## A COMPARATIVE ANALYSIS OF VARIABLES AFFECTING THE TAX REVENUE RELIANCE OF THE 50 UNITED STATES

# A SENIOR HONORS THESIS

Presented to The Faculty of the Department of Political Science University of Houston

> In Partial Fulfillment of the Requirements for Graduation with Honors

By Sharon Kaye Fitzgerald

December - 1978

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#### ABSTRACT

This study describes and contrasts variations in the tax revenue reliance of the 50 states. In addition, the linkages between measures of several demographic, socioeconomic, and governmental characteristics and tax revenue reliance is examined using correlational and regressional analytic methods. The variables examined as to their possible effect on tax reliance are: population density, population growth, urbanization, income, education, race, federal aid, and state taxing and spending constraints. Region is the control measure utilized.

Tax revenue reliance is found to be heaviest in those states located in the Midwest, with one-third of the 12 North Central states among the ten most heavily reliant states. The states which exhibit the least tax revenue reliance are found in the Western region; 46% of the 13 Western states are among the ten states which display the least tax revenue reliance.

In addition to this strictly comparative survey, correlational analysis is used to further this reliance pattern examination. The level of federal aid a state receives consistently exhibited the most significant, and negative, linkage to tax revenue reliance. This measure proved to be significant for all states, with or without region as a control. Only for the urbanization measure can this consistent significance also be found.

On the basis of the correlational analysis, regressional analysis was next utilized. Results of this regressional analysis indicate that once again federal aid is the most important determinant of tax reliance (r=-.74). This factor alone accounts for 55% of the total variance. The addition of the other variables only raises the explained variance to 60%. The governmental characteristic, state taxing and spending constraints, once again appeared to have little, if any, effect on the tax reliance pattern of the states.

The major significance of this research is the demonstration that the federal government has within its reach the ability to greatly affect the fiscal planning and dependency in the states. Depending on the role desired by the policy makers and citizens of each state, the active vs. passive role of each state government in execution of its taxation policies will result in the particular reliance pattern.

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#### Chapter I

Studying Tax Revenue Reliance Patterns in the States Introduction

The subject of taxation--federal, state, or local--rarely fails to evoke intense reactions from citizens and policy makers alike. Taxes affect everyone to some extent. Thus, the great interest in this topic. State and local governments together spend three times more than the federal government to provide services for their citizens. The cost of providing these services falls mainly on state- and locally-raised revenues, primarily tax revenues.<sup>1</sup> Such intensity of usage makes state tax revenue reliance patterns a subject of importance to students of state politics.

Demographic and socioeconomic conditions influence state governmental policies. Also influencing these policies are characteristics of the governments themselves. Together these factors can have little, if any, effect on each other, or they may work in close concert to shape the look of the state policies. This research will examine several of these variables to determine their relative effect on the taxation reliance patterns of the fifty states. The purpose of this study is to more fully determine how closely demographic, socioeconomic and political conditions are related to state variations in tax revenue reliance.

#### Research Design

Using correlational and regressional analysis, the linkages between demographic, socioeconomic, and governmental variables and state tax revenue reliance are examined. The units of analysis chosen for this research are the 50 states, examined comparatively as a part of one of the four normally recognized geographic regions (Northeast, South, North Central or Midwest, West).<sup>2</sup> Such analysis will help to determine what effect, if any, these variables have on the tax reliance of the states.

#### The Data

Fiscal, socioeconomic, and demographic data of the 50 states were collected for the fiscal years 1975 and 1976 from the U.S. Bureau of the Census annual publication <u>Statistical Abstract of the</u> <u>U.S. - 1976/1977</u>. Governmental data were collected from the July, 1978, publication of <u>Texas Town and City</u>.

#### Dependent Variable

The best measure of the relative intensity of usage of specific types of revenue is "reliance."<sup>3</sup> Tax revenue reliance, the dependent variable in this analysis, is defined as the percentage of the total general revenue received from taxes.<sup>4</sup> The U.S. Census Bureau's definition of total general revenue excludes utility revenues and employment-retirement revenues.<sup>5</sup> Thus, this study is concerned with that percent of a state's general revenue arising from its own tax sources.

#### Independent Variables

Prior research on tax revenue structures has suggested the importance of many environmental and governmental variables in

explaining tax revenue reliance patterns of the states. Those indicators which have been mentioned most frequently in the literature as having possible linkages to the dependent variable have been incorporated into this study. These variables are discussed below.

#### Demographic Variables

The population measures used in this study are population density and population growth. Population density is the number of persons per square mile of land area. The second measure, population growth rate is the percent population increase in the time period preceding each census. Here, the six years from the 1970 Census to the 1976 Census update are used.<sup>6</sup>

The third demographic variable represents the urbanization measure; the level of urbanization is determined by the percent of the population living in an urban area, as compared to a rural area.

#### Socioeconomic Variables

Four socioeconomic variables have been incorporated into this study--income, education, race, and federal aid dependency. The specific variables comprising these measures include: per capita income, the percent of the population completing four years of more of college, the percent of the black population, and the level of federal aid to the state.

### Governmental Variables

Constitutional and statutory constraints on revenue-raising are said to be important determinants of state policy regarding tax revenue reliance.<sup>7</sup> Thus, the political variables included in this

analysis are structural variables measuring the level of legal constraints upon state taxing powers. These measures utilized here are state taxing and spending limitations: truth in taxation requirements, levy limits, and spending limits.

Correlational analysis will be used to help determine which of the selected demographic, socioeconomic, and governmental characteristics of the state are more strongly associated with tax revenue reliance. Multiple regressional analysis, based on the correlational analysis results, will be utilized to ascertain which of the various demographic, socioeconomic, and governmental indicators prove to be the best predictors of tax revenue reliance variations among the states.

#### Previous Research

Since taxes are the most visible state revenue source they have been the subject of much revenue-related research over the past two decades. Given the increased visibility of state taxes during recent periods of economic adversity it is not unexpected that this policy area has come to the forefront of state studies, both theoretically and empirically.

The criteria for a "good tax," as advanced by many researchers, identifies equity, efficiency, productivity, ease of collection, stability of yield, and convenience as the desirable goals. However, there are no purely objective standards against which to measure the equitability, economic effect, revenue productivity, or efficiency of specific tax policies. "Equity" is usually expressed in terms of the actual regressivity of a tax. For example, sales taxes are generally

considered "inequitable" in that they tax consumption which places a greater relative burden on the poor.<sup>8</sup> Yet, the principle of "equity" can be viewed from a different perspective. This one is concerned with the "equity vs. efficiency" question: should taxes be structured so as to be equitable (facilitating a redistribution of wealth) or should they be efficient (output of services equals input of taxes).<sup>9</sup> Obviously, not all governments have the same values regarding the goal of taxation.

Similarly, there are no universally-accepted measures to allow computation of productivity or economic effects of various taxes. These effects simply cannot be measured apart from the value environment from which they emerge. The theory of state government finance is not yet sophisticated enough to have established fixed rules for evaluating trade-offs among various taxing objectives. Thus, relative, and not absolute, judgments tend to be characteristic of state tax studies.<sup>10</sup> In fact, states tend to evaluate their tax structures in terms relative to their neighboring states. For this reason, much of the earlier state tax revenue research is of this comparative bent.

#### General Tax Studies

An excellent overview of the politics of state taxation is presented by Clara Penniman in an article entitled "The Politics of Taxation."<sup>11</sup> She describes the basic structure of state tax policies and options and ranks the states in terms of per capita taxes, tax burdens, tax collections by source, "critical" tax choices, and highvs. low-tax states. Another study utilizing this comparative framework is that by Thomas R. Dye--<u>Politics, Economics, and the Public: Policy</u> <u>Outcomes in the American States</u>.<sup>12</sup> While observing that taxes are the

largest source of public revenue (accounting for 55% of all state revenue in 1961<sup>13</sup>), he focuses on the explanations for the states' tax policy differences. Dye finds that a measure of economic development (industrialization, urbanization, wealth, and education) is the best predictor of state variations in tax reliance.<sup>14</sup> More recent research has reaffirmed this finding.

## Fiscal Capacity and Effort

Researchers James A. Maxwell and J. Richard Aronson found that state and local governments together spend three times as much as the federal government to provide civilian services for citizens.<sup>15</sup> (By 1975 taxes from "own" sources provided 60% of the states' general revenue.<sup>16</sup>) From this increased use of and interest in state tax revenue reliance grew the enthusiasm for studying the fiscal capacity and effort of the states.

The major mode of analysis in this area is comparative analysis. The Advisory Commission on Intergovernmental Relations (ACIR) in 1971 released an information report which was the result of an effort to develop comparative fiscal measures of the taxing capacity and effort of the states.<sup>17</sup> Per capita personal income was replaced by the "average financing system" as the measurement of this capacity and effort. It was found that use of personal income as the measuring device resulted in sizable discrepancies; capacity and effort were either underor over-indicated.

The average financing system is the method by which the revenue capacity of any state is defined as the total amount of revenue that would result by applying, within the state, the national average effort rate of each of the state revenue sources.<sup>18</sup> Such a measure enabled

the determination of the amount of revenue within reach of the state through the use of "average" taxes and tax rates. The study found that because of differences in the scope of direct state handling of particular functions and the extent to which states provide grants-inaid, the individual states' share of total state-local taxes ranged from about one-quarter to a little less than two-thirds.<sup>19</sup>

Another study on the fiscal capacity and effort of the states examining unutilized tax resources, reinforces the ACIR's findings. This report, <u>State and Local Revenue Potential--1970</u><sup>20</sup> focuses on the Southern region, although it measures the tax capacity of all 50 states. This study found that the average Southern state utilizes only about 83% of its tax revenue potential.<sup>21</sup> Regional comparisons show the New England states utilize all but \$.11 per capita of their potential as opposed to the \$48.06 per capita in Southern states.<sup>22</sup> These disparities have ramifications not only for the tax revenue reliance of each state, but also for the amount of intergovernmental funds a state will want or need to solicit.

#### Intergovernmental Fiscal Relations

An immensely important development of the past four decades has been the escalation of intergovernmental transfers, particularly in the form of grants and shared taxes. As a result, the literature on this topic has become quite predominant in the area of state tax revenue policies. From the upsurge of federal aid to states during the New Deal era, to the controversy over revenue sharing in the Nixon Administration, the impact of federal dollars has been great on the tax revenue reliance patterns of the states. Maxwell and Aronson point out that grants increased from 18.9% of state-local taxes in 1963 to 32.6% of

state-local taxes in 1973.<sup>23</sup> But perhaps the most comprehensive (although somewhat data-dated) study of intergovernmental fiscal relations has been by George F. Break.<sup>24</sup> This study discusses tax coordination, functional and unconditional grants-in-aid, and fiscal prospects for the states. Presented as a background paper for discussion at a conference in 1965, this research is definitive in the area of intergovernmental fiscal relations. Break advances the claim that both state and local governments will need assistance from the national government if they are to perform their traditional roles in our federal system.<sup>25</sup> Fiscal trends bear this contention out--state receipts from the federal government rose to 21.2% of state expenditures by 1964 from a low of 1.6% in 1902.<sup>26</sup>

Thus, from this brief survey of the literature, it can be seen that while the scholarly research on state tax revenue policy has always been around to some extent, it has been only in the past few years that this topic has received the attention it merits. The fiscal trends of the states can be traced from a year-to-year survey of the writings. <sup>1</sup>James A. Maxwell and J. Richard Aronson, <u>Financing State and</u> <u>Local Governments</u>, 3rd ed. (Washington: The Brookings Institution, 1977), p. 1.

<sup>2</sup>U.S. Department of Commerce, Bureau of the Census, <u>U.S.</u> <u>Statistical Abstract-1977</u> (Washington: U.S. Government Printing Office, 1977), inside cover.

<sup>3</sup>Susan A. MacManus, "The Impact of Functional Responsibility and State Legal Constraints on the 'Revenue Debt' Packages of U.S. Central Cities" (1978), p. 3.

<sup>4</sup>Susan A. MacManus, "Tax Structures in American Cities: Levels, Reliance, and Rates," <u>Western Political Quarterly</u>, Vol. XXX, No. 2 (1977), p. 275.

<sup>5</sup>Ibid., p. 273.

<sup>6</sup>U.S. Department of Commerce, Bureau of the Census, published report, 1977.

<sup>7</sup>Clara Penniman, "The Politics of Taxation," <u>Politics in the</u> <u>American States--A Comparative Analysis</u>, 3rd ed., Herbert Jacobs and Kenneth N. Vines, eds. (Boston: Little, Brown and Company, 1976), pp. 445-447.

<sup>8</sup>Ibid. #1, p. 106.

<sup>9</sup>Werner Z. Hirsch, <u>The Economics of State and Local Government</u> (New York: McGraw-Hill Book Company, 1970), p. 191.

<sup>10</sup>Tax Foundation, Inc., <u>State Tax Studies: 1959-1967</u> (New York, 1967), p. 13.

<sup>11</sup>Clara Penniman, "The Politics of Taxation," <u>Politics in the</u> <u>American States--A Comparative Analysis</u>, 3rd ed., Herbert Jacob and Kenneth N. Vines, eds. (Boston: Little Brown and Company, 1976) pp. 428-463.

<sup>12</sup>Thomas R. Dye, Politics, <u>Economics, and the Public: Policy</u> <u>Outcomes in the American States</u> (Chicago: Rand McNally and Company, 1966), pp. 178-209.

<sup>13</sup>Ibid., p. 182. <sup>14</sup>Ibid., pp. 186-209. <sup>15</sup>Ibid. #1, p. 1. <sup>16</sup>Wayland D. Gardner, <u>Government Finance--National, State, Local</u> (New Jersey: Prentice-Hall, Inc., 1978), p. 295.

<sup>17</sup>Advisory Commission on Intergovernmental Relations, <u>Measuring</u> <u>the Fiscal Capacity and Effort of State and Local Areas</u> (Washington: U.S. Government Printing Office, 1971).

<sup>18</sup>Ibid., p. 7. <sup>19</sup>Ibid., p. 5. <sup>20</sup>Kenneth E. Quindry, <u>State and Local Revenue Potential, 1971</u> (Atlanta: Southern Regional Education Board, 1972). <sup>21</sup>Ibid., p. iii. <sup>22</sup>Ibid., p. 44. <sup>23</sup>Ibid. #1, p. 47. <sup>24</sup>George F. Break, <u>Intergovernmental Fiscal Relations</u> (Washington: The Brookings Institute, 1965). <sup>25</sup>Ibid., p. vii. <sup>26</sup>Ibid., p. 5.

#### Chapter II

#### Historical Overview of State Taxation

Tax decisions in the American states are influenced by the political, social, and economic circumstances which are unique to each. Beginning with Adam Smith and The Wealth of Nations in 1776, scholars have attempted to define the characteristics a "good" tax should possess. Among these qualities are: 1) equity--the tax burden should be placed with some consideration of the taxpayer's ability to pay and the benefits to be derived from the taxation; 2) certainty-every taxpayer should know in advance what his/her tax liability will be; 3) convenience--the time, place, and method of collection should be fixed so as to cause the average taxpayer the least possible trouble; 4) economy--the cost of administering a tax should not exceed 5% of the gross amount collected; 5) stability of yield--dependable yield in both good years and bad facilitate intelligent fiscal planning; 6) conservation of tax sources -- a tax should not be confiscatory or have the effect of driving away business and investment capital.<sup>1</sup> Thus, the particular tax revenue reliance/policies of each state will be a function of its interpretation of the "goodness" or "badness" of a tax source; this interpretation, naturally, is primarily the result of the political, social, and economic characteristics of the state. (See Table I for an historical compilation of revenue sources of the states.)

## TABLE I

Year	From Federal Government	From Local Government	Income Taxes	General Sales Taxes	Motor Fuel Taxes	Alcohol and Tobacco Taxes	Other Taxes	Charges	Insurance and Utilities
1902	1.6%	3.1%	anji 440 anji				71.3%	13.0%	1.1%
1913	1.6	2.7				0.5%	79.5	15.7	
922	7.3	2.0	7.4%		1.0%		61.3	13.3	7.8
932	8.7	1.8	6.0	0.3%	20.7	0.7	46.6	10.5	4.6
940	11.6	1.0	8.0	8.7	14.6	5.1	21.3	6.0	23.6
950	16.4	1.1	8.4	12.0	11.1	6.0	18.5	6.5	19.0
960	19.5	0.6	10.3	13.1	10.2	4.8	16.6	7.9	16.7
1961	19.0	0.6	10.5	13.0	9.9	4.9	16.7	8.2	17.1
975	26.9	1.2	18.9	18.4	9.7	3.9	5.5	11.6	3.8

## A COMPARISON OF STATE SOURCES OF REVENUE, 1902-1975

Sources: U.S. Bureau of the Census, <u>Historical Statistics of the United States</u> (Washington: U.S. Government Printing Office, 1960), pp. 727, 729.

Wayland D. Gardner, <u>Government Finance - National, State and Local</u> (New Jersey: Prentice-Hall, Inc., 1978), p. 295.

## Political Characteristics

All states share the limitations on state taxing powers imposed by the U.S. Constitution. However, the political features of each state do have an effect on the tax revenue policies that state adopts. Initially, the state's constitution determines many aspects of the tax reliance plan. It is in the state's own constitution that historical differences can be found. A state's constitution may have prohibitions against indebtedness, increased tax rates, certain forms of taxation, and the total level of taxes. Additionally, a state may require balancing the budget and/or earmarking and allocation of revenues.<sup>2</sup>

State limitations on local taxing powers will also have an effect on the tax revenue path the state has followed over the years. Research has pointed to the fact that the more restrictions a state places on the taxing authority of its local governments, the more centralized the state's government is likely to be.<sup>3</sup> Since the Southern states historically have been more centralized than other states, due in part "to a colonial experience of diffuse population and a plantation economy that did not nurture the development of autonomous towns, the Southern states provide a larger share of the state/local revenue".<sup>4</sup> It might be hypothesized, then, that the Southern states are the most local-taxingpower restrictive. The facts do not bear this assumption out, however. The most common type of state control over local fiscal activity involves the use of the local property tax.<sup>5</sup> As Table II indicates, Southern states are not alone in placing fiscal limitations on their localities. Both the midwestern and western states join the South imposing this tax constraint. Only the northeastern states do not follow this pattern. Among the northeastern states, only two (New York and Pennsylvania) impose rate limits and none restrict local property levy limits.

## TABLE II

## LOCAL TAX LIMITS IN 1974

Rate Limit (26 states)	Levy Limit (12 states)	No Limit (12 states)
Alabama Arkansas Georgia Idaho Illinois Iowa Kentucky Louisiana Michigan Mississippi Missouri Nebraska Nevada New Mexico New York North Carolina North Dakota Ohio Oklahoma Pennsylvania South Carolina South Dakota Texas Utah West Virginia Wyoming	Alaska Arizona California Colorado Florida Indiana Kansas Minnesota Montana Oregon Washington Wisconsin	Connecticut Delaware Hawaii Maine Maryland Massachusetts New Hampshire New Jersey Rhode Island Tennessee Vermont Virginia

Notes: States divided into groups according to two criteria: 1)whether any type of local tax limit existed in the state in fiscal 1974; and 2) existence of a)no limits; b)property tax rate limits only; and c)some form of levy limit.

Source: Advisory Commission on Intergovernmental Relations, <u>State</u> <u>Limitations on Local Taxes and Expenditures</u> (Washington: U.S. Government Printing Office, 1977), p. 20. Northeastern states, then, have clearly had different tax revenue options than states in other parts of the country.

Recently, the states have begun to alter the limitations they have placed on themselves and on their local governments (beginning with California's Proposition 13). Almost every state constitution, however, continues to ignore the advice of the National Municipal League that "ideally, a constitution should be silent on the subject of taxation and finance, thus permitting the legislature and the governor freedom to develop fiscal policies for the state to meet the requirements of their time."<sup>6</sup> State constitutions can be amended, but amendment means time, unusual majorities, and overcoming the fears of future legislative extravagance or legislative favoritism that wrought these constitutional constraints initially. Thus, the limit(s) unique to each state's constitution is one historical factor influencing the tax revenue reliance traits of that state.

Another political factor which is often indicated as historically influencing the tax revenue policies of a state is the party traditionally in control. Dye has found that there is some tendency for Democratic and Republican states to differ in their tax and revenue policy outcomes in that Democratic states tend to rely more upon state sources of revenue while Republican states tend more toward a reliance on local property taxes.<sup>7</sup> However, further research indicates that once economic development is controlled for the effect of partisanship on tax and revenue policy disappears.<sup>8</sup> Democratic states do seem to have had significantly lower tax and revenue levels, and less reliance on local sources of revenue, but this is more a result of economic than partisan influence. Also, there is no evidence that either party influences the selection of particular taxes that a state will utilize as its principal source of revenue. This pattern, then, indicates that partisanship is not really a plausible explanation of each state's tax revenue reliance policy. Other factors seem to be more influential in determining the historical reliance structures of a state.

#### Social Characteristics

Social factors, while perhaps the weakest indicator, have had an historical impact on state tax revenue reliance structures. The current period of time is marked by an eclectic pursuit of revenues; there does remain, however, distinct traditions in the taxes a state prefers and will utilize. For example, only recently have the tobacco states (North Carolina and Virginia) abandoned their long-held traditions against taxation of tobacco. In other cases, traditionally moreprogressive states have had to fight "bitter legislative and media battles to enact regressive sales taxes".<sup>9</sup> It is easy to understand how these historically-held values would effect the whole tax reliance scheme of a state; social prohibitions against one tax often result in a trade-off reliance on another tax, or a nontax resource.

Taxation has always been a politically volatile issue. The historical path a state has followed, then, can often be traced to the "mood" of the citizens. No politician or party desires being saddled with a "high-tax" reputation. Thus, the tax revenue reliance of a state is in part a function of the willingness of the population to be taxed, or to be taxed by certain taxes. Each state's population has its own unique "tax limit" where the benefits to be derived no longer equal the burden. The progressive level of a state affects the reliance level due to the infinite variety of exemptions and "reliefs" a state can offer its citizens. The last decade has witnessed an immense growth in the number of property tax relief programs for householders. Property tax relief can now be found in all 50 states, in some form or another.<sup>10</sup> It began with Wisconsin's offering of a "property tax relief" program as a protection to its poorer citizens from regressive taxation.<sup>11</sup> (This relief program initiated by Wisconsin in 1964 is the popular "circuit breaker" program.) Tables III and IV show the current status of circuit-breaker programs among the states.

Property tax circuit-breakers are tax relief programs designed to protect household incomes from excessive property taxes. When the property tax bill exceeds a fixed percentage of the family income, the circuit-breaker goes to work and relief is granted from the excessive taxes. Relief usually takes the form of a direct reduction in the property tax bill, a refundable credit against state income taxes, or a cash refund.<sup>12</sup> The ramifications of this relief on a state's tax reliance are obvious, particularly for those states which specify the relief as a credit against state income taxes. This type of refund directly reduces the actual tax revenues available, and therefore the reliance possible. However, actual costs to the states do not appear to be significant. although accurate figures are not available due to the recent adoption of these circuit-breaker programs.<sup>13</sup> The effects of the current circuit-breaker programs on tax reliance levels of the affected states deserve consideration. It is likely that this expression of the social value of "relief" will have tax revenue ramifications in the future.

Another social factor influencing a state's tax reliance is its "uniqueness" with regard to sources of wealth. For example, only those

## TABLE III

## COVERAGE OF STATE CIRCUIT-BREAKER PROGRAMS, 1974

No Circuit	Basic	Expanded,	General or
Breaker	Coverage <sup>a</sup>	Coverage <sup>b</sup>	Broad Coverage <sup>C</sup>
Alabama Alaska Delaware Florida Georgia Hawaii Kentucky Louisiana Massachusetts Mississippi Montana Nebraska New Hampshire New Jersey New Mexico New York North Carolina Rhode Island South Carolina South Carolina South Dakota Tennessee Texas Utah Virginia Washington Wyoming	Arkansas California Idaho Kansas Ohio Oklahoma	Arizona Colorado Connecticut Illinois Indiana Iowa Maine Minnesota Missouri Nevada North Dakota Pennsylvania West Virginia	Maryland Michigan Oregon Vermont Wisconsin

Notes: <sup>a</sup>Relief to elderly homeowners.

<sup>b</sup>Relief to elderly homeowners and renters.

<sup>C</sup>Relief to eligible homeowners and renters regardless of age.

Source: Advisory Commission on Intergovernmental Relations, <u>Property</u> <u>Tax Circuit-Breaker: Current Status and Policy Issues</u> (February, 1975), p. 4.

#### TABLE IV

#### TYPE OF STATE CIRCUIT-BREAKER PROGRAMS, 1974

No Circuit-Breaker	Threshhold-Type Formula <sup>a</sup>	Sliding Scale Approach <sup>b</sup>	Other Formula <sup>c</sup>
Alabama Alaska Delaware Florida Georgia Hawaii Kentucky Louisiana Massachusetts Mississippi Montana Nebraska New Hampshire New Jersey New Mexico New York North Carolina Rhode Island South Carolina South Dakota Tennessee Texas Utah Virginia Washington Wyoming	Arkansas Connecticut Illinois Kansas Maryland Michigan Missouri Nevada North Dakota Oklahoma Vermont West Virginia	Arizona California Idaho Indiana Iowa Minnesota Ohio Pennsylvania	Colorado Maine Oregon Wisconsin

Notes: <sup>a</sup>A fixed percentage of household income is set - any tax above this portion is "excessive" and qualifies for relief.

<sup>b</sup>A fixed percentage of property tax is rebated for each eligible taxpayer within a given income class.

<sup>C</sup>Formulas unique to each state.

Source: Advisory Commission on Intergovernmental Relations, <u>Property Tax</u> <u>Circuit-Breakers: Current Status and Policy Issues</u> (February, 1975), p. 4. states with abundant natural resources can depend on large sums of revenue from severance taxes, rents, and royalties. Those states without such resources must get their revenue from other sources. Likewise, states rich in oil and mineral deposits, such as Texas, Louisiana, New Mexico, and Oklahoma, have the option of taxing other areas less, and exporting some of their taxes. This option is not open to such resource-poor states as Ohio, Rhode Island and New Hampshire.

Finally, as a state's population grows and becomes more dense, and as inflation increases yearly, citizens demand new and/or better services. This increased demand necessitates increased capital outlays for roads, school systems, and water-supply and sewage systems, and each state has to look for additional revenue sources to meet the demand for increased expenditures. The solution--or stopgap--chosen will likely be a continuation of the tax revenue reliance history of that state, and consistent with the social and political mores of the state's population.

## Economic Factors

Economic factors have long been considered to be one of the more influential factors affecting a state's tax revenue structure. In fact, economic considerations have often led states to evaluate themselves against neighboring states in terms of the burden of taxes on specific industries and groups, and in terms of the particular tax revenue choices chosen.<sup>14</sup> This comparison has actually resulted in less tax revenue reliance diversity among the states as one state tends to follow the lead of another state so as not to be at an economic disadvantage. This pattern, however, does not override all tax-competition differentials--Nevada still chooses not to enact an inheritance tax, while Florida offers tax advantages to the elderly. Historic decisions, then, affect the "tax dependency" of a state. While economic factors may have influenced a state's tax policy in general, recent studies have indicated that the economic development of a state has been overrated as an influence. Economic development is determined by the income, education, and urbanization levels of each state. As Clara Penniman has found in her research on economic traits and state tax policies, statistical testing of industrialization, affluence, and economic development with tax policy choices produces no significant correlation.<sup>15</sup> As Table V indicates, there is no readily discernible pattern (by either income or urbanization) to indicate why states prefer specific taxes. Thus, from this analysis it appears that economic development did not play a major historical role in determining the tax revenue reliance policies of a state as might be thought on the basis of Dye's research.

The findings of Sharkansky and Hofferbert emphasize the multidimensionality of state economical and political settings and tax policies. They find that the relationships among the economic, political, and tax policy factors are generally stronger than the relationships between individual variables.<sup>16</sup> Therefore, it can be seen that the particular traits unique to each state historically determine, to a large extent, the tax revenue reliance of that state; it will be difficult, then, and somewhat foolhardy to draw causal inferences about each state's policy <u>solely</u> from political, economic, or social factors.

This chapter would not be complete without at least mention of another theory regarding the determinants of state tax policies. Ira Sharkansky has found that political, social, and economic factors are less successful predictors of state tax policies than the state's previous year's budget.<sup>17</sup> However, tradition or incrementalism as an explanation

## TABLE V

## STATES MAKING HEAVIEST USE OF SPECIFIED TAXES, 1972

Sales and Excise <sup>a</sup>	Income <sup>a</sup>	Severance, Rents, and Royalties <sup>b</sup>
Florida Hawaii Maine Mississippi South Dakota Tennessee Washington West Virginia Wyoming	Alaska Maryland Massachusetts Minnesota New York Oregon Virginia Wisconsin	Louisiana New Mexico Oklahoma Texas Wyoming

Notes: <sup>a</sup>Each state listed obtains at least 37% of its general tax revenue from either sales or income taxes, and there is a spread of at least 10% between its use of the other tax.

<sup>b</sup>These are states that collect at least 10% of the total taxes from severance, rent, and royalty taxes on natural resources within their boundaries.

Source: Clara Penniman, "The Politics of Taxation", <u>Politics in the</u> <u>American States</u>, Herbert Jacobs and Kenneth N. Vines, eds. (Boston: Little, Brown and Company, 1972), p. 450. of state tax revenue reliance policies does not answer the questions of how a state's individual tax policies began, and what caused the shifts in tax revenue policies through the years. Research is needed on the economic, political, and social histories of the states to provide explanations of the tax policy choices made in each state--and therefore, the reliance measure unique to each state.

#### Intergovernmental Relations

The historical pattern of dual taxation began with the adoption of the income tax law by Wisconsin in 1911 and the general sales tax by West Virginia in 1921. Now, such a practice is both common and necessary. In addition to the 50 state governments there are the federal government, and over 80,000 separate local governments which can levy and collect taxes.<sup>18</sup> As a result, governments at all three levels-federal, state, local--have developed tax specialization, with major reliance on one or two taxes at each level. The federal government has relied on the income tax, which until recently preempted it as a source of state revenue. The states, in general, have specialized in the consumption taxes--the general and selective sales taxes--leaving the property tax in the domain of the localities. As can be seen in Figure 1, the distribution of tax revenues among the three levels of government shows the trend toward specialization; use of each of the three major taxes tends to be monopolized by one of the three governments.

This monopolization, however, is increasingly losing out to a less specialized tax reliance system. As citizens' demands increasingly require more revenue dollars, each level of government has begun encroaching on the special tax of the upper level(s) of government.

## FIGURE I

## DISTRIBUTION OF TAX REVENUES AMONG LEVELS OF GOVERNMENT, 1968: BY BROAD TAX CATEGORIES



Source: L. L. Ecker-Racz, The Politics and Economics of State-Local Finance (New Jersey: Prentice-Hall, 1970), p. 34.

Persistent revenue pressures have forced state and local governments to reach for new tax revenue sources which they had previously disdained or been prohibited from using. What this means to the states is that their historical sources of tax revenue are no longer adequate to meet increased expenditure needs, and therefore states are utilizing new tax sources--sources which are being used by other levels of government. Thus, there is relatively less revenue for the states to rely on from these sources--less yield per tax per government.

States competing with the federal and local governments for the same tax dollars bring about not only dual taxation, but dual preparation of returns, dual tax administration, and dual tax assessing, collecting, and auditing. This inefficiency has created a new dimension in federal-state-local tax revenue usership. As responsibilities shift so do the revenue requirements and the reliance of each level of government on a particular tax. Thus, the tax revenue reliance of the states can be altered as a result of these new dimensions of tax overlapping and its problems and points. Chapter III examines this new dimension. Notes, Chapter II

<sup>1</sup>Joseph F. Zimmerman, <u>State and Local Government</u> (New York: Barnes and Noble Books, 1976), pp. 225-240.

<sup>2</sup>Clara Penniman, "The Politics of Taxation," <u>Politics in the</u> <u>American States--A Comparative Analysis</u>, 3rd ed., Herbert Jacob and Kenneth N. Vines, eds. (Boston: Little, Brown and Company, 1976), p. 447.

<sup>3</sup>Thomas R. Dye, <u>Politics in States and Communities</u>, 3rd ed. (New Jersey: Prentice-Hall, Inc., 1977), p. 59.

<sup>4</sup>Ibid.

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<sup>5</sup>Advisory Commission on Intergovernmental Relations, <u>State</u> <u>Limitations on Local Taxes and Expenditures</u> (Washington: U.S. Government Printing Office, 1977), p. 12.

<sup>6</sup>Ibid., p. 446.

<sup>7</sup>Thomas R. Dye, <u>Politics, Economics, and the Public--Policy</u> <u>Outcomes in the American States</u> (Chicago: Rand-McNally and Company, 1966), p. 204.

<sup>8</sup>Ibid., p. 205.

<sup>9</sup>Ira Sharkansky, <u>The Maligned States--Policy Accomplishments</u>, <u>Problems, and Opportunities</u> (New York: McGraw-Hill Book Company, 1972), pp. 68-69.

<sup>10</sup>Advisory Commission on Intergovernmental Relations, <u>Property</u> <u>Tax Circuit-Breakers: Current Status and Policy Issues</u> (Washington: U.S. Governmental Printing Office, 1975), p. 1.

<sup>11</sup> Ibid. #9, p. 74.
<sup>12</sup> Ibid. #10, p. 2.
<sup>13</sup> Ibid. #10, pp. 407.

<sup>14</sup>Tax Foundation, Inc., <u>State Tax Studies: 1959-1960</u> (New York: 1967), p. 13.

<sup>15</sup>Ibid. #2, p. 451.

<sup>16</sup>Ira Sharkansky and Richard J. Hofferbert, "Dimensions of State Politics, Economics, and Public Policy," <u>The American Political Science</u> <u>Review</u>, Vol. LXIII (1969), p. 878. <sup>17</sup>Ira Sharkansky, <u>The Politics of Taxing and Spending</u> (Indianapolis: The Bobbs-Merrill Company, Inc., 1969), p. 146.

<sup>18</sup>L.L. Ecker-Racz, <u>The Politics and Economics of State-Local</u> <u>Finance</u> (New Jersey: Prentice-Hall, Inc., 1970), p. 31.

#### Chapter III

## New Directions in State Taxing Policies

Increased responsibility in the states for provision of services has forced state governments to seek new or expanded revenue sources. Consequently, states have adopted new tax structures and have restructured old tax rates and bases.

## 01d Taxes

While the practice of increasing tax revenues simply by changing the tax rate or base is not a "new direction in state taxing policies" it is by far the most widely used. Decision-makers in the states have discovered that it is much easier politically and administratively to make marginal changes in existing tax rates and tax bases than to impose new taxes or to have to deal with the political and administrative problems involved in developing a new revenue source. Incrementalism is perhaps the ruling paradigm in the field of tax policy analysis.<sup>1</sup> The popular sentiment towards this feature is summarized in the adage "an old tax is a good tax." In other words, once a tax has been imposed it is difficult to rescind and therefore it soon becomes "acceptable"; governmental institutions come to depend on the tax as a source of revenue and citizens come to expect a certain level of service from the tax's revenue. Thus, it is easier to accept an increased tax burden from a "tried and true" tax than from an untested, new tax. While state tax yields are influenced by underlying economic conditions, sharp year-to-year changes in amounts for individual states generally reflect

the effect of legal changes in the base, rate, or collection-timing of the particular taxes in question.<sup>2</sup>

#### Tax Capacity--Tax Effort

State governments are quite varied in their relative usage of tax sources. This variety allows for measurement of the actual tax revenue reliance of a state as compared to the potential tax revenue reliance of the state. In this section the tax capacity and tax effort of the 50 states will be examined as possible avenues of new or increased revenue from taxation.

The revenue capacity of a state is defined as the total amount of revenue that would result by applying, within the state, the national average rate of each of the numerous kinds of state revenue sources. $^{3}$ This "average financing system" replaces the previously used measurement of per capita personal income. It was found that use of personal income as the measuring device resulted in sizable discrepancies; capacity and effort were either under- or over-indicated, as Tables VI and VII reveal. Many factors contribute to the divergence between relative revenue capacity and effort, their actual financing system, and the fiscal scheme as it is inferred simply from the personal income data.<sup>4</sup> These factors include the fact that where mining, tourism, or agriculture are important elements of the state's economy, the state is more likely to exhibit relatively more revenue-raising capacity than the income statistics would suggest. Also a factor is the degree to which a state will tap their nontax resources; those states that do use this source considerably more than the average rate will not be differentiated by the income measurement system.<sup>5</sup> Thus, finding that per capita

## TABLE VI

# MEASUREMENT OF PER CAPITA PERSONAL INCOME AS AN INDICATOR OF RELATIVE TAX REVENUE CAPACITY

Under-Indicator of Capacity	Within 1% Either Way as an Indicator of Capacity	Over-Indicator of Capacity
Wyoming	Georgia Hawaii North Carolina	Pennsylvania16% Rhode Island15 Connecticut14 Massachusetts14 New Jersey12 Maryland11 Illinois9 Ohio7 New York6 Indiana5 Maine5 South Carolina5 Vermont5 Michigan4 Wisconsin4 Missouri2 West Virginia2

Source: Advisory Commission on Intergovernmental Relations, <u>Measuring</u> <u>the Fiscal Capacity and Effort of State and Local Areas</u> (Washington, D.C., 1971), pp. 10-11.

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## TABLE VII

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# MEASUREMENT OF PER CAPITA PERSONAL INCOME AS AN INDICATOR OF RELAVIVE TAX EFFORT

Under-Indicator	Within 2% Either Way as	Over-Indicator
of Effort	an Indicator of Effort	of Effort
Alaska	Indiana Iowa Maine Minnesota Missouri New York Tennessee Texas Vermont West Virginia Wisconsin	Wyoming48% Nevada39 Louisiana20 Montana16 New Mexico16 Oklahoma14 Arizona12 New Hampshire12 California11 Florida10 Idaho

Source: Advisory Commission on Intergovernmental Relations, <u>Measuring</u> <u>the Fiscal Capacity and Effort of State and Local Areas</u> (Washington, D.C., 1971), pp. 16-17.

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personal income was not an adequate measure, an alternative measure has increasingly come to be used.

This alternative method, devised by the Advisory Commission on Intergovernmental Relations (ACIR), is the average financing system, calculated by: 1) determining for each of the various kinds of state taxes a national average rate which, if applied throughout the nation, would have produced the same total amount of revenue that state governments actually obtained from the particular type of tax; 2) estimating by state the potential yield of each type of tax, if imposed at this uniform nationwide rate; and 3) aggregating these potential yield amounts for each state to arrive at an estimate of its total tax capacity.<sup>6</sup> The rationale behind using this average financing system was an attempt to achieve a meaningful summary measure of the relative tax revenue capacity for each state, weighting the various elements of potential capacity according to their relative contributions to the total of all revenues raised by the states. This weighting seems more likely to produce a summary capacity estimate with which actual revenue-raising performance can be logically compared.<sup>7</sup> While this weighting does apply mainly to nontax revenue sources, the summary of tax revenue capacity is rendered more realistic. Thus, when these average rates are applied in a state, the result is an estimate of the amount of revenue the state would collect if it utilized the standard tax revenue-raising devices at a rate average for the nation.

The relative tax revenue effort is estimated by comparing actual tax revenue collected with the revenue capacity.<sup>8</sup> Therefore, this comparison yields a measure of each state's tax revenue capacity and tax effort; potential "new" sources of tax revenue are thus exposed. If
a state is not fully utilizing the resources of a tax already in use, expansion of the rate and/or base will result in increased tax revenue, and probably at the minimum political cost. If a state fails to utilize a tax revenue source currently, the potential for a new direction in taxation is present.

The potential for these new directions in taxation are summarized in Table VIII. In 1970 the combined unutilized tax revenue potential of the 50 states was close to \$16 billion. As the table indicates, the range of tax potential under-utilization ran the gamut from a low of \$18,789,000 in Vermont, to a high of \$1,503,615,000 in Tennessee. Some states prefer to levy fees or user charges in lieu of taxes to hold down their relative tax effort. Other states depend on federal assistance to a greater extent, thereby reducing effort. And tax exporting through tourism, industries involved in interstate commerce, and extraction industries, is particularly significant in affecting the capacity and effort of a state. Thus, tax potential utilization is affected; as a state relies more or less on revenue sources other than taxes, their tax utilization will decrease and tax revenue reliance along with it. Thus, differences among states will continue to exist so long as each state concludes that their own, unique tax reliance structure is preferable.<sup>9</sup>

The average financing system advocated by the ACIR has shown rather large differences among the states in their per capita tax revenue capacity.<sup>10</sup> The less revenue capacity available to a state, the less tax reliant it is likely to be (Table IX portrays this diversity). As expected, tax revenue capacity of a state is directly related to that state's tax revenue reliance. However, federal aid to a state is

## TABLE VIII

# SUMMARY OF UNUTILIZED TAX REVENUE POTENTIAL, BY REGION, 1971 (In Thousands)

State and Region	General Sales and Gross Receipts	Selective Sales and Receipts	General Property Taxes	Individual Income Taxes	Corporate Income Taxes	0ther <sup>a</sup>	Total Unutilized Potential
Nonthoact				<u> </u>			\$3 100 110
Connecticut	¢ 50 160	¢ 31 210	v	¢210 173	· <b>v</b>	¢ 18 //20	\$3,400,443 360 211
Maino	φ 033100	₽ 34,249 10 21A	Ň	φ <u>240</u> ,473	\$ 7 678	J 10,423	56 156
Maccachusetts	366 450	10,314	×	33,022	φ <b>/ ,</b> 0/0	70 235	538,099
Now Hampshino	60,906	8 662	×	12 537	1 207	1 1 37	115 350
New Jansov	222,355	7/ 3/3	×	574 001	5/ 737	27 078	052 501
New Vonk	ZZZ,303	211 670	, V	0749001 V	JT 3/ J/ V	36 0/8	248 618
New IUIK Ponneylyania	31 300	116 674	*622 611	250 107	Ň	36 5/1	1 068 646
Phode Island	783	5 078	3022,044	200,407	×	1 028	A1 255
Vormont	16 / 55	1 125	1,000	23,213	1 027	4,020	10 511
vermone	10,400	1,105	×	~	1,057	1,004	12,011
South							7,436,756
Alabama	X	6,254	333,195	86,738	17,402	49,469	493,058
Arkansas	6,964	14,321	131,523	57,187	2,158	13,533	225,686
Delaware	55,254	9,142	66,348	x	22	443	131,209
Florida	x	19,292	326,397	466,377	131,235	40,593	983,894
Georgia	X	25,840	242,263	98,578	x	76,800	443,481
Kentucky	X	53.041	247,439	x	11,382	41,787	353,622
Louisiana	X	X	265,544	120,944	5,785	42,655	434,987
Maryland	120,759	81,950	133.848	x	15.860	25,853	378,270
Mississippi	X	10.355	106,220	59,954	9,733	21,848	208,110
Oklahoma	56.237	1,196	149,050	90,736	18,235	12,524	328,104
North Carolina	75.787	38,741	344,194	X	X	31,585	490,307
South Carolina	X	7,240	192,012	31,327	X	29,466	260.045
Tennessee	X	10,515	242,401	210,291	3,160	8,729	475.096
Texas	137.887	35,628	308,712	719.253	202,392	124,505	1.528.377
Virginia	84,105	33.261	297.382	X	22.750	24.907	462.405
West Virginia	X	16,645	125,759	38,680	22,588	36,532	240,204

North Central							\$3,868,795
Illinois	X	\$131,641	\$124,210	\$128,369	\$ 98,826	\$ 48,583	541,985
Indiana	\$ 43,027	125,332	x	138,271	90,803	37,591	435,024
Iowa	22,476	35,249	x	71,943	28,805	9,669	168,142
Kansas	41,671	33,656	x	77,633	19,851	49,754	222,565
Michigan	X	132,136	x	74,168	24,612	56,345	287,270
Minnesota	114,769	10,085	x	X	x	11,687	136,541
Missouri	54,156	46,408	124,017	120,413	61,022	63,142	469,158
Nebraska	33,697	19,510	x	48,759	19,479	11,909	133,354
North Dakota	X	8,540	x	20,655	2,838	6,908	38,941
Ohio	257,558	85,059	126,907	468,274	213,091	132,560	1,283,449
South Dakota	x	3,933	x	39,204	10,232	4,157	57,529
Wisconsin	31,132	52,209	x	X	x	11,496	94,837
West							1,282,428
ATaska	22,284	3,353	34,249	X	1,198	24,884	63,568
Arizona	x	10,494	х	49,375	7,649	41,532	109,049
California	Х	323,967	x	314,191	x	239,286	877,444
Colorado	х	32,944	х	16,277	16,112	57,273	110,659
Hawaii	Х	8,936	75,238	x	2,262	3,076	89,512
Idaho	7,791	10,421	8,147	х	X	7,057	33,416
Montana	54,513	8,493	x	1,113	2,693	8,338	75,150
Nevada	Х	4,774	12,451	41,552	11,692	10,724	81,193
New Mexico	X	4,864	61,881	22,425	6,269	6,294	101,733
Oregon	179,310	36,666	X	x	15,741	13,558	245,275
Utah	x	11,980	12,817	1,761	6,824	24,575	57,957
·Washington	<b>. X</b>	9,284	45,841	240,207	1 67,592	21,848	384,772
Wyoming	x	5,534	x	22,482	6,326	18,558	52,700

TABLE VII-continuedSUMMARY OF UNUTILIZED TAX REVENUE POTENTIAL, BY REGION, 1971

Note: <sup>a</sup>Taxes included in this category are: death and gift, liscense, motor fuels, severance, and transfer.

Source: Kenneth E. Quindry, <u>State and Local Revenue Potential</u> (Southern Regional Education Board, 1972), Table 12, pp. 56-59.

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ESTIMATED TAX REVENUE CA	APACITY AND	ACTUAL TAX	EFFORT,	1966-1967
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State	Estimated Capacity	Actual Revenue
Alabama	70%	62%
Alaska	99	104
Arizona	95	104
Arkansas	77	64
California	124	133
Colorado	104	110
Connecticut	117	109
Delaware	123	110
Florida	104	88
Georgia	80	73
Hawaii	99	133
Idaho	91	96
Illinois	114	96
Indiana	99	95
Iowa	104	108
Kansas	105	101
Kentucky	80	68
Louisiana	94	85
Maine	81	·85
Maryland	101	104
Massachusetts	98	119
Michigan	104	104
Minnesota	94	113
Mississippi	65	63
Missouri	97	84
Montana	105	98
Nebraska	110	86
Nevada	1/1	122
New Hampshire		89
New Jersey	107	104
New Mexico	94	80
New fork	108	150
North Carolina	78	74
North Dakola Obje		69 02
Oklahoma	100	02
Orogon	102	107
Donneylyania		107
Phodo Island	01	90
South Carolina	51	55
South Dakota	04 01	97
Tennessee	78	68
Toyas	98	74
litab	87	
Vermont	88	105
Virginia	86	78
Washington	112	118
West Virginia	75	72
Wisconsin	94	116
Wyoming	141	iii
	• • •	

Source: Advisory Commission on Intergovernmental Relations, <u>Measuring</u> the Fiscal Capacity and Effort of State and Local Areas, (Washington, D.C., 19/1), pp. 210 - 211.

related inversely to a state's revenue capacity; as federal assistance increases as a source of state income, tax revenue reliance is decreased.<sup>11</sup> Conversely, intergovernmental aid to the states is directly related to their actual effort--tax revenue reliance can thus be affected.<sup>12</sup>

As Table IX indicates, there are profound differences among the states in per capita tax revenue capacity. The differences range from 36% below the national average in Mississippi to 71% above the national average in Nevada. This index also shows that in 1966-1967, on a regional basis, the western states, followed by the northeastern states, generally had high per capita tax revenue capacities, as compared to the low capacities of the states in the southern region. In fact, nine of the ten lowest-capacity states are in the southern region.

This ACIR study shows less variation among the states in their levels of tax effort. However, a considerable range of effort does exist, from a high tax effort of 150% in New York to a low tax effort of 62% in Alabama. Once again, a regional pattern is discernible. All of the ten lowest tax effort states are located in the south. Thus, it would appear that low capacity and low effort go hand in hand. Some evidence does suggest that less urbanized areas combine relatively low capacity and effort, perhaps because some services demanded by urban populations and provided by urban governments are not present.<sup>13</sup> On the other end of the scale, regional patterns are not as pronounced. One half of the high effort states are in the western region, followed again by the northeastern region. Thus, it appears that the linkages between capacity and effort hold true for both high- and low-ranked states. High capacity yields high effort while low effort usually results from low capacity.

The fact that tax revenue capacity differs significantly from state to state is important. The variables that influence this variety are the same variables that influence the particular taxes chosen by each state. The average financing system can measure not only the revenue capacity of each tax revenue source for a state but is also able to measure "effort" for each revenue source. This information can be useful to the states in their analysis of which direction to follow towards new levels of revenue. The data can also influence the tax revenue reliance of a state by altering the current tax structure to one more fully utilizing the state's tax revenue capacity. Alternative means to achieve these new levels of revenue can be divorced from the current tax revenue structures.

#### New Taxes--New Directions

Tax revenue capacity and tax effort may explain, to a large extent, the tax revenue structure and tax revenue reliance of each state. Incrementalism may explain more of the tax revenue reliance unique to each state. But these explanations leave many unanswered questions, many vague areas. At some point a tax may reach its political or fiscal limit and a new source of revenue becomes necessary.<sup>14</sup> Rather than expand the base or raise the allowable rate, a new tax becomes the feasible alternative. The distribution of tax innovations indicates that economic considerations affect tax innovation.<sup>15</sup>

The financial demands wrought by World War I and the Depression yielded the first series of tax innovation (see Table X). Currently, the urban demands and increased demands for state services are resulting in another tax innovation period. However, several factors are working against this innovation. As previously mentioned, new taxes are

#### TABLE X

NUMBER OF STATES ADOPTING NEW TAXES, BY MAJOR TYPE: FREQUENCY DISTRIBUTIONS BY DECADE, 1901-1977

	TYPE OF TAX						
Period	Individual Income	Corporate Income	Tobacco	Alcohol	Motor Fuels	General Sales	
1901-1910	1	1					
1911-1920	9	8			5		
1921-1930	5	8	8		43		
1931-1940	17	15	19	29	1	24	
1941-1950	1	2	15	2	1	5	
1951-1960		2	5	1		6	
1961-1970	3	1	1			2	
1971-1977	8	8	2	1		8	
TOTALS	44	44a	50	33b	50	45	

Notes: <sup>a</sup>Excludes South Dakota's tax on financial institutions.

<sup>b</sup>Excludes the 17 states that either operate or supervise government liquor stores.

Sources: Advisory Commission on Intergovernmental Relations, <u>Tax Overlapping in the United States</u>, 1964, ... p. 25; The Tax Foundation, <u>Tax Review</u> (October, 1964), p. 38; and U.S. Department of Commerce, Bureau of the Census, <u>U.S. Statistical Abstract - 1977</u>, p. 295. politically explosive. Most administrations prefer to quietly change the present taxes rather than to risk gaining a "high tax" reputation for themselves or their political party. Administratively, executives and legislators prefer to work with a known tax and its predictable results; a new tax yields new administration problems and possible unforeseen results. The goal is to achieve immediate revenue results-and to hopefully leave the future ramifications to the next administration to deal with as best they can.

Finally, the new tax options available to a state are dwindling. As early as 1967 most of the states had implemented all of the six major taxes: 1) general sales tax; 2) individual income tax; 3) corporate income tax; 4) tobacco tax; 5) alcohol tax; and 6) motor fuel tax.<sup>16</sup> Of the possible 300 sources (six major taxes x 50 states) only 32 were not being utilized.<sup>17</sup> This number has dropped even lower in recent years. By 1971 only 19 major tax sources were unutilized by the states,<sup>18</sup> and in 1976 the number had dropped to 15.<sup>19</sup> Table XI shows the states not utilizing their full potential of tax revenue sources--by tax. Thus, the new tax-source options for the states are rather limited in scope.

What, then, are the options available to the states in their search for increased tax revenues? One alternative offered is the value-added tax. Werner Z. Hirsch sees much promise in this tax--the measure of the contribution that each business firm makes to the total productive activity in the private sector.<sup>20</sup> Implementation of one of the three possible value-added taxes (consumption, gross income, net income) results in the multistage sales taxation--and new revenue for the states. Another suggested solution is to increase tax rates, particularly on sales taxes. A third recommendation is to statutorily

#### TABLE XI

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#### STATES THAT HAVE NOT ADOPTED ALL OF THE MAJOR TAXES, BY TYPE - 1976

#### TYPE OF TAX Individual Motor General Corporate Sales Alcohol Income Fuels Tobacco Income Arkansas Florida Nevada Delaware Nevada South Dakota Montana South Dakota Texas New Hampshire Texas Washington Virginia Oregon Wyoming Wyoming

Source: U.S. Department of Commerce, Bureau of the Census, <u>U.S. Statist-</u> ical Abstract - 1977 (Washington: U.S. Government Printing Office), Table 478, p. 295. adjust the base of the taxes used: 1) in the structure of exemptions; 2) revisions in the definition of taxable income; 3) provisions for grants-in-aid to localities; and 4) revisions in various administrative procedures.<sup>21</sup> Break sees some remedial value in the separation of tax sources, the coordination of sources, a centralized tax administration, and the coordination of tax bases.<sup>22</sup> But these solutions require intergovernmental cooperation in taxation policy, cooperation that, in the past, has not existed to a large degree. The search for new taxes, new directions of tax revenues, basically falls back to the "old" solution--full utilization of potential tax revenue. With this solution comes deeper ramifications for each state's own tax revenue reliance. Table XII examines the current tax collections of the states, as a percentage of total revenue.

## TABLE XII

## STATE TAX COLLECTIONS BY SOURCE AS A PERCENT OF TOTAL TAX REVENUE, 1976

State	Sales and Gross Receipts	Motor Fuels	Alcohol and Tobacco	Individual Income	Corporate Income	Motor Vehicle and Operator Liscense
Alabama	31.9%	12.7%	9.3%	18.1%	4.8%	3.0%
Alaska	x	4.0	2.0	24.4	5.2	2.0
Arizona	42.8	10.4	5.1	16.0	4.5	4.7
Arkansas	33.1	15.7	8.6	20.4	7.7	6.1
California	34.8	7.2	3.6	27.5	11.9	3.5
Colorado	31.5	10.3	5.1	33.2	7.3	4.3
Connecticut	43.0	11.1	7.7	4.0	11.4	5.5
Delaware	X	8.1	4.7	39.3	6.4	5.3
Florida	42.7	12.6	12.4	X	6.2	7.4
Georgia	37.1	13.9	8.9	24.6	7.9	2.7
Hawaii	48.5	4.9	3.9	29.0	5.5	X
Idaho	27.1	11.6	4.6	30.1	9.7	7.6
Illinois	35.0	8.2	5.5	25.4	6.6	7.1
Indiana	47.1	13.0	4.1	21.1	4.4	4.5
Iowa	29.3	10.6	5.0	32.3	6.5	9.6
Kansas	35.1	11.6	5.7	22.7	10.9	5.9
Kentucky	29.1	12.5	2.6	20.9	9.6	3.2
Louisiana	25.4	10.0	6.0	7.1	5.3	2.4
Maine	28.4	9.8	8.9	9.8	6.2	4.1
Maryland	21.4	9.2	4.7	40.3	5.6	4.0
Massachusetts	12.8	7.6	9.7	44.6	11.9	2.1
Michigan	28.4	10.7	5.7	30.0	8.9	.4.6
Minnesota	19.2	8.6	5.9	38.3	8.8	4.6
Mississippi	48.6	14.9	6.5	12.0	4.7	2.6
Missouri	36.8	13.6	5.6	24.6	4.7	6.9
Montana	X	14.3	7.0	34.1	8.0	4.2

## TABLE XII-continued

#### STATE TAX COLLECTIONS BY SOURCE AS A PERCENT OF TOTAL TAX REVENUE, 1976

Nebraska	33.9%	17.2%	6.7%	21.7%	5.9%	7.4%
Nevada	34.0	9.2	7.1	x	X	5.8
New Hampshire	x	21.2	16.8	3.3	13.0	10.3
New Jersey	36.5	12.5	9.7	4.4	10.0	8.8
New Mexico	42.3	10.6	3.5	10.1	4.2	5.0
New York	22.0	4.9	5.0	40.4	11.6	3.0
North Carolina	22.6	13.5	5.1	29.4	7.6	4.9
North Dakota	38.3	9.4	5.2	20.6	7.0	8.0
Ohio	31.1	11.4	8.0	15.5	8.0	8.1
Oklahoma	18.2	11.7	8.3	20.1	5.3	9.4
Oregon	X	10.4	4.4	57.1	8.1	9.3
Pennsylvania	27.2	9.4	6.8	20.7	12.0	5.3
Rhode Island	28.5	10.3	8.2	23.9	9.3	4.9
South Carolina	35.8	12.9	8.9	23.5	7.7	2.6
South Dakota	48.4	18.8	8.3	X	1.0	7.3
Tennessee	43.6	14.4	8.3	1.7	10.1	6.8
Texas	35.2	10.1	9.7	x	X	5.8
Utah	41.3	10.9	2.5	29.7	5.3	3.4
Vermont	13.7	10.7	10.7	28.8	6.3	8.3
Virginia	21.2	13.9	4.0	33.8	7.1	5.0
Washington	53.9	9.3	6.7	X	x	3.8
West Virginia	48.6	9,9	5.7	16.9	2.4	4.7
Wisconsin	24.2	6.7	5.0	39.7	7.8	4.0
Wyoming	42.0	11.9	3.1	x	X.	10.9

Notes: <sup>X</sup>denotes that this particular tax is not utilized by the state.

Source: U.S. Department of Commerce, U.S. Bureau of the Census, <u>U.S. Statistical Abstract - 1977</u>, (Washington: U.S. Government Printing Office), Table 477, p. 295.

#### Notes, Chapter III

<sup>1</sup>Susan B. Hansen, "The Politics of State Tax Innovation (Champaign-Urbana: University of Illinois, 1978), p. 4.

<sup>2</sup>Leon Rothenberg, "Recent Trends in State Taxation," <u>The Book of</u> <u>the States</u> (Lexington: Council of State Governments, 1974075), p. 242.

<sup>3</sup>Advisory Commission on Intergovernmental Relations, <u>Measuring</u> <u>the Fiscal Capacity and Effort of State and Local Areas</u> (Washington: U.S. Government Printing Office, 1971), p. 7.

<sup>4</sup>Ibid., pp. 10-17. <sup>5</sup>Ibid., pp. 11, 17. <sup>6</sup>Ibid., p. 7. <sup>7</sup>Ibid., p. 9.

<sup>8</sup>Wayland D. Gardner, <u>Government Finance--National, State, and Local</u> (New Jersey: Prentice-Hall, Inc., 1978), p. 299.

<sup>9</sup>Ibid., p. 302.
<sup>10</sup>Ibid., p. 300.
<sup>11</sup>Ibid., p. 297.
<sup>12</sup>Ibid. #3, pp. 121-122.
<sup>13</sup>Ibid., p. 300.
<sup>14</sup>Ibid. #1, p. 4.
<sup>15</sup>Ibid. #1, p. 6.

<sup>16</sup>Tax Foundation, Inc., <u>State Tax Studies: 1959-1967</u> (New York, 1967), p. 19.

<sup>17</sup>Ibid.

<sup>18</sup>Kenneth E. Quindry, <u>State and Local Revenue Potential--1971</u> (Atlanta: Southern Regional Education Board, 1972), pp. 5-10.

<sup>19</sup>This figure was reached by counting the states recorded as not receiving any revenue from the particular tax in the 1977 <u>U.S. Statistical</u> <u>Abstract</u>, Table 477, page 295.

<sup>20</sup>Werner Z. Hirsch, <u>The Economics of State and Local Government</u> (New York: McGraw-Hill Books, Inc., 1970), p. 106.

<sup>21</sup>Ibid., #16, pp. 19-29.

<sup>22</sup>George F. Break, <u>Intergovernmental Fiscal Relations</u> (Washington: The Brookings Institution, 1965), pp. 30-45.

#### Chapter IV

State Variations in Tax Reliance Patterns: An Overview

State and local revenue from "own" sources (tax and nontax revenues) more than doubled in the years from 1956 to 1965. It had also nearly doubled in the preceeding eight years (1948-1956).<sup>1</sup> In fact, total revenue from "own" sources grew almost ten-fold from 1948 to 1973.<sup>2</sup> During this period of rapid escalation of total revenues collected, the sources of revenue varied in importance to the states. Intergovernmental revenue transfers from the federal government, income tax revenue, and fees and charges for public services became relatively more important and sales and property taxes became relatively more important and sales and property taxes became relatively less important.<sup>3</sup> Overall, however, taxes of all types accounted for the greatest proportion of this revenue increase; tax collections increased by 429% during this period.<sup>4</sup> All of these statistics point to the dynamic nature of the tax revenue reliance of the states. Tax revenue reliance is defined as the percent of each state's total general revenue derived from all its tax sources: sales (general and selective), income (personal and corporate), property, severance, death and gift, document and stock transfer, user, and license taxes.

Changing revenue patterns have resulted in changing tax reliance patterns among the states. Several reasons for the state variations in tax reliance patterns have been mentioned previously. Among these are the different constitutional and statutory constraints on the states'

taxing powers. These legal constraints, along with political preferences and economic abilities of the constituencies, have led to immense variations in the utilization of different tax sources by the states. For example, states vary in their proportionate use of the sales tax. On the average, general (retail sales tax) and selective (alcohol, tobacco, entertainment, motor fuel) sales taxes account for over 50% of the total revenue collected from all state sources,<sup>5</sup> but as of 1974 five states did not utilize this tax revenue source.<sup>6</sup> Likewise, a full one-fifth of the states did not tax individual income in 1975,<sup>7</sup> although this tax has accounted for 31% of all state tax revenue as recently as 1974-1975.<sup>8</sup> There are even wider variations among the states with regard to tax reliance patterns because of the rates and exemptions associated with each tax.

There are several other factors that can also play a role in determining the tax usage patterns of a state. First, while state tax yields are generally influenced by economic trends, states do not have the ability to control the growth and stability of the economy. Such an ability is national in scope, and therefore out of the sphere of state control. But, the resultant inflations, recessions, booms, and bursts do affect state resources and incomes to differing degrees, because of variations in the progressivity or regressivity of their tax structures. Second, year-to-year variations in amounts collected by the individual states can also be the result of legal changes in base, rate, or collection-timing of the particular taxes in use.<sup>9</sup> Third, states also differ in their available taxable resources. The relative wealth of the citizenry as well as the level of industrial wealth obviously affect the actual taxes which can be raised. Fourth, states differ in their ability to export taxes through tourism and the extraction industries such as mining, oil, and lumber. In summary, all these factors affect a state's ability to raise different types of tax revenue, which in turn affects a state's relative reliance on nontax and intergovernmental revenue sources.

#### By Region

On the basis of prior studies, one can hypothesize with some certainty that there will be regional variations in terms of state tax revenue reliance. The working hypothesis of this research is that the southern state will prove to be the most tax reliant state, if for no other reason that their low levels of urbanization and wealth precludes reliance on nontax revenues such as charges and user fees. The western states are hypothesized to be the least tax reliant states for many of the same reasons but in reverse. The western states' high levels of urbanization and wealth allow them to raise a greater proportion of their total revenue from nontax sources--the user fees and charges. Also, intergovernmental transfers account for a large percentage of the total revenue. Thus, tax reliance is hypothesized to be minimal.

There is more than one way to define "region," however. The Bureau of the Census defines region in terms of geopolitical boundaries--Northeast, South, North Central (Midwest), West.<sup>10</sup> Daniel Elazar, however, sees more utility in categorizing states as "Moralistic," "Traditionalistic," or "Individualistic" on the basis of cultural traits.<sup>11</sup> Yet another attempt at classification is that of Norman Luttbeg. His scheme centers on re-classification of "region" according to internal variations among the 50 states. Under this method a state falls into

one of four categories: Industrial, Southern, Sparsely Populated, or Frontier.<sup>12</sup> This latter attempt has produced rather questionable results (e.g. listing Hawaii as "Frontier") and is therefore merely mentioned as a reference point in this research. All of these classifications actually seek to measure the same thing. "Region" implies similar values, social biases, traditions, and problems. For the purpose of this study, the Bureau of the Census' definition is adopted as it most closely approximates the general notion of "region."

Regional differences have been well-documented by various demographic, socioeconomic, and political measures collected by the U.S. Bureau of the Census. The influence of "regional historical experiences and the continuing inclination of state leaders to acquire their policy directions from neighboring states appear to have been powerful enough to enable states to resist the pressures of nationalization (conformity)".<sup>13</sup> This "regional individualism" has often resulted in regional variations of state revenue usage patterns. For example, the tax policies of the northeastern states are a reflection of the industrialization, congestion, and personal wealth characteristics of that region. Also influential are the ethnic-religious characteristics that predominate. The southern states' tax policies are often mandated by the pressures imposed by large numbers of poor, uneducated, ruralities, and by a one-party (Democratic) state political arrangement. Among the midwestern states, the historical conflict between agriculture and industrialization produces tax structures somewhat unique to this region. The fourth region, the West, is characterized by states with diffuse and growing populations, extensive mineral resources, and high incidences of land ownership by the federal governemnt. Among the states in each region, common characteristics <u>tend</u> to result in similar revenue reliance patterns within them, and distinguished from states in other regions.

There are, however, some variations within regions. For example, Vermont could be considered more like Mississippi than New York in many policy areas; Vermont's low urbanization levels, low educational levels, and generally conservative tendencies render it more similar to this southern state than to the highly urbanized, wealthy, and liberal state in its own region. Likewise, California and Ohio could be thought of as more akin to each other than other less-urbanized and denselypopulated states of their respective regions. Different levels of industrialization and urbanization, different political norms and institutions, different perceptions of public necessities and luxuries, are just a few of the innumerable factors that can differentiate states from their immediate neighbors, and make them more resemblant of states in other regions sharing similar characteristics. Regardless of these intraregional differences, however, there are distinct regional patterns with regard to the tax reliance patterns of the states within them.

As is shown in Table XIII, the North Central (Midwest) states are generally the most heavily reliant on tax revenues. More specifically, of the ten most heavily tax reliant states, 40% are in the Midwest, 30% are in the South, 20% are in the West, and 10% are in the Northeast. (This, of course, suggests that states in the Northeast are more heavily reliant upon intergovernmental aid than other regions. This prediction will be examined in more detail in Chapter V.)

Similarly, an examination of the ten least tax reliant states reveals that 60% are found in the western region, and 20% are located in the Northeast and North Central regions respectively. As this

## TABLE XIII

#### TAX REVENUE RELIANCE RANKING OF THE STATES: BY REGION

	· · · · · · · · · · · · · · · · · · ·	Tax Revenue Reliance <sup>a</sup>	
	State	(%)	Region <sup>b</sup>
1.	Wisconsin	68.4%	3
2.	Arizona	66.1	4
3.	Florida	65.6	2
4	Pennsvlvania	65.4	ī
5.	Illinois	65.0	3
6.	Delaware	64.4	ž
7.	Indiana	63.9	3
8.	Minnesota	62.9	3
9.	Marvland	62.3	2
10.	California	61.5	4
11.	Nevada	61.5	4
12.	Connecticut	60.6	i
13.	Missouri	60.4	3
14	New York	60.2	ī
15.	Iowa	60.1	3
16.	Kansas	60.1	3
17.	Massachusetts	59.6	ĩ
18.	Ohio	59.5	3
19.	Washington	59.0	4
20.	Kentucky	58.8	2
21.	Hawaii	58.7	4
22.	Louisiana	58.6	2
23.	North Carolina	58.5	2
24.	Michigan	58.4	3
25.	Texas	58.2	2
26.	Arkansas	57.3	2
27.	Georgia	57.2	2
28.	West Virgina	57.1	2
29.	Virginia	57.0	2
30.	Tennessee	56.5	2
31.	Idaho	56.4	4
32.	South Carolina	56.1	2
33.	Mississippi	55.5	2
34.	New Jersev	54.5	ī
35.	Rhode Island	54.3	i
36.	Nebraska	53.7	3
37.	Oklahona	53.3	2
38.	Alabama	53.2	2
39.	Maine	52.6	· 1
40.	Colorado	52.5	4
41.	New Mexico	51.7	4
42.	Oregon	51.7	4
43.	Utah	50.7	4
44.	North Dakota	47.9	3
45.	Vermont	47.0	ī
46.	New Hampshire	46.6	1
47.	Montana	46.0	4

#### TABLE XIII-continued

#### TAX REVENUE RELIANCE RANKING OF THE STATES: BY REGION

Notes: <sup>a</sup>Tax revenue reliance is the percent of a state's total general revenue derived from its own tax sources.

bRegional code is: l=Northeast; 2=South; 3=North Central; 4=West.

Source: U.S. Department of Commerce, Bureau of the Census, <u>U.S. Statis-</u> <u>tical Abstract - 1977</u> (Washington: U.S. Government Printing Office), Table 475, p. 292. cursory examination reveals, then, there are observable regional state tax reliance patterns. The hypotheses advanced at the beginning of this section--high Southern tax reliance and low Western tax reliance--have been confirmed to a fair degree, in this initial examination. The real question now becomes what is it within the states in these regions that sets them apart from each other. The possible causitive factors will be dealt with in Chapter V.

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<sup>1</sup>Eugene P. McLoone, Gabrielle C. Lupo, and Selma J. Mushkin, Long-Range Revenue Estimation (Washington: George Washington University, 1967), p. 9.

<sup>2</sup>James A. Maxwell and J. Richard Aronson, <u>Financing State and</u> Local Government, 3rd ed. (Washington: The Brookings Institution, 1977), p. 246.

<sup>3</sup>Ibid. #1.

<sup>4</sup>Ira Sharkansky, <u>The Maligned States--Policy Accomplishments</u>, <u>Problems, and Opportunities</u> (New York: McGraw-Hill Book Company, 1972), p. 155.

<sup>5</sup>Leon Rothenberg, "Recent Trends in State Taxation," <u>The Book of</u> <u>State</u> (Lexington: Council of State Governments, 1974-75), p. 241.

<sup>6</sup>Wayland D. Gardner, <u>Government Finance--National, State, and</u> <u>Local</u> (New Jersey: Prentice-Hall, Inc., 1978), p. 294.

<sup>7</sup>Thomas R. Dye, <u>Politics in States and Communities</u>, 3rd ed. (New Jersey, Prentice-Hall, Inc., 1977), p. 467.

<sup>8</sup>Ibid. #5, p. 241.

<sup>9</sup>Ibid. #5, p. 242.

<sup>10</sup>U.S. Department of Commerce, Bureau of the Census, <u>U.S. Statistical</u> <u>Abstract--1977</u> (Washington: U.S. Government Printing Office, 1977), p. inside front cover.

<sup>11</sup>Charles A. Johnson, "Political Culture in American States: Elazar's Formulation Examined," <u>American Journal of Political Science</u>, Vol. XX (1976), pp. 491-510.

<sup>12</sup>Norman R. Luttbeg, "Classifying the American States: An Empirical Attempt to Identify Internal Variations," <u>Midwest Journal of Political</u> <u>Science</u>, Vol. 15 (1971), pp. 703-721.

<sup>13</sup>Ira Sharkansky, <u>The Maligned States--Policy Accomplishments</u>, <u>Problems, and Opportunities</u> (New York: McGraw-Hill Book Company, 1972), p. 30.

#### Chapter V

#### Determinants of State Tax Policies

Many studies have hypothesized that various demographic, socioeconomic, and political factors affect state tax usage patterns (see Chapter II). Indeed, it has been suggested that these factors are what contribute to regional differences as well. Of particular interest in this study is determining which of the variables are <u>most</u> strongly associated with tax revenue reliance. In this chapter, the linkages between these environmental and political variables and state tax reliance will be examined, using correlational analysis. Correlation coefficients indicate the degree to which variation between two variables is related. The correlation coefficients summarize the strength of the relationship between the two variables. The results of this analysis are shown in Table XXIII.

#### Demographic Correlates

The demographic variables analyzed include population density, population growth, and level of urbanization. Of these variables, the order of the strength of the correlation with state tax reliance is urbanization first, population density second, and population growth third.

Population density is defined by the U.S. Census Bureau as the "population per square mile of land area."<sup>1</sup> As can be seen from 1976 figures shown in Table XIV, states in the northeast are the most densely populated, while states in the western region are the most

## TABLE XIV

## POPULATION DENSITY OF THE STATES: BY REGION

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		Population per Square	
	State	Mile of Land Area <sup>a</sup>	Region
1.	New Jersey	975.4	1
2.	Rhode Island	883.7	1
3.	Massachusetts	742.3	1
- 4.	Connecticut	641.1	1
5.	Maryland	419.0	2
6.	New York	378.1	1
7.	Delaware	293.6	2
8.	Pennsylvania	263.8	1
9.	Ohio	260.9	3
10.	Illinois	201.4	3
11.	Michigan	160.2	3
12.	Florida	155.7	2
13.	Indiana	146.9	3
14.	Hawaii	138.1	4
15.	California	137.6	4
16.	Virginia	126.5	2
17.	North Carolina	112.1	2
18.	Tennessee	102.0	2
19.	South Carolina	94.2	2
20.	New Hampshire	91.1	1
21.	Kentucky	86.5	2
22.	Georgia	85.6	2
23.	Louisiana	85.5	2
24.	Wisconsin	84.6	3
25.	West Virginia	75.7	2
26.	Alabama	72.3	2
27.	Missouri	69.3	3
28.	Washington	54.2	4
29.	Vermont	51.4	1
30.	Iowa	51.3	3
31.	Minnesota	50.0	3
32.	Mississippi	49.8	2
33.	Texas	47.6	2
34.	Arkansas	40.6	2
35.	Oklahoma	40.2	2
36.	Maine	34.6	1
37.	Kansas	28.2	3
38.	Colorado	24.9	4
39.	Oregon	24.2	4
40.	Nebraska	20.3	. 3
41.	Arizona	20.0	4
42.	Utah	15.0	4
43.	Idaho	10.1	4
44	New Mexico	9.6	4
45.	North Dakota	9.3	3
46.	South Dakota	9.0	3
47.	Nevada	5.6	4
48	Montana	5.2	4
49	Wyoming	4.0	4
50.	Alaska	_7	4
	1 1 L VA 47 L VA	÷ •	•

#### TABLE XIV-continued

POPULATION DENSITY RANKING OF THE STATES: BY REGION

Notes: <sup>a</sup>Population density is the population at a given census divided by land area, as then constituted. It is stated in terms of "population per square mile of land area". Population is currently determined by a decennial census in which each person is counted as an inhabitant of his usual place of residence, not necessarily his legal residence, voting residence, or domicile. Also included in the census are military personnel stationed abroad.

<sup>b</sup>Regional code is: 1=Northeast; 2=South; 3=North Central; 4=West.

Source: U.S. Department of Commerce, Bureau of the Census report, and U.S. Statistical Abstract - 1977 (Washington: U.S. Government Printing Office), Table 327, p. 197.

sparsely populated. Perhaps the most logical explanation of this fact is that the Northeastern states are geographically the smallest. They are also the oldest states, and the most industrialized. Therefore, the number of persons per square mile of land area will most likely be the greatest there.

On the basis of regional variations, it is likely that population density will be negatively correlated with tax reliance. This hypothesis is based on the assumption that a dense population correspondingly allows increased revenue options. As the need for services grows, the potential use of user charges and fees is enhanced, along with the rationale that federal monies are necessary to help provide for the citizens. Also hypothesized is the rather weak correlation between population density and state tax reliance patterns. While population density may very well play an important role in tax reliance patterns, concurrent forces (wealth distribution, racial balance, education levels, for example) are hypothesized as being more influential.

The relationship between population density and this reliance structure is not easily discerned. For the Western states the pattern seems fairly clear; this region, the least-densely populated, displays the least tax revenue reliant tendency. Six of the ten least reliant states are western states. The reason for this finding is obvious. Of the sixteen states that have not utilized at least one of the six major taxes, seven (44%) are located in the western region--the highest proportion of any region. Thus, the least densely populated region, the West, also has the largest percentage of states not utilizing the major sources of tax revenue and therefore earning its position as the least tax reliant region. Another explanation can be given when one considers the large amount of federally-owned acreage found in the western states. The principles of federal ownership conveying federal responsibility for economic assistance has allowed the Western region to rely less on taxation and more on federal money to provide services. In comparative terms, the West also uses more nontax revenue than the other three regions.

This positive relationship between population density and tax reliance found among Western states is not characteristic of states in other regions. In fact the relationship appears negative among North Central states. This region (Midwest) has the highest percentage of tax reliant states, but is also the second least-densely-populated region. Nothing even this clearcut or contradictory can be discerned through examination of the Northeast or Southern regions. There appears to be little relationship between population density and state tax revenue reliance patterns in those regions.

This contention is borne out through an analysis of Table XXIII. As is indicated, the relationship between population density and tax reliance among all 50 states is not significant. When controlling for region, only the southern states display a significant relationship between the two variables (.69). Thus, population density is not shown to be very strongly related to tax revenue reliance levels among the states.

Population growth is the proportional growth of a state's population between 1970-1976.<sup>2</sup> The hypothesized direction of the relationship between population growth and state tax reliance is positive. Growth supposedly increases the need for services, but it also results in expanded tax bases for the growing states. Additional, and expanding tax bases indicate the likelihood of increased tax reliance. The western region has experienced the greatest population growth between 1970 and 1976. Nine of the ten fastest growing states are western states, with only one southern state (Florida) interrupting this pattern. Improving and dynamic economic conditions reinforce this trend. Industry has increasingly been drawn to this region--attracted by a favorable climate, comparatively lower energy cost, and a vigorous economy. And where industry goes, people and the service sectors follow (see Table XV).

Conversely, the ten states exhibiting the least growth can be evenly divided between the Northeast and North Central regions. Several factors account for this lack of comparative growth. The unfavorable winter climate has induced many northerners to head South or West to the "endless summer." The economic and job situations also tend to be more static and less favorable in these regions, especially for the midwestern farmers and central city industrial laborers of the numerous northeastern urban centers.

The effect of population growth on tax reliance is somewhat clear. The relationship is a negative one; the lower the tax revenue reliance the higher the growth rate. This pattern, however, is in no way definitive. The Northeast and the Southern adherance to this pattern is shaky at best. Several explanations can be posited for the relationship as it does exist. As the population grows the need for new and improved services demand not only that tax revenues increase, but also that the federal government involve itself more immediately with the financing of certain services and/or facilities. Also, growing states can use <u>nontax</u> sources more, as the use of efficiency-type revenues is facilitated by the growth features. The local government, the focal

TABLE XV

POPULATION	GROWTH	RANKING	0F	STATES:	BY	REGION
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		Population Growtha	
	States	(%)	Regionb
1.	Arizona	27.9%	4
2.	Alaska	26.3	4
3.	Nevada	24.8	4
4.	Florida	24.0	2
5.	Wyoming	17.4	4
6.	Colorado	16.9	4
7.	Idaho	16.5	4
8.	Utah	15.9	4
9.	Hawaii	15.2	4
10.	New Mexico	14.9	4
11.	New Hampshire	11.5	1
12.	Texas	11.5	2
13.	Oregon	11.3	4
14.	South Carolina	9.9	2
15.	Arkansas	9.3	2
16.	Montana	8.4	4
17.	Georgia	8.3	2
18.	Virginia	8.2	2
19.	Oklahoma	8.1	2
20.	California	7.8	4
21.	Maine	7.7	1
22.	North Carolina	7.6	2
23.	Tennessee	7.3	2
24.	Vermont	7.1	1
25.	Alabama	6.4	2
26.	Kentucky	6.4	2
27.	Delaware	6.2	2
28.	Mississippi	6.2	2
29.	Washington	5.8	4
30.	Maryland	5.6	2
31.	Louisiana	5.4	2
32.	Nebraska	4.5	3
33.	West Virginia	4.4	2
34.	Wisconsin	4.3	3
35.	Minnesota	4.2	3
36.	North Dakota	4.1	3
37.	South Dakota	3.0	3
38.	Connecticut	2.8	1
39.	Kansas	2.7	3
40.	Michigan	2.5	3
41.	New Jersey	2.3	
42.	Missouri	2.2	3
43.	Massachusetts	2.1	1
44.	Indiana	2.0	3
45.	IOWa	1.6	3
40.	rennsy i vanta	.5	
4/.		.3	3
48.	New Tork	9	
49.		-1.0	3
50.	KNODE ISLAND	-2.4	1

#### TABLE XV-continued

#### POPULATION GROWTH RANKING OF STATES: BY REGION

Notes: <sup>a</sup>Population growth is that change in the population of a state from one census date to the next. Included are births, deaths, and persons who have moved to or from the state. Not included are military personnel stationed in the state but with a permanent residence in another state.

bRegional code is: l=Northeast; 2=South; 3=North Central; 4=West.

Source: U.S. Department of Commerce, Bureau of the Census report - a 1976 update of the 1970 Census - (Washington, 1977).

point as provider of many of these services, must also increase its fiscal output to the extent possible, further reducing the states' reliance on the taxes necessary to provide the services. Furthermore, a certain level of particular services results in an increasing reliance on user charges. The monies raised from these services (hospitals, highway user fees, etc.) allow for costs to be met to some degree, and therefore tax reliance need not be so great. Also, the ability of a state to attract new citizens requires that it already provide some level of services while also keeping tax burdens at a minimum.<sup>3</sup> These factors work together to decrease the viability of a high level of tax reliance. Thus, as the figures of Table XXII indicate, there is a negative relationship between a state's population growth and its level of tax reliance. The hypothesis is not initially supported.

This negative relationship is observable by examining the simple correlational coefficients shown in Table XXIII. As can be seen, for all states, the relationship is negative (-.22) but it is not a significant one. Only for the Northeastern and Southern regions is there any significance (-.76 and .46, respectively). These results, then, seem to indicate that population growth is not an independently strong factor affecting the tax revenue reliance of a state and its effects vary from state to state.

The urbanization level<sup>4</sup> of a state is hypothesized as being negatively related to its tax revenue reliance. A second hypothesis is that the strength of the relationship will be strong; as states urbanize, the level and scope of services required is altered. There is an increased demand for public services, which means increased expenditures. There is, however, a greater income disparity found which results in increased

dependence on federal assistance. The option to utilize user fees and charges is also enhanced as an urbanized society creates new and more opportunities to extract revenue from these sources.

The northeastern and western regions are the most heavily urbanized regions, each containing 40% of the ten most-urbanized states. The least urbanized region is the South, with 50% of the ten least urbanized states. As Table XVI indicates, the relationship between the urbanization level of a state and its tax reliance posture is a negative one; the higher the tax reliance the lower the incidence of urbanization. One explanation for this relationship could be the remarkable growth of special districts accompanying rapid urbanization. These districts have peculiar features: they are usually created to perform a single function; they overlap geographically; and their sources of revenue are taxes.<sup>5</sup> It must be borne in mind, however, that this tax reliance is not in the form of state tax reliance; the fragmentation may yield an increased reliance at the local/special district level. By taxing for revenue, these districts are preventing those dollars from being taxed by the state, and thus, the state must look to other sources for revenue. A corollary to this fragmentation theory is that increased urbanization means increased service demands; the states more and more must look to new sources of revenue for the funds to meet these demands. Another probable influence of this negative relationship concerns political constraints mandating politicos to promise "no new taxes."

Results of the correlational analysis shown in Table XXIII reveal that the relationship between urbanization and tax reliance is a positive one (.48). The relationship is even stronger among states located in either the North Central region (.76) or the Western region (.74).

### TABLE XVI

## URBANIZATION RANKING OF STATES: BY REGION

		Urbanization	
	States	(%)	Regionb
1.	California	90.9%	4
2.	New Jersey	88 <b>.9</b>	1
3.	Rhode Island	87.1	1
4.	New York	85.6	1
5.	Massachusetts	84.6	1
6.	Hawaii	83.1	4
7.	Illinois	83.0	3
8.	Nevada	80.9	4
9.	Florida	80.5	2
10.	Utah	80.4	4
11.	Texas	79.7	2
12.	Arizona	79.6	4
13.	Colorado	78.5	4
14.	Connecticut	77.4	1
15.	Maryland	76.6	2
16.	Ohio	75.3	3
17.	Michigan	73.8	3
18.	Washington	72.6	4
19.	Delaware	72.2	2
20.	Pennsylvania	70.5	1
21.	Missouri	70.1	3
22.	New Mexico	69.8	4
23.	Oklahoma	68.0	2
24.	Oregon	67.1	4
25.	Minnesota	66.4	3
26.	Kansas	66.1	3
27.	Louisiana	66.1	2
28.	Wisconsin	65.9	3
29.	Indiana	64.9	3
30.	Virginia	63.1	2
31.	Nebraska	61.5	3
32.	Wyoming	60.5	4
33.	Georgia	60.3	2
34.	Tennessee	58.8	2
35.	Alabama	58.4	2
36.	Iowa	57.2	3
37.	New Hampshire	56.4	I
38.	Idaho	54.1	4
39.	Montana	53.4	4
40.	Kentucky	52.3	2
41.	Maine	50.8	· 1
42.	Arkansas	50.0	2
43.	Alaska	48.4	4
44.	South Carolina	47.6	2
45.	North Carolina	45.0	2
46.	South Dakota	44.6	3
47.	Mississippi	44.5	2
48.	North Dakota	44.3	3
49.	West Virginia	39.0	2
50.	Vermont	32.2	1

#### TABLE XVI-continued

#### URBANIZATION RANKING OF STATES: BY REGION

Notes; <sup>a</sup>The urban population comprises all persons in (a)places of 2500 inhabitants or more incorporated as cities, villages, boroughs (except Alaska), and towns (except in New England, New York, and Wisconsin), but excluding persons living in the rural portions of extended cities; (b) unincorporated places of 2500 inhabitants or more; and (c)other territory, incorporated or unicorporated, included in urbanized areas. An urbanized area consists of a central city, or twin cities, with a total of 50,000 inhabitants or more, together with contiguous closely settled territory. The population not classified as urban constitutes the rural population.

DRegional code is: l=Northeast; 2=South; 3=North Central; 4=West.

Source: U.S. Department of Commerce, Bureau of the Census, <u>U.S. Statist-</u> <u>ical Abstract - 1975</u> (Washington: U.S. Government Printing Office), Table 18, p. 25. Perhaps the best explanation for this relationship contrary to the hypothesized one is that urbanized areas are generally older areas, and areas where sales taxes are likely to be heavy, and state tax reliance patterns well-established.

#### Socioeconomic Variables

Previous research has shown that a state's level of economic development is the most important determinant of state/local revenue policies.<sup>6</sup> Economic development is measured not only by urbanization, but by income and educational levels as well. The socioeconomic variables analyzed in this research include personal income, education, black population, and level of federal assistance. Of these four variables, federal assistance is the most strongly correlated with state tax reliance, followed by race, income, and education, in that order. Table XXIII shows the results of the correlational analysis.

The initial socioeconomic correlate examined in this study as to its relation to a state's tax revenue reliance is per capita personal income, defined as "that current average income from all sources."<sup>7</sup> Per capita personal income seems intricately related to tax revenue reliance. Total taxes per capita collected by state and local governments within each state reflect, in part, the incidence of personal wealth and urbanization in the state.<sup>8</sup>

As is indicated in Table XVII, the wealthiest regions--that is, the regions with the largest number of states in the upper one-fifth of per capita personal income--are the northeastern and western regions. Thus, while the states in these two regions seem to be more economically advantaged, they also rely more on sources other than state tax sources. There may be greater affluence in these states, but there are also
# TABLE XVII

# PER CAPITA PERSONAL INCOME RANKING OF STATES: BY REGION

		Per Capita Income <sup>a</sup>	
	States	(in dollars)	RegionD
1.	Alaska	\$10178	4
2.	Illinois	7432	3
3.	Connecticut	7373	1
4.	Nevada	7337	4
5.	Delaware	7290	2
6.	New Jersey	7269	1
7.	California	7164	4
8.	New York	7100	1
9.	Maryland	7036	2
10.	Michigan	6994	3
11.	Hawaii	6969	4
12.	Washington	6772	4
13.	Wyoming	6723	4
14.	Massachusetts	6585	1
15.	Colorado	6503	4
16.	Rhode Island	6498	1
17.	Kansas	6495	3
18.	Pennsylvania	6466	1
19.	Iowa	6439	3
20.	Ohio	6432	3
21.	Oregon	6331	4
22.	Wisconsin	6293	3
23.	Virginia	6276	2
24.	Indiana	6257	3
25.	lexas	6243	2
26.	Nebraska	6240	3
27.	Minnesota	6153	3
28.	Florida	6108	2
29.	Missouri	6005	3
30.	New Hampshire	59/3	l A
31.	Arizona	5817	4
32.	Idano	5/26	4
33.	UKIanoma	5657	2
34.	Montana	5600	4
35.	Georgia	5571	2
27	Verment	0482 5480	4
3/.		548U 5430	1
30. 20	Kontucku	5432 E422	2
39.	Nenth Canalina	5425	2
40.	North Carolina	5409	. 2
41.	North Dakota	5400	3
42.	west virginia	5394 E286	2
4J. 11	LUUISIANA Maina	3300 5905	2
44. 15	Now Moxico	3385 5010	l A
4U. Ac	new Mexicu South Complete	5196	4
40. 17	Alabama	5120 5105	2
4/. 10	Ankancac	5105	2
40.	nranjaj South Dakota	JU/J 1706	2
47. 60	Micciccippi	4/30	ວ າ
UU	LI1221221001	43/4	4

### TABLE XVII-continued

PER CAPITA PERSONAL INCOME RANKING OF STATES: BY REGION

Notes: <sup>a</sup>Per capita personal income is defined as the current average income received by all persons from all sources net of contributions.

<sup>b</sup>Regional code is: l=Northeast; 2=South; 3=North Central; 4=West.

Source: U.S. Department of Commerce, U.S. Bureau of the Census, <u>U.S.</u> <u>Statistical Abstract - 1977</u> (Washington: U.S. Government Printing Office), Table 704, p. 437. greater percentages of their populations in the lower income strata. This necessitates greater reliance on intergovernmental transfers. This helps explain why per capita personal income is inversely related to tax revenue reliance. This pattern is supported when the poorest region-the South--is examined. None of the ten least tax relaint states are found in the southern region, whereas six of the ten states with the lowest per capita income are located in this region. Only two southern states are among the ten most affluent states, Maryland and Delaware. A possible explanation for Maryland is the fact that a large number of executive military and governmental personnel work in Washington, D.C. but reside in Maryland. The fact that Delaware has been the atypical southern state in the research results indicates that perhaps this state cannot legitimately be considered a southern state.

One explanation for the "deviation" of the states from the expected relationship (the higher the personal income the higher the tax revenue reliance rate) has already been mentioned. The western states may be the wealthiest, but due to the resource development of that region it receives a disproportionate amount of federal assistance, thereby proportionately decreasing its tax revenue reliance. Another possible reason is that the western states have the largest percent of public land acreage as compared to the other regions--acreage that federal monies support and develop.<sup>9</sup> In conjunction with this pattern of federal assistance is the fact that the western states are greater users of nontax revenues.

In general, the wealthier states can rely more on the user charges as a source of revenue. The higher the income of the population the more willing they are to pay for certain services directly, and the

more other sources of revenue (utilities, parks, tourism, liquor stores) are utilized.<sup>10</sup> Thus, the potential for additional revenue sources opens up with increasing wealth. Another plausible explanation is the fact that wealthier states are more in a position to play the "grantsmanship game" with Washington, and therefore to receive a disproportionate share of intergovernmental revenue transfer dollars. This is particularly true in light of the very expensive capital construction projects which are mandated by increasing income and growth. The poorer states may also be at a disadvantage in terms of matching funds; if the federal grants have a matching requirement these states have a lesser ability to raise the necessary funds. As a result, the possible revenue from federal sources declines as a percent of total revenue and therefore, the tax reliance of the states is affected.

The hypothesized negative relationship between per capita personal income and tax reliance, as shown in Table XXII is substantiated by results of correlational analysis--but only for the Western region (-.46). Among the three remaining regions the relationships between income and tax revenue reliance is positive.

The level of education in a state is hypothesized as being negatively correlated with the tax reliance pattern. Education, along with income and urbanization level, determines the economic development of a state. Thus, following the lead of the other two variables, educational level is likely to be an important determinant, albeit a negative one, of tax revenue reliance. For the purposes of this study, "college education" is the measure of education. College educated persons are those persons 25 or older who have attended a public or private institution of higher learning for at least four years.<sup>11</sup> As Table XVIII

# TABLE XVIII

# COLLEGE EDUCATION RANKING OF STATES: BY REGION

States         Regionb           1.         Colorado         7.9%         4           2.         Connecticut         7.6°.         1           3.         California         7.4         4           4.         Maryland         7.4         4           4.         Maryland         7.4         4           5.         Hawaii         7.2         4           6.         Arizona         7.0         2           6.         Arizona         7.0         2           6.         Arizona         7.0         2           6.         Massachusetts         6.9         1           9.         New York         6.8         4           11.         Alaska         6.7         4           12.         New Jersey         6.7         1           13.         Utah         6.5         2           14.         Oregon         6.6         1           15.         Vermont         6.6         1           14.         Oregon         6.5         4           12.         Neimostine         5.5         2           14.         Oregon         6.6			College Education <sup>d</sup>																																																																																																																														
1. Colorado       7.9%       4         2. Connectícut       7.6.       1         3. California       7.4       4         4. Maryland       7.4       2         5. Hawain       7.2       4         6. Arizona       7.0       4         7. Delaware       7.0       2         8. Massachusetts       6.9       1         9. New York       6.8       1         10. Washington       6.8       4         11. Alaska       6.7       4         12. New Jersey       6.7       1         13. Utah       6.5       2         14. Oregon       6.6       4         15. Vermont       6.6       4         16. Virginia       6.5       2         17. Wyoming       6.5       2         18. Florida       6.4       2         19. New Maxas       6.2       3         11. Nutaha       5.8       3         21. New Mexico       6.1       4         22. New Hampshire       5.9       1         23. Minnesota       5.5       3       3         24. Montana       5.6       2       2		States	(%)	Regionb																																																																																																																													
2. Connecticut       7.6.       1         3. California       7.4       4         4. Maryland       7.4       2         5. Hawaii       7.2       4         6. Arizona       7.0       2         7. Delaware       7.0       2         8. Massachusetts       6.9       1         9. New York       6.8       1         10. Washington       6.8       4         11. Alaska       6.7       4         12. New Jersey       6.7       1         13. Utah       6.7       4         14. Oregon       6.6       1         15. Vermont       6.6       1         16. Virginia       6.5       2         17. Wyoming       6.5       4         18. Florida       6.4       2         19. Newada       6.3       4         21. New Mexico       6.1       4         22. New Hampshire       5.9       1         23. Minnesota       5.8       3         24. Montana       5.6       2         27. Illinois       5.5       3         32. Iowa       5.0       3         33. Missouri       5	1.	Colorado	7.9%	4																																																																																																																													
3. California       7.4       4         4. Maryland       7.4       2         5. Hawaii       7.2       4         6. Arizona       7.0       2         8. Massachusetts       6.9       1         9. New York       6.8       1         10. Washington       6.8       4         11. Alaska       6.7       4         12. New Jersey       6.7       1         13. Utah       6.5       2         14. Oregon       6.6       1         15. Vermont       6.6       1         16. Virginia       6.5       2         17. Wyoming       6.5       2         18. Florida       6.4       2         19. Nevada       6.3       4         20. Kansas       6.2       3         21. New Mexico       6.1       4         22. Nei Mampshire       5.9       1         23. Minnesota       5.8       3         24. Montana       5.6       2         27. Illinois       5.5       3         28. Idaho       5.3       3         30. Rhode Island       5.0       3         31. Wisconsin <td< td=""><td>2.</td><td>Connecticut</td><td>7.6-</td><td>1</td></td<>	2.	Connecticut	7.6-	1																																																																																																																													
4.       Maryland       7.4       2         5.       Hawaii       7.2       4         6.       Arizona       7.0       4         7.       Delaware       7.0       2         8.       Massachusetts       6.9       1         9.       New York       6.8       1         10.       Washington       6.8       4         11.       Alaska       6.7       4         12.       New Jersey       6.7       1         13.       Utah       6.6       1         14.       Oregon       6.6       2         14.       Oregon       6.5       4         15.       Vermont       6.6       1         16.       Virginia       6.5       4         17.       Wasta       6.3       4         20.       Kansas       6.2       3         21.       New Mexico       6.1       4         22.       New Masshire       5.9       1         23.       Minnesota       5.6       2       3         22.       Idaho       5.3       3       4         23.       Missouri	3.	California	7.4	4																																																																																																																													
5.       Hawaii       7.2       4         6.       Arizona       7.0       2         7.       Delaware       7.0       2         8.       Massachusetts       6.9       1         9.       New York       6.8       4         10.       Washington       6.8       4         11.       Alaska       6.7       4         12.       New Jersey       6.7       1         13.       Utah       6.7       4         14.       Oregon       6.6       1         15.       Vermont       6.6       1         16.       Virginia       6.5       2         17.       Wyoming       6.5       4         18.       Florida       6.4       2         19.       Nevada       6.3       4         20.       Kansas       6.2       3         21.       New Mexico       6.1       4         22.       New Hampshire       5.9       1         23.       Minnesota       5.6       2         21.       New Maxia       5.3       3         28.       Johana       5.0	4.	Maryland	7.4	2																																																																																																																													
6.       Arizona       7.0       4         7.       Delaware       7.0       2         8.       Massachusetts       6.9       1         9.       New York       6.8       1         10.       Washington       6.8       4         11.       Alaska       6.7       4         12.       New Jersey       6.7       4         13.       Utah       6.5       4         14.       Oregon       6.6       1         15.       Vermont       6.6       1         16.       Virginia       6.5       2         17.       Wyoming       6.5       4         18.       Florida       6.4       2         19.       Nevada       6.3       4         20.       Kansas       6.2       3         21.       New Mexico       6.1       4         22.       New Hampshire       5.9       1         23.       Minnesota       5.6       2         27.       Ilinois       5.5       3         28.       Idaho       5.3       4         29.       Nebraska       5.0	5.	Hawaii	7.2	4																																																																																																																													
7.       Delaware       7.0       2         8.       Massachusetts       6.9       1         9.       New York       6.8       1         10.       Washington       6.8       4         11.       Alaska       6.7       4         12.       New Jersey       6.7       1         13.       Utah       6.7       4         14.       Oregon       6.6       1         15.       Vermont       6.6       1         16.       Virginia       6.5       2         17.       Wyoming       6.5       4         18.       Florida       6.4       2         19.       Nevada       6.3       4         20.       Kansas       6.2       3         21.       New Mexico       6.1       4         22.       New Mampshire       5.9       1         23.       Minnesota       5.6       2         27.       Illinois       5.5       3         28.       Idaho       5.3       3         30.       Rhode Island       5.2       1         31.       Wisconsin       5.0	6.	Arizona	7.0	4																																																																																																																													
8. Massachusetts       6.9       1         9. New York       6.8       1         10. Washington       6.8       4         11. Alaska       6.7       4         12. New Jersey       6.7       4         13. Utah       6.6       4         14. Oregon       6.6       4         15. Vermont       6.6       1         16. Virginia       6.5       2         17. Wyoming       6.5       4         18. Florida       6.4       2         19. Nevada       6.3       4         20. Kansas       6.2       3         21. New Mexico       6.1       4         22. New Hampshire       5.9       1         23. Minnesota       5.8       3         24. Montana       5.8       3         25. Texas       5.7       2         26. Oklahoma       5.6       2         27. Illinois       5.5       3         28. Idaho       5.3       4         29. Nebraska       5.0       3         30. Rhode Island       5.0       3         31. Wisconsin       5.1       3         32. Iowa       5	7.	Delaware	7.0	2																																																																																																																													
9. New York       6.8       1         10. Washington       6.8       4         11. Alaska       6.7       4         12. New Jersey       6.7       1         13. Utah       6.7       4         14. Oregon       6.6       4         15. Vermont       6.6       1         16. Virginia       6.5       2         7. Wyoming       6.5       4         18. Florida       6.4       2         19. Nevada       6.3       4         20. Kansas       6.2       3         21. New Mexico       6.1       4         22. New Hampshire       5.9       1         23. Minnesota       5.8       3         24. Montana       5.6       2         25. Texas       5.7       2         26. Oklahoma       5.6       2         27. Illinois       5.5       3         28. Idaho       5.3       4         29. Nebraska       5.0       3         30. Rhode Island       5.2       1         31. Wisconsin       5.1       3         32. Jowa       5.0       3         33. Missouri       5.0 <td>·8.</td> <td>Massachusetts</td> <td>6.9</td> <td>1</td>	·8.	Massachusetts	6.9	1																																																																																																																													
10.       Washington       6.8       4         11.       Alaska       6.7       4         12.       New Jersey       6.7       1         13.       Utah       6.7       4         14.       Oregon       6.6       4         15.       Vermont       6.6       1         16.       Virginia       6.5       2         17.       Wyoming       6.5       4         8.       Florida       6.4       2         19.       Nevada       6.3       4         20.       Kansas       6.2       3         21.       New Mextoo       6.1       4         22.       New Hampshire       5.9       1         23.       Minnesota       5.8       3         24.       Montana       5.6       2         27.       Illinois       5.5       3         30.       Rhode Island       5.1       3         31.       Wisconsin       5.1       3         32.       Idaho       5.0       3         33.       Missouri       5.0       3         34.       Ohio       5.0	9.	New York	6.8	1																																																																																																																													
11. Alaska       6.7       4         12. New Jersey       6.7       1         13. Utah       6.7       4         14. Oregon       6.6       1         15. Vermont       6.6       1         16. Virginia       6.5       2         17. Wyoming       6.5       4         18. Florida       6.4       2         19. Nevada       6.3       4         20. Kansas       6.2       3         21. New Mexico       6.1       4         22. Neimesota       5.8       3         24. Montana       5.8       3         25. Texas       5.7       2         26. Oklahoma       5.6       2         27. Illinois       5.5       3         28. Idaho       5.3       4         29. Nebraska       5.3       3         30. Rhode Island       5.2       1         31. Wisconsin       5.1       3         32. Iowa       5.0       3         33. Missouri       5.0       3         34. Ohio       5.0       3         35. Pennsylvania       4.5       2         37. Georgia       4.8	10.	Washington	6.8	4																																																																																																																													
12. New Jersey       6.7       1         13. Utah       6.7       4         14. Oregon       6.6       4         15. Vermont       6.6       1         16. Virginia       6.5       2         7. Wyoming       6.5       4         18. Florida       6.4       2         19. Nevada       6.3       4         20. Kansas       6.2       3         21. New Mexico       6.1       4         22. New Hampshire       5.9       1         23. Minnesota       5.8       3         24. Montana       5.6       2         27. Illinois       5.5       3         28. Idaho       5.3       4         29. Nebraska       5.3       3         30. Rhode Island       5.2       1         31. Wisconsin       5.1       3         32. Iowa       5.0       3         33. Missouri       5.0       3         34. Ohio       5.0       3         35. Pensylvania       5.0       3         36. Michigan       4.5       2         37. Georgia       4.8       2         4.5       3     <	11.	Alaska	6.7	4																																																																																																																													
13.       Utah       6.7       4         14.       Oregon       6.6       1         15.       Vermont       6.6       1         16.       Virginia       6.5       2         17.       Wyoming       6.5       4         18.       Florida       6.4       2         19.       Nevada       6.3       4         20.       Kansas       6.2       3         21.       New Mexico       6.1       4         22.       New Hampshire       5.9       1         23.       Minnesota       5.8       3         24.       Montana       5.8       3         25.       Texas       5.7       2         26.       Oklahoma       5.6       2         27.       Illinois       5.5       3         28.       Idaho       5.3       4         29.       Nebraska       5.3       3       3         30.       Rhode Island       5.2       1       1         31.       Wisconsin       5.0       3       3         32.       Jowa       5.0       3       3 <t< td=""><td>12.</td><td>New Jersey</td><td>6.7</td><td>1</td></t<>	12.	New Jersey	6.7	1																																																																																																																													
14.       Oregon       6.6       4         15.       Vermont       6.6       1         16.       Virginia       6.5       2         17.       Wyoming       6.5       4         18.       Florida       6.4       2         19.       Nevada       6.3       4         20.       Kansas       6.2       3         21.       New Mexico       6.1       4         22.       New Mampshire       5.9       1         23.       Minnesota       5.8       3         24.       Montana       5.8       4         25.       Texas       5.7       2         26.       Oklahoma       5.6       2         27.       Ilinois       5.5       3         28.       Idaho       5.3       4         29.       Nebraska       5.3       3         30.       Rhode Island       5.2       1         31.       Wisconsin       5.1       3         32.       Iowa       5.0       3         33.       Missouri       5.0       3         34.       Ohio       5.0       3 <td>13.</td> <td>Utah</td> <td>6.7</td> <td>4</td>	13.	Utah	6.7	4																																																																																																																													
15.       Vermont       6.6       1         16.       Virginia       6.5       2         7.       Wyoming       6.5       4         18.       Florida       6.4       2         19.       Nevada       6.3       4         20.       Kansas       6.2       3         21.       New Mexico       6.1       4         22.       New Hampshire       5.9       1         23.       Minnesota       5.8       3         24.       Montana       5.8       4         25.       Texas       5.7       2         26.       Oklahoma       5.6       2         27.       Illinois       5.5       3         28.       Idaho       5.3       4         29.       Nebraska       5.3       3         30.       Rhode Island       5.2       1         31.       Wisconsin       5.1       3         32.       Iowa       5.0       3         33.       Missouri       5.0       3         34.       Ohio       5.0       3         35.       Pennsylvania       4.5 <td< td=""><td>14.</td><td>Oregon</td><td>6.6</td><td>4</td></td<>	14.	Oregon	6.6	4																																																																																																																													
16.       Virginia       6.5       2         17.       Wyoming       6.5       4         18.       Florida       6.4       2         19.       Nevada       6.3       4         20.       Kansas       6.2       3         21.       New Mexico       6.1       4         22.       New Hampshire       5.9       1         23.       Minnesota       5.8       3         24.       Montana       5.8       3         25.       Texas       5.7       2         26.       Oklahoma       5.6       2         27.       Illinois       5.5       3         28.       Idaho       5.3       4         29.       Nebraska       5.3       3         30.       Rhode Island       5.2       1         31.       Wisconsin       5.1       3         32.       Iowa       5.0       3         33.       Missouri       5.0       3         34.       Ohio       5.0       3         35.       Pennsylvania       4.6       1         39.       Louisiana       4.5	15.	Vermont	6.6	1																																																																																																																													
17.Wyoming6.5418.Florida6.4219.Nevada6.3420.Kansas6.2321.New Mexico6.1422.New Mampshire5.9123.Minnesota5.8324.Montana5.8425.Texas5.7226.Oklahoma5.6227.Illinois5.5328.Idaho5.3429.Nebraska5.3330.Rhode Island5.2131.Wisconsin5.1332.Iowa5.0333.Missouri5.0334.Ohio5.0335.Pennsylvania5.0336.Maine4.6137.Georgia4.8238.Maine4.6139.Louisiana4.5241.South Carolina4.5342.Indiana4.4343.North Carolina4.4344.North Dakota4.4345.Tennessee4.3246.Alabama4.1247.Missisfippi4.1248.Kentucky3.9249.West Virginia3.8250.Arkansas3.72	16.	Virginia	6.5	2																																																																																																																													
18. Florida       6.4       2         19. Nevada       6.3       4         20. Kansas       6.2       3         21. New Mexico       6.1       4         22. New Hampshire       5.9       1         23. Minnesota       5.8       3         24. Montana       5.8       3         25. Texas       5.7       2         26. Oklahoma       5.6       2         27. Illinois       5.5       3         28. Idaho       5.3       4         29. Nebraska       5.3       3         30. Rhode Island       5.2       1         31. Wisconsin       5.1       3         32. Iowa       5.0       3         33. Missouri       5.0       3         34. Ohio       5.0       3         35. Pennsylvania       5.0       3         37. Georgia       4.8       2         38. Maine       4.6       1         39. Louisiana       4.5       2         40. South Carolina       4.5       3         42. Indiana       4.4       3         43. North Carolina       4.4       3         45. Tennessee	17.	Wyoming	6.5	4																																																																																																																													
19.       Nevada       6.3       4         20.       Kansas       6.2       3         21.       New Mexico       6.1       4         22.       New Hampshire       5.9       1         23.       Minnesota       5.8       3         24.       Montana       5.8       3         24.       Montana       5.8       4         25.       Texas       5.7       2         26.       Oklahoma       5.6       2         27.       Illinois       5.5       3         28.       Idaho       5.3       4         29.       Nebraska       5.3       3         30.       Rhode Island       5.2       1         31.       Wisconsin       5.1       3         32.       Iowa       5.0       3         33.       Missouri       5.0       3         34.       Ohio       5.0       3         35.       Pennsylvania       5.0       3         37.       Georgia       4.8       2         38.       Maine       4.6       1         39.       Louisiana       4.5 <td< td=""><td>18.</td><td>Florida</td><td>6.4</td><td>2</td></td<>	18.	Florida	6.4	2																																																																																																																													
20. Kansas       6.2       3         21. New Mexico       6.1       4         22. New Hampshire       5.9       1         23. Minnesota       5.8       3         24. Montana       5.8       3         25. Texas       5.7       2         26. Oklahoma       5.6       2         27. Illinois       5.5       3         28. Idaho       5.3       4         29. Nebraska       5.3       3         30. Rhode Island       5.2       1         31. Wisconsin       5.1       3         32. Iowa       5.0       3         33. Missouri       5.0       3         34. Ohio       5.0       3         35. Pensylvania       5.0       3         36. Michigan       4.9       3         37. Georgia       4.8       2         40. South Carolina       4.5       3         42. Indiana       4.4       3         43. North Carolina       4.4       3         44. North Dakota       4.1       2         45. Tennessee       4.3       2         46. Alabama       4.1       2         47. Missis	19.	Nevada	6.3	4																																																																																																																													
21. New Mexico       6.1       4         22. New Hampshire       5.9       1         23. Minnesota       5.8       3         24. Montana       5.8       4         25. Texas       5.7       2         26. Oklahoma       5.6       2         27. Illinois       5.5       3         28. Idaho       5.3       4         29. Nebraska       5.3       3         30. Rhode Island       5.2       1         31. Wisconsin       5.1       3         32. Iowa       5.0       3         33. Missouri       5.0       3         34. Ohio       5.0       3         35. Pennsylvania       5.0       1         36. Michigan       4.9       3         37. Georgia       4.8       2         38. Maine       4.6       1         39. Louisiana       4.5       2         40. South Carolina       4.5       3         42. Indiana       4.4       3         43. North Carolina       4.4       3         44. North Dakota       4.1       2         45. Tennessee       4.3       2         46. Alab	20.	Kansas	6.2	3																																																																																																																													
22. New Hampshire       5.9       1         23. Minnesota       5.8       3         24. Montana       5.8       4         25. Texas       5.7       2         26. Oklahoma       5.6       2         27. Illinois       5.5       3         28. Idaho       5.3       4         29. Nebraska       5.3       4         29. Nebraska       5.3       3         30. Rhode Island       5.2       1         31. Wisconsin       5.1       3         32. Iowa       5.0       3         33. Missouri       5.0       3         34. Ohio       5.0       3         35. Pennsylvania       5.0       3         36. Michigan       4.9       3         37. Georgia       4.8       2         38. Maine       4.6       1         39. Louisiana       4.5       2         40. South Carolina       4.5       3         42. Indiana       4.4       3         43. North Carolina       4.4       3         44. North Dakota       4.1       2         45. Tennessee       4.3       2         46. Alabam	21.	New Mexico	6.1	4																																																																																																																													
23. Minnesota       5.8       3         24. Montana       5.8       4         25. Texas       5.7       2         26. Oklahoma       5.6       2         27. Illinois       5.5       3         28. Idaho       5.3       4         29. Nebraska       5.3       3         30. Rhode Island       5.2       1         31. Wisconsin       5.1       3         32. Iowa       5.0       3         33. Missouri       5.0       3         34. Ohio       5.0       3         35. Pennsylvania       5.0       3         37. Georgia       4.8       2         38. Maine       4.6       1         39. Louisiana       4.5       2         40. South Carolina       4.5       2         41. South Dakota       4.4       3         42. Indiana       4.4       2         44. North Dakota       4.4       2         45. Tennessee       4.3       2         46. Alabama       4.1       2         47. Mississippi       4.1       2         48. Kentucky       3.9       2         49. West Virgin	22.	New Hampshire	5.9	1																																																																																																																													
24. Montana       5.8       4         25. Texas       5.7       2         26. Oklahoma       5.6       2         27. Illinois       5.5       3         28. Idaho       5.3       4         29. Nebraska       5.3       3         30. Rhode Island       5.2       1         31. Wisconsin       5.1       3         32. Iowa       5.0       3         33. Missouri       5.0       3         34. Ohio       5.0       3         35. Pennsylvania       5.0       3         36. Michigan       4.9       3         37. Georgia       4.8       2         38. Maine       4.6       1         39. Louisiana       4.5       2         40. South Carolina       4.5       3         42. Indiana       4.4       3         43. North Carolina       4.4       3         45. Tennessee       4.3       2         46. Alabama       4.1       2         47. Mississippi       4.1       2         48. Kentucky       3.9       2         49. West Virginia       3.8       2         50. Arkansas<	23.	Minnesota	5.8	3																																																																																																																													
25. Texas       5.7       2         26. Oklahoma       5.6       2         27. Illinois       5.5       3         28. Idaho       5.3       4         29. Nebraska       5.3       3         30. Rhode Island       5.2       1         31. Wisconsin       5.1       3         32. Iowa       5.0       3         33. Missouri       5.0       3         34. Ohio       5.0       3         35. Pennsylvania       5.0       1         36. Michigan       4.9       3         37. Georgia       4.8       2         38. Maine       4.6       1         39. Louisiana       4.5       2         40. South Carolina       4.5       2         41. South Dakota       4.5       3         42. Indiana       4.4       3         43. North Carolina       4.4       3         44. North Dakota       4.1       2         44. North Dakota       4.1       2         45. Tennessee       4.3       2         46. Alabama       4.1       2         47. Mississippi       4.1       2         48. K	24.	Montana	5.8	4																																																																																																																													
26.       0klahoma       5.6       2         27.       Illinois       5.5       3         28.       Idaho       5.3       4         29.       Nebraska       5.3       3         30.       Rhode Island       5.2       1         31.       Wisconsin       5.1       3         32.       Iowa       5.0       3         33.       Missouri       5.0       3         34.       Ohio       5.0       3         35.       Pennsylvania       5.0       3         37.       Georgia       4.8       2         38.       Maine       4.6       1         39.       Louisiana       4.5       2         40.       South Dakota       4.5       3         42.       Indiana       4.4       3         43.       North Carolina       4.4       3         44.       North Dakota       4.4       3         45.       Tennessee       4.3       2         46.       Alabama       4.1       2         47.       Mississippi       4.1       2 <tr td="">       48.       Kentucky       <t< td=""><td>25.</td><td>Texas</td><td>5.7</td><td>2</td></t<></tr> <tr><td>27.       Illinois       5.5       3         28.       Idaho       5.3       4         29.       Nebraska       5.3       3         30.       Rhode Island       5.2       1         31.       Wisconsin       5.1       3         32.       Iowa       5.0       3         33.       Missouri       5.0       3         34.       Ohio       5.0       3         35.       Pennsylvania       5.0       3         36.       Michigan       4.9       3         37.       Georgia       4.8       2         38.       Maine       4.6       1         39.       Louisiana       4.5       2         40.       South Carolina       4.5       2         41.       South Dakota       4.4       3         42.       Indiana       4.4       3         43.       North Carolina       4.4       2         44.       North Dakota       4.1       2         45.       Tennessee       4.3       2         46.       Alabama       4.1       2         47.       Mississippi</td><td>26.</td><td>Oklahoma</td><td>5.6</td><td>2</td></tr> <tr><td>28. Idaho       5.3       4         29. Nebraska       5.3       3         30. Rhode Island       5.2       1         31. Wisconsin       5.1       3         32. Iowa       5.0       3         33. Missouri       5.0       3         34. Ohio       5.0       3         35. Pennsylvania       5.0       1         36. Michigan       4.9       3         37. Georgia       4.8       2         38. Maine       4.6       1         39. Louisiana       4.5       2         40. South Carolina       4.5       2         41. South Dakota       4.3       2         42. Indiana       4.4       3         43. North Carolina       4.4       3         44. North Dakota       4.1       2         44. North Dakota       4.1       2         45. Tennessee       4.3       2         46. Alabama       4.1       2         47. Mississippi       4.1       2         48. Kentucky       3.9       2         49. West Virginia       3.8       2         50. Arkansas       3.7       2    &lt;</td><td>27.</td><td>Illinois</td><td>5.5</td><td>3</td></tr> <tr><td>29.       Nebraska       5.3       3         30.       Rhode Island       5.2       1         31.       Wisconsin       5.1       3         32.       Iowa       5.0       3         33.       Missouri       5.0       3         34.       Ohio       5.0       3         35.       Pennsylvania       5.0       3         36.       Michigan       4.9       3         37.       Georgia       4.8       2         38.       Maine       4.6       1         39.       Louisiana       4.5       2         40.       South Carolina       4.5       2         41.       South Dakota       4.5       3         42.       Indiana       4.4       3         43.       North Carolina       4.4       3         44.       North Dakota       4.4       3         45.       Tennessee       4.3       2         46.       Alabama       4.1       2         47.       Mississippi       4.1       2         48.       Kentucky       3.9       2         49.       West Virginia<td>28.</td><td>Idaho</td><td>5.3</td><td>4</td></td></tr> <tr><td>30.       Rhode Island       5.2       1         31.       Wisconsin       5.1       3         32.       Iowa       5.0       3         33.       Missouri       5.0       3         34.       Ohio       5.0       3         35.       Pennsylvania       5.0       3         35.       Pennsylvania       5.0       1         36.       Michigan       4.9       3         37.       Georgia       4.8       2         38.       Maine       4.6       1         39.       Louisiana       4.5       2         40.       South Carolina       4.5       2         41.       South Dakota       4.5       3         42.       Indiana       4.4       3         43.       North Carolina       4.4       3         44.       North Dakota       4.4       3         45.       Tennessee       4.3       2         46.       Alabama       4.1       2         47.       Mississippi       4.1       2         48.       Kentucky       3.9       2         49.       West Virgini</td><td>29.</td><td>Nebraska</td><td>5.3</td><td>3</td></tr> <tr><td>31.       Wisconsin       5.1       3         32.       Iowa       5.0       3         33.       Missouri       5.0       3         34.       Ohio       5.0       3         35.       Pennsylvania       5.0       3         36.       Michigan       4.9       3         37.       Georgia       4.8       2         38.       Maine       4.6       1         39.       Louisiana       4.5       2         40.       South Carolina       4.5       2         41.       South Dakota       4.5       3         42.       Indiana       4.4       3         43.       North Carolina       4.4       3         44.       North Dakota       4.1       2         44.       North Dakota       4.1       2         45.       Tennessee       4.3       2         46.       Alabama       4.1       2         47.       Mississippi       4.1       2         48.       Kentucky       3.9       2         49.       West Virginia       3.8       2         50.       Arkansas<td>30.</td><td>Rhode Island</td><td>5.2</td><td>1</td></td></tr> <tr><td>32. Iowa       5.0       3         33. Missouri       5.0       3         34. Ohio       5.0       3         35. Pennsylvania       5.0       1         36. Michigan       4.9       3         37. Georgia       4.8       2         38. Maine       4.6       1         39. Louisiana       4.5       2         40. South Carolina       4.5       2         41. South Dakota       4.5       3         42. Indiana       4.4       3         43. North Carolina       4.4       2         44. North Dakota       4.1       2         45. Tennessee       4.3       2         46. Alabama       4.1       2         47. Mississippi       4.1       2         48. Kentucky       3.9       2         49. West Virginia       3.8       2         50. Arkansas       3.7       2</td><td>31.</td><td>Wisconsin</td><td>5:1</td><td>3</td></tr> <tr><td>33. Missouri       5.0       3         34. Ohio       5.0       3         35. Pennsylvania       5.0       1         36. Michigan       4.9       3         37. Georgia       4.8       2         38. Maine       4.6       1         39. Louisiana       4.5       2         40. South Carolina       4.5       2         41. South Dakota       4.5       3         42. Indiana       4.4       3         43. North Carolina       4.4       3         44. North Dakota       4.1       2         45. Tennessee       4.3       2         46. Alabama       4.1       2         47. Mississippi       4.1       2         48. Kentucky       3.9       2         49. West Virginia       3.8       2         50. Arkansas       3.7       2</td><td>32.</td><td>Iowa</td><td>5.0</td><td>3</td></tr> <tr><td>34. Ohio       5.0       3         35. Pennsylvania       5.0       1         36. Michigan       4.9       3         37. Georgia       4.8       2         38. Maine       4.6       1         39. Louisiana       4.5       2         40. South Carolina       4.5       2         41. South Dakota       4.5       3         42. Indiana       4.4       3         43. North Carolina       4.4       3         44. North Dakota       4.4       3         45. Tennessee       4.3       2         46. Alabama       4.1       2         47. Mississippi       4.1       2         48. Kentucky       3.9       2         49. West Virginia       3.8       2         50. Arkansas       3.7       2</td><td>33.</td><td>Missouri</td><td>5.0</td><td>3</td></tr> <tr><td>35. Pennsylvania       5.0       1         36. Michigan       4.9       3         37. Georgia       4.8       2         38. Maine       4.6       1         39. Louisiana       4.5       2         40. South Carolina       4.5       2         41. South Dakota       4.5       3         42. Indiana       4.4       3         43. North Carolina       4.4       3         44. North Dakota       4.1       2         45. Tennessee       4.3       2         46. Alabama       4.1       2         47. Mississippi       4.1       2         48. Kentucky       3.9       2         49. West Virginia       3.8       2         50. Arkansas       3.7       2</td><td>34.</td><td>Ohio</td><td>5.0</td><td>3</td></tr> <tr><td>36. Michigan       4.9       3         37. Georgia       4.8       2         38. Maine       4.6       1         39. Louisiana       4.5       2         40. South Carolina       4.5       2         41. South Dakota       4.5       3         42. Indiana       4.4       3         43. North Carolina       4.4       3         44. North Dakota       4.4       3         45. Tennessee       4.3       2         46. Alabama       4.1       2         47. Mississippi       4.1       2         48. Kentucky       3.9       2         49. West Virginia       3.8       2         50. Arkansas       3.7       2</td><td>35.</td><td>Pennsylvania</td><td>5.0</td><td>1</td></tr> <tr><td>37. Georgia       4.8       2         38. Maine       4.6       1         39. Louisiana       4.5       2         40. South Carolina       4.5       2         41. South Dakota       4.5       3         42. Indiana       4.4       3         43. North Carolina       4.4       3         44. North Dakota       4.4       3         45. Tennessee       4.3       2         46. Alabama       4.1       2         47. Mississippi       4.1       2         48. Kentucky       3.9       2         49. West Virginia       3.8       2         50. Arkansas       3.7       2</td><td>36.</td><td>Michigan</td><td>4.9</td><td>3</td></tr> <tr><td>38. Maine       4.6       1         39. Louisiana       4.5       2         40. South Carolina       4.5       2         41. South Dakota       4.5       3         42. Indiana       4.4       3         43. North Carolina       4.4       3         44. North Dakota       4.4       3         45. Tennessee       4.3       2         46. Alabama       4.1       2         47. Mississippi       4.1       2         48. Kentucky       3.9       2         49. West Virginia       3.8       2         50. Arkansas       3.7       2</td><td>37.</td><td>Georgia</td><td>4.8</td><td>2</td></tr> <tr><td>39.       Louisiana       4.5       2         40.       South Carolina       4.5       2         41.       South Dakota       4.5       3         42.       Indiana       4.4       3         43.       North Carolina       4.4       3         43.       North Carolina       4.4       3         44.       North Dakota       4.4       3         45.       Tennessee       4.3       2         46.       Alabama       4.1       2         47.       Mississippi       4.1       2         48.       Kentucky       3.9       2         49.       West Virginia       3.8       2         50.       Arkansas       3.7       2</td><td>38.</td><td>Maine</td><td>4.6</td><td>1</td></tr> <tr><td>40.       South Carolina       4.5       2         41.       South Dakota       4.5       3         42.       Indiana       4.4       3         43.       North Carolina       4.4       3         43.       North Carolina       4.4       3         44.       North Dakota       4.4       3         45.       Tennessee       4.3       2         46.       Alabama       4.1       2         47.       Mississippi       4.1       2         48.       Kentucky       3.9       2         49.       West Virginia       3.8       2         50.       Arkansas       3.7       2</td><td>39.</td><td>Louisiana</td><td>4.5</td><td>2</td></tr> <tr><td>41. South Dakota       4.5       3         42. Indiana       4.4       3         43. North Carolina       4.4       3         44. North Dakota       4.4       3         45. Tennessee       4.3       2         46. Alabama       4.1       2         47. Mississippi       4.1       2         48. Kentucky       3.9       2         49. West Virginia       3.8       2         50. Arkansas       3.7       2</td><td>40.</td><td>South Carolina</td><td>4.5</td><td>2</td></tr> <tr><td>42. Indiana       4.4       3         43. North Carolina       4.4       2         44. North Dakota       4.4       3         45. Tennessee       4.3       2         46. Alabama       4.1       2         47. Mississippi       4.1       2         48. Kentucky       3.9       2         49. West Virginia       3.8       2         50. Arkansas       3.7       2</td><td>41.</td><td>South Dakota</td><td>4.5</td><td>· 3</td></tr> <tr><td>43. North Carolina       4.4       2         44. North Dakota       4.4       3         45. Tennessee       4.3       2         46. Alabama       4.1       2         47. Mississippi       4.1       2         48. Kentucky       3.9       2         49. West Virginia       3.8       2         50. Arkansas       3.7       2</td><td>42.</td><td>Indiana</td><td>4.4</td><td>3</td></tr> <tr><td>44. North Dakota       4.4       3         45. Tennessee       4.3       2         46. Alabama       4.1       2         47. Mississippi       4.1       2         48. Kentucky       3.9       2         49. West Virginia       3.8       2         50. Arkansas       3.7       2</td><td>43.</td><td>North Carolina</td><td>4.4</td><td>2</td></tr> <tr><td>45. Tennessee       4.3       2         46. Alabama       4.1       2         47. Mississippi       4.1       2         48. Kentucky       3.9       2         49. West Virginia       3.8       2         50. Arkansas       3.7       2</td><td>44.</td><td>North Dakota</td><td>4.4</td><td>3</td></tr> <tr><td>46. Alabama       4.1       2         47. Mississippi       4.1       2         48. Kentucky       3.9       2         49. West Virginia       3.8       2         50. Arkansas       3.7       2</td><td>45.</td><td>Tennessee</td><td>4.3</td><td>2</td></tr> <tr><td>47. Mississippi       4.1       2         48. Kentucky       3.9       2         49. West Virginia       3.8       2         50. Arkansas       3.7       2</td><td>46.</td><td>Alabama</td><td>4.1</td><td>2</td></tr> <tr><td>48. Kentucky       3.9       2         49. West Virginia       3.8       2         50. Arkansas       3.7       2</td><td>47.</td><td>Mississippi</td><td>4.1</td><td>2</td></tr> <tr><td>49.         West Virginia         3.8         2           50.         Arkansas         3.7         2</td><td>48.</td><td>Kentucky</td><td>3.9</td><td>2</td></tr> <tr><td>50. Arkansas         3.7         2</td><td>49.</td><td>West Virginia</td><td>3.8</td><td>2</td></tr> <tr><td></td><td>50.</td><td>Arkansas</td><td>3.7</td><td>2</td></tr>	25.	Texas	5.7	2	27.       Illinois       5.5       3         28.       Idaho       5.3       4         29.       Nebraska       5.3       3         30.       Rhode Island       5.2       1         31.       Wisconsin       5.1       3         32.       Iowa       5.0       3         33.       Missouri       5.0       3         34.       Ohio       5.0       3         35.       Pennsylvania       5.0       3         36.       Michigan       4.9       3         37.       Georgia       4.8       2         38.       Maine       4.6       1         39.       Louisiana       4.5       2         40.       South Carolina       4.5       2         41.       South Dakota       4.4       3         42.       Indiana       4.4       3         43.       North Carolina       4.4       2         44.       North Dakota       4.1       2         45.       Tennessee       4.3       2         46.       Alabama       4.1       2         47.       Mississippi	26.	Oklahoma	5.6	2	28. Idaho       5.3       4         29. Nebraska       5.3       3         30. Rhode Island       5.2       1         31. Wisconsin       5.1       3         32. Iowa       5.0       3         33. Missouri       5.0       3         34. Ohio       5.0       3         35. Pennsylvania       5.0       1         36. Michigan       4.9       3         37. Georgia       4.8       2         38. Maine       4.6       1         39. Louisiana       4.5       2         40. South Carolina       4.5       2         41. South Dakota       4.3       2         42. Indiana       4.4       3         43. North Carolina       4.4       3         44. North Dakota       4.1       2         44. North Dakota       4.1       2         45. Tennessee       4.3       2         46. Alabama       4.1       2         47. Mississippi       4.1       2         48. Kentucky       3.9       2         49. West Virginia       3.8       2         50. Arkansas       3.7       2    <	27.	Illinois	5.5	3	29.       Nebraska       5.3       3         30.       Rhode Island       5.2       1         31.       Wisconsin       5.1       3         32.       Iowa       5.0       3         33.       Missouri       5.0       3         34.       Ohio       5.0       3         35.       Pennsylvania       5.0       3         36.       Michigan       4.9       3         37.       Georgia       4.8       2         38.       Maine       4.6       1         39.       Louisiana       4.5       2         40.       South Carolina       4.5       2         41.       South Dakota       4.5       3         42.       Indiana       4.4       3         43.       North Carolina       4.4       3         44.       North Dakota       4.4       3         45.       Tennessee       4.3       2         46.       Alabama       4.1       2         47.       Mississippi       4.1       2         48.       Kentucky       3.9       2         49.       West Virginia <td>28.</td> <td>Idaho</td> <td>5.3</td> <td>4</td>	28.	Idaho	5.3	4	30.       Rhode Island       5.2       1         31.       Wisconsin       5.1       3         32.       Iowa       5.0       3         33.       Missouri       5.0       3         34.       Ohio       5.0       3         35.       Pennsylvania       5.0       3         35.       Pennsylvania       5.0       1         36.       Michigan       4.9       3         37.       Georgia       4.8       2         38.       Maine       4.6       1         39.       Louisiana       4.5       2         40.       South Carolina       4.5       2         41.       South Dakota       4.5       3         42.       Indiana       4.4       3         43.       North Carolina       4.4       3         44.       North Dakota       4.4       3         45.       Tennessee       4.3       2         46.       Alabama       4.1       2         47.       Mississippi       4.1       2         48.       Kentucky       3.9       2         49.       West Virgini	29.	Nebraska	5.3	3	31.       Wisconsin       5.1       3         32.       Iowa       5.0       3         33.       Missouri       5.0       3         34.       Ohio       5.0       3         35.       Pennsylvania       5.0       3         36.       Michigan       4.9       3         37.       Georgia       4.8       2         38.       Maine       4.6       1         39.       Louisiana       4.5       2         40.       South Carolina       4.5       2         41.       South Dakota       4.5       3         42.       Indiana       4.4       3         43.       North Carolina       4.4       3         44.       North Dakota       4.1       2         44.       North Dakota       4.1       2         45.       Tennessee       4.3       2         46.       Alabama       4.1       2         47.       Mississippi       4.1       2         48.       Kentucky       3.9       2         49.       West Virginia       3.8       2         50.       Arkansas <td>30.</td> <td>Rhode Island</td> <td>5.2</td> <td>1</td>	30.	Rhode Island	5.2	1	32. Iowa       5.0       3         33. Missouri       5.0       3         34. Ohio       5.0       3         35. Pennsylvania       5.0       1         36. Michigan       4.9       3         37. Georgia       4.8       2         38. Maine       4.6       1         39. Louisiana       4.5       2         40. South Carolina       4.5       2         41. South Dakota       4.5       3         42. Indiana       4.4       3         43. North Carolina       4.4       2         44. North Dakota       4.1       2         45. Tennessee       4.3       2         46. Alabama       4.1       2         47. Mississippi       4.1       2         48. Kentucky       3.9       2         49. West Virginia       3.8       2         50. Arkansas       3.7       2	31.	Wisconsin	5:1	3	33. Missouri       5.0       3         34. Ohio       5.0       3         35. Pennsylvania       5.0       1         36. Michigan       4.9       3         37. Georgia       4.8       2         38. Maine       4.6       1         39. Louisiana       4.5       2         40. South Carolina       4.5       2         41. South Dakota       4.5       3         42. Indiana       4.4       3         43. North Carolina       4.4       3         44. North Dakota       4.1       2         45. Tennessee       4.3       2         46. Alabama       4.1       2         47. Mississippi       4.1       2         48. Kentucky       3.9       2         49. West Virginia       3.8       2         50. Arkansas       3.7       2	32.	Iowa	5.0	3	34. Ohio       5.0       3         35. Pennsylvania       5.0       1         36. Michigan       4.9       3         37. Georgia       4.8       2         38. Maine       4.6       1         39. Louisiana       4.5       2         40. South Carolina       4.5       2         41. South Dakota       4.5       3         42. Indiana       4.4       3         43. North Carolina       4.4       3         44. North Dakota       4.4       3         45. Tennessee       4.3       2         46. Alabama       4.1       2         47. Mississippi       4.1       2         48. Kentucky       3.9       2         49. West Virginia       3.8       2         50. Arkansas       3.7       2	33.	Missouri	5.0	3	35. Pennsylvania       5.0       1         36. Michigan       4.9       3         37. Georgia       4.8       2         38. Maine       4.6       1         39. Louisiana       4.5       2         40. South Carolina       4.5       2         41. South Dakota       4.5       3         42. Indiana       4.4       3         43. North Carolina       4.4       3         44. North Dakota       4.1       2         45. Tennessee       4.3       2         46. Alabama       4.1       2         47. Mississippi       4.1       2         48. Kentucky       3.9       2         49. West Virginia       3.8       2         50. Arkansas       3.7       2	34.	Ohio	5.0	3	36. Michigan       4.9       3         37. Georgia       4.8       2         38. Maine       4.6       1         39. Louisiana       4.5       2         40. South Carolina       4.5       2         41. South Dakota       4.5       3         42. Indiana       4.4       3         43. North Carolina       4.4       3         44. North Dakota       4.4       3         45. Tennessee       4.3       2         46. Alabama       4.1       2         47. Mississippi       4.1       2         48. Kentucky       3.9       2         49. West Virginia       3.8       2         50. Arkansas       3.7       2	35.	Pennsylvania	5.0	1	37. Georgia       4.8       2         38. Maine       4.6       1         39. Louisiana       4.5       2         40. South Carolina       4.5       2         41. South Dakota       4.5       3         42. Indiana       4.4       3         43. North Carolina       4.4       3         44. North Dakota       4.4       3         45. Tennessee       4.3       2         46. Alabama       4.1       2         47. Mississippi       4.1       2         48. Kentucky       3.9       2         49. West Virginia       3.8       2         50. Arkansas       3.7       2	36.	Michigan	4.9	3	38. Maine       4.6       1         39. Louisiana       4.5       2         40. South Carolina       4.5       2         41. South Dakota       4.5       3         42. Indiana       4.4       3         43. North Carolina       4.4       3         44. North Dakota       4.4       3         45. Tennessee       4.3       2         46. Alabama       4.1       2         47. Mississippi       4.1       2         48. Kentucky       3.9       2         49. West Virginia       3.8       2         50. Arkansas       3.7       2	37.	Georgia	4.8	2	39.       Louisiana       4.5       2         40.       South Carolina       4.5       2         41.       South Dakota       4.5       3         42.       Indiana       4.4       3         43.       North Carolina       4.4       3         43.       North Carolina       4.4       3         44.       North Dakota       4.4       3         45.       Tennessee       4.3       2         46.       Alabama       4.1       2         47.       Mississippi       4.1       2         48.       Kentucky       3.9       2         49.       West Virginia       3.8       2         50.       Arkansas       3.7       2	38.	Maine	4.6	1	40.       South Carolina       4.5       2         41.       South Dakota       4.5       3         42.       Indiana       4.4       3         43.       North Carolina       4.4       3         43.       North Carolina       4.4       3         44.       North Dakota       4.4       3         45.       Tennessee       4.3       2         46.       Alabama       4.1       2         47.       Mississippi       4.1       2         48.       Kentucky       3.9       2         49.       West Virginia       3.8       2         50.       Arkansas       3.7       2	39.	Louisiana	4.5	2	41. South Dakota       4.5       3         42. Indiana       4.4       3         43. North Carolina       4.4       3         44. North Dakota       4.4       3         45. Tennessee       4.3       2         46. Alabama       4.1       2         47. Mississippi       4.1       2         48. Kentucky       3.9       2         49. West Virginia       3.8       2         50. Arkansas       3.7       2	40.	South Carolina	4.5	2	42. Indiana       4.4       3         43. North Carolina       4.4       2         44. North Dakota       4.4       3         45. Tennessee       4.3       2         46. Alabama       4.1       2         47. Mississippi       4.1       2         48. Kentucky       3.9       2         49. West Virginia       3.8       2         50. Arkansas       3.7       2	41.	South Dakota	4.5	· 3	43. North Carolina       4.4       2         44. North Dakota       4.4       3         45. Tennessee       4.3       2         46. Alabama       4.1       2         47. Mississippi       4.1       2         48. Kentucky       3.9       2         49. West Virginia       3.8       2         50. Arkansas       3.7       2	42.	Indiana	4.4	3	44. North Dakota       4.4       3         45. Tennessee       4.3       2         46. Alabama       4.1       2         47. Mississippi       4.1       2         48. Kentucky       3.9       2         49. West Virginia       3.8       2         50. Arkansas       3.7       2	43.	North Carolina	4.4	2	45. Tennessee       4.3       2         46. Alabama       4.1       2         47. Mississippi       4.1       2         48. Kentucky       3.9       2         49. West Virginia       3.8       2         50. Arkansas       3.7       2	44.	North Dakota	4.4	3	46. Alabama       4.1       2         47. Mississippi       4.1       2         48. Kentucky       3.9       2         49. West Virginia       3.8       2         50. Arkansas       3.7       2	45.	Tennessee	4.3	2	47. Mississippi       4.1       2         48. Kentucky       3.9       2         49. West Virginia       3.8       2         50. Arkansas       3.7       2	46.	Alabama	4.1	2	48. Kentucky       3.9       2         49. West Virginia       3.8       2         50. Arkansas       3.7       2	47.	Mississippi	4.1	2	49.         West Virginia         3.8         2           50.         Arkansas         3.7         2	48.	Kentucky	3.9	2	50. Arkansas         3.7         2	49.	West Virginia	3.8	2		50.	Arkansas	3.7	2
25.	Texas	5.7	2																																																																																																																														
27.       Illinois       5.5       3         28.       Idaho       5.3       4         29.       Nebraska       5.3       3         30.       Rhode Island       5.2       1         31.       Wisconsin       5.1       3         32.       Iowa       5.0       3         33.       Missouri       5.0       3         34.       Ohio       5.0       3         35.       Pennsylvania       5.0       3         36.       Michigan       4.9       3         37.       Georgia       4.8       2         38.       Maine       4.6       1         39.       Louisiana       4.5       2         40.       South Carolina       4.5       2         41.       South Dakota       4.4       3         42.       Indiana       4.4       3         43.       North Carolina       4.4       2         44.       North Dakota       4.1       2         45.       Tennessee       4.3       2         46.       Alabama       4.1       2         47.       Mississippi	26.	Oklahoma	5.6	2																																																																																																																													
28. Idaho       5.3       4         29. Nebraska       5.3       3         30. Rhode Island       5.2       1         31. Wisconsin       5.1       3         32. Iowa       5.0       3         33. Missouri       5.0       3         34. Ohio       5.0       3         35. Pennsylvania       5.0       1         36. Michigan       4.9       3         37. Georgia       4.8       2         38. Maine       4.6       1         39. Louisiana       4.5       2         40. South Carolina       4.5       2         41. South Dakota       4.3       2         42. Indiana       4.4       3         43. North Carolina       4.4       3         44. North Dakota       4.1       2         44. North Dakota       4.1       2         45. Tennessee       4.3       2         46. Alabama       4.1       2         47. Mississippi       4.1       2         48. Kentucky       3.9       2         49. West Virginia       3.8       2         50. Arkansas       3.7       2    <	27.	Illinois	5.5	3																																																																																																																													
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30.       Rhode Island       5.2       1         31.       Wisconsin       5.1       3         32.       Iowa       5.0       3         33.       Missouri       5.0       3         34.       Ohio       5.0       3         35.       Pennsylvania       5.0       3         35.       Pennsylvania       5.0       1         36.       Michigan       4.9       3         37.       Georgia       4.8       2         38.       Maine       4.6       1         39.       Louisiana       4.5       2         40.       South Carolina       4.5       2         41.       South Dakota       4.5       3         42.       Indiana       4.4       3         43.       North Carolina       4.4       3         44.       North Dakota       4.4       3         45.       Tennessee       4.3       2         46.       Alabama       4.1       2         47.       Mississippi       4.1       2         48.       Kentucky       3.9       2         49.       West Virgini	29.	Nebraska	5.3	3																																																																																																																													
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42. Indiana       4.4       3         43. North Carolina       4.4       2         44. North Dakota       4.4       3         45. Tennessee       4.3       2         46. Alabama       4.1       2         47. Mississippi       4.1       2         48. Kentucky       3.9       2         49. West Virginia       3.8       2         50. Arkansas       3.7       2	41.	South Dakota	4.5	· 3																																																																																																																													
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	50.	Arkansas	3.7	2																																																																																																																													

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### TABLE XVIII-continued

### COLLEGE EDUCATION RANKING OF STATES: BY REGION

Notes: <sup>a</sup>College education is defined as at least four years of study at a public or private institution of higher learning. Persons over 25 are the sample; 1976 is the year studied.

bRegional code is: l=Northeast; 2=South; 3=North Central; 4=West.

Source: U.S. Department of Commerce, Bureau of the Census, <u>U.S. Statist-</u> <u>ical Abstract - 1977</u> (Washington: U.S. Government Printing Office), Table 223, p. 139.

indicates, the western states contain proportionately more college educated persons--50% of the ten states with the most-educated populace are from this region. Not surprisingly 70% of the states with the least-educated populations are from the southern region. As studies have shown, there is a positive linkage between education and income.<sup>12</sup> Thus, it is consistent to find here that the West, followed by the Northeast, is the wealthiest, and the most-educated region. There are several reasons for this pattern. The higher the income level the more ability, incentive, and pressure to remain in school. The parental pressure to finish school, coupled with a lessened need to guit school to work for support has helped this region attain its comparatively high education level. This pattern is strengthened by the influx of persons of higher socioeconomic status moving into the white collar jobs available in the expanding economy. Conversely, seven of the ten states with the lowest percentages of college-educated persons are found in the southern region. These states are not only the poorest, but are generally perceived as the least progressive. The pressure and chance to attend college are thus lessened; the lower level of income often necessitates that a larger portion of the population concentrate more on a job than a higher education. The types of jobs available--agricultural, blue collar, low skilled--present no need for a college eduction. There also is not the social pressure to attend college, partially due to the often dominant agricultural inclination of the southern region.

The percent of tax revenue reliance, thus, does seem to be affected, to some degree, by educational levels. The directness of this relationship is not decisive. As Table XXII reveals, this relationship between college education and tax reliance in the states appears to be

negative; the higher the proportion of college-educated persons, the lower the level of tax revenue reliance. However, simple correlational analysis reveals that this relationship is neither negative (.01) nor significant. When analyzing by region, only among southern states can a significant relationship be observed (.60). As would be expected, increased education adds to the tendency of the citizenry to demand taxation policies in their own economic-self interest.<sup>13</sup> Thus, the observed linkage with tax reliance.

Black Americans have historically been important in American politics--but as the subjects of governmental policies, not as political participants.<sup>14</sup> Regardless of their role, however, the impact of blacks on taxation policies seems important to study. It is hypothesized that the relationship between the percentage of the black population and the state tax reliance will be negative; as the level of blacks concentrated in the lower income strata of the population increases, sources of revenue other than taxes will necessarily have to be sought. As can be seen in Table XIX, the ten states with the highest proportion of blacks in the population are in the south. When the historical setting is considered, this pattern is not surprising. When the least blackpopulated states are studied, 12 states must be looked at. In these states the black population is less than one percent of the total population and is therefore not reported in the Census publication. Of these 12 states, 58% are found in the western region, 25% in the Northeast, and 17% in the North Central region.

In light of earlier results reported in this research it seems valid to predict that a negative relationship exists between the percent black of the populace and tax revenue reliance of a state. The

# TABLE XIX

# BLACK POPULATION RANKING OF STATES: BY REGION

	<b>0</b> • • •	Black Population <sup>a</sup>	- · b
	States	(%)	Region
1.	Mississippi	35.7%	2
2.	South Carolina	30.4	2
3.	Louisiana	29.5	2
4	Georgia	25.9	2
5	Alahama	25.1	2
6	North Carolina	21 8	2
7	Maryland	20.0	2
· · ·	Vinginia		2
0.	Ankangag	10.5	2
7.	Topposess	10.9	2
10.	Delevere	10.4	2
11.	Delaware	14.8	2
12.	Florida	14.0	2
13.		13.7	3
14.	New York	13.2	I
15.	lexas	12.3	2
16.	Michigan	11.9	3
17.	New Jersey	11.9	1
18.	Missouri	10.6	3
19.	Ohio	9.7	3
20.	Pennsylvania	8.8	1
21.	California	7.4	4
22.	Indiana	7.3	3
23.	Kentucky	7.1	2
24.	Oklahoma	6.9	2
25.	Connecticut	6.0	1
26.	Nevada	5.9	4
27.	Kansas	4.7	3
28.	Massachusetts	3.6	ī
29.	West Virginia	3.5	2
30	Colorado	3 4	4
31	Wisconsin	3 0	3
32	Arizona	3 0	4
32.	Nobracka	3.0	3
37	Phode Island	3.0	1
35	Washington	2.0	1
35.	Towa	1 /	7
30.	10wa Onogon	1.4	5
37.	Minneseta	1.5	4
20.	Alacka	1.0	3
39.	Alaska	X	4
40.	Hawall	X	4
41.	Idano	X	4
42.	Maine	X	1
43.	Montana	X	4
44.	New Hampshire	X	l
45.	New Mexico	X	4
46.	North Dakota	X	3
47.	South Dakota	X	3
48.	Utah	x	4
49.	Vermont	x	1
50.	Wyoming	X	4

#### TABLE XIX-continued

### BLACK POPULATION RANKING OF STATES: BY REGION

Notes: <sup>a</sup>Black population is determined from data principally obtained through self-enumeration on census questions. For this study, the 1970 Census has been updated to 1975 figures. The father's race is used for persons of mixed parentage who are in doubt as to their classification.

DRegional code is: l=Northeast; 2=South; 3=North Central; 4=West.

Xdenotes those states where the black population is less than 1% of the total population.

Source: U.S. Department of Commerce, Bureau of the Census, <u>U.S. Statist</u>ical Abstract - 1977 (Washington: U.S. Government Printing Office), Table 35, p. 31. relationship exhibited in Table XXII between these two variables, however, suggests a positive relation. An examination of the simple correlational coefficient analysis does, on the other hand, show the expected negative relationship (-.17). The relationship is not significant at any level when all states are considered. Only in the south, the region most heavily populated by blacks, is there a negative relationship (-.18). For the three remaining regions a positive correlation is present. The most probable explanation for this relationship is the increasingly minor place of blacks in the population. As blacks occupy comparatively less of a place in the state, the state policies will reflect comparatively less consideration of their social influences. This results in increased tax revenue reliance; blacks have historically been at the bottom of the income ladder. Without this "dragging" influence of the lower-income black population, the states in these three regions can rely more heavily on taxes as a source of revenue. The final socioeconomic measure considered here is one that has often been alluded to throughout this study--federal aid. As the impact of federal assistance grows, its effect on the tax reliance patterns of the states becomes increasingly important. Hypothesized as exhibiting a negative correlation, intergovernmental transfers are also posited as being very strongly related to the reliance levels.

Increasingly, federal aid has become more important to states as a source of revenue; "the burden of government finance has grown much faster than the nation's income, yielding an increased burden on the national government."<sup>15</sup> But there is considerable variation in the states' use of and dependence on federal aid, and their motives for doing so. The figures in Table XX demonstrate this diversity.

# TABLE XX

# FEDERAL AID AS A PERCENT OF TOTAL GENERAL REVENUE RANKING OF THE STATES: BY REGION

		Endoral Aida	
	States	rederal Ald~ (%)	Regionb
	A7		
1.	Alaska South Dokoto	37.8%	4
2.	South Dakota	37.1	3
3.	Wyoming	37.1	4
4.	Montana	36.2	4
5.	Vermont	35.4	I
<u>o</u> .	west virginia	34.4	2
/.	Arkansas	33.4	2
8.	Maine	33.3	
. 9.	Utan	33.0	4
10.	Georgia	32.9	2
11.	MISSISSIPPI	32.7	2
12.	New Hampshire	32.5	
13.	Alabama	31.9	2
14.	lennessee	31.2	2
15.	Uregon	31.1	4
16.	Idaho	30.3	4
17.	North Carolina	30.2	2
18.	Oklahoma	30.2	2
19.	Missouri	29.6	3
20.	Rhode Island	29.5	1
21.	New Jersey	29.4	1
22.	Nebraska	28.8	3
23.	Colorado	28.7	4
24.	Kentucky	28.4	2
25.	Washington	28.0	4
26.	Michigan	27.3	3
27.	Texas	27.2	2
28.	Connectiuct	26.6	1
29.	South Carolina	26.6	2
30.	New York	26.5	1
31.	New Mexico	26.4	4
32.	Massachusetts	26.3	1
33.	Ohio	26.2	3
34.	California	26.1	4
35.	Kansas	25.9	3
36.	Louisiana	25.8	2
37.	Virginia	25.5	2
38.	Hawaii	24.7	4
39.	Illinois	24.7	3
40.	North Dakota	24.7	3
41.	Pennsylvania	24.7	1
42.	Iowa	24.6	3
43.	Nevada	24.2	4
44.	Wisconsin	24.2	3
45.	Minnesota	23.4	3
46.	Florida	23.3	2
47.	Maryland	22.7	2
48.	Arizona	21.4	4
49.	Indiana	19.7	3
50.	Delaware	17.4	2

#### TABLE XX-continued

FEDERAL AID AS A PERCENT OF TOTAL GENERAL REVENUE RANKING OF THE STATES: BY REGION

Notes: <sup>a</sup>Federal aid is the intergovernmental transfer of funds to the state and local governments for the general welfare of the citizens of that area. Included in the term are grants-in-aid, revenue sharing, supplimental income, subsidies, shared taxes, and nationally-sponsored projects which benefit the state or locality affected.

<sup>b</sup>Regional code is: l=Northeast; 2=South; 3=North Central; 4=West.

Source: U.S. Department of Commerce, Bureau of the Census, <u>U.S.</u> <u>Statistical Abstract - 1977</u> (Washington: U.S. Government Printing Office), Table 475, p. 292.

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Federal aid is defined as the intergovernmental transfer of money to the states for the "general welfare" of the population of that state. It may be in the form of grants-in-aid, revenue sharing, supplemental income, subsidies, shared taxes, or nationally-sponsored projects which benefit the state involved. In this study federal aid is operationalized as the percentage of a state's total general revenue contributed by federal funds.

Federal grants-in-aid programs can be seen as the single most important source of federal influence over state policy. Federal aid as a percent of general revenue has increased slightly in the past decade from 18.9% in 1963 to 32.6% in 1973. <sup>16</sup> This growth can be attributed to the fact that the federal government has increased its activity in public assistance and social welfare, public health, and educational program areas. These programs have, along with highway programs, increasingly required heavy expenditures, expenditures that state and local governments can ill afford out of their own resources. While revenue from the states' own sources grew 10% from 1948-1973. revenue from federal sources increased 27% during the same time period.<sup>17</sup> About one-fifth of all state and local governmental revenue originates from the federal government.<sup>18</sup> The variation in the proportion of a state's total revenue that comes from federal aid--from a high of 37.8% (Alaska) to a low of 17.4% (Delaware) of total general revenue--can be attributed to numerous characteristics unique to each state. On the whole, poorer states tend to receive more federal dollars. The different Congressionally-mandated criteria for determining the distribution of many grants-in-aid are one cause of this pattern. Formula grants are allocated to states both on the basis of need and fiscal

capacity. This distribution works to the benefit of the less wealthy states. And the poorer states--those of the South--tend to be lessindustrialized and more agriculturally-inclined. Conversely, the more highly urbanized and wealthier states can also receive a larger share of federal assistance than the less-urbanized, poorer states. This apparent contradiction can be explained by examining in more detail the qualifications used to allocate federal grant monies. Some federal funds are project grant-type funds. These are awarded to the states on the basis of specific applications and are typically used to finance research, training, or demonstrations of new techniques. These conditions favor those states which are wealthy and capable of grantsmanship. According to Jack Walker's Innovation Scores for the states, the most innovative states are those in the northeastern and western regions-the wealthiest regions. The southern states occupy 50% of the lower one-fifth of the innovative states.<sup>19</sup> Poorer states are less likely to have the excess revenue to innovate, and the political climate has generally been somewhat less responsive to new ideas or policies, particularly those eminating from Washington. As a result, Southern involvement with this particular type of federal grant is likely to be of a limited scope.

Another reason that the wealthier and more urbanized states have generally received a larger share of federal assistance than other states is to help them to provide services, particularly to the poor, concentrated in urban centers. Wealthy, but heavily-urbanized states are characterized by much greater differentials in income distributions--a greater percentage of rich, offset by a greater percentage of poor. This situation calls attention to the needs of the "have nots." In summary, one

of the main reasons for intergovernmental transfers is equalization among the states--the redistribution of income and wealth in some fashion through federal grants.

Federal aid as a percent of a state's general revenue has increased, thereby decreasing the state's reliance on tax revenue. Adding to this pattern are political pressures which make tax increases difficult. However, federal aid reliance is not totally related to taxes. As can be seen in Table XXII, the southern and western states rely most heavily on federal assistance as a source of general revenue. Of the 10 most reliant states three are southern and four are western. One reason for this pattern is that the South, being the poorest region receives a greater proportion of redistributive-type federal aid. On the other hand, the western states receive large portions of federal aid for resource development.<sup>20</sup> Three western states are also among the ten wealthiest (in terms of per capita personal income); this allows the western region to play the "grantsmanship game" more intensely and thus "win" a greater proportion of federal dollars. These statistics, then, strongly suggest a state's ability to or necessity of relying on federal aid does influence a state's relative reliance on tax revenues. As federal aid dependency increases, reliance on tax revenue decreases.

The increasing intergovernmental transfering of monies raises the question of whether the effects of this assistance have been "stimulative" or "substitutive." Of course, the <u>net</u> benefit of federal grants is to the receiving level. But if federal funds free up state monies that were previously used for specific purposes or if they enable the government to provide new services without raising raxes or service charges, they in effect are discretionary monies and are thus stimulative in nature.

On the other hand, if they force the receiving unit to cut other programs and reallocate its resources in order to participate, the grant is a direct exercise of federal power which can be considered neutral insofar as state/local relations are concerned.<sup>21</sup> These grants, by allowing the state to lower taxes while simply retaining the same level of services are considered substitutive.

Current figures tend to indicate that states are using these federal monies as substitutes for state-raised monies. Block grants have enhanced the states' ability to use federal funds in a substitutive manner. For example, state governors have indicated that federal revenue sharing monies have generally enabled states to reduce taxes (1 state), prevent <u>new</u> taxes (10 states), prevent tax increases (18 states), or maintain current tax levels (26 states). The overall result was that receipt of the funds primarily resulted in a reduction of tax burdens, rather than in an increase in service levels.<sup>22</sup> Thus, on the basis of these findings it appears that the percent of federal aid a state receives does not increase its tax revenue reliance, but, rather, allows it to remain stable or to decrease.

This assumption is borne out when Table XXIII is examined. A highly significant and negative relationship between these two variables is found (-.70). In fact, this significant and negative correlation is found in all of the four regions when region is controlled for.

#### Governmental Variables

The one governmental measure examined in this research is a legal measure related to a state's taxing and spending powers (constitutional and statutory). It has been hypothesized that taxing constraints influence

a state's tax revenue reliance to some degree; by prescribing allowable rates, raises, and taxes, the available tax sources could be restrained and therefore, dependence on taxes as a revenue resource would be limited also. The results of the analysis show that this hypothesis is not supported. It appears that while state constraints on taxing powers may possibly have some effect, this effect is very minor, and other intervening variables play a much larger role. (Table XXI indicates the most recently-enacted constraints.)

#### Summary

Correlational analysis enables the identification of the demographic and socioeconomic characteristics which are the most strongly associated with tax revenue reliance of the states and regions.

State tax revenue reliance patterns are most affected by the level of federal aid received (-.79) followed by the level of urbanization (.48). When region is controlled for, federal aid is once again the strongest indicator in all regions except the North Central, where it closely follows the urbanization level as an indicator of the strength of the relationship. In the Northeastern states the population growth measure is the second most significant (-.72), while in the South it is per capita personal income (.74), and in the western states it is urbanization (.74).

## Determinants of Tax Revenue Reliance in the States

The final step in this analysis is to submit these results to regressional analysis in order to determine which of these significant demographic and socioeconomic correlates are the best predictors of the states' tax reliance.

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# TABLE XXI

# ADOPTION OF NEW TAX AND/OR EXPENDITURE CONTROLS SINCE 1970

Truth in Taxation <sup>a</sup>	Levy Limits <sup>b</sup>	Spending Limits
Florida Hawaii Montana Virginia	Alaska California Indiana Iowa Kansas Minnesota Ohio Washington Wisconsin	Colorado New Jersey Tennessee

Notes: <sup>a</sup>Limits tax rate levy. Public announce is needed to increase.

<sup>b</sup>Growth of property tax levies is restricted to a specified rate of increase from one year to the next.

Source: Texas Town and City (July, 1978), pp. 10-13.

	Region			
Variable	Northeast	South	North Central	West
Tax Revenue Reliance 10 highest states (%) 10 lowest states (%)	1 (10%) 2 (20%)	3 (30%) 0 (00%)	4 (40%) 2 (40%)	2 (20%) 6 (60%)
Population Density 10 highest states (%) 10 lowest states (%)	6 (60%) 0 (00%)	2 (20%) 0 (00)	2 (20%) 2 (20%)	0 (00%) 8 (80%)
Population Growth 10 highest states (%) 10 lowest states (%)	0 (00%) 5 (50%)	1 (10%) 0 (00%)	0 (00%) 5 (50%)	9 (90%) 0 (00%)
Urbanization 10 highest states (%) 10 lowest states (%)	4 (40%) 2 (20%)	1 (10%) 5 (50%)	1 (10%) 2 (20%)	4 (40%) 1 (10%)
Per Capita Income 10 highest states (%) 10 lowest states (%)	3 (30%) 1 (10%)	2 (20%) 6 (60%)	2 (20%) 2 (20%)	3 (30%) 1 (10%)
College Education 10 highest states (%) 12 lowest states (%)	3 (30%) 0 (00%)	2 (20%) 9 (75%)	0 (00%) 3 (25%)	5 (50%) 0 (00%)
Black Population 10 highest states (%) 12 lowest states (%)	0 (00%) 3 (25%)	10 (100%) 0 (00%)	0 (00%) 2 (17%)	0 (00%) 7 (58%)
Federal Aid 10 highest states (%) 13 lowest states (%)	2 (20%) 1 (8%)	3 (30%) 3 (23%)	1 (10%) 6 (46%)	4 (40%) 3 (23%)

# REGIONAL COMPARISON OF VARIABLES AFFECTING STATE TAX REVENUE RELIANCE

### TABLE XXIII

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# RELATIONSHIP BETWEEN INDICATOR VARIABLES AND TAX REVENUE RELIANCE OF THE STATES: BY REGION

Variable	All States	Northeast (9)	South (16)	North Central (12)	West (13)
Population Density	.22	.36	.69**	.49	.45
Population Growth	22	72	.46*	14	09
Urbanization	.48***	.64*	.53*	.76*	.74**
Per Capita Personal Income	01	.62*	.70***	.74**	46
College Education	.01	.12	.60**	.46	.18
Black Population	17	.13	18	.03	.44
Federal Aid	79***	94***	75***	71**	89***
State Constraints					

Notes: Figures are simple correlational coefficients.

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\*=significant at .05; \*\*=significant at .01; \*\*\*=significant at .001.

--- indicates that the coefficient cannot be computed.

The results of this regressional analysis of tax revenue reliance determinants, as shown in Table XXIV, indicate that among states, the level of federal aid received is the most important predictor of reliance. This measure alone can explain 55% of the variance. The other variables exhibiting some level of predictive power, in descending order, are college education (.3%), black population (.1%), population growth (.1%), per capita personal income (.1%), and urbanization (.1%). Together with federal aid, these correlates explain 60% of the total variance in state revenue reliance patterns.

In summary, the results of the regressional analysis of determinants of tax revenue reliance reinforce results of the correlational analysis, namely that federal aid is the predominant factor to consider when attempting to explain variations in state tax reliance patterns. Of the measures examined here, socioeconomic variables seem to be the best indicators of this reliance, although demographic measures cannot be ignored. State legal constraints, however, do not appear to be very significant determinants. The explanation for this may be that state constraints are themselves the product of a state's socioeconomic and demographic environment.

# TABLE XXIV

# DETERMINANTS OF TAX REVENUE RELIANCE: ALL STATES

			<u> </u>
Variable	r	В	R2
Federal Aid	74	81	.55
College Education	.17	31	.58
Black Population	19	09	.59
Population Growth	.13	.10	.60
Per Capita Personal Income	.30	.05	.60
Urbanization	.23	.04	.60

Note: Figures are a result of regressional analysis.

### Notes, Chapter V

<sup>1</sup>Population density, as defined by the U.S. Bureau of the Census, is the population per square mile of land area. The population for each state is currently determined by a decennial census in which each person is counted as an inhabitant of his usual place of residence, not necessarily his legal residence, voting residence or domicile. Also included in the census are miliatry personnel stationed abroad.

<sup>2</sup>Determined by a comparison of the 1970 census with the 1976 Bureau of the Census updated figures.

<sup>3</sup>Charles M. Tiebout, <u>The Community Economy Base Study</u> (New York: Committee for Economic Development, 1962), pp. 18-19.

<sup>4</sup>The urban population comprises all persons in: 1) places of 2,500 inhabitants or more incorporated as cities, villages, burroughs (except Alaska), and towns (except in New England, New York, and Wisconsin), but excluding persons living in the rural portions of extended cities; 2) unincorporated places of 2,500 inhabitants or more; 3) other territory, incorporated or unincorporated, included in urbanized areas. An urbanized area consists of a central city, or twin cities, with a total of 50,000 inhabitants or more.

<sup>5</sup>James A. Maxwell and J. Richard Aronson, <u>Financing State and Local</u> Governments, 3rd ed. (Washington: The Brookings Institution, 1977), p. 79.

<sup>6</sup>Thomas R. Dye, <u>Politics, Economics, and the Public: Policy</u> <u>Outcomes in the American States</u> (Chicago: Rand McNally and Company, 1966). pp. 7-8.

<sup>7</sup>U.S. Department of Commerce, Bureau of the Census, <u>U.S. Statistical</u> <u>Abstract--1977</u> (Washington: U.S. Government Printing Office, 1977), p. 426.

<sup>8</sup>Ira Sharkansky, <u>The Politics of Taxing and Spending</u> (New York: The Bobbs-Merrill Company, Inc., 1969), p. 138.

<sup>9</sup>Ira Sharkansky, <u>The Maligned States--Policy Accomplishments</u>, <u>Problems, and Opportunities</u> (New York: McGraw-Hill Book Company, Inc,, 1972), p. 26.

<sup>10</sup>Werner Z. Hirsch, <u>The Economics of State and Local Governments</u> (New York: McGraw-Hill Books, Inc., 1970), pp. 29-31.

<sup>11</sup>U.S. Department of Commerce, Bureau of the Census, <u>U.S. Statistical</u> <u>Abstract--1977</u> (Washington: U.S. Government Printing Office, 1977), pp. 107-108.

<sup>12</sup>Ibid. #6, pp. 79-80.

<sup>13</sup>Ibid. #8, p. 17.

<sup>14</sup>Kenneth Prewitt and Sidney Verba, <u>An Introduction to American</u> <u>Government</u>, 2nd ed. (New York: Harper and Row Publishers, 1976), p. 174.

<sup>15</sup>Thomas R. Dye, <u>Politics in States and Communities</u>, 3rd ed. (New Jersey: Prentice-Hall, Inc., 1977), p. 465.

<sup>16</sup>Ibid. #5, p. 47. <sup>17</sup>Ibid. #5, p. 248. <sup>18</sup>Ibid. #15, p. 44.

<sup>19</sup>Jack L. Walker, "The Diffusion of Innovation Among the American States," <u>The American Political Science Review</u>, Vol. LXIII p. 883.

<sup>20</sup>Ibid. #9.

<sup>21</sup>G. Ross Stephens, "State Centralization and Erosion of Local Autonomy," <u>The Journal of Politics</u>, Vol. 36, No. 1 (1964), pp. 56-57.

<sup>22</sup>Maureen McBreen, <u>An Overview of the General Revenue Sharing</u> <u>Program, Including Pro and Con Arguments</u> (Washington: Library of Congress. Congressional Research Service, 1976), p. 12.

#### Chapter VI

# Tax Revolts in the States

At one time, the property tax was the major source of state and local revenue in the U.S.<sup>1</sup> Widespread delinquencies and public demands for tax relief during the Depression led the way for the majority of states to abandon this tax and "will" it to the local governments. Also influencing this decision was the increase in revenue that sales and income taxes could produce during this era--thereby explaining their ascension to their current status of being the major state tax revenue sources.<sup>2</sup> Despite this demotion by the states, the property tax remains the mainstay of local governments. Thus, their dependence on this tax as their primary source to tax revenue--37.2% of all revenue sources in 1973, second only to intergovernmental transfers--carries ramifications for the states' tax policies.<sup>3</sup>

The more a locality can raise its own revenue through property taxation, the less it will rely on other tax revenue sources. Although an increasing number of states are allowing localities to tax personal income and retail sales, many do not take advantage of these potential revenue sources and those that do keep the rates low. As late as 1969, these "alternate" schemes for raising revenues accounted for only 11% of local tax revenues.<sup>4</sup> What this means to the state is that these tax dollars are more available as revenue resources, thereby enhancing the likelihood of increased tax reliance. If states do not have to split these tax dollars with the local governments, that leaves more money to

be gotten from these tax revenue sources. Thus, the chance that there will be less reliance on other sources of revenue exists. Also, the degree to which a locality depends on the state for fiscal assistance determines the level to which the state relies on each of its revenueproducers. And with tax revenues yielding over half of the states' total revenue, this main source is likely to continue to grow as the major provider. Thus, tax reliance is affected.

From the above discussion it is easy to see that the current tax revolts carry significant ramifications for state tax policies and planning.

Rapidly growing tax burdens focus attention on assessment inequities. And as tax burdens grow, demands for property tax relief are accompanied by demands for property tax reform. With the overwhelming passage of Proposition 13 by the California voters comes numerous implications for the state and local governments. Heralded as the major cause of other property taxpayer revolts in the other states, Proposition 13 has been revered as the saviour of the homeowner but the killer of the localities. But what are the real ramifications of this tax revolt movement? What are the real reasons for its emergence? Which are its probable results? Can the goals of lower, more-equitably assessed tax rates be achieved by different means? What states are most likely to join the ranks of the revolters? These questions will be discussed in the remaining sections of this chapter.

#### Proposition 13

As of July 1, 1978, the California constitution states that:

 No property can be taxed at more than 1% of its estimated 1975-76 market value.

- No property tax assessment can be increased in any one year by more than 2% unless that property is sold, at which time it can be reassessed on the basis of its market value.
- No local tax can be increased or a new tax imposed without the approval of two-thirds of the qualified voters.
- 4. No additional state taxes can be imposed unless approved by at least two-thirds of the total membership of both houses of the legislature.

Both national influences and influences peculiar to California provided the impetus to Proposition 13. Among these were a \$5.5 billion state surplus, a well above-average property tax burden, a steadily increasing state-local tax burden that was already high, a strong populist tradition, an unusually rapid property tax growth rate (particularly in Southern California) and an "anti-government" feeling.<sup>6</sup> All of these forces combined to produce a massive outpouring of support for Proposition 13.

Inflation is increasing property values everywhere but particularly in Southern California where population continues to grow. Accelerating property values, coupled with the relatively efficient system of reassessing property in California produced sharp increases in tax assessment levels. Had local officials decreased tax rates in compensation, the tax bills would not have risen to the levels they did. But these officials, reacting to the pressure for improved services, found increased expenditures (and therefore increasing tax bills) more compelling. Thus, more fuel was added to the revolt fires.

Proposition 13 cut California's fiscal year (1978-1979) local revenues by about \$7 billion.<sup>7</sup> This is nearly one-half of what the property tax receipts would have been. The magnitude of this measure, as several economists have been quick to point out, may have dealt a devastating blow to that state's ability to govern itself.<sup>8</sup> But the large state surplus which is being used to "rescue" the localities will most likely be misread by other states as the proof that government leaders can provide the services at a much lower tax burden.

This particular combination of events may be unique to California. But it can certainly be assumed that other states have their own potentially explosive forces; the rising number of "revolts" does seem to support this assumption. The property tax has, for the fourth time since 1972, been voted the "least fair" tax. In a survey by the Advisory Commission on Intergovernmental Relations in 1977, the local property tax emerges as the worst tax in the view of the American public.<sup>9</sup> Coupled with the relatively low level of the American populace who perceive the local governments as the most efficient (26%), the likelihood of growing more discontent with increasing property tax burdens and decreasing levels of services seems great.<sup>10</sup> Since 1970, 14 states have increased restrictions on their localities' taxing and spending powers. Five other states (New Jersey, Michigan, Colorado, Tennessee and California) have taken restrictive measures on state taxing and spending powers since 1976. And, as mentioned in Chapter II, support for homeowner property tax relief has grown in recent years. Driven by the growing demand for property tax relief, several states have embarked on programs that essentially provide relief made possible by a direct transfer of state funds to local governments as reimbursement for tax relief granted by the state legislatures.<sup>11</sup> Can a common cause be found for all this activity?

#### State Taxpayer Revolts

Property tax increases generate comparatively more resentment than do income and sales tax increases. (The latter two thus reflect increases in personal income from which the additional tax bill can be paid; property taxation increases, however, indicate only a higher property assessment. The rising property tax bills are not accompanied by a real increase of income from which the bill can be paid.) People are critical of the local property tax for several reasons: the heavy weight of the tax, especially on low-income families; the sudden jump of tax bills following reassessment; the usually poor administration of the tax; and the inconvenience and burden of paying a year's taxes in one or two lump sums.

The states experiencing these taxpayer revolts are in different stages of "revolt." Characteristic attributes can be discerned. Those states imposing or proposing constraints are characterized more by:

> Greater reliance (dependency) upon property taxes as a revenue source; Higher property tax levels (per capita); Heavier property tax burdens; Heavier reliance on real, as opposed to personal, property; Greater proportions of local governments, including special districts with property taxing powers; greater competition for property tax dollars among local governments;

Greater incidences of tax relief (circuit breaker) programs in existence; greater property tax strain on middle- and upperincomed persons.

than those states not so inclined towards revolts.<sup>13</sup>

As is true with any tax, the heavier it becomes, the more obvious are its faults. Considering the characteristics of the revolt-prone

states' property tax levels, this assumption appears valid. Of the 30 states listed in Table XXV as proposing or imposing taxing and/or spending controls, 24 have average effective property tax rates above the established "moderate" level (1.0%-1.5%).<sup>14</sup> In fact, the majority of the 50 states are above this acceptable rate; only 17 states fall within or below this moderate rate.

But more than property tax characteristics determine the likelihood a state's taxpayers will revolt. In California, for example, an increase in the level of speculative property-buying reinforced the spiraling direction of property taxes. Homeowners from all economic levels were affected. The lower income homeowners were either driven out of their homes by property taxes well beyond their means (and unable to buy a comparable home for the same reasons) or they never even had a chance to achieve this portion of "the American Dream". For many of the same reasons, middle income homeowners were placed in tax brackets completely unrelated to their income. They too felt the "crunch" of rapidly rising property taxes. Those persons in the upper income brackets were not above feeling the effects either. Being the largest proportion of homeowners, they were hurt by the same forces which destroyed those not as financially secure. In general, the socioeconomic characteristics of the populace are strongly associated with reform movements.

Utilizing the same socioeconomic and demographic variables (except that population replaces population density as an indice and the level of federal aid is not examined) as those used in the earlier analyses, certain population characteristics surface as one studies the incidence of Proposition 13-type revolts among the states. Those states with the greater chance of experiencing taxpayer revolts are whose with:

### TABLE XXV

### TAXPAYER REVOLTS IN THE STATES: THE 1970'S

States Imposing Taxing	States Proposing	States Proposing	States Not
or Spending Controls,	Taxing Controls,	Spending Controls,	Proposing Taxing
1970-Proposition 13 <sup>a</sup>	Post Proposition-13 <sup>b</sup>	Post-Proposition 13 <sup>C</sup>	or Spending Controls
Alaska California Florida Hawaii Indiana Iowa Kansas Minnesota Montana Ohio Virginia Washington Wisconsin	Alabama Idaho Illinois Massachusetts Missouri Nevada New York Oregon South Dakota Texas Washington	Arizona Colorado Michigan Nebraska New Jersey Tennessee	Arkansas Connecticut Delaware Georgia Kentucky Louisiana Maine Maryland Mississippi New Hampshire New Mexico North Carolina North Dakota Oklahoma Pennsylvania Rhode Island South Carolina Utah Vermont West Virginia Wyoming

Notes: <sup>a</sup>Truth-in-taxation requirements whereby the government is required to establish a tax rate which, when applied to current tax bases, will produce property tax revenues equal to those of the previous year, were adopted by <u>Florida</u>, <u>Hawaii</u>, <u>Montana</u>, and <u>Virginia</u>. Levy limits, whereby growth of property tax levies is restricted to a specified rate of increase from one year to the next, were adopted by <u>California</u>, <u>Kansas</u>, <u>Minnesota</u>, <u>Wisconsin</u>, <u>Indiana</u>, <u>Washington</u>, <u>Alaska</u>, and <u>Ohio</u>. Source: ACIR study cited in <u>Texas Town and</u> <u>City</u>, 65 (July 1978), pp. 10-13.

### TABLE XXV-continued

### TAXPAYER REVOLTS IN THE STATES: THE 1970'S

## Notes continued

<sup>b</sup>Tax proposals as of August, 1978, are: <u>Alabama</u> - constitutional amendment to put a 20% lid, after reassessment, on county tax increases; <u>Idaho</u> - constitutional amendment to lower property tax rate to 1% of 1978 market value; <u>Illinois</u> - proposal for property tax circuit-break for homeowners and renters; <u>Massachusetts</u> two proposals before the legislature, one to amend the constitution to limit the power of the state to raise taxes, one to limit local property taxes to 2.5% of full cash value; <u>Missouri</u> - constitutional amendment giving legislature the authority to roll-back property taxes; <u>Nevada</u> - legislature given power to eliminate personal property taxes; <u>New York</u> - court rulings forcing state to finance education through means other than property tax; <u>Oregon</u> - constitutional amendment reducing property tax rate to 1.5% of market value; <u>South Dakota</u> - constitutional amendment requiring 2/3 vote of the legislature or a majority vote of the people to increase state taxes; <u>Texas</u> - constitutional amendment limiting state property tax; and <u>Washington</u>; extension of 6% state and local revenue lid to school property. Washington already has a 1% property tax lid. Source: "It is the Harbinger of a National Tax Revolt", Nation's Cities, August, 1978, pp. 26-27.

<sup>C</sup>Spending proposals as of August, 1978, are: <u>Arizona</u> - constitutional amendment limiting state spending to 7% of personal income in the state; <u>Colorado</u> - constitutional amendment limiting increases in state and local government spending to a per capita amount tied to increases in the consumer price index; <u>Michigan</u> - constitutional amendment freezing state spending at its fiscal year 1979 percentage of state personal income, 9.4%; it ties growth of local tax revenues to increases in consumer price index; <u>Nebraska</u> constitutional amendment restricting the budgets of the state's political subdivisions to a 5% budget increase per year; <u>New Jersey</u> - has enacted a three year experimental spending lid of 5% increase over previous year's budget; and <u>Tennessee</u> - constitutional amendment limiting state spending; it is tied to the rate of growth of the economy. Source: "It is the Harbinger of a National TAx Revolt", <u>Nation's Cities</u>, August, 1978, pp. 26-27. Larger populations; Rapidly-growing populations; More heavily-urbanized populations; More highly-educated populations; Wealthier populations; Smaller minority populations.<sup>15</sup>

The reasoning behind these characteristics of the more revolt-prone states are somewhat expected. States experiencing rapid population growth rates also experience greater strains on state and local government revenue structures as the service demands not only increase but also become redirected (to school systems, public utilities, and health care for example). The more highly-educated populations are also usually more politically active, more likely to initiate petition drives to get these tax reforms on the ballots, and more likely to be homeowners. Hand in hand with the higher education characteristic is that of wealth; the wealthier populations are most likely to actually feel the "bite" of increasing property taxes since they are the most likely to he homeowners. And since minorities are less likely to be homeowners, or politically active in tax-related matters, those states with the smaller minority populations are more prone to taxpayer revolts.<sup>16</sup> Table XXVI summarizes this data.

Drawing on the results of the earlier analyses in this study, the conclusion must be reached that the more tax reliant states (not simply the more local property tax reliant states) are most susceptible to taxpayer revolts. As the results of the multiple regression analysis indicated, those states with a more educated populace, a faster growth rate, higher levels of urbanization, a lower percentage of blacks, and

### TABLE XXVI

## POPULATION CHARACTERISTICS OF STATES BY STAGE OF TAXPAYER REVOLT

Population Characteristics	States Imposing Taxing and/or Spending Controls, 1970-Proposition 13 (n=13)	States Proposing Taxing Controls, Post-Proposition 13 (n=11)	States Proposing Spending Controls, Post-Proposition 13 (n=6)	States Not Prosing Taxing or Spending Controls (n=21)
Population Size <sup>a</sup>	5,411,769	5,829,091	4,510,000	2,668,333
Population Growth Rate <sup>b</sup>	+8.5%	+8.3%	+10.2%	+7.5%
Urbanization <sup>C</sup>	68.3%	71.0%	73.5%	59.6%
Percent Black Population <sup>d</sup>	5.3%	8.1%	8.1%	11.0%
Percent College Graduates <sup>e</sup>	6.0%	5.8%	6.0%	5.3%
Per Capita Personal Income <sup>f</sup>	\$6703	\$6312	\$6376	<b>\$5806</b>

Notes: <sup>a</sup>Population size figures are as of 1976 as estimated by the U.S. Bureau of the Census.

<sup>b</sup>Population growth rate figures are the percent increase in state population, 1970-1976, as estimated by the U.S. Bureau of the Census.

<sup>C</sup>Urbanization is the proportion of the population living in urban areas in 1970.

<sup>d</sup>Percent black population figures are for 1975.

<sup>e</sup>Percent college graduate figures are for 1970.

<sup>f</sup>Per capita personal income figures are for 1976.

Source: Susan A. MacManus, "State Property Tax Revolts in the Seventies: Economic Necessity or Political Opportunity?" (October, 1978), p. 3.

a higher level of income, are the most tax reliant states. And, as the above research shows, it is these states with those same attributes which are most likely to experience a taxpayers' revolt. It has been suggested, however, that there are alternative routes of taxpayer apeasement than the currently imposed and considered revolts, but the alternatives still primarily focus on the local property tax.

#### Alternatives

In spite of its obvious defects and poor public image, the property tax has significant political and fiscal virtues. First, it is the one major revenue source most directly available to the local governments and there serves as the traditional protection against fiscal centralization. Second, it is the one tax in general use that can regain for the community the property value created in part by that community. Third, its high visibility makes it a force that can work in favor of the greater public accountability citizens are increasingly calling for.<sup>17</sup> But beyond these considerations stands the inescapable element of fiscal reality--the present local governments will not be able to quickly come up with an acceptable substitute for this indispensable \$65 billion revenue producer. Thus, a more prudent alternative to the somewhat overreactive nature of Proposition 13 does seem desirable. If one is not found, the burden of local finance will fall not only on the federal government, but also on the state governments. The tax reliance ramifications of this added burden are tremendous. In response to this threat, the Advisory Commission on Intergovernmental Relations has proposed a five-pronged "protection plan." The proposed elements are:
- 1. A uniform system for administering the property tax marked by:
  - a) market value appraisal of all taxable property;
  - b) professional appraisers;
  - c) either strong state supervision of local assessors or state administration of the tax assessment system; and
  - d) the preparation and disclosure of assessment ratio findings to enable taxpayers to judge the fairness of their assessments.
- A "truth in property taxation" process that will enable taxpayers to fix political responsibility for higher property taxes.
- 3. A state-financed circuit-breaker system to shield homeowners and renters with low and fixed income from property tax overload situations.
- 4. An intergovernmental "fair play" policy--when a state mandates additional expenditure responsibilities on local government, it should be prepared to help finance the added expenditure burden. Also included is the situation when the state mandates a partial or complete exemption from the local property tax (such as a homestead exemption) it should reimburse the localities for the revenue loss.
- 5. A tax utilization philosophy that rests on the premise that a good property tax is a moderate property tax (1.0%-1.5%).<sup>18</sup>

The Advisory Commission on Intergovernmental Relations has expressed "guarded optimism" about the prospects of this program as a remedial property tax action.<sup>19</sup> Other states, considering their own property tax revolts, may be charmed by the apparent ability of California to survive Proposition 13, at least for this year. But if these states are not so lucky as to have a large surplus of funds as was the case in California, "taxpayers' dream" could well turn into a fiscal nightmare. The danger of misreading the California experience is present. Which policy will actually prove to be the most cost/benefit efficient for all concerned remains to be seen. Nonetheless, the effect of the program chosen on the tax reliance structures of the states will be profound. <sup>1</sup>Glenn W. Fisher, <u>The Property Tax System</u> (Wichita: Center for Urban Studies, 1975), p. I-A-1.

<sup>2</sup>Eugene P. McLoone, Gabrielle Lupo, and Selma J. Muskin, <u>Long</u> <u>Range Revenue Estimation</u> (Washington: George Washington University, 1967), p. 1.

<sup>3</sup>James A. Maxwell and J. Richard Aronson, <u>Financing State and</u> Local Government, 3rd ed. (Washington: The Brookings Institution, 1977), p. 136.

<sup>4</sup>Ira Sharkansky, The Maligned States--Policy Accomplishments, <u>Problems, and Opportunities</u> (New York: McGraw-Hill Book Company, 1972), pp. 155-156.

<sup>5</sup>Advisory Commission on Intergovernmental Relations, "After Jarvis: Tough Questions for Fiscal Policy Makers", <u>Intergovernmental</u> <u>Perspective</u>, by John Shannon and Carol S. Weissert (Washington: U.S. Government Printing Office, 1978), p. 8.

<sup>6</sup>Ibid.

<sup>7</sup>L.L. Ecker-Racz, "Coping with Proposition 13," <u>Today's Education</u> (Washington: National Education Association, September-October, 1978), p. 41.

<sup>8</sup>Ibid., p. 40.

<sup>9</sup>Advisory Commission on Intergovernmental Relations, <u>Changing</u> <u>Public Attitudes on Governments and Taxes</u> (Washington: U.S. Government Printing Office, 1977), p. 11.

<sup>10</sup>Ibid., p. 3.

<sup>11</sup>Advisory Commission on Intergovernmental Relations, <u>State</u> <u>Aid to Local Government</u> (Washington: U.S. Government and Printing Office, 1969), p. 102.

<sup>12</sup>Ibid. #7, p. 46.

<sup>13</sup>Susan A. MacManus, "State Property Tax Revolts in the Seventies: Economic Necessity or Political Opportunity?" (October, 1978), p. 2.

<sup>14</sup>Ibid. #5, p. 12. <sup>15</sup>Ibid. #13, p. 3. <sup>16</sup>Ibid. #13, p. 3. <sup>17</sup>Ibid. #5, p. 11. <sup>18</sup>Ibid. #5, p. 12. <sup>19</sup>Ibid. #5, p. 12.

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## Chapter VII

## Conclusion

State tax revenue reliance is affected by levels of federal assistance, the proportion of blacks in the population, the educational levels of the population, population density, a high population growth rate, and urbanization. States relying more heavily on taxes are those with low levels of federal assistance, low proportions of blacks, lower educational levels, a static or decreasing population, a more rural population, and a wealthier population.

Results of the regressional analysis have indicated that socioeconomic characteristics are more important determinants of the tax reliance patterns among states. Governmental, or political factors appear to only minimally affect tax reliance.

However, the total variance explained by these combined variables is only 60% (55% of which is accounted for by a single variable--federal aid). Thus, while this study has provided a good start on the analysis of the variables affecting the tax revenue reliance of the states, more research is needed to discover which variables not analyzed account for the remaining variance.

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