THE 1973 SCHOOL FINANCE REFORM IN ILLINOIS: QUO JURE? QUO VADIS?

G. Alan Hickrod and Ben C. Hubbard

Center for the Study of Educational Finance
Department of Educational Administration
College of Education
Illinois State University

March, 1978

Support from this paper came from the General Revenue Funds of Illinois State University. The first portion of this paper has been authorized for publication in the Journal of Education Finance. Matters of fact or opinion contained herein are solely the responsibility of the authors and in no way reflect the official policy of Illinois State University. As a part of its public service, the University seeks to promote a systematic and thorough discussion of all public policy matters and supports various types of research which contribute to that end.

THE 1973 SCHOOL FINANCE REFORM IN ILLINOIS: QUO JURE? QUO VADIS?

G. Alan Hickrod and Ben C. Hubbard

> "Every reform is only a mask under cover of which a more terrible reform, which dares not yet name itself, advances."
>
> -Emerson

School finance reform in Illinois has proceeded by evolution rather than by revolution. For forty-six years, from 1927 to 1973, the state operated under a basic "Strayer-Haig-Mort" or "foundation level" allocation system. In the latter part of this long period the General Assembly found it necessary to make adjustments to the basic allocation law every two years, and then to make adjustments almost annually. These yearly adjustments to the fundamental school finance law were, for the most part, technical adjustments suggested by professional educators for the purpose of making the allocation system function more smoothly. These adjustments also represented a modicum of consensus among the Illinois school professionals relative to the desired "goals" of a school finance system. Then, in the summer of 1973, the Illinois legislature did make a change in the allocation system which did rest upon a somewhat different mixture of political values. The purpose of this article is to describe those political values, outline the legislative details of the 1973 reform and the subsequent amendments to that reform, briefly discuss evaluative research conducted on this reform, and finally suggest what further reforms might take place in the state. This is a tall order for one paper and readers must be referred to a rather large body of Illinois school finance literature for many of the details which must be omitted from this manuscript.(1)

G. Alan Hickrod is Director of the Center for the Study of Educational Finance and Professor of Educational Administration at Illinois State University. Ben C. Hubbard is Co-Director of the Center and University Professor at Illinois State University.

I. Political Aspects of the 1973 Reform

At the outset of this article the authors wish to make it clear that they are in basic agreement with the conceptual framework for the study of school finance provided recently by Garms, Guthrie, and Pierce.(2) We concur in their opinion that school finance can indeed only be fully understood when viewed as a branch of political economy. We would, in fact, go further. It seems to us that this area of academic endeavor is basically a study of the conflict of contradictory political values with dollars attached to those values. We have elsewhere expressed these political values somewhat differently than Garms, Guthrie, and Pierce (3) and our particular mixture of values is not the same as these gentlemen. There is no doubt, however, that our basic approach to the field is the same.

What then are the basic political values that are the foundation stones for school finance laws in Illinois and how have these values changed, if at all, in the last few years? Let us look first at the value of "equity." For over half of a century a basic political value in Illinois has been that it was unfair, or not equitable, for both rich and poor school districts to bear equally the weight of all costs of the K-12 system. For fifty years both professional educators and politicians have recognized that if the superior resources of the state government were not used to even out the differences in wealth among local districts in the state, then students in the poorer districts would be condemned to levels of public service greatly inferior to the levels of public service offered in the more affluent districts. This political value, often referred to as "wealth equalization," was present in Illinois long before any constitutional litigation on the subject. The 1973 reform did not change this at all. Even the measure of wealth remained the same, e.g., property valuations per pupil. We shall comment later, however, on proposals to change the method of measuring school district wealth. Fundamentally there has been no retreat from the half century old tradition that it is a responsibility of the state government to assist students in the poorer school districts.

However, the notion of student equity holding sway prior to 1973, and in fact still held by many, was a "floor" or "minimum" notion of equity. The state, it was held, had the responsibility to see to it that educational services did not fall below a minimum acceptable level of expenditure in any district. Much of the effort of both professional educators and legislators was spent in attempting to push up the dollar value of this "floor" or "minimum." The prevailing opinion was, and still may be, that a district could spend whatever it wanted to spend on education over the foundation level since the state had already met its basic obligation by providing a "minimum adequate education" to all its young citizens. To be sure, Illinois, like many other states, did limit local spending by some tax rate ceilings, but these have been set relatively high and moved upward when they seemed to be pinching the desire of local citizens to spend their own local resources for public education.(4) Expenditure controls or limits on the spending of school districts above the foundation level are relatively unpopular in this state. One relatively modest attempt to hold back spending above the foundation level was incorporated into the 1973 reform in the form of a "rollback" of taxes provision for those districts that profited from the new allocation system described in the next section. However, wealthy districts in the state had little difficulty in getting this aspect of the reform repealed from the 1973 law. In our judgment, controls of the type present in California, which hold back spending in wealthy districts, would have very difficult sledding in the Illinois legislature.(5) Why? The answer is simply another political value that is also deeply held by many educators and legislators in the state, e.g., local control of educational spending decisions.

The "partnership" notion of state-local funding is a very strongly held political value in Illinois. It is very hard, however, to give any clear operational definition to this notion. The consensus prior to 1973 was that the state was the "junior" partner, providing less than 50% of the funds for education. The prevailing notion during the 1973 reform was that this was to be an "equal" partnership with the state providing at least 50% of the funds. Since that date a majority of Illinois educators have argued that the state should assume more than 50% of the funding, that is, that the state should become the "senior" partner. This single financial statistic is, of course, extremely important. As several students of the subject have pointed out, as the percentage of state support increases and the percentage of local support declines, many of the problems of disparity among school districts in revenues will disappear.(6) A state's grant-in-aid system would have to be acting very perversely for this not to occur. Garms, Guthrie, and Pierce do allege that the movement to higher levels of state support, which is very apparent in Illinois, is also for the purpose of gaining more funds for education, since professional educators assume it would be easier to get more funds from the state government than from local governments.(7) Perhaps, but it is our observation that at least in Illinois there are a good many educators and legislators with strong egalitarian political convictions. These individuals, for whom the ancient battle cry of "egalite" is just as compelling as that of "liberte," will always support a greater percentage of funding by the state government, no matter what the effect on total funding.(8)

It should come as no surprise, therefore, that the 1973 reform in Illinois not only did not weaken local control, it actually strengthened local control. The "district power equalization" system, known locally as the "resource equalizer," which is described in the next section, is the very quintessence of local control. In fact, some have described it as "local control with a vengeance." Under this system districts which are able to respond to the "reward for effort" held out by the state are rewarded not only with increased local revenues for higher local taxes, they also receive more state funds. Districts which lower their tax effort lose both their local revenues and some of their state aid. The system is deliberately and intentionally designed to encourage the passage of local tax referenda and woe betide any district that is unwilling or unable to pass local tax referenda. The system is therefore also designed to keep a sizeable portion of local funding in the entire fiscal picture. The exact ratio of state to local funds depends, of course, on the actual parameters placed into the formula. In the concluding section of this paper we shall describe a "natural regression" phenomenon which causes the state fiscal system to move backward toward higher percentages of local funding and lower percentages of state funding, unless the parameters in the formula are constantly adjusted upward by the legislature.

The political value of "equity" also underwent a transformation in 1973. "Equity among taxpayers" became as important as "equity among students." In the many hearings of the various reform committees and in the numerous legislative hearings in 1972 and 1973 (9), the favorite statistical display of the reformers was to show that it was possible for a taxpayer in a property valuation poor district of the state to tax himself or herself at twice the rate of a taxpayer in a more affluent district and yet receive only half the level of educational goods and services. This situation, it was claimed, was just as unfair and was just as inequitable for the taxpayer in the poor district as it was for the child in the poor district who was condemned to receiving an inferior education. In the twenty-twenty of hindsight, it is the opinion of the authors that this taxpayer inequity matter moved just as many votes as the student inequity matter.

An extremely important part of the taxpayer equity situation was the strong movement in the legislature in 1973 toward "local property tax relief." In fact, at the time the 1973 reform passed, a tax "freeze" piece of legislation had come within a signature of being signed into law very similar to the legislation that did prevail in the neighboring state of Indiana. The 1973 Illinois reform was viewed, particularly in the Governor's office, as an alternative to the Indiana style property tax freeze. The argument that under the "resource equalizer" the districts with the highest tax rates were the ones that would receive the greatest aid, e.g., the greatest relief to those in greatest need, cut heavily into the ranks of those proposing an overall property tax "freeze." The reformers in Illinois in 1973 also had the benefit of a first-rate slogan, and as Lenin pointed out, one should never underestimate the power of a good political slogan. Virtually every piece of literature in the reform extolled the virtues of "equal expenditure for equal effort." A similar slogan was simultaneously being used in Michigan to pass reform legislation there, e.g., "equal yield for equal effort."(10) This simple phrase seemed to catch the interest of the legislators in both equity and in local control.

One further development occurred in 1973 which can be viewed various ways. Professional educators will probably claim that 1973 marked that point in time at which they finally convinced the legislators of the importance of including a measurement of "educational need" in the funding formula. Illinois reformers had failed a short time before in gaining this situation through litigation in McInnis vs. Ogilvie.(11) There had been some weighting in the formula previous to 1973 for students in high schools, but for the first time in Illinois history, a reform was passed which included a weighting for students for lower socio-economic families. The General Assembly had previously come close to passing a special purpose or categorical assistance act for low income children in 1965. In fact, to be accurate, the act was passed but the legislature failed to fund it after the federal government passed the elementary and secondary act of 1965. Thus Illinois came close to supporting compensatory education, not through a weighting in the general formula, but through a separate special purpose act in the manner of Michigan and California. Politically, however, it is possible to view the increased concern in 1973 with the education of socio-economically deprived children in a different way. Like most states, the reallocation of seats in the Illinois legislature following Baker vs. Carr gave the urban and especially suburban areas of the state more voting strength than the rural areas of the state. The relatively strong weighting in the Illinois formula for districts with high concentrations of low income families can be viewed as a partial consequence of this shift. One should remember in this connection that not all suburbs are affluent, and many suburban districts in the northern part of the state also benefited from the weighting for lower socio-economic children.(12)

We think it is fair to conclude that the mixture of political values such as "equity" and "local control" did shift somewhat in 1973, or at least they underwent a transformation in definition. Interestingly enough, there was not much evidence in the 1973 reform of a great concern for another pol cal value, e.g., "efficiency" or "effectiveness." A report prepared for th outgoing Governor in very late 1972 did make legislative recommendations re tive to this value, but the defeat of the Republican candidate sealed the f of many recommendations in that report.(13) There can also be little quest that the reform of 1973 was a very attractive political "package."(14) The bill's chief sponsor and floor manager, Representative Gene Hoffman, showed consummate artistry in putting the various elements together. Detractors ar critics, of course, called the bill a piece of "Christmas tree legislation,' e.g., "hang a gift on it for everybody and figure out the wiring later." Il nois Office of Education officials who had to live with the intricacies of t new law may still feel that way about it. Nevertheless, legislators voting 1973 could clearly see, without much evaluation, that: (a) greater state ai for higher local taxes (the reward for effort portion of the bill) was going to greatly assist many suburban districts, especially the "working class" an "middle class" suburbs; (b) the weighting for compensatory education was goi to help the central cities and some rural pockets of poverty in the southern part of the state; (c) at least in the short run, the increased levels of st support would take the pressure off demands to raise local tax rates in many districts; (d) the provisions for choice between the older Strayer-Haig syste and the newer system would see that no school district was hurt by the change over. Representative Hoffman's bill passed almost unanimously on final readi a rare occurance for a piece of school finance legislation.

It can also not be denied that "reward for effort" or "district power equalization" proposals were very popular in 1973. These provisions were disseminated among the professional educators by the publication of the Cune, Clune, and Sugarman book, <u>Private Wealth and Public Education</u>.(15) They were also highly touted at that time as the "solution" to Serrano type litigation. One recent estimate puts the number of states with some form of "reward for effort" provisions at about twenty.(16) The reform group, which at least initially put together the 1973 package, consisted of both college professors and legislators who were knowledgeable about these developments outside the state. It can also not be denied that the presence of the state government's portion of the federal revenue sharing money greatly assisted in the passage of the reform of 1973. In fact, had it not been for this "windfall" in the state treasury, it might not have been possible to get the new Democratic governor to sign the bill. Passage was also helped by phasing-in the cost over what was originally planned as four years, but came close to six years in many districts. Joel Berke quotes the Speaker of the House in Florida as saying, "You can only equalize on a rising tide."(17) The tide was up in Illinois in 1973 and the reformers had their surf boards at the "ready."

II. Some Details of the 1973 Reform and Subsequent Amendments

The 1973 Illinois law left in place the foundation formula that had evolved through time, modified that foundation formula, and continued it as one alternative method of funding for a school district. The foundation plan that was in effect, and which remained as an option after the passage of the reform, required each K-12 district to levy a qualifying rate. This qualifying rate was 1.08 percent of assessed valuation for K-12 grade districts; .84 percent of assessed valuation for dual (high school and elementary) districts with a WADA (weighted average daily attendance for the best six months) of 100; and .90 percent of assessed valuation for those with a WADA of less than 100. The funds raised by levying the qualifying rate were subtracted from a foundation level of \$520 per WADA (\$520 x WADA - qualifying rate x assessed valuation).

If the result of this calculation was $120 or more per student, this wa considered the base amount to be received from the formula. There was a secon funding plan, that was never properly named, but which was sometimes labeled a "flexible flat grant" and later "the alternate method," which said that if a district got less than $120 per WADA in the foundation calculation, the district might claim state aid on a separate provision of the law which read: "The amount of state aid per best 6 months' WADA shall be computed by multiply the quotient of the equalized assessed valuation per WADA necessary to produce $120 on the foundation formula by the district's equalized assessed valuation per WADA and multiplying by $120." The law further stipulated that when this alternate method produced less than $48 per WADA, each district would receive at least $48 per WADA.

For several years before the 1973 reform, the basic claim calculated by the most advantageous of the three systems described above (foundation, alternate method, flat grant) had been increased by simply multiplying the basic claim amount from any of the three ways of calculation by a given percentage. In 1973, at the time of the reform, this was a 19% add-on (formula amount x 119% = actual claim). The foundation formula was amended in 1973 to make the add-on 25% and the best six months' WADA was changed to add a weighting for all Title I students living in the district of .45. This was to cause some confusion in later years because the new section of the law, described below, used a variable weighting for Title I students rather than a constant weighting. With the addition of the 25% add-on and the .45 weightin for Title I students, those districts electing to stay on the old formula got the only increase in their claimed amount in 1973-74 that they have received. It should be clear, however, that either because of the high level of their assessment or the low level of their tax effort, they got an advantage over all other districts that used the second method described below, or they would not have remained on the old formula. This fact, probably more than any other, affects equity considerations since these districts usually have high wealth and yet they still receive appreciable amounts of state aid.

The fourth funding system added by the 1973 reform was such a major change that estimates furnished to the General Assembly indicated that to move all districts to the new formula in 1973-74 would increase the 1972-73 common school fund from $802,000,000 to $1,505,000,000 if no district increased its tax rate, or a total 1973-74 cost of the new reform package of $703,000,000. The General Assembly was also advised that rising assessments and the loss of students would reduce these costs. Estimates by Hubbard indicate that full funding costs have been reduced by approximately $200,000,000 from the original 1972-73 targeted figure, despite many districts increasing their tax rates and the increase because of the Jaffe bill described later.

The new formula was called the "resource equalizer." Outside the State of Illinois it would be recognizable as a "district power equalization" system or a "guaranteed valuation" or "guaranteed yield" system. There have never been any "recapture" provisions in the Illinois law and on those grounds some might not choose to regard it as a true "DPE" system. The formula guaranteed a resource level for each district with the same tax rate that would produce the same combination of state and local dollars up to a maximum guaranteed expenditure level ($1,260). The level of assessment, $42,000 per WADA, was set at the K-12 district assessment which left only 6% of the students above the median assessed valuation out of the calculation. There were only 25 districts with a total enrollment of only 12,779 ADA in K-12 districts above this wealth level. The maximum tax rate which the state would match was then set at 3%. These parameters resulted in no major cities and only a few unit districts being above these levels.

The dual districts (elementary and secondary) were adjusted to both the $42,000 assessment level and a proportionate division of the maximum tax rates was made based upon the following ratio of WADA students: 35% secondary and 65% elementary. This resulted in the state guaranteeing an assessment level of $64,615 with a guaranteed tax rate of 1.95% for elementary (K-8) districts and $120,000 with a guaranteed tax rate of 1.05% for secondary (9-12) districts.

The tax rate to be used in the formula was to be the sum of all operational taxes except transportation. Illinois had for years added additional legal funds, with their own tax rates and limitations, rather than increasing the basic operational fund when additional costs or new programs were needed. The new law summed up all tax rates for all legal funds except transportation, capital, and debt service, and called this the "operating tax rate." One additional change was made. Funds paid because of the resource equalizer could be used by local boards in any fund that spent dollars, whereas, in the past, all general state aid was earmarked for the educational fund alone. In fact, if a district used the old law, this was, and still is, true.

The student count was adjusted for resource equalizer purposes through a change of WADA by adding a Title I count. The Title I count of students used by the federal government was available for each district. The law was written so that the Title I count of each district would be adjusted on a proportionate basis to reward not only the number, but rather the number and concentration of Title I students in the district. This notion that costs are related in an exponential fashion to concentrations of difficult to educate children has been used in various ways in Minnesota, Ohio, and Pennsylvania at various points in time. It is alleged that the school "climate" changes dramatically as the percentage of children from lower socio-economic homes reaches the higher percentages of the total student body. Based on a composite of several cost estimates discussed in the <u>13th Illinois School Problems Commission Report</u> (18) the weighting of 37.5% was added to any district having the same percentage of Title I students that the state as a whole had. Districts having greater and less concentrations than the state average would find their weightings proportionate except that the maximum that any district could weight a pupil would be 75%. This count (% x number of Title I) was then added to the WADA and has since been referred to as TWADA (Title I weighted average daily attendance).

The formula thus used to calculate a district's claim was:

State Grant = Operational Tax Rate x [Guaranteed Valuation TWADA - District Actual Assessed Valuation TWADA] x TWADA

This formula worked for all three types of districts (K-12, elementary, and secondary) with the different parameters described above.

In 1973-74, because of the excessive cost and other considerations, including the level of increase that some districts would receive, the General Assembly determined to phase the resource equalizer in over four years. This was to be done by paying each district one-fourth of the difference in the amount it would have earned under the 1972-73 formula and the total claim under the resource equalizer. The second, third, and fourth years it would be recalculated and two-fourths, three-fourths, and 100% was to be paid so that in 1976-77 each district would be entitled to 100% of their claim, except that no district would receive an increase of more than 25% over the amount they received from the state the previous year. Because the total calculations for the formula treated all districts alike, whereas in the past dual districts had not received equal treatment and high schools had received very little state aid, there were many high school districts which would take up to eight years to achieve full funding.

A serious problem developed in the third year, 1975-76. A general recession in the economy was in progress and state revenues were affected to the point where state authorities felt that it was impossible to fully fund the "3/4ths" payment due the district. Therefore, as provided by law, all districts (both the foundation and the resource equalizer claims) were prorated in terms of the available appropriations against the claims. In 1976-77 revenues were still short and proration was repeated again. In 1977-78 claims again exceeded revenues; however, the proration of 1977-78 was primarily due to the amendments described below. In fairness to the Governor and the General Assembly, until the recession, an event certainly not predicted when the 1973 reform was passed, it can be said that they did meet their reform commitments. Kindergarten through grade twelve education in Illinois has continued to get more dollars each year despite the fact that the appropriations failed to meet the expectations created by the 1973 reform.

The only significant changes made in the 1973 reform occurred in 1976 with PA 79-1, popularly known as the "Jaffe bill." This bill increased the claims of many districts, but since there was no significant increase in appropriations to cover the anticipated increased cost, the bill simply shifted the incidence of the receipt of state dollars. PA 79-1 changed a provision of the law that allowed a district to claim payment either on the current year or the previous year's WADA to the current year or the average of the three previous years. This was in response to declining enrollments in many districts. The bill also authorized an increase in the guaranteed assessment levels for K-12 districts to $43,500 and increased the guaranteed assessment level for K-8 districts to $66,300. The maximum tax rate which the state would match was reduced to 2.9% for K-12 districts and 1.9% for K-8 districts. The bill further authorized counting the taxes collected for transportation as operational and for one year saved harmless all districts from decreasing their state claim because of these changes. The Jaffe bill increased the total cost of the formula about $100,000,000 and thus caused at least one additional year before the full calculated and authorized claims could be paid since appropriations were not increased enough to cover this additional cost. Except for the possibility of some of the proposed changes discussed in the final section of this paper, the current appropriation would fully fund the 1977-78 school year and, in fact, would probably cause an unexpended surplus of twenty million dollars plus.

III. The Three Annual Evaluations of the Illinois 1973 Reform (19)

When the Illinois General Assembly broke with 46 years of tradition, it did so with more than a little hesitation. The legislative leadership regarded the new allocation system as "experimental" and directed that it be closely monitored and tested for the next few years. Accordingly, both the Illinois School Problems Commission and the Illinois Office of Education have provided small grants to the Center at ISU to evaluate on an annual basis the operation of the 1973 reform. A small amount of matching funds were also secured from the U. S. Office of Education. Three such annual evaluations have been completed.(20) Since our intent in this article is to improve research as well as to report research, we shall provide only the briefest summary of the results and concentrate upon the limitations of these studies.

The three annual evaluations were set up on a fairly standard format to facilitate comparison of results from year to year. The emphasis in all three annual reports was upon equity goals of the state and two basic criteria were established to operationalize these equity goals. One was labeled "permissible variance" and the other "fiscal neutrality," although some analysts now seem to prefer to call this second criteria "wealth neutrality." We believe this to be in keeping with the intent of the 1973 reform. In passing this act, the General Assembly had placed emphasis on its desire to reduce the disparity in expenditure per pupil between school districts to more "permissible" ranges. Secondly, the legislature had also evidenced a desire to make expenditures less of a function of local district wealth. Legislative and political studies will show, of course, that not all members of the General Assembly desired that goal, and some legislators do not consider these desirable goals even at this point in time. The legislative leadership, however, particularly acting through the Illinois School Problems Commission, did make it known that the attainment of equity goals was a high priority item in 1973.

The Center at ISU then borrowed, adapted, and developed various measurement techniques to measure these two goals, e.g., reduction of variance and the association of wealth with expenditures. The Center had been experimenting with various equity measurements since 1967. Some of this measurement activity was the straightforward use of standard statistics such as the use of the coefficient of variation, that is, the standard deviation divided by the mean and multiplied by 100. But we soon found we needed other quantitative tools not to be found in most statistics books. For example, one notion of "permissible variance" held by many educators and legislators is that the state should be concerned only with variation below the middle of the expenditure distribution. According to this point of view, held historically by Paul Mort and his associates among others, the task of the state is to level up expenditures in the bottom half of the distribution, but not to constrain in any way expenditures in the top half of the expenditure distribution.(21) The use of the coefficient of variation would not be appropriate if that view is taken of "permissible variance." Fortunately, McLoone had been using indexes of expenditures based on the distribution of expenditures below the median and we adopted some of these tools for Illinois.(22) Our usage was not identical to McLoone's, however, and therefore our results cannot be directly compared with his.

Finding an operational definition of "permissible variance" was not too difficult. Finding an operational definition of "fiscal neutrality" was a bit more of a challenge. We started with the notion of a least squares regression slope of expenditures on wealth, since that had been used historically in studies of expenditure determination at Stanford University and elsewhere.(23) However, in order to simplify the results for legislators and other decision-makers, we used this relationship in simple bi-variate form. That is, the relationships we reported in the three annual evaluations between expenditure per pupil and wealth per pupil were gross elasticities of expenditure upon property valuation and upon income. They are not net elasticities since they do not control for the effect of variables other than the two measurements of wealth (income and property valuations) upon expenditures. This is the first limitation upon our results. We are of the opinion that net elasticities might be more appropriate and Harrison has demonstrated that this is possible.(24) However, there are major theoretical and data availability problems if one wishes to use net rather than gross elasticities of wealth as a specification of "fiscal neutrality." In the first place, even after decades of experimentation with expenditure determination studies in school finance, there is still no one single multivariate expenditure determination model that would be acceptable to all researchers.(25) That is, we are still not sure just what other variables to control for when we measure the relationship between expenditures and wealth. Second, expenditure determination studies have turned up major specification and intercorrelation problems with the independent variables. The full weight of all these econometric concerns descends upon the school finance analyst who options for net elasticities rather than gross elasticities to measure fiscal neutrality or wealth neutrality. We were just not that brave and besides we knew of others who were simultaneously measuring wealth neutrality by gross elasticities.(26) One final point on the net elasticities limitation. Those attempting to use net elasticities in a longitudinal framework will have to find control variables that can be measured on an annual basis, or at least at more than one point in time. This will not prove an easy task.

While gross elasticities of expenditure upon wealth have proven a very serviceable tool, we were, and we are, aware of one serious weakness in that tool. In the standard regression technique each school district has the same effect on the reported regression coefficient, or in this case elasticities, since we customarily transform both expenditures and the wealth measurements into their logarithms. Thus the Chicago school district has the same weighting as the smallest district in the state in these calculations. This started us on a long and very involved search for a measurement tool that would use the student as the unit of analysis rather than the district. Only a small part of that development can be recounted here. Essentially, it led us to review the possible uses of the Lorenz curve and the Gini index, methods which had been used by economists since the turn of this century but were not a standard part of educational statistics. Eventually we devised a particular adaptation of the Lorenz-Gini procedure, which depends upon ranking districts first by a wealth measurement and then calculating a cumulative distribution of students from poor to wealthy. Essentially, this usage turns the Lorenz-

Gini procedure into a measurement of association rather than a measurement of dispersion, which had been its traditional role in economics. The current school finance literature reports both successes and failures with this approach.(27) It appears to work well in most states when property valuations are taken as the measurement of wealth, but complications can arise when income is introduced into the wealth specifications. Neither the descriptive nor the inferential properties of this "wealth weighted Gini index" are fully known at present and we have usually cautioned interested researchers to use the procedure with some care.

We come now to a second major limitation on the Illinois evaluations. The expenditures measured in all three annual evaluations are revenues from local sources plus general state aid. We have never included either state categorical revenues or federal categorical revenues in these calculations. Our justification for not including these important other sources of educational revenue, and to realize just how important they are one need only remember that one-third of Illinois K-12 aid is distributed through state categoricals, has been that these other forms of aid are "targeted," that is, that they are intended for special kinds of student needs. In essence then, we have assumed that state general equity goals must be achieved <u>before</u> "targeted" money is laid on, since "targeted" money is intended for special needs after general equity has been achieved. We have therefore taken the same policy position relative to state categoricals that the federal officials generally take relative to federal categoricals. Equity, or in the federal terms "parity," must be achieved first with general state aid and local dollars before categorical dollars are allowed to enter the calculations. It has been argued by some that we should have looked at the relationship between total expenditures per pupil and wealth rather than simply state general aid dollars plus local dollars. However, that would require us to believe that "targeted" dollars are to be used to establish general state equity goals. The important point is that if either total state dollars or state plus federal dollars are used in the equity measurements we have devised at the Center, then one might well get quite different results. In fact, if our original assumption was correct, one should get different results when these funds are added to the analysis. That is, when total expenditures are used we concur with Garms that, "The existence of expenditure differences does not necessarily mean that there are undesirable inequalities."(28)

A third limitation on the Center's evaluations concerns the difficulty of comparing these results with any other state. The weighted student measurement used in Illinois is not like any other weighting used in any other state. Illinois results could be stated in average daily attendance (ADA) terms, and we have done that in some instances. However, these ADA results can be quite misleading since the state both delivers its dollars and even measures the wealth of school districts on a weighted student basis. Since the General Assembly did not "target" the funds delivered by means of the Title I weighting, all evaluations of the Center do not treat those funds as categorical aid, but rather include them within the general state aid. Thus, it is more accurate to think of the Illinois evaluations as equity tests or equity evaluations conducted on school districts whose pupils have been weighted for a condition of poverty. We think this procedure is legitimate if one is going to try to assess progress toward equity goals which Illinois has made with the passage of time, but it does make state-to-state comparisons at one point in time awkward.
A study by Yang supported by the Center does provide one way out of this limitation.(29) Yang used the same evaluation procedures we have used in Illinois

on both Michigan and Kansas data. However, in each case Yang used the pupil measurement peculiar to each state. Therefore, while he cannot make comparisons at any given time between the three states, he can assess the degree to which each state has progressed toward equity goals with the passage of time.

If all of the foregoing limitations are borne firmly in mind, then one can say that the 1973 act has done what the General Assembly wanted it to do in the three years immediately following the reform. The evidence does show a reduction in the disparity between school districts in expenditure per pupil. The trend is more marked in unit districts and high school districts than in elementary districts, but there is evidence of reduction in variance in all three populations. If one concentrates on the variation below the median expenditure, then the evidence indicates progress in moving up the low spending unit districts and high school districts, but there appears to be no such progress for low spending elementary districts. The findings with respect to the attainment of the goal of "fiscal neutrality" or "wealth neutrality" are also reassuring. This is especially the case when the evaluation using gross wealth elasticities is used. In all three categories of districts in Illinois, e.g., units, elementaries, and high schools, there is evidence of movement toward wealth neutrality. This is especially true in unit districts where the slope of the regression line between property valuations per pupil and expenditures per pupil has been cut in half within a three-year period. The evidence using income as a wealth specification, rather than property valuation, is not so regular as the property valuation results, but the third year's values are all less than the base year and thus support in general the property valuation results. Should the state ever face a constitutional challenge to its allocation system based upon wealth neutrality grounds, these results should prove helpful to the defendants. Tests made with the Gini index and the Lorenz curve are also generally supportive of the results achieved with the gross wealth elasticities, but there are problems in the use of this evaluation technique. Essentially, these problems have centered around the fact that Chicago appears relatively wealthy in terms of median family income, or even income per weighted pupil, and thus aid to Chicago is registered as aid to wealthy students on the Gini-Lorenz procedures.

Not all the results of the evaluations are cast up in equity terms. The first year's evaluation, for example, broke down state aid increments according to school district typologies, like central cities, slow growth and rapid growth suburbs, independent cities, and rural districts. It was obvious from these results that some of the critics of the 1973 reform were justified in their allegation that most of the increase in aid went to either central cities or suburban districts. To put it more bluntly, the rural areas were left out in the 1973 reform. This may tell the political analysts something about the waning strength of the rural contingent in the Illinois General Assembly.

We come now to the fourth and final limitation on the Center's evaluations. All of these results are for the short run, specifically three years after the enactment of the reform. We know very little about the long-run results of this kind of allocation system. It is certainly possible that the movement of the state toward equity goals is mostly a matter of the large increase in state aid since 1973 and has little to do with the nature of the grant-in-aid system.(30) Unless the grant-in-aid system is very badly structured, equity problems will improve with an increase in the percentage of funding assumed by the state government as opposed to the local governments, no matter what the grant-in-aid system looks like. There is another problem with the particular kind of grant-in-aid system Illinois adopted in 1973. As long as the allocation formula is being "phased in," the districts are really being paid not only for their current effort but also for their past effort. Once the formula is fully funded, districts will receive increments in state aid only if they are able to increase their local tax rates, and in Illinois this usually means passing tax referenda. Thus, beyond full funding of the 1973 reform, districts which have not already achieved the maximum rate that the state will match and which pass tax referenda will be rewarded by the state; those that do not pass referenda will continue to receive less from the state, assuming no change in the contants of the formula and no change in the constraints on the variables in the formula. Unfortunately, we know only a limited amount concerning the determinants of tax rates at one point in time and virtually nothing about the determinants of tax rate change through time. If we are to get any kind of firm grip upon where we might be heading beyond full funding of the 1973 reform, we must learn more about referenda behavior and tax rate change under the conditions of a grant-in-aid system that rewards local effort. This statement, of course, holds not just for Illinois, but for all other states that have adopted "district power equalization" or "guaranteed tax yield" systems. Some of the research described below is designed to gain that type of information.

IV. Additional Illinois School Finance Research

Very important school finance research has gone on in recent years in Illinois other than the three evaluations noted in the previous section. It is hazardous to write about this research for at least two reasons. First, we will undoubtedly leave something or someone out. Secondly, in the space available to us we can no nothing but indicate the major thrust of this other Illinois research and hope that the reader will procure the original documents for details. We must also limit ourselves to commenting only upon that Illinois research which is rather closely connected with the 1973 reform.

As described earlier, the reform of 1973 did put into motion a movement toward including a measurement of educational need into the Illinois grant-in-aid system. This need measurement was a weighting based on the concentration of children from lower socio-economic homes, that is, a weighting for compensatory education. The strongest proponent of tailoring the Illinois fiscal system to meet the needs of individual students is, without doubt, Professor William P. McLure. Professor McLure is the "Dean" of school finance researchers in Illinois and his expertise is respected by many members of the legislature.(31) McLure conducted two studies for the Illinois School Problems Commission dealing with the matter of introducing weightings into the Illinois system for handicapped children and for vocational education.(32) These studies present extensive cost differential data on many kinds of educational programs. One of these studies also deals with the manner in which special education and vocational education programs are delivered through intermediate school districts. Despite the forceful advocacy of Professor McLure, the Illinois General Assembly, at least as of this writing, has not followed the lead of Florida, Utah, New Mexico, and other states in building into the allocation system weightings for vocational needs other than compensatory education. Both special education and vocational education in this state retain their own distribution formulae. The vocational formula does take into consideration district wealth; the special education formula does not. It appears almost as if the Illinois legislature is taking a "wait and see" attitude on the matter of weightings for educational needs other than compensatory education.

The University of Illinois at Urbana is also the location for the activities of Professor Walter W. McMahon and his associates. McMahon and Melton have addressed themselves to the matter of a geographic cost-of-living adjustment which might be added to the 1973 reform.(33) Differences in educational costs between school districts have been a concern of the legislature for some time. The adjustment proposed by McMahon and Melton would raise state aid in the northeastern part of the state (their cost-of-living index is 105.1 and higher for these counties) and would lower state aid in the southeastern part of the state (their index is 95.1 or lower in these counties). While the legislature has shown an interest in geographic cost differentials, it has not yet acted, at least partially because of the disequalizing aspects of these geographic cost-of-living indexes. The northeastern part of Illinois just happens to be the richest part of this state, and the southeastern part is perhaps the poorest part of the state. There are some complicated theoretical and empirical questions connected with these cost-of-living indexes as recent research outside of the state shows.(34) Are the higher educational expenditures in northeastern Illinois a function of higher costs in that heavily urbanized part of the state, or are those higher expenditures more a function of the wealth that is also concentrated in that portion of the state? Are these higher expenditures not also a function of a concentration of citizens who are willing to tax themselves heavily for education? As R. L. Johns so succinctly put this problem, "Is it the high cost of living, or the cost of high living?" Until researchers can convince legislators that their multiple regression procedures really do separate the demand aspects of the problem from the supply aspects--and they currently have trouble convincing even other researchers that this is so--we will probably not get legislation on this matter. More recently McMahon has turned his very considerable talents to exploring the possibilities of changing both the measurement of "effort" and the measurement of "wealth" in the 1973 reform legislation.(35) McMahon presents a relatively sophisticated method for combining property valuations with income into a new combined measurement of district wealth. One method would convert property assets into an income flow, and an alternative would determine the present value of an income stream. McMahon then introduces his new combined wealth measurement into the 1973 reform legislation, converting the present measurement of effort, e.g., the operating tax rate, to an "effective tax rate," and using the new wealth measurement as the "ability to pay" specification in the formula. A computer simulation is provided for all districts in the state.

The political difficulty with the introduction of an income factor into the Illinois grant-in-aid system is simply that the legislators who represent income wealthy districts will oppose, in very vigorous terms, any such adjustment. They have, in fact, made it impossible, at least to date, to even collect current income data by placing the name of the school district on the Illinois state income tax form. It is also true that the income level of the central cities, with the exception of East St. Louis, is so high that the legislators representing central cities cannot see that they would be benefited by such a move. Only the rural districts, especially those in the southern part of Illinois, would be clearly assisted by the introduction of an income factor, and it is not obvious that these districts can muster the votes to pass the legislation.

J. Daniel Hou and Warren B. Carson of the Illinois Office of Education have also conducted research on the use of an income factor in the Illinois grant-in-aid system.(36) Unlike McMahon, Hou and Caron use conventional income specifications such as per capita income, per weighted student income, median family income etc. These researchers merely adjust the property valuations and tax rates of a district by ratios which compare district income with average state income. This approach has less sophistication and theoretical elegance than McMahon, but Hou does illustrate the effect of the introduction of these income factors on various classifications of Illinois districts such as central cities, suburbs, independent cities, rural districts, etc. Hou also demonstrates the effect of the introduction of an income factor by using the kinds of equity criteria and measurements described in the foregoing sections of this paper. Furthermore, Hou and Carson explore the possibility of a system that would impose no penalities on districts with above the state average income. In essence, the Hou and Carson approach calls for an adjustment in the 1973 reform legislation for low income districts only. Given the opposition to the introduction of an income factor into the Illinois system by the income wealthy districts, something like the Hou and Carson proposal may be the only practical political alternative. A problem still remains in that the total of votes in districts below the state average income is probably not enough to pass the measure. In our opinion the introduction of an income factor into the Illinois formula will be possible only as a part of some broader legislative package which contains other changes. Political trade-offs with McMahon's geographic cost-of-living adjustment might be explored. Hou has also investigated alternative ways of measuring the elementary and secondary education act, "Title I eligibles."(37) The political implications of Hou's proposed alternative definition have not been worked out, but they appear to favor urban districts. Hou's work does complement McMahon's rather well. McMahon has been interested in a notion of district average wealth, while Hou is concerned, not with the average wealth of a district, but rather with how "poverty" can be measured in that district. The large central cities in Illinois, which tend to have relatively high average wealth and yet also have concentrations of poverty, would do well to support research efforts like those of J. Dan Hou.

As was noted in this journal recently, the measurement of "fiscal effort" in the 1973 Illinois reform continues to merit much stricter scrutiny than when that reform was first passed.(38) In a study supported by federal section 842 funds in Illinois, Yang and Chaudhari demonstrated by a multiple discriminant function that low income is associated with medium to low effort; while high income, along with high educational attainment, high occupational status, and high residential housing values, are associated with high property tax effort.(39) The Yang and Chaudhari study suggests that these relationships are stronger in Illinois for the dual districts (separate elementary and high school districts) than for the K-12 districts. A strong positive relationship was also demonstrated in Ohio by Gensemer between median family income and tax effort for education.(40) This very important matter of just how to measure "fiscal effort" and what the determinants of fiscal effort might be is currently being explored through a grant from the National Conference of State Legislatures to the Center for the Study of Educational Finance at Illinois State University. One study, conducted by Ramesh Chaudhari, investigates the determinants of tax rate change in Illinois, both before the reform and after the reform. A second study by Virginia Lundeen investigates the effects of the residential-commercial-industrial property tax "mix" on expenditure and effort. Ability and effort are also affected in Illinois by a new farm assessment bill passed in the state and this third study is being conducted by Walter Warfield.

Finally, mention should be made of several research activities currently underway within the Illinois Office of Education. Federal 842 funds have been used to support a rather lengthy Citizens Commission investigation of Illinois school finance.(41) The research and investigations underpinning this report are largely the work of Dr. Carol E. Hanes. Dr. Hanes also heads a new group of 842 supported school finance researchers within the IOE, who are at work on a number of school finance studies ranging from the funding of the transportation formula to alternative measurements of wealth. Most of these studies have not yet been released for public discussion. Meanwhile, a separate section in IOE's Research and Statistics Department, under the leadership of Dr. Sally Pancrazio, is also working on an important array of school finance subjects such as the effect of inflation on Illinois school finance, determinants of the passage of tax referenda in Illinois, the impact of reduction-in-force, early retirement implications, and a number of other financially related topics. These efforts are primarily the reponsibility of J. Dan Hou and David Ellsworth. We hope we have made it abundantly clear that school finance research is flowering profusely in Illinois.

V. Recent National Developments in the Measurement of Equity Goals

For a great many years, school finance literature focused primarily upon proposals for new or reformed school finance laws. This "futuristic" or "developmental" orientation is still very much in evidence. The demand has been for stating what a state legislature might do, rather than for evaluating what a state legislature has already done. It is true, of course, that a number of primarily academically based school finance experts, notably Johns, Hickrod, Garms, and McCloone, have always invested various portions of their professional writing in developing criteria by which state school finance systems could be evaluated at any point in time, either before or after reform.(42) This "evaluative" orientation is also very much in evidence in the work of researchers in this field who are strongly oriented toward the academic discipline of economics, for example, Fieldstein, Grubb, Michelson, and Cohn.(43) In 1975 the profession thought this matter sufficiently important to offer a symposium on the subject at an annual meeting of the American Educational Research

Association.(44) Without doubt, this "evaluative" activity has been greatly enhanced by the need for criteria in school finance litigation. The question of what is "justiciable" very often turns on the related question of what is "measurable" in a court of law. Within the last year there is evidence that professional interest in this subject is growing very rapidly. The annual evaluations in Illinois recounted earlier have, in fact, been briefly suspended in order to absorb these new developments into future Illinois evaluations.

Again, space limitations will prevent us from doing more than simply citing some of these national developments. First, there is the work of Friedman and Wiseman.(45) This promises to be of both conceptual as well as of methodological importance. Especially important is the Friedman and Wiseman notion of a concept of "conditional" wealth neutrality and how to measure such a concept. This builds partially on the work of Barro at the Rand Corporation.(46) This line of inquiry puts us back into the notion of a "net" rather than a "gross" elasticity of demand for education mentioned earlier in this paper. Second, there is the work of Robert Berne.(47) Berne has expanded the number of possible measurements of equity drawing on social science literature that is outside the normal cognizance of researchers in school finance. Berne's insistence on the value assumptions of all "evaluation" techniques is also most helpful. Third, there is the restatement, expansion, and codification of some of Garms' earlier work in this area in the new school finance textbook we have mentioned earlier in this article.(48) Fourth, there is the work at the Rand Corporation by Barro, Carroll, Alexander, and Cox.(49) Fifth, there is the criteria development work at the Educational Policies Research Institute of the Educational Testing Service by Mosowitz, Sinkin, and Jargowsky.(50) Sixth, there is the state-by-state profile work of Brown, Ginsburg, Killalea, and Tron.(51) Finally, there is an attempt to coordinate all of this activity into some kind of "Grand Alliance" led by James Kelly of the Ford Foundation and Denis Doyle of the National Institute of Education. Kelly and Doyle have their hands full in such an endeavor. School finance researchers seem to be an especially individualistic lot.

VI. Further Reform in Illinois

The number of proposals to change the grant-in-aid system in this state are almost as numerous as educators and legislators who understand the present system, plus all of the educators and legislators who do not understand the present system. Fundamentally, however, the present "would-be" reformers can be grouped into three classifications. One group strongly supports the "reward for effort" aspects of the present Illinois formula, and would therefore be in favor of any legislative changes which might strengthen this dimension of local control over educational spending decisions.(52) This group, for example, would be in favor of raising the maximum tax rate in the resource equalizer formula to much higher levels than is presently the case. If one really believes in local control, they argue, then the state should impose few, if any, limitations on whatever level of local spending and local taxation the school district elects to set for itself. Furthermore, if one really believes in "reward for effort," then the state is also obligated to participate in funding at whatever levels of local spending and taxation the district might set. The local control advocates tend to divide, however, on whether the board should set this funding level by board action alone, or whether these tax levels need to be determined by public referenda. The original version of the resource equalizer did propose that statutory power be given to districts to increase local taxes to maximums in the formula without referenda. This proposal has been rejected annually by the General Assembly, but history reveals that when enough districts have achieved taxes at a higher rate than the tax limits without referendum, then the General Assembly has increased the power to tax without a referendum. For example, the educational fund was increased from 1% to 1.25% in 1957 and then "board leeway," as it is sometimes called, was increased from 1.25% to 1.6% in 1965.

This reform group is not too pleased with the part of the Jaffe amendment which lowered the maximum tax rate for K-12 and K-8 districts, rather than raising it. The Jaffe amendment also increased the guaranteed assessment level so that the mathematics kept the maximum guaranteed state and local revenue level at $1,260. This maneuver of simultaneously raising the guaranteed assessed valuation level, while lowering the maximum tax rate, has some interesting effects. Since there is support in the legislature for doing this again, these effects need to be carefully inspected. In the first place, if the process is carried out far enough, it will begin to affect the equity goals of the formula. For example, dropping the maximum rate from 3% to 2.9% means that a rich district at 3% can now raise more than a poor district at 3% in combined state and local revenues. The tenth of a percent is an "unequalized" tax yield. Second, it tends to reduce the amount of state aid needed to fund the allocation system, and thus reduces the ratio of state to local dollars in the system. Third, while in the long run it moves away from the reward for effort principle, in the short run it may encourage increases in local taxation. This occurs because, after the maneuver has taken place, the districts can achieve greater amounts of state aid for each increment in tax rate passed. The proponents, of course, favor this last phenomena since they wish to increase the "access" of districts to the $1,260 level, that is, they wish to get there faster at lower tax rates. This is especially true for representatives of unit districts who argue that they must move further by referenda to get to the $1,260 level than must high school districts and elementary districts. There are enough "unintended" consequences of this maneuver that the authors of this article would rather use the increased state dollars to raise the guaranteed valuation level without changing the local effort required or calculated.

A second group of reformers are now having serious misgivings about the reward for effort factor, but they appear to be unwilling to give it up altogether. In particular, the second group argue, and with at least some research support, that low income districts and low property valuation districts will not be able to increase their local tax rates and therefore not be able to take advantage of the reward for effort the state is holding out. One would think it might be a simple research matter to determine whether it is the rich or the poor districts that are raising their local tax rates under the conditions imposed by the 1973 reform. However, nothing in school finance is that simple. The principal problem here is the very long lag in time needed before one can observe the effects on local district tax preferences within a district power equalization system. In particular, as long as relatively large increments of state aid are coming to the district through a phasing-in of the formula, many districts will simply stave off the necessity of going to their local voters to increase the tax rate. Only after the formula has been fully funded, which means in Illinois only about the time this article is being written, will the districts begin to feel the need to reveal their preferences for tax increments. This second group simply assumes that when all the research is in, it will reveal that poor districts were not helped by district power equalization schemes, including the one in Illinois. Various changes are therefore proposed by this group.

The first proposal follows from the McMahon and Hou research discussed earlier. This strategy would be to change the way "effort" is measured in such a manner that the "adjusted" effort measure would favor the poorer districts. A second proposal would ignore whether a district was taxing at the maximum for those districts which were below the 50th percentile in both property valuations and income. Still a third proposal involves establishing the foundation plan as the first phase of a "two-tiered" allocation system and then progressively increasing the first tier until the second tier, the resource equalizer or district power equalization portion, is simply a local "enrichment" part of the two-stage allocation system.(53) A design calling for a high foundation grant-in-aid, supplemented by a small amount of reward for effort, and weighted to account for individual student needs, has secured the endorsement of a number of professional educators throughout the country.(54) The difficulty with such a "two-tiered" system is that it may call for as much as 75% state aid. One could, of course, start with a relatively low foundation level and edge it up rather slowly. Given the amount of state funds available in Illinois for the K-12 jurisdiction, that is probably the only practical course.

The third group are so dissatisfied with the reward for effort notion in Illinois that they would simply do away with that element in the Illinois system forthwith.(55) There are various ways that this can be accomplished. One simple way is to substitute the present maximum tax rate for the actual tax rate. That is, give all districts credit for the maximum rate, regardless of whether they have been able to pass tax referenda or not. If that is done, what in essence remains is a foundation program set at a $1,260 figure. Interestingly enough, this is not all that expensive to the state. Estimates made by Hubbard put this maneuver at a cost of only $76,000,000. Such a move would, however, constitute a major shift away from the "equal expenditure for equal effort" thinking that dominated the 1973 reform. This third group, a strongly anti-"reward for effort" contingent, has been greatly encouraged recently by the Cincinnati vs. Walter decision in Ohio.(56) While that decision is now on appeal, it does cast at least a shadow of doubtful constitutionality over the "reward for effort" principle.

While potential reformers are in considerable disagreement regarding the notion of reward for effort in Illinois, they are in fundamental agreement about the need to keep the formula current with inflation. This problem, present in all states, has been highlighted by Garms, Guthrie, and Pierce.(57) Because the formula was designed to give an increase for all districts except those already at higher levels (those above the guaranteed level of assessment and the foundation formula districts), this matter of providing for a constantly inflating grant-in-aid was rejected by the sponsors of the 1973 legislation. It was felt that for the four years of increased state funding, the districts could absorb the inflation. It is possible that this would have been true had the formula been fully funded. However, it is obvious to most political observers that the General Assembly will, after their experience in 1973-77, not again commit themselves for more than a single year to funding an escalating grant-in-aid formula. Thus, it becomes a real struggle to see that the state support level is increased annually by an amount at least equal to the increase in the cost of living. Increases in local tax rates and therefore increases in locally derived revenue are not likely to be enough to bail most Illinois districts out of their inflation induced problems. The task is to convince the state that it should accept, as an additional annual cost of education, the amount of dollars it takes to increase the guaranteed valuation figure by a percentage equal to inflation, and then to add whatever is desirable to improve education beyond keeping pace with inflation.

Most reformers, regardless of their differences, are aware that the combined effects of inflation and loss of pupils are thieves, waiting in the shadows to steal some or all of their hard-earned advances toward equity goals that they might have recently made. As inflation drives property valuations upward and pupils are lost through demographic changes in the population, districts appear to possess more and more property valuation per pupil and, therefore, the state grant-in-aid system requires less and less state dollars to fund it. Furthermore, while state dollars are lost immediately when students no longer show up at the schoolhouse door, locally derived dollars generally continue. In fact, locally derived revenues may have to increase given the effects of collective negotiation, rapidly rising fuel costs, rising commodity costs, and other selective inflationary forces. The reformers therefore face the dismal prospect of reverting to primarily local funding with all the inequalities that primarily local funding brings with it. There is some evidence that this "regression to local funding" is already at work in Illinois in spite of the equity gains under the 1973 reform.(58) Reformers are thus running on a treadmill simply hoping to hold on to the limited equity gains since the 1971 Serrano decision. The only real ally here may be the great unpopularity of the local property tax. However, if the state refuses to keep up its share of the inflation burden and if the local citizens refuse to pass property tax referenda, then the local district superintendent has no recourse except to do that which he or she dislikes most, reduce the level of educational services offered the citizenry.

There are scores of other changes being proposed almost every day in Illinois. To list only a few this would include: changing the pupil count in the measurement of wealth to all children (public, private, and parochial) from the present TWADA count; abolish the foundation program and replace it with a flat grant of $100 per TWADA or some other figure; change both the definition of students and the weighting used in the compensatory education factor in the formula; work the special education and vocational education funding into the general formula; control the "allowable costs" in the transportation formula; consider a local option income tax for the schools or even substitute a state income tax for the local property tax; etc. Many of these changes are discussed in the Citizens Commission report previously mentioned.(59) The prognosis for the future may well be that many of these smaller and more technical changes will indeed take place. However, we believe that the core of deeply held political values upon which the basic allocation system is ultimately constructed changes very, very slowly. Thus the Illinois school finance system will continue to rest upon the principles of equity, efficiency, and at least some decentralization, or local control, for the foreseeable future. The strengths of these often conflicting values, however, will ebb and flow with the passage of time. Equity may be a very strong goal at one point of time and decentralization or local control may be stronger at some other point in time. Surely one would not wish it otherwise, for sovereignty in a democratic system is never monolithic; it must change as consensus on political values shifts among freemen.

Notes and References

1. The "short shelf" of readings on Illinois school finance research is not so short anymore. Three official state reports are of interest: Final Report of the Superintendent's Advisory Committee on School Finance, 1973, Illinois Office of Education, Springfield, Illinois (also available as ED 078 550 in the ERIC document system); A New Design: Financing for Effective Education in Illinois, 1972, Executive Office of the Governor, Springfield, Illinois; Report of the Citizens Commission on School Finance, 1977, Illinois Office of Education, Springfield, Illinois. In addition there are the three evaluations of the 1973 reform that have been conducted by the Center for the Study of Educational Finance at Illinois State University: Hickrod, G. Alan, Ben C. Hubbard, and Thomas W.C. Yang, The 1973 Reform of the Illinois General Purpose Educational Grant-In-Aid: A Description and an Evaluation, 1975, the Center, Normal, Illinois (also available in Tron, Esther O. (ed.), Selected Papers in School Finance, 1974, U.S.O.E., GPO, Washington, D.C., and available as ED 127 681 in the ERIC system); Hickrod, G. Alan, Thomas W.C. Yang, Ben C. Hubbard, and Ramesh Chaudhari, Measurable Objectives for School Finance Reform, 1975, Center for the Study of Educational Finance, Illinois State University, Normal, Illinois (also available as ED 103 977 in the ERIC system); Hickrod, G. Alan, Ben C. Hubbard, Thomas W.C. Yang, Tharin Rasanond, and Ramesh Chaudhari, The 1973 Reform of the Illinois Grant-In-Aid System: An Evaluation After Three Years, the Center, Illinois State University (also available as TM 006 099 in the ERIC system). The ERIC system mailing address is P.O. Drawer O, Bethesda, Maryland 20014. The most comprehensive short description of the entire Illinois school finance system, not just the reforms, can be found in an annual publication of the Illinois Office of Education entitled: State, Local, and Federal Financing for Illinois Public Schools; while contributed to by several individuals, this is primarily the work of the state assistant superintendent for finance, Fred Bradshaw. Finally, for what amounts to a running account of school finance studies and problems in Illinois since the early 1950's, the reader should be directed to the Reports of the Illinois School Problems Commission; while contributed to by several individuals, these are primarily the work of Ben C. Hubbard.

2. Garms, Walter I., James W. Guthrie, and Lawrence C. Pierce, School Finance: The Economics and Politics of Public Education, 1978, Prentice-Hall, Englewood Cliffs, New Jersey.

3. Hickrod, G. Alan, Ronald L. Laymon, and Ben C. Hubbard, "Toward a Political Theory of School Finance Reform in the United States," Journal of Educational Administration, October, 1974. For an earlier policy statement see, Hickrod, G. Alan and Ben C. Hubbard, "Social Stratification, Educational Opportunity, and the Role of State Departments of Education," Educational Administration Quarterly, Winter, 1969.

4. See Tron, Esther O., "Fiscal Controls and Tax Requirements Imposed by States and Tax Options Available to School Districts" in Tron, Esther O., Selected Papers in School Finance, 1976, U.S.O.E., GPO, Washington, D.C.

5. See Pincus, John, "The Serrano Case: Policy for Education or For Public Finance?", Phi Delta Kappan, November, 1977.

6. Empirical evidence of this point can be found in Harrison, Russell S., Equality in Public School Finance, 1976, Lexington Books, Lexington, Massachusetts. Further discussion is also found in Garms, Guthrie, and Pierce, op. cit.

7. Garms, Guthrie, and Pierce, op. cit., pp. 339-340.

8. The classic statement of this ideological conflict between egalitarian and libertarian viewpoints is still: James, H. Thomas, School Revenue Systems in Five States, 1961, School of Education, Stanford University. For more recent treatments see, Guthrie, James W., George M. Kleindorfer, Henry M. Levin, and Robert T. Stout, Schools and Inequality, 1971, Massachusetts Institute of Technology Press, Cambridge, Massachusetts; Benson, Charles S. and Others, The Fleischmann Report, 1973, Viking Press, New York, New York; Benson, Charles S., Paul M. Goldfinger, E. Gareth Hoachlander, and Jessica S. Pers, Planning for Educational Reform: Financial and Social Alternatives, 1974, Dodd, Mead, and Company, New York, New York; Cohn, Elchanan, Economics of State Aid to Education, 1974, Lexington Books, Lexington, Massachusetts; Harrison, Russell S., op. cit.; and, of course, Garms, Guthrie, and Pierce, op. cit. Numerous "state studies" struggle with this conflict. For an early example see, Thomas, J. Alan, School Finance and Educational Opportunity in Michigan, 1968, Michigan Department of Education; more recent examples may be found in Hickrod, G. Alan, et. al., Final Report of the Superintendents Advisory Committee on School Finance, 1973, Illinois Office of Education; and especially, Pierce, Lawrence C., Walter I. Garms, James W. Guthrie, and Michael W. Kirst, State School Finance Alternatives, 1975, Center for Educational Policy and Management, University of Oregon, Eugene, Oregon. Of course, this is discussed in detail in the neo-Marxist critiques of public school finance. For example see, Carnoy, Martin, Education as Cultural Imperialism, David McKay, 1974; also, especially, Bowles, Samuel and Herbert Gintis, Schooling in Capitalist America, 1976, Basic Books.

9. For the really dedicated student of school finance in Illinois, the "short shelf" of Illinois school finance readings in footnote one might be extended by three volumes of "occasional papers" all published by the Superintendents Advisory Committee on School Finance in 1972. These contain many Illinois school statistics bearing on the "equity" question. They are all preserved in the ERIC system under the following numbers: ED 078 551, ED 078 552, and ED 078 553.

10. Michigan State Education Committee, New Equity in Michigan School Finance: The Story of the Bursley Act, 1974, Lansing, Michigan; excellent material on equity matters in Michigan is produced by Dr. James L. Phelps. Regrettably, little of this has been published outside the state or in a form that readers can get to it. Contact Dr. Phelps at the Michigan Department of Education, Lansing, Michigan.

11. Kirp, David . and Mark G. Yudof, Educational Policy and the Law, 1974, McCutchan Publishing Company, Berkeley, California.

12. For an outdated but still revealing look at metropolitan disparities see, Hickrod, G. Alan, "Dispersion of Human Resources and Fiscal Characteristics Among School Districts in a Metropolitan Area," Educational Administration Quarterly, Autumn, 1967; for a more elaborate treatment see, Hickrod, G. Alan and Cesar M. Sabulao, Increasing Social and Economic Inequalities Among Suburban Schools, 1969, Interstate Printers and Publishers, Danville, Illinois.

13. *A New Design: Financing for Effective Education in Illinois*, *op. cit.*

14. For the testimony of another very successful legislator about the necessity of these political trade-offs see, Bursley, Gilbert E., "The Political Strategies of Educational Finance Reform," *Journal of Education Finance*, Summer, 1975.

15. Coons, John E., William H. Clune, and Stephen D. Sugarman, *Private Wealth and Public Education*, 1970, Harvard University Press.

16. Augenblick, John G., *School Finance at a Second Glance*, 1977, Education Commission of the States, Denver, Colorado. For good descriptions of school finance reforms see: Odden, Allan, John Augenblick, and Phillip Vincent, *School Finance Reform in the States*, 1976-1977; for an earlier description see: Grubb, W. Norton, *New Programs of School Aid*, 1974, National Conference of State Legislatures, Washington, D. C., and Johns, Thomas L., "1975 School Aid Legislation: A Look at Three States," *Journal of Education Finance*, Winter, 1976. The single most authoritative treatment of these reforms is: Callahan, John J. and William H. Wilken, *School Finance Reform: A Legislators Handbook*, 1976, National Conference of State Legislatures, Washington, D. C. The best treatments within a legal context are: Alexander, Kern and K. Forbis Jordan (eds.), *Constitutional Reform of School Finance*, 1972, Institute for Educational Finance, Gainesville, Florida, and Levin, Betsy, *Future Directions for School Finance Reform*, 1974, Lexington Books, Lexington, Massachusetts.

17. Berke, Joel S., *Answers to Inequity*, 1974, McCutchan Publishing Co., Berkeley, California, p. 124.

18. Hubbard, Ben C., G. Alan Hickrod, and Robert A. Burnham, "House Bill 1484--A Second Look at the 1973 Common School Reform," *13th School Problems Commission Report*, the Commission, Springfield, Illinois.

19. This section of the paper is a modified version of part of a Center report: Hickrod, G. Alan and Ben C. Hubbard, *Illinois School Finance Research: Some Knowns and Unknowns*, 1977, the Center, Illinois State University, Normal, Illinois.

20. See footnote one for citations to the three annual evaluations.

21. Mort put it in these terms, "Underlying the quality principle is the concept of assuring a minimum without placing a ceiling on opportunities -- the idea of helping those handicapped by their economic and social environment. Equality of opportunity demands leveling up, not hobbling the strong." P. 37, Mort, Paul R., Walter C. Reusser, and John W. Polley, *Public School Finance: Third Edition*, 1960, McGraw-Hill.

22. Harrison, Forrest W. and Eugene P. McLoone, *Profiles in School Support*, 1965, U.S.O.E.; also, McLoone, Eugene P., *Profiles in School Support, 1969-70*, National Center for Educational Statistics, U.S.O.E., 1974, GPO, Washington, D.C.

23. James. H. Thomas, *School Revenue Systems in Five States*, 1961; James, H. Thomas, J. Alan Thomas, and Harold J. Dyck, *Wealth, Expenditure, and Decision-Making for Education*, 1963; James, H. Thomas, James A. Kelly, and Walter I. Garms, *Determinants of Educational Expenditures in Large Cities of the United States*, 1966, all from the School of Education, Stanford University.

24. Harrison, Russell A., op. cit.

25. For a review of these expenditure determination studies during a particular period see: Hickrod, G. Alan, "Local Demand for Education: A Critique of School Finance and Economic Research Circa 1959-1969," Review of Educational Research, February, 1971; for an example of expenditure determination studies using the state rather than the local district as the unit of analysis see: McMahon, Walter W., "An Economic Analysis of Major Determinants and Expenditures on Public Education," Review of Economics and Statistics, August, 1970.

26. Michelson, Stephan, "What Is a 'Just' System for Financing Schools?" in Levin, Betsy (ed.), Future Directions for School Finance Reform, 1974, Lexington Books; Feldstein, Martin S., "Wealth Neutrality and Local Choice in Public Education," American Economic Review, March, 1975.

27. Lorenz curves and Gini indexes have proven rather popular over the last several years in school finance research. In addition to the work of Hickrod and his associates, the following literature might be consulted: Michelson, Stephan, "The Political Economy of Public School Finance" in Carnoy, Martin (ed.), Schooling in a Corporate Society, 1972, David McKay; Grubb, W. Norton and Stephan Michelson, States and Schools, 1974, D. C. Heath and Company; McLoone, Eugene P., op. cit.; Alexander, Arthur J., Inequality in California School Finances: Dimensions, Sources, Remedies, 1975, Rand Corporation, Santa Monica, California; Wilensky, Gail R., State Aid and Educational Opportunity, 1970, Sage Publishing; Barkin, David, The Equalizing Impact of State Aid to Education, Washington University Institute for Urban and Regional Studies, St. Louis, Missouri, 1967; see also the following papers on the subject: Garms, Walter I., "Use of the Gini Index and Lorenz Curve in School Finance Research," and Firestine, Robert E., "Some Empirical Approaches to Comparing Equity in School Finance Systems," 1975, Annual Meeting of the American Educational Research Association; Gensemer, Bruce L., "Equalizing Educational Opportunities: Analysis of the Proposed Reform in the Ohio State Aid to Public Schools," 1975, Ohio Association of Economists and Political Scientists. Gini indexes and Lorenz curves are used in three or four different ways and a careful reading is necessary to determine just which application has been made. For a discussion of two of these methods see: Garms, Guthrie, and Pierce, op. cit., pp. 322-324.

28. Garms, Guthrie, and Pierce, op. cit., p. 318.

29. Yang, Thomas Wei Chi, Measurement of School Revenue Equity in the States of Illinois, Michigan, and Kansas, 1975, Center for the Study of Educational Finance, Illinois State University, Normal, Illinois 61761.

30. A letter from R. L. Johns to Thomas Yang, dated January 13, 1976, pointed this out in some detail.

31. See McLure, William P., The Public Schools of Illinois, 1964, Illinois Office of Education, Springfield, Illinois; also McLure, William P. and Others, Education for the Future of Illinois, 1966, Illinois Office of Education, Springfield, Illinois.

32. McLure, William P., Special Education: Needs, Costs, Methods of Financing, 1975, Bureau of Educational Research, College of Education, University of Illinois at Urbana; McLure, William P., Special Programs in Public Schools, 1976, Bureau of Educational Research, College of Education, University of Illinois at Urbana.

33. McMahon, Walter W. and Carroll Melton, A Cost of Living Index for Illinois Counties and School Districts, 1977, Illinois Office of Education, Springfield, Illinois.

34. Tron, Esther O. (ed.), Selected Papers in School Finance, 1975, U.S.O.E., GPO, Washington D.C.; Chambers, Jay G., Allan Odden, and Phillip Vincent, Cost of Education Indices Among School Districts, 1976, Education Commission of the States, Denver, Colorado.

35. McMahon, Walter W., A Broader Measure of Wealth and Effort for Educational Equality and Tax Equity, 1977, Illinois Office of Education, Springfield, Illinois.

36. Hou, J. Dan and Warren B. Carson, Alternative Measures of Local Wealth and Effort, 1977, Illinois Office of Education, Springfield, Illinois.

37. Hou, J. Dan, An Alternative Measure of ESEA Title One Eligibles, 1977, Illinois Office of Education, Springfield, Illinois.

38. Hickrod, G. Alan and Ben C. Hubbard, "The Concept of Fiscal Effort in the Illinois General Purpose Educational Grant-In-Aid," Journal of Education Finance, Winter, 1978.

39. Yang, Thomas W.C., and Ramesh Chaudhari, A Study of the Relationship Between Selected Socio-Economic Variables and Local Tax Effort to Support Public Schools in Illinois, 1977, Center for the Study of Educational Finance, Illinois State University, Normal, Illinois 61761.

40. Gensemer, Bruce, Personal Income Variations Among Ohio School Districts and Their Implications for the Guaranteed-Yield Formula, 1976, Education Review Committee, Ohio General Assembly, Columbus, Ohio.

41. Report of the Citizens Commission on School Finance, 1977, Illinois Office of Education, Springfield, Illinois.

42. A limited number of examples would include: Johns, Roe L., Kern Alexander, and K. Forbis Jordan, Financing Education: Fiscal and Legal Alternatives, 1972, Merrill Publishing, Columbus, Ohio, especially Chapter Nine; Hickrod, G. Alan, "Alternative Fiscal Solutions to Equity Problems in Public School Finance," School Finance in Transition, 1973, Institute for Educational Finance, Gainesville, Florida; all of the publications of the Center for the Study of Educational Finance mentioned in the first footnote of this paper illustrate this frame of reference; for applications of evaluative techniques in states other than Illinois see: Yang, Thomas W.C., Measurement of School Revenue Equity in the States of Illinois, Michigan, and Kansas, 1975, Center for the Study of Educational Finance, Illinois State University, Normal, Illinois 61761; McCloone, op. cit.; Garms, Guthrie, and Pierce, op. cit., especially Chapter Twelve.

43. Feldstein, *op. cit.*; Grubb, W. Norton and Stephan Michelson, *States and Schools*, 1974, Lexington Books, Lexington, Massachusetts; Cohn, Elchanan, *Economics of State Aid to Education*, 1974, Lexington Books, Lexington, Massachusetts.

44. See especially: Hickrod, G. Alan, Thomas W.C. Yang, Ben C. Hubbard, and Ramesh Chaudhari, *Measurable Objectives for School Finance Reform*, 1975, Center for the Study of Educational Finance, Illinois State University, Normal, Illinois (also available as ED 103 977 in the ERIC system); Garms, Walter I., "Use of the Gini Index and Lorenz Curve in School Finance Research," unpublished AERA paper; also Firestine, Robert E., "Some Empirical Approaches to Comparing Equity in School Finance Systems," unpublished AERA paper; also an AERA paper which later appeared as: Lindman, Erick L., "Potential Revenue Index," *Journal of Education Finance*, Fall, 1976.

45. Friedman, Lee S. and Michael Wiseman, *Toward Understanding the Equity Consequences of School Finance Reform*, 1977, Graduate School of Public Policy, Berkeley, California; also Friedman, Lee S., "The Ambiguity of *Serrano*: Two Concepts of Wealth Neutrality," *Hastings Constitutional Law Quarterly*, in press.

46. Barro, Stephan M., "Alternative Post-Serrano Systems and Their Expenditure Implications," in Pincus, John (ed.), *School Finance in Transition*, 1974, Ballinger Press, Cambridge, Massachusetts.

47. Berne, Robert, *Equity and Public Education: Conceptual Issues of Measurement*, 1977, Ford Foundation, New York, New York.

48. Garms, Guthrie, and Pierce, *op. cit.*, especially Chapter Twelve.

49. Alexander, Arthur J., *Inequality in California School Finances: Dimensions, Sources, Remedies*, 1975; Barro, Stephen M. and Stephen J. Carroll, *Budget Allocation by School Districts*, 1975; Carroll, Stephen J., *School District Expenditure Behavior*, 1976, Rand Corporation, Santa Monica, California 90406.

50. Moskowitz, Jay, Judy Sinkin, and Peter Jargowsky, *The School Finance Equalization Management System*, Education Policy Research Institute, Educational Testing Service, Princeton, New Jersey.

51. Brown, Lawrence L., Alan L. Ginsburg, J. Neil Killalea, Richard A. Rosthal, and Esther O. Tron, *School Finance Reform in the Seventies: Achievements and Failures*, 1977, Office of the Assistant Secretary for Planning and Evaluation, U. S. Department of Health, Education, and Welfare, Washington, D.C.

52. For a favorable local control case see: Jones, Thomas H., "The Case for Local Control," *Journal of Education Finance*, Summer, 1976.

53. Hickrod, G. Alan and Ben C. Hubbard, "The Concept of Fiscal Effort in the Illinois General Purpose Grant-In-Aid," *Journal of Education Finance*, Winter, 1978.

54. Phi Delta Kappa Commission on Alternative Designs for Funding Education, *Financing the Public Schools: A Search for Equality*, 1973, Phi Delta Kappa, Bloomington, Indiana; also appears to be the favored design of the Education Commission of the States. See especially: Odden, Allan, Phillip E. Vincent, Judy Bellows, and Lora Lee Rice, *Report of the Task Force on School Finance of*

the South Dakota State Board of Education, November, 1976; also Odden, Allan, Phillip E. Vincent, Judy Bellows, and Lora Lee Rice, Analysis of the School Finance and Tax Structure of Missouri, October, 1976; for applications in Illinois see: Hickrod, G. Alan and Ben C. Hubbard, Return to the "Two-Tier" Funding Notion in Illinois, 1977, Center for the Study of Educational Finance, Illinois State University, Normal, Illinois 61761.

55. "Reward for effort" has some formidable opponents. For example see: Johns, Roe L., "Improving the Equity of School Finance Programs," Journal of Education Finance, Spring, 1976; see also Jordan, K. Forbis and Kern Alexander, "Constitutional Methods of Financing Public Schools," in Alexander, Kern and K. Forbis Jordan, Constitutional Reform of School Finance, 1972, Institute for Educational Finance, Gainesville, Florida. Johns has not always been opposed to the concept, however--see: Johns, R. L., Incentive Grant for Quality Education, 1966, Florida Educational Research and Development Council, Gainesville, Florida (available as ED 010 906 in the ERIC system).

56. Board of Education of the City School District of the City of Cincinnati et. al., vs. Franklin B. Walter, Superintendent of Public Instruction, et. al., Findings of Fact and Conclusions of Law, December 5, 1977, Court of Common Pleas, Hamilton County, Ohio. Numerous publications on school finance matters in Ohio may be obtained from William A. Harrison, Jr., Staff Director, Education Review Committee, Ohio General Assembly, 20 East Broad Street, Columbus, Ohio 43215.

57. Garms, Guthrie, and Pierce, op. cit., pp. 237-238.

58. Bradshaw, Fred and Others, State Local, and Federal Financing for Illinois Public Schools, 1977-1978, Illinois Office of Education, Springfield, Illinois. The percentage of state support has recently dropped in Illinois from 48.36 percent in 1975-76 to 44.65 percent (estimated) in 1977-1978.

59. Report of the Citizens Commission on School Finance, 1977, Illinois Office of Education, Springfield, Illinois.