

# **The Implications of Tax Limitation Legislation: A Simulation of Effects on Illinois Community Colleges**

**Betty Doversberger**

**Center for the Study of Educational Finance  
Department of Educational Administration and Foundations  
College of Education and the Graduate School  
Illinois State University  
Normal, Illinois 61761**

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## Abstract

This study examined effects of three limitations on local taxes, two limitations on state taxes, and combinations of these limitations on Illinois community college finance and revenue equity. Effects were investigated on: (1) statewide community college revenues; (2) revenues of individual community college districts; and (3) revenue equity as measured by the criteria of fiscal neutrality and permissible variance.

The population of the study consisted of all public community college districts in Illinois, except one district which operates without local tax revenue. Data for fiscal year (FY) 1978, FY 1981, and FY 1984 were gathered from published reports of the Illinois Community College Board (ICCB), reports of the individual districts to the ICCB, and questionnaires sent to the individual districts. Twenty-nine districts (76.3 percent of the population) responded to the questionnaire. Means of fiscal variables for this data-producing sample and the population differed by less than 2 percent.

The percentage decrease in statewide community college revenues by FY 1984 projected in this study as the result of various tax limitations ranged from 2 percent to 10 percent. Combinations of state and local tax limitations increased the stringency of effects on revenues. Individual districts showed differing effects on revenues due to differences in dependence on the various funding sources. Several districts indicated that tax rates or tuition rates might be increased to compensate for revenues lost due to tax limitation. Increases in tax rates would be curtailed under limitations on tax rate increases, however.

Both fiscal neutrality and revenue disparity would be improved by limitations on local taxes, with adverse effects resulting from limitations on state taxes. Combinations of state and local limitations would result in reduction in the beneficial effects on revenue equity caused by local tax limitation. Increased tuition rates and tax rates projected by some districts would result in adverse effects on revenue equity.

## Introduction

The Center for the Study of Educational Finance was established for the purpose of evaluating Illinois educational fiscal policy. The majority of Center publications have focused on effects on equity changes in the general purpose grant-in-aid system for K-12 education. We have, however, been mindful of the need for research into other aspects of educational finance, and have diversified our efforts in order to broaden the scope of our services.

A segment of public education which has recently come under Center scrutiny is the state-supported community college system. With the passage of the Illinois Public Junior College Act in 1965, existing public junior colleges were coordinated into a statewide system, and the establishment of additional districts was stimulated. By 1977, there were thirty-nine public community college districts in Illinois, operating fifty-one colleges. The increase in enrollments was five-fold in slightly over a decade, from approximately 66,000 in 1965 to over 330,000 in the fall of 1977. State funding of the operating expenses of community colleges rose from under \$25 million to over \$100 million in this same period. State funding represented approximately 40 percent of total operating revenues of the community colleges in Illinois in fiscal year (FY) 1977. Additional revenues of almost \$100 million were generated through tuition and fees. Total operating revenues of the public community colleges have been predicted to reach almost \$450 million by FY 1984.(1)

It seems appropriate, therefore, for the Center to devote some of its efforts to an investigation of community college finance and revenue equity. Three recent studies have addressed these issues. In 1979, we published a monograph which examined trends in Illinois community college finance and the impact which would have been felt if tax limitation legislation had limited the rate of growth of local and state tax revenues from FY 1971 through FY 1977.(2) Another recently completed study, which will soon be published by the Center, has examined the effects on equity of changes in the proportion of revenues from the three primary sources, state apportionment, local taxes, and tuition and fees, due to changes in the funding formula.(3) The study reported in this publication utilized a computer simulation to predict future effects on community college finance and revenue equity of various possible limitations on state and local taxes.(4)

### Philosophical Bases of Community College Funding

Much of the philosophy of community college funding has been an outgrowth of the primary origin of the community college, K-12 education. The community college is, however, a segment of the higher education system, and its funding is a hybrid of K-12 and higher education. The addition of tuition and fees to the primary revenue sources for K-12 education, local taxes, and state apportionment has added one more complicating factor to the attainment of philosophical goals.

Three major philosophical goals of community college finance can be identified. One is the underlying philosophy that public education should be available to all who desire it and are able to benefit from it. A second is the historical belief that local schools, including community colleges, should be locally controlled. The third, pressure to provide equitable distribution of resources, is exerting increasing influence on community college finance.

Accessibility of public education has been a goal of American education since colonial days. Tuition-free primary schools were started in the early nineteenth century, with the concept of tuition-free secondary education established in the courts in the Kalamazoo case of 1874.(5) To assure accessibility to all, community colleges began as no-tuition or low-tuition institutions. The concept of tuition-free education through the fourteenth grade has been advocated by many and was endorsed in 1947 by the President's Commission on Higher Education.(6) However, the comprehensive spectrum of programs expected of the community college has made it necessary to impose tuition and other fees in order to provide supplementary funds. By 1965, only four of the states which had established community colleges offered this education tuition-free. By 1971, California had become the only remaining state which did not charge tuition. For states other than California, tuition provided an average of 19 percent of community college revenues, closely comparable to the 19.5 percent contributed by tuition in public universities and 18.5 percent in public four-year colleges.(7)

Local control of local schools has also been a long-standing goal of American public education. Local taxes supported early primary schools, with this local support eventually extending upward to the fourteenth grade. Although the thirteenth and fourteenth years of education were eventually severed from the secondary school system, the philosophy of local support with local control continued for the community college system. In the majority of states, part of the control for the community colleges presently comes from local taxes, with governance resting with a locally elected board and, at the state level, either a governing board or a coordinating board. A 1976 study showed that seventeen states levied no local taxes for the support of community colleges. Six of these states maintained varying degrees of local control of the community colleges, however.(8)

The third philosophical consideration, that of equitable distribution of resources, has been addressed with respect to K-12 education in numerous Center publications.(9) The issue of equal educational opportunity for all students is essentially the same for community colleges as for K-12 education. The concept of equity is a complicated one, however. One view of equity is that districts of differing levels of wealth should not bear equally the costs of education. A second is that a minimum level of educational opportunity should be available in all districts. Equity among taxpayers presents a different view, with the availability of equal educational services in all districts taxing at the same rate seen as a goal. The measurement of district wealth presents a further problem. The measurement criterion has traditionally been property wealth, but poor families do not always live in districts with low property valuation per pupil. As Augenblick has stated,

Depending on the group for whom equity is to be achieved and the objects that must be distributed equitably, there are different principles of equity that must be considered and alternative measures of the level of equity being achieved.(10)

The funding systems for community colleges which have evolved across the country reflect differing emphases on the philosophical considerations which underlie educational finance. The funding system in effect in Illinois shows the influence of all of the philosophical considerations discussed above.

### The Illinois Community College Funding System

With one exception, all of the community college districts in Illinois are funded in part by local taxes, with the local constituency exercising control over the maximum allowable tax rate for each district. One district, the State Community College of East St. Louis, was established with the provision that it will levy no local taxes, due to the fact that it is located in a poverty area. Each district in the state, including the State Community College, is governed by a local board of trustees. The local boards exercise a great deal of autonomy in such areas as fiscal management, personnel management, and program planning. The statewide coordinating board, the Illinois Community College Board (ICCB), determines the distribution system for state aid, which has programmatic implications, and retains the right of approval of credit-generating courses and programs. However, the bulk of the funds which are distributed by the state may be used by the districts as they see fit.

Concern for the equitable distribution of resources has been shown from the beginning, with equalization grants recommended by the Illinois Board of Higher Education (IBHE) in 1964 and implemented seven years after the Illinois Public Community College Act was passed. While studies by Augenblick(11) and Kinawong(12) have shown that there are still inequities in the state aid system being used in Illinois, the state has shown continued commitment to the principle of equalization, increasing the amount distributed in equalization grants from \$1.05 million in FY 1972 to over \$17 million in FY 1980.

In 1964, the IBHE addressed the issue of accessibility through the recommendation that community college education should be available to Illinois residents tuition-free. The Illinois Public Junior College Act of 1965, however, left the question of whether to charge tuition to the discretion of the local boards of trustees.(13) Eight of the thirty-nine districts elected not to charge tuition at the time they opened their doors. By FY 1973, the number of districts not charging tuition had decreased to two, and since FY 1975, only one district has remained tuition-free. This district does charge fees amounting to about \$4 per full-time equivalent (FTE) student. In FY 1979, tuition charges in those districts charging tuition ranged from \$6 to \$20 per semester hour.(14) When fees are added, the direct charges to students for instruction are higher in some Illinois community colleges than in some of the state universities.

Accessibility is facilitated in other ways, however. With the exception of those areas of the state which are not yet in a community

college district, an effort has been made to place a community college within commuting distance of all Illinois residents. In addition, the distribution of disadvantaged student grants by the state has provided incentive for the development of programs to serve the economically disadvantaged. While these funds do not provide direct financial aid to the poorer students, they do add to the state share of total revenues and also have an effect on accessibility by providing remediation for educational deficiencies.

Concern for a fourth philosophical consideration is also evident in the evolution of the present Illinois community college funding system. One of the missions of the community college is to provide a comprehensive spectrum of services--to include the first two years of baccalaureate education, career education, general studies, community education, community service activities, and student services.(15) There is wide variation in the cost of these services. The distribution of state aid in the form of a flat grant at a single rate per semester hour offers a disincentive to offer high-cost programs. A differential funding system has been developed, which allows a uniform level of local funding for all programs, with the state assuming most of the extra expense of high-cost programs.(16)

#### The Implications of Tax Limitation Legislation

In June 1978, the financing system for the California community colleges was disrupted by the passage of Proposition 13. The reduction in local tax collections effected by this measure reduced the funds available to local governmental and educational agencies by 57 percent.(17) Dependence on local revenues was greater in the community colleges in California than in other states. With no tuition charged in the community colleges, between 45 and 55 percent of their financing came from local taxes.(18) In the aftermath of Proposition 13, total funds available statewide to the community colleges were reduced by about \$498 million, or close to 39 percent.(19) A comparison with the change in the financing of elementary and secondary education may be illustrative. For this segment of education, the local share of educational funding is expected to drop from 52 percent to 28 percent. The significance of this change is highlighted by the fact that in only six other states is the local share of elementary and secondary educational funding less than 30 percent.(20)

The long-term effects of this drastic reduction in local revenues were not immediately evident. The state was able to provide supplemental funds to local jurisdictions by distributions from the \$6 billion surplus in the General Fund. The community colleges received between 85 and 90 percent of FY 1978 budgets for operation in FY 1979. The passage of a further tax limitation measure in November 1979 has further reduced the ability of the state to provide extra funds in the future. Proposition 4, the Gann Initiative, which was passed by an overwhelming majority of the California electorate, limits growth in the

appropriations made by state and local governments to the amount appropriated in 1978-79, adjusted for changes in the cost of living and population changes. It has been estimated that if this limit had been in effect over the past ten years, spending at both the state and the local level would have increased by 100 percent in that decade. The actual increase in state spending in this period was 200 percent, and at the county and city level of government, the actual increase was 170 percent. (21)

The effects of reduced funds have not been manifested in immediate full-time faculty reductions, program terminations, or campus closings. Effects which will be noticeable as time progresses will result from the absence of salary increases, vacant positions left unfilled, cutbacks in equipment purchases, and postponement of maintenance. (22) Also of concern is the effect on local control of the community colleges. It has been said, in analyzing long-term implications of the tax revolt, that "Proposition 13 . . . represents an inexorable move away from local control toward higher level funding and controls." (23)

Analysts do not agree on the message intended by the California voters who approved Proposition 13. One view is that it was a protest against government control and inefficiency. Another view is that:

The tax battles, in sum, are over who shall pay . . . and not over how much shall be paid. Thus it is not over the proper size or tasks of government. (24)

In another statement supporting this view, it has been said that:

One must not forget that five years earlier California had rejected a much more general tax limitation measure sponsored by Governor Reagan. It is quite probable that a great many pro-Proposition 13 votes were cast by people who wanted to see much of the burden that had fallen upon the local property tax shifted to other tax sources and probably to higher levels of government. (25)

An alternative viewpoint is that:

. . . concern over government spending and taxes is primarily a concern over the total tax burden and the aggregate amount of spending at all levels of government. This in turn, of course, is fostered by the rapid growth of government spending relative to income and the changing pattern of government spending by level and by function. . . it is caused primarily by the generally unrecognized complete lack of growth in real private income since 1973. Stated simply, all growth in income in the United States since 1973 has been either eaten away by inflation or gone into government spending! (26)

Tax limitation measures did not originate in California. Ohio has had a ceiling on property tax increases for almost fifty years. Before Proposition 13, tax or expenditure limitations had been passed in Alaska, Indiana, Kansas, Washington, Wisconsin, New Jersey, Colorado, Michigan, and Tennessee.(27) Nevertheless, Proposition 13 did start what might be termed a tax revolt. Voters in sixteen states voted on some question concerning tax limitation in the November 1978 elections. In four states, Arkansas, Colorado, Nebraska, and Oregon, tax limitation measures were defeated. Illinois and Massachusetts voters approved non-binding propositions supporting the principle of tax limitation. A Nevada measure limiting property taxes to 1 percent of market value won voter approval, but must be approved again by voters in 1980 if it is to take effect. Future tax increases in South Dakota will require a two-thirds majority of the legislature. In Missouri, the legislature was empowered to roll back property tax rates following reassessment if the local taxing body fails to make adjustments. In the remaining seven states, tax limitations which will immediately reduce taxes were approved by the voters. Property taxes were limited to 1 percent of market value in Alabama and Idaho. State spending was limited in Arizona and Hawaii. In North Dakota, state income tax rates were reduced for individuals by approximately 45 percent and were increased slightly for corporations. Texas voters approved increased tax exemptions from property taxes and limitations on state appropriations. In Michigan, limits on increases in both property taxes and state expenditures were approved.(28)

Following the 1978 elections, the Education Finance Center of the Education Commission of the States polled public opinion about the tax limitation measures which had been on the ballot in Colorado, Idaho, Michigan, and Oregon. In summarizing their conclusions, the authors stated that:

. . . people had positive attitudes toward schools in their communities. This was reflected in many ways. People felt that locally provided services are the most valuable. They had relatively more confidence in school personnel than other public servants . . . People feel that federal income taxes are unfair. They feel that the government is undertaking too many public services while not doing enough to reduce inflation. Our findings confirm that taxpayer unrest is a reflection of general economic problems and distrust of big government.(29)

They concluded that continued movement away from property taxes toward statewide sales or income taxes will improve finance equity and promote school finance reform. Centralization of control should be avoided, however, and efficiency in the provision of educational services should be improved.(30)

It has been pointed out that tax limitation at the state level has an adverse effect on finance equity. Hubbard and Hickrod, in investigating whether tax reform is compatible with the equal educational opportunity movement, concluded that:



. . . the answer is yes, if one is looking only at the local side of the revenue picture. Tax caps, or spending increase limitations, are not only reconcilable with equalizing educational opportunity, they have indeed formed an important part of the strategy of states like Florida, New Mexico, and Minnesota in bringing about less expenditure disparity between school districts. Basically, the strategy in these states has been to raise the foundation level, while simultaneously shutting off the revenues raised on the local side through very restrictive tax caps. However, the advocates of spending limitations usually propose limiting not only the local side of the revenue picture, but also limiting the state spending for education as well. Very restrictive spending or taxing limitations on the state spending side are simply not compatible with equal educational opportunity reforms and the Serrano type decisions of many state courts. Almost all reforms addressing the Serrano problem call for an increase in state funding of education. Under very restrictive state tax caps or spending limitations, it would not be possible to raise enough state dollars to offset the interdistrict differences in local district wealth, which are still the primary reason for interdistrict differences in expenditures per pupil.(31)

#### Tax Limitation Prospects in Illinois

Following voter approval of the Thompson Proposition supporting the concept of tax limitation in November 1978, fourteen tax limitation measures were introduced in the Eighty-first Illinois General Assembly.(32) None of these proposals was passed. In the fall of 1979, however, a bill was passed reducing by one cent the sales tax on food for human consumption and on drugs.

The issue of tax limitation legislation is still very much alive. Tax limitation proposals appear on the 1980 ballots in at least nine states. Illinois voters have expressed their desire for tax relief. Tax limitation was strongly debated by the Eighty-second General Assembly in January 1980. A measure supported by the Governor, which would have limited increases in local property taxes, was defeated narrowly at that time. Further tax limitation measures will probably be introduced in the future.

There is a wide range in dependence on state and local revenues among local community college districts in Illinois. The effect of tax limitation on community college finance and on revenue equity will depend upon the type of tax limitation which is chosen. A study was therefore conducted by the Center to simulate the effects of five of the measures which were considered by the Eighty-first General Assembly. The tax limitations studied were selected as being representative of general types of limitations which might become reality in Illinois.

## Research Design and Procedures

The computer simulation which was carried out in this study examined the effects of the selected tax limitation measures on both total revenues available to the community colleges and revenue equity among the districts. The tax limitation proposals which were studied were:

1. Limitation of increases in local property taxes to 75 percent of the increase in the consumer price index for the previous year;
2. Limitation of increases in local property tax collections to 2 percent per year;
3. Rollback of equalized assessed valuations from 33-1/3 percent to 25 percent of fair market value;
4. Limitation of state expenditures to 8 percent of the aggregate personal income of Illinois;
5. Limitation of increases in state tax collections to 5.5 percent per year.

In order to simulate the effects of these tax limitation measures, it was necessary to project future revenues without tax limitation. Each district submits such a projection annually to the Illinois Community College Board (ICCB) in its Resource Allocation and Management Plan (RAMP) report. Projected revenues for individual districts for FY 1981 and FY 1984 were taken from the RAMP reports and were then adjusted for each of the tax limitation measures and for combinations of state and local limitations by means of a FORTRAN program written for this purpose.(33) Statewide revenues were calculated by totaling the projections of the individual districts. An alternative projection of statewide revenues is made annually by the ICCB staff of analysts, based on the RAMP reports of the individual districts and carefully derived assumptions concerning such factors as enrollment patterns and changes in property values. These projections were included in the study for comparison with those taken from the reports of the individual districts.

If tax limitation becomes a reality, it is possible that some of the community college districts may effect policy changes in order to compensate for reduced revenues. Variables which are under the control of local boards of trustees include tuition rates, fees, and local tax rates. Policies might also be effected which would alter the distribution of student credit hours among the various funding categories.

Questionnaires were therefore sent to all districts in Illinois except State Community College of East St. Louis. This district was excluded from the study because the absence of local taxes in its revenues makes it atypical of community college funding in Illinois. The questionnaires inquired about expected tax rates, tuition rates, FTE enrollment changes, proportion of credit hours in each funding category,

and changes in fees under the assumption of a 10 percent reduction in local tax revenues by FY 1984.

Twenty-nine of the thirty-eight districts to whom the questionnaire was sent responded. The means and standard deviations of revenue data for the population and this data-producing sample were found to correspond within 1.5 percent. The responses obtained through the questionnaires were therefore used to develop an additional set of revenue and enrollment projections for individual districts.

Two of the tax limitation measures under study restricted the growth of local or state expenditures to the growth in an economic indicator. The first limitation on local property taxes in the list above restricted the growth of these tax collections to a percentage of the increase in the consumer price index and the first state limitation listed related state expenditures to the aggregate personal income of the state. It was therefore necessary to determine an estimate of future trends of these two economic indices.

Data concerning the consumer price index are readily available for previous years. Projections for the future are changed from month to month, however, and do not appear to be available for more than one year in the future. The change in the consumer price index is known to have been 6.8 percent in 1978 and 9.4 percent in 1979. Chase Econometrics has predicted that for 1980, the increase will be 10.6 percent, and Data Resources, Inc. predicted that it will be 11.1 percent. An increase of 9 percent has been predicted by Robert Russell, Director of the Council on Wage and Price Stability. The projections for 1981 are lower, however. The Chase Econometrics projection as of August 1979 was 8.0 percent, while Data Resources, Inc. has predicted 8.6 percent.

After examining these data and projections, it was decided to use a constant projection of 8.0 percent for the entire period through 1984. This figure not only agrees with the Chase projection for 1981, but is also in close agreement with the average increase for 1978 and 1979. It was further felt that if the consumer price index should rise at a more rapid rate than the figure selected, the dilemma of the community colleges would not be improved. The increased local taxes which would be made available due to this greater rate of inflation would be more than offset by increased costs, since the tax limitation under study would limit the increase in tax collections to 75 percent of the inflation rate.

The annual rate of growth of personal income of the state was projected in this study to average 9.468 percent. This figure was selected after comparing projections made by the Illinois Economic and Fiscal Commission and by analysts on the staff of Illinois Representative Donald Totten, who proposed this tax limitation. The projections of these two groups differed by less than 0.15 percent. The less restrictive of the two projections was selected in order to present a more conservative estimate of the effects of tax limitation on the community colleges.

Effects of Tax Limitation on Illinois Community College Revenue. Two sets of projections of community college revenues were derived as described above. One set was based on the estimates made in the normal annual routine of long-range planning of the individual districts and the ICCB. The other set was developed through the questionnaires used in the study, based on a scenario of a 10 percent reduction in revenues due to tax limitation over a five-year period. All calculations of the study were applied to both of these sets of data.

The total revenues of each district and for the entire state were adjusted for each tax limitation under study and for each combination of local and state limitations. The percentage decrease in total revenues was calculated for statewide aggregate data. The differential effect of these tax limitations on individual community college districts was also examined.

Effects of Tax Limitation on Illinois Community College Revenue Equity. Two concepts of revenue equity were investigated in this study. Fiscal neutrality, representing the dependence per educational need unit of district revenue on district wealth, was assessed by three operational techniques: the Lorenz Curve with Gini Index, Pearson product-moment correlation, and multiple regression. Permissible variance, representing the disparity of levels of revenue per educational need unit, was assessed by two operational techniques, the McLoone Index and the Coefficient of Variation. (34) These concepts and the methodology for measuring them have been described in the Center publications referenced. In this study, the measurement of conditional fiscal neutrality by the technique of multiple regression controlled for an additional source of variation besides that addressed in the study by Schmink and his associates. The concept of conditional fiscal neutrality is based on the philosophical belief that a district which exerts greater tax effort should be permitted higher revenue. Under this approach, the effect of operating tax rate is first removed from the calculation. The relationship between district wealth per FTE and revenue per FTE can then be examined with this intervening variable controlled. In examining the fiscal neutrality of Illinois community colleges, another identifiable source of variation in revenues is the proportion of credit hour generation in the funding categories which are used for state credit hour apportionment. It was therefore decided to control for this source of variation. The dependent variable in the multiple regression equation was district revenue per FTE. Independent variables were the proportion of credit hours in the various funding categories, operating tax rate, and district property wealth per FTE. The proportion of credit hours in all but one funding category was entered into the multiple regression first. (One category was omitted to prevent redundancy.) Operating tax rate was next entered into the equation. The final variable entered was district wealth per FTE. The relationship between district wealth and district revenue, independent of the intervening variables, could thus be assessed.

Following completion of the calculations, the effects of the selected tax limitation measures were compared in terms of impact on statewide community college revenue, the differential effect they would have on individual districts, and the effects on fiscal neutrality and permissible variance.

### Results of the Study

Effects on Statewide Community College Revenues. Slight variations in percentage decreases of statewide community college revenues resulted from analysis of data from the two sources, the RAMP reports of the individual districts and the ICCB projections. The patterns of the results were consistent for the two sets of data, however.

1. A more stringent reduction in community college revenues would result from a rollback of equalized assessed valuations from 33-1/3 percent to 25 percent of fair market value than from either of the limitations on the rate of growth of local property taxes which were investigated. The rollback of equalized assessed valuations would result in a reduction of statewide community college revenues of approximately 7 to 10 percent for each year of the study. The effect of a limitation of the rate of growth of local property tax collections to 2 percent per year would increase each year, resulting in decreases in statewide community college revenues of approximately 5 percent in FY 1984. A limitation of the rate of growth of local property tax collections to 75 percent of the rate of growth of the consumer price index would result in a reduction in statewide community college revenues of less than 2.5 percent for each year of the study.

2. A limitation of state expenditures to 8 percent of the aggregate personal income of Illinois would have a decreasing effect on statewide community college revenues over time, declining from approximately 2 to 2.5 percent in FY 1981 to less than 2 percent in FY 1984. A limitation of the rate of growth of state tax collections to 5.5 percent would result in a greater percentage decrease in statewide community college revenues each year, amounting to approximately 6 percent in FY 1984.

3. The stringency of the effects of tax limitation legislation would be increased if limitations are enacted at both the state and the local level. Decreases in statewide community college revenues ranging from 8.5 to 15.5 percent would result from the combination of a rollback of equalized assessed valuation with either of the state tax limitations or the combination of a limitation on increases of local taxes to 2 percent per year and state taxes to 5.5 percent per year.

Revenues of Individual Districts. As expected, the tax limitations under study had varying effects on different districts, due to the differing dependence of the districts on the various sources of revenue.

1. The effects on individual district revenues varied more as the result of limitations on local taxes than those on state taxes. The limitation of the rate of increase of local taxes to 2 percent per year caused the greatest variability in revenue decreases, ranging in FY 1984 from a low of no decrease in revenue to a high of 11.79 percent. The least variability resulted from a limitation of state expenditures to 8 percent of the aggregate personal income of Illinois.

2. The most stringent effect of tax limitation for individual districts resulted from a rollback of equalized assessed valuations, with decreases in revenue of over 10 percent for approximately one-third of the districts for each year of the study and a high figure of 15.35 percent.

3. Both the variability and the stringency of tax limitations would be affected by combinations of state and local tax limitations. The combination of a rollback of equalized assessed valuations and a limitation of state tax increases to 5.5 percent per year would result in decreases in revenue in excess of 10 percent for every district in FY 1984, with a high figure of 17.87 percent. The greatest variability would result from the combination of a limitation of property tax increases to 2 percent per year and a limitation of state expenditures to 8 percent of the aggregate personal income of the state.

4. Increases in local tax rates which would be used by some districts to compensate for decreases in revenue as the result of tax limitation would be curtailed by limitations directed toward limiting the rate of growth of property taxes.

5. Local tax limitations tend to reduce the revenues of the wealthier districts, while state tax limitations tend to reduce the revenues of the less affluent districts.

#### Effects of Selected Tax Limitation Measures on Community College Revenue Equity

Fiscal Neutrality Criterion. The three operational techniques used in this study for measuring fiscal neutrality were the Gini Index, Pearson product-moment correlation, and multiple regression. These techniques produced consistent results.

1. Revenue per FTE was found to be related to district wealth per FTE.

2. Projected data for FY 1981 and FY 1984 without tax limitation indicated an expected improvement in fiscal neutrality over time, as measured by each operational technique.

3. Fiscal neutrality tends to be improved by limitations on local property taxes, with greater degrees of improvement associated with

more stringent limitations of local revenue. Tax limitations at the state level result in a movement away from fiscal neutrality.

4. When state and local tax limitations are combined, the adverse effects of state tax limitations are ameliorated to some extent by the beneficial effects of local tax limitations on fiscal neutrality. No combination of state and local tax limitations would result in as great an improvement in fiscal neutrality as would result from local tax limitation alone, however.

5. The increases in tax rates and tuition rates which would be used by some districts to compensate for reduction in revenues due to tax limitation would result in a movement away from fiscal neutrality over time. Each operational technique showed greater dependence of total revenues on district wealth per FTE for the contingency data than for the revenue projections based on the RAMP reports.

6. Compensatory increases in tax rates and tuition rates are more likely among the wealthier districts than among the less affluent districts.

Permissible Variance Criterion. The operational techniques used to examine the effects of tax limitation on permissible variance were the McLoone Index and the Coefficient of Variation.

1. Based on projected revenues without tax limitation, both operational techniques indicated an improvement in permissible variance in FY 1981 as compared with FY 1978 and a less favorable condition in FY 1984.

2. Revenue disparity tends to be decreased by tax limitation at the local level, with the more stringent limitations producing the greatest decrease. Revenue disparity is increased by tax limitation at the state level.

3. The adverse effects of tax limitation at the state level on revenue disparity are ameliorated to some extent by combinations of state and local tax limitations, as was found to be the case in examining fiscal neutrality.

4. Revenue disparity would be increased by the tax rate and tuition rate increases anticipated by some districts in response to tax limitation.

### Policy Implications

Funding systems for community colleges have been shown to reflect several philosophical considerations. Among those which have been discussed in this study are accessibility, local control, equitable distribution of resources, and adequate funding for comprehensive

programs. The tax limitation measures which have been investigated could be expected to have varying, and sometimes conflicting, impacts on these philosophical bases of the Illinois community college system. These impacts have policy implications which appear to be worthy of consideration.

1. The more stringent limitations of local property taxes would result in improvement in revenue equity, in terms of both the fiscal neutrality and the permissible variance criteria. These stringent tax limitations would also result in the greatest reduction of resources for the community colleges, however, which might be expected to have programmatic implications. It is possible that the strength of local control might also be affected by reductions in local revenues.

2. The tax limitations at the state level which were investigated in this study would cause less reduction in community college revenues than might result from some types of local tax limitation. State tax limitations would have an adverse effect on revenue equity under both the fiscal neutrality and the permissible variance criteria, however.

3. The combination of state tax limitation with local tax limitation would cause a greater reduction in revenues for the community colleges than either type of tax limitation alone and would also introduce an adverse effect on revenue equity.

4. A trend toward improvement in fiscal neutrality appears to be underway among Illinois community colleges. However, tax rate and tuition rate increases among wealthier districts which might be a result of tax limitation could be expected to cause a reversal of this trend. Additional restrictions on such increases might be worthy of consideration.

5. Tuition rate increases which might be effected to compensate for the reduced revenues resulting from tax limitation might have an adverse effect on the accessibility of community college education.

It is hoped that a careful examination of the possible effects on various aspects of the community college funding system which might result from different tax limitation measures may prove helpful in designing legislation which may provide tax relief while protecting the philosophical bases of community college funding.

#### Recommendations for Further Research

Several aspects of this study suggested opportunities for further research.

1. Further investigation into the adverse effects on revenue equity which would result from tax rate and tuition rate increases in response to tax limitation legislation is recommended. This study did not address the question of whether the effects on equity of tax rate



increases and tuition rate increases differ. A study similar to that of Kinawong, examining the differential effects on equity of revenues from the various sources and using projected and contingency data such as those used in this study might help to clarify the relative impact of possible increases in these two sources of revenues by some districts.

2. If an enrollment decline is experienced in the coming decade, the community college revenues from tuition and fees will be decreased, as will the credit hour reimbursement from the state. A study analyzing enrollment trends in terms of student age and program choice might permit projection of the impact of the expected decline in the traditional college-age population on community college enrollments. It would then be possible to project the changes in community college revenues which would result from changing enrollment patterns.

3. The decreases in community college revenues examined in this study did not reflect changes in the value of the dollar due to inflation. An examination of the real reduction in resources, combining the effects of tax limitation legislation and inflation, would appear advisable.

4. Tax limitation legislation, if enacted, will also affect revenue equity among the elementary, secondary, and unit school districts in Illinois. A study of the effects of tax limitation measures on projected revenues in these districts is therefore also recommended.

#### Notes and References

1. For further information about historical trends in community college revenues and enrollments in Illinois, see the publications of the Illinois Community College Board, such as Statewide Master Plan for the Public Community Colleges of Illinois: RAMP/CC, Illinois Community College Board, Springfield, Illinois (published annually); Operating Finance Report for the Illinois Public Community Colleges, Illinois Community College Board, Springfield, Illinois (published annually); Public Community Colleges in Illinois, Illinois Community College Board, Springfield, Illinois, 1978.
2. Doversberger, Betty, and G. Alan Hickrod. Proposed Tax Reforms and Community College Finance in Illinois, 1979, Center for the Study of Educational Finance, Illinois State University, Normal, Illinois 61761.
3. Kinawong, Nipon, G. Alan Hickrod, and Betty Doversberger. Revenue Sources and Illinois Community College Revenue Equity, a study soon to be released by the Center for the Study of Educational Finance, Illinois State University, Normal, Illinois 61761.
4. Doversberger, Betty. "Tax Limitation: Effects on Illinois Community College Finance and Revenue Equity," Ph.D. dissertation, Illinois State University, 1980.

5. Charles E. Stuart et al. v. School District No. 1 of the Village of Kalamazoo 30 Michigan 69 (1874).
6. U.S. President's Commission on Higher Education. Higher Education for American Democracy. A report, Washington, D.C.: Government Printing Office, 1947.
7. Wattenbarger, James L., Suzan Schafer, and Jacob D. Zucker. "Tuition and the Open Door." New Directions for Community Colleges, No. 2, Meeting the Financial Crisis. Issue edited by John Lombardi. San Francisco, Jossey-Bass, Inc., Summer, 1973. Also Walter I. Garms. Financing Community Colleges, Teachers College Press, Columbia University, New York, 1977.
8. Garms. Op. cit.
9. See the following studies of the Center for the Study of Educational Finance, Illinois State University, Normal, Illinois: G. Alan Hickrod, Ramesh Chaudhari, and Ben C. Hubbard, Equity Goals in Illinois School Finance: 1973-1979, 1979; David P. Schmink, Ronald S. Halinski, G. Alan Hickrod, and Ben C. Hubbard, Conditional Wealth Neutrality as a School Finance Equity Criterion in Illinois, 1979; G. Alan Hickrod, Thomas Wei-Chi Yang, Ben C. Hubbard, and Ramesh Chaudhari, Measurable Objectives for School Finance Reform: A Further Evaluation of the Illinois School Finance Reforms of 1973, 1975; J. Dan Hou and Warren B. Carson, Alternative Measures of Local Wealth and Effort, 1977; Thomas Wei-Chi Yang, Measurement of School Revenue Equity in the States of Illinois, Michigan, and Kansas, 1975.
10. Augenblick, John, Betsy Levin, Kent McGuire, and Jane Mattingly. School Finance Reform in the States: 1979, Education Finance Center, Education Commission of the States, Denver, Colorado, 1979. See also J. Dan Hou and Warren B. Carson, Alternative Measures of Local Wealth and Effort, 1977; and G. Alan Hickrod and Ben C. Hubbard, The 1973 School Finance Reform in Illinois: Quo Jure? Quo Vadis?, 1978, Center for the Study of Educational Finance, Illinois State University, Normal, Illinois 61761.
11. Augenblick, John. Issues in Financing Community Colleges, Education Finance Center, Education Commission of the States, Denver, Colorado, 1978.
12. Kinawong, Nipon. "Revenue Equity in Illinois Public Community Colleges," Ph.D. dissertation, Illinois State University, Normal, Illinois, 1978.
13. State Bar Association, ed. Illinois Public Community College Act, West Publishing Company, St. Paul, Minnesota, 1976.

14. Illinois Community College Board. Operating Finance Report for the Illinois Public Community Colleges for 1978-1979, Illinois Community College Board, Springfield, Illinois, 1979.
15. Illinois Community College Board. Public Community Colleges in Illinois, Illinois Community College Board, Springfield, Illinois, 1978.
16. "Report of the Committee to Study Public Community College Financing in Illinois." William B. Browder, Chairman, n.p., May 1975. (photocopied.)
17. Watkins, Beverly T. "The Budget Cutting Begins in California Community Colleges," The Chronicle of Higher Education, 26 June 1978.
18. Watkins, Beverly T. "California Vote Could Cost Two-Year Colleges 26 Percent of Revenue," The Chronicle of Higher Education, 3 April 1978.
19. Watkins, Beverly T. "The Budget Cutting Begins," op. cit.
20. Oakland, William H. "Proposition 13--Genesis and Consequences," National Tax Journal 32 (June 1979):387-407.
21. "Tax and Expenditure Limitations, Round Two in California: The Gann Initiative--Projected Impact." Finance Facts, Vol. 4, Education Finance Center, Education Commission of the States, Denver, Colorado, December 1979.
22. Watkins, Beverly T. "The 'Invisible Effects' of Proposition 13," The Chronicle of Higher Education, 13 November 1978.
23. Post, Alan. "Effects of Proposition 13 on the State of California," National Tax Journal 32 (June 1979).
24. Reid, Joseph D., Jr. "Tax Revolts in Historical Perspective," National Tax Journal 32 (June 1979).
25. Break, George F. "Interpreting Proposition 13: A Comment," National Tax Journal 32 (June 1979).
26. Boskin, Michael J. "Some Neglected Economic Factors Behind Recent Tax and Spending Limitation Movements," National Tax Journal 32 (June 1979).
27. "The Roots of Proposition 13." Excerpt from Tax Revolt Digest. In Illinois Issues 4 (December 1978).
28. "The 1978 Elections: Tax-cut Proposals Get Mixed Response from Voters." The Chronicle of Higher Education, 13 November 1978.

29. "Public Opinions on Tax and Expenditure Limitations: Attitudes in Four States." Finance Facts, Vol. 4, Education Finance Center, Education Commission of the States, Denver, Colorado, December 1979.
30. Ibid.
31. Hubbard, Ben C. and G. Alan Hickrod. Illinois School Finance in an Era of Property Tax Relief: Some Alternatives to a Proposition Thirteen, Center for the Study of Educational Finance, Illinois State University, Normal, Illinois 61761.
32. Doversberger, Betty. Op. cit.
33. This program is available through the Center for the Study of Educational Finance, Illinois State University, Normal, Illinois 61761. Details are given in the Ph.D. dissertation by Betty Doversberger cited above.
34. For additional discussions of these criteria of revenue equity and their operational measures, see such publications of the Center for the Study of Educational Finance as G. Alan Hickrod, Thomas Wei-Chi Yang, Ben C. Hubbard, and Ramesh Chaudhari, Measurable Objectives for School Finance Reform: A Further Evaluation of the Illinois School Finance Reform of 1973; G. Alan Hickrod, Ben C. Hubbard, Thomas Wei-Chi Yang, and Tharin Rasanond, The 1973 Reform of the Illinois General Purpose Grant-in-Aid: An Evaluation after Three Years; and David P. Schmink, Ronald S. Halinski, G. Alan Hickrod, and Ben C. Hubbard, Conditional Wealth Neutrality as a School Finance Equity Criterion in Illinois.