04 - State Effort Decomposition

Year	t	y	y^	Actual as % of trend
75	0	0.292	0.279	104.66%
76	1	0.270	0.278	97.12%
77	2	0.282	0.277	101.81%
78	3	0.280	0.276	101.45%
79	4	0.279	0.275	101.45%
80	5	0.275	0.274	100.36%
81	6	0.270	0.273	98.90%
82	7	0.280	0.272	102.94%
83	8	0.262	0.271	96.68%
84	9	0.247	0.270	91.48%
85	10	0.268	0.269	99.63%
86	11	0.252	0.268	94.03%
87	12	0.257	0.267	96.25%
88	13	0.254	0.266	95.49%
89	14	0.288	0.265	108.68%
90	15	0.281	0.264	106.44%

Relationship between Local Reliance and State Effort

Local reliance and state effort are measures for fiscal interaction. These indicators involve two different perspectives on the interaction question. Local reliance involves the local situation relative to the state while state effort involves state action relative to local government. They differ in their directional perspective. An examination of the relationship between the two variables is in order. Scores for local reliance and state effort are correlated at r = .54. Thus, variation in state effort explains 29 percent of the variation in local reliance. Stonecash (1981) calculates a simple correlation of r = .56

with cross-sectional data.

The formula for the regression line is:

$$y = .072 + .770x$$

$$x = \text{STAEFFRT},\ y = \text{LOCREL}$$

The slope of the regression line indicates the magnitude of the change in y for a unit change in x. A slope of less than one indicates that local reliance does not change uniformly with state effort. In other words, there is not a one-to-one change in local reliance for each unit change in state effort. Local reliance changes at a slower rate than state effort (b = .770).

Division-of-Labor

The other component of centralization is division-of-labor. This refers to the extent that the state controls the collection of revenues and the direct distribution of expenditures. State revenue raising and state expenditure are the indicators.

State Revenue Raising

The component parts of state revenue raising (STAREVRG) are Total State General Revenue (STAREV) and Combined State and Local General Revenue (COMBREV). The variables and calculated scores for state revenue raising are presented on Table 3.05. The variables are expressed in millions of dollars. State General Revenues, as measured in current dollars, increased 295 percent. In constant dollars, the increase is 57 percent. Combined state and local general revenues increased 297 percent measured in current dollars. Measured in constant dollars, the increase is 58 percent.

The variables demonstrate a clear and strong linear relationship.

The regression equation is:

$$y = 9.99 + 1.87x$$

$$x = \text{STAREV},\ y = \text{COMBREV}$$

Table 3.05 - State Revenue Raising

Year	t	STAREV	COMBREV	STAREVRG
75	0	1,384.5	2,571.3	0.538
76	1	1,515.8	2,799.0	0.542
77	2	1,792.2	3,196.9	0.561
78	3	2,005.6	3,611.9	0.555
79	4	2,196.3	3,594.1	0.611
80	5	2,330.7	4,302.0	0.542
81	6	2,432.5	4,865.6	0.500
82	7	2,687.8	5,105.8	0.526
83	8	2,858.6	5,862.1	0.503
84	9	3,122.7	6,026.3	0.518
85	10	3,703.2	6,867.0	0.539
86	11	4,033.4	7,516.3	0.537
87	12	4,424.4	8,176.6	0.541
88	13	4,667.3	8,707.5	0.536
89	14	5,178.6	9,642.3	0.537
90	15	5,467.6	10,217.3	0.535

Combined General Revenue is increasing at a faster rate than State General revenue. Each variable has increased steadily during the study period.

$$y_t = 1{,}080.71 + 270.91$$

$t = 0$ at 1975, t is in years, y = STAREV

and

$$y_t = 1{,}998.54 + 510.54_t$$

$t = 0$ at 1975, t is in years, y = COMBREV

These increases can be attributed to economic growth yielding increased tax revenues for both state and local government.

The variables are used to calculate the scores for state revenue raising. The score represents the proportion of total state and local general revenues (excluding intergovernmental revenues) that are collected by the state. The range is from 0.500 to 0.561. The mean is 0.535. The trend line is calculated as:

$$y_t = .542 - .001_t$$

$t = 0$ at 1975, t is in years, y = STAREVRG

This indicates that state revenue raising was relatively stable although it decreased slightly over the study period. Decreasing state revenue raising may suggest decreasing fiscal centralization as well. This may also suggest increasing local autonomy.

The calculations of the CI component of state revenue raising are presented in Table 3.06. Cyclical forces appear to present. These will be discussed at the conclusion of this chapter. The years 1981 through 1984 fall below the trend line.

State Expenditure

The other component of division-of-labor is state expenditure (STAEXP). The elements of state expenditure are State General Expenditures (STGENEXP) and Combined State and Local General Expenditures (COMBEXP). The variables and

Table 3.06 - State Revenue Raising Decomposition

Year	t	y	y^	Actual as % of trend
75	0	0.538	0.542	99.26%
76	1	0.542	0.541	100.18%
77	2	0.561	0.540	103.89%
78	3	0.555	0.539	102.97%
79	4	0.611	0.538	113.57%
80	5	0.542	0.537	100.93%
81	6	0.500	0.536	99.28%
82	7	0.526	0.535	98.32%
83	8	0.503	0.534	94.19%
84	9	0.518	0.533	97.19%
85	10	0.539	0.532	101.32%
86	11	0.537	0.531	101.13%
87	12	0.541	0.530	102.08%
88	13	0.536	0.529	101.32%
89	14	0.537	0.528	101.70%
90	15	0.535	0.527	101.52%

scores calculated for this indicator are presented in Table 3.07. The variables are expressed in millions of dollars. State general expenditures increased 266 percent when measured in current dollars. In constant dollars, the increase is 46 percent. Combined state and local general revenue increased 253 percent when measured in current dollars. The increase is 58 percent when measured in constant dollars.

The regression equation line is calculated as:

$$y = 326.58 + 2.17x$$

$$x = \text{STGENEXP},\ y = \text{COMBEXP}$$

Combined General Expenditures are increasing at a faster rate than State General Expenditures.

Both variables exhibited increases during the study period.

$$y_t = 1{,}203.78 + 270.32_t$$

t = 0 at 1975, t is in years, y = STGENEXP

and

$$y_t = 2{,}898.57 + 593.69_t$$

t = 0 at 1975, t is in years, y = COMBEXP

Table 3.07 - State Expenditure

Year	t	STGENEXP	COMBEXP	STAEXP
75	0	1,547.8	3,595.7	0.430
76	1	1,775.8	3,940.0	0.451
77	2	1,833.3	4,266.1	0.430
78	3	2,047.7	4,743.7	0.432
79	4	2,240.7	5,136.3	0.436
80	5	2,568.9	5,928.6	0.433
81	6	2,765.0	6,416.2	0.431
82	7	2,475.3	6,283.7	0.394
83	8	2,996.1	6,996.4	0.428
84	9	3,368.4	7,504.6	0.449
85	10	3,479.2	8,029.6	0.433
86	11	4,240.4	9,213.6	0.460
87	12	4,576.0	10,086.9	0.454
88	13	4,939.8	10,792.4	0.458
89	14	5,175.8	11,802.0	0.439
90	15	5,668.4	12,703.6	0.446

The variables are used to calculate the scores for state expenditure. The score is the proportion of total direct expenditures made by the state. It does not include intergovernmental expenditures. The range is from 0.394 to 0.460. The mean is 0.437. The trend line is calculated as:

$$y_t = .429 + .001_t$$

t = 0 at 1976, t is in years, Y = STAEXP

This indicates that state expenditure is increasing slightly and suggests increasing fiscal centralization. This may suggest decreasing local autonomy.

Calculations for the CI component of state expenditure are presented in Table 3.08. Potential cyclical influences are not as apparent here since deviations from the trend line are small and fail to follow any pattern. Fluctuations have been relatively minor except in 1976 and 1986.

Table 3.08 - State Expenditure Decomposition

Year	t	y	y^	Actual as % of trend
75	0	0.430	0.429	100.23%
76	1	0.451	0.430	104.88%
77	2	0.430	0.431	99.77%
78	3	0.432	0.432	100.00%
79	4	0.436	0.433	100.69%
80	5	0.433	0.434	99.77%
81	6	0.431	0.435	99.08%
82	7	0.394	0.436	90.37%
83	8	0.428	0.437	97.94%
84	9	0.449	0.438	102.51%
85	10	0.433	0.439	98.63%
86	11	0.460	0.440	104.55%
87	12	0.454	0.441	102.95%
88	13	0.458	0.442	103.62%
89	14	0.439	0.443	99.10%
90	15	0.446	0.444	100.45%

Relationship between State Revenue Raising and State Expenditure

State revenue raising and state expenditure are measures for division-of-labor. These indicators relate to the separation of activities between levels of government. They refer to the extent to which revenue raising and expenditure are state functions. An examination of the relationship between the two measures is in order. The scores for state revenue raising and state expenditure are correlated at r = .16. The regression line is calculated as:

$$y = .362 + .141x$$

$$x = \text{STAREVRG},\ y = \text{STAEXP}$$

State expenditure, as a measure of centralization, increases at a slower rate than state revenue raising.

Combined Analysis

The relationships among the component parts of fiscal interaction, local reliance and state effort have been described, as have the relationships between state revenue raising and state expenditure, the elements of division-of-labor. The relationships between the individual fiscal interaction and division-of-labor indicators are also of interest. For one thing, this will allow for comparison with Stonecash's cross-sectional data. Recall that Stonecash developed these indicators for all the states using 1972 data. He then calculated correlation coefficients for the indicators. It should be noted that correlation analysis determines relationships and not cause.

Local reliance is correlated to state revenue raising at r = .74. This would indicate a strong relationship between the state's ability to raise revenue and local governments tendency to rely on state assistance. Stonecash found a correlation of r = .55 (Stonecash, 1981, p. 306) with cross-sectional data.

Local reliance is correlated to state expenditures at r = .16. There is little relationship indicated between local governments reliance on the state and the state's provision of services. Stonecash found a correlation of r = -.08 (Stonecash, 1981, p. 306).

State effort is correlated to state revenue raising at r = .40. The relationship while present is weak. This is contrary to Stonecash who found a negative relationship with cross-sectional data (r = -.05) (Stonecash, 1981, p. 306).

State effort is correlated to state expenditure at r = -.57. The relationship is negative and relatively strong. This would seem to indicate that the more the state spends on direct expenditures the less there is available for local assistance. This is somewhat similar to Stonecash's finding of r = -.80 (Stonecash, 1981, p. 306).

Stonecash raises two questions: (1) whether states which are centralized in terms of division-of-labor are also states which have very dependent local governments, and (2) whether states which raise a large proportion of state-local revenues also make a greater effort to support local governments? (Stonecash, 1981, p. 305) The patterns of relationships among the indicators in this study are similar though not identical to those found by Stonecash. He indicates that the low relationships suggests that the fiscal interaction and division-of-labor conditions are not equivalent (Stonecash, 1981, p. 306). In other words, they measure different dimensions of centralization.

In examining the relationships among the indicators, it is important to remember that they are not causally related. Stonecash found the relationship between state expenditure and state effort to be negative. In other words, states that are highly centralized in terms of state expenditure (state domination of state and local expenditures) transfer less of their funds to local government. This is to be expected. While the relationship is weaker, this study yields similar results. On the other hand, there is no apparent relationship between state expenditure and local reliance in either study. This suggests that local reliance may be associated with other factors besides state expenditure.

The relationship of state revenue raising (state domination of state and local revenue raising) to state effort is weak in both studies. Stonecash found a negative relationship. The relationship between state revenue raising and local reliance is positive and stronger in both studies.

Both studies indicate that greater state assumption of revenue raising is associated with less state effort and is also associated with greater local reliance. Again, it is important to note that one condition does not cause another.

We can conclude, as did Stonecash, that state domination of revenue raising is not strongly associated with local reliance or state effort, and that state domination of expenditure is not strongly associated with local reliance (Stonecash, 1981, p. 307).

The Federal Revenue Dimension

There are other methods of assessing centralization. One is to examine the originating level of state and local governmental revenues and the receiving level of state and local governmental revenues. This method specifically accounts for federal revenues. The federal government has long been a source of revenue for both state and local government. One of the basic premises of this study is that the role of the national government as a provider of fiscal resources is diminishing. Table 3.09 presents state and local revenues for Tennessee during the study period based upon the originating level of government.

Revenue from the federal government going to state and local government in Tennessee increased 229 percent in current dollars during the study period. When measured in constant dollars, the increase is 31 percent. Revenue from state government increased 295 percent when measured in current dollars. It increased 57 percent as measured by constant dollars. Local government revenues increased 300 percent as measured in current dollars. The increase is 59 percent when measured in constant dollars. Total revenues generated by federal, state, and local governments increased 281 percent as measured in current dollars. The increase is 51 percent measured in constant dollars.

In dollars, both current and constant, federal dollars are declining in importance as a revenue source for state and local government in Tennessee. State and local revenues have grown almost twice as fast as federal revenues.

Table 3.09 - Originating Level of Government

Year	t	Federal	%	State	%	Local	%	Total
75	0	837.4	24.57%	1,384.4	40.61%	1,186.8	34.82%	3,408.6
76	1	1,015.8	26.63%	1,515.8	39.73%	1,283.2	33.64%	3,814.8
77	2	1,098.4	25.57%	1,792.2	41.72%	1,404.7	32.70%	4,295.3
78	3	1,254.7	25.78%	2,005.6	41.21%	1,606.3	33.01%	4,866.6
79	4	1,341.1	25.33%	2,196.3	41.48%	1,757.8	33.20%	5,295.2
80	5	1,586.9	26.95%	2,330.7	39.58%	1,971.3	33.47%	5,888.9
81	6	1,688.2	25.76%	2,432.5	37.12%	2,433.1	37.13%	6,553.8
82	7	1,561.7	23.42%	2,687.8	40.31%	2,418.0	36.27%	6,667.5
83	8	1,699.1	23.02%	2,858.6	38.73%	2,823.5	38.25%	7,381.2
84	9	1,845.7	23.45%	3,122.7	39.67%	2,903.6	36.89%	7,872.0
85	10	1,932.4	21.96%	3,703.2	42.08%	3,163.8	35.95%	8,799.4
86	11	2,168.2	22.39%	4,033.4	41.65%	3,482.9	35.96%	9,684.5
87	12	2,131.5	20.68%	4,424.4	42.92%	3,752.2	36.40%	10,308.1
88	13	2,306.2	20.94%	4,667.3	42.38%	4,040.2	36.68%	11,013.7
89	14	2,562.9	21.00%	5,178.6	42.43%	4,463.7	36.57%	12,205.2
90	15	2,761.3	21.28%	5,467.6	42.13%	4,749.7	36.60%	12,978.6

It is apparent from these data that even though actual federal dollars are increasing annually, the federal role in providing fiscal resources to state and local government is diminishing when compared to revenues available from all sources (federal, state, and local). The equation for the trend line for federal revenues as a percentage of total revenues is:

$$y_t = 26.67 - .40_t$$

t = 0 at 1975, t is in years, y = % revenue from fed. government

The percentage of total federal, state, and local revenue from the federal government available to state and local government in Tennessee is diminishing during the study period.

State revenues, as proportion of total revenue, have shown an increase during the study period. The trend line equation for state revenue is:

$$y_t = 39.75 + .15_t$$

t = 0 at 1975, t is in years, y = % revenue from state government

Local government has also demonstrated increases in proportion to all revenues. The trend line equation is:

$$y_t = 33.56 + .26_t$$

t = 0 at 1975, t is in years, y = % revenue from local government

Revenue from the federal government as a proportion of total revenue has diminished. This is consistent with the assumption that the federal role as a source for revenues in federal-state-local fiscal relations is diminishing. The state role is increasing. The local role is increasing as well. In fact, the local role is increasing at a greater rate than the state's during the study period. This may suggest increasing decentralization.

Similarly, one can examine revenues by the level of government finally receiving the revenue (and ultimately spending it). In a state-local study, all revenues, regardless of the source, will end up with either the state or its local governments. Data for receiving levels of government are presented on Table 3.10. Revenue received by state government increased 325 percent when measured in current dollars. When measured in constant dollars the increase is 69 percent. Local governments increased 248 percent as measured by current dollars. The increase is 39 percent. Total state and local revenues received increased 280 percent as measured in current dollars. When measured in constant dollars, the increase is 51 percent.

A quick view of the data indicates that local governments in Tennessee ultimately receive more revenue than the state, although the gap appears to be narrowing.

State government, as the final recipient of federal-state-local revenues appears to be increasing. The trend line equation is:

$$y_t = 42.46 + .26_t$$

t = 0 at 1975, t is in years, y = % revenue to state government

The trend for local government is therefore decreasing. The trend line equation is:

$$y_t = 57.55 - .26_t$$

t = 0 at 1975, t is in years, y = % revenue to local government

State government, as the final recipient of revenues, is increasing. This suggests that fiscal centralization is increasing. This is consistent with the previous finding that the centralization indicator of state expenditure is increasing.

This data confirms the assumption that the federal government's role as a source of revenues for state and local government is decreasing. Local government has increased its role as a revenue producer at a faster rate than has state government. On the other hand, state government has increased its role in state-local government expenditures.

Table 3.10 - Receiving Level of Government

Year	t	State	%	Local	%	Total
75	0	1,413.3	41.46%	1,995.4	58.54%	3,408.7
76	1	1,626.1	42.63%	2,188.7	57.37%	3,814.8
77	2	1,922.2	44.75%	2,373.1	55.25%	4,295.3
78	3	2,117.6	43.51%	2,749.0	56.49%	4,866.6
79	4	2,338.0	44.15%	2,957.2	55.85%	5,295.2
80	5	2,605.8	44.25%	3,283.1	55.75%	5,888.9
81	6	2,774.9	42.28%	3,788.9	57.72%	6,563.8
82	7	2,949.9	44.24%	3,717.6	55.76%	6,667.5
83	8	3,118.1	42.24%	4,263.1	57.76%	7,381.2
84	9	3,526.9	44.80%	4,345.1	55.20%	7,872.0
85	10	4,088.9	46.47%	4,710.5	53.53%	8,799.4
86	11	4,493.3	46.40%	5,191.2	53.60%	9,684.5
87	12	4,716.8	45.76%	5,591.3	54.24%	10,308.1
88	13	5,005.9	45.45%	6,007.8	54.55%	11,013.7
89	14	5,622.5	46.07%	6,582.7	53.93%	12,205.2
90	15	6,018.0	46.37%	6,961.3	53.63%	12,979.3

Conclusions

This chapter has explored the nature and extent of fiscal centralization in Tennessee. This was done by assessing four indicators of centralization: local reliance, state effort, state revenue raising, and state expenditure. These findings are summarized in Table 3.11.

Local reliance as a measure of centralization appears to be declining, albeit very slowly (b = -.002). Having identified a trend of slight decline, we examined the CI component and found that cyclical forces appear to be present.

State effort has also declined slightly during the study period. Its decline is even more gradual than local reliance (b = -.001). An analysis of the trend revealed that cyclical forces may be present but not as a strong force.

Table 3.11 - Centralization Indicators Summary (1975 - 1990)

Indicator	Avg.	b	Range
Local Reliance	0.280	-0.002	.246 - .310
State Effort	0.270	-0.001	.247 - .288
State Revenue Raising	0.535	-0.001	.500 - .561
State Expenditure	0.437	0.001	.394 - .437

State revenue raising has also exhibited slight decline during the study period (b = -.001). Analysis of the trend line suggests that cyclical forces may be present.

State expenditure is the only indicator that exhibited increase during the period (b = +.001). Analysis of the trend line suggests the slight presence of other forces but that they are probably not cyclical in nature.

The four indicators for centralization have varied from the expected values calculated from their regression equations. It has been suggested that forces other than the trend may have been present. These forces can be described as cyclical in nature.

Analysis of the individual indicators reveals that 3 or 4 of the indicators fell above the estimated trend line in 75, 76, 77, 78, 79, 80 and then again in 87, 88, 89, and 90. Cyclical forces become even more apparent in the combined analysis of the indicators. These factors cause the observed value to differ from the expected value. There are several forces that could cause such a variation. One possible explanation deals with economic activity. If one utilizes total personal income as an indicator for economic activity, then a plausible explanation of the observed cyclical forces can be made. Such an analysis reveals that actual observations for personal income fell above the estimated trend line in 75, 76, 77, 78, 79, 81, 88, 89, and 90. This is identical to the aggregated indicators except for 80 and 81. This indicates that cyclical economic forces as indicated by personal income affected the centralization indicators. This suggests that economic activity is linked to state and local revenue and expenditure patterns. Variations from the trend in economic activity are associated with variations from the trends of the centralization indicators.

This chapter also examined the relationships among the centralization indicators and compared them to Stonecash's findings. Stonecash considered Tennessee to be decentralized as compared to other states (Stonecash, 1981, p. 308).

The most obvious finding of this analysis is that Tennessee has changed very little on the centralization dimensions during the study period. This indicates that very little has changed in the world of state-local finance in Tennessee. No new major tax or expenditure initiatives have been adopted nor have there been any significant changes in the delivery of public services.

Similarly, the reduction of federal revenues to both state and local governments has had little impact on state-local centralization in Tennessee. It would appear that both state and local governments in Tennessee have moved to fill the void left by diminished federal revenues.

CHAPTER 4

TENNESSEE STATE AND LOCAL TAX POLICY

Public policy has consequences. Many of the consequences are intended, some are not. There are two dimensions of fiscal policy: revenues and expenditures. The revenue side tells us "who pays" and the expenditure side tells us "who gets it." Governmental budgets and financial records provide the answers to these questions.

Perhaps the most common dimension on which to examine the effects of state-local fiscal policy is taxation. The decisions on how state and local governments raise revenues are often seen as more important than how they choose to spend them. This study will examine the consequences of state-local fiscal policy in Tennessee according to the concept of tax and revenue policy. Indicators for tax and revenue policy will be tax burden and tax reliance. These indicators are based on Dye (1966). Tax burden questions refer to the extent to which government transfers monies from the private sector to the public sector. Tax reliance questions refer to the extent that a government uses a particular tax rather than others.

Indicators will be developed for the years 1975 through 1990. Analysis will concentrate on examining changes in tax burden and tax reliance indicators during this period. These indicators will be related to indicators for centralization to determine the relationships between the two sets. This is done to see if certain patterns of centralization are related to certain patterns of tax burden and tax reliance.

Methodology

The effects of Tennessee's state and local fiscal policy will be described by using the concept of tax policy. Tax policy will be measured by tax burden and tax reliance indicators.

Data were obtained from published Census Bureau reports. Analysis will be as follows:

1. Tax and policy
    a. Tax burden
    b. Tax reliance

Scores for each indicator will be developed for each year. Correlation analysis will be done to determine their relationship to one another and time-series analysis will be done to determine any trends.

Finally, the tax policy indicators will be compared to the centralization indicators developed in Chapter 3 to determine the relationships between centralization and state-local tax policy in Tennessee.

Variables

The following variables are used to calculate the tax burden and tax policy indicators:

State tax revenues (STATAXREV) - General revenues of the state received from taxes.

Local tax revenue (LOCTAXREV) - General revenues of local government received from taxes.

Combined tax revenue (COTAXREV) - The total of state tax revenue and local tax revenue.

Income tax revenue (INTAXREV) - Revenue received from the levy of income tax in Tennessee. In Tennessee this is exclusively a state tax.

Sales tax revenue (SATAXREV) - Revenue received from the levy of sales taxes.

Property tax revenue (PRTAXREV) - Revenue from the levy of property tax. This is a uniquely local tax in Tennessee.

Personal income (PERSINC) - Total income for all residents of Tennessee.

Findings

Tax policy can be described by examining tax burden and tax reliance. They represent two different dimensions of tax policy. Tax burden refers to the impact of tax policy on the taxpayers. From the viewpoint of government, it is external. Tax reliance refers to the impact of tax policy on governmental budgets. It is internal in point-of-view.

Tax Burden

Tax burden refers to the extent to which a government transfers money from the private sector to the public sector. A state's combined tax burden is comprised of the state government tax burden and the local government tax burden. Each of these will be analyzed.

Combined Tax Burden

Combined state and local tax burden (COTAXBRD) is the total tax burden of state and local government on the taxpayers of Tennessee. The elements are combined state and local taxes (COTAXREV) and total personal income (PERSINC). These variables and the calculated combined state and local tax burden are presented as Table 4.01. The variables are expressed in millions of dollars. Combined taxes increased 262 percent as measured by current dollars. They increased 44 percent as measured in constant dollars (1982-84 = 100). Total personal income increased 270 percent measured in current dollars. It increased 47 percent as measured in constant dollars.

The variables are correlated at r = .99. The regression equation is:

$$y = -77.27 + .089x$$

$$x = \text{PERSINC},\ y = \text{COTAXREV}$$

State and local taxes increase approximately 9 cents for every dollar increase in personal income.

The variables are strongly related and demonstrate a noticeable growth trend during the study period. The trend line equations for the variables are:

$$y_t = 18,400.2 + 3,750.6_t$$

t = 0 at 1975, t is in years, y = PERSINC

and

$$y_t = 1,564.5 + 33.9_t$$

t = 0 at 1975, t is in years, Y = COTAXREV

Table 4.01 - Combined Tax Burden

Year	t	COTAXREV	PERSINC	COTAXBRD
75	0	1,887.30	20,978.00	0.090
75	1	2,078.20	22,606.00	0.092
77	2	2,425.00	26,183.00	0.093
78	3	2,672.10	29,859.00	0.089
79	4	2,903.30	33,508.00	0.087
80	5	3,012.30	36,958.00	0.082
81	6	3,394.70	40,872.00	0.083
82	7	3,544.80	42,969.00	0.082
83	8	3,766.30	45,745.00	0.082
84	9	4,142.00	50,360.00	0.082
85	10	4,741.60	55,637.00	0.085
86	11	5,171.70	57,850.00	0.089
87	12	5,611.80	62,703.00	0.089
88	13	6,079.90	68,050.00	0.089
89	14	6,489.10	72,586.00	0.089
90	15	6,822.90	77,612.00	0.088

The variables are used to calculate the score for combined state and local tax burden (COTAXBRD). The score represents the percentage of total personal income extracted by state and local government in the form of taxes. The range of scores is from .082 to .093. The mean is .087. The trend line is calculated as:

$$y_t = .088 - .0003t$$

t = 0 at 1975, t is in years, y = COTAXBRD

Combined state and local tax burden has remained essentially constant during the study period but exhibits a slight tendency toward decline for the entire study period. The decrease is very gradual at 0.02% per year. A close examination of Table 4.01 reveals that combined state and local tax burden was highest during the first years of the period, dipped to its lowest point during the middle years, and went up again during the later years.

Calculations for the CI component of the trend line are presented on Table 4.02. Actual combined state and local tax burden fell above the trend line for the years 75-78, and 85-89. It fell below in 79 through 84. Cyclical forces appear to be present.

Table 4.02 - Combined Tax Burden Decomposition

Year	t	y	y^	Actual as % of trend
75	0	0.090	0.088	102.27%
76	1	0.092	0.088	104.90%
77	2	0.093	0.087	106.41%
78	3	0.089	0.087	102.18%
79	4	0.087	0.087	100.23%
80	5	0.082	0.087	94.80%
81	6	0.083	0.086	96.29%
82	7	0.082	0.086	95.46%
83	8	0.082	0.086	95.79%
84	9	0.082	0.085	96.13%
85	10	0.085	0.085	100.00%
86	11	0.089	0.085	105.08%
87	12	0.089	0.084	105.45%
88	13	0.089	0.084	105.83%
89	14	0.089	0.084	106.21%
90	15	0.088	0.084	105.39%

State Tax Burden

State tax burden (STATXBRD) refers to the extent state taxes transfer money to state government. The variables are total state taxes (STTAXREV) and total personal income (PERSINC). These variables are presented in Table 4.03. The variables are expressed in millions of dollars. Total state taxes increased 268 percent as measured in current dollars. Measured in constant dollars, the increase is 46 percent. Total personal income increased 270 percent measured in current dollars. It increased 47 percent as measured in constant dollars.

The variables are correlated at $r = .987$. The regression equation for the variables is:

$$y = -122.32 + .067x$$

x = PERSINC, y = STTAXREV

State taxes increase approximately 7 cents for every dollar increase in personal income.

Both variables demonstrate noticeable growth. The trend line for total personal income was described above. The trend line for state taxes is:

$$y_t = 944.4 + 209.8_t$$

$t = 0$ at 1975, t is in years, y = STTAXREV

The variables are used to calculate state tax burden. The score indicates the proportion of total personal income extracted as state taxes. The range is from .048 to .058 with a mean of .054. The trend line is calculated as:

$$y_t = .054 + .000049_t$$

t = 0 at 1975, t is in years, y = STTAXBRD

Table 4.03 - State Tax Burden

Year	t	STTAXREV	PERSINC	STTAXBRD
75	0	1,152.10	20,978.00	0.055
75	1	1,273.20	22,606.00	0.056
77	2	1,529.50	26,183.00	0.058
78	3	1,704.00	29,859.00	0.057
79	4	1,843.90	33,508.00	0.055
80	5	1,887.00	36,958.00	0.051
81	6	1,958.40	40,872.00	0.048
82	7	2,146.20	42,969.00	0.050
83	8	2,246.30	45,745.00	0.049
84	9	2,511.60	50,360.00	0.050
85	10	2,998.30	55,637.00	0.056
86	11	3,272.00	57,850.00	0.057
87	12	3,603.30	62,703.00	0.057
88	13	3,855.00	68,050.00	0.057
89	14	4,066.50	72,586.00	0.056
90	15	4,245.00	77,612.00	0.055

State tax burden has remained virtually constant during the study period. Closer examination of Table 4.03 shows that state tax burden was lower during the middle years of the study period and higher during the early years and the later years.

Calculations for the CI component of the time-series are presented on Table 4.04. State tax burden fell above the trend line for the years 75-79 and 85-89. It fell below in 80 through 84. Cyclical forces appear to be present.

Local Tax Burden

Local tax burden relates local government (county and city) tax collections to personal income.

Table 4.04 - State Tax Burden Decomposition

Year	t	y	y^	Actual as % of trend
75	0	0.055	0.054	101.85%
76	1	0.056	0.054	103.61%
77	2	0.058	0.054	107.21%
78	3	0.057	0.054	105.27%
79	4	0.055	0.054	101.48%
80	5	0.051	0.054	94.02%
81	6	0.048	0.054	88.41%
82	7	0.050	0.054	92.01%
83	8	0.049	0.054	90.09%
84	9	0.050	0.054	91.84%
85	10	0.056	0.054	102.77%
86	11	0.057	0.055	104.51%
87	12	0.057	0.055	104.42%
88	13	0.057	0.055	104.32%
89	14	0.056	0.055	102.40%
90	15	0.055	0.055	100.48%

The variables are total local taxes and personal income. The variables and the scores for local tax burdens are presented on Table 4.05. Local taxes increased 251 percent as measured in current dollars. They increased 39 percent measured in constant dollars. Total personal income increased 270 percent measured in current dollars. It increased 47 percent as measured in constant dollars.

The variables are correlated at r = .996. The regression equation for the variables is:

$$y = 31.82 + .032x$$

$$x = \text{PERSINC},\ y = \text{LOTAXREV}$$

Local taxes increase approximately 3 cents for every dollar increase in personal income.

Local taxes demonstrate noticeable growth. The trend line for Total local taxes is calculated as:

$$y_t = 620.1 + 121.1_t$$

t = 0 at 1975, t is in years, y = LOTAXREV

Table 4.05 - Local Tax Burden

Year	t	LOTAXREV	PERSINC	LOTAXBRD
75	0	735.2	20,978	0.035
75	1	805.0	22,606	0.036
77	2	895.5	26,183	0.034
78	3	968.1	29,859	0.032
79	4	1,059.4	33,508	0.032
80	5	1,125.3	36,958	0.030
81	6	1,436.3	40,872	0.035
82	7	1,398.6	42,969	0.033
83	8	1,520.0	45,745	0.033
84	9	1,630.4	50,360	0.032
85	10	1,743.3	55,637	0.033
86	11	1,899.7	57,850	0.033
87	12	2,008.5	62,703	0.032
88	13	2,224.9	68,050	0.033
89	14	2,422.6	72,586	0.033
90	15	2,577.9	77,612	0.033

The variables are used to calculate local tax burden. The scores indicate the proportions of total personal income that goes for local government taxes. The range is from .030 to .036 with a mean of .033. The trend line is calculated as:

$$y_t = .0338 - .000099_t$$

t = 0 at 1975, t is in years, y = LOTAXBRD

Local tax burden has remained constant during the study period. Examination of Table 4.05 reveals that local tax burden varied widely during the first half of the study period but has stabilized at .032 or .033 for the last half.

Calculations for the CI component of local tax burden are presented in Table 4.06. Observed local tax burden fell above the trend line estimate in 75, 76, 77, 81, 85, 86, 88, 89, and 90.

Table 4.06 - Local Tax Burden Decomposition

Year	t	y	y^	Actual as % of trend
75	0	0.035	0.034	103.55%
76	1	0.036	0.034	106.82%
77	2	0.034	0.034	101.18%
78	3	0.032	0.034	95.51%
79	4	0.032	0.033	95.80%
80	5	0.030	0.033	90.08%
81	6	0.035	0.033	105.40%
82	7	0.033	0.033	99.68%
83	8	0.033	0.033	99.98%
84	9	0.032	0.033	97.24%
85	10	0.033	0.033	100.58%
86	11	0.033	0.033	100.88%
87	12	0.032	0.033	98.12%
88	13	0.033	0.033	101.50%
89	14	0.033	0.032	101.81%
90	15	0.033	0.032	102.12%

Analysis

Comparisons of combined state and local tax burden, state tax burden, and local tax burden provide some interesting results. It has been noted that these indicators have remained relatively constant during the study period. They do covary in an interesting way. State tax burden and combined state and local tax burden are correlated at r = .917. Local tax burden and combined state and local tax burden are correlated at r = .436. State tax burden and local tax burden are correlated at $r = .081$.

State tax burden has a strong positive association with combined state and local tax burden. Variations in state tax burden explain 85 percent of the variation in combined state and local tax burden.

Local tax burden, while positively associated with combined state and local tax burden, is not as strongly linked to combined state and local tax burden as is state tax burden.

Interestingly, there is no apparent relationship between state tax burden and local tax burden.

Tax Reliance

In addition to tax burden, tax and revenue policy can be examined by determining to what extent governments rely on taxation for their revenue. This is known as tax reliance.

Tax reliance refers to how much a government relies on taxes in general or a specific type of tax. There are three major taxes in Tennessee: sales tax, property tax, and income tax. State and local government share in the sales tax. The property tax is exclusive to local government while the income tax is exclusive to state government.

Combined Tax Reliance

Combined tax reliance (COTAXREL) is the proportion of total state and local tax revenues to total state and local general revenues. Combined state and local tax reliance variables and scores are presented in Table 4.07. The variables are combined state and local taxes (COTAXREV) and combined state and local general revenues (COGENREV). Combined state and local taxes increased 262 percent as measured in current dollars. Measured in constant dollars, the increase is 44 percent. Combined state and local general revenue increased 270 percent as measured in current dollars and 47 percent as measured in constant dollars.

Table 4.07 - Combined Tax Reliance

Year	t	COTAXREV	COGENREV	COTAXREL
75	0	1,887.3	4,050.2	0.466
75	1	2,078.2	4,504.0	0.461
77	2	2,425.0	5,015.3	0.484
78	3	2,672.1	5,710.4	0.468
79	4	2,903.3	6,207.9	0.468
80	5	3,012.3	6,888.6	0.437
81	6	3,394.7	7,598.4	0.447
82	7	3,544.8	7,704.3	0.460
83	8	3,766.3	8,468.0	0.445
84	9	4,142.0	8,994.1	0.461
85	10	4,741.6	10,098.1	0.470
86	11	5,171.7	11,118.2	0.465
87	12	5,611.8	11,930.4	0.470
88	13	6,079.9	12,783.2	0.476
89	14	6,489.1	14,072.3	0.461
90	15	6,822.9	14,989.9	0.455

The regression equation for the variables is:

$$y = -395.63 + 2.29x$$

$$x = \text{COTAXREV},\ y = \text{COGENREV}$$

The variables are strongly related and have demonstrated steady growth during the study period. The trend lines for each of the variables are:

$$y_t = 1{,}564.54 + 330.92_t$$

$t = 0$ at 1975, t is in years, y = COTAXREV

and

$$y_t = 3{,}200.00 + 757.80_t$$

$t = 0$ at 1975, t is in years, y = COGENREV

The variables are used to calculate the score for combined tax reliance. This score represents the proportion of combined state and local revenues that are collected in the form of taxes. The range of scores is from .402 to .484. The mean is .458. The trend line is calculated as:

$$y_t = .468 - .001_t$$

$t = 0$ at 1975, t is in years, y = COTAXREL

Combined state and local tax reliance has shown a gradual decline during the study period.

Calculations for the CI component of combined tax reliance is shown on Table 4.08. Combined tax reliance fell above the trend line estimate in 77, 78, 79, 84, 85, 86, 87, 88, 89, and 90.

State Tax Reliance

State tax reliance (STTAXREL) is the proportion of state tax revenue (STTAXREV) to state general revenue (STGENREV). These variables and the calculated scores for state tax reliance are presented on Table 4.09. State taxes increased 268 percent as measured in current dollars. The increase is 46 percent as measured in constant dollars. State general revenues increased 292 percent measured in current dollars. It increased 56 percent measured in constant dollars.

Table 4.08 - Combined Tax Reliance Decomposition

Year	t	y	y^	Actual as % of trend
75	0	0.466	0.468	99.57%
76	1	0.461	0.467	98.72%
77	2	0.484	0.466	103.86%
78	3	0.468	0.465	100.65%
79	4	0.468	0.464	100.86%
80	5	0.437	0.463	94.38%
81	6	0.447	0.462	96.75%
82	7	0.460	0.461	99.78%
83	8	0.445	0.460	96.74%
84	9	0.461	0.459	100.44%
85	10	0.470	0.458	102.62%
86	11	0.465	0.457	101.75%
87	12	0.470	0.456	103.07%
88	13	0.476	0.455	104.62%
89	14	0.461	0.454	101.54%
90	15	0.455	0.453	100.44%

Table 4.09 - State Tax Reliance

Year	t	STTAXREV	STGENREV	STTAXREL
75	0	1,152.1	2,037.4	0.565
75	1	1,273.2	2,300.5	0.553
77	2	1,529.5	2,625.9	0.582
78	3	1,704.0	2,938.4	0.580
79	4	1,843.9	3,225.6	0.572
80	5	1,887.0	3,572.0	0.528
81	6	1,958.4	3,787.2	0.517
82	7	2,146.2	3,952.6	0.543
83	8	2,246.3	4,175.4	0.538
84	9	2,511.6	4,617.3	0.544
85	10	2,998.3	5,351.2	0.560
86	11	3,272.0	5,886.3	0.556
87	12	3,603.3	6,307.9	0.571
88	13	3,855.0	6,759.1	0.570
89	14	4,066.5	7,457.3	0.545
90	15	4,245.0	7,987.9	0.531

The regression equation for the variables is:

$$y = -29.56 + 1.82x$$

$$x = \text{STTAXREV},\ y = \text{STGENREV}$$

Both variables have exhibited steady increase during the study period. The trend line equations for the variables are as follows:

$$y_t = 944.44 + 209.84_t$$

$$t = 0 \text{ at } 1975,\ t \text{ is in years},\ y = \text{STTAXREV}$$

and

$$y_t = 1{,}668.13 + 385.77_t$$

$$t = 0 \text{ at } 1975,\ t \text{ is in years},\ y = \text{STGENREV}$$

The variables are used to calculate the scores for state tax reliance. The range of scores is from .517 to .528 with a mean of .553. The trend line equation is:

$$y_t = .561 - .001_t$$

$$t = 0 \text{ at } 1975,\ t \text{ is in years},\ y = \text{STTAXREL}$$

State tax reliance declined gradually during the study period.

Calculations for the CI component for state tax reliance are presented on Table 4.10. Actual observations for state tax reliance fell above the trend line estimate in 75, 77, 78, 79, 85, 86, 87, and 88.

Local Tax Reliance

The elements of local tax reliance (LOTAXREL) are local tax revenue (LOTAXREV) and local general revenue (LOGENREV). These variables and the calculated local tax reliance scores are presented on Table 4.11. The variables are expressed in

Table 4.10 - State Tax Reliance Decomposition

Year	t	y	y^	Actual as % of trend
75	0	0.565	0.561	100.71%
76	1	0.553	0.560	98.75%
77	2	0.582	0.559	104.11%
78	3	0.580	0.558	103.94%
79	4	0.572	0.557	102.69%
80	5	0.528	0.556	94.96%
81	6	0.517	0.555	93.15%
82	7	0.543	0.554	98.01%
83	8	0.538	0.553	97.29%
84	9	0.544	0.552	98.55%
85	10	0.560	0.551	101.63%
86	11	0.556	0.550	101.09%
87	12	0.571	0.549	104.01%
88	13	0.570	0.548	104.01%
89	14	0.545	0.547	99.63%
90	15	0.531	0.546	97.25%

millions of dollars. Local taxes increased 248 percent measured in current dollars. It increased 39 percent measured in constant dollars. Local general revenue increased 248 percent measured in current dollars. In constant dollars, the increase is 38 percent.

The variables are correlated at r =.99. The regression equation for the variables is:

$$y = 75.08 + 2.70x$$

x = LOTAXREV, y = LOGENREV

Both variables have shown steady increases during the study period. The equations for the trend lines of the variables are:

$$y_t = 620.09 + 121.08_t$$

t = 0 at 1975, t is in years, y = LOTAXREV and

$$y_t = 1{,}737.82 + 327.89_t$$

t = 0 at 1975, t is in years, y = LOGENREV

Table 4.11 - Local Tax Reliance

Year	t	LOTAXREV	LOGENREV	LOTAXREL
75	0	735.2	2,012.8	0.365
75	1	805.0	2,203.5	0.365
77	2	895.5	2,389.4	0.375
78	3	968.1	2,772.0	0.349
79	4	1,059.4	2,982.3	0.355
80	5	1,125.3	3,316.6	0.339
81	6	1,436.3	3,811.2	0.377
82	7	1,398.6	3,751.7	0.373
83	8	1,520.0	4,292.6	0.354
84	9	1,630.4	4,376.8	0.373
85	10	1,743.3	4,746.9	0.367
86	11	1,899.7	5,231.9	0.363
87	12	2,008.5	5,622.5	0.357
88	13	2,224.9	6,024.1	0.369
89	14	2,422.6	6,615.0	0.366
90	15	2,577.9	7,002.2	0.368

The variables are used to calculate the scores for local tax reliance. The range of scores is from .339 to .377. The mean is .363. The equation for the trend line is:

$$y_t = .361 + .0003_t$$

t = 0 at 1975, t is in years, y = LOTAXREL

Local tax reliance increased very slightly during the study period.

Calculations for the CI component of local tax reliance are shown on Table 4.12.

Table 4.12 - Local Tax Reliance Decomposition

Year	t	y	y^	Actual as % of trend
75	0	0.365	0.361	101.11%
76	1	0.365	0.361	101.02%
77	2	0.375	0.362	103.71%
78	3	0.349	0.362	96.44%
79	4	0.355	0.362	98.01%
80	5	0.339	0.363	93.52%
81	6	0.377	0.363	103.91%
82	7	0.373	0.363	102.73%
83	8	0.354	0.363	97.41%
84	9	0.373	0.364	102.56%
85	10	0.367	0.364	100.82%
86	11	0.363	0.364	99.64%
87	12	0.357	0.365	97.92%
88	13	0.369	0.365	101.12%
89	14	0.366	0.365	100.22%
90	15	0.368	0.366	100.68%

Analysis

Combined state and local tax reliance is negatively related to combined state and local taxes (r = -.426). As combined state and local taxes and general revenues are increasing, combined state and local tax reliance is decreasing.

State tax reliance in negatively associated with state taxes (r = -.130) and to state general revenues (r = -.207). This indicates that as state taxes and state general revenues increase, state tax reliance is decreasing.

Local tax reliance is negatively associated with local taxes (r = -.351) and with local general revenue (r = -.552).

Tax reliance has been examined for combined state and local taxes, total state taxes, and total local taxes. Tax reliance scores for Combined Tax Reliance, State Tax Reliance, and Local Tax Reliance are presented in Table 4.13. The variables used to calculate the scores and the trend line equations for each score have been discussed above. Analysis of the CI component of each trend line also has been discussed above. As noted earlier, state and local government rely on sales tax, income tax, and property tax as sources of revenue. Tax reliance indicators will be developed for each of these specific indicators.

Table 4.13 - Tax Reliance Comparison

Year	t	COTAXREL	STTAXREL	LOTAXREL
75	0	0.466	0.565	0.365
76	1	0.461	0.553	0.365
77	2	0.484	0.582	0.375
78	3	0.468	0.580	0.349
79	4	0.468	0.572	0.355
80	5	0.437	0.528	0.339
81	6	0.447	0.517	0.377
82	7	0.460	0.543	0.373
83	8	0.445	0.538	0.354
84	9	0.461	0.544	0.373
85	10	0.470	0.560	0.367
86	11	0.465	0.556	0.363
87	12	0.470	0.571	0.357
88	13	0.476	0.570	0.369
89	14	0.461	0.545	0.366
90	15	0.455	0.531	0.368

Sales Tax Reliance

State and local government in Tennessee rely on the sales tax for general revenue. Scores for sales tax reliance are shown on Table 4.14. Combined state and local sales tax reliance (COSATXRL) in the study period ranged from .158 to

.223 with a mean of .194. The equation for the trend line is:

$$y_t = .168 + .003_t$$

t = 0 at 1975, t is in years, y = COSATXRL

State sales tax reliance scores range from .234 to .325. The mean is .288. The trend line equation is:

$$y_t = .257 + .004_t$$

t = 0 at 1975, t is in years, y = state sales tax reliance

Local sales tax reliance scores range from .078 to .108 with a mean score of .093. The secular trend line equation is:

$$y_t = .076 + .002_t$$

t = 0 at 1975, t is in years, y = LOSATXRL

Table 4.14 - Sales Tax Reliance Comparison

Year	t	COSATXRL	STSATXRL	LOSATXRL
75	0	0.158	0.234	0.082
76	1	0.162	0.242	0.078
77	2	0.185	0.279	0.082
78	3	0.185	0.284	0.080
79	4	0.193	0.292	0.085
80	5	0.182	0.275	0.082
81	6	0.177	0.276	0.080
82	7	0.189	0.283	0.091
83	8	0.183	0.282	0.087
84	9	0.200	0.294	0.101
85	10	0.223	0.325	0.108
86	11	0.219	0.317	0.108
87	12	0.212	0.308	0.103
88	13	0.218	0.317	0.107
89	14	0.208	0.300	0.103
90	15	0.205	0.293	0.103

Tax reliance on the sales tax has increased during the study period. Combined sales tax reliance, state sales tax reliance, and local sales tax reliance, have all increased. The rate of increase for state sales tax reliance is greater than the rate of increase for local sales tax reliance.

Analysis of the CI component of combined sales tax reliance is presented on Table 4.15. Combined sales tax reliance fell above the trend line estimate in 77, 78, 79, 82, 84, 85, 86, 87, and 88.

Analysis of the CI component of state sales tax reliance is presented on Table 4.16. State sales tax reliance fell above the trend line estimate in 77, 78, 79, 84, 85, 86, 87, and 88. Cyclical forces may be present.

Analysis of the CI component of local sales tax reliance is displayed on Table 4.17. Local sales tax reliance fell above the trend line estimate in 75, 76, 77, 79, 82, 84, 85, 86, 87, and 88.

Income Tax Reliance

The income tax is a revenue source exclusive to state government in Tennessee. Recall also that the income tax in Tennessee is applied only to dividends and bond interest. It is not a true general income tax. Calculated scores for Combined Income Tax Reliance (COINTXRL) and State Income Tax Reliance (STINTXRL) are presented on Table 4.18. As a combined revenue source for state and local government, the income tax averaged 3.2 percent of state and local general revenues during the study period. The range of scores is

Table 4.15 - Combined Sales Tax Reliance Decomposition

Year	t	y	y^	Actual as % of trend
75	0	0.158	0.168	94.05%
76	1	0.162	0.171	94.74%
77	2	0.185	0.174	106.32%
78	3	0.185	0.177	109.04%
79	4	0.193	0.180	101.11%
80	5	0.182	0.183	96.72%
81	6	0.177	0.186	101.61%
82	7	0.189	0.189	98.83%
83	8	0.183	0.192	104.17%
84	9	0.200	0.195	114.36%
85	10	0.223	0.198	110.61%
86	11	0.219	0.201	105.47%
87	12	0.212	0.204	106.86%
88	13	0.218	0.207	100.48%
89	14	0.208	0.210	97.62%
90	15	0.205	0.213	96.24%

Table 4.16 - State Sales Tax Decomposition

Year	t	y	y^	Actual as % of trend
75	0	0.234	0.257	91.05%
76	1	0.242	0.261	92.72%
77	2	0.279	0.265	105.28%
78	3	0.284	0.269	108.55%
79	4	0.292	0.273	100.73%
80	5	0.275	0.277	99.64%
81	6	0.276	0.281	100.71%
82	7	0.283	0.285	98.95%
83	8	0.282	0.289	101.73%
84	9	0.294	0.293	110.92%
85	10	0.325	0.297	106.73%
86	11	0.317	0.301	102.33%
87	12	0.308	0.305	103.93%
88	13	0.317	0.309	97.09%
89	14	0.300	0.313	93.61%
90	15	0.293	0.317	92.43%

Table 4.17 - Local Sales Tax Reliance Decomposition

Year	t	y	y^	Actual as % of trend
75	0	0.082	0.076	107.89%
76	1	0.078	0.078	100.00%
77	2	0.082	0.080	102.50%
78	3	0.080	0.082	103.66%
79	4	0.085	0.084	97.62%
80	5	0.082	0.086	93.02%
81	6	0.080	0.088	103.41%
82	7	0.091	0.090	96.67%
83	8	0.087	0.092	109.78%
84	9	0.101	0.094	114.89%
85	10	0.108	0.096	112.50%
86	11	0.108	0.098	105.10%
87	12	0.103	0.100	107.00%
88	13	0.107	0.102	100.98%
89	14	0.104	0.104	99.04%
90	15	0.103	0.106	97.17%

Table 4.18 - Income Tax Reliance Comparison

Year	t	COINTXRL	STINTXRL
75	0	0.036	0.071
76	1	0.033	0.066
77	2	0.035	0.068
78	3	0.034	0.067
79	4	0.034	0.066
80	5	0.033	0.064
81	6	0.030	0.061
82	7	0.033	0.064
83	8	0.030	0.061
84	9	0.031	0.061
85	10	0.032	0.060
86	11	0.030	0.057
87	12	0.031	0.058
88	13	0.034	0.064
89	14	0.033	0.063
90	15	0.029	0.054

from .029 to .036. The trend line equation is:

$$y_t = .034 - .0003_t$$

t = 0 at 1975, t is in years, y = COINTXRL

State income tax reliance scores range from .054 to .071 with a mean score of .063. The equation for the trend line is:

$$y_t = .068 - .0007_t$$

t = 0 at 1975, t is in years, y = STINTXRL

Reliance on the state income tax has decreased as both a combined state and local revenue source and as a state revenue source.

Analysis of the CI component of combined income tax reliance is presented on Table 4.19. Combined income tax reliance fell above the trend line estimate in 75, 77, 78, 79, 80, 82, 85, 87, 88, and 89.

Analysis of the CI component of state income tax reliance is displayed on Table 4.20. State income tax reliance fell above the trend line estimate in 75, 77, 78, 79, 82, 88, and 89.

Property Tax Reliance

Property taxation is reserved exclusively for local government in Tennessee. Calculated scores for Combined Property Tax Reliance (COPRTXRL) and Local Property Tax Reliance (LOPRTXRL) are presented on Table 4.21. As a combined state and local revenue, the property tax accounted for an average of 11.1 percent of state and local revenues. Scores for combined property tax reliance range from .101 to

Table 4.19 - Combined Income Tax Reliance Decomposition

Year	t	y	y^	Actual as % of trend
75	0	0.036	0.034	105.88%
76	1	0.033	0.034	97.92%
77	2	0.035	0.033	104.79%
78	3	0.034	0.033	102.72%
79	4	0.034	0.033	100.61%
80	5	0.033	0.033	92.31%
81	6	0.030	0.032	102.48%
82	7	0.033	0.032	94.04%
83	8	0.030	0.032	98.10%
84	9	0.031	0.031	102.24%
85	10	0.032	0.031	96.77%
86	11	0.030	0.031	100.98%
87	12	0.031	0.030	111.84%
88	13	0.034	0.030	109.63%
89	14	0.033	0.030	97.32%
90	15	0.029	0.030	98.31%

Table 4.20 - State Income Tax Decomposition

Year	t	y	y^	Actual as % of trend
75	0	0.071	0.680	104.41%
76	1	0.066	0.067	98.07%
77	2	0.068	0.067	102.10%
78	3	0.067	0.066	100.15%
79	4	0.066	0.065	98.16%
80	5	0.064	0.065	94.57%
81	6	0.061	0.064	100.31%
82	7	0.064	0.063	96.67%
83	8	0.061	0.062	97.76%
84	9	0.061	0.062	97.24%
85	10	0.060	0.061	93.44%
86	11	0.057	0.060	96.19%
87	12	0.058	0.060	107.38%
88	13	0.064	0.059	106.96%
89	14	0.063	0.058	92.78%
90	15	0.054	0.058	93.91%

Table 4.21 - Property Tax Reliance Comparison

Year	t	COPRTXRL	LOPRTXRL
75	0	0.121	0.243
76	1	0.121	0.248
77	2	0.121	0.254
78	3	0.112	0.231
79	4	0.110	0.228
80	5	0.105	0.218
81	6	0.127	0.254
82	7	0.116	0.239
83	8	0.114	0.225
84	9	0.112	0.229
85	10	0.103	0.219
86	11	0.102	0.216
87	12	0.101	0.215
88	13	0.104	0.221
89	14	0.104	0.221
90	15	0.105	0.224

.127. The trend line equation is:

$$y_t = .121 - .001_t$$

t = 0 at 1975, t is in years, y = COPRTXRL

Scores for local property tax reliance range from .215 to .254 with a mean of .230. The trend line equation is:

$$y_t = .245 - .002_t$$

t = 0 at 1975, t is in years, y = LOPRTXRL

Property tax reliance has decreased as both a combined revenue source for state and local government and as a revenue source for local government during the study period. The decline in local reliance has been greater than the decline in combined tax reliance.

Analysis of the CI component of combined property tax reliance is presented on Table 4.22. Combined property tax reliance fell above the trend line estimate in 75, 76, 77, 81, 82, 83, and 84. Cyclical forces appear to be present.

Table 4.22 - Combined Property Tax Decomposition

Year	t	y	y^	Actual as % of trend
75	0	0.121	0.121	100.00%
76	1	0.121	0.120	100.83%
77	2	0.121	0.119	101.68%
78	3	0.112	0.118	93.22%
79	4	0.110	0.117	89.74%
80	5	0.105	0.116	109.48%
81	6	0.127	0.115	100.87%
82	7	0.116	0.114	100.00%
83	8	0.114	0.113	99.12%
84	9	0.112	0.112	91.96%
85	10	0.103	0.111	91.89%
86	11	0.102	0.110	91.82%
87	12	0.101	0.109	95.41%
88	13	0.104	0.108	96.30%
89	14	0.104	0.107	98.13%
90	15	0.105	0.106	99.06%

Analysis of the CI component of local property tax reliance is presented on Table 4.23. The observed scores for local property tax reliance fell above the trend line estimate in 76, 77, 81, 82, 84, 88, 89, and 90.

Tax Policy and Centralization

State-local fiscal relationships in Tennessee have been described in terms of centralization in Chapter 3. This chapter has described state-local tax policy in terms of tax burden and tax reliance. The relationships between the centralization indicators and the tax policy indicators will

Table 4.23 - Local Property Tax Reliance Decomposition

Year	t	y	y^	Actual as % of trend
75	0	0.243	0.245	99.18%
76	1	0.248	0.243	102.06%
77	2	0.254	0.241	105.39%
78	3	0.231	0.239	95.40%
79	4	0.228	0.237	91.98%
80	5	0.218	0.235	108.09%
81	6	0.254	0.233	102.58%
82	7	0.239	0.231	97.40%
83	8	0.225	0.229	100.00%
84	9	0.229	0.227	96.48%
85	10	0.219	0.225	96.00%
86	11	0.216	0.223	96.41%
87	12	0.215	0.221	100.00%
88	13	0.221	0.219	100.91%
89	14	0.221	0.217	103.23%
90	15	0.224	0.215	104.19%

be examined.

Recall that the indicators for centralization are local reliance, state effort, state revenue raising, and state expenditure. The higher the score, the greater the degree of centralization. The indicators for tax policy are combined tax burden, state tax burden, local tax burden, combined tax reliance, state tax reliance, and local tax reliance. (The indicators for the specific taxes will not be compared to the centralization indicators.)

Correlation coefficients are calculated for each pair of indicators. They are displayed in Table 4.24.

Local reliance is related to combined tax burden at r = .69, with state tax burden at r = .59, and to local tax burden at r = .21. It is related to combined tax reliance at r = .36, state tax reliance at r = .51, and to local tax reliance at r = -.23.

Table 4.24 - Indicator Correlation Coefficients

Indicator	LOCREL	STAEFFRT	STREVRG	STAEXP
COTAXBRD	0.69	0.26	0.46	0.43
STTAXBRD	0.59	0.13	0.59	0.48
LOTAXBRD	0.21	0.2	-0.24	-0.01
COTAXREL	0.36	-0.01	0.49	0.21
STTAXREL	0.51	0.05	0.65	0.18
LOTAXREL	-0.23	-0.06	-0.35	-0.06

State effort is related to combined tax burden at r = .26, to state tax burden at r = .13, and to local tax burden a t r = .20. It is related to combined tax reliance at r = -.01, to state tax reliance at r = .05, and to local tax reliance at r = -.06.

State revenue raising is related to combined tax burden at r = .46, to state tax burden at r = .59, and to local tax burden at r = -.24. It is related to combined tax reliance at r = .49, to state tax reliance at r = .65, and to local tax reliance at r = -.35.

State expenditure is related to combined tax burden at r = .43, to state tax burden at r = .48, and to local tax burden at r = -.01. It is related to combined tax reliance at r = .21, to state tax reliance at r = 18, and to local tax reliance at r = -.06.

Conclusions

This chapter has explored the consequences of state and local fiscal policy in Tennessee. This has been done by analyzing the tax policy indicators of tax burden and tax reliance.

Combined state and local tax burden has remained fairly constant during the study period, although there has been a gradual decline (b = -.0002). Having identified a trend of decline, we examined the CI compound and determined that cyclical forces may be present. State tax burden has remained essentially constant during the study period (b = .000036). An examination of the CI component indicated that cyclical forces may be present. Local tax burden has declined very slightly during the study period (b = -.1114). Cyclical forces are not apparent.

Comparisons of combined tax burden, state tax burden, and local tax burden reveal a strong relationship between combined tax burden and state tax burden (r = .92), a mild relationship between combined tax burden and local tax burden (r = .44) and a weak relationship between state tax burden and local tax burden (r = .08). Combined state and local tax reliance declined generally during the study period (b = -.001). Cyclical or irregular forces apart from the trend forces are not apparent. State tax reliance decreased gradually during the study period (b = -.001). Analysis of the CI component of the trend line reveals that cyclical forces may be present. Local tax reliance increased very slightly during the study period (b = .0003). Analysis of the CI component reveals no cyclical or irregular forces apart from the trend forces.

Comparisons of combined tax reliance, state tax reliance, and local tax reliance indicate a strong relationship between combined tax reliance and state tax reliance (r = .88), a relatively mild relationship between combined tax reliance and local tax reliance (r = .37), and a weak negative relationship between state tax reliance and local tax reliance (r = -.08). These relationships are very similar to those found regarding tax burden.

Combined state and local sales tax reliance increased during the study period (b = .003). Cyclical forces may be present. State sales tax reliance increased during the study period (b = .004). The presence of cyclical factors is apparent. Local sales tax reliance increased slightly during the study period (b = .002). Cyclical and irregular forces may be indicated.

Comparisons of combined sales tax reliance, state sales tax reliance, and local sales tax reliance show strong positive relationships between combined sales tax reliance and state sales tax reliance (r = .96), combines sales tax reliance and local sales reliance and local sales tax reliance (r = .88), and between sales tax reliance and local sales tax reliance (r = .82).

Combined state and local income tax reliance decreased slightly during the study period (b = -.0003). Cyclical forces or irregular forces apart from the trend are not apparent. State income tax reliance decreased slightly (b =-.0007). Irregular forces may be indicated.

Combined income tax reliance is weakly related to state income tax reliance (r = 15).

Combined property tax reliance declined during the study period (b = -.001). Cyclical and irregular forces may be present. Local property tax reliance decreased (b = -.002). Cyclical and irregular forces apart from the trend forces may be indicated.

Combined property tax reliance is strongly related to local property tax reliance (r = 92).

Economic activity may account for variations in the tax and revenue policy indicators. Combined tax burden indicators fell above or below the trend line the same as personal income for the years 75, 76, 77, 78, 80, 82, 83, 84, 87, 88, and 89. Combined tax reliance indicators fell above or below the trend line the same as personal income in the years 77, 78, 79, 80, 82, 83, 87, 88, and 89. This suggests that economic activity is linked to both tax burden and tax reliance.

CHAPTER 5

THE IMPACT OF "NEW FEDERALISM"

Having described the characteristics of state-local fiscal relations in Tennessee in Chapter 3, we will now turn attention to assessing the effects of Reagan's "New Federalism' on those relations.

One of the primary objectives of "New Federalism" was to alter the relations between the federal government and the states. An anticipated byproduct is the alteration of state-local relations as well. The purpose of this chapter is to assess the impact of "New Federalism" on the state-local centralization indicators developed in Chapter 3.

Research Design

Any research that attempts to assess the effect of a policy change needs to employ a longitudinal research design. When the policy change occurs at a specific point in time, a quasi-experimental time-series approach may be used. By comparing fiscal centralization before and after the implementation of "New Federalism", the impact of the change on state-local fiscal relations in Tennessee can be analyzed. The impact of "New Federalism" will be assessed with the following research design:

$$O_1 \ldots O_8 \; X \; O_9 \ldots O_{16}$$

where O_1, O_2 ... O_{16} are measures of centralization taken at yearly intervals, and X represents the implementation of "New Federalism" in 1982.

History is the main threat to validity for a design of this type. This problem will be addressed by examining all other factors that could have contributed to the observed impact.

With the above stated research design, "New Federalism" could have four different effects on centralization: (1) no effect, (2) a change in the level of centralization, (3) a change in the trend line of centralization, or (4) a change in both the level of centralization and the trend line. Because part of the intent of "New Federalism" was to alter the pattern of governmental spending at all levels of government, it is hypothesized that the centralization indicators will move toward increased state centralization by either a change in direction or a change in slope. The null hypothesis is that the post-1982 line will be a direct extrapolation of the pre-1982 line and show no effects of "New Federalism.".

The hypothesis can be tested with a statistical model. The impact can be estimated by the following model:

$$Y = a + b_1x_1 + b_2x_2 + e$$

where Y is the centralization indicator for a given year, x_1 is the time variable coded as 0,1,...n, x_2 is the time intervention variable coded as 0 before the intervention, and as 1 after the intervention, a is a constant, e is the error term, and b_1 and b_2 are the weights estimated by multiple regression.

The assumed logic of the model is that the expected centralization scores can be determined by extrapolating the scores from previous years. This assumes that the underlying causes of centralization remain the same from year to year. The regression coefficient b_2 shows whether or not the centralization scores are significantly different from the extrapolated trend line.

Findings

This section will examine the effect of "New Federalism" on the four centralization indicators developed in Chapter 3.

Local Reliance

Recall that the elements of local reliance (LOCREL) are local intergovernmental revenues received from the state (LOCIGREV) and total local government general revenue (TOLOCREV). These variables have previously been presented in Table 3.01.

The multiple regression equation for this data set is:

$$y = .292036 - .000200x_1 - .019630x_2$$

x_1 = time variable, x_2 = time intervention variable,

y = local reliance

Standardized coefficients must be used to assess the relative effect of the independent variables upon the dependents variable. Standardized coefficients are obtained according to the following formula:

$$\text{Std } b = bx_i * Sx_i / Sy$$

b = regression coefficient, S = standard error

The standardized equation is as follows:

$$y = -.000022x_1 - .019746x_2$$

The change in the coefficients indicates that observable differences exist in local reliance after the implementation of "New Federalism." The difference is statistically significant ($t = 3.29$, $p < .005$). It appears that "New Federalism" caused local reliance to decrease dramatically. This suggests that decreased fiscal centralization, as measured by local reliance, was the the result of "New Federalism."

State Effort

The elements of state effort (STAEFFRT) are state intergovernmental expenditures to local government (STAIGEXP) and total state general expenditures (TOSTAEXP). The variables and the scores developed from the variables were presented previously in Table 3.03.

The multiple regression for this data set is:

$$y = .273277 + .001161x_1 - .024160x_2$$

x_1 = time variable, x_2 = time intervention variable,

y = state effort

The equation with standardized coefficients is:

$$y = .000127x_1 - .024303x_2$$

This change in the coefficients indicates a noticeable change in state effort after the introduction of "New Federalism." State effort was increasing prior to implementation and decreased noticeably after the implementation of "New Federalism.". The difference is statistically significant ($t = 3.63$, $p < .005$). State effort has increased after "New Federalism." This also indicates increasing centralization as measured by the indicator of state effort although it was significantly reduced by "New Federalism.".

State Revenue Raising

The elements of state revenue raising (STAREVRG) are total state general revenue (STAREV) and combined state and local general revenue (COMBREV). The data for this indicator were presented in Table 3.05.

The multiple regression equation for this data is:

$$y = .546366 + .000113x_1 - .017030x_2$$

x_1 = time variable, x_2 = time intervention variable,

y = state revenue raising

The standardized equation is as follows:

$$y = .000012x_1 - .017131x_2$$

The change in coefficients is noticeable ($t = 1.52$, $p < .10$) though not statistically significant. State revenue raising was increasing prior to the implementation. It dropped after the introduction of "New Federalism" but continued to increase. This indicates that decentralization was the result.

State Expenditure

The elements of state expenditure (STAEXP) are state general expenditures (STGENEXP) and combined state and local general expenditures (COMBEXP). These were presented in Table 3.07.

The multiple regression equation for this data is:

$$y = .434821 - .001150x_1 + .025488x_2$$

x_1 = time variable, x_2 = time intervention variable,

y = state expenditure

The standardized equation is:

$$y = -.000126x_1 + .025639x_2$$

The change in coefficients indicates that differences exist in state expenditure after the implementation of "New Federalism." The difference is statistically significant ($t = 3.11$, $p < .005$). State expenditure indicators were decreasing prior to implementation and have decreased afterwards. State expenditure increased after the introduction of "New Federalism" but continued its downward trend. This indicates that increased centralization was the result of "New Federalism" according to this indicator.

Analysis

The indicators of local reliance and state effort are used to measure the concept of fiscal interaction. Fiscal interaction refers to the degree of involvement between state and local government.

The analysis of local reliance in Chapter 3 suggested that local reliance decreased for the entire study period. The analysis in this chapter indicates that a significant decrease took place after the introduction of "New Federalism." This suggests that decentralization was a result of "New Federalism."

In Chapter 3, analysis of state effort suggested that this indicator decreased during the study period. Analysis in this chapter indicates that state effort was increasing prior to the introduction of "New Federalism" but dropped significantly upon its implementation. This also suggests that decentralization was a result of "New Federalism."

The concept of division-of-labor is measured by the indicators of state revenue raising and state expenditure. Division-of-labor refers to the extent that the state dominates the collection of revenue and the distribution of expenses.

Analysis of state revenue raising in Chapter 3 indicates that state revenue raising decreased over the study period. Analysis in this chapter suggests that state revenue raising was increasing prior to the implementation of "New Federalism" but decreased upon its implementation. This suggests that decentralization was a result of "New Federalism."

The analysis of state expenditure in Chapter 3 suggests that this indicator increased slightly over the study period.

The analysis in this chapter indicates that state expenditure was decreasing prior to the implementation of "New Federalism." It increased upon the introduction of "New Federalism" then continued its downward trend. This indicates that "New Federalism" resulted in increased centralization according to this indicator.

Conclusions

Multiple regression analysis of the four centralization indicators indicates that "New Federalism" resulted in decentralization on three of the four. It resulted in reduced centralization on both of the fiscal interaction indicators. This is contrary to the hypothesis of increased centralization. Decentralization was noted for state revenue raising as well. This too was contrary to the hypothesis. Only state expenditure increased as a measure of centralization. This is the only indicator that agreed with the hypothesis.

These findings indicate that the impact of "New Federalism" on state and local government in Tennessee has been increased decentralization. The reader is reminded that these results assert correlation, not necessarily causation. This finding is contrary to the hypothesis of increased centralization.

Several items may account for this discrepancy. It is plausible that federal aid propped up state government more than local government and that the reduction of federal funding sharply reduced the state's income. Local governments were forced to make up lost federal revenues from their own sources rather than rely upon the state.

CHAPTER 6

COMPARING TENNESSEE TO OTHER STATES

In this chapter, Tennessee will be compared to other states in the area of state-local fiscal relations. The centralization indicators of local reliance, state effort, state revenue raising, and state expenditure will be used to compare the policy results of Tennessee's state-local fiscal policy to the results observed in other states. These indicators will be developed for Tennessee and other selected states for 1990 to provide a snapshot of how Tennessee compares. In addition, other comparative tax studies will be examined to determine how the findings of this study fit with those.

Centralization

Ten southeastern states are compared to Tennessee. The states are Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, and Virginia. The variables and the calculated scores for the centralization indicators are presented on Table 6.01. The table also includes data for Tennessee.

The range of scores for local reliance is .281 to .419 with an average score of .349. Tennessee ranked last in

Table 6.01 - Centralization Indicators (1990)

State	LOCIGREV	TOLOCREV	LOCREL	STAIGEXP	TOSTAEXP	STAEFFRT
AL	1,902.5	5,360.8	0.355	2,015.4	7,410.7	0.272
AR	1,086.8	2,603.1	0.418	1,176.3	3,929.9	0.299
FL	8,077.1	22,660.3	0.292	7,204.8	20,557.6	0.350
GA	3,560.6	12,570.3	0.283	3,667.0	11,392.9	0.322
KY	1,782.3	4,387.7	0.406	1,913.4	7,101.4	0.269
LA	2,227.5	6,918.1	0.322	2,330.7	8,523.6	0.273
MS	1,558.3	3,935.6	0.396	1,691.1	4,394.0	0.385
NC	4,724.9	11,286.0	0.419	5,084.6	12,555.3	0.405
SC	1,802.8	4,946.4	0.364	1,885.3	6,774.8	0.278
TN	1,969.7	7,002.2	0.281	2,210.6	7,879.1	0.281
VA	3,290.2	10,809.5	0.304	3,472.0	11,850.4	0.293
Avg	2,907.5	8,861.8	0.349	2,968.3	9,306.3	0.312
State	STAREV	COMBREV	STREVRG	STGENEXP	COMBEXP	STAEXP
AL	5,469.7	8,735.8	0.626	5,395.2	10,868.4	0.496
AR	2,908.3	4,337.5	0.671	2,753.6	5,351.6	0.515
FL	16,471.1	35,182.1	0.468	13,352.8	40,883.8	0.327
GA	8,257.4	16,811.8	0.491	7,725.9	19,648.3	0.393
KY	5,540.2	7,963.9	0.696	5,188.0	9,605.4	0.540
LA	6,509.2	10,893.7	0.598	6,192.9	12,926.4	0.479
MS	3,018.3	5,195.7	0.581	2,702.9	6,592.8	0.410
NC	9,456.8	16,605.8	0.606	7,470.7	18,715.2	0.399
SC	5,112.1	8,093.2	0.632	4,889.5	9,970.2	0.490
TN	5,467.7	10,217.4	0.535	5,668.4	12,703.6	0.446
VA	9,339.8	16,491.9	0.566	8,378.4	19,943.9	0.430
Avg	7,050.1	16,684.4	0.588	6,338.0	15,160.0	0.448

local reliance among the southeastern states with a score of .281. This suggests that local government in Tennessee is less dependent on the state government for revenues than all other states in the region. For this parameter, Tennessee is the most decentralized state in the southeast.

The range of scores for state effort is from .269 to .405 with an average score of .312. Tennessee ranked seventh with a score of .281, well below the regional average. State government in Tennessee spends less than the regional average for state assistance to local government. This indicates that Tennessee is among the more decentralized states in the region.

The range of scores for state revenue raising is from .468 to .696. The average score is .588. Tennessee ranked ninth with a score of .535. Tennessee's score is below the regional average. Tennessee ranks near the bottom in the proportion of state-local own-source revenue collected by the state. It is well below the regional average. This indicates that Tennessee is more decentralized according to this measure.

The scores for state expenditure range from .327 to .540 with an average score of .448. Tennessee ranked sixth with a score of .446 just below the regional average. Tennessee is in the middle on decentralization according to this measure.

Tennessee appears to be more decentralized in terms of these state-local fiscal indicators than other states in the southeastern region. Tennessee falls on the "decentralized" side of the regional average on all four indicators of centralization. Virginia is the only other state to fall below the regional average on all four indicators. Florida and Georgia fall below the regional average on three of the four indicators. From this, it would appear that the most decentralized states in the southeastern region are Tennessee, Virginia, Florida, and Georgia.

Tennessee ranks lowest in the region on local reliance. This may be attributed to the fact that Tennessee depends heavily on the sales tax which is levied by both state and local government in Tennessee. The local option sales tax presents local government in Tennessee with a significant revenue source apart form the state government. Tennessee also ranks below the regional average on state effort.

It is interesting to compare the difference between state revenue raising scores and state expenditure scores. Recall that the data used to calculate these scores do not include intergovernmental transfers. Tennessee ranks lowest by this method. This indicates that it is transferring the lowest proportion of state own-source revenues to local government of any other state in the region. Again, this indicates a relatively greater level of decentralization than in the other states.

Another means of analysis is to calculate correlation coefficients for the indicators on a regional basis and compare those findings to Tennessee's longitudinal results. For the region in 1990, local reliance is correlated to state effort at r = .27, to state revenue raising at r = .81, and to state expenditure at r = .27, to state revenue raising at r = .81, and to state expenditure at r = .47. The relationship to state revenue raising is significant at the .05 level. Stonecash (1981) found correlation coefficients of r = .56 for local reliance to state effort, r = .55 for local reliance to state revenue raising, and r = -.08 for local reliance to state expenditure. He used 1972 data for the entire country. For the study period of 1975 to 1990, Tennessee scores for local reliance are correlated to state effort at r = .54, to state revenue raising at r = .74, and to state expenditure at r = .16. Both Tennessee and the regional states show strong positive correlation coefficients between local reliance and state revenue raising.

For the region, state effort is correlated to state revenue raising at r = -.34, and to state expenditure at r = -.71. Tennessee scores for state effort are correlated to state revenue raising at r = .40, and to state expenditure at r = -.57. Both Tennessee and the region yield negative relationships between state effort and state expenditure.

For the region state revenue raising is correlated to state expenditure at r = 88. The relationship with state expenditure is significant at the .05 level. For Tennessee during the study period, state revenue raising and state expenditure are correlated at r = .16. This result differs from that found by a regional cross-sectional analysis.

Tax Policy Analysis

Tennessee is also compared to the ten other southeastern states on tax burden and tax reliance. Comparisons are made for combined state and local, state, and local governments in each state.

Tax burden scores are presented in Table 5.02. The range of scores for combined tax burden is .094 to .128. The average for combined tax burden in the southeastern region is .106. Tennessee ranks last at .094. Tennessee has the lowest combined state and local tax burden of any southeastern state. In other words, Tennessee state and local governments exact the lowest percentages of personal income from its citizens than any other state in the southeastern region. For state tax burden, the average for the region is .071. The score for Tennessee is .058. This is next to the lowest, ahead of only to Virginia. The regional average for local tax burden is .035. The score for local tax burden in Tennessee is .036. This ranks fifth in the region, behind Louisiana, Georgia, Virginia, and Florida.

Tax reliance scores for the region are presented in Table 6.03. The range of scores for combined tax reliance is .605 to .711 with an average score of .666. Tennessee ranks seventh with a score of .668. This is slightly above the regional average. Tennessee reliance on taxes as an own-source revenue is typical for the region. The regional average for state tax reliance is .565. Tennessee has a score of .537, ranking ninth in the region. The average of the region for local tax reliance in .325. Local tax reliance in Tennessee scores .368. This is second in the region, behind only Virginia.

Table 6.02 - Tax Burden Indicators (1990)

State	PERSINC	COMBTAX	COTAXBRD	STTAXREV	STTAXBRD	LOTAXREV	LOTAXBRD
AL	56,112.0	5,367.1	0.096	3,819.5	0.068	1,547.6	0.028
AR	31,035.0	2,993.3	0.096	2,260.9	0.073	732.4	0.024
FL	223,609.0	22,593.6	0.101	13,829.5	0.059	9,304.1	0.042
GA	103,313.0	11,667.0	0.113	7,078.2	0.069	4,588.8	0.044
KY	51,214.0	5,511.0	0.108	4,260.7	0.083	1,250.3	0.024
LA	51,615.0	6,590.7	0.128	4,086.7	0.079	2,504.0	0.049
MS	30,732.0	3,251.5	0.106	2,395.9	0.078	855.7	0.028
NC	99,863.0	11,103.5	0.111	7,864.7	0.079	3,238.8	0.032
SC	47,881.0	5,446.6	0.114	3,934.4	0.082	1,512.2	0.032
TN	72,586.0	6,823.0	0.094	4,245.0	0.058	2,577.9	0.036
VA	115,408.0	11,727.7	0.102	6,600.5	0.057	5,127.2	0.044
Avg	80,306.2	8,461.4	0.106	5,439.6	0.071	3,021.7	0.035

Table 6.03 - Tax Reliance Indicators (1990)

State	COMBTAX	COMBREV	COTAXRL	STTAXREV	STAGENREV	STTAXREL	LOCTAX	LOCGENREV	LOCTAXRL
AL	5,367.1	10,988.0	0.488	3,819.5	7,555.2	0.506	1,547.6	5,360.8	0.289
AR	2,993.3	5,567.2	0.538	2,260.9	4,056.1	0.557	732.4	2,603.1	0.281
FL	22,593.0	40,035.0	0.564	13,829.0	20,625.0	0.644	9,304.1	27,660.0	0.336
GA	11,667.0	20,143.0	0.579	7,078.2	11,189.0	0.633	4,588.8	12,570.0	0.365
KY	5,511.0	9,939.8	0.554	4,260.7	7,346.7	0.580	1,250.3	4,387.7	0.285
LA	6,590.7	13,598.0	0.485	4,086.7	8,924.3	0.458	2,504.0	6,918.1	0.362
MS	3,251.5	6,887.4	0.472	2,395.9	4,523.1	0.530	855.7	3,935.6	0.217
NC	11,103.0	18,666.0	0.595	7,864.7	12,345.0	0.637	3,238.8	11,286.0	0.287
SC	5,446.6	9,983.8	0.546	3,934.4	6,930.3	0.568	1,512.2	4,946.4	0.306
TN	6,823.0	12,978.0	0.526	4,245.0	7,897.8	0.537	2,577.9	7,002.2	0.368
VA	11,727.0	18,964.0	0.618	6,600.5	11,630.0	0.568	5,127.2	10,809.0	0.474
Avg	9,461.4	15,252.0	0.542	5,439.6	9,365.9	0.565	3,021.7	8,861.8	0.325

Scores for sales tax reliance are presented in Table 6.04. The range of scores for combined sales tax reliance is .300 to .112. The average score is .199. Tennessee ranks first in the region with a score of .300 on combined sales tax reliance. Tennessee relies more on the sales tax as an own-source revenue than any other state in the region. On state sales tax reliance, Tennessee scores .297, compared to the regional average of .207. Tennessee ranks second to Florida on this parameter. Local government in Tennessee scores .103, compared to the regional average of .057. Tennessee is second behind Louisiana and Alabama.

Income tax reliance indicators are presented in Table 6.05. The range of scores for combined income tax reliance is .020 to .256 with an average score of .155. Tennessee ranks tenth with a score of .043. Only Florida ranks lower in income tax reliance. State income tax reliance in Tennessee is .055. The regional average is .169. The

Table 6.04 - Sales Tax Reliance Indicators (1990)

State	COSATXRV	COGENREV	COSATXRL	STSATXRV	STGENREV	STSATXRL	LOSATXRV	LOCGENREV	LOSATXRL
AL	1,625.6	10,988.1	0.148	1,037.8	7,555.2	0.137	587.7	5,360.8	0.110
AR	970.9	5,567.2	0.174	839.4	4,056.1	0.207	131.5	2,603.1	0.051
FL	8,212.0	40,053.5	0.205	8,191.4	20,625.7	0.397	20.5	27,660.3	0.001
GA	3,509.1	20,143.9	0.174	2,638.7	11,189.8	0.236	870.4	12,570.3	0.069
KY	1,087.6	9,939.8	0.109	1,087.6	7,346.7	0.148	0.0	4,387.7	0.000
LA	2,473.9	13,598.8	0.182	1,262.9	8,924.3	0.142	1,211.0	6,918.1	0.175
MS	1,089.1	6,887.4	0.158	1,088.6	4,523.1	0.241	0.4	3,935.6	0.000
NC	2,651.5	18,666.2	0.142	1,772.9	12,345.2	0.144	878.6	11,286.0	0.078
SC	1,447.9	9,983.8	0.145	1,447.9	6,930.3	0.209	0.0	4,946.4	0.000
TN	3,066.5	12,978.7	0.236	2,343.9	7,897.8	0.297	722.6	7,002.2	0.103
VA	1,849.0	18,964.2	0.097	1,353.1	11,630.3	0.116	495.6	10,809.5	0.046
Avg	2,543.9	15,251.9	0.161	2,096.7	9,365.9	0.207	447.1	8,861.8	0.057

Table 6.05 - Income Tax Indicators(1990)

State	COINTXRV	COGENREV	COINTXRL	STINTXRV	STGENREV	STINTXRL	LOINTXRV	LOGENREV	LOINTXRL
AL	1,352.9	10,988.1	0.123	1,301.2	7,555.2	0.172	51.6	5,360.8	0.010
AR	869.5	5,567.2	0.156	869.5	4,056.1	0.214	0.0	2,603.1	0.000
FL	698.8	40,053.5	0.017	698.8	20,625.7	0.034	0.0	27,660.3	0.000
GA	3,346.1	20,143.9	0.166	3,346.1	11,189.8	0.299	0.0	12,570.3	0.000
KY	1,831.4	9,939.8	0.184	1,498.8	7,346.7	0.204	341.6	4,387.7	0.078
LA	1,131.2	13,598.8	0.083	1,131.1	8,924.3	0.127	0.0	6,918.1	0.000
MS	550.4	6,887.4	0.080	550.4	4,523.1	0.122	0.0	3,935.6	0.000
NC	4,002.8	18,666.2	0.214	4,002.8	12,345.2	0.324	0.0	11,286.0	0.000
SC	1,531.1	9,983.8	0.153	1,531.1	6,930.3	0.221	0.0	4,946.4	0.000
TN	435.0	12,978.7	0.034	435.0	7,897.8	0.055	0.0	7,002.2	0.000
VA	1,839.6	18,964.2	0.097	973.6	11,630.3	0.084	866.0	10,809.5	0.080
Avg	1,599.0	15,251.9	0.100	1,485.3	9,365.9	0.169	114.5	8,861.8	0.015

regional average for local income tax reliance is .015. Only Alabama, Kentucky, and Virginia local governments rely on this as a source of revenue.

Property tax reliance indicators are presented in Table 6.06. The range of scores for combined property tax reliance is .075 to .225. The average score is .155. Tennessee ranks sixth with a score of .153 just below the regional average.

Tennessee is the only state in the region that does not rely on the property tax for state revenues. The regional average for local property tax reliance is .217. The score for Tennessee is .224. This ranks fifth in the region.

Tennessee falls in the middle of the pack when it comes to relying on taxes for state and local government revenues. State and local government in Tennessee rely very heavily on the sales tax for combined own-source revenues when compared to other states in the region. They rely very little on the income tax and are average in their reliance on the property tax. This would seem to confirm the "conventional wisdom" concerning tax reliance in Tennessee.

Table 6.06 - Property Tax Indicators(1990)

State	COPRTXRV	COGENREV	COPRTXRL	STPRTXRV	STGENREV	STPRTXRL	LOPRTXRV	LOGENREV	LOPRTXRL
AL	658.8	10,988.1	0.060	90.5	7,555.2	0.012	568.3	5,360.8	0.106
AR	536.5	5,567.2	0.096	6.6	4,056.1	0.002	529.8	2,603.1	0.204
FL	7,916.7	40,053.5	0.198	308.6	20,625.7	0.015	7,608.2	27,660.3	0.275
GA	3,198.1	20,143.9	0.159	24.7	11,189.8	0.002	3,173.4	12,570.3	0.252
KY	929.7	9,939.8	0.094	303.3	7,346.7	0.041	626.4	4,387.7	0.143
LA	1,133.9	13,598.8	0.083	46.6	8,924.3	0.005	1,087.3	6,918.1	0.157
MS	877.2	6,887.4	0.127	74.4	4,523.1	0.016	802.8	3,935.6	0.204
NC	2,336.7	18,666.2	0.125	99.3	12,345.2	0.008	2,237.4	11,286.0	0.198
SC	1,399.6	9,983.8	0.140	9.6	6,930.3	0.001	1,390.1	4,946.4	0.281
TN	1,566.8	12,978.7	0.121	0.0	7,897.8	0.000	1,566.8	7,002.2	0.224
VA	3,698.1	18,964.2	0.195	16.7	11,630.3	0.001	3,681.5	10,809.5	0.341
Avg	2,204.7	15,251.9	0.127	89.1	9,365.9	0.010	2,115.6	8,861.8	0.217

Georgia and South Carolina appear to have the most balanced tax systems with the lowest variations among the tax reliance indicators.

Combined tax burden is correlated to combined tax reliance for the region at r = -.16, to combined sales tax reliance at r = -.18, to combined income tax reliance at r = .19, and to combined property tax reliance at r = -.07.

For the region, combined tax reliance is correlated to combined sales tax reliance at r = -.51, to combined income tax reliance at r = .66, and to combined property tax reliance at r = .40. For Tennessee, combined tax reliance is correlated to combined sales tax reliance at r = .34, to combined income tax reliance at r = .74, and to combined property tax reliance at r = .34.

For the region, combined sales tax reliance is correlated to combined income tax reliance at r = -.74 and to combined property tax reliance at r = -.10. For Tennessee, combined sales tax reliance is correlated to combined income tax reliance at r = -.15, and to combined property tax reliance at r = -.61. This finding is in conflict with the findings for the cross-sectional data.

For the region combined income tax reliance is correlated to combined property tax reliance at r = -.18. For Tennessee, combined income tax reliance is correlated to combined property tax reliance at r = .47.

Another way to compare states is to examine per capita tax revenues. Using 1990 data, combined state and local per capita tax burdens ranged from $1,264 to $1,896. The regional average is $1,546. Tennessee ranked eighth with a score of $1,399. State per capita tax burdens range from $870 to $1,186. The average is $1,030. Tennessee ranks last with a score of $870. Local per capita tax burdens range from $312 to $829 with an average of $515. Tennessee ranks fifth in the region with a score of $529.

Other Comparative Studies

There are several recent comparative tax and revenue studies that compare Tennessee to other states or cities. A recent publication by the Tennessee Advisory Commission on Intergovernmental Relations (1993) reviewed several studies that focused on tax burden questions. The TACIR work focused on comparisons of Tennessee to other states. The TACIR report notes that measuring and comparing tax burdens is not without difficulty nor controversy. Real measures of tax burden are specific to individuals and families. While certain generalizations can be made, real burdens can only be assessed at the individual level.

The first study examined by TACIR is the annual analysis conducted by the government of the District of Columbia entitled Tax Rates and Tax Burdens in the District of Columbia: A Nationwide Comparison. This study compares the district to the largest city in each of the fifty states. The basis of comparison are families of four with incomes of $25,000, $50,000, $75,000, and $100,000. The study bases its tax burden analysis on the individual income tax, real property tax on residential property, general sales and use taxes, and various automobile related taxes. According to the D.C. report these taxes represent over 75 percent of state and local taxes collected in a typical year and thus represent a reasonable basis for assessing tax burdens. The study used Memphis as the largest city in Tennessee. The D.C. study finds that Tennessee has the most regressive tax system of all the fifty states and the District. Low income families in Tennessee bear a greater relative tax burden than higher income families.

Another study is the Citizens for Tax Justice report entitled A Far Cry From Fair published in 1991. This report analyzed family tax burdens on seven income groups. The taxes considered are the property tax, general sales tax, personal income tax, corporate income tax, and excise taxes. The CTJ report found that personal and corporate income tax are moderately progressive in Tennessee. Excise taxes and property taxes are found to be regressive while the sales tax is found to be highly regressive. Tennessee state and local governments rely heavily on the sales tax for revenues. The findings of this report are significant in that it points to the highly regressive nature of state and local taxation in Tennessee. In the CTJ report, Tennessee ranks eighth highest in the nation with a tax burden of 15.2 percent on its poorest citizens (average income of $10,700). Conversely, Tennessee ranks eighth in lowest tax burdens on the richest 1 percent of its families. The CTJ study asserts that Tennessee is a "low" tax state only for the rich since tax burdens on the poor are extremely high. The CTJ study estimates for tax burdens are 2.8 percentage points higher than the D.C. study.

Money magazine publishes an annual report on state and local tax burdens on the typical Money subscriber (a family of four with an annual family income of $77,094). This report measures the combined state and local tax bill including income, sales, property, and gasoline. The results show that Tennessee has the fifth lowest tax burden in the nation. Only Florida, Nevada, Wyoming, and Alaska have lower tax burdens. It is worthy of note that none of these states have a personal income tax. On the other hand, each of these states have special revenue sources: Florida has tourism, Nevada has gaming, Wyoming has mining, and Alaska has oil. As a result, each of these states is able to shift a significant portion of its tax burden to non-residents of the state. Tennessee has some shifting capacity in the area of tourism.

Summary and Conclusions

This chapter compares Tennessee to other states on the centralization and tax and revenue policy indicators developed in previous chapters. The comparison utilized 1990 data for ten other southeastern regional states.

Tennessee consistently ranked at or below the regional average on all four indicators of centralization. Only Virginia exhibits a similar trait. It is interesting to note that Virginia, Georgia, and Florida rank first, second, and third respectively in combined state and local taxes per capita in the region. Tennessee ranks eighth out of eleven in the region on the same measure.

In addition, Tennessee ranks lowest in the region on the proportion of state own-source revenue transferred to local governments.

Tax burden measures the proportion of taxes exacted from the private sector relative to total income. Tennessee has the lowest overall tax burden of any state in the region. The score for combined tax burden is .094. Adjusting for population, Tennessee is eighth in per capita combined state and local taxes, last in per capita state taxes, and fifth in per capita local taxes. Per capita combined state and local taxes are collected at 90.4 percent of the regional average, per capita state taxes are collected at 84.4 percent of the regional average, and per capita local taxes are collected at 102.7 percent of the regional average.

Tax reliance is the proportion of tax revenues relative to total government revenues. Tennessee ranks in the middle on combined tax reliance. Tennessee ranks first on combined sales tax reliance, tenth on combined income tax reliance, and sixth on combined property tax reliance. Tennessee scores .668 on combined tax reliance (regional average = .666), .300 on combined sales tax reliance (regional average = .199), .043 on combined income tax reliance (regional average = .155), and .153 on combined property tax reliance (regional average = .155). While Tennessee is "average" in terms of combined tax reliance for the region, its pattern of tax reliance differs significantly from the regional average. Compared to the region, Tennessee state and local governments rely very heavily on the sales tax and virtually not at all on the income tax. It is about "average" in its reliance on the property tax.

CHAPTER 7

SUMMARY AND CONCLUSIONS

In addition to establishing the historical and legal context for state-local fiscal relations in Tennessee, the previous chapters presented a technical analysis of state-local fiscal relations in Tennessee. Findings were presented for the four fundamental research questions addressed in this study: (1) What are the major characteristics of state-local fiscal policy in Tennessee?, (2) How is centralization related to selected tax policy indicators?, (3) How did "New Federalism" impact state-local fiscal relations in Tennessee? and (4) How does Tennessee's state-local fiscal policy compare to that of other states?

The purpose of this chapter is to summarize and consolidate these findings in order to present a clear and concise picture of state-local fiscal relations in Tennessee during the study period. It will go beyond the technical findings presented earlier and attempt to make sense of the various parts of the analysis. In other words, it will interpret the various technical findings in order to provide a clear picture of state-local fiscal relations in Tennessee.

Further, this chapter examines the public policy implications of these findings. It will examine the characteristics of state-local fiscal policy, its effects, and the public policy questions that are raised or implied about public finance in Tennessee.

The chapter concludes with a discussion of the normative aspects of state-local fiscal relations and a discussion of future research needs in this area.

Discoveries

This section will answer the question: What do we know now about state-local fiscal relations in Tennessee that we did not know before? This will be done by examining the major subject areas of state-local fiscal relations explored in this study: centralization, tax policy, impact of "New Federalism", and interstate comparisons.

Recall that a fundamental premise of this study is that federal-state fiscal relations are changing and that these changes have implications for state and local governments. We discovered that the federal government's role as the originator of state-local revenues in Tennessee is in fact diminishing when compared to state and local government roles. As a result, state revenues and local revenues have increased in relative importance during the study period. We found that locally originated revenues have increased at a faster rate than state originated revenues. This suggests that local governments in Tennessee have moved faster than the state government in responding to changes in federal-state-local fiscal relations.

Of critical importance in the determination of relative power relationships is what level of government actually ends up spending the revenues that have been raised. On this dimension, state government in Tennessee has shown a clear tendency toward greater control in the spending of revenues. State government expenditures have increased relative to local government expenditures during the study period. In other words, the state is assuming a greater portion of state-local expenditures in Tennessee.

These factors indicate that federal-state-local fiscal relations have indeed changed during the study period and that state-local relations appear to have been affected. The next step is to summarize and interpret the findings of this study in the four research areas.

Centralization

Stonecash's measures of centralization were used to describe state-local fiscal relations in Tennessee and to assess how they have changed during the study period. The fiscal interaction measures of local reliance and state effort exhibited downward trends during the study period. This indicates a movement toward decentralization in state-local finances. Movement toward decentralization on the local reliance dimension means that local governments in Tennessee are reducing their overall reliance on state revenues relative to locally generated revenues. In other words, local governments are choosing to "fend-for-themselves" when it comes to revenue generation. A movement toward decentralization on the state effort dimension means that state government is expending proportionately less of its resources to assist local government. State government has responded to lessening federal revenues by choosing to reduce the proportion of its fiscal resources that it transfers to local governments. The fiscal interaction dimension measures the degree of exchange between state and local governments. The findings of this study suggest that interaction has diminished during the study period. This could be the result of the diminished role of the federal government in fiscal relations.

The division-of-labor measures of state revenue raising and state expenditure yielded conflicting signals on centralization. The state revenue raising dimension demonstrated a trend toward decentralization. Local government revenues grew at a slightly faster rate than state government revenues. Once again, it appears that local governments in Tennessee are moving to address their own revenue needs rather than depend on revenues from the state. On the other hand, the indicator of state expenditure exhibits a trend toward centralization. It is the only indicator that points to centralization. State government expenditures have grown faster than local government expenditures during the study period. This indicates that the state has assumed a greater role in the delivery of public services in Tennessee. The division-of-labor dimension measures the allocation of responsibilities between state and local government. The findings of this study indicate that state government has increased its share of the expenditure of state-local fiscal resources while local government has increased its share of the raising of state-local fiscal resources.

We can now ascertain the impact of diminishing federal revenues on state-local fiscal relations in Tennessee. It appears that state-local fiscal relations have demonstrated a tendency toward decentralization during the study period. The trend, while evident, is very slight. State government in Tennessee has responded very slowly to changes in federal-state fiscal relations. Local governments, on the other hand, have moved more quickly to respond to the lessening role of the federal government as a provider of revenues by dealing directly with revenue requirements rather than waiting on the state government to act.

Tax and Revenue Policy

Indicators for tax burden and tax reliance were used to describe tax and revenue policy. The premise to be considered here is that state fiscal policy affects local fiscal policy.

During the study period, the combined tax burden of state and local governments in Tennessee exhibited a trend toward decline. This is because combined state-local taxes increased at a slower rate than did total personal income. In terms of state and local taxes, Tennessee's taxpayers contributed a smaller portion of their income for state and local government taxes at the end of the study period than at the start.

When the individual components of state-local taxes are examined, the picture is slightly different. State taxes increased at almost exactly the same rate as did personal income. As a result, state tax burden remained virtually unchanged during the study period. Local tax burden, on the other hand, decreased during the study period. Local taxes grew at a slower rate than did personal income.

Tennessee remains a low tax burden state. In fact, its tax system has not kept pace with economic growth as measured by personal income. This indicates that the tax system is inelastic and somewhat unresponsive to changing economic conditions. As a result, increases in tax revenues must come from either increased tax rates or new taxes.

Governments in Tennessee rely on three basic types of taxes for revenues. These are the sales tax, the income tax, and the property tax. Reliance on taxes in general diminished during the study period. Combined tax reliance decreased as combined state and local taxes grew at a slower rate than did combined state and local general revenues. State tax reliance decreased during the study period but local tax reliance increased very slightly.

Combined reliance on the sales tax increased during the study period. Both state sales tax reliance and local sales tax reliance increased. State sales tax reliance increased at a faster rate than did local sales tax reliance. In Tennessee, the sales tax has been the tax of choice for both state and local government. This tax produces large quantities of money and is the most responsive to economic growth.

Combined income tax reliance and state income tax reliance decreased during the study period. Local governments do not levy any form of income tax. As presently levied, the income tax is not a significant revenue source for state and local government in Tennessee.

Combined property tax reliance and local property tax reliance decreased as well. State government does not levy a property tax in Tennessee. The property tax is not a popular tax. Local governments have turned increasingly to the sales tax as an alternative to the property tax.

In terms of the type of taxes levied by state and local government in Tennessee, the clear tendency has been to rely more and more on the sales tax than any of the major forms of taxation. This is clearly demonstrated by the tax reliance data in this study. Tennessee remains a low tax state with a system that relies heavily on the sales tax.

Impact of "New Federalism"

Reagan's "New Federalism" fundamentally altered nation-state relations. A federal structure that places increased importance upon the states has implications for local government. This study examined the impact of "New Federalism" on the state fiscal centralization indicators.

Three of the four indicators showed dramatic shifts toward decentralization upon the introduction of "New Federalism." Only state expenditure shifted toward centralization. In none of the cases did "New Federalism" change the course of the centralization trends established prior to its introduction.

The apparent impact of "New Federalism" appears to be the decreased centralization of state-local fiscal affairs.

Comparisons

When comparing Tennessee to ten other southeastern states on the centralization indicators, we found that Tennessee is among the most decentralized states in the region on the state-local fiscal relations dimension. Tennessee ranked last on local reliance, seventh on state effort, ninth on state revenue raising, and sixth on state expenditure. Tennessee scored below the regional average on all four indicators.

Tennessee was also compared to the other states in the region on the tax and revenue policy dimension. Tennessee ranked last on combined tax burden, next to last on state tax burden , and fifth on local tax burden. Tennessee ranks seventh on combined tax reliance, ninth on state tax reliance, and second on local tax reliance. Tennessee ranks first on combined sales tax reliance, second on state sales tax reliance, and third on local sales tax reliance. Tennessee is tenth on combined income tax reliance and tenth on state income tax reliance. Tennessee ranks sixth on combined property tax reliance and fifth on local property tax reliance.

When compared to other states in the region, Tennessee is a low tax state on combined state-local taxation. The reliance on all taxes as a revenue source is "average," but their is a heavy reliance on the sales tax as a source of governmental revenue. Overall reliance on the income tax is below the regional average and reliance on the property tax is at the regional average.

Tennessee is below the regional average on state tax burden as well. It is slightly below on state tax reliance. Tennessee is significantly above the regional average on state sales tax reliance. It is well below the average on state income tax reliance and state property tax reliance.

Local tax burden in Tennessee is at the regional average. Local tax reliance is above the regional average as is local sales tax reliance and local property tax reliance.

Compared to other states in the southeastern region, Tennessee is more decentralized and local governments are exercising relatively more autonomy in taxation than local governments in the other states.

Synthesis

This study indicates that state-local fiscal relations in Tennessee have changed during the study period. This change, while slight, is noticeable and important. There are two plausible explanations for the observed changes. The first is that these changes are a result of the changing nature of federal-state-local fiscal relations. That is, the reduction of revenues available from the federal government to state and local government has caused state and local governments to adapt with tax and revenue actions of their own.

The result, in Tennessee, has been that local governments have reduced their reliance on state revenues and have taken tax and revenue matters into their own hands. Limited to sales and property taxes, local governments in Tennessee have come to rely increasingly on the sales tax for local tax revenues. At the same time, local governments have come to rely less upon the property tax. More significantly, as reliance on intergovernmental revenues has decreased and reliance on taxes has remained constant, local governments in Tennessee have come to rely more upon user charges and miscellaneous revenues. Again, this is the result of local government action rather than reliance upon the state for fiscal resources.

The other explanation is that the changing nature of state-local fiscal relations are the result of a tax and revenue system that has undergone relatively minor change during the study period leaving local government with few choices but to take action on their own. Most "fiscal crises" have been addressed with action related to the sales tax. Since local governments in Tennessee have direct access to the sales tax, this has provided them with a significant revenue source at their disposal.

Public Policy Implications

Public policy has consequences and implications, as well. The consequences have been described. We now turn to the implications of these findings.

State fiscal policy affects local fiscal policy. State constitutional and statutory limitations affect the ways that state and local governments raise and spend revenues. Tennessee's state and local tax system exerts a relatively low burden on its citizens while depending heavily on the sales tax as the principle source of revenue. Dependence on the income tax is very low and on the property tax about average.

The result is a tax system weighted toward the sales tax and away from the income tax. The reader is reminded that there is a constitutional limitation on the income tax in Tennessee. There is a reluctance by both the legislature and the public to turn to this type of tax for needed revenues. This leaves the sales tax for state government and the property tax for local government to address revenue needs. Both state and local governments in Tennessee have looked to non-tax revenues to help address their needs.

Normative Aspects

This section deals with the normative aspects of state-local fiscal relations. It examines what state-local fiscal relations ought to be like and why state-local fiscal policies need to be reconsidered periodically.

The relations between state and local governments are controlled largely by the decisions of the state government. Local governments are creatures of the state and exist at their pleasure. As a result, the powers exercised by local governments are those that have been permitted by the state. These powers can therefore been seen as an instrument of state policy sometimes in the guise of local policy. The state does allow some local discretionary authority for dealing with local problems.

State and local governments are the major service providers in our country (Gold, 1989, p.1). Gold lists four important reasons why state-local fiscal policies are important: (1) federal cutbacks, (2) crucial to progress in many areas, (3) making government more efficient, and (4) desirability of periodic review of policies (Gold, 1989, p.2). It is this final reason that captures the essence of the normative dimension. According to Gold, it is desirable to periodically review fundamental state-local fiscal policies. In Tennessee, as in many other states, these policies have gone too long without searching and objective scrutiny. State policies affecting local government should be responsive to economic, social, and technological changes that are altering both the demands placed on local governments and the options available to them (Gold, 1989, p.2).

There are four major differences in how state-local systems operate. They are: (1) local government structures, (2) local government autonomy, (3) fiscal centralization, and (4) local revenue systems (Gold, 1989, p.11). In order to understand and interpret correctly the experience of any state, these differences need to be understood.

Any evaluation of state-local fiscal policy should be based on how well those policies help accomplish the objectives of state and local government. Often these objectives are not stated and there may not be agreement on the relative importance of each objective. The three major objectives of state-local policies should be: (1) providing the right amount of services, considering citizen's willingness to pay for them, (2) providing services efficiently, and (3) financing services through a system that is fair (Gold, 1989, p.19).

Ideally, governments should provide the services that citizen's want and are willing to pay for. Determining the right amount of services involves balancing these wants with the willingness to pay. Wants are unlimited, but the willingness and ability to pay have definite limits. Notwithstanding philosophical reasons on whether government is too large or too small, there are several considerations inherent in state-local relations that may inhibit a proper distribution of services. They are: (1) biases resulting from state and federal programs, (2) spillover benefits and costs, (3) fiscal disparities, and (4) ignoring differences in demands for services among places (Gold, 1989, p.20). Biases resulting from state and federal programs and spillover costs may cause local spending to be too high. These programs may shift the cost of delivery from the local government to the state or federal governments. This may encourage local governments to spend money in areas that they would not otherwise do so. When some of the costs for a service benefiting residents of a jurisdiction are born by non-residents, the level of service may be higher (and more costly) than would otherwise be acceptable by the residents.

On the other hand, other considerations may cause local spending to be too low. Spillover benefits and ability to pay may adversely affect local government expenditures. Many government services benefit not only direct recipients but also other people. The benefit of services to non-residents may not be taken into account when determining local service levels and expenditures. In addition, service levels and expenditures may be low because a community does not have the ability to pay for them. Both of these factors can contribute to lower spending levels by local government.

A final consideration in determining the right level of services is ignoring the differences in demands for services among different places. When services are not provided at the lowest (closest) level of government, there is the possibility that assumption of that service by a higher level will result in providing a level of service that is higher than desired in some areas and lower than desired in others.

Expenditures for local government services may then be too high or too low depending on a number of circumstances. The state-local system should be designed to further the objective of providing the right level of service, and this can be done by assigning the responsibilities for providing and financing the services with the appropriate level of government(Gold, p. 21).

Decentralized fiscal systems that rely on local wealth and taxation run the risk of putting poorer communities at a disadvantage. This is often referred to as "fiscal disparity." This is a major reason for state fiscal assistance to schools, but is often overlooked in other state policies for local government. The need for states to address problems of fiscal disparity are greater now as a result of reductions in federal aid.

Providing the right amount of service in the most efficient manner usually leads to a preference for services to be provided by local governments. Local autonomy is therefore viewed as being desirable. On the other hand, a decentralized system can be seen as unfair because of the disparity of wealth in a state. A more centralized state may be able to provide assistance to local governments to reduce these disparities. This may be at the expense of efficiency. The challenge for the state is to devise a state-local system that assigns responsibilities to state and local governments, providing financial assistance to local government, and creates an institutional structure that achieves the desired balance between the two objectives (Gold, 1989, p.26).

Further Research

One of the stated objectives of this study was to provide a clearer picture of state-local fiscal relations in Tennessee. In doing so, a number of other questions are raised that lead to further research needs.

Closer analysis needs to be accomplished in a number of areas. This study considered local government as a unit of analysis. Further research is needed to determine if there are differences in how county and city governments are affected by state-local fiscal relations.

State shared revenues have not been considered. Recall that these have been considered to be local revenues and not considered as part of state assistance to local government. Further research is needed to determine how much state shared revenue is received from the state and how that money is used by local governments.

Tennessee was compared to other states for only one year. Further research is needed on comparing Tennessee to other states. A longitudinal analysis of this question would allow for a determination of whether other states exhibit similar trends to those found for Tennessee.

State-local fiscal relations are important. Many of the most fundamental questions in government and service delivery can be tied to these relations. It is hoped that this study has laid a foundation for further research in this important topic.

List of References

List of References

Aaron, Henry J., 1975. Who Pays the Property Tax?: A New View. Washington, D.C.: Brookings Institution.

Adrian, Charles and Charles Press, 1977. Governing Urban America. New York: McGraw Hill.

Benton, J. Edwin, 1986. "Federal Aid Cutbacks and State and Local Government Spending Policies." In J. Edwin Benton and David R. Morgan eds., Intergovernmental Relations and Public Policy. New York: Greenwood, pp. 15-34.

Bragg, John T. and W. Jeff Reynolds, 1984. "Tax Reform: Good Business for Tennessee." Survey of Business, vol.20, no. 2, pp. 12-15.

Break, George F., 1967. Intergovernmental Relations in the United States. Washington, D.C.: The Brookings Institution.

Carnevale, John T., 1988. "Recent Trends in the Finance of the State and Local Sector." Public Budgeting and Finance, vol. 8. no.2, pp. 33-48.

Dye, Thomas R., 1988. Politics, Economics, and the Public: Policy Outcomes in the American States. Chicago: Rand McNally.

Elazar, Daniel,1972. American Federalism: A View From the States. New York: Thomas Y. Crowell Company.

Fox, William F. and Kenneth E. Quindry, 1984. "Tax Reform in Tennessee: Needs and Options." Survey of Business, vol. 20, no. 2, pp. 4-11.

Freeman, Patricia K., 1985. A Comparative Analysis of State-Local Relations. Knoxville, Tennessee: The University of Tennessee.

Gold, Steven D., 1989. Reforming State-Local Relations: A Practical Guide. Denver, Colorado: National Conference of State Legislatures.

Gramlich, Edward M., 1977. "Intergovernmental Grants: A Review of the empirical Literature." In Wallace Oates, ed., The Political Economy of Fiscal Federalism. Lexington, Massachusetts: D.C. Heath, pp. 219-240.

Greene, Lee, David Grubbs, and Victor Hobday, 1982. Government in Tennessee. Knoxville, Tennessee: The University of Tennessee.

Hanson, Susan B. and Patrick Cooper, 1980. "State Expenditure Growth and Revenue Elasticity." Policy Studies Journal, vol. 9, no. 4, pp. 26-33.

Hopkins, Ann H., 1985. "State Constitutional Change in Tennessee. In Dorothy F. Olshfski and T. McN. Simpson III eds., The Volunteer State: Readings in Tennessee Politics. Knoxville, Tennessee: Tennessee Political Science Association.

Liner, E. Blaine (ed.), 1989. A Decade of Devolution: Perspectives on State-Local Relations. Washington, D.C.: Urban Institute Press.

Maxwell, James A., 1969. Financing State and Local Governments. Washington, D.C.: The Brookings Institution.

Mosher, Frederick C., and Orville F. Poland, 1963. Costs of

American Governments. New York: Dodd,Mead, and Company.

Pechman, Joseph A. and Benjamin A. Okner, 1974. Who Bears the Tax Burden? Washington, D.C.: The Brookings Institution.

Phares, Donald, 1980. Who Pays State and Local Taxes? Cambridge, Massachusetts: Oelgeschlager, Gunn, and Hain.

Schmandt, Henry J. and John C. Goldblach, 1969. "The Urban Paradox." In Henry Schmandt and Warner Bloomberg, Jr., eds., The Quality of Urban Life. Beverly Hills, California: Sage Publications, pp. 492-494.

Shafritz, Jay M., 1988. The Dorsey Dictionary of American Government and Politics. Chicago: The Dorsey Press.

Shannon, John, 1987. "The Return to Fend-for-Yourself Federalism: The Reagan Mark. Intergovernmental Perspective, vol.13, pp. 34-37.

Sharkansky, Ira, 1968. Spending in the American States. Chicago: Rand McNally.

Stephens, G. Ross, 1974. "State Centralization and the Erosion of Local Autonomy." Journal of Politics, vol.36, no.1, pp. 44-76.

Stonecash, Jeff, 1981. "Centralization in State-Local Fiscal Relationships." Western Political Quarterly, vol.34, no. 2, pp. 301-309.

Tennessee Advisory Commission on Intergovernmental Relations, 1993. Family Tax Burdens in Tennessee: A Comparative Analysis. Nashville, Tennessee: TACIR.

Thorogood, James E., 1949. A Financial History of Tennessee Since 1870. Nashville, Tennessee: Tennessee Industrial

School.

Wager, Paul, W., 1940. "State Centralization in the South." Annals of the American Academy of Political and Social Science, vol. 207, no.3, pp. 144-150.

Whelan, Robert K., 1984. "Book Review" of State-Local Relations: A Partnership Approach, American Political Science Review, vol. 78, no. 1, pp. 244-245.

White, Leonard D., 1933. Trends in Public Administration. New York: McGraw-Hill Book Company.

Zimmerman, Joseph, 1983. State-Local Relations: A Partnership Approach. New York: Praeger.

Vita

Russell Gregg Treadway was born in Johnson City, Tennessee on October 12, 1953. He attended Johnson City public schools graduating from Science Hill High School in 1971. He graduated from East Tennessee State University with a Bachelor of Science degree in Political Science in 1975. He obtained a Masters in City Management from E.T.S.U. in 1977. He received a Doctor of Philosophy in Political Science from the University of Tennessee in August 1995.

He served as City Administrator in Sevierville, Tennessee from January 1978 to September 1993. He was Assistant City Manager for Community Services in Johnson City, Tennessee from October 1993 to November 1994. He presently is the Director of Human Resources for Knox County, Tennessee.