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State Support of Higher Education: A 20-Year Contextual Analysis Using Two-Year Percentage Gains In State Tax Appropriations

Edward R. Hines
Illinois State University

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**FINANCING HIGHER EDUCATION:
THE STATE'S ABILITY TO PAY**

**B. STATE SUPPORT OF HIGHER EDUCATION:
A 20-YEAR CONTEXTUAL ANALYSIS USING
TWO-YEAR PERCENTAGE GAINS IN
STATE TAX APPROPRIATIONS**

Edward R. Hines, Director of the
Center for Higher Education and
Professor, Dept. of Educational
Administration
Illinois State University

INTRODUCTION

State support of higher education continues to be a major policy issue of concern to both higher education leaders and to state lawmakers. We have now entered an era where, as Kerr noted, states are assuming the major role in higher education (Kerr, 1980). This is to be contrasted with the 1960s and some of the 1970s which could be described as a period characterized by federal initiatives in higher education. By nearly any objective measure, the federal government continues to be a significant partner in the support of higher education, especially in the areas of student aid and basic research, but nearly each year since 1980 there have been attempts to diminish the federal role in higher education.

The current "state policy" period has a number of features including the ascendancy of lawmakers, especially governors, as major actors in higher education; the linkages between economic development and higher education, including "high technology," manpower training, technology commercialization, business incubators, and the like; and the more direct involvement of state government in a range of activities in higher education which, if not actually diminishing campus autonomy, is giving the appearance of increasing state government's role in higher education at the expense of the institutional autonomy of colleges and universities (Mortimer, 1987). Another principal feature of the relationship between state government and higher education is a diminished rate of gain in state fiscal support, and it is this topic which is the focus of this paper.

THE GRAPEVINE DATA BASE

This paper relies upon the data base of state tax appropriations for the operating expenses of higher education as reported in the monthly research report, GRAPEVINE, where the author serves as Editor. There are eight to ten issues of GRAPEVINE which are published each year by the Center for Higher

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Education at Illinois State University. The GRAPEVINE data are aggregated at the end of the legislative year in the states (summer or early fall) and published in The Chronicle of Higher Education in October or early November. The following February, these data, incorporating supplementary legislative decisions and revisions, are then published in an annual publication entitled Appropriations of State Tax Funds for Operating Expenses of Higher Education by the National Association of State Universities and Land-Grant Colleges.

A. GRAPEVINE Characteristics. GRAPEVINE was begun as a modest monthly newsletter at the University of Michigan by M.M. Chambers in 1958. Chambers saw growing interest in the states and on campuses in identifying levels of state support of higher education. Although the 1960s were to be a period characterized by federal initiatives in higher education, states also were becoming more involved in higher education even in the late 1950s. Two-year percentage gains of 50 percent or greater by states in providing support to higher education were common, statewide coordinating and governing boards were coming into the fore in the early 1960s, state systems were in the process of being formed, two-year community colleges were being created as frequently as one per week as documented by the Carnegie Commission on Higher Education (Medsker and Tillery, 1971), and student enrollment was experiencing what has been termed as "rapid acceleration" (Carnegie Foundation for the Advancement of Teaching, 1975).

Begun as a newsletter sent to state officials or campus representatives, GRAPEVINE rapidly grew to a primary communications link among state budget officials, and the publication began to be recognized as a unique information source. Chambers described the effort as "the GRAPEVINE longitudinal study of state tax support of higher education in the United States." Its principal characteristics are timeliness, comprehensiveness, and accuracy.

B. GRAPEVINE is timely because the data are collected as soon as possible after legislative decisions are made, and these data appear in the next available issue of GRAPEVINE. The data are published sometimes by the end of the same legislative session, but in all cases prior to the beginning of the subsequent legislative session.

C. GRAPEVINE data are comprehensive because they reflect total state effort for higher education, and while comprehensiveness is a strength it also is a limitation. Not all categories of appropriations in a given state are duplicated in other states. Most states have medical schools, but Wyoming does not. Appropriations for vocational and technical education are not treated equally by all states, and the same holds true for agricultural extension services. State idiosyncracies and individual preferences, depending on how the data are used, are a potential source of incomparability. Comparability is only a standard toward which we can move.

Another aspect of comprehensiveness is related to the appropriations breakdown by category and by campus. GRAPEVINE data are reported on a campus by campus basis, and it is this feature in which Chronicle readers are especially interested. These amounts are appropriated by legislatures or distributed by the state higher education agency after receiving a lump-sum appropriation from the legislature. While these campus data are suspect for comparison purposes, over time they help provide a useful longitudinal data set for a campus. As measured by the numerous telephone and written inquiries to the GRAPEVINE office, there continues to be substantial reader interest in campus figures.

D. The next characteristic, the accuracy of GRAPEVINE data, has been the subject of more recent policy decisions by a national advisory committee and

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GRAPEVINE editors which has met once annually since 1984 in order to provide technical advice and policy recommendations to improve the accuracy of the GRAPEVINE data and the utility of the publication. Three steps were taken; first, GRAPEVINE communicates with the state correspondents several times yearly regarding data revisions — those decisions made either by a legislature or the governor after the initial appropriations decision. These supplementary decisions can affect the appropriations amount either by enhancement or reduction. In some states, reductions are termed rescissions or reversions. Data revisions are then published in the next available issue of GRAPEVINE, in The Chronicle of Higher Education, and in Appropriations of State Tax Funds published by the National Association of State Universities and Land-Grant Colleges.

States, thus, are given three specific opportunities to have state tax appropriations data published. There is the initial publication of the data in a monthly issue of GRAPEVINE. The data appear (in somewhat aggregated form) in The Chronicle of Higher Education in October or November. Finally, the data appear in the NASULGC publication. Beginning in 1987, the NASULGC publication contains the data from the previous fiscal year as well as the current fiscal year. This enables wide circulation of revised data as well as notification to researchers and analysts about data revisions.

GRAPEVINE editors are completing an updating of a data set beginning in 1976 including all changes and data revisions. Within the year, this data set will be an accurate historical data base for use by those making closer examination of state tax appropriations for higher education.

E. GRAPEVINE has never claimed greater comparability than warranted by the data, although the consumers of the data continue to be interested in this area. Comparability is attained by being able to compare appropriations in similar categories across states. The problem is that state budgeting and fiscal practices lead to comparability problems because not all states collect data in the same way, and some items are included by some states and excluded by others.

There are four sources of interstate higher education finance data, including the Halstead survey, the State of Washington Higher Education Coordinating Board National Comparison Survey, State Higher Education Profiles, and GRAPEVINE. One source, in particular, has attempted to move closer to data comparability, and that is the annual survey by Kent Halstead published as State Profiles: Financing Public Higher Education. Halstead has excluded certain items such as "appropriations for research, agriculture, public health care services, and medical schools" (Halstead, 1987, p. 10), thus focusing on education appropriations in more similar categories across states in order to facilitate comparisons. While GRAPEVINE emphasizes total state effort, the Halstead data focus on comparability. Any serious analysis of state support for higher education should include multiple data sets, thus increasing the degree to which a given analysis can promise both accuracy and comparability.

METHODOLOGY

There are three ways in which GRAPEVINE data can be used productively.

1. GRAPEVINE data provide an indication, early in the fiscal year, of legislative appropriations for the operating support of higher education. In a sense, GRAPEVINE is an "early warning device" for those who, using additional data sources reflecting multiple revenue SOURCES such as local taxes and student tuition, wish to make a more complete analysis of data later in the fiscal or legislative year. Does a precipitous decline in two-year percentage gain for higher education or even "negative" gain imply a decline in total support, or does

a decline in state appropriations tend to be compensated by increases in tuition, local taxes, or non-revenue sources? GRAPEVINE helps provide the answer to this question by identifying early changes in state tax support.

2. GRAPEVINE data are displayed on a campus-by-campus basis, and while only somewhat reliable for comparison purposes, they provide an indication over time of appropriations to a given campus or area of concern.

3. GRAPEVINE data have what William Pickens "longitudinal integrity" (Evangelauf, 1984), and for a given group of similar states or similar institutions, GRAPEVINE data can provide a valuable snapshot of state appropriations over time. There are two ways to capitalize on this feature of the data. Aggregate total amounts on a state-by-state basis can be utilized to examine trends over time, or two-year percentage gains can be examined in order to identify trends in selected states or groupings of states.

Two-year percentage gains were used for this analysis. Two-year percentage gains have been utilized by GRAPEVINE, rather than single-year changes, in order to even out the sudden and idiosyncratic gains or losses in a single year which can occur because of particular state circumstances.

Two-year percentage gains were identified for all 50 states (see attached tables) from the current fiscal year (FY '88) back to the 1967-1968 academic year (FY '68). Data for these 21 years incorporate 20 finite changes in two-year percentage gains. They provide a comprehensive, national view of state support for higher education for two full decades, going back to the years of strong growth in higher education support which was a fundamental characteristic of the 1960s.

ANALYSIS

A. National Patterns. The 1960s and early 1970s were a period of rapid growth in state support of higher education. Earlier in the 1960s, it was common to find two-year percentage gains of 50 percent or greater. This occurred when states were establishing systems of higher education, when enrollment was increasing rapidly, and when many public colleges, especially two-year community colleges, were being initiated. Table 1 demonstrates a national two-year percentage gain of more than 40 percent in the last two years of the 1960s, percentage gains of more than 30 percent in 1970 and 1971, and percentage gains in the 20s for the remainder of the 1970s through 1982. Since 1983, percentage gains have been less than 20 percent with 30-year lows reached in FY '84 and again in 1988.

If one simply calculates the mean of all annual two-year percentage gains for that 20-year period, one obtains a mean of 24.4. In the average two-year percentage gain, there was an increase of nearly 25 percent in state support of higher education during those two decades. In absolute dollars, there were 4.4 billion dollars appropriated nationally to higher education in 1968, and by 1988 that figure had grown to 34 billion — nearly an eightfold increase in 21 years. Clearly, states support considerable sums to colleges and universities and, in fact, states are the largest partner among all who provide support to public higher education, and a substantial partner in the support of private higher education by means of state student aid and categorical grants.

It is necessary to get more specific by examining trends in state support of higher education. A global statistic of a 24.4 percentage increase as an arithmetic average of two-year percentage gains over two decades is minimally meaningful. What is of greater interest is to examine patterns of gain over time, and some of these patterns are shown in Table 2. When the 20 changes in two-year percentage gains are identified from 1968 to 1988, one discovers that

in those 20 changes there were decreases from the previous year twice as often as there were increases. In 30 percent of the cases, there were increases in two-year gains from the previous year. However, there were decreases in two-year gains in 60 percent of the cases.

B. **Regional Patterns.** Regional patterns are evident from data presented in Table 2. Nine regions were identified using census data with two exceptions. Alaska was treated as a special case because of its unusual economic and fiscal circumstances. The 12 states generally included in a "Southeastern" census region were subdivided into two groups — six states located on the East Coast going from Virginia and West Virginia to the north down to Florida on the south. West Virginia is not a coastal state, but it was included in this grouping. The other six states in the Southeast were labeled "Southeast Central", including Kentucky, Tennessee, Alabama, Mississippi, Louisiana, and Arkansas. The number of states in all regions is reasonably consistent, except for the Southwest Region which includes Arizona, New Mexico, Texas, and Oklahoma. Hawaii was included in the Far West Region.

Looking at increases shown in Table 2, the Far West had the highest percentage above the national figure of a 30 percent increase in two-year gains over the previous year. In 45 percent of the 20 cases, Far West states had increases in two-year gains over the previous year. Next — and still higher than the national average of 30 percent, came the New England and Plains Regions at 40 percent each.

The situation opposite to the "gainers" described above may be found by examining the regional groupings in the "decrease over previous year" category. The regional groupings which had decreases more often than the national average of 60 percent included the Great Lakes and Southeast Central Regions at 65 percent each. In these two regions, there were decreases from the previous year two-year gain 65 percent of the time, compared to the national average of 60 percent.

Next, it is necessary to examine why there were differences among regions in these two categories of gainers and losers. Why were the Far West, New England, and Plains Regions in the category of gainers, and why were the Great Lakes and Southeast Central Regions generally in the loser category?

C. **Analysis of Regional Differences.** The Far West, New England, and Plains Regions emerged as regions which had a larger number of increases in two-year gains over the previous year than the national average and other six regions. The strong performance of the five states comprising the Far West was related to several factors. California has had a consistently strong economy and support of higher education, excepting from 1983 and 1984 because of the effects of Proposition 13. Since 1984, the two-year percentage gains for California were greater than the regional means in 1985 and 1986 and close to the regional mean in 1987 and 1988, although in the last three years, California's two-year gain has decreased from 30 to 18 to 13 percent. Nevada has demonstrated a consistently strong performance in supporting higher education and encountered a single digit gain only in 1985. Hawaii similarly has demonstrated strong gains for higher education. Underlying economic difficulty is more evident if one examines the somewhat lower gains shown in Oregon and Washington. These lower gains have been affected by regional economic problems in both the wood-related and aerospace industries of the Northwest, resulting in less revenue available for services such as higher education.

The strong performance of New England is of interest, because the New England Region was one which experienced economic difficulties early in this 20-year period. Single digit two-year gains were seen in New Hampshire and

Rhode Island in the early 1970s, and in Connecticut and Maine in the mid-1970s. While Massachusetts demonstrated clearly the second highest performance of all states in the nation with a state mean two-year percentage gain of 33.5 percent, it experienced slower rates of gain from 1976 through 1982. While the seven states comprising the Plains Region showed a greater percentage of increases in two-year gain than the national average (40 versus 30 percent) tying New England in this category, this Region also showed a percentage of decreases in two-year gain tying the national average (60 percent). This indicates that the Plains Region was subject to wider swings in two-year percentage gains for higher education, and Table 8 confirms this wider variation with particular note of more recent fiscal difficulties in Iowa, Kansas, Nebraska, North Dakota, and South Dakota. It has been well documented that the underlying economic problem in the Northern Plains is a struggling farm economy.

The Great Lakes and Southeast Central Regions, on the other hand, have had considerable difficulty in supporting higher education, as compared to the other regions of the nation. Both of these regions experienced decreases in two-year gain over the previous year 65 percent of the time in this 20-year period, compared to the national average of 60 percent. The underlying problems in these two regions include the continued economic weakness of the industrialized upper Midwest, especially in Michigan, Ohio, Indiana, and Illinois. Table 5 demonstrates that these four states had substantial difficulties with single digit two-year increases for higher education in Illinois (five in the period examined), Indiana (two single digit years), and Michigan (three single digit years). Wisconsin has less of an industrial base than the other four states, and its difficulties, especially during the 1980s, are demonstrated in Table 5.

An interesting pattern emerges from examining the Southeast Central Region, as shown in Table 7. The Region demonstrated consistently strong two-year percentage gains for higher education — in the 30s and 20s — until 1982 and subsequently when the two-year gains fell to four years of gains in the "teens", followed by a 30 percent two year gain in 1986. The last two years have been marked by single-digit gains of eight and one percent for the entire region. In fact, Table 7 shows negative gains in two of the six states in 1987 and negative gains in four of the six in 1988 (Alabama, Arkansas, Louisiana, and Mississippi). Kentucky and Tennessee remain as the bright spot in the region with much stronger recent two-year percentage gains.

D. Focus on the 1980s. In this analysis, because of greater interest in states' performance in supporting higher education in more recent years, attention will be given to trends in state support encompassing the four most recent years, since FY '85. Figure 1 displays the two national maps illustrating two-year percentage gains from FY '85 to '87, and from FY '86 to '88 (Hines, 1987, 1988). These two maps demonstrate what has been characteristic of the 1980s in state support of higher education. In FY '88, there was a decline in state support of higher education in a majority of states. This decline is shown more specifically in Table 12 where, from FY '87 to '88, there were 28 states experiencing decreasing two-year gains while only 17 states showed increasing two-year gains. Five states had identical rates of two-year gain from FY '87 to '88. The strongest gains occurred in the Northeast with especially strong gains in New England. Texas was the only state among the six states in the Southcentral area located in the bottom quartile of states with an increase in two-year gain. A cluster of Northern Plains states experienced declines or small two-year gains (Montana, North Dakota, and Wyoming). In FY '87, five states had negative two-year gains, and this number grew to eight states in FY '88. Of the five states showing negative gains in FY '87, Texas made a positive gain in FY '88, Mississippi and Montana were less negative in FY '88, and Alaska and Louisiana were more negative in FY '88. In FY '88, Alabama, Arkansas, North Dakota, and Oklahoma joined the negative gain category. On the other hand, five of the six

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New England states showed greater gains in FY '88 with Massachusetts about even with the gain in FY '87. Maine and New Hampshire were the national leaders in FY '88 with two-year gains of 39 and 33 percent respectively.

As shown by the two maps in Figure 1, the national pattern in FY '88 was similar to the pattern shown one year ago. There was some decline in a majority of the states in two-year percentage gains with a fairly sharp regional pattern in FY '88 exemplified by continued resurgence in state support of higher education in New England, the mid-South, Florida, and Nevada along with continued difficulties in the Southcentral and Northern Plains Regions. This pattern demonstrates what Hodgkinson termed a "mid-continental trough" with reference to demographic trends (1985). Rather than focusing on demographics, however, GRAPEVINE data focus on state fiscal support for higher education, and here we have what could be described as a mid-continental economic trough. There is no reason to believe that this pattern is a temporary one. On the contrary, with state economies in this region dominated by activities such as oil production in the Southcentral and agriculture in the Northern Plains Regions, there would be reason to believe that this downward economic trend might well continue.

The larger pattern of trends illustrated by GRAPEVINE data is noteworthy. The New England and Mideastern Regions experienced economic difficulties in the early to mid-1970s. This negative trend was related to the decay of the traditional "smokestack" industries along with labor issues which stimulated a number of factories and industries either to close or to relocate to the "sunbelt" of the Southeast, Southcentral, and Southwestern Regions. Although the New England Region experienced an economic slowdown during the 1970s, only a few of the states in that Region fell to the bottom grouping of states in two-year gains. In the industrialized Midwest and Plains Region, however, selected states fell to either single digit or negative two-year gains on a number of occasions.

By the early 1980s, there were signs of revitalization in New England and in some of the Mideast-Midwestern states with willingness to increase revenue for public services by levying higher taxes. This occurrence made a dramatic difference in state support of higher education in Michigan and in Ohio. The Southeastern states, in the early 1980s, experienced some slowdown in support for higher education except for continued strength shown in Florida, North Carolina, Virginia, and Tennessee.

The general pattern now emerging nationally is one of a bimodal distribution with states falling into one of two categories. On both coasts, there appears to be a pattern of stronger state support of higher education. There are continued problems with state support for higher education especially in the Southcentral and Northern Plains Regions, but also a decline in support in a majority of the other non-coastal states.

E. Reasons for Observed Trends. The principal difference between strong and weak state support of higher education is availability of revenue. Unlike the federal government, states do not engage in deficit financing; rather, they constantly struggle with the balance between available revenues and necessary expenditures. Education, especially if elementary and secondary education is included, comprises the largest item in states' budgets. At a time when enrollment growth has ebbed or ended, and as demand for other services has grown larger in areas such as corrections, mental health, and welfare, states are increasingly strapped for enough revenue. If education no longer has the strength of the argument of enrollment growth as a rationale for increasing state education funding, then it is not illogical that education is now encountering much more difficult times obtaining revenue.

This revenue trend is demonstrated explicitly by the data contained in Table 13. Available revenue is measured by what the projected growth rate will be in the amount of general fund revenues available and anticipated state appropriations. Using GRAPEVINE data, the 50 states were divided into quartiles. The top quartile states, as measured by two-year percentage gains for higher education, are shown on the left, and the bottom quartile states are shown on the right of Table 13. The top quartile states, very clearly, had much greater projected increases in the general fund and anticipated appropriations than did the bottom quartile states. In FY '88, the general fund increase in the top quartile states was 7.2 percent, and in the bottom quartile states it was 5.1 percent. However, the appropriations increases in the top quartile states was 7.7 percent, but in the bottom quartile states there was only a 0.8 percent increase in appropriations.

Table 13 also enables some comparison between FY '88 and FY '87 with regard to these comparative figures. In FY '87, the top quartile states had less of an increase in the general fund (5.6 v. 7.2 percent), but provided a relatively greater amount to higher education (26.1 v. 23.0 percent two-year gain), perhaps illustrating that states made a conscious choice in FY '87 to provide support for higher education in the face of competing demands from other service areas. In FY '88, although states had somewhat more available general fund revenues, they chose to appropriate it to services other than higher education.

States have the opportunity to make conscious choices in supporting services by making appropriations from available revenue. The so-called "victim" perspective described by Halverson where higher education is acted upon and victimized by insidious policymakers is rejected summarily (Halverson, 1975). There is no evidence of higher education being victimized by state lawmakers. What does appear to be operating, however, is higher education presenting an opportunity for advancing economic development, providing manpower training and retraining, and offering the locus and personpower for facilities such as supercomputers, supercolliders, business incubators, and other "high-tech" installations. If state leaders, principally governors and legislative leaders, view higher education as offering advancement in economic and human resource development, this will be reflected in increases in state appropriations for higher education. If higher education is not viewed in this manner, or if state leaders make conscious choices to emphasize other areas of service, such as corrections or mental health, then state appropriations for higher education will remain "flat".

Another fundamental trend is evident from GRAPEVINE data, and that deals with increases in state appropriations for campus operating budgets versus targeted increases for categorical purposes such as economic development and manpower training. The days of automatic increases for higher education may be behind us. What is increasingly evident is that increases for specific purposes are often related to larger state objectives. There are two fundamental views of this new occurrence in higher education. One can hypothesize that higher education has become less insulated and more integrated with state purposes external to the academy, or one can hypothesize that political leaders have now intruded into campus life and, through the campus operating budget, are fully controlling the goals and purposes of higher education. Whether this new level of involvement between higher education and the external world will result in strengthened support and a sense of renewed vision for higher education, or greater political intrusion and less institutional autonomy largely will depend on the quality of the interaction and the relationship among the critical actors (Newman, 1987). "New money" for higher education, in other words, increasingly will be tied to specific objectives. These objectives can be defined with or without the involvement of higher education leaders. If defined without higher education's involvement and input, then the hypothesis of higher education being

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acted upon by external officials may be largely accurate. If higher education demonstrates the interest as well as the capacity for continued involvement, then the state and higher education may be able to work out a relationship where state and higher education purposes, while not identical, will be congruent, and where partnership activities will be able to benefit both higher education and state government.

There are an increasing number of instances where these partnerships between state government and higher education seem to be working. Funding for higher education in New Jersey moved away from a strict formula to a base plus priority funding for specified purposes (Wallace, 1987). Two types of incentive funding are utilized in New Jersey, and these include challenge grants where campuses direct activities toward objectives which have been defined mutually by the state and higher education leadership, and competitive grants where a model similar to the federal Fund for Improvement of Postsecondary Education is utilized. Another example are the Ben Franklin Partnerships in Pennsylvania or the Thomas Edison program in Ohio where higher educational institutions are actively involved in promoting activities designed to stimulate economic development (Jaschik, 1987).

Another factor related to the current pattern of state support for higher education is the place of the education reform movement in the states. In July, 1987, legislative fiscal officers were asked by the National Conference of State Legislatures to identify the top three fiscal issues in their respective states. The leading issues were taxation, education, and general budget policy in that order of priority. In 22 states, education was the top priority issue, but for most of these states, elementary-secondary education was the concern, not higher education. Higher education was identified as the top priority fiscal issue only in Arizona and Idaho. The greater concern about taxation and a possible ebbing of the education reform movement is seen in the following quote from NCSL:

The main reason why taxation was the top fiscal issue was federal tax reform which had a direct impact on most states' revenue. The federal example also inspired many states to reform their own income taxes to varying degrees. A second reason why taxation was a leading issue was the need for revenue in some states plagued by poor economies and anemic revenues. The decline in education's rank as the leading fiscal issue is consistent with the decline in growth of education spending. The margin by which the growth rate of aggregate education spending exceeded the growth rate of general fund spending was less than it has been in the past several years. This could indicate that the momentum for education reform has subsided, in part because states have already made substantial increases in support of education (Gold et al, 1987).

Still another visible issue is student aid. While increases in campus operating budgets have shown less rapid gains recently, there have been somewhat greater gains in appropriations for student aid in many states. In FY '88, 33 states reported separate appropriation items for state student aid (usually to a state scholarship commission). Sixty-one percent of these states (20 of 33) appropriated at least as much or more money for student aid in FY '88 than they did in FY '87. The student aid category provides another example of spending for categorical purposes. It also is a category which is not lost to the legislators in terms of the political benefit to increasing the support directly to students.

CONCLUDING OBSERVATIONS

Based upon this contextual analysis of two-year percentage gains in the 50 states in supporting higher education, some concluding observations can be made. It is again emphasized that these data are limited to state tax appropriations as only one revenue source, admittedly the principal source of revenue, in the states. Additional analysis is needed including other revenue sources such as provided by Kent Halstead, the State of Washington Survey, and the Department of Education State Higher Education Profiles.

1. The overall trend in state support for higher education, as measured by 21 years of two-year percentage gain figures, is downward from gains of 40 percent or more in the 1960s to the 30 percent range in the early 1970s to the 20 percent range in the late 1970s to the teens in the 1980s. In absolute dollars, states have provided more to higher education each year, but in percentage gains there has been a consistent and significant lessening in support.

2. There is an overall "ebb and flow" in the pattern of support for higher education in virtually all of the states. One finds from these data that states have high and low points in supporting higher education. More consistent rates of gain and economic resurgence largely explain the relatively stronger showing of the Far West, New England, and Southeast Atlantic Regions in the 1980s. Economies oriented disproportionately to industries such as wood in the Northwest, oil in the Southcentral Region, and agriculture in the Northern Plains Region explain much of the difficulties encountered recently by those states.

3. The level at which state governments are providing appropriations to higher education is a function of the amount of general fund revenue available and the willingness of the state to allocate some of the revenue to higher education as part of the larger appropriations process. Underlying taxation issues and the basic health of a state's economy are, therefore, major factors in the amount of revenue which becomes available for services including education and higher education.

4. Increasingly, states are experiencing a "flat" record of performance in providing increases to campus operating budgets; rather, "new money" tends to be targeted to specific purposes either defined by states or in which states serve as a major partner along with higher education.

5. Current trends indicate that future funding of higher education increasingly will involve state governments as active partners in providing funds for the achievement of specific purposes. The nature of the involvement of higher education in this enterprise largely will depend on the response of higher education to these new funding realities.

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TABLE 1
 PERCENTAGES OF TWO-YEAR GAIN FOR THE NATION
 1968-1988

Year	Percentage of Two Year Gain (50 States)
1968	44
1969	43
1970	39
1971	39
1972	23
1973	23
1974	25
1975	29
1976	28
1977	24
1978	20
1979	22
1980	24
1981	23
1982	20
1983	16
1984	11
1985	16
1986	19
1987	14
1988	11
Mean	24.4
Median	27.5

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TABLE 2

PERCENTAGE OF INCREASE OR DECREASE IN TWO-YEAR
GAIN OVER THE PREVIOUS YEAR BY CENSUS REGION
1968 to 1988 (N=20)

Census Region	Decrease over Previous Year		Remained the Same		Increase over Previous Year	
	No.	%	No.	%	No.	%
National (all 50 states)	12/20	60	2/20	10	6/20	30
New England (6 states)	10/20	50	2/20	10	8/20	40
Mideast (5 states)	11/20	55	3/20	15	6/20	30
Great Lakes (5 states)	13/20	65	3/20	15	4/20	20
Plains (7 states)	12/20	60	0	0	8/20	40
Southeast Atlantic (6 state)	10/20	50	3/20	15	7/20	35
Southeast Central (6 states)	13/20	65	0	0	7/20	35
Southwest (4 states)	10/20	50	3/20	15	7/20	35
Rocky Mountain (5 states)	11/20	55	2/20	10	7/20	35
Far West (5 states)	10/20	50	1/20	5	9/20	45
Alaska	12/20	60	2/20	10	6/20	30
Mean	56		9.5		34	
Median	57.5		7.5		32.5	
Mode	60, 50		15, 10		35	

TABLE 3

PERCENTAGES OF TWO-YEAR GAIN FOR NEW ENGLAND REGION, 1968-1988

YEAR	Conn.	Maine	Mass.	New Hamp.	R.I.	Vt.	Annual Mean
1968	73	42	80	26	43	61	54
1969	76	33	57	42	40	56	51
1970	50	43	48	16	57	31	41
1971	58	56	68	7	46	35	45
1972	39	18	53	6	5	17	23
1973	17	21	33	18	28	14	22
1974	7	30	36	39	39	16	28
1975	19	36	29	33	33	20	28
1976	14	11	18	29	13	9	16
1977	8	-4	16	20	38	0	13
1978	20	1	16	2	21	14	12
1979	22	15	13	20	18	31	20
1980	11	25	25	8	20	18	18
1981	21	28	18	20	18	15	20
1982	15	17	16	32	19	22	20
1983	20	15	28	7	16	24	18
1984	19	15	29	5	17	19	17
1985	20	11	36	21	16	13	20
1986	21	31	31	22	13	12	22
1987	22	37	27	31	12	12	24
1988	24	39	26	33	14	15	25
State Mean	27.4	24.8	33.5	20.8	24.8	21.6	25.6 GRAND MEAN

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TABLE 4

PERCENTAGES OF TWO-YEAR GAIN FOR MIDEAST REGION, 1968-1988

YEAR	Delaware	Maryland	New Jersey	New York	Pennsylvania	Annual Mean
1968	53	40	65	52	46	51
1969	61	30	26	37	93	49
1970	50	36	51	45	40	44
1971	44	52	63	55	33	49
1972	36	54	46	29	10	35
1973	28	32	53	10	26	30
1974	45	21	39	22	21	30
1975	43	14	22	41	22	28
1976	25	20	4	28	24	20
1977	21	23	9	8	15	15
1978	5	28	27	3	9	14
1979	13	14	35	14	6	16
1980	21	19	18	19	11	18
1981	31	26	17	16	12	20
1982	35	19	16	20	12	20
1983	21	18	15	22	12	18
1984	8	13	14	17	10	12
1985	10	12	18	17	13	14
1986	18	21	27	17	16	20
1987	14	17	19	15	12	15
1988	11	16	20	15	12	15
State Mean	28.2	25.0	28.8	23.9	21.7	25.4 GRAND MEAN

TABLE 5

PERCENTAGES OF TWO-YEAR GAIN FOR GREAT LAKES REGION, 1968-1988

YEAR	Illinois	Indiana	Michigan	Ohio	Wisconsin	Annual Mean
1968	47	47	31	77	68	54
1969	47	39	19	87	64	51
1970	35	16	32	60	26	34
1971	47	20	31	50	16	33
1972	16	31	24	23	37	26
1973	9	21	22	25	42	24
1974	16	16	22	21	34	22
1975	19	17	25	13	27	20
1976	17	27	20	31	10	21
1977	9	30	13	30	12	19
1978	15	19	19	22	19	19
1979	19	17	24	20	19	20
1980	18	17	22	21	17	19
1981	18	20	3	19	18	18
1982	13	17	5	10	14	12
1983	4	6	14	18	8	10
1984	8	4	5	20	12	10
1985	14	17	16	13	12	14
1986	19	19	26	23	10	19
1987	18	20	22	25	8	19
1988	1	16	14	14	8	11
State Mean	19.5	20.8	19.5	29.6	22.9	22.6 GRAND MEAN

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TABLE 6

PERCENTAGES OF TWO-YEAR GAIN FOR SOUTHEAST ATLANTIC REGION, 1968-1988

YEAR	Florida	Georgia	North Carolina	South Carolina	Virginia	West Virginia	Mean
1968	34	72	40	64	83	38	55
1969	64	90	41	44	68	52	60
1970	55	42	65	49	58	24	49
1971	54	32	54	55	27	19	40
1972	25	31	27	41	31	26	30
1973	25	20	27	36	37	33	30
1974	40	34	28	70	34	18	37
1975	36	33	51	72	30	14	39
1976	19	10	28	47	34	26	27
1977	6	12	17	13	30	29	18
1978	14	22	28	22	25	31	24
1979	39	22	33	30	42	33	33
1980	21	34	32	36	25	30	30
1981	14	34	13	43	19	21	24
1982	11	8	18	38	29	12	19
1983	6	6	18	26	13	11	13
1984	9	7	18	11	15	9	12
1985	23	26	11	11	10	27	18
1986	53	52	8	14	15	35	30
1987	11	10	13	-3	-5	23	8
State Mean	26.6	28.4	26.3	34.2	29.5	24.3	28.4 GRAND MEAN

TABLE 7

PERCENTAGES OF TWO-YEAR GAIN FOR SOUTHEAST CENTRAL REGION, 1968-1988

YEAR	Alabama	Arkansas	Kentucky	Louisiana	Mississippi	Tennessee	Mean
1968	44	36	50	29	42	57	43
1969	7	55	31	14	30	46	31
1970	25	22	29	7	30	35	25
1971	28	23	32	23	51	35	32
1972	47	10	26	41	62	31	36
1973	42	3	28	21	35	30	27
1974	38	40	23	13	34	29	30
1975	39	46	21	26	34	32	33
1976	52	41	25	25	32	16	32
1977	39	39	30	16	18	15	26
1978	14	22	28	22	25	31	24
1979	39	22	33	30	42	33	33
1980	21	34	32	36	25	30	30
1981	14	34	13	43	19	21	24
1982	11	8	18	38	29	12	19
1983	6	6	18	26	13	11	13
1984	9	7	18	11	15	9	12
1985	23	26	11	11	10	27	18
1986	53	52	8	14	15	35	30
1987	11	10	13	-3	-5	23	8
1988	-10	-7	15	-5	-3	17	1
State Mean	26.3	25.2	23.9	20.8	26.3	26.0	25.1 GRAND MEAN

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TABLE 8

PERCENTAGES OF TWO-YEAR GAIN FOR PLAINS REGION, 1968-1988

YEAR	Iowa	Kansas	Minnesota	Missouri	Nebraska	North Dakota	South Dakota	Mean
1968	40	22	46	50	52	42	7	37
1969	40	26	45	51	52	42	20	39
1970	19	35	35	37	45	17	7	20
1971	19	19	37	17	46	17	24	26
1972	14	6	28	17	8	16	20	16
1973	16	14	21	23	17	18	7	17
1974	10	29	14	21	31	17	19	21
1975	18	36	11	22	50	15	41	28
1976	35	41	34	18	47	54	37	38
1977	35	37	32	20	43	54	19	34
1978	25	23	20	22	31	25	15	23
1979	21	28	21	20	15	25	19	21
1980	24	26	21	21	15	24	21	22
1981	21	17	22	24	18	24	12	20
1982	13	17	12	12	24	43	5	18
1983	20	20	9	1	14	43	0	15
1984	16	10	12	12	7	0	-7	7
1985	7	11	12	12	12	0	9	9
1986	7	14	16	25	10	13	16	14
1987	3	4	15	19	2	11	15	10
1988	15	5	15	12	8	-2	6	8
State Mean	19.4	21.0	22.8	21.7	26.0	23.7	14.9	21.1 GRAND MEAN

TABLE 9

PERCENTAGES OF TWO-YEAR GAIN FOR ROCKY MOUNTAIN REGION, 1968-1988

YEAR	Colorado	Idaho	Montana	Utah	Wyoming	Mean
1968	41	30	45	35	27	36
1969	36	33	31	36	27	33
1970	41	49	25	19	32	33
1971	57	53	20	31	32	39
1972	30	15	15	26	3	18
1973	4	17	6	26	25	16
1974	18	18	20	31	24	22
1975	42	36	24	32	32	33
1976	31	52	24	32	44	37
1977	23	40	32	36	39	34
1978	20	25	17	33	27	24
1979	15	21	17	28	29	22
1980	12	11	16	24	20	17
1981	11	13	21	22	50	23
1982	24	12	38	20	60	31
1983	33	10	42	22	38	29
1984	20	6	24	14	22	17
1985	10	17	13	18	4	12
1986	11	21	5	26	7	14
1987	10	12	-4	9	7	7
1988	10	17	-1	5	2	7
State Mean	23.8	24.2	20.5	25.0	24.9	24.0
						GRAND MEAN

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TABLE 10

PERCENTAGES OF TWO-YEAR GAIN FOR SOUTHWEST REGION, 1968-1988

YEAR	Arizona	New Mexico	Oklahoma	Texas	Mean
1968	31	34	12	42	30
1969	36	20	26	58	35
1970	42	25	27	45	35
1971	51	33	32	33	37
1972	49	26	33	23	33
1973	35	23	18	35	28
1974	39	21	21	16	24
1975	35	20	29	10	24
1976	20	35	33	63	39
1977	21	34	44	72	43
1978	33	29	36	27	31
1979	18	36	29	13	24
1980	12	31	32	25	25
1981	29	25	38	41	33
1982	32	36	42	45	39
1983	15	28	47	39	32
1984	10	9	20	20	15
1985	29	20	-4	16	15
1986	28	17	9	-3	13
1987	27	2	5	-9	6
1988	14	4	-9	2	3
State Mean	28.9	24.2	23.4	29.1	26.9 GRAND MEAN

TABLE 11

PERCENTAGES OF TWO-YEAR GAIN FOR FAR WEST AND ALASKA, 1968-1988

YEAR	California	Nevada	Oregon	Washington	Hawaii	Mean	Alaska ^a
1968	29	66	37	44	55	46	41
1969	31	53	22	44	30	36	42
1970	40	26	30	39	59	39	38
1971	28	29	53	39	78	45	64
1972	14	26	18	0	43	20	64
1973	24	30	11	0	17	16	29
1974	33	42	20	22	-4	23	20
1975	35	44	21	22	-10	22	64
1976	33	42	29	23	41	34	126
1977	34	42	36	23	38	35	80
1978	27	21	24	23	15	22	21
1979	27	18	15	23	16	20	11
1980	43	25	26	23	9	25	13
1981	35	24	23	23	19	25	14
1982	18	16	10	6	30	16	69
1983	4	16	-4	6	37	12	79
1984	-5	14	8	14	17	10	23
1985	16	8	17	14	1	11	14
1986	30	25	14	5	15	18	-8
1987	18	30	19	9	18	19	-11
1988	13	19	12	14	22	16	-33
State Mean	25.1	29.3	21.0	19.8	26.0	24.3 GRAND MEAN	37.0

^aThe Alaska data are included here but treated as a somewhat special case.

Alaska data are not included in the means for the region but are included in the national mean (Tables 1 & 2).

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TABLE 12

SEVENTEEN STATES WITH INCREASING 2-YEAR GAINS, FY87 to FY88			TWENTY-EIGHT STATES WITH DECREASING 2-YEAR GAINS, FY87 to FY88		
State	FY1987	FY1988	State	FY1987	FY1988
Connecticut	22	24	Alabama	11	-10
Hawaii	18	22	Alaska	-11	-33
Idaho	12	17	Arizona	27	14
Iowa	3	15	Arkansas	10	-7
Kansas	4	5	California	18	13
Kentucky	13	15	Delaware	14	11
Maine	37	39	Florida	24	21
Mississippi	-5	-3	Georgia	17	14
Montana	-4	-1	Illinois	18	1
Nebraska	2	8	Indiana	20	16
New Hampshire	31	33	Louisiana	-3	-5
New Jersey	19	20	Maryland	17	16
New Mexico	2	-4	Massachusetts	27	26
Rhode Island	12	14	Michigan	22	14
Texas	-9	1	Missouri	11	12
Vermont	12	15	Nevada	25	19
Washington	9	14	North Carolina	22	19
-----			North Dakota	11	-2
Five States with Identical Rates of Gain, FY87 and FY88			Ohio	25	14
-----			Oklahoma	5	-9
State			Oregon	19	12
-----			South Carolina	15	5
Colorado	10	10	South Dakota	19	6
Minnesota	15	15	Tennessee	23	17
New York	15	15	Utah	9	5
Pennsylvania	12	12	Virginia	26	19
Wisconsin	8	8	West Virginia	10	2
-----			Wyoming	7	2

TABLE 13

12 TOP QUARTILE STATES				12 BOTTOM QUARTILE STATES			
General Fund Increase*	State Approp. Inc.*	Higher Educ. Inc.**		General Fund Inc.*	State Approp. Inc.*	Higher Educ. Inc.**	
(1-yr)%	(1-yr)%	(2-yr)%	(5)	(1-yr)%	(1-yr)%	(2-yr)%	(8)
(1)	(2)	(3)	(4)	(6)	(7)	(8)	
Maine	7.6	11.0	39.3	Wyoming	-5.8	0.0	2.3
New Hampshire	3.1	10.8	33.1	West Va.	-6.9	-9.4	1.5
Massachusetts	***	***	25.9	Illinois	3.1	2.9	1.3
Connecticut	4.6	12.6	24.1	Texas	16.2	6.8	1.2
Hawaii	3.1	8.6	22.1	Montana	5.7	-7.1	-1.0
Florida	14.3	10.5	20.9	N. Dak.	16.6	-4.6	-1.9
New Jersey	8.1	11.4	19.7	Miss.	1.7	7.5	-3.1
Nevada	7.9	0.9	19.4	La.	9.8	1.3	-4.7
N. Car.	9.3	3.8	19.0	Ark.	7.5	7.9	-6.7
Virginia	8.3	6.7	18.8	Okla.	9.0	0.2	-9.3
Idaho	7.6	7.9	16.9	Alabama	5.4	4.0	-9.6
Tennessee	5.8	0.4	16.6	Alaska	-1.4	0.5	-33.5
Mean in FY88	7.2	7.7	23.0	Mean in FY88	5.1	0.8	-5.3
Mean in FY87	5.6		26.1	Mean in FY87-2.1			-0.4

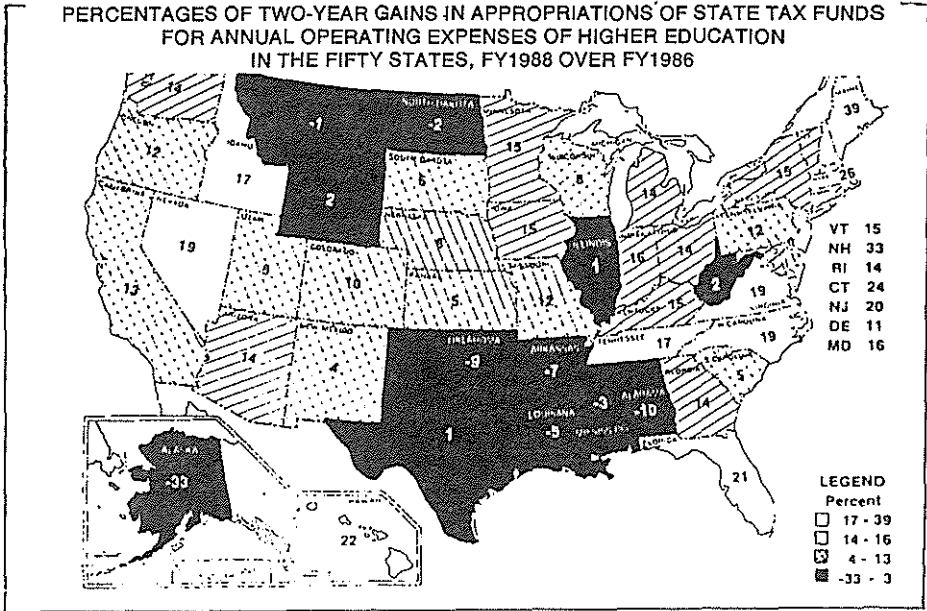
* Reported as Projected Growth Rates of General Fund Revenues and Appropriations, FY1987 to FY1988 (Percent), Table 4 in State Budget Actions in 1987 by Steven D. Gold, Corina L. Eckl, and Brenda M. Erickson, Denver: National Conference of State Legislatures, August, 1987, p. 11.

** Two-year gains (in percent) of state tax appropriations for the operating expenses of higher education, as reported in GRAPEVINE. Identification of top and bottom quartile states also based on data reported in GRAPEVINE.

*** Not reported

FIGURE 1

PERCENTAGES OF TWO-YEAR GAINS IN APPROPRIATIONS OF STATE TAX FUNDS FOR ANNUAL OPERATING EXPENSES OF HIGHER EDUCATION IN THE FIFTY STATES, FY1988 OVER FY1986



PERCENTAGES OF TWO-YEAR GAINS IN APPROPRIATIONS OF STATE TAX FUNDS FOR ANNUAL OPERATING EXPENSES OF HIGHER EDUCATION IN THE FIFTY STATES, FISCAL 1987 OVER FISCAL 1985

