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Roy W. Bahl
Georgia State University, rbahl@gsu.edu

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Edited by

Bernard L. Weinstein
Scholar-in-Residence

Southern Growth Policies Board
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ROY BAHL

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Roy Bahl*

The shift in economic activity from the Northeastern and Midwestern industrial regions to the Southeast and Southwest has by now been thoroughly documented.[1] The numerous empirical examinations of this shift have been revealing in describing what has happened and in offering hypotheses about why it happened. Over the same period of time there has been an outpouring of literature on the financial problems of state and local governments.[2] The relationship between the declining economy and the declining fisc, however, has not been adequately studied,[3] or if it has, public policymakers do not appear to have understood the linkage. Perhaps it is because the relationship between the economy and the fisc is so difficult to formulate

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*Professor of Economics and Director, Metropolitan Studies Program, The Maxwell School, Syracuse University. Larry DeBoer and Linda Svetlik, graduate assistants in the Metropolitan Studies Program, updated the data for this analysis. An earlier version of this analysis was presented at a September, 1977 conference "National Policy Toward Regional Change," held at the University of Texas.

[1]See, for examples, William H. Miernyk, "The Northeast Isn't What It Used To Be," in Balanced Growth for the Northeast, (New York State Senate, 1975). Lawrence K. Lynch and E. Evan Brunson "Comparative Growth and Structure: The South and the Nation" in The Economics of Southern Growth, edited by E. Blaine Liner and Lawrence K. Lynch (Durham: The Southern Growth Policies Board) 1977, pp. 11-34; and David Puryear and Roy Bahl, Economic Problems of a Mature Economy, Occasional Paper No. 27 (Metropolitan Studies Program, The Maxwell School, Syracuse University, April 1976).

[2]See for examples, George E. Peterson, "Finance," in The Urban Predicament, ed. William Gorham and Nathan Glazer (The Urban Institute: Washington, D.C., 1976); Roy Bahl, Bernard Jump and Larry Schroeder "The Outlook For City Fiscal Performance in Declining Regions" in The Fiscal Outlook For Cities, (Syracuse, New York: Syracuse University Press, 1978): pp. 1-48.

[3]Notable exceptions here are Richard P. Nathan and Paul R. Dommel, who in "Understanding Central City Hardship," (Political Science Quarterly Vol. 21, No. 1, Spring 1976) argue a relationship between regional shifts

and because state and local governments have so little control over the performance of the state/local economy that policy analysts have turned in other directions to grapple with fiscal problems. There is probably no more glaring example of this misunderstanding than the proposed solutions to the New York City fiscal problem. Indeed, at least in the early stages much more attention was focused on the financial management issues which surrounded the New York City and State near financial disasters than on the fiscal implications of the economic decline which was taking place. As a result, it should come as no great surprise that remedial management policies and a temporary Federal assistance program have done little to deal with the city's fundamental long term fiscal problems.

The objective in this paper is to describe and analyze the linkage betwe regional variations in economic and demographic change and State and Local government finances. For the declining regions, particularly the Mid Atlant states, this analysis shows an imbalance between the growth in public sector activities and the growth in the capacity to finance public sector activities For some states this has resulted in what might be termed an overdeveloped public sector i.e., a level of government activity which cannot be sustained. This overexpansion of public sector activities has important implications

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(cont.) and urban fiscal problems; Tom Muller, who argues that population decline is a reasonable proxy for fiscal distress in "The Declining and Growing Metropolis--A Fiscal Comparison", in Post-Industrial America: Metropolitan Decline and Regional Job Shifts, eds. George Sternlieb and James W. Hughes, (New Brunswick, New Jersey: The Center for Urban Policy Research, State University of New Jersey, 1975) pp. 197-220; and Roy Bahl Alan Campbell and David Greytak, Taxes, Expenditures and the Economic Base: A Case Study of New York City (New York: Praeger, 1974).

for Southern states, which are now in a growth period and facing the same set of factors which drove up government costs in the North: inflation, rapid in-migration, growing public service demands and increasing union strength. Such an analysis requires that careful attention be paid to the setting in which problems of growth and decline must be dealt with--particularly the structure of government and the structure of intergovernmental relations within the state.

An initial assumption of this paper is that regional shifts in population and employment are not undesirable per se and therefore should not be the object of remedial public policy. Nor is a trend toward interregional income equality or a growing homogeneity in the provision of public services across geographic areas detrimental to the public welfare. What is harmful about regional shifts and what ought to be at the center of concern about public policy to deal with such shifts, are the effects on unemployment, poverty,and the fiscal position of state and local governments. In a sense all three of these concerns can be translated into a more general concern for the distribution of income--more specifically, to a concern for the share of purchasing power or public services accruing to low income families.

The problems of decline appear more difficult to resolve than the problems of growth and are more likely to eventually result in major changes in national policy. There are migration barriers which hold the jobless in central cities in declining regions and there are institutional barriers which cause worsening of the fiscal position for jurisdictions in the declining region. But most important, these problems are the result of past decisions

which are not easily reversed and the solutions to the problems of decline are probably beyond purely state and local government actions. Federal subsidies will be imperative to ease the adjustment of Northern States to a new, lower economic equilibrium. This is not to say that there are not severe fiscal and poverty problems in the Southern region, but rather, to say that the adjustment problems associated with regional shifts are likely to be more severe in the Northeast. Moreover, many of the fiscal problems of Northern cities and states need not be repeated in the South. It is well within the reach of state and local governments, through prudent fiscal planning, to avoid an overexpansion of the public sector.

Regardless of one's view as to where problems are most serious or of how they might be resolved, it is clear that an understanding of the linkages among regional shifts in employment and population, the unemployment problems particularly of large cities and the fiscal problems of state and local governments is essential to formulating a remedial public policy. This paper is a very modest attempt to deal with one dimension of this linkage, the relationship between regional economic shifts and State and Local government finances.

The analysis here is necessarily concerned with regional variations, more specifically, with the variationin finances of jurisdictions--state and local--in growing and declining regions. If any regularities are to be ferreted out, some form of aggregation of these jurisdictions must be used. Since the concern in this paper is with how the fisc has been compromised by regional movements in population, jobs, and income, the financing jurisdictions are aggregated by state and region. We follow

the general convention of labeling "Northern Tier" the aggregate of the East North Central, Middle Atlantic and New England Census Regions, and "Southern Tier", the South Atlantic,[1] East South Central and West South Central regions.[2]

The danger with such aggregation is that there remain very wide differences in fiscal structure and performance across states in a region and even across local jurisdictions within a state. For example, in fiscal structure, Texas is more like Ohio than West Virginia, and in terms of economic and population expansion, the City of Atlanta is more like Syracuse than Houston. The reader should remain cognizant of such variations, especially when this analysis is overenthusiastic in identifying "clear" regional variations.

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[1] Excluding the District of Columbia.

[2] The states included in each region are enumerated in the text tables which follow. Some authors have followed a procedure of excluding certain states in these regions on grounds that they are qualitatively different in terms of economic base. For example, Jusenius and Ledebur exclude Maine, Vermont and New Hampshire because the industrial bases of these states differ in kind and degree from the rest of the region. See C.L. Jesenius and L.C. Ledebur, A Myth in the Making: The Southern Economic Challenge and the Northern Economic Decline (Economic Development Administration, U.S. Department of Commerce: Washington, D.C., November 1976) p.2.

THE EXISTING PATTERN OF REGIONAL VARIATIONS

Several characteristics of state fiscal systems are crucial both to an understanding of variations among regions in state/local revenue and expenditure patterns and to an explanation of how these variations have been affected by regional shifts. The most important characteristics would include:

(a) The assignment of expenditure and financing responsibility between the state and its local governments;

(b) The structure of local governments and the potential for regionwide service delivery or financing;

(c) The level and functional composition of expenditures;

(d) The level of public employee compensation, public employment, and the importance of public employee unions;

(e) The level of taxation and its composition by major sources;

(f) The reliance on debt and federal grants as financing sources, and;

(g) Central city/outside central city disparities in local government revenues and expenditures.

While these patterns will be compared in terms of state and region-wide averages, the substantial intrastate heterogeneity should be kept in mind. These comparisons do show distinct regional patterns or preferences for tax and spending levels and structures, but there are states in both regions which simply do not appear to "belong". Texas, for example, has a local government taxing and spending dominance which is much more like the Northeastern than the Southern State fiscal structures.

Revenue and Expenditure Assignment

There are two approaches to identifying regional variations in the relative importance of state and local governments. One is to study the characteristics of Southern and Northern states and to present whatever pattern emerges. The other is to devise an objective system for classifying all states and to examine the results for the two regions. The latter approach was taken in a recent ACIR study which classified state fiscal systems.[1]

To develop a state fiscal classification scheme, expenditure and financing data were gathered for total state and local expenditures and four specific expenditure functions: education, highways, public welfare, and health-hospitals for 1967 and 1972. From these data, nine specific fiscal characteristics were derived. The first three--*percent of state and local government expenditures financed by federal, state, and local sectors, respectively*--represent the relative financing responsibilities of the three governmental levels. The second group of fiscal characteristics--*state and local direct expenditure shares*--describe final spending responsibilities rather than original source of financing of state and local governments. The sixth characteristic, *per capita expenditures*, is included to capture the scope rather than the division of fiscal responsibilities among the states. The seventh variable is *state grants to local governments as a percent of total state government expenditure*

[1]See David Puryear, Roy Bahl, and Seymour Sacks, Federal Grants: Their Effect on State and Local Expenditures, Employment Levels, Wage Rates, (Washington, D.C.: Advisory Commission on Intergovernmental Relations, February 1977), Chapter 2.

and is meant to separate state governments that dominate financing into two groups: those that retain heavy direct expenditure responsibility, and those that pass expenditure responsibility to localities via grant systems. An eighth indicator is revenue effort, defined as *state plus locally financed expenditure expressed as a percent of state personal income.* Finally, the *share of state and local government revenues accounted for by the individual income tax* is included to approximate the progressivity of state taxation systems.

The fifty state fiscal systems described by these nine characteristics exhibit many varied and distinctive combinations of intergovermental relationships. Some general patterns, however, also emerge indicating that although each state may be unique, certain common types of state and local fiscal relationships exist.

Based on this analysis, the fifty states were grouped into categories of high, moderate and low financing responsibilities, expenditure shares, and per capita spending levels. These groupings were used to cross-classify state and local fiscal systems as one of three major types: state government dominated in terms of both expenditure responsibility and origin of financing; local government dominated; and mixed systems. These results are described in Table 1.

Though no systematic relationship could be found between census region and these cross-classifications, it may be noted that nine of the sixteen Southern Tier states exhibit a high state financing responsibility and a moderate to a high state expenditure responsibility. Only one Southern state, Texas, is to be found in the locally-dominated group.

TABLE 1

CLASSIFICATION OF STATE FISCAL SYSTEMS: NONWELFARE EXPENDITURES OF STATE AND LOCAL GOVERNMENTS, 1972

	High State Expenditure Responsibility	Moderate State Expenditure Responsibility	Low State Expenditure Responsibility
High State Financing Responsibility			
High Expenditure Per Capita	Alaska Delaware Hawaii Vermont		
Moderate Expenditure Per Capita	Idaho Utah West Virginia	Louisiana New Mexico	
Low Expenditure Per Capita	Kentucky South Carolina	Arkansas Mississippi North Carolina Oklahoma	
Moderate State Financing Responsibility			
High Expenditure Per Capita	Montana Wyoming	Arizona Maryland Oregon Washington	Minnesota Wisconsin
Moderate Expenditure Per Capita	North Dakota New Hampshire	Connecticut Pennsylvania	Florida
Low Expenditure Per Capita	Maine Rhode Island	Alabama Georgia Tennessee Virginia	Iowa
Low State Financing Responsibility			
High Expenditure Per Capita			California Nevada New York
Moderate Expenditure Per Capita		Colorado Kansas Nebraska South Dakota	Illinois Indiana Massachusetts Michigan Missouri New Jersey
Low Expenditure Per Capita			Ohio Texas

NOTES: High, moderate, and low designations for each category relate to whether the State placed in the top 15, middle 20, or bottom 15 among States./ State expenditure responsibility is the State share of total State and local direct expenditures./ State financial responsibility is the share of total State and local expenditures financed by the State./ Per capita expenditures is total State and local expenditures per capita.

SOURCE: Advisory Commission on Intergovernmental Relations, Federal Grants: Their Effects on State-Local Expenditures, Employment Levels, Wage Rates, Washington, D.C., February 1977.

By contrast, only two of the fourteen Northern Tier states--Rhode Island and Vermont--may be classified as state-dominated, while seven of the fourteen Northern Tier states may be classified as locally-dominated.

A correlation analysis tends to confirm the argument that Southern states in general tend to have more state-dominated fiscal systems. Those states which have a heavier financing and direct expenditure share tend to be significantly lower income, less urban, and less populous (See Table 2).

TABLE 2

CORRELATIONS BETWEEN FISCAL CHARACTERISTICS OF STATES AND SOCIAL AND ECONOMIC VARIABLES, 1972

	Per Capita Income	Percent Urban	State Population
Federal Financing Share	-.654*	-.466*	-.382*
State Financing Share	-.122	-.247	-.327*
Local Financing Share	.463*	.451*	.461
State Direct Expenditure Share	-.340*	-.457*	-.595*
Local Direct Expenditure Share	.340*	.457*	.595
Per Capita Expenditures ($)	.551*	.119*	.014
Grants as Share of State Expenditures	-.189	-.334*	-.583

*Statistically significant at the 5 percent level.

SOURCE: Advisory Commission on Intergovernmental Relations, Federal Grants: Their Effects on State-Local Expenditures, Employment Levels, Wage Rates, Washington, D.C., February 1977.

Local Government Structure

A second important difference between Northern and Southern Tier states is the structure of local government in metropolitan areas. The stereotype difference would be northern central cities with heavy concentrations of the poor, an antiquated, dilapidated infrastructure sur-

rounded by more affluent suburbs, and with little hope of annexation or consolidation. Many if not most Northeastern metropolitan areas would fit this stereotype. The Southern Tier cities might be painted as newer, subject to less city and suburb wealth difference and having been more successful at annexation and consolidation. The examples of Jacksonville, Miami, Nashville, Houston, and Baton Rouge come quickly to mind.

There is more than impressionistic evidence to support this stereotype. Sacks finds striking differences between regions in the percent of metropolitan area populations residing within the central city. As may be seen in Table 3, he found an average of 61 percent of metropolitan population residing inside central cities in the South as compared to

TABLE 3

CENTRAL CITY POPULATION AS A PROPORTION OF SMSA POPULATION: 1960 and 1973[a]

	Number of Observations	Mean Value (in percent) 1960	1973
East	18	41	34
Midwest	22	52	45
South	27	59	61
West	18	49	44
Total	85	51	47

[a]For the 85 largest SMSA's.

SOURCE: Advisory Commission on Intergovernmental Relations, Trends in Metropolitan America (Washington, D.C., 1977), Table 2.

34 and 45 percent respectively in the East and Midwest.[1] Moreover, he shows that between 1960 and 1973 this percentage increased slightly in the Southern metropolitan areas but declined in all other regions. This in no way allows a conclusion to be drawn that the structure of government in the South is less complicated, but it does show that central cities in the South are a more dominant force in their respective metropolitan areas. In addition to this population advantage, it can be shown that the central cities are both fiscally and economically better off in the Southern Tier than in the Northern Tier states. Much of this advantaged position of Southern central cities must be ascribed to the greater success of the South in consolidation attempts and/or in using more area-wide financing mechanisms. Marando argues that consolidation is essentially a Southern regional phenomenon, and that annexation has occurred extensively throughout the United States with the exception of the Northeastern region.[2]

Expenditure Level and Structure

There are important variations between the Northern and Southern Tier states in the level and functional distribution of expenditures. The Northern states spend more--about 16 percent more on a per capita basis--

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[1] Sacks' East and Midwest regions correspond approximately to our Northern Tier, and his Southern region to our Southern Tier, with the following exceptions: a) in the Midwest he includes Des Moines, Wichita, Minneapolis, Kansas City, St. Louis, and Omaha. In the East he includes Washington, D.C. Advisory Commission on Intergovernmental Relations, Trends in Metropolitan America (U.S. Government Printing Office, Washington, D.C., 1977).

[2] Vincent Marando, "The Politics of Metropolitan Reform," in State and Local Government: the Political Economy of Reform, Alan Campbell and Roy Bahl, eds. (New York: The Free Press, 1976) p. 24-49.

than do the Southern Tier states (see Table 4).[1] This pattern holds for most states within the two regions. Only one Northern Tier state (Indiana) spends less than the Southern mean, and only two Southern Tier states (Delaware and Maryland) spend above the Northern mean. This relatively low expenditure level in the South, even in the midst of an increased flow of resources to that region, is important in understanding the possibilities for fiscal adjustment. It means that Southern states have very low public service levels, if expenditures are any indication of services provided. It also means that Southern states may expand tax and spending levels by a significant amount before reaching non-competitive levels.

In terms of expenditure distribution, the Southern states allocate a slightly greater share of total public resources to education and there is substantial homogeneity among the Southern states in the education share of the total budget. The same holds true for the share devoted to health and hospitals, though there is much greater variation among states in both regions. But perhaps the major regional difference in expenditure structure is that

[1] In comparing the performance of the public and private sectors, between regions, there is the problem of selecting the appropriate "average". Assuming, as we do, that the arithmetic mean is a better measure of central tendency than is the median, there remains the choice between the average value for the entire region and the average state performance. For example, in the case of per capita expenditures, the former would be $\sum_{i=1}^{n} E_i / \sum_{i=1}^{n} P_i$, and the latter, $\sum_{i=1}^{n} (E_i/P_i)$ where E = expenditures and P = population. The latter the average state performance measure, has the disadvantage of giving the same weight to all states in determining the regional average, and may be a misleading indicator if there are wide variations in population size within the region. Nevertheless, our interest in this chapter is with the fiscal decisions of jurisdictions, hence, we stay with the "average state" measure as best for our purposes

TABLE 4

EXPENDITURE AND EMPLOYMENT CHARACTERISTICS OF STATE AND LOCAL GOVERNMENTS BY REGION IN 1977

State and Region	Per Capita Expenditures	Percent of Current Expenditures			State and Local Government Employees	
		Education	Welfare	Health & Hospitals	Per 10,000 Population	Average Wage
NORTHERN TIER						
weighted	1342	37.8	17.0	7.9	459	$1144
unweighted	1261	39.5	16.3	7.3	459	1076
East North Central						
weighted	1218	42.8	15.8	8.2	447	1132
unweighted	1208	43.4	15.3	8.5	451	1112
Illinois (1)	1266	40.7	17.3	6.6	439	1205
Indiana (2)	953	47.3	11.0	11.3	443	967
Michigan (3)	1390	41.9	17.9	8.9	468	1258
Ohio (4)	1109	44.6	13.1	8.6	425	1041
Wisconsin (5)	1322	42.6	17.2	7.4	478	1087
Middle Atlantic						
weighted	1502	34.0	18.0	8.0	470	1184
unweighted	1429	35.6	17.4	7.3	464	1159
New Jersey (6)	1327	38.2	14.3	5.7	477	1157
New York (7)	1795	31.5	18.5	9.0	512	1255
Pennsylvania (8)	1166	37.0	19.5	7.1	402	1065
New England						
weighted	1268	35.8	17.3	6.8	464	1065
unweighted	1221	38.1	16.5	6.2	463	1004
Connecticut (9)	1152	38.0	13.7	6.0	426	1086
Maine (10)	1120	37.9	16.8	4.4	455	881
Massachusetts (11)	1378	33.3	18.9	7.5	485	1114
N. Hampshire (12)	1116	40.3	15.1	5.7	446	927
Rhode Island (13)	1283	37.3	19.8	7.8	474	1081
Vermont (14)	1280	41.9	14.5	5.9	491	933

TABLE 4 (CONT.)

State and Region	Per Capita Expenditures	Percent of Current Expenditures: Education	Welfare	Health & Hospitals	State and Local Government Employees: Per 10,000 Population	Average Wage
SOUTHERN TIER						
weighted	1062	42.4	11.3	11.2	49.	912
unweighted	1082	42.2	11.9	10.8	497	901
South Atlantic						
weighted	1105	42.4	9.9	11.3	514	943
unweighted	1145	42.6	10.4	10.5	514	949
Delaware (15)	1458	44.6	10.4	5.6	531	1068
Maryland (16)	1453	42.6	12.0	7.7	524	1127
North Carolina (17)	982	48.0	9.5	10.2	505	908
Virginia (18)	1105	43.3	11.2	9.3	510	937
South Carolina (19)	979	42.7	10.0	13.9	506	835
Georgia (20)	1003	39.0	11.9	16.7	543	838
Florida (21)	1099	40.1	6.5	12.7	508	983
West Virginia (22)	1083	40.7	11.5	8.0	489	892
East South Central						
weighted	1003	41.3	13.4	11.5	472	851
unweighted	1005	41.4	13.4	11.6	473	846
Alabama (23)	1002	42.6	12.4	13.7	480	883
Kentucky (24)	1006	41.9	16.8	6.7	422	890
Mississippi (25)	1018	41.5	11.9	13.3	494	766
Tennessee (26)	992	39.5	12.4	12.5	494	846
West South Central						
weighted	1033	43.3	12.2	10.8	491	898
unweighted	1033	42.3	13.3	10.6	486	860
Arkansas (27)	876	43.6	15.3	10.0	447	790
Louisiana (28)	1207	37.8	11.9	12.8	508	863
Oklahoma (29)	1045.	42.5	14.7	8.8	498	848
Texas (30)	1003	45.4	11.2	10.8	492	937

SOURCE: U.S. Bureau of the Census, Government Finances in 1976-77, Series GF77-5 (Washington, D.C.: U.S. Government Printing Office, 1977); and, U.S. Department of Commerce, Current Population Reports, "Annual Estimates of States," Series P-25, No. 727, July 1978. Resident Population and Public Employment in 1967, 1972, 1975, 1977, GE67, 72, 75, 77 (Washington, D.C.: U.S.

the Northern states spend proportionately more for public welfare. Only one Northern state--Indiana--allocates as little to public welfare as the Southern mean of 11.9 percent. Indeed, if Southern states were to make the same per capita welfare expenditures as northern states, the North-South gap in per capita spending would be cut from 17 to 9 percent. This suggests that the advantage of Northern states in public service levels may be overstated by expenditure comparisons. It also suggests that complete Federal assumption of welfare financing will provide substantially greater fiscal relief to the Northern tier of states.

Public Employment and Wage Levels

It is surprising that there is a greater average level of state and local government employment, relative to population, in the South (See Table 4). Nine of the sixteen states in the Southern Tier are at or above the U.S. average of 476 employees per 10,000 population while only one of the fourteen Northern states is above this national mean. Though there are a few outliers, there is relatively little variation among states in either region. The variations among the Northern states range from Pennsylvania's 402 state and local government employees per 10,000 population to New York's 512; while in the South, the spread is not as great, ranging from Kentucky's 422 to Georgia's 543 employees per 10,000 population.

This higher level of public employment in Southern States is not easily explained but a number of hypotheses might be offered. It would be consistent with an economies of scale hypothesis. The more populous, more highly urbanized states conceivably would need fewer employees to provide a given amount of public services. Smaller, more rural and more spread out Southern states may require a greater number of public employees to service any given amount of population. Likewise, the lower density may leave

much less room for capital-labor substitution, leaving the Southern states with more labor intensive public sectors.

The higher level of public employment in the South does not square with the hypothesis that public employment tends to be higher in slower growing or declining regions. There is some evidence that an association exists between the level of local government employment and the rate of population growth. Muller compares twelve growing cities and fourteen declining cities on the basis of common function[1] employment per 1,000 residents. From this relatively small set of observations, he finds declining cities to have 12.1 workers per 1,000 residents as compared to 8.7 in the growing cities.[2] Perhaps even more interesting is his finding that the gap has widened between 1967 and 1972. No such relationship between the level of state and local employment and population growth or decline can be found among the Northern or Southern Tier states examined here.

A third explanation could be that the more centralized governmental structure which generally prevails in the Southern states somehow leads to greater levels of public employment. This is not consistent with *a priori* reasoning which would suggest that centralization would eliminate much duplication and, *cet.par.*, lead to lower employment levels. The problem here is that all other factors are not held constant.

Finally, the public employment level differences may reflect the downward sloping demand curve for public employees, i.e., lower employment levels

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[1] Common municipal functions exclude education, hospitals, and other variable functions as defined by the Census.

[2] Tom Muller, "The Declining and Growing Metropolis--A Fiscal Comparison," pp. 203-206.

in the Northern states are a result of higher wage levels in those states. Average public employee wages are higher in the Northern Tier by almost any standard (Table 4). While per capita income is 14 percent higher in the North, the gap in average public sector wages is 19 percent. The pattern holds for nearly all states in the two regions. There are a number of possible reasons why public sector workers receive such low wages in the Southern states: low productivity, the absence of strong unions, a lower opportunity wage in the private sector, or the possibility that governments in the Southern states do not perform the same range of public subfunctions and hence do not require as expensive a mix of labor skills.

Another possibility is that these comparisons are not valid because of measurement problems. There are many problems inherent in a comparison of average wage levels across states. There are not good disaggregated data on the wage levels of public employees at various levels of seniority or in various occupations. The estimates presented in Table 4 are of average payroll per full-time equivalent employee. Such a measure misses the wide variation in pay levels by class of employees, and since October payrolls are used, mixes nine month employees (teachers) with twelve month employees. Moreover, the inclusion of total payroll, but only full-time equivalent employees introduces distortions created by payments to part-time employees. The variation in this distortion across states is unknown.

Even if payroll per full-time equivalent employee is a reasonable measure of interstate variations in the average wage, there remains the problem of measuring interstate variation in the level of pensions and fringe benefits. Again, there are inadequate data to make these cross-State

comparisons, and one must be content to assume that interstate variations in the average wage, as measured above, accurately reflect interstate variations in total compensation.[1] There is good reason to expect that it does not, since most benefits are tied to wage levels, e.g., pensions, social security contributions. Hence, it is likely that the regional differences in total compensation are greater than those in average wages.

Finally, even if the payroll per full time-equivalent employee is a reasonable benchmark for comparison, there remains the problem of cost-of-living differentials which may tend to change this pattern of interstate differences. To estimate the influence of regional cost-of-living differences, we have deflated the distribution of average wages in 1975 with the HUD estimated fair market rent index for that year.[2] When adjusted for living cost differentials in this manner, the advantage of Northern Tier average public sector wages over Soutern Tier falls from about 20 percent to an almost negligible 2 percent. This doesn't demonstrate that North-South public employee wage differences are primarily due to cost-of-living differences--the HUD rent index is not an appropriate measure of

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[1] For a good discussion of these measurement problems, see Bernard Jump "Public Employment, Collective Bargaining and Employee Wages and Pensions" in State and Local Government Finance and Financial Management (Municipal Finance Officers Association, Washington, D.C., 1978) pp.74-85.

[2] HUD has established fair market rent levels for about 3,100 areas throughout the nation in conjunction with their Section Eight Lease Housing Program. One might argue the use of the data to construct a cost-of-living index because (a) housing costs make up a large proportion of total consumption; and (b) much of the variance in living costs might be attributed to housing. Following this procedure, we have taken the indices computed for 501 formula cities under the HUD community development block program, aggregated and averaged the indices by state and then compared them to the U.S. average to develop an index. For a discussion of the potential use of the HUD index as a cost-of-living measure in another context, see the Controller-General of the United States,"Why the Formula for Allocative Community Development Block Grant Funds Should be Improved," (Washington, D.C.: General Accounting Office, December 1976).

such differences.[1] However, this calculation based solely on a housing price index would suggest that price level differences may explain a substantial proportion of regional public sector wage rate differences.[2]

If all of these caveats are disregarded, or if one could live with the assumption that the North-South bias created by the data problems somehow cancel out, the greater average wage in the Northern Tier suggests that a substantial part of the State and Local expenditure difference in the Northern and Southern states is due to public employee compensation differences. If it is further accepted that differentials in average wages across regions are not the result of public employee productivity differentials, then we have further evidence that the higher level of per capita spending in the Northern states substantially overstates the difference in the average quality of services provided between the two regions. Muller has also studied wage variations among local governments using his growth/decline dichotomy, and for his sample, has determined that average wage levels tend to be higher in older and declining cities. His plausible explanation for this difference is the greater ability of municipal employee associations in older cities to press for more favorable contract terms, coupled with cost-of-living differences and perhaps a necessary premium for what is perceived as a lower quality of life in the older, more congested cities of the Northeast and industrial Midwest.

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[1] There are not adequate deflators for this purpose. The choices here were between the BLS levels of living for low, intermediate and high income families, and the HUD index of rent. We chose the latter because the BLS data are available only for 41 metropolitan areas and this would not seem to provide adequate regional coverage. See Bureau of Labor Statistics, "Autumn 1976 Urban Family Budgets and Comparative Indexes for Selected Urban Areas," (Washington, D.C.: U.S. Department of Labor, April 27, 1977): pp. 77-369.

[2] This faster rate of growth in prices in the Southern region is consistent with the results of Brunson and Lynch, "Comparative Growth...", pg. 14.

Sources of Finance

Three aspects of the financing of state and local government expenditures are important in describing regional variations in fiscal systems: reliance on debt financing, the structure of taxes raised, and the level of revenue effort exerted. With respect to borrowing, the level of general obligation debt in the Northern Tier is substantially higher on a per capita basis (See Table 5). If these per capita debt levels are adjusted for differences in per capita income, a somewhat different picture emerges. Comparisons of the debt-income ratio, which measures the level of debt relative to capacity to carry debt, show that the highest levels of debt burden belong to those states thought to be facing the most serious fiscal crisis, i.e., New Jersey, New York, Pennsylvania, and Massachusetts. The level of debt in the East North Central states is lower than that in any Southern subregion, attesting again to the problems with inferences from regional averages.

To give some rough idea of how the market perceives the quality of this debt, Standard & Poor's ratings of the general obligations bonds of each state are shown in Table 5.[1] No consistent pattern emerges with respect to variations between regions. From the ratings one might draw the conclusion that the market does not weight the regional shift in economic activity and employment very heavily in gauging the long-term repayment potential of state government. For example, declining New York and growing Florida are both seen as AA credits, while declining New Jersey and growing Texas are both seen as AAA credits.

[1] Standard and Poor's Corporation, Municipal Bond Selector, 1977.

TABLE 5

DEBT LEVELS: BY REGION FOR 1977

State and Region	By Long Term Debt Outstanding: Per Capita	By Long Term Debt Outstanding: As a Percent of Personal Income	General Obligation Bond Rating
NORTHERN TIER			
weighted	1193	16.2	
unweighted	1053	14.9	
East North Central			
weighted	767	10.4	
unweighted	744	10.2	
Illinois (1)	858	11.0	AAA
Indiana (2)	465	6.7	
Michigan (3)	915	12.0	AA
Ohio (4)	683	9.6	AAA
Wisconsin (5)	797	11.6	AAA
Middle Atlantic			
weighted	1657	22.2	
unweighted	1500	20.1	
New Jersey (6)	1082	13.5	AAA
New York (7)	2144	28.4	AA
Pennsylvania (8)	1275	18.2	AA
New England			
weighted	1214	16.9	
unweighted	1087	16.2	
Connecticut (9)	1469	18.2	AA
Maine (10)	815	14.2	AAA
Massachusetts (11)	1245	17.2	AA
New Hampshire (12)	781	12.0	NCR
Rhode Island (13)	1048	15.5	AA
Vermont (14)	1163	20.0	NCR

TABLE 5 (CONT.)

State and Region	By Long Term Debt Outstanding: Per Capita	By Long Term Debt Outstanding: As a Percent of Personal Income	General Obligation Bond Rating
SOUTHERN TIER			
weighted	798	12.7	
unweighted	867	13.7	
South Atlantic			
weighted	777	12.0	
unweighted	937	13.9	
Delaware (15)	1896	24.7	A+
Maryland (16)	1396	18.4	AAA
North Carolina (17)	377	6.3	AAA
Virginia (18)	707	10.3	AAA
South Carolina (19)	712	12.6	AAA
Georgia (20)	664	11.0	AA
Florida (21)	741	11.1	AA
West Virginia (22)	1002	16.7	AA+
East South Central			
weighted	827	14.6	
unweighted	821	14.6	
Alabama (23)	717	12.8	AA
Kentucky (24)	1065	17.9	AA
Mississippi (25)	705	14.0	A+
Tennessee (26)	799	13.8	AA
West South Central			
weighted	814	12.6	
unweighted	771	12.5	
Arkansas (27)	462	8.3	AA
Louisiana (28)	1119	18.9	AA
Oklahoma (29)	701	11.0	AAA
Texas (30)	804	11.8	

SOURCE: U.S. Bureau of the Census, Government Finances in 1976-77, Series GF77-5 (Washington, D.C.: U.S. Government Printing Office, 1977); and, U.S. Department of Commerce, Current Population Reports, "Annual Estimates of the Population of States," Series P-25, No. 727, July 1978. Resident Population.

In terms of revenue structure there are distinct and important differences between the regions. Southern states are more heavily reliant on sales taxes and Northern states on property taxes (See Table 6). This difference is largely a reflection of the division of financial responsibility for services between the state and local level. Where local government involvement in the delivery of services is strong, there tends to be much heavier use of the property tax. But, as shown above, the Southern states tend to be more state government dominant, hence there is heavier reliance on non-property taxation. This difference is of considerable importance to the potential response of the fisc to growth or decline in the economic base. In the South, where there is heavy reliance on sales taxes, a combination of real growth and inflation will automatically generate substantial new revenues for expansion of the public sector. In the Northern Tier, where reliance is greater on property taxation, even the tax base growth generated by inflationary increases in income will not be fully or easily captured.[1]

In terms of the controversial issue of the regional distribution of Federal aid, the Northern states receive, on average, about 5 percent more in per capita terms. Dependence on federal aid as a revenue source is about the same in the two regions. It is interesting to note, however, that during the 1975-1977 recovery period, per capita Federal aid increased by a greater amount in the Northern Tier and the revenue dependence on Federal aid actually fell in the Southern Tier.

[1] David Greytak and Bernard Jump, "Inflation and Local Government Expenditures and Revenues: Method and Case Studies," Public Finance Quarterly, June 1977.

TABLE 8

REVENUE STRUCTURE: BY REGION FOR 1977

State and Region		Percent of Own Source Revenue From: Property Taxes	Sales Taxes	Income Taxes	Per Capita Federal Aid	Federal Aid as Percent of Total General Revenue
NORTHERN TIER						
weighted		30.9	14.3	20.7	283	20.3
unweighted		33.1	13.4	17.3	291	22.2
East North Central						
weighted		29.5	16.2	19.1	248	20.1
unweighted		29.2	16.5	19.3	246	19.8
Illinois	(1)	31.0	19.4	15.6	250	19.6
Indiana	(2)	28.6	23.1	13.3	188	18.2
Michigan	(3)	29.3	13.6	23.6	311	21.5
Ohio	(4)	29.6	13.3	16.4	211	20.0
Wisconsin	(5)	27.4	13.2	27.5	269	19.8
Middle Atlantic						
weighted		29.7	13.6	23.2	314	20.0
unweighted		30.9	13.1	20.9	299	20.3
New Jersey	(6)	41.7	11.1	12.7	267	19.3
New York	(7)	29.1	14.2	25.9	363	19.1
Pennsylvania	(8)	21.9	14.1	24.0	267	22.5
New England						
weighted		39.8	10.5	17.2	307	22.4
unweighted		37.4	11.0	13.9	325	25.1
Connecticut	(9)	39.3	17.9	8.0	229	17.9
Maine	(10)	29.5	19.4	12.6	368	31.3
Massachusetts	(11)	41.9	6.5	23.4	328	21.9
New Hampshire	(12)	47.8	0	5.8	238	23.0
Rhode Island	(13)	33.2	15.4	15.7	369	27.3
Vermont	(14)	32.8	6.7	17.9	420	29.4

TABLE 6 (CONT.)

State and Region	Percent of Own Source Revenue From: Property Taxes	Sales Taxes	Income Taxes	Per Capita Federal Aid	Federal Aid as Percent of Total General Revenue
SOUTHERN TIER					
weighted	20.4	18.4	11.9	260	23.8
unweighted	17.2	18.5	14.9	277	25.1
South Atlantic					
weighted	21.6	16.3	16.6	261	23.2
unweighted	19.4	15.8	19.1	279	24.1
Delaware (15)	11.9	0	31.6	343	23.3
Maryland (16)	23.2	9.8	27.5	297	20.6
North Carolina (17)	18.7	15.7	23.9	281	27.4
Virginia (18)	22.6	13.0	19.8	253	22.7
South Carolina (19)	17.0	19.1	18.3	261	25.7
Georgia (20)	22.8	18.4	15.9	272	24.6
Florida (21)	24.5	19.2	2.7	211	19.6
West Virginia (22)	14.5	31.1	13.1	312	28.7
East South Central					
weighted	14.4	23.8	12.7	279	27.1
unweighted	14.3	23.8	12.8	281	27.3
Alabama (23)	8.1	21.9	13.2	293	28.6
Kentucky (24)	14.5	17.3	22.4	281	26.6
Mississippi (25)	15.7	26.8	10.0	293	28.3
Tennessee (26)	19.0	29.1	5.6	256	25.6
West South Central					
weighted	21.9	18.8	4.1	246	22.7
unweighted	17.8	18.8	8.8	271	25.1
Arkansas (27)	16.6	19.4	16.3	271	29.1
Louisiana (28)	11.0	23.0	6.5	312	25.8
Oklahoma (29)	16.2	14.6	12.3	286	25.6
Texas (30)	27.3	18.2	0	212	19.9

SOURCE: U.S. Bureau of the Census, Government Finances in 1976-77, Series GF-77, 5 (Washington, D.C.: U.S. Government Printing Office, 1977); and, U.S. Department of Commerce, Current Population Reports, "Annual Estimates of the Population of States," Series P-25, No. 727, July, 1978. Resident Population.

Local Fiscal Problems

State-to-state variations in fiscal structure and performance mask differences between regions in the problems facing the largest local governments within the regions. Indeed, the standard stereotype would have central cities in a substantially worse position than their suburbs in terms of income level, public service levels, and concentration of the poor.

Nathan and Dommel have developed a "hardship index" which compares cities both with their surrounding suburban area and with each other.[1] Of the fourteen cities scoring poorest on this hardship index, eleven are in the Northern Tier states while only two, Atlanta and Richmond, are in the South. Of the ten cities found better off, five were in the Southern Tier and none in the North.

Sacks, in his latest compendium of metropolitan fiscal disparities, also supports the stereotype.[2] The Southern cities are more densely populated and wealthier relative to their own suburbs, but are less densely populated and poorer relative to Northern cities (see Table 7). The fiscal disparities which grow out of this socio-economic disparity are predictable: central cities in the Northeast have greater average tax burdens than their suburbs and apparently provide a lower level of public services.

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[1] Richard P. Nathan and Paul R. Dommel, "The Strong Sunbelt Cities and the Weak Cold Belt Cities," Hearings before the Subcommittee on the City, of the House Committee on Banking, Finance and Urban Affairs, Toward a National Urban Policy, 95th Congress (Washington, D.C.: U.S. Government Printing Office, 1977) pp. 19-26; and "Understanding Central City Hardship," Political Science Quarterly, vol. 21, no. 1 (Spring 1976) pp. 61-62.

[2] Advisory Commission on Intergovernmental Relations, Trends in Metropolitan America (Washington, D.C., 1977), Tables 4 and 10.

TABLE 7

CITY-SUBURB DISPARITIES

	Mean Values in 1973		
		Per Capita Income	
	Population Density in Central City[a]	City	Ratio of City to Suburb
East	16.4	$3727	.83
Midwest	8.4	3756	.89
South	4.7	3644	1.06
West	6.3	4088	1.04
85 SMSA's	8.5	3784	.96

[a] in persons per acre.

SOURCE: Advisory Commission on Intergovernmental Relations, Trends in Metropolitan America (Washington, D.C., 1977), Tables 4 and 10.

Summary: Regional Variations in State-Local Finances

These data show certain clear differences in fiscal structure and performance between the Northern and Southern Tier states. While there certainly are exceptions to this pattern, the general differences observed would appear to hold for most states in the two regions. First, the Southern Tier States have more state-dominated fiscal systems. This means that they have heavier state government responsibility for both financing and direct expenditures, which in turn means that the growth and distribution of total state and local expenditures is more controllable and that the growth in expenditures is financed from a more elastic revenue source. In the case of the Southern Tier states, the sales tax is relied upon to a much greater

extent than in the North. The Northeastern and Midwestern states, on the other hand, tend to have more local government-dominated systems. As a result, there is a potential for much greater disparity in public spending levels among jurisdictions within the state and there is much heavier reliance on the local property tax.

With respect to the level of spending, per capita expenditures were 17 percent lower in the Southern states than in the Northern states in 1977, however, a part of this difference is due to the higher level of welfare expenditure in the Northern Tier states. Moreover, since these differences are not adjusted for regional variations in prices, and average public employee wages are much higher in the North, the difference in public service levels may be considerably less than 17 percent. Public employment levels per 10,000 population are greater on average in the Southern states and do not vary systematically with the rate of population growth of a state.

There is a major difference between the two regions with respect to the fiscal health of their largest local governments. The Northeast and industrial Midwest regions seem to fit the stereotype of declining and poor central cities surrounded by relatively wealthy and fiscally sound suburbs. The reverse tends to be true in the South, where the per capita income level in the central city is greater than in the suburbs. This advantaged position of Southern central cities can be attributed in part to the newness of the cities and their resulting local government structure which often tends to encompass growing suburban areas. There would appear to be much less jurisdictional fragmentation in the South, largely because of the greater potential for annexation and consolidation during the

rapid growth period of the past two decades. To the contrary, Northern cities which are surrounded by older incorporated jurisdictions, find it all but impossible to expand jurisdictional boundaries.

COMPARATIVE FISCAL AND ECONOMIC GROWTH

An understanding of the fiscal problems resulting from the movement of population and economic activity to the South requires analysis of the structure of the state and local government expenditure and revenue responses to this movement. In the discussion below, we look successively at the growth in the capacity to finance public services and the demand for expansion of public services as measured by the growth in the economic and demographic base of the regions, the expenditure response and the extent to which it was demand or supply induced, and the revenue response in terms of its composition by type of tax and in terms of changes in the level of tax effort.[1] The results of this analysis suggest that fiscal activity in the South expanded relatively more in response to an increased level of population, a demand consideration, and was supported by an increased capacity to finance activity. In the North fiscal activity also continued to expand, even in the face of a relatively slower growing or in some cases a declining economic base. However, the expansion of fiscal activity may be attributed relatively more to increases in the average compensation of public employees.

Economic Base and Population Changes

The shift in economic activity from the Northern to the Southern states has been well documented in the literature. Jusenius and Ledebur

[1] For a parallel analysis of the New York State economy and fisc, see Roy Bahl, "The Long Term Fiscal Outlook for New York State," The Declining Northeast, edited by Benjamin Chinitz (Praeger Publishers, 1978) pp. 69-105.

have described this shift in terms of population movement,[1] Greenberg and Valente[2] and Garnick[3] have studied the trends in employment, and the Congressional Budget Office has described the pattern of growth in earnings and personal income.[4] For purposes of this paper it is necessary to examine these trends in order to determine their potential effects on the taxable capacity and public servicing requirements of states in each region. Unfortunately, none of these indicators of economic expansion or contraction is an adequate measure of taxable capacity, partly because the tax structures of the fifty states vary so widely. Nevertheless, population movement, employment, and growth in earnings and personal income give some notion of how regional shifts in economic activity enhance or compromise the ability of state and local governments to finance public services. Insofar as possible, four time periods are considered. The 1962-1967 period saw the beginnings of a southern movement of population and economic activity which accelerated between 1967 and 1972. The 1972-1975 period includes the recession which heightened the sunbelt movement, and the 1975-1977 period accounts for the effects of the present recovery period.

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[1] C.L. Jusenius and L.C. Ledebur, A Myth in the Making: The Southern Economic Challenge and Northern Economic Decline (Washington, D.C.: Economic Development Administration, U.S. Department of Commerce, 1976).

[2] Michael R. Greenberg and Nicholas J. Valente, "Recent Economic Trends in the Major Northeastern Metropolises," in Post-Industrial America: Metropolitan Decline and Inter-Regional Job Shifts, George Sternlieb and James Hughes, eds. (New Brunswick: The Center for Urban Policy Research, Rutgers University, 1975) pp. 77-100.

[3] Daniel Garnick, "The Northeast States in the Context of the Nation," The Declining Northeast, pp. 145-159.

[4] Troubled Local Economies and the Distribution of Federal Dollars Congressional Budget Office (Washington, D.C.: U.S. Government Printing Office, August 1977).

Income. Per capita income is a composite measure which, perhaps, more than any other single index, indicates the average level of well-being of citizens in a region. Since per capita income is influenced by changes in population size, it may or may not provide a proxy measure of changes in the capacity to finance. As may be seen in Table 8 below, the per capita income growth in the Southern Tier was greater than in the North for all four time periods considered here. It is interesting to note, however, that the disparity in the rate of growth in per capita personal income narrowed during the recession period, and continued to narrow during the recovery. Between 1967 and 1972, per capita income in the Southern Tier was growing about 27 percent faster than in the North, but the differential growth rate fell to about 14 percent between 1972 and 1975. This narrowing in per capita income growth is due to a combination of relatively heavy loss of population in the Northern Tier states, a continued rapid growth of population in the Southern Tier states and a flow of income-compensating transfer payments to the Northern states.[1] In the recovery period, the process of convergence slowed--per capita income grew only 4 percent faster in the Southern than in the Northern Tier states.

The aggregate personal income trends which lie behind these per capita amounts gives perhaps a clearer picture of the implications for the capacity to finance. Between 1962 and 1975, there were substantial increases in money income in both regions, but there was relatively little shift in the composition of income. Income originating in manufacturing in Northern States fell from 25 to 21 percent while income originating in the services rose by about 4 percent. Otherwise, things stayed much the same. Most importantly, the share of income accounted for by all transfer payments--

[1] It is interesting to note, however, that the share of transfer payments in personal income is about the same in the North as in the South (14.0 and 13.8 percent respectively, in 1977).

PERCENT INCREASE IN PER CAPITA PERSONAL INCOME:
BY REGION FOR SELECTED TIME PERIODS

State and Region	1962-1967	1967-1972	1972-1975	1975-1977	1977 Level
NORTHERN TIER					
weighted	32.5	37.6	28.3	19.3	7371
unweighted	33.2	38.0	28.5	[illegible]	7072
East North Central					
weighted	33.4	37.8	29.3	21.3	7347
unweighted	33.2	37.9	29.4	22.1	7256
Illinois (1)	31.3	36.6	32.9	15.1	7768
Indiana (2)	33.1	36.9	30.0	23.4	6921
Michigan (3)	38.1	39.3	24.6	27.1	7619
Ohio (4)	33.1	38.4	28.3	22.3	7084
Wisconsin (5)	30.7	38.5	31.5	22.7	6890
Middle Atlantic					
weighted	32.2	37.5	27.8	17.2	7460
unweighted	31.9	38.3	28.3	17.7	7514
New Jersey (6)	29.7	40.9	27.6	17.7	7994
New York (7)	32.2	35.5	25.8	15.6	7537
Pennsylvania (8)	33.8	38.7	31.5	19.7	7011
New England					
weighted	31.2	37.4	27.0	19.7	7183
unweighted	33.7	37.9	27.9	19.4	6697
Connecticut (9)	31.3	32.7	27.2	18.4	8061
Maine (10)	34.1	41.0	30.8	20.4	5734
Massachusetts (11)	28.6	40.1	26.1	19.3	7258
New Hampshire (12)	31.6	38.7	28.7	20.8	6534
Rhode Island (13)	36.6	34.0	28.7	19.1	6772
Vermont (14)	40.1	41.0	25.7	18.6	5826

TABLE 8 (CONT.)

State and Region		1962-1967	1967-1972	1972-1975	1975-1977	1977 Level
SOUTHERN TIER						
	weighted	41.1	49.0	32.4	20.7	6310
	unweighted	40.9	48.3	32.6	20.8	6210
South Atlantic						
	weighted	40.3	52.4	29.5	[illegible].1	
	unweighted	39.2	49.9	30.5	19.3	6485
Delaware	(15)	27.1	36.3	28.6	17.4	6547
Maryland	(16)	29.8	47.7	30.0	17.9	7692
North Carolina	(17)	43.6	51.0	30.2	20.0	7571
Virginia	(18)	41.3	52.0	31.8	19.0	5935
South Carolina	(19)	48.3	53.8	32.3	20.7	6864
Georgia	(20)	46.2	51.4	27.4	19.7	5628
Florida	(21)	36.8	58.4	26.5	18.5	6014
West Virginia	(22)	40.3	48.9	37.0	20.9	6684
East South Central						5987
	weighted	42.3	50.9	32.7	21.7	
	unweighted	43.3	51.1	32.7	22.0	5651
Alabama	(23)	40.2	52.1	35.0	21.2	5596
Kentucky	(24)	39.1	47.2	35.5	21.8	5622
Mississippi	(25)	52.0	54.0	30.4	24.6	5946
Tennessee	(26)	41.7	51.3	29.8	20.6	5031
West South Central						5785
	weighted	41.0	42.0	36.9	22.7	
	unweighted	42.0	42.4	36.8	22.5	6458
Arkansas	(27)	44.6	48.8	35.9	23.2	6151
Louisiana	(28)	43.8	37.2	37.0	23.6	5540
Oklahoma	(29)	39.6	41.5	37.1	20.7	5914
Texas	(30)	39.7	42.2	36.9	22.6	6346
						6803

SOURCE: Department of Commerce, Survey of Current Business, August 1976, August, 1978; Current Population Reports, Series P-25, No. 727, July 1978.

which may provide less taxable capacity than earnings from goods and service production--remained about the same in both regions. These data offer scant evidence that changes in the composition of income have compromised the tax base during the period studied.

However, in the case of local governments, particularly large central city governments, changes in the composition of personal income may well have had a dampening effect on potential revenue growth. To the extent local property tax systems include industrial machinery, equipment, etc., the shift of income composition from manufacturing to services may have depressed the level of property tax revenues. Similarly, the very rapid growth in income generated in the state/local sector in large central cities may not have offset the revenue losses due to the outmovement of manufacturing. This is in part due to the exemption of state and local government properties from the real estate tax and the fact that they are not included in the business income tax base.[1]

Employment. In terms of changes in the level of employment, the Southern Tier states have been growing more rapidly for all four time periods considered (see Table 9). Even though the rate of employment growth has slowed in the Southern states, it still remains considerably higher than that in the North. Perhaps even more important in the context of this analysis is the fact that the relatively low rate of employment growth in the Northern Tier between 1967 and 1972 turned to literally no growth and in some cases decline between 1972 and 1975 and has been very slow during the recovery. In the Southern Tier, on the other hand, while the growth rate slowed between 1972 and 1975 only one state (Delaware) showed an absolute job loss. As may be seen from the weighted growth rates in Table 9, the southern region has participated to a much greater extent than the northern states in the recovery.

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[1] These possibilities are examined for New York City in Roy Bahl and David Greytak, "The Response of City Government Revenues to Changes in Employment Structure," Land Economics 52 (4) (November 1976): 415-434.

TABLE 9

GROWTH IN EMPLOYMENT: BY REGION

State and Region		1962-1967 Change	1962-1967 Percent Change	1967-1972 Change	1967-1972 Percent Change	1972-1975 Change	1972-1975 Percent Change	1975-1977 Change	1975-1977 Percent Change
NORTHERN TIER									
	weighted	4193.3	(15.2)	1835.3	(5.8)	276.2	(0.8)	1444.3	(4.3)
	unweighted		(16.7)		(7.6)		(1.9)		(6.4)
East North Central									
	weighted	2261.3	(19.4)	944.3	(6.8)	322.4	(2.2)	920.0	(6.1)
	unweighted		(19.8)		(7.5)		(2.4)		(6.4)
Illinois	(1)	634.9	17.8	117.6	2.8	109.4	2.5	189.0	4.3
Indiana	(2)	315.7	21.6	145.0	8.2	19.7	1.0	147.7	7.6
Michigan	(3)	566.8	24.3	212.9	7.3	19.4	0.6	275.5	8.8
Ohio	(4)	520.6	16.8	318.5	8.8	77.9	2.0	199.3	5.0
Wisconsin	(5)	223.3	18.5	150.3	10.5	90.6	6.1	108.5	6.5
Middle Atlantic									
	weighted	1396.6	(11.6)	632.9	(4.7)	-117.1	(-0.8)	256.5	(1.8)
	unweighted		(12.6)		(6.0)		(-0.2)		(2.6)
New Jersey	(6)	324.8	15.5	252.8	10.4	26.5	-1.0	141.0	5.2
New York	(7)	597.0	9.5	171.9	2.5	-203.4	-2.9	0.6	0.0
Pennsylvania	(8)	474.8	12.9	208.2	5.0	59.8	1.4	114.9	2.6
New England									
	weighted	535.4	(14.1)	258.1	(6.0)	70.9	(1.5)	267.8	(5.8)
	unweighted		(16.3)		(8.6)		(2.5)		(8.2)
Connecticut	(9)	180.3	19.0	59.5	5.3	33.8	2.8	59.3	4.8
Maine	(10)	37.4	13.4	27.1	8.6	12.9	3.8	30.9	8.7
Massachusetts	(11)	215.8	11.1	98.7	4.6	11.5	0.5	91.1	4.0
New Hampshire	(12)	36.1	17.4	35.7	14.6	13.1	4.7	43.6	14.9
Rhode Island	(13)	40.0	13.4	19.8	5.9	-8.9	-2.5	29.5	8.4
Vermont	(14)	25.8	23.3	17.3	12.7	8.5	5.5	13.4	8.3

State and Region	1962–1967 Change	1962–1967 Percent Change	1967–1972 Change	1967–1972 Percent Change	1972–1975 Change	1972–1975 Percent Change	1975–1977 Change	1975–1977 Percent Change
SOUTHERN TIER								
weighted	3515.3	(24.7)	3593.4	(20.2)	1799.5	(8.4)	1761.8	(7.6)
unweighted		(24.0)		(18.7)		(7.2)		(7.5)
South Atlantic								
weighted	1796.2	(25.7)	2016.2	(23.0)	721.6	(6.7)	734.6	(6.4)
unweighted		(24.5)		(20.4)		(5.8)		(6.1)
Delaware (15)	41.2	26.4	32.7	16.6	-0.1	-0.1	6.2	2.7
Maryland (16)	232.9	24.5	175.7	14.9	121.9	9.0	49.3	3.3
North Carolina (17)	342.4	27.2	323.2	20.2	45.6	2.4	158.6	8.1
Virginia (18)	248.4	23.0	313.3	23.6	135.2	8.2	133.0	7.5
South Carolina (19)	144.6	23.8	165.9	22.0	62.3	6.8	96.2	10.0
Georgia (20)	302.0	27.6	310.3	22.2	50.7	3.0	134.0	7.6
Florida (21)	428.6	30.9	658.2	36.2	271.8	11.0	126.8	4.6
West Virginia (22)	56.1	12.5	36.9	7.3	34.2	6.3	30.5	5.3
East South Central								
weighted	676.5	(23.6)	611.8	(17.3)	268.3	(6.5)	389.0	(8.8)
unweighted		(23.7)		(17.5)		(6.9)		(9.0)
Alabama (23)	160.0	20.2	120.5	12.7	83.1	7.7	104.4	9.0
Kentucky (24)	160.9	23.9	152.5	18.3	76.7	7.8	92.9	8.7
Mississippi (25)	106.2	24.9	106.3	20.0	54.1	8.5	68.7	9.9
Tennessee (26)	249.4	25.7	232.5	19.1	54.4	3.7	123.0	8.2
West South Central								
weighted	1042.6	(23.6)	965.4	(17.7)	809.6	(12.6)	638.2	(8.8)
unweighted		(23.3)		(16.4)		(10.4)		(8.8)
Arkansas (27)	101.1	25.5	87.5	17.6	38.4	6.6	68.9	11.0
Louisiana (28)	209.8	26.4	131.5	13.1	113.0	9.9	85.0	6.8
Oklahoma (29)	104.8	17.4	107.9	15.3	85.5	10.5	75.3	8.4
Texas (30)	626.9	23.9	638.5	19.6	527.7	14.7	409.0	9.2

SOURCE: U.S. Department of Labor, Employment and Earnings: States and Areas, 1939-1975, (Washington, D.C.: Government Printing Office, 1977); _____, Employment and Earnings, May 1978.

Garnick argues that the relative shifts in employment are primarily a northern central city phenomenon with central counties of the large SMSAs in particular having been subject to absolute declines in employment (especially manufacturing) at least since 1960.[1]

When the 1965-1972 pattern of employment growth in metropolitan central cities is examined in the ten largest city-counties, declines were registered in New York, Philadelphia and St. Louis, with only a modest increment in Baltimore. The largest percent increases in employment were in Denver, Indianapolis, Jacksonville, Nashville, and New Orleans.[2]

Population. Yet a third way to measure the change in economic activity in the two regions is to examine the pattern and trend of population growth. On the revenue side, a declining population may mean a diminished capacity to finance public services if the population losses are of higher income earning families. If out-migration is primarily of low income families, service requirements may be reduced by more than taxable capacity thereby enhancing the government's fiscal position. The expenditure "determinants" literature provides some evidence that population growth and changing demographic makeup influence the level of public expenditures. Weinstein and Firestine, for example, have carefully studied and analyzed the relations between migration, demographic change and State-Local government budgets and find evidence of positive effects of in-migration on spending levels.[3]

The North-South differentials in population growth rates are predictable. The growth in the Northern Tier has slowed markedly since 1962 and growth has been negligible since 1972 (See Table 10). Among the Southern states

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[1] Garnick, "The Northeast States in the Context of the Nation," p. 188.

[2] David Puryear and Roy Bahl, "Economic Problems of a Mature Economy," Metropolitan Studies Program Occasional Paper No. 27 (Syracuse, New York: Syracuse University, April 1976).

[3] Bernard Weinstein and Robert Firestine, Regional Growth and Decline in the U.S. (New York: Praeger Publishers, 1978).

TABLE 10

POPULATION LEVEL AND GROWTH: BY REGION, SELECTED YEARS

State and Region	Population (thousands)					Percent Change			
	1962	1967	1972	1975	1977	1962-1967	1967-1972	1972-1975	1975-1977
NORTHERN TIER									
total	82785	87453	90416	90313	90336				
weighted						5.6	3.4	-0.1	0.02
unweighted						6.5	4.8	0.6	0.7
East North Central									
total	36874	39347	40752	40891	41056				
weighted						6.7	3.6	0.3	0.4
unweighted						6.9	3.8	0.6	0.5
Illinois (1)	10260	10947	11209	11171	11245	6.7	2.4	-0.3	0.7
Indiana (2)	4725	5053	5279	5312	5330	6.9	4.5	0.6	0.3
Michigan (3)	7923	8630	9029	9108	9129	8.9	4.6	0.9	0.2
Ohio (4)	9952	10414	10727	10711	10701	4.6	3.0	-0.2	-0.1
Wisconsin (5)	4014	4303	4508	4589	4651	7.2	4.8	1.8	1.4
Middle Atlantic									
total	35185	36544	37567	37239	37038				
weighted						3.9	2.8	-0.9	-0.5
unweighted						4.7	3.3	-0.6	-0.4
New Jersey (6)	6385	6928	7333	7336	7329	8.5	5.8	0.04	-0.1
New York (7)	17464	17935	18360	18081	17924	2.7	2.4	-1.5	-0.9
Pennsylvania (8)	11336	11681	11874	11822	11785	3.0	1.7	-0.4	-0.3
New England									
total	10726	11562	12097	12183	12242				
weighted						7.8	4.6	0.7	0.5
unweighted						7.1	6.3	1.2	1.5
Connecticut (9)	2640	2935	3082	3095	3108	11.2	5.0	0.4	0.4
Maine (10)	990	1004	1029	1059	1085	1.4	2.5	2.9	2.5
Massachusetts (11)	5201	5594	5778	5808	5782	7.6	3.3	0.5	-0.5
New Hampshire (12)	630	697	776	813	849	10.6	11.3	4.8	4.4
Rhode Island (13)	872	909	971	935	935	4.2	6.8	-3.7	0
Vermont (14)	393	423	461	473	483	7.6	9.0	2.6	2.1

TABLE 10 (CONT.)

State and Region	Population (thousands) 1962	1967	1972	1975	1977	Percent Change 1962-1967	1967-1972	1972-1975	1975-1977
SOUTHERN TIER									
total	56619	59981	64413	67431	69158				
weighted						5.9	7.4	4.7	2.6
unweighted						5.4	6.2	3.8	2.2
South Atlantic									
total	26407	28694	31284	32925	33616				
weighted						8.7	9.0	5.2	2.1
unweighted						8.0	7.7	4.0	2.0
Delaware (15)	466	525	569	579	582	12.7	8.4	1.8	0.5
Maryland (16)	3245	3757	4063	4111	4139	15.8	8.1	1.2	0.7
North Carolina (17)	4736	4952	5256	5436	5525	4.6	6.1	3.4	1.6
Virginia (18)	4187	4508	4785	4984	5135	7.7	6.1	4.2	3.0
South Carolina (19)	2450	2533	2681	2816	2876	3.4	5.8	5.0	2.1
Georgia (20)	4108	4408	4758	4936	5048	7.3	7.9	3.7	2.3
Florida (21)	5392	6242	7391	8260	8452	15.8	18.4	11.8	2.3
West Virginia (22)	1823	1769	1781	1803	1859	-3.0	0.7	1.2	3.1
East South Central									
total	12407	12717	13143	13526	13836				
weighted						2.5	3.3	2.9	2.3
unweighted						2.1	3.2	2.9	2.2
Alabama (23)	3342	3458	3514	3611	3690	3.5	1.6	2.8	2.2
Kentucky (24)	3099	3172	3301	3391	3458	2.4	4.1	2.7	2.0
Mississippi (25)	2276	2228	2279	2346	2389	-2.1	2.3	2.9	1.8
Tennessee (26)	3690	3859	4049	4178	4299	4.6	4.9	3.2	2.9
West South Central									
total	17805	18570	19986	20980	21706				
weighted						4.3	7.6	5.0	3.5
unweighted						3.6	6.2	4.4	2.8
Arkansas (27)	1875	1901	1998	2116	2144	1.4	5.1	5.9	1.3
Louisiana (28)	3371	3581	3733	3821	3921	6.2	4.2	2.4	2.6
Oklahoma (29)	2435	2489	2636	2725	2811	2.2	5.9	3.4	3.2
Texas (30)	10124	10599	11619	12318	12830	4.7	9.6	6.0	4.2

SOURCE: U.S. Bureau of Census, Current Population Reports, "Annual Estimates of the Population of States, July 1, 1970 to 1977," Series P-25, No. 727, July 1978. Resident Population.

the rate of population growth also slowed but remained well above the Northern rate. No state in the Southern Tier showed a population decline since 1972 while five northern states--Ohio, New Jersey, New York, Pennsylvania and Rhode Island--lost population (see Table 10). Though most of the population changes were due to migration, it is interesting to note that because of higher fertility rates the Southern Tier would have grown faster than the Northern Tier even in the absence of migration between the Regions.[1] With respect to the composition of population change, little data are available by way of the income level and employment characteristics (i.e., occupation, industry) of migrants.[2]

In terms of population change within metropolitan areas, some evidence is available on the changes by central city/outside central city and by race. These data show that Southern cities tended to increase their share of metropolitan area population while Northern cities generally tended to decline as a percentage of metropolitan area population. Sacks has shown that the population decline in the major cities of the East between 1960 and 1970 was predominantly an exodus of white population--no major central city in the East showed a gain of white population between 1960 and 1970.

The inference one might draw from these trends is that the declining population in the North likely reduced certain servicing needs, but these reductions may have been offset by increasing concentrations of the poor,

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[1] Jusenius and Ledebur, A Myth in the Making, pp. 1-5.

[2] For some evidence, see Julie DaVanzo "U.S. Internal Migration: Who Moves and Why" in Consequences of Changing U.S. Population. Hearings Before the Select Committee on Population, June 6, 1978, pp. 188-201.

particularly in central cities.

Expenditure Growth

Given the relatively slower growth in financial capacity in the Northern states, a commensurately slower growth in fiscal activity might have been expected. In fact, per capita expenditure growth in the Northern Tier states was above that in the Southern states through 1972 (See Table 11). Indeed, expenditures grew 20 to 30 percent faster than personal income in both regions in the three earlier time periods considered, except for the 1967-1972 period, when per capita expenditures in the Northern Tier grew 90 percent faster than per capita income (See Table 12). Even in the 1972-1975 period, when total employment increased by about 7 percent in the South and less than 1 percent in the North, per capita expenditures grew by about the same percentage in both regions. From this evidence, one might conclude that there was not a strong relationship between the growth in public expenditures in the two regions and the capacity to finance that growth.

The first evidence of serious fiscal restraint in the Northern Tier States shows up in the recovery period when the growth in expenditures fell below the growth in income in both regions. One plausible explanation of this lagged, and long overdue response to slow growing economic activity is that the New York City financial collapse and the near disasters in several other cities finally drove home the reality that the public sector in many Northern Tier states could no longer sustain itself. Reduction, cutbacks and deferrals became the centerpieces of state and local government fiscal policies.

TABLE 11

INDICATORS OF FISCAL EXPANSION: BY REGION

State and Region	Increases in Per Capita General Expenditures (dollars) 1962-1967	1967-1972	1972-1975	1975-1977	Percent Increases in Per Capita General Expenditures 1962-1967	1967-1972	1972-1975	1975-1977
NORTHERN TIER								
weighted	145	390	292	185	44.0	82.3	33.8	16.0
unweighted	138	341	275	182	42.8	73.4	34.5	17.2
East North Central								
weighted	126	311	270	196	39.7	70.4	35.8	19.1
unweighted	132	304	261	192	41.0	67.8	34.5	18.9
Illinois (1)	102	377	269	203	32.5	90.2	33.9	19.1
Indiana (2)	122	241	174	126	41.8	58.6	26.6	15.2
Michigan (3)	162	349	339	192	46.7	68.5	39.4	16.1
Ohio (4)	103	244	262	211	35.3	62.1	41.1	23.5
Wisconsin (5)	169	311	264	226	48.2	59.8	31.8	20.6
Middle Atlantic								
weighted	172	484	325	181	50.5	94.5	32.6	13.7
unweighted	157	447	315	187	47.9	91.4	34.6	15.7
New Jersey (6)	115	386	301	223	38.2	92.5	37.6	20.2
New York (7)	216	624	376	181	54.3	101.5	30.3	11.2
Pennsylvania (8)	139	330	267	158	51.0	80.2	36.0	15.7
New England								
weighted	125	367	271	166	36.9	79.0	32.7	15.1
unweighted	135	320	266	172	41.8	69.1	34.4	16.7
Connecticut (9)	105	354	233	93	28.6	74.9	28.2	8.8
Maine (10)	122	270	254	182	41.8	65.3	37.1	19.4
Massachusetts (11)	123	426	294	192	35.8	91.5	32.9	16.1
New Hampshire (12)	104	276	247	187	34.5	67.9	36.1	20.1
Rhode Island (13)	202	228	313	248	68.9	46.0	43.3	24.0
Vermont (14)	154	364	257	132	41.2	69.1	28.9	11.5

TABLE 11 (CONT.)

State and Region		Increases in Per Capita General Expenditures (dollars) 1962-1967	1967-1972	1972-1975	1975-1977	Percent Increases in Per Capita General Expenditures 1962-1967	1967-1972	1972-1975	1975-1977
SOUTHERN TIER									
	weighted	131	250	255	161	49.6	62.9	39.5	17.8
	unweighted	139	259	247	170	51.8	64.5	38.0	18.6
South Atlantic									
	weighted	136	270	295	144	52.5	68.3	44.2	15.0
	unweighted	149	292	277	162	55.2	71.0	40.9	16.2
Delaware	(15)	271	403	177	271	80.9	66.4	17.6	22.8
Maryland	(16)	155	363	404	213	48.6	76.8	48.2	17.2
North Carolina	(17)	113	221	264	154	49.4	64.4	46.9	18.6
Virginia	(18)	130	258	333	134	52.3	67.9	52.3	13.8
South Carolina	(19)	103	262	306	105	50.9	86.0	53.9	12.1
Georgia	(20)	118	302	246	80	46.1	80.6	36.2	8.6
Florida	(21)	153	222	297	144	53.9	51.0	45.3	15.1
West Virginia	(22)	150	301	190	192	59.6	75.2	27.0	21.5
East South Central									
	weighted	122	236	228	161	47.8	62.3	37.2	19.2
	unweighted	119	240	224	165	47.0	64.5	36.5	19.6
Alabama	(23)	115	240	228	174	47.0	66.6	38.1	21.0
Kentucky	(24)	117	215	214	167	40.0	52.4	34.1	20.0
Mississippi	(25)	98	284	202	185	39.3	82.0	32.1	22.2
Tennessee	(26)	147	221	254	132	61.8	57.2	41.8	15.3
West South Central									
	weighted	130	226	210	187	46.6	55.1	32.9	22.1
	unweighted	138	214	210	191	49.6	51.5	33.8	22.5
Arkansas	(27)	118	174	215	149	53.3	51.2	42.0	20.4
Louisiana	(28)	152	239	215	269	45.8	49.3	29.7	28.6
Oklahoma	(29)	168	205	198	176	56.2	44.1	29.5	20.3
Texas	(30)	116	237	211	171	43.1	61.5	33.8	20.5

SOURCE: U.S. Bureau of the Census, Governmental Finances in 1962, Series G-GF62, No. 2, October, 1963; _____, Governmental Finances 1966-67, 1971-72, 1974-75, 1976-77, GF67, 72, 75, 77, (U.S. Government Printing Office, Washington, D.C., 1967, 1972, 1975, 1977); Current Population Report P-25, 727, July, 1978.

TABLE 12

PER CAPITA INCOME ELASTICITY OF STATE AND LOCAL GOVERNMENT EXPENDITURES

	Northern Tier			Southern Tier		
	Percent Change Per Capita Expenditures	Percent Change Per Capita Income	Elasticity	Percent Change Per Capita Expenditures	Percent Change Per Capita Income	Elasticity
Weighted Elasticities						
1962-1967	44.0	32.5	1.35	49.6	41.4	1.20
1967-1972	82.3	37.6	2.19	62.9	49.0	1.28
1972-1975	33.8	28.3	1.19	39.5	32.4	1.22
1975-1977	16.0	19.3	0.83	17.8	20.7	0.86
Unweighted Elasticies						
1962-1967	42.8	33.2	1.29	51.8	40.9	1.27
1967-1972	73.4	38.0	1.93	64.5	48.3	1.34
1972-1975	34.5	28.5	1.12	38.0	32.6	1.17
1975-1977	17.2	20.0	0.86	18.6	20.8	0.89

SOURCE: Computed from Tables 8 and 11.

If the growth or decline in taxable capacity does not explain the growth of the state and local government sector through 1975, then attention might be turned to two other possible explanations: (a) on the demand side, growing requirements for services resulted primarily in increased numbers of public employees and thereby exerted an upward pressure on expenditures, (b) on the supply side, increased public employee compensation resulted from union pressures and inflation and forced up expenditure levels. Either explanation would be consistent with the observed absence of a consistent, long-term relationship between economic base and public expenditure growth.

There is a wealth of literature on expenditure determinants which attests to the difficulties of separating demand from supply influence to explain expenditure growth and variations.[1] Those difficulties notwithstanding, we proxy the growth in service demand here with three variables: population growth (Table 10), increase in AFDC recipients (Table 13) and increase in primary and secondary school enrollments (Table 14). To the extent these factors increased over the four periods studied, an increase in state and local government employment levels might have been expected. To the extent these factors increased faster in one region than the other, a faster growth in public expenditures and/or employment might be expected.

When the states are aggregated by region, it may be seen that the number of AFDC recipients increased at a greater rate in the North than in the South in the first three periods, while the reverse was true for

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[1] R.G. Ehrenberg, "The Demand for State and Local Government Employees," American Economic Review 63, No. 3 (June 1973): 366-79; T.E. Borcherding and R.T. Deacon, "The Demand for Services of Non-Federal Governments," American Economic Review 62, No. 5 (December 1972): 891-901; and Roy Bahl, Richard Gustely and Michael Wasylenko "The Determinants of Local Government Police Expenditures: A Public Employment Approach," National Tax Journal Vol. XXXI, 1978

RECIPIENTS OF 'AID TO FAMILIES WITH DEPENDENT CHILDREN': BY REGION

State and Region		Level (in thousand)					Percent Increase			
		1962	1967	1972	1975	1977	1962-1967	1967-1972	1972-1975	1975-1977
NORTHERN TIER										
	total	1601	2280	5038	5403	5173				
	weighted						42.4	121.0	7.3	-4.3
	unweighted						44.1	152.3	12.8	-5.7
East North Central										
	total	622	792	2139	2417	2234				
	weighted						27.3	170.1	13.0	-7.6
	unweighted						31.6	176.0	14.7	-5.9
Illinois	(1)	265	275	754	803	734	3.9	174.3	6.5	-8.7
Indiana	(2)	47	51	171	176	157	9.6	232.1	3.3	-10.8
Michigan	(3)	121	183	591	676	623	51.1	222.7	14.4	-7.9
Ohio	(4)	147	222	482	578	524	51.5	171.1	19.9	-9.3
Wisconsin	(5)	43	61	142	184	197	42.2	133.6	29.6	7.1
Middle Atlantic										
	total	815	1222	2334	2320	2282				
	weighted						49.9	100.0	-0.6	-1.7
	unweighted						53.3	121.8	2.0	-0.3
New Jersey	(6)	83	145	408	452	464	75.5	181.4	10.8	2.7
New York	(7)	399	786	1284	1230	1173	96.9	63.3	-4.2	-4.7
Pennsylvania	(8)	333	291	642	638	645	-12.7	120.6	-0.7	1.1
New England										
	total	164	265	565	667	657				
	weighted						61.8	112.9	18.0	-1.5
	unweighted						49.8	147.8	16.6	-8.3
Connecticut	(9)	43	62	114	135	136	44.9	82.2	18.7	-0.8
Maine	(10)	22	22	68	68	60	0.1	209.1	0.7	-12.2
Massachusetts	(11)	70	138	293	359	368	96.9	112.3	22.5	2.5
New Hampshire	(12)	4	6	22	27	23	41.5	282.8	22.5	-16.9
Rhode Island	(13)	20	29	50	54	52	43.8	70.9	7.8	-4.3
Vermont	(14)	5	8	19	24	19	70.8	129.3	27.7	-2.0

TABLE 13 (CONT.)

State and Region		Level (in thousand)					Percent Increase			
		1962	1967	1972	1975	1977	1962-1967	1967-1972	1972-1975	1975-1977
SOUTHERN TIER										
	total	1159	1418	2974	2944	2657				
	weighted						22.3	109.8	-1.0	-9.7
	unweighted						33.4	115.6	4.7	-8.2
South Atlantic										
	total	564	667	1422	1391	1282				
	weighted						18.3	113.3	-2.2	-7.9
	unweighted						37.2	129.1	2.9	-6.2
Delaware	(15)	7	17	32	32	32	126.0	91.5	0.3	-0.6
Maryland	(16)	58	108	216	218	209	86.9	99.8	1.1	-4.3
North Carolina	(17)	115	107	161	192	198	-7.1	50.7	19.0	3.0
Virginia	(18)	44	58	165	180	166	32.4	184.0	9.4	-7.7
South Carolina	(19)	34	28	108	139	142	-18.0	286.7	28.9	2.6
Georgia	(20)	64	105	332	310	226	63.8	216.5	-6.9	-27.1
Florida	(21)	103	148	333	246	246	43.7	125.1	-26.2	0.1
West Virginia	(22)	139	96	76	74	63	-30.5	-21.2	-2.2	-15.2
East South Central										
	total	332	377	673	763	680				
	weighted						13.5	78.5	1.3	-10.9
	unweighted						14.4	81.4	13.8	-10.1
Alabama	(23)	90	75	162	167	171	-16.4	114.3	3.0	2.6
Kentucky	(24)	81	106	150	198	173	31.4	41.7	31.8	-12.6
Mississippi	(25)	79	99	172	186	168	24.9	73.0	8.5	-9.7
Tennessee	(26)	82	97	190	212	168	17.8	96.5	11.8	-20.8
West South Central										
	total	263	374	878	791	696				
	weighted						42.4	134.9	-10.0	-12.0
	unweighted						45.0	122.4	-0.9	-10.5
Arkansas	(27)	25	39	80	109	91	54.8	106.2	36.1	-16.6
Louisiana	(28)	95	124	354	233	211	31.2	104.8	-8.4	-9.5
Oklahoma	(29)	71	90	101	88	88	27.4	12.4	-12.7	-0.8
Texas	(30)	73	121	443	361	307	66.7	266.2	-18.5	-15.0

SOURCE: U.S. Bureau of the Census, Statistical Abstract of the United States: 1963, 1968, 1973, 1977, 1978 (Washington, D.C.: U.S. Government Printing Office, 1963, 1968, 1973, 1977, 1978).

PRIMARY AND SECONDARY SCHOOL ENROLLEMNT (BY REGION)

State and Region		Level (in thousands)					Percent Increase			
		1962	1967	1972	1975	1977	1962-1967	1967-1972	1972-1975	1975-1977
NORTHERN TIER										
	total	15734	17992	19213	18486	18164				
	weighted						14.4	6.8	-3.8	-1.8
	unweighted						15.2	9.1	-2.4	-1.5
East North Central										
	total	7560	8719	9262	8825	8631				
	weighted						15.3	6.2	-4.7	-2.2
	unweighted						15.9	6.4	-4.2	-2.4
Illinois	(1)	1890	2215	2379	2270	2238	17.2	7.4	-4.6	-1.4
Indiana	(2)	1029	1182	1231	1226	1163	14.9	4.1	-0.4	-5.1
Michigan	(3)	1792	2042	2213	2073	2035	14.0	8.4	-6.3	-1.8
Ohio	(4)	2082	2359	2439	2292	2249	13.3	3.4	-6.0	-1.9
Wisconsin	(5)	767	921	1000	964	946	20.1	8.6	-3.6	-1.9
Middle Atlantic										
	total	6162	6955	7389	7105	6999				
	weighted						12.9	6.2	-3.9	-1.5
	unweighted						13.7	6.6	-3.8	-1.7
New Jersey	(6)	1159	1378	1498	1458	1427	18.9	8.7	-2.7	-2.1
New York	(7)	2943	3321	3520	3401	3379	12.8	6.0	-3.4	-0.7
Pennsylvania	(8)	2060	2256	2371	2246	2193	9.5	5.1	-5.3	-2.4
New England										
	total	2012	2318	2562	2556	2534				
	weighted						15.2	10.5	-0.2	-0.9
	unweighted						15.3	12.4	-0.1	-0.7
Connecticut	(9)	519	614	667	653	635	18.3	8.6	-2.1	-2.8
Maine	(10)	212	229	247	251	249	8.0	7.9	1.6	-0.8
Massachusetts	(11)	944	1080	1191	1198	1198	14.4	10.3	-0.6	0.0
New Hampshire	(12)	116	138	162	174	175	19.0	17.4	7.4	0.6
Rhode Island	(13)	143	167	190	176	172	16.8	13.8	-7.4	-2.3
Vermont	(14)	78	90	105	104	105	15.4	16.7	-1.0	1.0

TABLE 14 (CONT.)

State and Region	Level (in thousand)					Percent Increase			
	1962	1967	1972	1975	1977	1962-1967	1967-1972	1972-1975	1975-1977
SOUTHERN TIER									
total	12846	14103	14632	14521	14342	9.8	3.8	-0.8	-1.2
weighted						9.4	3.3	-1.7	-1.5
unweighted									
South Atlantic									
total	5937	6609	6931	6971	6833	11.3	4.9	0.6	-2.0
weighted						12.4	5.3	-0.6	-2.4
unweighted						28.6	15.4	-5.9	-3.9
Delaware (15)	91	117	135	127	122	23.7	11.6	-4.5	-13.6
Maryland (16)	668	826	922	881	761	4.6	-1.4	0.8	0.5
North Carolina (17)	1140	1193	1176	1185	1191	12.9	5.0	2.7	-0.3
Virginia (18)	906	1023	1074	1103	1100	5.9	0.2	-2.9	-1.3
South Carolina (19)	611	647	648	629	621	9.7	0.6	-0.2	0.5
Georgia (20)	991	1087	1093	1091	1096	18.8	13.8	4.9	-0.9
Florida (21)	1094	1300	1479	1551	1537	-4.6	-2.9	0.0	2.4
West Virginia (22)	436	416	404	404	405				
East South Central									
total	2859	2975	2952	2840	2788	4.1	-0.8	-3.8	-1.8
weighted						4.1	-1.2	-3.8	-1.6
unweighted						2.2	-2.9	-5.8	-2.2
Alabama (23)	812	830	806	759	742	6.3	4.7	-3.9	0.3
Kentucky (24)	647	688	720	692	694	3.6	-9.1	-3.2	-0.4
Mississippi (25)	562	582	529	512	510	4.4	2.5	-2.2	-4.0
Tennessee (26)	838	875	897	877	842				
West South Central									
total	4050	4519	4749	4710	4721	11.6	5.1	-0.8	0.2
weighted						8.6	3.9	-1.7	0.3
unweighted						3.7	2.0	-1.1	0.9
Arkansas (27)	436	452	461	456	460	10.5	1.3	-0.5	-0.8
Louisiana (28)	760	840	851	847	840	5.3	5.6	-5.1	0.7
Oklahoma (29)	563	593	626	594	598	15.0	6.7	0.1	0.4
Texas (30)	2291	2634	2811	2813	2823				

SOURCE: U.S. Bureau of the Census

percent increases in total population and numbers of school-aged children (Table 15). During the 1975-1977 recovery, the number of AFDC recipients declined in both regions, but more rapidly in the Southern Tier. By 1977, AFDC recipients as a proportion of the population in the Northern region was 5.7 percent, 50 percent above the proportion in the South. Population grew more rapidly in the Southern tier, suggesting a greater increase in overall service demands during the recovery, and the number of school-aged children declined by about the same percentage in both regions.

To the extent there is some validity to a demand explanation for public expenditure increases, these trends would suggest a more rapid increase in fiscal activity in the Northern Tier in the earlier period and in the Southern Tier in the latter period. This pattern is roughly borne out by the data. Public employment did increase rapidly in both regions between 1962 and 1972 in response to relatively high population and school enrollment growth and a growing concentration of the poor. The even greater increase in per capita spending in the 1962-72 period can be partly attributed to the increase in transfer payments necessitated by the growth in AFDC recipients. The 1972-1977 period shows a different pattern. The growth in all three service requirement indicators was relatively low and there was a slower growth in public employment and public expenditures.

But while this adjustment to changed economic and demographic circumstances was taking place in terms of the aggregate performance of states in both regions, it was not necessarily taking place in every state nor to the same extent in the two regions. Indeed, public employment increased

TABLE 15

INDICATORS OF GROWTH IN SERVICING REQUIREMENTS

	Weighted Percentage Changes							
	1962-1967		1967-1972		1972-1975		1975-1977	
	Northern Tier	Southern Tier	Northern Tier	Southern Tier	Northern Tier	Southern Tier	Northern Tier	Southern Tier
AFDC	42.4	22.3	121.0	109.8	7.3	-1.0	-4.3	-9.7
Population	5.6	5.9	3.4	7.4	-0.1	4.7	0.02	2.6
Enrollment	14.4	9.8	6.8	3.8	-3.8	-0.8	-1.8	-1.2
Public Employment	26.1	31.4	17.9	24.4	6.4	14.8	0.9	7.3
Per Capita Expenditures	44.0	49.6	82.3	62.9	33.8	39.5	16.0	17.8
	Unweighted Percentage Changes							
AFDC	44.1	33.4	152.3	115.6	12.8	4.7	-5.7	-8.2
Population	6.5	5.4	4.8	6.2	0.6	3.8	0.7	2.2
Enrollment	15.2	9.4	9.1	3.3	-2.4	-1.7	-1.5	-1.5
Public Employment	25.0	30.9	20.3	24.3	8.8	13.1	3.0	6.7
Per Capita Expenditures	42.8	51.8	73.4	64.5	34.5	38.0	17.2	18.6

SOURCES: AFDC - Table 13
Population - Table 10
Enrollment - Table 14
Public Employment - Table 16
Per Capita Expenditures - Table 11

TABLE 16

PERCENT INCREASE IN STATE AND LOCAL GOVERNMENT EMPLOYMENT AND EMPLOYEE WAGES: BY REGION

State and Region	Total Employment				Employment per 10,000 Population				Payroll per Employee			
	1962-1967	1967-1972	1972-1975	1975-1977	1962-1967	1967-1972	1972-1975	1975-1977	1962-1967	1967-1972	1972-1975	1975-1977
NORTHERN TIER												
weighted	26.1	17.9	6.4	0.9	19.4	14.1	6.6	0.8	27.9	41.3	22.6	11.4
unweighted	25.0	20.3	8.8	3.0	17.6	14.9	8.1	2.2	28.8	38.3	21.8	12.4
East North Central												
weighted	25.3	17.6	7.5	2.3	17.4	13.6	7.1	1.9	26.0	41.4	22.9	12.5
unweighted	25.0	17.8	7.7	2.6	17.0	13.5	7.1	2.1	24.4	39.2	22.4	12.9
Illinois (1)	28.3	20.4	7.2	-0.6	20.3	17.5	7.6	-1.3	19.4	44.5	26.9	10.4
Indiana (2)	36.7	10.0	8.4	2.0	27.9	5.3	7.7	1.7	25.1	27.5	20.6	16.9
Michigan (3)	26.6	16.2	8.1	4.5	16.2	11.1	7.1	4.2	27.4	50.1	20.2	12.6
Ohio (4)	21.9	16.5	6.2	3.1	16.5	13.1	6.4	3.2	27.3	37.9	22.5	13.9
Wisconsin (5)	11.7	26.0	8.8	3.9	4.2	20.3	6.9	2.5	38.1	36.7	21.7	10.6
Middle Atlantic												
weighted	28.5	17.2	4.8	-1.8	23.8	14.0	5.7	-1.2	28.8	42.2	23.0	10.3
unweighted	30.0	17.9	7.3	0.2	24.1	14.1	7.9	0.6	28.8	40.1	24.0	10.8
New Jersey (6)	33.0	21.7	14.9	6.0	22.6	15.0	14.9	6.1	23.6	38.9	23.2	12.3
New York (7)	26.3	17.1	1.3	-5.2	23.0	14.4	2.9	-4.4	28.1	45.6	21.8	10.1
Pennsylvania (8)	30.6	14.8	5.6	-0.1	26.7	12.9	6.1	0.2	34.6	35.9	27.1	10.1
New England												
weighted	20.8	21.3	8.6	4.6	12.1	16.0	7.8	4.1	30.9	37.9	20.3	12.4
unweighted	23.0	23.7	10.3	4.7	14.7	16.4	9.0	3.2	30.1	36.7	20.1	12.8
Connecticut (9)	29.0	19.6	8.2	2.7	16.0	13.9	7.8	2.3	29.4	39.0	14.3	9.4
Maine (10)	15.6	27.2	6.3	4.7	14.0	24.1	3.3	2.2	29.9	33.8	19.1	16.8
Massachusetts (11)	16.8	20.3	7.6	5.3	8.5	16.5	7.1	5.7	32.1	38.7	23.2	13.2
New Hampshire (12)	38.0	21.1	18.1	7.4	24.7	8.7	12.7	2.8	27.6	34.9	22.0	13.7
Rhode Island (13)	19.0	21.9	8.5	4.7	14.1	14.1	12.6	4.7	28.1	38.2	24.0	12.6
Vermont (14)	19.5	32.0	13.4	3.5	11.1	21.1	10.5	1.4	33.2	35.2	18.3	10.9

TABLE 16 (CONT.)

State and Region	Total Employment 1962-1967	Total Employment 1967-1972	Total Employment 1972-1975	Total Employment 1975-1977	Employment per 10,000 Population 1962-1967	Employment per 10,000 Population 1967-1972	Employment per 10,000 Population 1972-1975	Employment per 10,000 Population 1975-1977	Payroll per Employee 1962-1967	Payroll per Employee 1967-1972	Payroll per Employee 1972-1975	Payroll per Employee 1975-1977
SOUTHERN TIER												
weighted	31.4	24.4	14.8	7.3	24.1	15.8	9.7	4.6	27.5	35.3	26.6	13.5
unweighted	30.9	24.3	13.1	6.7	24.2	17.1	8.9	4.3	27.2	34.3	26.9	14.8
South Atlantic												
weighted	35.0	28.1	15.7	8.0	24.3	17.5	9.9	5.8	28.8	38.1	23.6	13.0
unweighted	33.9	28.4	13.6	7.1	24.1	19.3	9.2	5.1	28.5	36.5	24.2	15.2
Delaware (15)	34.0	39.9	3.4	0.3	18.9	29.1	1.6	-0.2	30.1	37.8	24.2	22.3
Maryland (16)	40.0	26.6	11.8	6.1	20.9	17.0	10.5	5.4	32.1	38.4	26.8	10.7
North Carolina (17)	27.9	24.7	12.6	15.5	22.3	17.5	8.9	13.7	25.5	34.9	17.4	14.2
Virginia (18)	39.2	25.4	19.3	8.2	29.3	18.1	14.5	5.0	29.0	36.1	25.0	9.7
South Carolina (19)	33.6	31.1	16.7	9.2	29.2	23.9	11.1	6.9	24.6	37.6	25.4	15.2
Georgia (20)	35.0	32.2	15.7	6.3	25.8	22.5	11.5	3.9	29.9	33.4	28.8	12.3
Florida (21)	39.0	31.3	19.8	6.0	20.1	10.9	7.2	3.6	29.3	46.9	20.8	13.0
West Virginia (22)	22.6	15.9	9.5	5.5	26.3	15.1	8.2	2.3	27.1	27.1	25.3	24.4
East South Central												
weighted	26.8	21.2	11.1	6.5	23.7	17.3	7.9	4.1	27.3	33.9	28.6	14.4
unweighted	26.4	21.3	10.9	6.4	23.9	17.5	7.7	4.1	27.0	34.1	29.2	14.4
Alabama (23)	23.9	21.2	12.0	9.0	19.8	19.3	9.0	6.7	33.7	32.3	32.8	15.3
Kentucky (24)	25.4	18.9	15.7	2.2	22.5	14.3	12.7	0.3	20.8	36.4	23.6	15.0
Mississippi (25)	25.1	23.1	5.3	7.5	27.8	20.4	2.3	5.5	25.3	34.1	35.5	13.3
Tennessee (26)	31.2	21.8	10.5	6.9	25.5	16.1	7.1	3.9	28.2	33.5	24.9	14.0
West South Central												
weighted	29.3	20.8	15.8	6.7	24.0	12.3	10.3	3.1	25.3	30.8	30.6	13.7
unweighted	29.3	19.3	14.5	6.0	24.9	12.4	9.7	3.1	24.8	30.1	29.9	14.5
Arkansas (27)	33.6	21.4	16.3	6.7	31.8	15.5	9.8	5.3	27.0	27.7	34.2	13.8
Louisiana (28)	25.4	16.3	12.6	1.5	18.0	11.6	10.0	-1.1	24.8	32.1	24.2	17.4
Oklahoma (29)	27.7	16.1	11.3	7.4	25.0	9.6	7.6	4.2	21.4	30.1	28.9	14.4
Texas (30)	30.6	23.7	17.8	8.2	24.7	12.8	11.1	3.9	26.2	30.7	32.4	12.4

SOURCE: U. S. Bureau of the Census, State Distribution of Public Employment, 1962, G-GE62-No. 1, April, 1963; _____, Public Employment in 1967, 1972, 1975, 1977, GE67, 72, 75, 77 (Washington, D. C.: U.S. Government Printing Office, 1968, 1973, 1976, 1978); Current Population Reports, Series P-25, No. 727, July 1978.

at a greater rate in the South in all four periods, with the growth rate widening from around 20 percent faster between 1962 and 1972 to 50 percent faster since 1972. The differential growth in expenditures has been much less pronounced, due to the greater growth in transfer payments, debt service and pension expenditures in the Northern states. Unfortunately, these aggregate data do not let us conclude that the adjustment was somehow "better" in one region than in the other.

The possibility that a differential growth in the wage rate of state and local government employees accounts for some of the regional differential in expenditure growth suggests that supply as well as demand factors should be studied. As may be seen in Table 16, the percentage increase in payroll per employee was slightly higher in the Northern than in the Southern states over the 1962-1972 period--this despite the fact that the capacity to finance such increases in Northern states was declining. By the 1972-1975 period, the rate of increase in average wages in the North had fallen below that in the South.[1] The pattern continued for the 1975-1977 period. Therefore, since 1972, state and local governments in the South have been increasing per capita expenditures and employment as well as employee wage rates at a greater rate than have Northern states.

Revenue Growth

The comparisons above might be summarized as showing that, relative to personal income growth, the fisc in the Northern states has expanded at about the same rate as that in the Southern states, despite very great differences in the growth of their respective economic and demographic

[1] It is important to reemphasize that the rates of increase of average wages do not measure total compensation, but only direct wage and salary payments. To the extent there are regional differences in the pension and fringe benefit component of compensation increases, these comparisons are distorted. One view would be that this distortion is in the direction of underestimating growth rates in compensation for employees of Northern States.

bases. As a consequence, revenue effort in the Northern Tier states must have increased more rapidly, and/or the flow of Federal aid to the Northern states must have increased. The reality of an increase in revenue effort is borne out by an ACIR classification of states with reference to both the level and direction of tax effort.[1] Of the states classified as having high and rising levels of tax effort, nine are in the Northern tier and three are in the South (See Table 17).

A comparison of the growth in own source revenues with the growth in personal income, employment, and population shows a greater revenue-income elasticity[2] in the North in every period (See Table 18). This means that, on average, the tax on each increment to income was greater in the North, or that tax reduction of disposable income was largest in the North.

The presentation in Table 19 disaggregates increases in state and local government revenue by source of increase. The results are helpful in understanding the mechanics of the fiscal response over the period in question. Three patterns of change stand out. First, there was a growing use of sales and income taxes in both regions. Second, there has been much heavier reliance on property taxes in the Northern states. Third, the pattern of reliance on Federal grant financing has differed between the two regions. The Southern states have been more reliant on grants throughout this period,

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[1] Advisory Commission on Intergovernmental Relations, Measuring the Fiscal Blood Pressure of the States (Washington, D.C.: U.S. Government Printing Office, 1977).

[2] Revenue-income elasticity is the percent increase in revenue divided by the percent increase in personal income. A more rigorous measure of the revenue-income elasticity would require adjusting the revenue data levels for discretionary changes in both the rates or bases of the tax systems within the several states.

TABLE 17

LEVELS OF REVENUE EFFORT: SELECTED NORTHERN AND SOUTHERN TIER STATES, 1977

State and Region		Revenues from Own Sources per $1000 of Personal Income	Per Capita Revenue from Own Sources
NORTHERN TIER			
weighted		150.4	1108.9
unweighted		145.0	1024.5
East North Central			
weighted		134.3	986.9
unweighted		136.2	988.7
Illinois	(1)	132.2	1026.6
Indiana	(2)	122.6	848.4
Michigan	(3)	148.7	1133.1
Ohio	(4)	119.1	843.8
Wisconsin	(5)	158.4	1091.6
Middle Atlantic			
weighted		168.9	1259.7
unweighted		158.6	1193.6
New Jersey	(6)	140.3	1121.5
New York	(7)	204.3	1540.1
Pennsylvania	(8)	131.1	919.2
New England			
weighted		147.8	1061.9
unweighted		145.5	969.7
Connecticut	(9)	130.3	1050.7
Maine	(10)	140.7	806.5
Massachusetts	(11)	161.5	1171.8
New Hampshire	(12)	122.4	799.6
Rhode Island	(13)	145.1	982.5
Vermont	(14)	172.8	1006.8

TABLE 17 (CONT.)

State and Region	Revenues from Own Sources per $1000 of Personal Income	Per Capita Revenue from Own Sources
SOUTHERN TIER		
weighted	132.0	833.0
unweighted	134.0	833.7
South Atlantic		
weighted	133.1	863.5
unweighted	134.9	887.4
Delaware (15)	146.3	1125.4
Maryland (16)	151.0	1143.1
North Carolina (17)	126.0	747.6
Virginia (18)	125.2	859.4
South Carolina (19)	134.1	754.6
Georgia (20)	138.5	832.7
Florida (21)	129.0	862.1
West Virginia (22)	129.3	774.1
East South Central		
weighted	132.5	748.9
unweighted	134.3	749.0
Alabama (23)	130.4	733.0
Kentucky (24)	130.7	777.0
Mississippi (25)	147.6	742.4
Tennessee (26)	128.5	743.6
West South Central		
weighted	130.0	839.5
unweighted	131.9	811.0
Arkansas (27)	119.2	660.4
Louisiana (28)	151.8	897.8
Oklahoma (29)	131.2	832.8
Texas (30)	125.4	853.1

SOURCE: U.S. Bureau of the Census, Governmental Finances in 1976-77, Series GF77, No. 5 (Washington, D.C.: U.S. Government Printing Office, 1977); and, Current Population Report, P-25, No. 727 (July 1978); and, Department of Commerce, Survey of Current Business, August, 1978.

OVERALL RESPONSIVENESS OF REVENUES TO ECONOMIC ACTIVITY: 1962-1977

Percentage Changes:	Weighted: Northern Tier 1962-1967	Northern Tier 1967-1972	Northern Tier 1972-1975	Northern Tier 1975-1977	Southern Tier 1962-1967	Southern Tier 1967-1972	Southern Tier 1972-1975	Southern Tier 1975-1977
Own Source Revenue	48.0	80.9	29.6	20.8	54.7	77.8	41.1	23.8
Personal Income	40.0	42.3	28.2	19.3	49.4	60.0	38.6	23.8
Own Source Revenue-Income Elasticity	1.20	1.91	1.05	1.08	1.11	1.30	1.06	1.00
Total Employment	15.2	5.8	0.8	4.3	24.7	20.2	8.4	7.6
Population	5.6	3.4	-0.1	0.02	5.9	7.4	4.7	2.6
Unweighted								
Own Source Revenue	46.6	84.8	28.9	21.4	56.8	75.5	39.7	22.8
Personal Income	41.8	44.6	29.3	20.9	48.3	57.6	37.6	23.5
Own Source Revenue-Income Elasticity	1.11	1.90	0.99	1.02	1.18	1.31	1.06	0.97
Total Employment	16.7	7.6	1.9	6.4	24.0	18.7	7.2	7.5
Population	6.5	4.8	0.6	0.7	5.4	6.2	3.8	2.2

SOURCES: Computed from Tables 9 and 10, U. S. Bureau of the Census, Governmental Finances in 1962, Series G-GF62-No. 2, October, 1963; _____, Governmental Finances 1966-67, 1971-72, 1974-75, 1976-77, GF67, 72, 75, 77; Department of Commerce, Survey of Current Business, August, 1976, August, 1978.

TABLE 19

INCREASES IN GENERAL REVENUES OF STATE AND LOCAL GOVERNMENTS

State and Region	1962-1967 Percent of Increase due to: Sales and Income Taxes	1962-1967 Property Taxes	1962-1967 Federal Aid	1967-1972 Percent of Increase due to: Sales and Income Taxes	1967-1972 Property Taxes	1967-1972 Federal Aid
NORTHERN TIER						
weighted	24.9	22.2	18.6	26.3	23.7	20.2
unweighted	21.0	22.6	19.5	22.6	25.5	19.5
East North Central						
weighted	23.3	22.1	18.2	26.6	22.6	19.3
unweighted	25.0	21.8	17.6	25.5	23.9	17.8
Illinois (1)	21.2	22.5	19.3	27.8	21.6	25.0
Indiana (2)	32.0	31.4	14.9	17.6	25.6	15.2
Michigan (3)	19.1	20.7	20.8	28.7	20.2	18.5
Ohio (4)	13.4	27.5	18.8	24.8	20.2	15.4
Wisconsin (5)	39.4	6.8	14.1	28.8	31.9	14.7
Middle Atlantic						
weighted	27.7	21.7	18.3	27.7	22.3	21.1
unweighted	24.4	22.8	18.6	24.9	24.0	20.4
New Jersey (6)	20.3	27.6	15.9	13.5	36.2	20.1
New York (7)	31.6	20.9	17.6	30.8	21.8	22.6
Pennsylvania (8)	21.3	19.8	22.4	30.3	14.1	18.4
New England						
weighted	19.1	24.2	20.9	21.1	31.7	20.1
unweighted	15.9	23.2	21.4	19.1	27.6	20.5
Connecticut (9)	10.8	32.3	19.4	21.2	34.7	14.8
Maine (10)	23.7	10.9	28.1	19.5	21.3	26.2
Massachusetts (11)	25.0	21.7	20.2	22.1	34.0	21.8
New Hampshire (12)	1.3	40.2	14.8	1.6	32.2	17.0
Rhode Island (13)	15.5	19.9	29.9	31.5	21.2	21.6
Vermont (14)	19.0	13.9	16.3	18.5	22.0	21.5

TABLE 19 (CONT.)

State and Region	1972-1975 Percent of Increase due to: Sales and Income Taxes	1972-1975 Property Taxes	1972-1975 Federal Aid	1975-1977 Percent of Increase due to: Sales and Income Taxes	1975-1977 Property Taxes	1975-1977 Federal Aid
NORTHERN TIER						
weighted	37.6	19.1	26.1	35.8	18.6	26.9
unweighted	33.0	21.3	31.0	31.5	18.2	29.8
East North Central						
weighted	38.4	15.1	25.7	38.9	16.5	26.9
unweighted	40.4	13.3	26.0	38.7	15.5	28.6
Illinois (1)	42.4	18.4	12.9	33.0	18.9	26.9
Indiana (2)	51.2	5.4	20.4	42.9	9.2	38.4
Michigan (3)	22.4	26.7	33.8	51.2	12.6	25.2
Ohio (4)	40.0	9.4	29.9	24.7	25.6	25.8
Wisconsin (5)	46.1	6.8	33.1	41.9	11.2	26.4
Middle Atlantic						
weighted	38.6	19.0	25.3	36.0	20.3	26.1
unweighted	34.8	20.4	26.9	36.9	19.5	27.0
New Jersey (6)	20.0	35.3	23.7	42.5	18.7	25.3
New York (7)	42.7	18.6	22.5	34.6	21.7	24.2
Pennsylvania (8)	41.8	7.4	34.2	33.7	17.9	31.4
New England						
weighted	30.5	32.7	30.6	27.2	19.1	29.4
unweighted	25.8	28.4	37.2	22.9	19.7	32.1
Connecticut (9)	31.5	27.5	42.9	31.3	22.9	14.4
Maine (10)	29.6	14.5	40.4	28.9	5.0	47.4
Massachusetts (11)	33.6	37.9	22.9	28.4	18.0	32.8
New Hampshire (12)	14.5	34.3	39.3	2.7	38.2	22.3
Rhode Island (13)	27.1	24.4	34.9	22.0	18.2	37.8
Vermont (14)	18.4	32.1	42.9	24.0	15.9	38.2

TABLE 19 (CONT.)

State and Region	1962-1967 Percent of Increase due to: Sales and Income Taxes	1962-1967 Property Taxes	1962-1967 Federal Aid	1967-1972 Percent of Increase due to: Sales and Income Taxes	1967-1972 Property Taxes	1967-1972 Federal Aid
SOUTHERN TIER						
weighted	18.9	16.4	25.5	25.1	12.8	21.7
unweighted	19.3	14.2	26.6	25.4	11.0	23.5
South Atlantic						
weighted	21.9	18.6	21.8	26.3	14.0	20.3
unweighted	21.5	15.9	23.1	26.1	12.9	22.2
Delaware (15)	15.4	9.2	17.9	18.8	8.7	23.6
Maryland (16)	25.1	32.0	13.7	36.5	12.2	17.5
North Carolina (17)	25.3	13.6	23.2	24.0	14.0	22.6
Virginia (18)	34.1	16.4	21.8	26.2	15.3	19.2
South Carolina (19)	24.3	6.8	21.8	27.8	14.0	24.0
Georgia (20)	20.2	16.2	23.1	21.2	16.7	23.7
Florida (21)	12.1	23.3	21.1	23.5	14.6	15.5
West Virginia (22)	15.1	9.9	42.0	30.8	7.4	31.7
East South Central						
weighted	21.1	9.5	30.8	26.4	8.1	25.7
unweighted	21.0	9.5	31.1	27.1	7.9	26.0
Alabama (23)	25.5	6.6	25.5	20.8	3.1	32.2
Kentucky (24)	19.8	8.6	36.9	35.4	7.6	20.2
Mississippi (25)	18.4	10.4	33.1	29.2	7.8	30.1
Tennessee (26)	20.1	12.3	28.8	22.9	13.0	21.5
West South Central						
weighted	12.1	17.8	27.8	22.1	13.4	21.9
unweighted	13.5	15.3	29.0	22.3	10.5	23.4
Arkansas (27)	17.3	9.7	33.4	20.9	10.2	27.8
Louisiana (28)	19.8	7.8	24.0	26.9	8.5	20.2
Oklahoma (29)	8.0	20.2	31.5	20.5	6.3	24.3
Texas (30)	8.8	23.3	27.1	21.1	16.8	21.2

State and Region	1972-1975 Percent of Increase due to: Sales and Income Taxes	1972-1975 Property Taxes	1972-1975 Federal Aid	1975-1977 Percent of Increase due to: Sales and Income Taxes	1975-1977 Property Taxes	1975-1977 Federal Aid
SOUTHERN TIER						
weighted	28.1	12.3	28.0	25.3	15.6	26.8
unweighted	31.1	10.5	28.5	28.7	12.6	29.2
South Atlantic						
weighted	30.5	12.7	29.3	26.0	17.6	27.6
unweighted	32.7	11.7	29.0	28.8	14.5	29.2
Delaware (15)	36.8	10.3	20.9	27.0	2.5	43.5
Maryland (16)	36.6	11.6	28.3	23.0	18.0	26.2
North Carolina (17)	35.9	10.1	39.8	35.0	12.0	31.2
Virginia (18)	28.9	14.5	27.2	27.0	19.7	27.7
South Carolina (19)	32.2	9.3	29.1	30.2	14.3	32.1
Georgia (20)	32.0	17.0	30.4	34.5	16.4	24.1
Florida (21)	21.1	13.5	24.1	12.4	24.7	26.1
West Virginia (22)	38.2	7.5	32.0	41.5	8.2	22.8
East South Central						
weighted	31.0	8.3	28.2	33.5	9.5	30.8
unweighted	31.2	8.3	28.5	33.3	9.6	30.5
Alabama (23)	33.1	5.1	25.0	27.8	3.6	34.4
Kentucky (24)	27.7	7.7	28.3	39.5	10.8	31.2
Mississippi (25)	32.2	9.3	31.8	29.9	10.6	26.9
Tennessee (26)	32.0	11.0	28.8	36.2	13.4	29.4
West South Central						
weighted	21.8	14.4	25.5	19.9	15.9	23.4
unweighted	27.9	10.2	27.7	23.7	12.1	27.7
Arkansas (27)	38.6	9.2	32.1	29.1	11.6	29.5
Louisiana (28)	26.2	3.6	27.4	24.1	6.7	38.2
Oklahoma (29)	30.6	8.6	27.7	25.3	8.9	25.9
Texas (30)	16.3	19.6	23.5	16.2	21.0	17.3

SOURCES: U.S. Bureau of Census, Governmental Finances in 1962, Series G-GF62, No. 2 (Washington, D.C.: U.S. Government Printing Office, October 1963); _____, Governmental Finances, 1966-1967, 1971-1972, 1974-1975, 1976-1977, GF67, 72,75,77 (Washington, D.C.: U.S. Government Printing Office, 1968, 1973, 1976, 1978); and, _____, Current Population Reports, Series P-25, No. 727 (Washington, D.C.: U.S. Government Printing Office, July 1978).

but their dependence on grants has not increased substantially. The Northern states, on the other hand, financed only 19 percent of their 1962-1967 expenditure increases with grants as compared to 29 percent of their increases in the 1975-1977 period. The direct Federal-Local governmental aid included in the stimulus package accounts for much of this increase. As may be seen in Table 19, the pattern described above holds true for most states in the two regions.

This pattern of revenue increase may reflect the greater automatic responsiveness of tax systems in the South which rely more on sales and less on property taxes. While detailed comparisons are not readily available, it would seem reasonable to assume that relatively more of the revenue increase in the North was the result of discretionary changes in the tax system. Data for 1975-1976 suggest that rate and base changes in the income and sales taxes occurred with greater frequency in the North, especially among the harder pressed states.[1]

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[1]Advisory Commission on Intergovernmental Relations, Significant Features of Fiscal Federalism, 1976-1977 Edition, Vol. II (Washington, D.C.: ACIR): Tables 34-37.

IMPLICATIONS FOR PUBLIC POLICY

It is important to separate the general fiscal problems of state and local governments from those which have been exacerbated by the regional shifts which lie at the heart of this discussion. It is particularly important to separate the fiscal problems and public service deficiencies which are primarily attributable to low income--the Southern problem.

The basic dilemma faced by several of the declining states in the Northeast is that their public sector has become overdeveloped relative to financial capacity. As a result, tax burdens are thought to be too high, there is little additional public money to be devoted to what are thought to be serious city fiscal problems, fixed debt and pension commitments are high, union compensation demands will likely parallel cost-of-living increments, and there seems to be no short term reversal of existing economic trends. To be sure, this pattern does not fit all state and local governments in the Northeastern and Midwestern regions, and likely describes some Southern metropolitan area governments. But the pattern tends to hold for many governments in the Northern Tier, and tends not to hold for most in the Southern rim.

The strategies for dealing with these fiscal problems would seem to be of four types: reversal of the Northern economic decline, both in the central cities and the region; increased federal assistance during the transition period; a strengthening of the fiscal position of the poorest local jurisdictions through a grants program and federal welfare assumption, and fiscal planning in the declining region to bring about a better balance between the size of the public sector

and the size of the economic base available to support that public sector.

An alternative strategy would be to take no action to correct the fiscal problems of governments in the declining region. The argument would go that market forces are already underway which are correcting regional disparities in real income, employment, and population; and that the regional disparities in public service levels also should narrow. Eventually, as the resource base continues to grow slowly, the public sector in the Northeast will also grow slowly. The problem with this line of reasoning is that shrinkage in the public sector in the Northeast will likely mean a cutting of service levels in those areas where expenditures are greatest--health, education and welfare. This may imply that much of the painful burden of the transition to a lower level of public services will be borne by lower income residents in the declining regions.

Given these strategies, there would seem to be five policy directions open: cut services, raise taxes, increase productivity, increase federal assistance, or improve the local economy. The first three are options for state and local government action while the last two require federal action.

Options For Governments In The Delcining Region

Increased productivity in the public sector is a favorite policy recommendation in that it resolves fiscal problems without requiring governments either to raise taxes or cut services. While there is clearly room for improved management at the local government level, large savings (relative to projected deficits) from increased productivity in the public sector is not a realistic expectation.[1]

[1] A review of the issues surrounding productivity measurement, and improvement is presented in Jesse Burkhead and John P. Ross, Productivity in the Local Government Sector, (Lexington: D.C. Heath and Company, 1974).

Revenues might be increased through further increases in the effective tax rate. The argument against this is the possible retarding effect on economic development. State and local government revenue effort in the Northeastern and Midwestern regions is already high relative to the South, a difference that would reinforce the argument to lower rather than raise taxes for competitive reasons. While this pattern certainly does not hold for all states in the declining region--Connecticut and Ohio have revenue efforts among the lowest in the United States--it fits many of the large industrial states.

Service level reductions are the most likely route. While there will be absolute cutbacks in the sense of reductions in the scope of services, expenditure retrenchment will mostly take the form of services not expanding to accomodate increasing needs. However, this cutback in services does not mean that expenditures will decline. Increasing wages and benefits can drive up expenditures by a significant amount, without raising service levels.

There is another type of reform which is highly desirable but politically difficult. If the tax base in the suburbs could be tapped more fully so as to balance needs for services with capacity to finance, the fiscal situation in central cities could be markedly improved. History has not shown this to be a viable alternative in the Northern industrial states.

Federal Options

The federal government could increase the flow of aid to states to prop up the public sector in the declining region. A program of increased

aid during a transition period in which the state sought to balance its long-term spending expectations with its likely future economic growth would be a sane program. On the other hand, federal grants to maintain an overdeveloped public sector would only prolong the period of continuing annual fiscal crisis. Moreover, in this time of budget stringency, such allocations would reduce the amount of federal monies available to the growing states.

There are a number of federal policies which might be undertaken during the fiscal adjustment period--that period when the public sector in the North is moving to a lower level which is commensurate with its capacity to finance. One element of such a program would be an expansion of the countercyclical revenue sharing program and the temporary public sector job related programs. But perhaps the most important ingredient of a fiscal reform would be a higher level of federal financing of public welfare. The removal of a substantial share of welfare costs from the declining states in the Northeast would free up substantial resources for other uses. The net effect would be to allow governments in the declining states to maintain a higher level of fiscal activity with respect to other social services.

A similar position might be taken with respect to regional development subsidies. They only prolong the period of transition to a lower, but stable level of activity. The longer the period of this transition, the greater the uncertainty with respect to business investment, and the greater the chance for a snowballing effect of the decline.

An often discussed approach to dealing with the problems of decline is the creation of a Regional Energy and Development Corporation that would finance regional development projects using federally guaranteed taxable bonds. It is hoped that such an activity would accelerate development of Eastern coal and result in substantial job generation. If regional subsidies worked, they could have a strong positive effect on the finances of governments in the declining region. There are two caveats, however, even to the potentially favorable governmental finance effects. One is that the fiscal problems in the declining region are very much the fiscal problems of the central cities in those regions. Historically, these cities have not always shared in the economic growth of the region, and therefore it is not clear how much their fiscal positions would improve in the event the regional shifts slowed. A second, and related caveat, is that the states in the declining region tend to be more heavily dependent on local property taxation which may make it difficult to fully capture increases in regional income and employment for the public sector. But the most important issue with respect to regional subsidies remains whether or not they induce any net improvement in private sector economic activity.

Finally, it should be noted that a successful Federal approach will not likely grow out of political compromise. The problems of State and local governments in the regions are sufficiently different that any remedial program which benefits all is not apt to substantially benefit any. Programs such as General Revenue Sharing, a formula based program with something for everyone, is an almost classic case of the "compromise effect".

Improved Fiscal Balance

The fiscal problems of many Northern Tier states is that their public sectors are overdeveloped. The state's resource bases will no longer support the high level of public services provided in the state, unless tax rates are continuously increased. While shifts in population and economic activity are tending toward equalizing income across the country, the states have retained dominance in their relative national role in state and local fiscal activity. This can no longer be done. A downward transition must be recognized, and policy should center on selecting priorities in the adjustment of public service levels. With appropriate federal aid, this need not mean severe service cutbacks in all areas, but rather a slow growth in services provided while the rest of the nation catches up.

Lessons for the Growing Region

It is likely that the rapid fiscal expansion in the State-Local sector in the South has yet to come. Investments in public infrastructure and human capital often lag behind the growth in population and income level. It is noteworthy that this growth has been particularly rapid over the past five years in the Southern states.

If the Southern Tier of states is about to enter a fiscal growth period similar to that experienced in the Northern Tier in the sixties, some of the painful fiscal lessons of that period might be well learned. Much of the problem facing the Northern Tier states was not of their own making. The very rapid fiscal expansion in the mid and late 1960's and early 1970's was to a large extent, the result of union pressures for higher employee compensation, a demand that was abetted by a high rate of inflation, and a crowding of high cost-low income citizens into the central cities.

Much of this expenditure increase would have been difficult to avoid. Other aspects of the expansion, however, were more discretionary--the making of substantial long term fixed debt and pension commitments, the addition of substantial numbers to the public employee roles, and the buying into Federal programs to expand the scope of services offered.

The growing states with rapidly developing public sectors could learn much from this experience. But the lesson is not that public employee unionization should be resisted or that public service levels should be kept at modest levels, but rather that the longer term consequences of of fiscal decisions should be continuously monitored. Moreover, there are conditions in the growing region which may make the growth experience much less painful than in the Northern Tier. A more favorable local government structure and a more elastic tax mix that is less reliant on the property tax may allow big, newer cities in the growth region to avoid the central city financial crisis which is so common in the Northern Tier.