Public Administration Program

Applied Research Projects

Texas State University *Year* 2002

Explaining Variation in the Level of State and Local Government Expenditures on Health and Public Assistance

Glenn S. Neal
Texas State University-San Marcos, Political Science Department, Public Administration, glenn.neal@dars.state.tx.us

Explaining Va4iation in the Level of State and Local Government Expenditures on Health and Public Assistance.

By

Glenn Neal

Chapter One
Introduction

According to a 2002 fiscal survey of the states conducted by the National Association of State Budget Officers (NASBO), the economy may be recovering somewhat from a downturn that began near the end of 2000, but states are still experiencing dismal budget situations. The survey presents aggregate and individual data on the states' general fund receipts, expenditures, and balances that shows revenue growth is anemic, spending pressures continue to rise, and states are facing massive budget shortfalls (NASBO, 2002: xi). Since fiscal year 2002 budgets were enacted, 40 states have had to battle revenue shortfalls that total nearly $40 billion. Because state revenue growth generally trails the end of a recession by as much as 12 to 18 months, state fiscal problems are expected to continue in 2003. At the same time, state general fund Medicaid expenditures in 2002 are expected to increase 13.4 percent over 2001 levels. In 2002, 28 states expect shortfalls in their Medicaid budgets. Although states continue to provide supportive services for families aimed at promoting self-sufficiency, only nine states increased cash assistance benefit levels in the Temporary Assistance for Needy Families (TANF) program in 2002 (NASBO, 2002: ix).

NASBO's 2001 State Expenditure Report estimated state spending from all sources to be just more than $1 trillion, with the general fund representing 48.1 percent of the total (NASBO, 2001: 4). Table 1.1 shows the proportion of state spending (all funds) by major component for the last nine years. As can be seen, the proportions remain fairly consistent over time,

suggesting that states' priorities do not shift dramatically from year to year. Medicaid and public assistance together constituted roughly 22 percent of all spending in 2001. Medicaid commands a significant share of state spending at 19.6 percent. Although Medicaid spending increases have leveled off the last few years, the program is expected to experience renewed growth over the next few years as the cost of medical services continues to climb. The proportion of state expenditures for public assistance through cash payments continued to drop in fiscal 2001 due to welfare reform efforts in the mid-1990s and declining caseloads (NASBO, 2001: 2). Public health and assistance programs are of particular interest to legislators and citizens because they represent "redistributive" public policy—that is, policy that redistributes wealth from those who have the most to those who have the least.[1] Examples of redistributive policies include Medicaid, Food Stamps, Temporary Assistance to Needy Families, and the Women, Infants, and Children (WIC) programs. "Inevitably...poverty and welfare politics produce strong emotions and sharp political divisions" (Kraemer, Newell, and Prindle, 2002: 398). This is especially true when economic downturns reduce state revenues and increase enrollment pressures.

Table 1.1 Components of Total State Spending, Fiscal Years 1993 to 2001

Component	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**	**2001**
Education	21.5	20.4	21.0	21.5	21.7	22.0	22.3	22.5	22.6
Medicaid	18.8	19.7	19.8	19.9	20.0	19.6	19.5	19.5	19.6
Higher Ed.	10.8	10.8	10.4	10.7	10.7	10.3	10.8	10.9	10.8
Transportation	8.7	9.0	9.1	8.7	9.0	8.8	9.1	8.8	9.0
Corrections	3.1	3.4	3.6	3.7	3.7	3.7	3.9	3.8	3.7
Public Asst.	4.5	4.2	4.0	3.5	3.1	2.9	2.6	2.4	2.3
All Other	32.5	32.4	32.1	31.8	31.8	32.8	31.8	32.1	31.9
Total	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

SOURCE: NASBO, *2000 State Expenditure Report*, 2001: 8

[1] The priority given to government spending on health care, nutrition, and cash assistance for the needy often sorts out along "liberal" and "conservative" dimensions and in many respects is the crux of partisan differences. Conventional wisdom holds that liberals are more likely than conservatives to favor government redistribution of wealth from the "haves" to the "have-nots." Lean fiscal times tend to heighten partisan differences over just how much, if any, wealth redistribution is appropriate.

Although the proportion of state spending by category appears relatively consistent over time, changes in expenditure levels have not been so stable. Table 1.2 shows that total expenditures have risen an average 7.9 percent from 1998 through 2001 and have exhibited strong positive growth for all categories except public assistance, which slowed considerably after the welfare reforms of 1996[2]. It is important to note that although public assistance represents just 2.3 percent of total state spending in 2001, growth in expenditures has been positive.

Table 1.2 All Funds Percent Change in State Expenditures by Component, 1998-2001

Component	1998-1999	1999-2000	2000-2001
Education	9.1	8.1	7.9
Medicaid	5.7	7.5	7.8
Higher Ed.	6.8	8.2	6.3
Transportation	10.4	4.1	9.5
Corrections	9.2	6.1	5.2
Public Asst.	1.5	2.2	1.1
All Other	12.1	8.1	6.6
Total	**9.1**	**7.4**	**7.2**

SOURCE: NASBO, *1999 and 2000 State Expenditure Reports*, 2000 and 2001: 3

Research Purpose

Given the combination of falling state revenues, rising expenditures in redistributive programs (especially Medicaid), and the political weight of such redistributive policies, the question of what factors influence expenditures on public health and assistance becomes compelling. The purpose of this research is to identify the factors influencing expenditures across states on public assistance and health and to examine the relative impact of these variables on expenditure levels.

[2] Public assistance expenditures in the 1990s reached a high of 5.3 percent of state spending in 1991 but were steadily declining before the 1996 Personal Responsibility and Work Opportunity Reconciliation Act replaced the 60-year old Aid to Families with Dependent Children (AFDC) and several related programs with the Temporary Assistance for Needy Families (TANF) block grant (discussed later).

Health and Public Assistance Defined

Before reviewing the literature in Chapter Two, it is useful to understand what is meant by the terms *health* and *public assistance* as applied in this research. Health refers to the Medicaid program and public assistance refers to the Temporary Assistance to Needy Families (TANF) program and other cash assistance, such as optional state programs for Supplemental Security Income (SSI) and General Assistance. These other non-TANF programs are not funded in all states and when funded are relatively small, accounting for less than one percent of state expenditures. Together, Medicaid, TANF, and related public assistance programs constitute the largest share of spending on health and human services programs (NASBO, 2000). Medicaid is an entitlement that requires a state match; TANF is a block grant that requires a state maintenance of effort. Since these programs are jointly funded and administered by federal and state governments, it is possible to examine the effects of federal grants on state program expenditures and other factors that contribute to state expenditure levels. Expenditure levels, funding mechanisms, and program features are described in more detail below.

Medicaid

Congress established the Medicaid program as Title XIX of the Social Security Act of 1965. Medicaid is intended to pay medical bills for low-income persons who have no other way to pay for health care. After dozens of amendments since 1965, Medicaid today functions as a basic health insurance program and as a funding source for institutional and community care services for people with chronic or long-term needs (CPPP, 2001: 1). Generally, Medicaid is an entitlement program and the state must provide health care to all eligible individuals who seek services. State and federal expenditures for Medicaid topped $207 billion in 2000 (HCFA, 2000: 22).

The Medicaid financing system is designed so that states and the federal government jointly cover the costs of health insurance for low-income people. The federal government matches a certain percentage — higher in poorer states and revised annually — of every state's expenditures for health care benefits provided under Medicaid. This federal matching rate is called the Federal Medical Assistance Percentage, or FMAP. To measure the relative incomes of states and compute the FMAP, the federal government compares the average per capita personal income for each state with the national average per capita income. States with lower relative per capita incomes have higher federal matching rates. Every state receives at least a 50 percent matching rate (CPPP, 2001: 1). States may use local government funding for up to 60 percent of the state's share. Federal law specifies that taxes on health care providers cannot make up more than 25 percent of a state's total Medicaid expenditures (HHSC, 2002: 3-7).

With the exception of the requirement that they provide Medicaid for all TANF and Supplemental Security Income (SSI) recipients, states formulate their own eligibility requirements and set their own benefits levels. Eligibility rules are complex and tend to exclude those who are not extremely poor, blind, disabled, or the children of out-of-work parents.

Many Medicaid services are mandatory; far more are optional. For example, states must provide ambulance, inpatient and outpatient hospital, home health care, laboratory, and X-ray services. States *may* provide a wide range of services, including emergency medical, Hospice, prescription drug, and physical therapy services (HHSC, 2002: 4-11). In Texas, for example, the largest expenditure categories (both mandatory and optional) are inpatient hospital (17 percent), nursing facilities (16 percent), prescription drugs (12 percent), and physician and practitioner services (11 percent) (HHSC, 2002: 5-3).

Table 1.3 shows the types of services provided nationwide to the more than 40 million Medicaid recipients in 1998. By far, physician services, outpatient hospital services, and prescription drugs account for the highest number of recipients.

Table 1.3 Fiscal Year 1998 Medicaid Type of Service (Duplicated Count)

Service	Number of Recipients (Thousands)
Inpatient services	
General hospitals	4,273
Mental hospitals	135
Nursing facility services	1,646
Intermediate care facility (MR) services	126
Physician services	18,555
Dental services	4,965
Other practitioner services	4,342
Outpatient hospital services	12,158
Clinic services	5,285
Laboratory and radiological services	9,381
Home health services	1,225
Prescribed drugs	19,338
Family planning services	2,011
Early and periodic screening	6,175
Personal care support services	3,108
Home and community based waiver services	467
PCCM services	4,066
Other care	6,875
Total Recipients	**40,649**

SOURCE: Health Care Financing Administration, Center for Medicaid and State Operations, 2001.

Temporary Assistance to Needy Families

On August 22, 1996, President Clinton signed the bipartisan welfare reform plan that significantly changed the nation's welfare system. The Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) of 1996 replaced the previous welfare system, Aid to Families with Dependent Children (AFDC), with Temporary Assistance for Needy Families (TANF) to focus on work and responsibility and to provide states with flexibility to create new approaches for their individual circumstances (U.S. Dept. of HHS, 2000: 1).

As a general rule, states (or local governments and other agencies where decision-making has devolved from the state agency) must use the available funds for eligible, needy families with a child and for one of the four purposes of the TANF program:

1. To provide assistance to needy families (including cash assistance);
2. To end dependence of needy parents by promoting job preparation, work and marriage;
3. To prevent and reduce out-of-wedlock pregnancies; and
4. To encourage the formation and maintenance of two-parent families.

States must use objective criteria for determining eligibility and benefits. However, they may decide the income and resource standards that they will use to determine eligibility, and they may set different financial eligibility criteria for different benefits or services. (For example, they can limit eligibility for cash assistance to families living below poverty, but provide supportive services like childcare and transportation to working families with incomes up to 185% of poverty). Further, since individuals do not have an entitlement to TANF benefits, states may elect to target benefits to families with incomes below their established eligibility guidelines. States fund their TANF programs with a combination of federal and state funds. While both are very flexible, the two sources of funds entail somewhat different rules and restrictions (U.S. Dept. of HHS, 1999: 3).

In order to maintain the shared federal-state responsibility that was built into the AFDC program, states must continue spending their own funds at a level equal to at least 80 percent of the 1994 level for AFDC-related programs, or 75 percent if they meet the minimum work participation rates. This requirement is called the "maintenance of effort" (MOE), and it totals roughly $10.5 billion nationally (CPPP, 2002: 2). The 1996 welfare reform law requires states to continue to spend state funds. In 2000, all states met their MOE requirement at the 75 percent level and, in fact, report spending a total of $11.1 billion in state funds above the 75 percent level. States can carry forward unobligated TANF funds in one year for use in future years. Cumulative unobligated balances for 1997 through 2000 equal $3.2 billion, or approximately five percent of the total $64 billion in Federal funds awarded to states since implementation of the TANF program (U.S. Dept. of HHS, 2002: II-5).

Total TANF expenditures (combined federal funds and state MOE funds) for 2000 were $24 billion, $1.4 billion more than the amount spent in 1999. This increased spending is attributable to significant new investments in supportive services in the TANF program, such as childcare and support of work activities. Spending on cash assistance decreased by $1.9 billion from 1999 to 2000. In 2000, total spending on basic cash assistance was $11.5 billion compared to $13.4 billion in 1999. During the same period, states dramatically increased the amounts they spent through the TANF program on childcare. In 1999, states reported spending nearly $2 billion of combined funds on childcare, while in 2000 they spent $3.2 billion. The total spending on work activities in 2000 was $2.3 billion, an increase of 28 percent over the $1.8 billion spent in 1999. (U.S. Dept. of HHS, ACF, 2001: II-2).

Table 1.4 illustrates the proportional shift in expenditure categories for TANF since the 1996 passage of PRWORA. As the table shows, in 2000 only 41 percent of TANF spending went toward paying cash benefits, down from 76 percent in 1996. Almost 30 percent of TANF funds were going to child care and work activities in 2000, up from just 9 percent four years earlier. States also used TANF dollars to fund a variety of other work-support programs, including transportation, state tax credits for low-income families, and programs to promote marriage or reduce non-marital pregnancies (Urban Institute, 2002).

Table 1.4. Distribution of Federal and State Welfare Spending, 1996 and 2000

Expenditure Category[3]	1996	2000
Cash	76	41
Work	5	9
Administrative	11	9
Child Care	4	19
Other	4	22
	100%	**100%**

SOURCE: The Urban Institute, 2002

At the end of 2001, the average monthly number of TANF recipients was 5.4 million, or 56 percent lower than the AFDC caseload in 1996. From its peak of 14.4 million in March 1994, the number of recipients dropped by 63.2 percent to 5.3 million in September 2001. More than three-fourths of the reduction in the U.S. average monthly number of recipients since March 1994 occurred following implementation of TANF. These are the largest caseload declines in the history of U.S. public assistance programs. The 5.4 million persons receiving TANF in 2001 was the smallest number since 1967, and the lowest percentage of the population receiving assistance since 1961 (U.S. Dept. HHS, Administration for Children and Families, 2001: II-1).

Under AFDC, declining caseloads would have resulted in automatic declines in federal and state spending. Yet while caseloads and cash assistance expenditures have declined, the amount of federal TANF funding remains constant and the amount of state funding has decreased only slightly. PRWORA specified that the annual TANF block grant allocations to states would be based on 1994 federal funding levels. A total of $16.5 billion was authorized annually for TANF through federal fiscal year 2002, when the program is subject to review and reauthorization (NASBO, 2000: 35).

[3] "Other" services include family formation programs, tax credits, out-of-wedlock pregnancy prevention programs, Social Services Block Grant transfers, and other unspecified state programs.

Organization and Explanation of Research

In Chapter Two, a comprehensive review of the literature related to state and local government expenditures is carried out, with emphasis on factors that best explain expenditures on health and public assistance across states. The different factors found in the literature are explored and the most significant are identified for subsequent analysis. The conceptual framework for analysis is introduced and discussed. Chapter Three presents the methodology, which uses formal hypotheses and explanatory factors, and describes the data sources and types. The appropriate statistical techniques—in this case correlation and regression analysis—are discussed, including a consideration of the strengths and weakness of this approach. Each explanatory factor is operationalized, the data sources discussed, and the rationale behind each decision is described. Chapter Four presents the results of the analyses in tabular and textual form, with explanatory remarks. Chapter Five restates the hypotheses and identifies the outcomes, offers conclusions and makes suggestions for future research.

Chapter Two
Literature Review

This chapter examines and reviews literature on the factors that influence state and local government expenditures directly and indirectly, including expenditures for health and public assistance. Research related to the subject of state and local government expenditures may focus on specific or general types of expenditures. The literature does not suggest that the factors influencing expenditures apply only to certain types of services. Therefore, factors underlying state and local government expenditures are assumed to apply to a range of programs and services provided by state and local governments, including health and public assistance.

Measuring State and Local Government Expenditures

This section begins a discussion of the literature where state and local expenditures were used as dependent variables. Research studying the effects of certain factors on state and local government expenditures is plentiful. For example, Dilger (1998) studied the influence of political, economic, and demographic factors on state general expenditures and on specific expenditures for health, education, welfare, corrections, and highways. Buchanan, Cappelleri and Ohsfeldt (1991) assessed influences on Medicaid expenditures among states by focusing on economic, political, and administrative factors. They used time-series analysis to examine the effects on state Medicaid expenditures of such factors as previous year's expenditures, per capita income, and the number of physicians per 1,000 population.[4] Tweedie (1994) examined the states' policy making for the Aid to Families with Dependent Children (AFDC) program by

[4] The time constraints imposed on this research project made collecting and analyzing several years' worth of data impractical. Therefore, a cross-sectional analysis using a single point in time was chosen. Performing a time-series regression for a period beyond two years would be an appropriate approach to the study of expenditure levels for TANF and Medicaid. Over the last 10 years, the nation's welfare program has been drastically changed and the economy has seen periods of impressive growth and retrenchment. To observe the effects of these factors over a longer time period might prove fruitful.

using changes in benefits levels (a form of state expenditure) as a dependent variable and measuring the influence of such factors as previous year's expenditures, the cost of living, personal income, state revenues, and relative benefits levels as independent factors. Holcombe and Stroup (1991) focused on the effects of federal funding on demand for state and local government spending; Blais, Blake, and Dion (1993), and Koven and Mausolff (1996) used state and local expenditures or close proxies as dependent variables in their research on political culture and political parties.

Table 2.1 organizes the empirical literature reviewed by author and the factors each used in the research. This table provides an organized overview of the empirical factors that were considered for this research and groups them into political, economic, budgetary and social categories. These categories appear repeatedly in the literature. Factors that were found to be significant are in bold text.

Table 2.1 Summary of Factors Identified in the Literature[5]

Author	Political Factors	Economic Factors	Budgetary Factors	Social Factors
Aronson and Hilley (1986)		• Fiscal Capacity	• Tax Effort • Interstate Tax Competition	
Blais, Blake and Dion (1993)	• **Party affiliation** • Minority control of government	• **Per capita GDP** • **Exports vs. Imports**	• Total government expenditures	• **Unemployment rate** • **Proportion of population over 65**
Buchanan, Cappelleri, and Ohsfeldt (1991)	• Interparty competition • Liberal ideology • **State or local control**	• **Per capita personal income**	• **Previous year's expenditures** • Federal matching rate	• **Physicians per 1000 population** • **Medicaid Recipients**
Dilger (1998)	• **Governor's**	• State general	• Spending for	• Government em-

[5] Not all factors presented in Table 2.1 were used in the equations explored in this research, but many provided insight into other variables that proved useful when the final variables were chosen. Most of the factors are used as independent variables to explain differences in expenditure levels; some (notably Sharkansky and Morgan and Watson) use the identified factors as dependent variables. Although the context of their use may differ, these factors have been used in political science literature to answer questions similar to the one raised in this research.

Author	Political Factors	Economic Factors	Budgetary Factors	Social Factors
	party affiliation • **State legislature's party affiliation**	expenditures • Tax collections • State debt • **Per capita income** • **Unemployment rate**	health, education, welfare, corrections, and highways	ployment • **Urban density** • **State population**
Elazar (1966)	• Political culture • Federalism			
Hager and Talbert (2000)	• Roll call votes • **Party identification** • **Conservatism** • **Liberalism** • **Party influence** • **Presidential support** • **Party switching**			
Holcombe and Stroup (1996)	• Partisan control of lower house of state legislature • Partisan control of governor's office.	• **Per capita income**	• **Percent federal grants**	• **Percentage living in metropolitan areas** • **Percent white population** • **Median population age** • **Percent population with HS diploma**
Koven and Mausolff (2001)	• **Sharkansky's Cultural Index** • Democrats in legislature	• **Per capita income**	• Expenditure levels	• Proportion living in metro areas
Morgan and Watson (1991)	• **Culture** • **Party Competition** • **Party relevance** • Legislative professionalism, • Bills introduced	• **Per capita own-source revenue** • **Per capita debt tax effort** • **Per capita debt**		• **Voter turnout**

Author	Political Factors	Economic Factors	Budgetary Factors	Social Factors
	• Session length • Legislative expenditures • Staffing • **Liberalism**			
Sharkansky (1969)	• Elazar's Political Culture scale	• **Number of state and local government employees**	• **Proportion of income paid in taxes to state and local governments (tax effort)** • **Per capita state and local expenditures**	• Voting age population • Life and health insurance coverage • Road mileage per capita • **Avg. AFDC benefits levels** • **Number AFDC recipients** • **High school graduates**
True (2000)			• Mandatory and discretionary expenditures by sub-function • **Change in budget levels**	
Tweedie (1994)	• **AFDC eligibility** • **Public opinion**	• Inflation • **Personal Income**	• **State Revenues** • Food stamps budget • **Benefits levels**	• **Caseload levels**

Selected Factors Identified

For this research, those factors were chosen that were found to have a significant influence on expenditures or that were significantly related to such factors. Each category in Table 2.1 was drawn from to ensure balance across the political, budgetary, economic, and social spectrum. This section describes in more detail the selected factors that influence state and local government spending generally and, where applicable, specifically on health and public assistance.

Last year's expenditures

Wildavsky (1988) argues that expenditure levels from the previous year influence expenditure levels in the current year. Such influence Wildavsky calls *incrementalism*. Governments, he argues, tend to make marginal adjustments to future budgets using past expenditure levels as a guide. Incremental budgeting focuses attention on additions or deletions to the existing structure of state government. This budget approach usually takes for granted previous appropriations and structure, focusing on year-to-year inflationary changes, and building by small increments on past budget decisions. Incrementalism argues that we start with what we have, and that is last year's budget. This is so because:

- The previous year's budget represents earlier agreements over priorities
- Re-examining all of the expenditure patterns in the previous year's budget would create a great deal of conflict and debate
- Legislators do not have the time or ability to analyze every aspect of a large budget

Therefore, only small changes are made at the margins each year, usually based upon changes in revenues (Wildavsky 1988).

Consistent with the notion of incrementalism, Buchanan, Capelleri, and Ohsfeldt (1991) find that the level of state Medicaid spending in the previous year has a significant impact on spending levels in the current year. Research by Blais, Blake and Dion (1996) also supports the theory of incrementalism. They point out that when a new government is formed it is not able to set spending at its preferred level immediately; rather, it marginally shifts spending in the direction (increase or decrease) it wishes. "As Wildavsky pointed out a long time ago, the budget is based on last years' budget with special attention given to a narrow range of increases or decreases" (Blais, Blake, and Dion, 1996: 515).

James L. True (2000) challenges Wildavsky's theory of incrementalism and finds that although incrementalism remains the primary framework of government budgetary processes today, it fails when looking for a comprehensive explanation of what to expect from policy

decisions and budget decisions (True, 2000: 4). He argues that "large scale [budgetary] change is much more common in national budgeting than the incrementalists' literature suggests. About one third of all the annual budget changes in the national government since World War II have been non-incremental," defined as falling between a 20 percent increase and 15 percent decrease (True, 2000: 13). His findings indicate that while budgets do indeed shift significantly from time-to-time, programs and functions that avoided large-scale change in the previous year have an 80 percent probability of doing so again (True, 2000: 14). Last year's expenditures do appear to relate directly to current expenditures. Although the literature reveals conflicting findings, it is expected that the direction and magnitude of previous years' expenditures will correspond directly (positively) with current year expenditures.

Revenue Capacity

According to Aronson and Hilley (1986), higher levels of government expenditures will be found in "rich" states (defined as those with high per capita income) than in "poor" states. It follows that as the wealth of a state's population expands, the opportunity for state and local governments to generate tax revenues increases, which in turn may lead to a rise in government spending. For example, Dilger (1998) finds a significant relationship between expenditures on welfare and health and state per capita income. The relationship is positive at the .05 level of significance. Dilger's findings suggest that state economic conditions may have a significant impact on spending and tax policies, with states experiencing "relatively strong economic growth (measured as increased state per capita income) having larger increases in (1) total spending; (2) spending on health, education, welfare, corrections and highways; and (3) state government employment" (Dilger, 1998: 140).

Tweedie (1994) examines states' Aid to Families with Dependent Children (AFDC) program and the impact of policymaking on benefit levels. Included in his pooled time-series analysis is the influence of changes in per capita income on benefits levels. He hypothesizes that AFDC benefit levels vary positively with changes in taxpayers' per capita personal income and state revenue levels. His research reveals significant positive relationships between revenues and expenditures and per capita personal income and expenditures (Tweedie 1994: 657). In their research on Medicaid expenditures, Buchanan, Cappelleri, and Ohsfeldt (1991) find a significant positive relationship between per capita income and Medicaid expenditures. Their findings support earlier work by Holahan and Cohen (1986) that also finds that higher-income states do in fact spend more on their Medicaid programs.

Holcombe and Stroup (1996) examine the relationship between income and state and local government spending in the context of federal grant receipts and find that "per capita personal income has a consistently negative effect, indicating that as income goes up, the demand for state and local government expenditures becomes more income-inelastic," which means governments tend not to raise expenditure levels in response to rising incomes (Holcombe and Stroup, 1996: 138). This finding runs counter to the findings of other researchers, as it suggests an inverse or negative relationship between expenditures and per capita income. Koven and Mausolff (1996) use per capita income as a surrogate for the taxable resources of each state and find it a significant positive predictor of combined state and local per capita spending between 1992 and 1996. As demonstrated in these studies, the simplest and most often used measure of relative fiscal capacity is a state's per capita income. Per capita personal income is easy to calculate, but the literature suggests it is not necessarily the best measure of fiscal capacity because it ignores other types of revenue sources, such as value of retail sales and the

value of personal property (Aronson and Hilley, 1986: 37). Nonetheless, per capita income is widely used in the literature to measure states' revenue capacity. Although the direction of the relationship between per capita income and expenditures is inconsistent in the literature, the relationship is nonetheless significant and is generally assumed to be positive, with increases in per capita income leading to higher expenditure levels.

Tax Effort

Governments collect most of their revenue by exercising their sovereign power to collect coercive payments—taxes—rather than by selling products or services (Mikesell, 1999: 275). Hence, when tax revenues rise, one would expect higher expenditure levels to follow. Tweedie (1994) shows that increases in state revenues provide a ready fund for increases in benefits levels, and expected increases in state revenues lead to increases in AFDC benefits. Of course, states' revenue capacity is useful only to the extent government is willing to levy taxes against that capacity. A state or local government's tax effort provides a measure of the degree to which governments are willing to tax personal income. Per capita tax collections compared with the per capita personal income of a state provides a measure of states' relative tax effort (Aronson and Hilley, 1986). Such tax effort is often used as a criterion in federal funding formulas (LBB, 2002). There is an expected positive relationship between tax effort and program expenditure levels, such that an increase in tax effort should lead to an increase in expenditure levels.

A measure of tax effort has long been used in political science research. When testing his political cultural scale, Sharkansky (1969) uses partial correlations to control for the relationship between culture and certain socio-economic characteristics. Among many factors, he chooses the percentage of citizens' personal income that is paid in taxes to state and local governments to represent a ratio he labels "tax effort" (Sharkansky, 1969: 79). Although not looking specifically

at expenditure levels, Morgan and Watson (1991) employ tax effort (which they define as the actual amount of state and local taxes raised as a proportion of tax capacity) as one of the fiscal factors that may be influenced by political culture. Their findings show a significant relationship between a state's political culture and a willingness (or unwillingness) to raise taxes.[6]

During the past decade, state governments' tax collections have grown faster than their taxpayers' personal income, just under one percent faster annually after adjusting for inflation (Tax Foundation, 2002: 3). In 2000, the trend continued, and at a faster rate, as state tax collections grew at an almost two percent faster clip than personal income. The growth rate of state tax collections relative to personal income growth, however, varies substantially from state to state. While the mean growth rate was nearly two percent, the rate ranged throughout the nation from a high in Alaska of 53.28 percent to a low in Missouri of -4.83 percent (Tax Foundation, 2002: 3).[7]

Federal Grants-in-Aid

Federal grants have long been recognized as a potential stimulus to state and local government spending (Gramlich, 1968). Federal grants influence state and local expenditures because in most cases that was the intended purposed of the grant. In Texas as well as many states, most health and human services expenditures consist largely of federal funds (approximately 60 percent in Texas). Recent increases in states' federal funds are driven principally by expanding Medicaid caseloads and the accompanying federal Medicaid match

---

[6] Among the significant findings were that "traditionalistic states tend to raise less money per capita, to have lower levels of debt per capita, and to generate less tax revenue given the state's tax capacity" (Morgan and Watson, 1991: 45). A discussion of political culture appears later in this research paper.

[7] From FY 1999 to FY 2000, the five states whose tax collections grew fastest compared to taxpayers' personal income growth were Alaska, New Hampshire, Wyoming, Nebraska and California. On the flip side, the five states where personal income growth clearly outpaced the growth in tax collections were Missouri, Washington, West Virginia, Louisiana, South Carolina and Florida (Tax Foundation, 2002: 3).

(LBB, 2002: 9). Since Medicaid is an entitlement program whose caseloads are growing, states are obliged to pay for Medicaid services at increasing levels. Recall from the earlier discussion of Medicaid that states receive a minimum match of 50 cents for every dollar expended. Thus, as state fund expenditures rise, so too do federal funds. Unlike Medicaid, the TANF program requires only that states maintain expenditure levels at 75 or 80 percent of 1994 levels to receive the maximum federal share. As previously mentioned, states spent approximately $11 billion above the 75 percent level in 2000.

Holcombe and Stroup (1996) examine the relationship between federal grants and state and local government expenditures and find that the presence of federal grants increases the income elasticity of state and local spending, pushing state and local spending up when incomes rise. In other words, when a state's per capita income rises, the tendency for state and local government to increase taxing and spending in response is encouraged if there are federal funds available to offset the costs. Somewhat surprisingly, their results show a relatively weak direct relationship between federal grants and the overall level of state and local spending. A rise in income will be more likely to result in increased state and local government expenditures when accompanied by increased levels of federal grants (Holcombe and Stroup, 1996). "The relationship between federal grants and the income elasticity of state and local government expenditures is clearly stronger than between federal grants and the level of state and local expenditures" (Holcombe and Stroup, 1996: 139). The results suggest that federal grants indirectly stimulate growth of state and local expenditures by increasing state sensitivity to growth in per capita income.

Looking at the influence of the Medicaid matching rate on the level of Medicaid expenditures, Buchanan, Cappelleri, and Ohsfeldt (1991) find no significant relationship,

although they had expected to see a direct relationship (Buchanan, Cappelleri and Ohsfeldt, 1991: 71). Since Medicaid is an entitlement program that requires states to increase expenditures when caseloads rise regardless of the federal matching rate, the finding is perhaps less compelling. Holahan and Cohen (1986) did observe that states with higher federal matching payments had higher levels of Medicaid spending. Despite these mixed findings, for the purposes of this research federal grants are assumed to exert a positive influence on state and local expenditures for health and public assistance.

Political Culture

The idea that cultural orientations affect politics and policy outputs is well-established in the literature. There is extensive evidence that the political culture of a given state or region influences the scope and priorities of government services in its geo-political area. Perhaps most notable for their enduring relevance is Daniel Elazar's (1966) gradients of political culture. For Elazar, political culture constitutes the particular pattern of orientation to government that a given geographical area exhibits. He writes, "Political culture is particularly important as the historical source of such differences in habits, concerns, and attitudes that exist to influence political life in the various states" (Elazar 1966: 80). Those cultures range from individualistic, which emphasizes the concept of democratic order as a marketplace, to moralistic, which emphasizes the commonwealth as the basis for democratic government, to traditionalistic, which reflects an older, pre-industrial attitude that accepts a generally hierarchical society as part of the settled ordered of things, with those at the top expected to take a special and dominant role in government (Elazar, 1966). These cultural categories, or typologies, are important because they form the basis of later work, which attempts to "operationalize" the categories by creating numerical indexes to measure relative levels of each typology. Table 2.2 presents Elazar's

concepts of culture along with their imputed impact on certain aspects of society. One expects a higher level of expenditure in moralistic states, where government is seen as a means to achieve social and economic good, and lower expenditure levels in traditionalistic states, where government is viewed simply as a means of maintaining the exiting social order.

Table 2.2 Elazar's Political Culture Typologies

Culture	Basic Values	Government	Participation	Corruption	Political Parties
Traditionalistic	Maintenance of the prevailing social order	Means of maintaining existing order; initiatory only for that purpose	Restricted to socioeconomic elites	Possibly	Undesirable because they are open and public; usually weak or non-existent
Individualistic	Private gain, competition	A business; limited to basic services; essentially non-initiatory	Open to all who play by the rules	Definitely	Important for organizing personal relationships; worthy of loyalty
Moralistic	Community; achievement of general welfare	Means to achieve social and economic good; initiatory	Responsibility of all members of the community	Rarely	Useful for pursuing general welfare but less important than ideology

Source: Adapted from Table One, pages 24-25 in Daniel J. Elazar, "The American Cultural Matrix," in Daniel J. Elazar and Joseph Zikmund II, The Ecology of American Political Culture: Reading (New York: Thomas Y. Crowell, 1975), 13-42.

Following-up Elazar's work is Ira Sharkansky (1969) who "was the first to offer an empirical test of the effect of Elazar's typology of political culture on state politics" (Morgan and Watson, 1991: 33). The general direction of research in the late 1960s was toward quantitative analysis and statistical techniques that provided a measure of confidence in results. But Skarkansky argued that the contribution of political culture, an inherently qualitative concept, should not be overlooked. He sought to meld the quantitative certainty of data analysis with the "contribution of a sensitive observer" when he formulated his political culture index

(Sharkansky, 1969: 68). That Sharkansky's cultural index has relevance today is illustrated by Morgan and Watson (1991) who contend that "in using the Elazar construct in an aggregate analysis, one has essentially two choices—to rely on Sharkansky's scale, which some see as flawed, or to use another surrogate measure" Morgan and Watson (1991: 35).[8]

Other studies (Fischer, 1989; Lieske, 1993, 2000) have mostly verified the durability of Elazar and Sharkansky's insights. Koven and Mausolff (2002) offer many reasons why they made Sharkansky's operationalization of Elazar's political culture the backbone of their study: "(a) it lends itself to predictions about the willingness of different cultures to support government spending; (b) it has been well researched and generally found to be at least as valid an indicator of culture as other measures, including those based on updated demographic data; and (c) because of its basis in early migration patterns, it provides a test of the influence of cultural history on current policy" (Koven and Mausolff, 2002: 71).

Koven and Mausolff (2002) argue that cultural variations from state to state or region to region influence the relative size of per capita expenditures in different categories, including spending in such redistributive categories as health, hospitals, and public assistance (Koven and Mausolff, 2002: 71). The implication for health and public assistance is that traditionalistic states are expected to spend less than states whose cultures are individualistic or moralistic. Koven and Mausolff's (2002) findings are conclusive: "Most importantly for this study, the political culture variable was significant (at the .05 level) and in the predicted negative direction." That is, for each full-point drop in Sharkansky's 9-point political culture scale, there is an increase in per capita expenditures of $66. "Public expenditures in the United States appear to be based not just on objective political and economic factors but also on culture," they conclude

[8] Development of a surrogate measure is beyond the scope of this research.

(Koven and Mausolff, 2002: 73). The influence of culture will depend on the state and therefore is not expected to exert a strictly positive or negative influence on expenditures.

Party Control

The relationship between political culture and political parties is well documented. Since there are many gradients of political culture and only two dominant political parties in America that generally subsume them, the exploration of the effects of party affiliation on public expenditures appears worthwhile. The principal party labels in America are Republican and Democrat and the literature shows mixed results with respect to the degree and direction of party effects on spending levels.

Hager and Talbert (2000) test whether party identification has any effect on votes in which party leaders, the president, and a combination of the two take a position on a vote that is opposed to the other party. The results are conclusive: party almost always has an independent effect on voting behavior controlling for ideology. Party is statistically significant and in the expected direction in more than 85 percent of the regression equations tested. Since voting is the means by which legislators translate party ideology into concrete terms such as a budget, these findings have important implications for state and local expenditures.

Dilger (1998) finds just the opposite to be true: he finds that partisanship generally does not have a significant impact on state government spending and tax policies during the period examined (1985-1995). Only partisan control of the governor's office has a significant effect on expenditures, and then only in the categories of education and state debt. In all other cases, partisanship does not have a significant impact on state and local spending and tax policy (Dilger, 1998: 141).

> Partisanship in the governor's office had a significant impact on change in state education spending: states with Democratic governors were more likely than those with Republican governors to increase state education spending during the 1985-1995 period. Similarly, partisanship in the state legislature had a significant impact on change in state debt: Democratic state legislatures were more likely than Republican state legislatures to increase the state's debt (Dilger, 1998: 141).

Blais, Blake and Dion (1993) studied 15 democracies over a period of 28 years to determine whether parties of the left, when in control of government, spend more than parties of the right. Their analysis shows that parties of the left do spend a little more than parties of the right. The difference, however, emerges only for majority governments whose party composition remains unchanged over a number of years, an indication that it takes time for parties to affect total spending (Blais, Blake, and Dion, 1993: 40). On the other hand, Holcombe and Stroupe (1996) find that "political party variables were rarely statistically significant even at the 10 percent level" when they include partisan control of the lower house of the state legislature and of the governor's office in their study of factors influencing state and local government spending. The influence of party is mixed, according to the literature. Therefore, it is not expected to exert a strictly positive or negative influence on expenditure levels.

Race

According to the U.S. Census Bureau, the poverty rate for white non-Hispanics has been lower than for all other racial groups from 1959 to 2000 (U.S. Census, 2000: 4). The average poverty rate for blacks and Hispanics for years 1998-2000 is more than three times the rate for whites (U.S. Census, 2000: 7). Since research has established a clear, although directionally mixed, relationship between per capita income and state and local government expenditures, it stands to reason that factors affecting per capita income, such as the proportion of whites in a state, may also have an impact. The direction of this relationship may vary depending on the expenditures under consideration. For example, this research focuses on expenditures for

Medicaid and TANF, the beneficiaries of which are predominantly minority. In 2000, approximately 57 percent of Medicaid recipients and 64 percent of TANF recipients were non-white (U.S. Dept. of HHS, 2002). Logic suggests that as the proportion of whites in a given population increases, poverty decreases and the need for expenditures on health and public assistance should decline.

Holcombe and Stroup (1991) examine the effects of federal aid on state and local government expenditures, taking into account such social factors as the percent of a state's population that is white. They find a significant negative relationship between the proportion of whites in the population and levels of spending (Holcombe and Stroup, 1991: 134). Therefore, a negative relationship is predicted, so that as the proportion of whites in the population increases, state and local expenditure on health and public assistance decreases.

Conceptual Framework

Having looked in some detail at explanatory factors that generally influence state and local expenditures, a set of hypotheses may be developed about the specific relationship between those factors and expenditure levels in health and public assistance programs. The conceptual framework presented in Table 2.3 comprises formal hypotheses that propose a relationship between factors such as state per capita income, tax effort, political culture and party control and expenditures on public assistance and health. The conceptual framework summarizes the hypotheses that are subsequently tested empirically and Table 2.3 also identifies the literature associated with each hypothesis. A framework using formal hypotheses for inquiry is well supported in the literature. For example, Tweedie (1994) establishes three formal hypotheses to test a model of AFDC policy making: the need level hypothesis, income transfer hypothesis, and revenue allocation hypothesis. Hager and Talbert (2000) approach the question of party label as

an influence on voting behavior by developing formal hypotheses that tested six independent variables relating to roll call votes.

Table 2.3 Conceptual Framework Link to the Literature[9]

Conceptual Framework Link to Literature	
Hypotheses	**Literature**
(H1) **Last year's expenditures** on combined state and local health and public assistance positively influence this year's expenditures.	Wildavsky (1988) Buchanan, Capelleri, and Ohsfeldt (1991) Blais, Blake and Dion (1996) True (2000)
(H2) As a state's **revenue capacity** increases, combined state and local health and public assistance expenditures increase.	Aronson and Hilley (1986) Holahan and Cohen (1986) Buchanan, Cappelleri, and Ohsfeldt (1991) Morgan and Watson (1991) Tweedie (1994) Koven and Mausolff (1996) Holcombe and Stroup (1996) Dilger (1998)
(H3) As a state's **tax effort** increases, combined state and local health and public assistance expenditures increase.	Sharkansky (1969) Aronson and Hilley (1986) Morgan and Watson (1991) Tweedie (1994) Mikesell (1998) Tax Foundation (2002) Legislative Budget Board (2002)
(H4) As a state's total **federal grants-in-aid** increase, combined state and local health and public assistance expenditures increase.	Gramlich (1968) Aronson and Hilley (1986) Holahan and Cohen (1986) Buchanan, Cappelleri, and Ohsfeldt (1991) Holcombe and Stroup (1996) Legislative Budget Board (2002)
(H5) Combined state and local health and public assistance expenditures are influenced by a state's **political culture.**	Elazar (1966) Sharkansky (1969) Koven and Mausolff (2002) Morgan and Watson (1991) Wildavsky (1985) Greenberg and Page (1993)

[9] This research employs two conceptual frameworks, one for each of two regression models used to test the hypotheses. Hypothesis (H1) and its related variable appear only in model one since the influence of last year's expenditures is found to be so strongly positive that it overshadows the effects of the other factors. Model two eliminates this hypothesis (and the related variable) to test for significance of other, possibly subtler, influences on expenditures.

Conceptual Framework Link to Literature	
Hypotheses	**Literature**
(H6) Combined state and local health and public assistance expenditures are influenced by the **party control of a state's legislature.**	Blais, Blake and Dion (1993) Holcombe and Stroup (1996) Dilger (1998) Hager and Talbert (2000)
(H7) Combined state and local health and public assistance expenditures are influenced by the **party control of a state's executive branch.**	Blais, Blake and Dion (1993) Holcombe and Stroup (1996) Dilger (1998) Hager and Talbert (2000)
(H8) As the **proportion of whites in a state's population** increases, combined state and local health and public assistance expenditures decrease.	Holcombe and Stroup (1991)

Chapter Three
Methodology

This chapter provides a discussion of the data collected to test the hypotheses developed in Chapter Two and explains the methods and statistical techniques used to address the research question. The hypotheses are operationalized through associated variables. Each variable is defined and the source of data is discussed.

Data Sources and Limitations

In most instances, data relating to the identified factors is available in aggregate form from the U.S. Department of Commerce, the U.S. Department of Health and Human Services, the Bureau of the Census, the Statistical Abstract of the United States, and the Bureau of Economic Analysis. Data from non-governmental sources include state partisanship information from the National Association of Governors and the National Conference of State Legislatures. Medicaid and TANF expenditure data is obtained from the National Association of State Budget Officers. These sources are nationally recognized and their data is used regularly in scholarly research. NASBO data is one of the few sources of aggregated expenditure data by program and state and broken out by state and federal components.

Where possible, data for all 50 U.S. states is used. The District of Columbia is not included in the study since it does not collect state general revenue. When measuring party control of the state legislature, Nebraska is eliminated. Nebraska has only one legislative chamber and party affiliation is listed as "other" by the National Conference of State Legislatures. Other factors influencing expenditures in Nebraska are included in the analysis. Party affiliation is limited to Republicans and Democrats and other parties are treated as missing values for the sake of simplicity. Fortunately, such limitations occur in only a handful of cases.

The state of Wyoming spent zero dollars on public assistance or health programs in 1999 and 2000.

Statistical Techniques

The research techniques used to analyze the data are correlation and multiple regression. Correlation measures two characteristics of a linear relationship between two variables: direction and degree (Gravetter and Wallnau, 1999: 389). Pearson's correlation is used in this paper to measure associations among the variables under study.

Multiple regression analysis is the appropriate statistical technique to apply in this study because it enables the researcher to measure the simultaneous effects of many independent variables on a dependent variable (Babbie, 1998). The regression equation is valuable both descriptively and inferentially. First, the regression equation provides a mathematical description of the relationship between variables. Second, the regression equation allows us to infer values of the dependent variable when we have values of the independent variables (Babbie, 1998: 413). Multiple regression depends on certain assumptions for its validity. Data must be at the interval or ratio level of measurement and must be drawn from a random sample (Babbie, 1998: 414). In this case, data is at the interval or ratio level and the entire population of states is represented, thus meeting the model requirements.[10]

Validity of the model refers to the extent to which an empirical measure adequately reflects the real meaning of the concept under consideration. *Reliability* is a matter of whether a particular technique, applied repeatedly to the same object, would yield the same result each time (Babbie, 1998: 129). The validity of the chosen variables has been substantiated in the literature

[10] Regression analysis permits testing of variables with only two values (such as gender, which is either male or female) by assigning a 0 to one value and a 1 to the other. Such variables are called "dummy variables" and their use in social science research is commonplace. This study includes three dummy variables representing party factors, with the value 0=Democrat and 1=Republican.

review; the reliability of the data is ensured by using widely available aggregate data from U.S. government and other data sources. The results of this research are easily replicable.

The dependent variable is defined in Table 3.1 (which operationalizes the conceptual framework) along with the independent variables that will be used in the analysis. The table describes and defines each variable, provides an abbreviation for the variable that will be used in a subsequent correlation table, and indicates the source of data for each. The hypotheses are repeated in abbreviated form and the expected direction of influence on expenditures levels is noted by a plus or minus sign. A discussion follows the table.

Table 3.1 Operationalization of the Conceptual Framework

Operationalization of the Conceptual Framework			
Hypothesis	**Variable (Abbrev.)**	**Definition**	**Data Source**
	Dependent		
	Combined state and local Medicaid and TANF expenditures for 2000. **(EXP00)**	Revenues expended by state and local government on Medicaid and TANF for calendar year 2000 in dollars per capita.[11]	National Association of Budget Officers, 2002
	Independent		
(H1) Last year's expenditures (+)	Combined state and local Medicaid and TANF expenditures for 1999. **(EXP99)** [12]	Revenues expended by state and local government on Medicaid and TANF for calendar year 1999 in dollars per capita.[13]	National Association of Budget Officers, 2002
(H2) Revenue capacity (+)	Per capita income for each state. **(REVCAP)**	The total personal income for each state divided by the total population for each state for 2000, in dollars.	U.S. Dept. of Commerce • Statistical Abstract of the United States, 2001 • Bureau of the Census, 2000

[11] Does not include federal grants-in-aid.
[12] Not included in regression model two. See footnote nine.
[13] Does not include federal grants-in-aid.

Operationalization of the Conceptual Framework			
Hypothesis	**Variable (Abbrev.)**	**Definition**	**Data Source**
(H3) Tax effort (+)	Per capita state taxes paid as a percentage of per capita income. **(EFFORT)**	The ratio of each state's per capita tax revenues to per capita income. [(total revenues ÷ population) / (total income ÷ population], in dollars.	U.S. Dept. of Commerce • Statistical Abstract of the United States, 2001 • Bureau of the Census, 2000
(H4) Federal Grants-in-Aid (+)	Per capita state receipts of federal grants-in-aid **(GRANT)**	Each state's total federal grants-in-aid divided by state population, in dollars.	U.S. Dept. of Commerce • Statistical Abstract of the United States, 2001 • Bureau of the Census, 2000
(H5) Political Culture (+/-)	A numerical index score indicating state's position on a continuum of culture ranging from 0 to nine. **(CULTURE)**	$C = (\Sigma c) \div n$ Where C is the average numerical cultural rating; c is the value of each cultural designation assigned by Elazar to sub-regions of each state; and n equals the number of such designations.	Ira Sharkansky, 1969 Koven and Mausolff, 2002.
(H6) Party control of a state's legislature (+/-)	Party control of each state's senate in 2000 **(SENATE)**	A dichotomous variable where 1 = Republican control and 0 = Democratic control of state's senate.	National Association of State Legislatures, 2000.
(H6) Party control of a state's legislature (+/-)	Party control of each state's house in 2000 **(HOUSE)**	A dichotomous variable where 1 = Republican control and 0 = Democratic control of each state's house.	National Association of State Legislatures, 2000.
(H7) Party control of a state's executive branch (+/-)	Party control of each state's governor in 2000 **(GOV)**	A dichotomous variable where 1 = Republican control and 0 = Democratic control of each state's governor.	National Governor's Association, 2000

Operationalization of the Conceptual Framework			
Hypothesis	**Variable (Abbrev.)**	**Definition**	**Data Source**
(H8) Proportion of whites in a state's population (-)	Percentage of a state's population that is white. **(RACE)**	Total white (non-Hispanic) population divided by total population in each state for 2000, decimal form.	U.S. Department of Commerce • Bureau of the Census, 2000

Dependent Variable

2000 Expenditures on Medicaid and TANF. As presented in Table 3.1, the dependent variable is combined state and local Medicaid and TANF expenditures for 2000. There is debate in the literature about how to measure state expenditures. An important first decision is whether to include federal funds when looking at expenditures or to exclude them and focus only on the level of state effort. As discussed earlier, Holcombe and Stroup (1996: 142) find that federal grants indirectly stimulate growth of state and local expenditures by increasing state sensitivity to growth in per capita income. They find that a rise in income will be more likely to result in increased state and local government expenditures when accompanied by increased levels of federal grants (Holcombe and Stroup, 1996: 142). To assess the separate influence on state and local expenditures of federal grants-in-aid, logic suggests that federal grants should be considered apart from state and local funds; therefore, federal funds are not included as measures of expenditure.

To control for the influences of population size on expenditure levels, per capita dollar figures are used. The burden of funding public assistance and health programs usually is shared between state and local governments, with the proportion of each share varying from state to state. Aronson and Hilley (1986) argue that accurate expenditure comparisons should be made across states by combining state and local expenditures. "Such figures, when expressed per

capita or per $1,000 of personal income, provide a more useful measure of state-by-state differences in governmental provisions of services and collection of revenues" (Aronson and Hilley, 1986: 31). Therefore, expenditures are measured as the per capita dollar amount of all state and local spending for TANF and Medicaid. Aggregate expenditure data is available from the National Association of State Budget Officers.

Independent Variables

1999 Expenditures on Medicaid and TANF. All the measurement issues that were discussed for the dependent variable apply to this independent variable. The only difference is the year for which data is collected. This independent variable is not included in the regression model two, as discussed in footnote nine and later in this chapter. The data was collected through the National Association of State Budget Officers.

Per Capita Revenue Capacity. Per capita income has been chosen as the measure of state revenue capacity. It is a relatively straightforward measure that involves dividing a state's total personal income for 2000 by its total population in the same year. The Statistical Abstract of the United States is the source of the income data and the U.S. Bureau of the Census provides data on population from state to state.

Per Capita Tax Effort. Much has been written about disparities among states' tax efforts, particularly by advocate groups calling for more spending on public assistance and health (see for example, the Center for Public Policy Priorities at www.cppp.org). The degree to which a state chooses or is able to levy taxes against personal income or personal property affects its revenue levels and, consequently, its ability to pay for services. Tax effort is simply a fraction, the numerator of which is total per capita state tax revenues in dollars and the denominator of

which is total per capita income in dollars. The fraction is reduced to its decimal form, with higher ratios indicating a greater effort by government to levy taxes against its available revenue base. The source for the data is the Statistical Abstract of the U.S. and the Census Bureau.

Per Capita Federal Grants-in-Aid. The Statistical Abstract of the U.S. makes available data that captures total federal aid to state and local governments and by selected programs. Programs run the spectrum, from rehabilitation services to public housing to highway transportation. The value used for this research is total federal aid to states (in dollars) divided by total state population. The sources are the Statistical Abstract of the U.S. and the Census Bureau.

Political Culture. Sharkansky essentially "operationalizes" Elzar's political culture gradients by assigning numerical values to states based on their relative position on a scale from 1 to 9, with lower scores corresponding to moralistic cultures and higher scores corresponding to traditionalistic cultures (Sharkansky, 1969). Table 3.2 presents Sharkansky's political culture indexes for each state and shows where states fall on the cultural spectrum. As can be seen from Table 3.2, there is overlap among states on the cultural scale since culture does not observe strict geo-political boundaries such as exist between states but instead reflects degrees of shared culture from region to region. For example, Missouri is principally individualistic, but at 7.66 also exhibits slightly more traditionalistic tendencies than the principally traditionalistic state of Kentucky at 7.40. Likewise, Kentucky is principally traditionalistic but also exhibits a moderate amount of individualist culture.

Table 3.2 Sharkansky's Political Culture Index

Traditionalistic		Individualistic		Moralistic	
Arkansas	9	Hawaii	8.25	Kansas	3.66
Mississippi	9	Missouri	7.66	California	3.55
Georgia	8.8	Delaware	7	Montana	3
South Carolina	8.75	Maryland	7	South Dakota	3
Alabama	8.57	Indiana	6.33	Idaho	2.5
North Carolina	8.5	Ohio	5.16	Maine	2.33
Tennessee	8.5	Nevada	5	New Hampshire	2.33
Oklahoma	8.25	Illinois	4.72	Vermont	2.33
Louisiana	8	Pennsylvania	4.28	Iowa	2
Virginia	7.86	New Jersey	4	Michigan	2
Florida	7.8	Wyoming	4	North Dakota	2
Kentucky	7.4	Massachusetts	3.66	Oregon	2
West Virginia	7.33	Nebraska	3.66	Utah	2
Texas	7.11	New York	3.62	Wisconsin	2
New Mexico	7	Connecticut	3	Colorado	1.8
Arizona	5.66	Rhode Island	3	Washington	1.66
				Minnesota	1

SOURCE: Koven and Mausolff. "The Influence of Political Culture on Budgets: Another Look at Elazar's Formulation." *American Review of Public Administration*, Vol 32 No. 1. March 2002. pp. 66-77.

Party Control of the State House, Senate, and Governor's Office. This variable represents party control of each state's senate, house and governor's office. Data were obtained from the National Governors' Association and the National Conference of State Legislatures. States with Republican control are coded as one, states with Democratic control are coded as zero, and states with other-party control are coded as "missing."

Proportion of Whites in Population. The U.S. Bureau of the Census provides comprehensive data on the demographic aspects of state populations. The underlying premise for using this variable is that whites on average are more affluent than minorities and therefore

rely less on public assistance and public health than their minority counterparts. As the proportion of whites in a population increases the level of state expenditures on health and public assistance should decrease, all other things being equal. The expected relationship of this variable to the dependent variable is therefore negative, as discussed in Chapter Two.

Chapter Four
Results

This chapter reviews the results of statistical procedures run on the selected variables. Results are presented in tabular and narrative form. Table 4.1 shows the results of a correlation analysis of the selected independent variables. Table 4.2 shows the results of regression analyses of selected variables. The outputs calculated for the multiple regression include the adjusted R^2 (which measures the percentage of variance in the dependent variable that is explained by the independent variables), the unstandardized coefficients (which measure the change in the dependent variable for every unit of change in an independent variable), standardized beta coefficients (which standardizes different units of measurement among the independent variables and makes their influence comparable), F ratio (which indicates whether the model's results were obtained by chance, with higher F values indicating lower likelihood of chance results), and the standard error.

Correlations

Correlations were run between independent variables to determine the extent, if any, of multicollinearity.[14] As Table 4.1 shows, a strong positive relationship exists between the dependent variable (EXP00), and the independent variable representing last year's expenditures (EXP99) . Relationships between independent variables are not so strong, but many are significant.[15] Table 4.1 indicates that linear regression is an appropriate statistical technique to use with these data.

---

[14] Multicollinearity refers to a condition where the relationship between two independent variables is so strong that they essentially provide the same information. Some overlap or redundancy between two variables is acceptable. For the purposes of this research, if two independent variables were to correlate above 70 percent, they would be considered essentially the same and one would be removed.

[15] Notable are significant negative relationships between political culture and party control of the senate and house, revenue capacity, and the proportion of whites in the population. This suggests that as cultures become more

Table 4.1 Correlations Among Dependent and Independent Variables

	EXP00	EXP99	REVCAP	EFFORT	GRANT	CULTURE	SENATE	HOUSE	GOV	RACE
EXP00	1.00	.99**	.65**	.07	.13	-.27	-.19	-.22	.00	-.05
EXP99		1.00	.66**	.07	.11	-.25	-.18	-.21	.03	-.08
REVCAP			1.00	-.27	-.10	-.37**	.06	.05	.02	-.08
EFFORT				1.00	.26	-.02	-.42**	-.14	-.14	-.13
GRANT					1.00	-.16	.06	.06	-.07	.05
CULTURE						1.00	-.34*	-.48**	-.23	-.56**
SENATE							1.00	.57**	.35*	.27
HOUSE								1.00	.18	.33*
GOV									1.00	.25
RACE										1.00

**Correlation is significant at the 0.01 level (2-tailed).
*Correlation is significant at the 0.05 level (2-tailed).
EXP00 is the dependent variable.

Multiple Regression Models

Table 4.2 presents the results of two multiple regression models: Model one, with 1999 expenditures in the equation, and model two without. The high standardized beta coefficient between 1999 and 2000 expenditures, although possibly expected given the theory of incrementalism, tends to overshadow the effects of other factors in explaining variations in state and local expenditures on public assistance and health. In fact, model one in Table 4.2 reveals that *only* last year's expenditures are significant in explaining variations among state expenditure levels and that the model explains almost 98 percent of the variation. Removing 1999 expenditures from model two reduces the model's explanatory power to roughly half that of

---

traditionalistic (scoring higher on Sharkansky's scale), they tend to become more Democratic, poorer, and to count fewer white citizens among the population.

model one and shows significant influence of revenue capacity on 2000 expenditures. The standard error for model two is nearly five times greater than for model one.

Table 4.2 Regression Models Measuring Influence of Select Factors on 2000 Health and Public Assistance Expenditures

Independent Variables	Model 1		Model 2	
	Unstandardized Coefficients	Standardized Coefficients	Unstandardized Coefficients	Standardized Coefficients
	B	Beta	B	Beta
1999 Expenditures	1.02**	.99**	—	—
Revenue Capacity	1.49E-04	.00	2.63E-02**	.67**
Tax Effort	-223.03	-.02	1911.94	.13
Federal Grants-in-Aid	1.24E-02	.02	4.42E-02	.08
Political Culture	-.30	-.00	-8.01	-.12
Party Control of Senate	.92	.00	-50.65	-.15
Party Control of House	-6.24	-.02	-80.14	-.23
Party Control of Governor's Office	-10.21	-.03	25.02	.07
Proportion White Population	45.26	.03	55.97	.04
(Constant)	-27.37		-594.82	
Adjusted R^2	.98		.47	
F	215.76**		5.70**	
Std. Error	25.60		128.01	

Dependent Variable: 2000 State Expenditures on Health and Public Assistance
****Significant at the 0.01 level (2-tailed).**
N=49

The findings in model one indicate that last year's expenditures are the single best predictor of current year expenditures across states. The coefficient is positive, indicating a direct relationship as expected. The un-standarized coefficient shows that for every $1 increase

in per capita expenditures in the previous year, current year expenditures rise by approximately $1.02. Model two shows that for every $1 increase in state per capita income, expenditures increase approximately $0.03. These factors are significant at the .01 level. These findings should not be generalized to apply to other countries, since the data used was limited to the 50 United States.

Chapter Five
Conclusion

The results of model one presented in Chapter Four support hypothesis (H1), which states that last year's expenditures on combined state and local health and public assistance positively influence this year's expenditures. In the case of Medicaid and TANF expenditures, the theory of incrementalism appears to be a good fit, since large-scale budget changes have not occurred in these programs for several years. Last year's expenditure is such a powerful predictor that it may obscure more subtle factors that can account for variation. As discussed, model two in Table 4.2 removes the effects of this strong predictor to see if other factors are significant. Only revenue capacity (as measured by state per capita income) is shown to have a significant influence. This result supports hypothesis (H2), which states that as a state's revenue capacity increases, combined state and local health and public assistance expenditures increase. In both models, hypotheses relating to partisan politics, political culture, and the amount of federal funding did not influence expenditures. One possible explanation is that the controversial nature of redistributive policy (as exemplified by the Medicaid and TANF programs) is itself a deterrent to politicians who would undertake large-scale budgetary change. Table 5.1 summarizes the results and recapitulates the hypotheses along with the observed outcomes.

Table 5.1 Summary of Findings

Summary of Findings		
Hypothesis	**Expected Influence on Expenditures**	**Observed Result**
(H1) **Last year's expenditures** on combined state and local health and public assistance positively influence this year's expenditures.	Positive	Supported[16]
(H2) As a state's **revenue capacity** increases, combined state and local health and public assistance expenditures increase.	Positive	Supported[17]
(H3) As a state's **tax effort** increases, combined state and local health and public assistance expenditures increase.	Positive	Not Supported
(H4) As a state's total **federal grants-in-aid** increase, combined state and local health and public assistance expenditures increase.	Positive	Not Supported
(H5) Combined state and local health and public assistance expenditures are influenced by a state's **political culture.**	Positive or Negative	Not Supported
(H6) Combined state and local health and public assistance expenditures are influenced by the **party control of a state's legislature.**	Positive or Negative	Not Supported
(H7) Combined state and local health and public assistance expenditures are influenced by the **party control of a state's executive branch.**	Positive or Negative	Not Supported
(H8) As the **proportion of whites in a state's population** increases, combined state and local health and public assistance expenditures decrease.	Negative	Not Supported

Suggestions for Future Research

The factors drawn from the literature to explain expenditures levels on health and public assistance are presented in Table 2.1. Only factors that research confirmed as having significant

[16] Model One only
[17] Model Two only

influence on expenditures or on other factors were chosen for this study. Future study may involve selection of other factors for testing and review of literature from other sources in an effort to uncover additional indirect and direct factors.

In addition, the literature suggests that measuring the percentage change from year to year, instead of absolute expenditure levels, may yield more significant results. For example, Tweedie (1994) examines states' policy making for the Aid to Families with Dependent Children (AFDC) program, and the impact of policy making on benefit levels. He uses percentage change in benefits levels as the dependent variable because "the AFDC program structures benefit level changes in percentage terms rather than actual dollar amounts" and because of states' widely varying base levels of benefits (Tweedie, 1994: 658). He adjusts all his independent variables to represent the percentage change from one year to the next. Blais, Blake and Dion reappraised their 1993 research after determining that it is appropriate to shift the focus of the analysis from level of spending to change in spending (Blais, Blake and Dion, 1996: 514).

Tweedie (1994) also chose to measure change in benefit levels over a *two-year period*. This method is useful for three reasons: First, states follow a two-year elections cycle. In all states, at least one house of the legislature comes up for election every two years. Second, many states operate a biennial budget cycle. Budget decisions in one year cover that year and the following year. Third, the two-year periods allow for some of what is sometimes called the "sluggishness of political response." The two-year interval and the lags provide some latitude to capture the effects of changes while still focusing on states' decision making (Tweedie, 1994: 664). As noted in footnote four, conducting a time-series for a period beyond two years would be a more robust approach to the study of expenditure levels for TANF and Medicaid.

It should be noted that a third regression model, not formally presented in this study, was developed to test the influence of the independent variables on the percentage change in expenditures from 1999 to 2000. The results did not indicate any significant relationships. One possible reason is that the change in expenditures from 1999 to 2000 was so minuscule for most states as to be virtually non-existent. Perhaps looking across a longer time period would yield better results because the percentage change would be greater.

Research Summary

The purpose of this study is to review the available literature on factors influencing state and local government expenditures on health and public assistance and to select and test several factors against current expenditure data. Chapter One presents an introduction to the research purpose, including definitions of Medicaid and TANF, the two programs that constitute the largest share of government spending on health and public assistance. Chapter Two presents a review of the literature and the factors identified consistently as influencing expenditure levels. A conceptual framework is introduced, which serves to organize the research into formal hypotheses. Chapter Three operationalizes the conceptual framework and provides working definitions of the variables chosen to test the hypotheses. The data source and limitations are also discussed as well as the statistical techniques that are used. Chapter Four describes the results obtained from the statistical procedures and provides an explanation of the findings. Chapter Five presents the results in tabular form and makes recommendations for further research.

Bibliography

Aronson and Hilley, J. Richard and John L. Hilley. *Financing State and Local Governments*, 4ed., The Brookings Institution. Washington, D.C., 1986

Buchanan, Robert J., Joseph C. Cappelleri, and Robert L. Ohsfeldt. "The Social Environment and Medicaid Expenditures: Factors Influencing the Level of State Medicaid Spending." *Public Administration Review*, Jan./Feb. 1991, Vol. 51, No. 1.

Blais, Andre, Donald Blake and Stephane Dion. "Do Parties Make a Difference? Parties and the Size of Government in Liberal Democracies." *American Journal of Political Science*, Feb. 1993, Vol. 37, No. 1.

Blais, Andre, Donald Blake, and Stephane Dion. "Do Parties Make a Difference? A Reappraisal." *American Journal of Political Science*, May 1996, Vol. 40, No. 2.

Cable News Network (CNN). "Clinton to Sign Health Insurance Bill." August, 1996. www.cnn.com/US/9608/21/health.insurance/.

Center for Public Policy Priorities (CPPP). *Betting Against the Future: The Inadequacy of the Texas Tax System.* (1998). www.cppp.org.

Center for Public Policy Priorities (CPPP). *Who Pays Texas Taxes?* (2001). www.cppp.org

Center for Public Policy Priorities (CPPP). *Recent Changes in Texas Rankings.* (2002). http://www.cppp.org/products/fastfacts/changes.html

Center for Public Policy Priorities (CPPP). *Federal Aid To State Medicaid Programs Is Falling While The Economy Weakens.* (2001). www.cbpp.org/10-11-01health.pdf

Center for Public Policy Priorities (CPPP). *An Introduction to TANF.* (2002). www.centeronbudget.org/1-22-02tanf2.htm

Davidson, James West, et al. *Nation of Nations: A Narrative History of the American Republic.* McGraw-Hill Publishing Co., New York. 1990.

Dilger, Robert Jay. "Does Politics Matter? Partisanship's Impact on State Spending and Taxes, 1985-95." *State and Local Government Review*, Vol. 30, No. 2 (1998), 139-144.

Elazar, Daniel J. *American Federalism: A View from the States.*" Crowell Co., New York, 1966.

Elazar, Daniel J. and Joseph Zikmund II. *The Ecology of American Political Culture.* Reading, Crowell Co., New York, 1975.

Fischer, D.H. *Albion's Seed: Four British Folkways in America*. New York: Oxford University Press, 1989.

Gramlich, Edward M. "Alternative Federal Policies for Stimulating State and Local Expenditures: A Comparison of their Effects." *National Tax Journal*, June 1968, 21, 2.

Gravetter, Frederick J. and Larry B. Wallnau. *Essentials of Statistics for the Behavioral Sciences.* 3rd Ed. Brooks/Cole Publishing Co., 1999.

Greenberg, Edward S. and Benjamin I. Page. *The Struggle for Democracy.* HarperCollins College Publishers, New York, NY. 1993.

Hager, Gregory, and Jeffery Talbert. "Look for the Party Label: Party Influences on Voting in the U.S. House." *Legislative Studies Quarterly*, 2000, XXV.

Health and Human Services Commission (HHSC). *Annual Federal Funds Report.* (2001). www.hhsc.state.tx.us/about_hhsc/finance/FedFunds/Ann-FFunds_Rep_Dec2001.pdf

Health and Human Services Commission (HHSC). *Texas Medicaid in Perspective.* 4th Ed. (2002). www.hhsc.state.tx.us/Medicaid/reports/PB/2002pinkbook.html

Health Care Financing Administration (HCFA). *2001 HCFA Statistics.* (2001). www.cms.hhs.gov/statistics/01hcfastats.pdf

Holahan, John F. and Joel W. Cohen. *Medicaid: The Trade-Off between Cost Containment and Access to Care*. Washington, D.C.: The Urban Institute. 1986.

Koven, Steven G. and Christopher Mausolff. "The Influence of Political Culture on State Budgets." *American Review of Public Administration*, Vol. 32, No.1 (2002), 66-77.

Kraemer, Richard H., Charldean Newell and David F. Prindle. *Texas Politics*. 8th Ed. Wadsworth. 2002.

Legislative Budget Board (LBB). *Fiscal Size-up: Texas State Services, 2002-2003 Biennium* (2002). Austin, TX. www.lbb.state.tx.us

Lieske, J. "Regional Subcultures of the United States." *Journal of Politics*, 55 (1993), 888-913.

Lieske, J. "The Fragmenting American Republic: Diversity, Division, and Discontent." Paper presented at the 2000 meeting of the American Political Science Association, Washington, DC, (2000).

Mikesell, John. *Fiscal Administration: Analysis and Applications for the Public Sector*. 5th Edition, Harcourt Brace & Company, 1999.

Morgan, David R. and Sheilah S. Watson. "Political Culture, Political System Characteristics, and Public Policies Among the American States." *Publius: The Journal of Federalism*, 21, 1991, 31-48.

National Governors' Association (NGA). *Governors of the American States, Commonwealths, and Territories, 2000 Directory*. (2000). www.nga.org

National Association of State Budget Officers (NASBO). *2000 State Expenditure Report*. (Summer 2001).

National Association of State Budget Officers (NASBO). *Fiscal Survey of the States*, (May 2002). www.nasbo.org/Publications/fiscsurv/may2002fiscalsurvey.pdf

National Conference of State Legislatures (NCSL), *2000 Partisan Composition of State Legislatures*. (2000). www.ncsl.org.

Peterson, Paul and Mark Rom. "American Federalism, Welfare Policy, and Residential Choices." *American Political Science Review,* 1989*,* 83: 711-728

Sharkansky, Ira. "The Utility of Elazar's Political Culture." *Polity*, 2 (1969), 66-83.

Tax Foundation. *Special Report: State Tax Collections and Rates*. (2002). No. 110. http://taxfoundation.org/sr110.pdf

Tax Foundation. *Tax and Spending Policies Benefit Some States, Leave Others Footing the Bill*. (2001). www.taxfoundation.org/pr-fedtaxspendingratio.html.

The Urban Institute. *Distribution of Federal and State Welfare Spending*, 1996-2000. (2002). www.urban.org/UploadedPDF/900514.pdf

True, James L. "Avalanches and Incrementalism: Making Policy and Budgets in the United States." *American Review of Public Administration*, Vol. 30, No.1 (2000), 3-18.

U.S. Department of Commerce, Bureau of the Census, *Poverty in the United States: 2000.* (2001). www.census.gov/hhes/poverty/poverty00/tabled.pdf.

U.S. Department of Commerce, Bureau of the Census, *Federal, State, and Local Governments, State Government Finances.* (1999). www.census.gov/govs/www/state.html.

U.S. Department of Commerce, Bureau of Economic Analysis, *Annual State Personal Income, 1929-2000*. (2000). www.bea.doc.gov/bea/regional/spi/

U.S. Department of Commerce, Bureau of the Census, *Statistical Abstract of the United States, Sec. 9. State and Local Government.* (2000). www.census.gov/prod/www/statistical-abstract-us.html.

U.S. Department of Health and Human Services, *Third Annual Report to Congress*. (2000) www.acf.dhhs.gov/programs/opre/annual3.pdf

U.S. Department of Health and Human Services, *Funding Services to Children and Families through TANF: A guide* (1999). www.acf.dhhs.gov/programs/ofa/funds2.pdf

U.S. Department of Health and Human Services, *A Profile of Medicaid: Chart Book.* (2000). www.cms.gov/statistics/2Tchartbk.pdf

U.S. Department of Health and Human Services, Administration for Children and Families. *TANF Fourth Annual Report to Congress.* (2001). www.acf.dhhs.gov/programs/opre/ar2001

Wildavsky, Aaron B. *The New Politics of the Budgetary Process*. Scott, Foresman/Little Brown College Division, Glenview, Illinois, 1988.

Wildavsky, Aaron. "A Cultural Theory of Expenditure Growth and (Un)Balanced Budgets." *Journal of Public Economics*, 28 (1985), 349-357.