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THE IMPACT OF STATE AND LOCAL TAXES ON ECONOMIC GROWTH

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The tax revolt of 1978 could prove to be the most important economic development of the past decade. Since the passage of Proposition 13 in California, at least 17 states have initiated some action in an effort to limit their future taxes. Political candidates from both parties appear to have caught the tax-cut fever. In the three months since Proposition 13 was passed, employment by state and local governments has dropped 1% compared to a steady 3% increase over the previous year. For better or worse, total state and local taxes as a share of personal income are likely to go down next year, and in some states the decline will be particularly sharp.

What effect is the tax revolt likely to have on the economic climate in those states which choose to reduce their tax burden? What impact will it have on those states that refuse to lower taxes? Recently, a study of state and local tax burdens was undertaken in the hope of answering these types of questions. The conclusions of that study are as follows: 1) Between 1969 and 1976 the economic growth achieved by a particular state relative to the average U.S. performance was not directly related to its average state and local tax burden; 2) over this same period, a state's relative economic growth was loosely related to the change in a state's relative tax burden, with those states displaying above average increases in their tax burden tending to show below average economic growth and vice versa; and 3) once allowance is made for a three-year period of adjustment to tax changes, there is a strong relationship suggesting that above average increases in a state's tax burden can lead to below average economic growth, while below average increases in tax burdens lead to above average growth.

The conclusions of this study have widespread implications for the tax revolt. For one, it suggests that those states which reduce their tax burden relative to others should expect to experience above average growth, although the positive response to a lower relative tax burden could take about three years to become apparent. On the other side of the coin, those states that increase their relative tax burdens should expect to experience below average growth. This phenomenon should be a powerful force in lowering overall state and local tax burdens over the next decade.

ANALYSIS OF STATE AND LOCAL TAX BURDENS AND ECONOMIC GROWTH

This analysis uses total state and local tax receipts for a particular state as a percent of that state's personal income to measure each individual state's tax burden. In this sense, we have chosen to use the broadest possible measure of state and local taxation and have not attempted to distinguish between the different types of taxes--income, property, sales, business, and so on. While the particular structure of taxation may be an important factor influencing state and local development, a more comprehensive analysis would be necessary to study the impact of different types of taxes.

State personal income growth is used as a proxy for a state's economic development. Since the study is concerned primarily with the economic performance of a particular state relative to the nation, a state's growth is always presented in terms of how it compares to the rest of the nation.^{1/}

Relative Economic Growth and State Tax Burdens--1969 to 1976

Chart I shows the relative economic growth of the fifty states plus Washington, D.C., along with their average tax burdens for the years 1969 to 1976. The outcast on the chart is Alaska which enjoyed extraordinary economic growth and tax revenues during this period due to the construction of the Alaska pipeline. Owing to this unique development, Alaska was excluded from consideration in analyzing subsequent relationships.

Chart II shows a close-up of the relationship presented in the first chart once Alaska has been removed. According to the chart, there is no apparent relationship between the average tax burden of a particular state during this period and its economic performance.

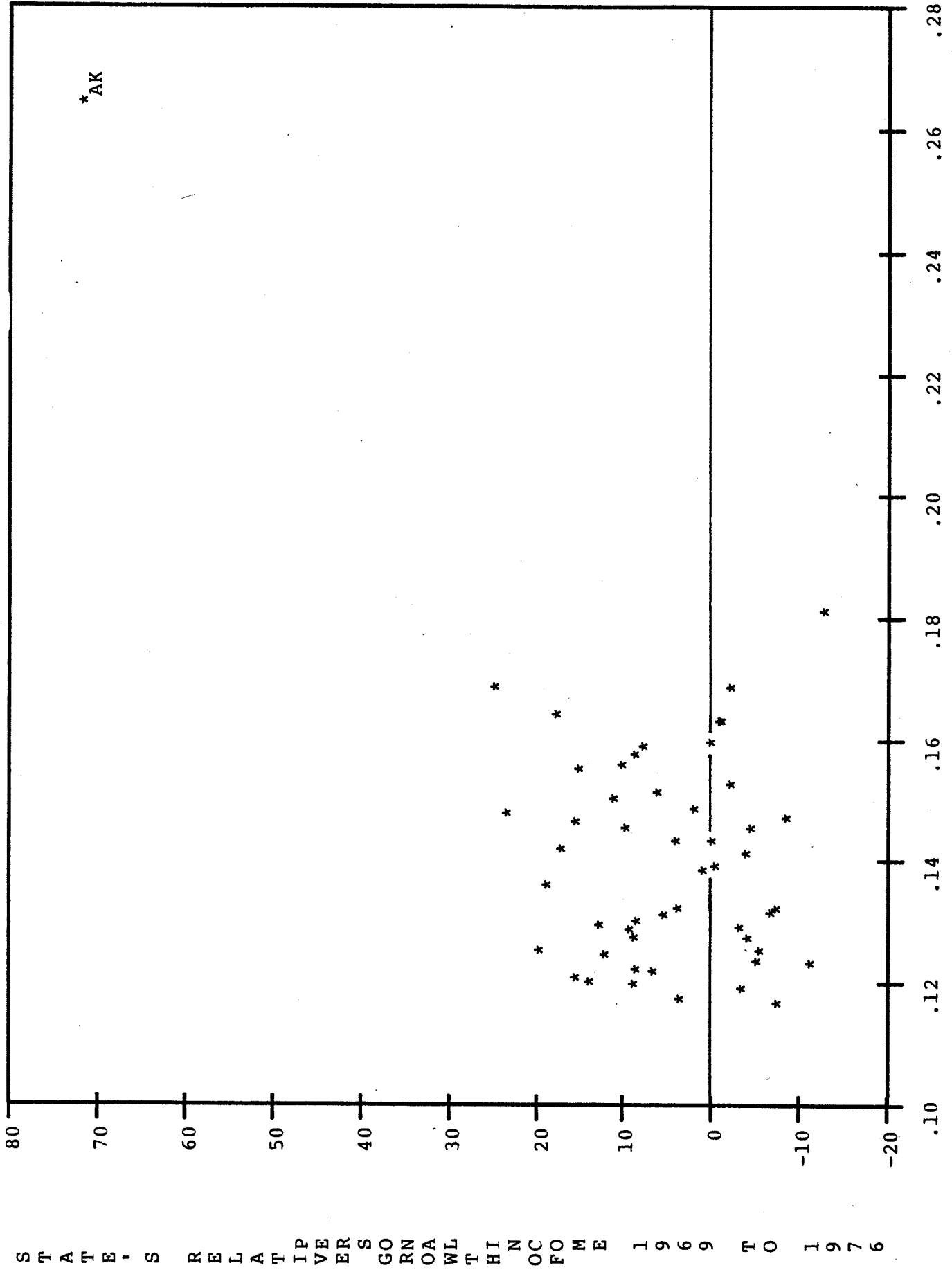
Relative Economic Growth and Changes In State Tax Burdens--1969 to 1976

The next step was to compare the relative economic growth of particular states to changes in each state's relative tax burden.^{2/} As Chart III shows, there is a loose relationship indicating a tendency for states which experienced the greatest increases in tax burdens to show slower than average economic expansion. In contrast, those states where tax burdens rose less than the national average tended to show greater than average economic expansion. The "best-fit" regression line running through the observations suggests that approximately 25% of the variation in relative economic growth among the various states can be explained by changes in relative tax burdens during this period.

^{1/} See appendix for the procedure used to measure a state's relative growth.

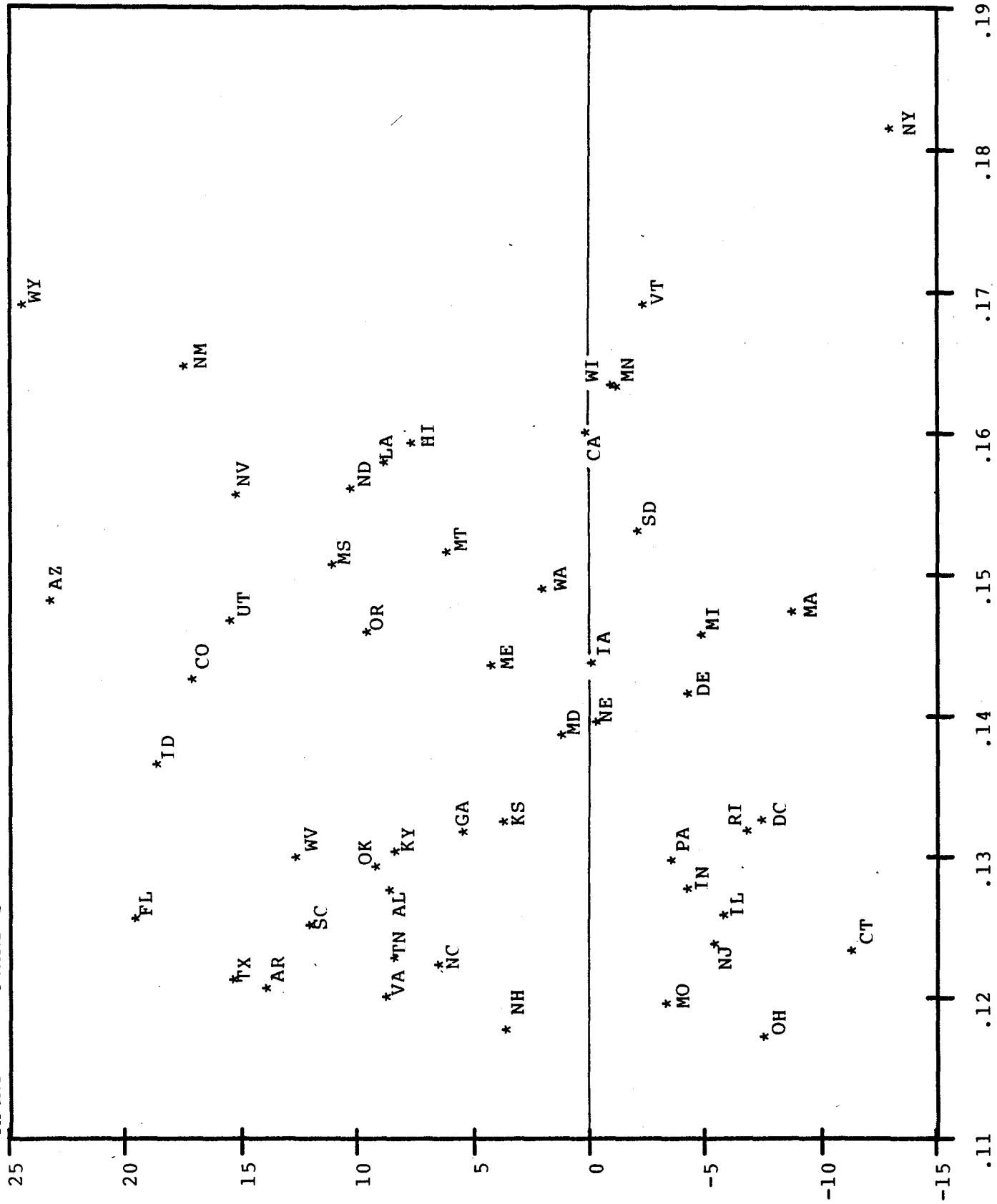
^{2/} See appendix for the procedure used to measure the change in a state's relative tax burden.

CHART I. RELATIVE ECONOMIC GROWTH AND AVERAGE TAX BURDENS -- 1969. -- 1976



STATE'S AVERAGE TAX BURDEN, 1969 TO 1976

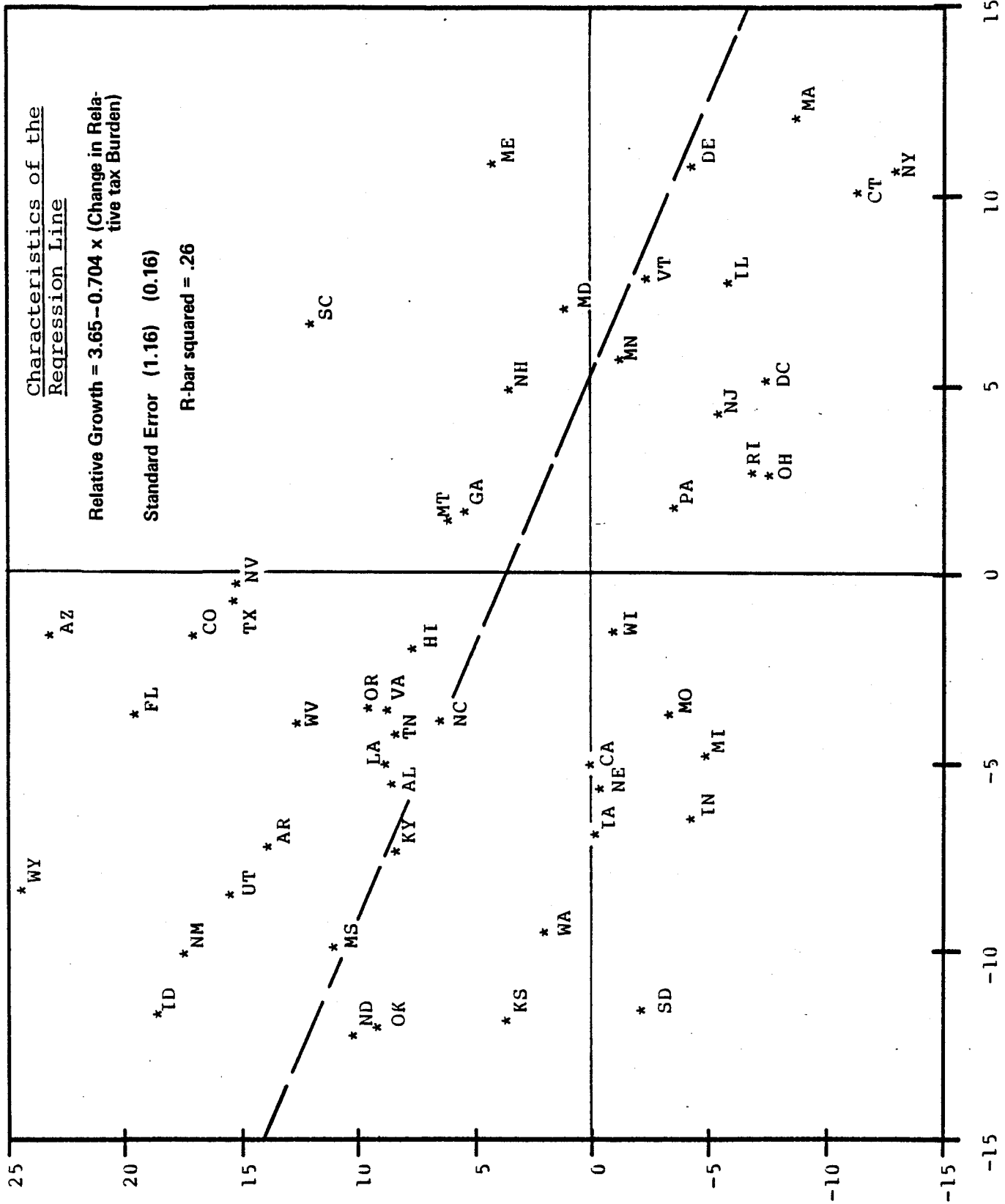
CHART II. CHART I WITH ALASKA REMOVED



S T A T E S R E L A T I V E R G S R O N W A T L H I O N F C O M E 1 9 6 9 T O 1 9 7 6

STATE'S AVERAGE TAX BURDEN, 1969 TO 1976

CHART III. RELATIVE ECONOMIC GROWTH AND CHANGES IN STATE TAX BURDENS-- 1969 - 1976



STATE'S RELATIVE GROWTH OF TAX BURDEN, 1969 TO 1976

S T A T E ' S R E L A T I V E E C O N O M I C G R O W T H I N 1 9 6 9 T O 1 9 7 6

Relative Economic Growth and Changes in State Tax Burdens After
Allowing Time for Tax Changes to Influence Economic Activity

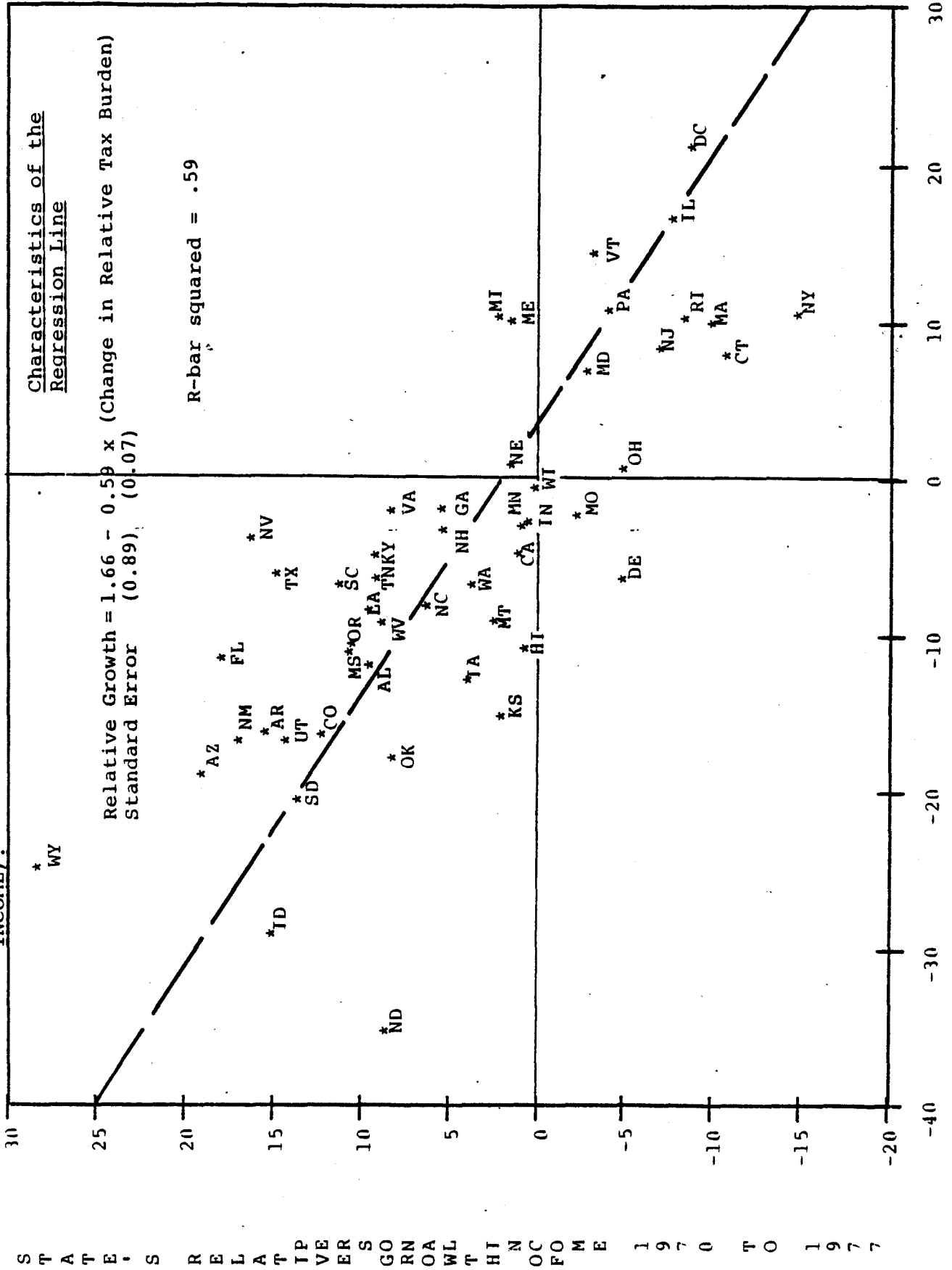
The final comparison uses changes in the relative tax burden of each state, but allows for a three-year lag between those changes and subsequent economic growth. The results of this analysis are shown in Chart IV which indicates an extremely strong relationship between relative tax changes among states and subsequent economic development.

The above analysis suggests that much of the relatively slow or rapid economic development among particular states should not be attributed to climate, high union wages, or many of the other explanations which are frequently offered. For the period analyzed, the "best-fit" regression line indicates that the change in the relative tax burden of particular states serves to explain approximately 60% of the variation in relative growth among the various states. The relationship suggests that for every one percent increase in a state's relative tax burden growth over the period analyzed, relative income growth declines by approximately $\frac{1}{2}$ percent and vice versa.

A slightly different perspective is seen in Table I. In the first column, states are ranked according to the change in relative tax burdens. Those states with the fastest increase in relative tax burdens are at the top of the list. In the second column, states are ranked according to relative income growth with those showing the slowest growth at the top of the list. As with Chart IV, it is apparent that those states with relatively high tax increases are often those which are characterized by below average economic growth. In contrast, those states with relatively low tax increases tend to be those where economic growth is highest. Illinois, for example, ranks highest in terms of tax burden growth and is sixth from the bottom in terms of economic growth. At the other extreme, Idaho ranks second from the lowest in terms of tax burden growth and eight highest in economic growth.

According to the analysis, it appears that an increase in the tax burden for a particular state relative to others creates disincentives for business and/or workers. As time passes, resources in the form of both investment capital and workers tend to move toward those states where relative tax burdens are falling. After a period of approximately three years, enough time has elapsed so that the movement of resources away from states with increasing relative tax burdens and toward those with decreasing relative tax burdens can become apparent.

CHART IV. RELATIVE ECONOMIC GROWTH AND CHANGES IN STATE TAX BURDENS (WITH 3-YEAR TIME LAG TO ALLOW FOR THE FULL EFFECT OF A TAX BURDEN CHANGE ON PERSONAL INCOME).



STATE'S RELATIVE GROWTH OF TAX BURDEN, 1967 TO 1974

TABLE I

Relative Tax Burden Changes, 1967 to 1974
Ranked Highest to Lowest

Relative Tax Burden Growth Greater than 10% of U.S. Average	1.	Washington, D.C.
	2.	Illinois
	3.	Vermont
	4.	Pennsylvania
	5.	New York
	6.	Michigan
	7.	Rhode Island
	8.	Maine
	9.	Massachusetts
Relative Tax Burden Growth Near the U.S. Average	10.	Alaska
	11.	New Jersey
	12.	Connecticut
	13.	Maryland
	14.	Nebraska
	15.	Ohio
	16.	Wisconsin
	17.	Georgia
	18.	Virginia
	19.	Missouri
	20.	Indiana
	21.	Minnesota
	22.	New Hampshire
	23.	Nevada
	24.	California
	25.	Kentucky
26.	Texas	
27.	Delaware	
28.	Tennessee	
29.	South Carolina	
30.	Washington	
31.	North Carolina	
32.	Louisiana	
33.	Montana	
34.	West Virginia	
Relative Tax Burden Growth Less than 90% of U.S. Average	35.	Oregon
	36.	Hawaii
	37.	Mississippi
	38.	Florida
	39.	Alabama
	40.	Iowa
	41.	Kansas
	42.	Arkansas
	43.	Colorado
	44.	New Mexico
	45.	Utah
	46.	Oklahoma
	47.	Arizona
	48.	South Dakota
	49.	Wyoming
	50.	Idaho
	51.	North Dakota

Relative Personal Income Changes, 1970 to 1977
Ranked Lowest to Highest

Relative Personal Income Growth Less than 90% of U.S. Average	1.	New York
	2.	Connecticut
	3.	Massachusetts
	4.	Washington, D.C.
	5.	Rhode Island
	6.	Illinois
	7.	New Jersey
	8.	Ohio
	9.	Delaware
Relative Personal Income Growth Near the U.S. Average	10.	Pennsylvania
	11.	Vermont
	12.	Maryland
	13.	Missouri
	14.	Wisconsin
	15.	Indiana
	16.	Hawaii
	17.	Minnesota
	18.	California
	19.	Maine
	20.	Nebraska
	21.	Kansas
	22.	Michigan
	23.	Montana
	24.	Washington
	25.	Iowa
26.	Georgia	
27.	New Hampshire	
Relative Personal Income Growth Greater than 5% of U.S. Average	28.	North Carolina
	29.	Virginia
	30.	Oklahoma
	31.	North Dakota
	32.	West Virginia
	33.	Tennessee
	34.	Kentucky
	35.	Alabama
	36.	Louisiana
	37.	Oregon
	38.	Mississippi
	39.	South Carolina
	40.	Colorado
	41.	South Dakota
	42.	Utah
	43.	Texas
	44.	Idaho
45.	Arkansas	
46.	Nevada	
47.	New Mexico	
48.	Florida	
49.	Arizona	
50.	Wyoming	
51.	Alaska	

CONCLUSION

The conclusions of the analysis are extremely important. For one, it suggests that much of the slower-than-average economic growth experienced in many of the Northeastern states, such as New York, Connecticut, Rhode Island, Vermont, New Jersey, and Massachusetts, appears to be related to the sharp increases in relative tax burdens in those states. In contrast, New Hampshire's relative tax burden was lowered during this period, and its economic growth was above the national average. Similarly, the above-average economic growth experienced in many Western and Southern states during this period is associated with decreases in their relative tax burdens.

Popular discontent over increasing tax rates has now gone well beyond that which resulted in the passage of California's Proposition 13. Tax cut and tax limitation proposals are under consideration in many other states and on the federal level as well. The years ahead are likely to be characterized by increased attempts by various states to reduce present tax burdens. This study suggests that those states which are successful in cutting relative tax burdens will experience higher economic growth than the nation as a whole, while those states which do not reduce their relative tax burdens are likely to suffer below-average economic growth.

APPENDIX

The procedure followed to measure a state's relative growth was to take state personal income as a percent of the U.S. total for a particular year and then take the percentage change in this measure for the period under consideration. For example, if PI represents personal income, then personal income for a particular state relative to the nation as a whole in 1976 could be shown as $\frac{\text{PI state 1976}}{\text{PI U.S. 1976}}$.

The change in relative personal income between 1969 and 1976 was obtained by the following:

$$\text{Change in Relative Personal Income} = \left[\left(\frac{\frac{\text{PI state 1976}}{\text{PI U.S. 1976}}}{\frac{\text{PI state 1969}}{\text{PI U.S. 1969}}} \right) - 1 \right] \times 100$$

The procedure used for obtaining a state's relative tax burden was to take a state's tax burden for a given year as a share of the tax burden for the nation as a whole in the same year. Then, the percent change was taken in this measure over the period to be analyzed. For example, if S&L represents state and local taxes, then the change in the relative tax burden was obtained as follows:

$$\text{Change in Relative Tax Burden} = \left[\left(\frac{\frac{\text{S\&L state 1976}}{\text{PI state 1976}} \div \frac{\text{S\&L U.S. 1976}}{\text{PI U.S. 1976}}}{\frac{\text{S\&L state 1969}}{\text{PI state 1969}} \div \frac{\text{S\&L U.S. 1969}}{\text{PI U.S. 1969}}} \right) - 1 \right] \times 100$$