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ABSTRACT

In the wake of "municipal overburden" characterizing today's cities faced with an increased demand for public services and a diminishing tax base, most urban areas in the United States have had to explore new sources of additional funds ranging from federal revenue sharing to the use of public lotteries. This paper focuses on the financing of urban education using Chicago in the state of Illinois as an illustrative example. By presenting a detailed comparison of Chicago vis-a-vis the metropolitan area with respect to fiscal capacity and educational need, the author argues for financing urban schools on the basis of educational need and analyzes the implications of some recent plans to finance local school districts in Illinois. This report should be of considerable use to educational planners interested in public finance. (Author)

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PUPIL-NEED ORIENTED STATE SCHOOL FINANCE SYSTEM: THE HOPE OF LARGE CITY SCHOOLS

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FOREWORD

Modern-day educational planners face an extremely difficult task of providing quality education to large masses of students in view of decreased revenues, soaring costs, shifting populations and changing educational programs. Such a challenge requires that a far greater emphasis be placed on planning for schools than has been the case to date and necessitates the development of improved techniques specially designed for educational planning.

Project Simu-School is intended to provide an action-oriented organizational and functional framework necessary for tackling the problems of modern-day educational planning. It was conceived by a task force of the National Committee on Architecture for Education of the American Institute of Architects, working in conjunction with the Council of Educational Facility Planners. The national project is comprised of a network of component centers located in different parts of the country.

The main objective of the Chicago component is to develop a Center for Urban Educational Planning designed to bring a variety of people--layment as well as experts--together in a joint effort to plan for new forms of education in their communities. The Center is intended to serve several different functions including research and development, investigation of alternative strategies in actual planning problems, community involvement, and dissemination of project reports.

In the wake of "municipal overburden" characterizing today's cities faced with an increased demand for public services and a diminishing tax base, most urban areas in the United States have had to explore new sources of additional funds ranging from federal revenue sharing to the use of public lotteries. This paper focuses on the financing of urban education using Chicago in the State of Illinois as an illustrative example. By presenting a detailed comparison of Chicago vis-a-vis the metropolitan area with respect to fiscal capacity and educational need, the author argues for financing urban schools on the basis of educational need and analyzes the implications of some recent plans to finance local school districts in Illinois. It is hoped, therefore, that this report will be of considerable use to educational planners interested in public finance.

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PUPIL-NEED ORIENTED STATE SCHOOL FINANCE SYSTEM: THE HOPE OF LARGE CITY SCHOOLS

I. INTRODUCTION

Most of the large-city school systems in the United States are currently in serious financial trouble.[1] Recent demographic and economic changes have left the cities with a population that has higher proportion of the economically and socially disadvantaged relative to other areas of their respective states. The change in the character of city population has resulted in increased demand for public services in health, sanitation, transportation, safety, welfare, housing, and education. While the demand for public services has rapidly increased, owing to a deteriorating tax base, the revenue necessary for financing public services has not. The schools which mostly rely on the proceeds from a local property tax base have particularly felt the pinch of diminishing local revenues in the cities. The availability of locally-raised revenues for schools has been threatened, not only by the diminishing tax base, but also by competition from other public agencies because of the increased demand for these services.

The change in the socioeconomic composition of the city population also has had definite impact on the educational services offered by the schools. School performance as measured by achievement, grade level attainment or enrollment status is influenced by the socioeconomic status of the parents.[2] Generally, children from low socioeconomic status homes perform poorly in school as compared with

children from middle and upper socioeconomic status homes.[3] Schools catering to the children from lower socioeconomic status homes would require compensatory and remedial programs to meet the needs of their pupils. Besides having higher proportion of socioeconomically disadvantaged perople, the cities also have a large number of immigrants whose children need additional help in learning the English language. Additional programs, however, require additional dollars. Special compensatory, remedial and bilingual programs cost relatively more than regular school programs.[4]

Another important reason for the financial troubles of the large city schools is that the methods used to distribute state aid for the support of public education are obsolete.[5] The existing educational finance arrangements were devised during the first quarter of this century when the cities were undisputed centers of commerce, industry, and culture and had well-developed public school systems. Then, the objective of state aid was to help the less affluent rural areas develop adequate school systems. Since then, the demographic, economic, and social changes have led to the growth of suburban rings around the cities as well as to the transformation of the relative status of the cities from that of affluence to that of poverty. Consequently, most of the state aid formulas, as they stand today, fail in their multiple purpose of imposing equitable tax burden on the school districts while distributing educational resources among them so as to equalize educational opportunity.

The major aim of this paper is to focus on the financing of urban

education using Chicago in the State of Illinois as an illustrative example. In the rest of the paper a brief presentation of various educational distribution formulas will precede the discussion of educational need and fiscal ability. Then, Chicago will be compared with metropolitan counties in the Standard Metropolitan Statistical Area (SMSA) as well as surrounding suburbs and other large cities in Illinois vis-a-vis fiscal and need variables. Following the comparisons, the new as well as the old state aid distribution formulas and the recent recommendations made by the Finance Task Force of the Governor's Commission on the Schools[6] and by the State Superintendent's Advisory Committee on School Finance[7] will be reviewed and analyzed. Finally, the implications of need based state aid formulas will be discussed.

II. GENERAL STATE AID FORMULAS FOR FINANCING LOCAL SCHOOL DISTRICTS

To compensate for variation in the fiscal ability of school districts to support an acceptable instructional program, all of the states supplement the revenue raised by local school districts within the state. A few of the states make flat grants to the school districts on a per pupil or per teacher basis; however, most of the states utilize equalization grants to provide state aid.[8] The distribution formulas used in the various states are generally modified versions of the following three "pure" forms.[9]

1. The Strayer-Haig Formula or the Foundation Program Plan

$G = FP - rV$

Where:

F = Expenditure per pupil established by the state legislature as the level at which education will be supported in the state
P = Number of pupils in the local school district
r = Required local tax rate, sometimes called the "qualifying rate"
V = Property valuation in the local school district

The product of F and P gives the total educational expenditure for the school district under the foundation program whereas the product of r and V determines the amount of revenue to be raised locally. The difference between the two products equals the amount of state aid (G) that the school would be entitled to. It can be seen that r and F are fixed by the state. Thus, the state aid for a given school district would be directly proportional to the number of pupils in the district and inversely proportional to the property valuation of the district. In the formula presented above, the pupil variable may be said to represent a school district's educational resource requirement or need

and the assessed valuation measure may be considered as an indicator of the school district's fiscal ability.

2. The Percentage Equalization Formula

$$G = EP\left(1 - 0.5\,\frac{Vi}{Vs}\right)$$

Where:

E = Local expenditure per pupil
P = Number of pupils in local school district
Vi = Property valuation in the local district per pupil
Vs = Property valuation in the state per pupil

The total educational expenditure for the district is the product of E and P. The E in the above formula is similar to the F in the Strayer-Haig formula. The level of E can be established by the state legislature. The fiscal ability of a school district is denoted by the ratio of assessed valuation per pupil in the state.

According to the formula, a school district with assessed valuation per pupil that is equal to the state average would receive state aid equivalent to 50 percent of its educational expenditure. A school district with property valuation 50 percent or more than the state average would receive state aid equivalent to 25 percent of its educational expenditure. And a school district with a valuation 50 percent less than the state average would obtain aid equivalent to 75 percent of its educational expenditure. However, a school district with a property valuation twice the size of the ratio average would receive no state aid.

3. The Resource Equalization Formula

$G = P[r(Vg-Vi)]$

Where:

P = Number of pupils in local school district
r = Educational tax rate in the local school district
Vg = Property valuation guaranteed by the state per pupil
Vi = Property valuation in the local district per pupil

The state guarantees to each district a fixed valuation or tax yield per pupil. The difference between the guaranteed tax yield and actual yield is the aid per pupil that the school district would receive from the state. Instead of guaranteeing a fixed sum of money per pupil as in the Strayer-Haig formula, the resource equalizing formula guarantees a fixed property valuation per pupil to a school district. The variable P in the formula may be regarded as a measure of educational need. The fiscal ability and the effort put forth by the school districts would be given by (Vg-Vi) and r respectively. A school district with the same valuation per pupil as guaranteed by the state would receive no aid whereas a school district with a higher valuation than guaranteed may have to transfer some of the locally raised revenue to the state.

As was pointed out before, the formulas presented above are merely "pure" versions of more complicated forms used in various states. By manipulating the educational need and fiscal capacity variables in the formula as well as by adding new variables, a state can achieve desired distribution of tax burden as well as educational resources among school districts within the state. In the formulas presented above only single variables were used to represent educational need

and fiscal capacity of school districts. In reality, the concepts of fiscal capacity and educational need are multidimensional and quite difficult to represent even with multiple variables.

III. CONCEPTS OF FISCAL CAPACITY AND EDUCATIONAL NEED

1. Fiscal Capacity

The term fiscal capacity refers to the tax base (or bases) against which a unit of government (such as a school district) may levy taxes.[10] Personal and corporate income, real and personal property, and retail sales are some of the most prevalent tax bases utilized by federal, state, and local governments to raise revenue. Together the retail sales, income, and wealth of a community provide an adequate picture of the economic well-being of the community and, hence, a useful measure of the community's "ability to pay." The problem of measuring capacity in the distribution of tax burden could be much simplified if these different measures of economic well-being could be aggregated into a single index or if there existed close correlation between the measures of retail sales, income, and wealth. Unfortunately, however, no acceptable index of ability to pay utilizing property valuations, retail sales and income exists. The evidence pertaining to the correlation between these variables is also inconclusive.[11] In measuring equity in school support, nevertheless, it would be necessary to take account of the incidence of taxes on total income and wealth of individuals and families.

Closely related to the concept of fiscal capacity is the idea of tax effort, i.e., the extent to which a government unit actually uses its capacity to raise revenue through taxation.[12] The concept of tax effort is particularly useful for studying the situations where the same tax base is used by several governmental units for raising revenue. Property tax is the major source of revenue for several

different local governmental units such as municipalities, school districts, park districts and counties.[13] In equalizing educational tax burden, serious inequities would result if the state neglects to take into account the incidence of the taxes of other government bodies on the residents of a school district.

An adequate system of state school finance would take into consideration the assessed value of property as well as other measures of wealth and income and the total tax effort put forth by the people of a school district when determining the distribution of state aid.

2. Educational Need

The demand for educational resources made by school systems are generally couched in items of educational needs of their clientele. The needs of pupils tend to get defined in terms of their sheer numbers or even characteristics such as having a mental or physical handicap, achieving a low reading score, having a primary language other than English and coming from a low socioeconomic status (SES) home. Pupil needs also are expressed in terms of program categories such as preschool, kindergarten, elementary, general high and vocational.

In school distribution formulas, pupil needs are expressed in various ways. Average Daily Attendance (ADA) and Average Daily Membership (ADM) are two simple representations of the size of the pupil population that have been widely used in state aid formulas. Many states have incorporated differential weighting of high school students under the

rationale that high school education costs more. Using similar argument of differential cost, Professor McLure[14] has recommended that cost ratios derived from cost analyses of special education, remedial and compensatory, and vocational and technical education programs be used to weight school pupils when distributing educational resources. Table I shows the different cost ratios reported by McLure in his National Education Finance Project Special Study report on Early Childhood and Basic Elementary and Secondary Education. It can be seen from the table that considerably more resources are being devoted to special programs than to the regular institutional programs. Except for one grade category, relative cost ratios of special programs in cities are consistently higher than the ratios in the suburbs.

In the State of New York, the Fleischmann Commission[15] has recommended the use of reading and math achievement test results as measures of need. The commission advocated weighting students who scored at a low level in reading and math at 1.50 as against a weight of 1.00 for other students. The basis of the commission's recommendation was the belief that "educational priority rather than the artifact of assessed valuation per student should control resource distribution."[16] The commission also recommended weighting all handicapped children at 2.05 for purposes of distributing educational funds.[17] Although the commission report was not explicit on how the commission arrived at the weight of 1.50 to be used for low achieving students, there was some indication that the recommended weight of 2.05 for all handicapped students was derived using data on costs of special programs serving

TABLE I

RATIOS OF
MEAN CURRENT OPERATING EXPENDITURES PER PUPIL BY PROGRAM AND GRADE LEVEL
TO MEAN EXPENDITURE PER PUPIL IN BASIC PROGRAMS,
GRADES ONE THROUGH SIX - 1968-69

Program	Cities (12 Districts)	Suburbs (8 Districts)
Basic Program:		
Grades 1-6	1.000	1.000
Grades 7-9	1.177	1.174
Grades 10-12	1.445	1.219
Mentally and Physically Handicapped:		
Grades 1-6	2.397	2.436
Grades 7-9	2.098	1.878
Grades 10-12	2.220	1.752
Socially Maladjusted:		
Grades 1-6	2.954	2.499
Grades 7-9	2.880	1.368
Grades 10-12	2.432	1.567
Remedial and Compensatory:		
Grades 1-6	1.805	1.702
Grades 7-9	2.940	1.996
Grades 10-12	1.718	1.962
Vocational-Technical:		
Grades 7-12	1.915	1.680
Prekindergarten	1.133	1.047
Kindergarten	1.293	1.110

Source: Eugene P. McLure and Audra May Pence, Early Childhood and Basic Elementary and Secondary Education, National Educational Finance Project Special Study No. 1, Page 96.

handicapped pupils and on the prevalence of various types of handicaps in the student population of the state.[18]

Instead of using achievement test scores as criteria for the allocation of educational resources, Garms and Smith[19] recommend the use of socioeconomic variables which best predict such achievement. The reasons expressed by Garms and Smith for their reservation about the use of achievement scores, are that giving additional money to schools with children scoring low in math and reading tests would be akin to rewarding low achievement and that at present there is a lack of consensus regarding the validity, reliability and cultural bias of the achievement tests available for administration.

The above mentioned authors tried to use local school personnel to gather socioeconomic data on students that would be highly predictive of educational achievement. Their sample consisted of 45 elementary schools in the State of New York. With the help of regression analysis the authors identified the following five variables that gave best prediction of school achievement:

- Percentage of Black students in schools
- Percentage of Puerto Ricans in schools
- Pupil mobility (the average number of schools attended by the pupils in the last three years)
- Percentage of children from broken homes
- Number of years of schooling completed by the father, if present, otherwise the mother of a pupil.[20]

Other socioeconomic variables discarded by the analysts were percentage of children from broken homes, percentage of children living in

overcrowded housing, and percentage of children from families receiving aid to dependent children. Garms and Smith proposed an alteration in the New York state aid formula that essentially consisted of using a need-weighted ADA variable in the distribution formula in addition to the regular weighted average daily attendance (WADA) attendance variable.[21]

Garms and Goettel[22] replicated the above mentioned study with a larger sample and reported that "... using only three variables--percent of pupils from broken homes, percent of pupils living in overcrowded housing and years of education of a pupil's mother--along with the three interaction variables involving pairs of these variables, it is possible to predict 61.6 percent of the variance in school achievement."[23] Their reasons for dropping the ethnic identification variables were that the ethnic identification did not provide politically viable categories.[24] Since close to 40 percent of the variance in achievement scores remained unexplained, the authors understandably did not emphatically recommend the use of the composite of the three socioeconomic variables as a measure of educational need in a state aid formula.

Obviously there is no agreement among school policy makers as to the best measure of educational need. The ADA can be derived quite easily; however, it does not accurately reflect the need for educational resources because school districts have to allocate funds on the basis of enrollment or membership rather than expected attendance rate. School attendance has been found to be positively correlated with

socioeconomic status and, hence, the use of ADA in a state distributive formula would favor affluent school districts over the poorer ones. The ADM measure does not have the drawbacks associated with ADA; however, it, too, fails to reflect higher resource requirements of compensatory and special education programs which cater to the poor and the handicapped children.

Weighting various pupil subpopulations to derive an aggregate measure of school population reflecting educational need is an attractive prospect. Using relative cost ratios to weight pupils, however, implies that current allocation is optimal--a hazardous assumption to accept in the light of existing research findings pertaining to educational production functions.[25] It may be that most of the observed differences in the per pupil costs of various programs are just a reflection of the established pupil-teacher ratios and teacher certification requirements rather than the result of deliberate past resource allocation procedures aimed at maximizing the achievement of desired outcomes of schooling for various subgroups of the school population. Further analyses of the causes of the observed differences in the costs of various programs seem necessary before any intelligent application of cost ratios to school resource allocation procedures can be developed. It would seem that one of the most useful functions of cost analysis, such as the one conducted by McLure, is that it focuses the attention of school administrators and policy makers on the heterogeneity of school population and the different demands of the various subpopulations for school services.

Some of the reservations about the use of achievement scores in state aid distribution formulas were mentioned earlier. Assessing educational disadvantage on the basis of achievement scores makes sense, if the output measures on reading and math can be obtained in an unbiased form. Of all the different outputs schooling is expected to produce, there would be least disagreement regarding the legitimacy of literacy and numeracy as proper outcomes of the schooling process.

As far as the use of socioeconomic indicators to identify disadvantage school population is concerned, it seems that the data on income and occupation--the best indicators of socioeconomic status--are difficult to obtain. The data that can be obtained by school personnel has not conclusively shown to be adequate. Census data would be a good source of information on socioeconomic status of the population residing in a particular school attendance area; however, such data is updated only every ten years. If it were possible to utilize income information collected annually by the Internal Revenue Service, then monitoring any change in the socioeconomic status of school attendance areas would be possible.

The application of the various approaches designed to identify educational need may be expected to yield further insights into the possibility of focusing educational resources on pupils and programs so as to maximize the outcomes of schooling with minimal imposition of taxes. Using the fiscal capacity and educational need concepts discussed thus far, the rest of this paper will focus on the unique

educational and financial troubles of the Chicago public schools.

IV. THE CASE OF CHICAGO PUBLIC SCHOOLS

Chicago can easily be used as an illustrative example when discussing the plight of large urban school districts. For the last six years, the Board of Education of the City of Chicago has had difficulty obtaining adequate revenue to support ongoing programs. In its response to the fiscal-educational crisis, the Board resorted to a variety of actions that has included measures such as increasing class size, borrowing funds, not filling vacant positions, as well as closing down the entire school system for a limited period of time. In this part, following a brief discussion of the state aid formula of last year, Chicago will be compared with the counties in Chicago SMSA vis-a-vis the fiscal and educational need variables. Some comparisons involving Chicago and surrounding suburbs and other large cities of Illinois will also be made. Following the comparative analyses, some recent recommendations made by the Financial Task Force of the Governor's Commission on Schools[26] and by the State Superintendent's Advisory Committee on School Finance[27] will be briefly reviewed. The new state aid formula will then be examined and, lastly, some possible problems and implications of deriving and administering an equitable educational finance system will be discussed.

1. 1972 Illinois Foundation Program

In 1972, all eligible school districts in Illinois received state aid according to the following formula:[28]

$$\text{State Aid} = [(F.\ WADA) - (r.\ AV)]\ 1.19 + UB$$

Where:

F = $520 per pupil foundation level
WADA = Weighted Average Daily Attendance (Elementary ADA + 1.25 High School ADA)
r = qualify tax rate (dual school district over 100 ADA - 0.87%) (dual school district under 100 ADA - 0.90%) (unit school district - 1.08%)
AV = state equalized assessed valuation of property
UB = urban bonus

The Illinois foundation program resembles the simplified Strayer-Haig version presented earlier with the following exceptions. Instead of using a straight head count of pupil population, the formula uses a WADA measure where a high school pupil is weighted 25 percent more than an elementary school pupil. The difference between the state guaranteed amount and the amount to be raised locally in the Illinois version is increased by 19 percent. Large school districts are eligible for an urban bonus, the amount of which depends on the size of the school district. Two additional provisions which are a part of the Illinois program consist of: an alternative method of computing aid when the amount of calculated state aid using the foundation formula provides less than $120 per WADA pupil; and a flat grant equivalent to $48 per WADA pupil for eligible school districts not receiving equalization aid.

As shown in the foundation formula, general state aid is computed as follows. First, the district WADA is multiplied by $520 and the product of assessed valuation and qualifying tax rate is subtracted from the result. Next, the derived amount is increased by 19 percent. Finally, if the district qualifies for an urban bonus, the bonus is computed according to an established schedule and the bonus amount is added to arrive at the total general state aid the school district

would receive. If the calculated amount provides less than $120 per WADA pupil, the amount of state aid is computed by multiplying the quotient of the assessed valuation per pupil necessary to produce $120 state aid per WADA pupil under the formula, divided by the district's assessed valuation per WADA pupil and multiplied by $120. In no case would a district receive less than the minimum flat grant of $57.12 per WADA pupil ($48 x 1.19). Table II shows the computation of general state aid for Chicago for the 1971-72 school year.

The main variables determining state aid received by any school district in Illinois are the WADA, the qualifying tax rate, and the assessed valuation of local property. In terms of educational need and fiscal capacity, the WADA variable can be said to represent the need for educational resources whereas the assessed valuation and the qualifying tax rate can be considered as reflecting fiscal capacity and tax effort respectively. The manner in which the 19-percent add-on is incorporated in the formula would have the effect of funneling more dollars into relatively poorer districts than into richer ones of the same size. As its name indicates, the urban bonus variable provides more money for larger school districts.

Although the distribution formula appears to take into consideration educational need as well as fiscal capacity, the equity effect of the formula is extremely limited.[29] The limitations in the formula arise for several reasons. There is wide variation in the local property wealth. In 1972, equalized assessed valuation per pupil (AVPP)

TABLE II

GENERAL STATE AID COMPILATION: 1971-72 SCHOOL YEAR

The State Aid Formula for the 1971-72 school year was based on a foundation level of

- $520 per pupil in ADA
- a minimum flat grant of $48 for all pupils with a qualifying rate of 1.08%
- the weighting of the ADA of all high school pupils by 1.25.

The school district does not receive this actual amount for each pupil but is allotted payment on the following basis:

1. Guaranteed Support. The state guarantee of $520 per pupil is multiplied by the total WADA for the best six months of the school year to determine the total guarantee.

   512,754.09 (WADA) x $520 = $266,632,126.80

2. Qualifying Amount. Each unit district (a district maintaining grades K-12) must include a minimum tax rate of $1.08 per $100 of assessed valuation (AV) in its educational fund levy in order to receive equalization aid.* If it does not levy the minimum rate, it is considered a flat grant district for aid purposes. The dollar amount is computed as follows for 1971-72:

   $$\frac{\$12,672,456,260 \text{ (1970AV)}}{100} \times \$1.08 = \$136,862,527.60$$

   Note: Since the cost per pupil for Chicago exceeds $520, the Board of Education requests levies which require more than $1.08 per $100 of assessed valuation qualifying tax. The total net tax levy in 1970 for this educational fund was $224,962,041 and the total educational fund tax rate was $2.01 per $100 of assessed valuation.

3. Equalization Aid. The Chicago Board of Education claimed $129,769,599.20 which represents the difference between the total of the WADA (512,754.09) times the guaranteed support level ($520) and the qualifying rate ($1.08%) of unit districts times the equalized assessed valuation of the district.

4. Add-On. The legislature has authorized each district to apply an add-on percentage of 19% to the equalization aid which increases the total to $154,425,823.04.

5. Density Factor. Additional legislation has provided that school districts with a WADA of 200,000 or more may apply a percentage of 16% to that WADA. This additional amount, computed according to the normal formula calculations amounted to $42,661,138.00.

6. Flat Grant. The flat grant for Chicago, determined by multiplying WADA by $48, amounted to $24,612,196.32. Since the equalization amount is larger than the flat grant, the former figure is used for the claim.

7. Adjustment. The final formula computation requires that the total gross claim for the 1971-72 year be subtracted from the total gross claim for the 1970-71 year. This positive/negative amount is added to/subtracted from the payments to be received in the 1972-72 year. This adjustment plus audit adjustments resulted in a 1971-72 net claim to be paid during the 1972-73 year of $187,385,037.96.

*The levy of $1.08 indicates financial support and effort on the part of the local education agency.

Source: Facts and Figures, Bureau of Administrative Research, Department of Systems Analysis and Data Processing (Chicago Board of Education, 1973)

for unit districts ranged from $3,544 to $101,908; for elementary school districts from $5,388 to $403,024; and for secondary districts from $23,945 to $246,980.[30] The foundation level of $520 is considered low as compared with the actual net operating expense per pupil, which in the 1970-71 school year amounted to $1,052.[31] The extreme variation in assessed valuation among districts, and the difference between average operating expense per pupil and the foundation level indicate that for expenditures over $520 a rich district would be able to raise more money than a poor district at identical tax rates. The Governor's Task Force[32] reported that a tax rate of $1.00 per $100 of assessed valuation in the wealthiest elementary district would produce almost 75 times the revenue per pupil as the same tax rate in the poorest district.

The flat grant provision is another factor that contributes to the dis-equalization among school districts. The 19-percent add-on feature of the formula further compounds inequality introduced by the flat grant provision. The so-called urban bonus is actually a bonus for large school districts regardless of whether they are urban or suburban. The distribution of the bonus is not contingent upon the wealth of the school district.

The only variable in the formula that reflects educational resource requirement is the WADA. By weighting the secondary school pupils at 25 percent more, the state takes into account higher costs of secondary instruction. It was pointed out earlier that the ADA was a less adequate measure of educational resource requirement than the

ADM and, also, that both the variables failed to reflect the differential needs of the school subpopulations such as the socio-economically disadvantaged and the physically and the mentally handicapped. The State of Illinois provides categorical aid to school districts for special education, bilingual, gifted, and other special programs. The case of special education programs will be discussed later in this paper. In the following section some data comparing Chicago with the metropolitan counties in Chicago SMSA, surrounding suburbs, and other large cities of Illinois will be presented and discussed.

2. Fiscal Capacity and Educational Need: Chicago Versus Metropolitan Area

The Strayer-Haig type formula that was used to determine state aid in Illinois during and prior to 1972 did take into account the property value of the school districts when distributing educational resources. The value of local property, however, is only a partial indicator of local wealth and economic well-being. Other economic variables such as per capita income, median family income, median value of owner occupied housing, and per capita annual retail sales are also considered as alternative indices of wealth and economic well-being. Data on the above mentioned variables for the census years of 1960 and 1970 were obtained for Chicago and the suburban counties in Chicago SMSA (Table III). The data obtained would help one study the correlation between the property value measure of wealth and various other indices of economic well-being. The data would also assist one in observing the change in economic well-being over a decade implied by the various indices.

TABLE III

INDICES OF ECONOMIC WELL-BEING: CHICAGO AND METROPOLITAN AREA

County	Year	Assessed Value of Property Per Capita	RANK	Income Per Capita	RANK	Retail Trade Sales Per Capita	RANK	Family Income (Median)	RANK	Value Of Owner Occupied Housing (Median)	RANK
DuPage	1960	3,919	2	2,654	2	876	7	8,570	1	19,800	2
	1970	5,006	1	4,262	3	2,066	2	14,458	1	28,500	1
Change 1960-70		28%	5	61%	5	186%	1	69%	4	44%	1
Kane	1960	3,534	5	2,195	5	1,245	2	7,152	3	15,300	6
	1970	4,572	6	3,588	5	2,005	4	11,947	5	20,800	5
Change 1960-70		29%	3.5	63%	4	61%	3	67%	5	36%	6
Lake	1960	3,704	3	2,951	2	1,153	3	6,108	6	17,700	4
	1970	4,661	5	4,272	2	1,477	5	13,009	3	24,800	3
Change 1960-70		26%	6	65%	3	28%	5	113%	2	40%	4.5
McHenry	1960	4,510	1	2,149	6	1,109	4	6,983	4	14,800	6
	1970	4,920	2	3,605	4	1,292	6	11,965	4	21,200	4.5
Change 1960-70		9%	7	68%	2	17%	7	71%	3	43%	2
Will	1960	3,487	6	1,988	7	1,006	6	5,509	7	13,500	7
	1970	4,705	3	3,392	7	1,188	7	11,791	6	19,000	7
Change 1960-70		35%	1	71%	1	18%	6	114%	1	41%	3
Suburban Cook	1960	3,621	4	2,846	1	1,017	5	8,454	2	19,900	1
	1970	4,679	4	4,372	1	2,182	1	13,748	2	27,800	2
Change 1960-70		29%	3.5	54%	6	115%	2	63%	6	40%	4.5
CHICAGO	1960	2,945	7	2,294	4	1,586	1	6,738	5	18,000	3
	1970	3,919	7	3,420	6	2,059	3	10,242	7	21,200	4.5
Change 1960-70		33%	2	49%	7	30%	4	52%	7	18%	7

Sources: U.S. Bureau of the Census.
U.S. Census of Population: 1960 General Social and Economic Characteristics, Illinois Final Report PC(1)-15C
U.S. Census of Housing: 1960 Vol I. States and Small Areas; Part 3: Delaware-Indiana
County and City Data Book, 1967 (A Statistical Abstract Supplement)
Census of Population: 1970 General Social and Economic Characteristics Final Report PC(1)-C15 Illinois
Census of Governments: 1962 and 1972, Vol. 2, Taxable Property Values and Assessments

Despite an increase of 33 percent in assessed property value per capita between 1960 and 1970, the per capita assessed value of property in Chicago remained the lowest of the metropolitan areas as shown in Table III. The increase of 33 percent which was narrowly surpassed by only one suburban county is, in a way, misleading because it seems to be more a result of reduction in population in Chicago rather than an increase in assessed value of property. Between 1960 and 1970, the total assessed value of property in Chicago increased by about 26 percent (Table IV). During the same period, however, the population of Chicago dropped 5 percent. None of the suburban areas, as shown in Table IV, experienced a growth in their property values of less than 44 percent. Four of the suburban areas had a growth of more than 50 percent. With respect to total population, all of the suburban areas experienced an increase in population greater than 20 percent, with four of the five suburban areas having an increase of greater than 30 percent. In the suburbs, the increase in the assessed value of property was minimized by the corresponding increase in population; whereas, in Chicago the reduction in population resulted in an apparent gain in assessed value of property.

In terms of per capita income, Chicago lost ground as indicated by the drop in its ranking from four to six (Table III). This occurred because Chicago experienced the lowest level of increase in per capita income as compared with its suburban areas. The reduction in population apparently did not have the same kind of effect on income per capita as it did on assessed valuation per capita. Between 1960 and

TABLE IV

CHICAGO AND SUBURBAN METROPOLITAN AREA: POPULATION, INCOME, ASSESSED VALUE OF PROPERTY, AND RETAIL TRADE SALES

County	Year	Population	Income (000)	Assessed Value Of Property (000)	Retail Trade Sales (000)
DuPage	1960	313,459	831,920	1,228,348	274,740
	1970	491,882	2,096,401	2,462,433	1,016,081
Change 1960-70		57%	152%	100%	270%
Kane	1960	208,246	457,100	735,959	259,220
	1970	251,005	900,606	1,147,604	503,319
Change 1960-70		21%	97%	56%	94%
Lake	1960	293,656	760,863	1,087,828	338,707
	1970	382,638	1,634,630	1,783,454	565,295
Change 1960-70		30%	114%	64%	67%
McHenry	1960	84,210	180,967	379,829	93,365
	1970	111,555	402,156	548,839	144,170
Change 1960-70		32%	122%	44%	54%
Will	1960	191,617	380,935	668,223	192,763
	1970	249,498	846,297	1,173,955	296,342
Change 1960-70		30%	122%	76%	52%
Suburban Cook	1960	1,579,321	4,494,748	5,718,397	1,605,815
	1970	2,124,898	9,290,054	9,943,118	4,635,578
Change 1960-70		35%	106%	74%	189%
CHICAGO	1960	3,550,404	8,144,627	10,456,136	5,630,939
	1970	3,362,947	11,501,279	13,180,356	6,922,841
Change 1960-70		- 5%	41%	26%	23%

Sources: U.S. Bureau of the Census.
U.S. Census of Population: 1960 General Social and Economic Characteristics, Illinois Final Report PC(1)-15C
U.S. Census of Population: 1970 General Social and Economic Characteristics, Final Report PC(1)-C15 Illinois
Census of Governments: 1962 Vol. II Taxable Property Values
Census of Governments: 1972 Vol. II Tasable Property Values and Assessments - Sales Price Ratios Part 1 Taxable and Other Property Values

1970, the total income in Chicago increased by the smallest percentage as compared with any of its suburbs (Table IV). Whereas, the aggregate income in Chicago increased by 41 percent, in none of the suburban counties did the aggregate income increase less than 97 percent. Thus, fiscal capacity as measured by income per capita shows a definite decline for Chicago. This observed decline reflects the flight of the affluent from the city to suburbia, as is well known.

The drop in retail sales per capita ranking for Chicago is another indication of deteriorating economic situation vis-a-vis its suburbs. In terms of median family income, Chicago had the smallest increase between the census years shown in Table III. The out-migration of population from Chicago is reflected more in income variables than in property value or retail sales variables. Chicago also experienced the smallest increase in the median value of owner occupied housing as compared with its metropolitan counties. Thus overall, there does not seem to be a perfect agreement between indices as regards the relative economic well-being of Chicago. This is more clearly reflected in Table V showing the rank order correlation between the variables. In terms of retail sales per capita and the median value of owner occupied housing, Chicago seems better off than some of its suburbs. However, with respect to assessed value of property per capita and the income variables, the situation does seem depressing. The relatively low rate of growth in the major tax bases such as property, sales, and income for Chicago would be of particular concern for schools and other public agencies in the city.

TABLE V

SPEARMAN RANK-ORDER CORRELATION MATRIX:
INDICES OF ECONOMIC WELL-BEING

	Y	S	H	FY
AV	.20	-.12	0.34	.60
Y		.57	.65	.86
S			.74	.50
H				.85

Where:

AV = Assessed Valuation per Capita
Y = Income per Capita
S = Retail Sales per Capita
H = Value of Owner Occupied Housing (Median)
FY = Family Income (Median)

The socioeconomic composition of the city population, as compared with that of suburban areas, would clearly indicate the greater need for public services in the city. Some data on families receiving public assistance, families with female head, as well as level of schooling attained by the adult population in Chicago and counties in Chicago SMSA were obtained from census reports (Table VI).

As shown in Table VI, the median family income in Chicago in 1969 was lower than in any of its suburban counties. Close to eight percent of the families in Chicago were receiving public assistance. In none of the suburban counties, however, did the proportion of families receiving such assistance exceed the two-percent mark. Suburban Cook County had the lowest percentage of families receiving

TABLE VI

SOCIOECONOMIC CHARACTERISTICS - 1970: CHICAGO AND SUBURBAN METROPOLITAN AREA

County	FAMILIES						POPULATION AGE 25 AND OVER					
	Median Income	RANK	Percent Receiving Public Assistance	RANK	Percent With Female Head	RANK	Level Of Schooling	RANK	Percent With Less Than H. S. Education	RANK	With 4 Or More Years Of College	RANK
DuPage	14,458	1	1.1	6	4.6	7	12.6	1.5	27.9	7	20	1
Kane	11,947	5	1.6	4.5	6.4	2.5	12.2	4.5	43.5	3	10	4.5
Lake	13,009	3	1.6	4.5	5.9	5	12.4	3	36.9	6	17	2
McHenry	11,965	4	1.8	3	5.3	6	12.2	4.5	43.2	4	10	4.5
Will	11,791	6	1.9	2	6.4	2.5	12.1	6	48.1	2	8	6.5
Suburban Cook	13,748	2	0.7	7	6.2	4	12.6	1.5	37.3	5	16	3
CHICAGO	10,242	7	7.8	1	12.8	1	11.2	7	56.1	1	8	6.5

Source: U.S. Bureau of the Census. Census of Population: 1970 General, Social, and Economic Characteristics Final Report PC(1) - C15 Illinois

public aid. In Chicago, the percentage of families with a female head was twice as large as the percentage of such families in suburban Cook County. In terms of family characteristics, Chicago obviously has a disproportionate number of broken families and families which are poor.

The adult population of the city of Chicago has attained less schooling than the population in the rest of the metropolitan area (Table VI). More than half the adult population of Chicago has not graduated from high school. Chicago also has proportionately less college graduates when compared with most of the metropolitan counties, particularly suburban Cook and DuPage counties. Thus, the adult population of Chicago has relatively less human capital embodied in it as compared with the suburban population. To an extent, the relatively low level of income of the Chicago adult population is a reflection of the comparatively low level of embodied human capital.

The low level of income and education and high proportion of broken homes indicate greater need for various kinds of public services in health, welfare, housing, occupational training, as well as formal schooling. The agencies providing various social services have to compete with one another for scarce public resources. Thus in large cities such as Chicago, public schools have to face more competitors than their counterparts in suburban environments.

Besides providing social services for their residents, large cities also provide services that benefit commuters from the entire

metropolis. Police, fire, transportation, and other public services benefit the city residents as well as the non-residents who use the city as a work place or cultural center while paying their property taxes in the suburbs where they live. The additional demands on the city resources represent "municipal overburden." The heavy social welfare services for family support and health purposes that are associated with the large number of disadvantaged residents who populate inner cities, and the municipal overburden considerably reduce the amount of resources that cities can allocate to the schools. Table VII shows the governmental expenditures for education and non-education purposes for Chicago and the suburban counties. The data are from the census of governments which is conducted every five years. As the relevant data from 1972 census will not be available until 1974, data for 1957 and 1967 are presented in Table VII.

It can be observed in Table VII that between 1957 and 1967 the proportion of expenditure devoted to education dropped for all the metropolitan counties except suburban Cook. It will be recalled that the population of these metropolitan counties underwent tremendous growth around the same period. Educational expenditure, as a fraction of the total general expenditure, went up by about seven percent in suburban Cook County and by over eleven percent in Chicago. In both periods, nevertheless, proportionate educational expenditure in Chicago was considerably less than in the suburban counties. The revenue for the general expenditures shown in Table VII is derived from various sources. The school revenues raised locally

TABLE VII

CHICAGO AND SUBURBAN COUNTIES: GENERAL AND EDUCATIONAL EXPENDITURES FOR THE YEARS 1957 AND 1967

County	General Expenditures (000)		Educational Expenditures (000)		Educational Expenditures / General Expenditures (Percent)	
	1957	1967	1957	1967	1957	1967
DuPage	$ 25,913	$ 88,115	$ 22,529	$ 58,944	86.94	66.89
Kane	20,021	48,898	15,383	32,014	76.83	65.47
Lake	28,107	72,364	23,076	47,133	82.10	65.13
McHenry	7,661	18,828	7,055	12,681	92.08	67.36
Will	15,255	42,009	13,325	28,542	87.34	67.94
Suburban Cook	543,799	965,111	288,764	581,761	53.10	60.27
CHICAGO	419,290	745,727	155,611	362,795	37.11	48.64

Sources: U.S. Bureau of Census.
Census of Governments: 1957 Vol. VII, No. 11, Government in Illinois
Census of Governments: 1967. Vol. VII, State Reports, No. 13: Illinois

are, however, mostly derived from property taxes. A comparison of total property tax and the education portion of the property tax could better enable one to appreciate fiscal problems of urban schools. Since tax data are not aggregated by counties, some tax comparisons for Chicago, some of its suburbs, and other large cities of Illinois are shown in Tables VIII and IX.

Table VIII shows the total tax rates and the school tax rates for some of the Chicago suburbs. Since suburban school districts and municipal boundaries are rarely coterminous, the communities shown in Table VIII represent an arbitrary sample. In 1970, the property tax for the listed cities ranged from $5.126 to $8.114 for $100 assessed valuation. It can be seen that although the Chicago tax rate was close to the median tax rate for the listed cities, the ratio of the Chicago school tax rate to the total tax rate was the lowest in the sample. Whereas the ratio of school tax to total tax shown as a percentage varied from 59 for Forest Park to about 72 for Northbrook, the comparable figure for Chicago was only about 39.

Even when Chicago is compared with other large cities of Illinois outside of Cook County, the proportion of the property tax revenue going to schools in Chicago is the lowest. As shown in Table IX, the total tax rate in Chicago in 1970 was next to the highest; whereas, in terms of the ratio reflecting the proportion of the property tax revenue going to schools, Chicago ranked the lowest. It can also be observed that for all but one of the cities listed, the proportion of property tax devoted to public schools declined between

TABLE VIII

RANKING OF AGGREGATE AND SCHOOL TAX RATES:
CHICAGO AND SOME SUBURBS - 1970

City	Aggregate Tax Rate (ATR)	Rank	School Tax Rate (STR)	Rank	(STR) % (ATR)	Rank
Northbrook	8.114	1	5.844	1	72.02	1
Oak Forest	7.980	2	5.506	3	68.99	7
Winnetka	7.842	3	5.542	2	70.67	5
Evanston	7.658	4	5.450	4	71.16	2
Palatine	7.402	5	5.260	5	71.06	3
Oak Park	7.230	6	4.782	6	66.14	10
CHICAGO	6.912	7	2.710	15	39.20	15
River Forest	6.764	8	4.496	7	66.46	9
Oak Lawn	6.668	9	4.198	10	62.95	13
Forest Park	6.560	10	3.878	12	59.11	14
Bellwood	6.390	11	4.152	11	64.97	11
Evergreen Park	6.210	12	4.284	9	68.98	8
Calumet Park	6.176	13	4.344	8	70.33	6
Lincolnwood	5.338	14	3.788	13	70.96	4
Schiller Park	5.126	15	3.314	14	64.65	12

Source: Illinois Department of Local Government Affairs, Office of Financial Affairs, Illinois Property Tax Statistics - 1970

TABLE IX

TOTAL TAX RATE AND SCHOOL TAX RATE AS A PERCENTAGE OF THE TOTAL TAX RATE: CHICAGO AND NINE OTHER LARGE CITIES OF ILLINOIS - 1960, 1970

City	1960				1970			
	Total Tax Rate	Rank	School Tax Rate / Aggregate Tax Rate (Percent)	Rank	Total Tax Rate	Rank	School Tax Rate / Aggregate Tax Rate (Percent)	Rank
Aurora	3.4245	7	62.82	3	6.111	4	53.64	6
CHICAGO	4.6880	1	39.46	10	6.890	2	39.33	10
Decatur	3.7500	5	68.00	1	4.935	9	60.39	2
East St. Louis	4.2930	2	51.47	8	7.278	1	44.94	9
Joliet	3.7450	4	65.76	2	6.504	3	60.68	1
Peoria	2.9150	10	54.54	6	5.347	6	48.10	8
Quincy	3.0080	8	52.95	7	4.308	10	56.29	3
Rockford	3.0060	9	58.81	4	5.137	7	55.79	4
Springfield	3.446	6	54.87	5	5.022	8	50.19	7
Waukegan	4.218	3	40.56	9	5.935	5	54.28	5

Source: Department of Local Government Affairs; Office of Financial Affairs. Illinois Property Tax Statistics 1960 and 1970 (Springfield, Illinois)

1960 and 1970.

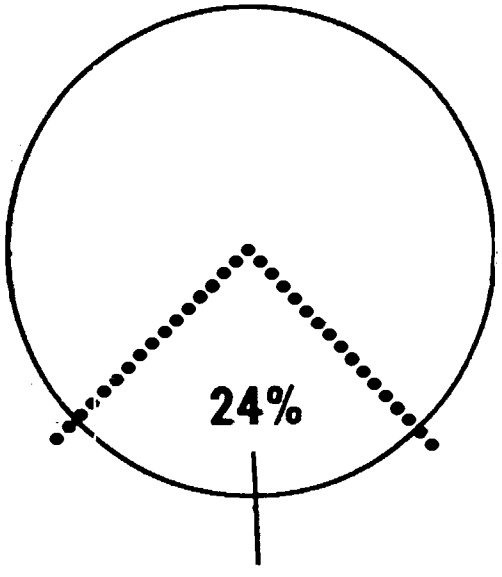
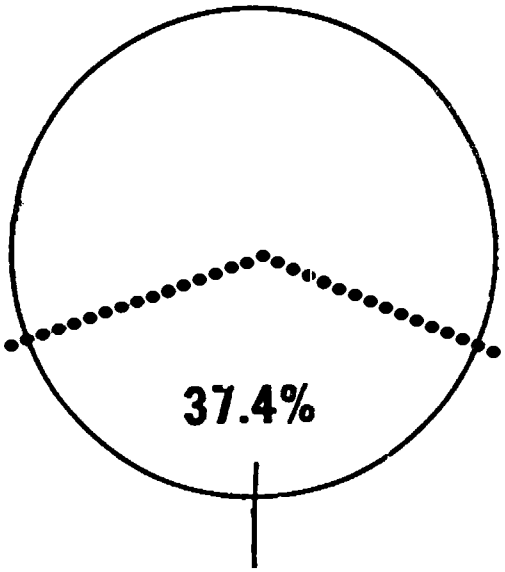
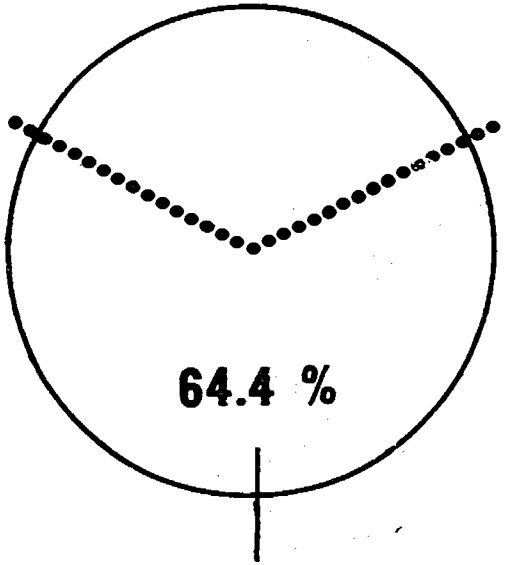
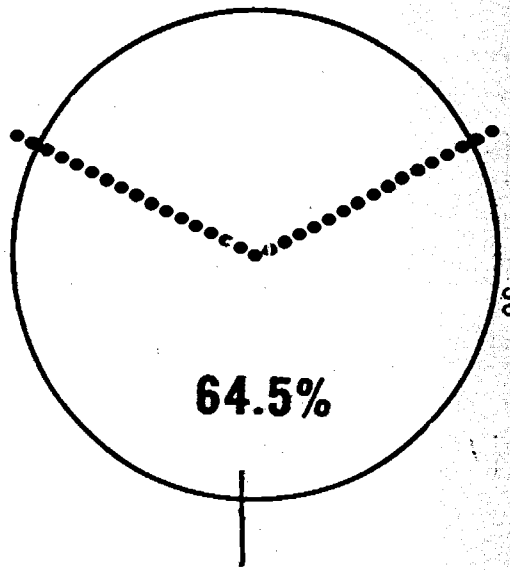
Data on indices of economic well-being and socioeconomic characteristics of the population in the Chicago metropolitan area, as well as other fiscal data, show that various tax bases in Chicago, particularly real property, have grown at a considerably lower rate as compared with suburban counties; whereas, the disadvantageousness of the population as indicated by educational and poverty measures has increased considerably. Although the people of Chicago pay fairly high property taxes, the Chicago public schools receive a smaller proportion of the tax revenue than the school districts in the surrounding suburban area and other large cities in Illinois.

The prevalence of socioeconomic disadvantage in the general population is even more grimly reflected in the Chicago school population (Chart I). In the 1970-71 school year, 24 percent of all children enrolled in Illinois public schools lived in Chicago. Of the total Illinois special education enrollment, however, 37 percent was located in Chicago. Similarly, of 412,599 E.S.E.A. Title I eligible pupils in Illinois, 64 percent were in Chicago. The Office of the Superintendent of Public Instruction does not have data on pupils from homes where English is not the first language, but the 1970 census reports do contain information on Spanish-speaking population attending school. According to the latest census of population, 64.5 percent of Spanish-speaking pupils in Illinois was enrolled in Chicago schools.

Special educational programs for the physically and mentally handi-

CHART I

CHARACTERISTICS OF PUPIL POPULATION: CHICAGO AND STATE OF ILLINOIS

PUPILS IN GENERAL ELEMENTARY AND SECONDARY SCHOOL PROGRAMS	PUPILS IN SPECIAL EDUCATION PROGRAMS*	E.S.E.A. TITLE I ELIGIBLES	SPANISH-SPEAKING PUPILS
ILLINOIS 2,333,962	ILLINOIS 62,014	ILLINOIS 412,599	ILLINOIS 84,179
			
CHICAGO 560,563	CHICAGO 23,248	CHICAGO 266,053	CHICAGO 54,366
Source: Annual Report of the Superintendent of Public Instruction, State of Illinois, July 1, 1970 to June 30, 1971, Circular Series.	Source: Annual Report of the Superintendent of Public Instruction, State of Illinois, July 1, 1970 to June 30, 1971, Circular Series.	Source: Mr. Hardy, Director, ESEA Title I Projects, Office of the Superintendent of Public Instruction, State of Illinois.	Source: U.S. Bureau of Census. Census of Population: 1970 General, Social, and Economic Characteristics Final Report PC(1)-C15 Illinois.

*Includes enrollment in Physically Handicapped, Blind, Partially Seeing, Deaf and Hard of Hearing, Preschool Deaf, EMH, TMH, Socially Maladjusted, Brain Injured and Multiple Handicapped Program categories

capped, the socioeconomically disadvantaged, and non-English speaking pupils cost more money. The additional cost to the Chicago Board of Education for some of the special education programs are shown in Table X. In 1973, $84 million were allocated by the Board of Education for the teaching of reading and related activities. This did not include $21 million of government funded projects dealing with the teaching of reading and related activities, and an additional Board appropriation of $4 million for special projects for the teaching of reading.[33] The $25 million allocated to the special projects in reading and related activities represent the best effort on part of the Board to provide compensatory programs for children from socioeconomically disadvantaged homes.

The only need variables in the Illinois school resource distribution formula were WADA and density. Other pupil-need characteristics such as socioeconomic disadvantage or not having English as the first language were absent in the state aid mechanism, except as reflected in the density factor. Although the state did provide categorical aid for special education programs, the pattern of reimbursement was quite inadequate as shown in Table X. The reports of the Finance Task Force of the Governor's Commission on Schools and of the Superintendent's Advisory Committee on School Finance concurred on the inadequacy of the state's school finance system and recommended various alternative ways the system could be improved. In 1973, the Illinois legislature approved an alternative state aid formula for distributing educational resources to school districts which was signed into law by the governor. The details of the new state aid formulas will be presented

TABLE X

DIFFERENCE BETWEEN EXPENDITURES AND REIMBURSEMENTS:
SPECIAL EDUCATION PROGRAM - 1973 FINAL BUDGET

Program	Amount Appropriated Per Pupil	Amount Reimbursable Per Pupil	Difference
Educable Mentally Handicapped	$1,039	$ 717	$ 322
Trainable Mentally Handicapped	1,201	825	376
Physically Handicapped	2,470	1,034	1,436
Socially Maladjusted	1,810	1,101	709
Blind and Partially Seeing	2,669	1,250	1,419
Deaf and Hard of Hearing*	2,174	1,065	1,109
Multiple Handicapped	1,450	853	597

Source: 1973 Annual School Budget, Board of Education, City of Chicago. Figures derived by Mr. George Coltman, Budget Analyst, Department of Financial Planning.

*Includes Preschool Deaf

and analyzed following a brief discussion of some of the proposals made by the Governor's Finance Task Force and the Superintendent's Advisory Committee on School Finance.

3. Some Recent School Finance Proposals

Plans Recommended by Governor's Task Force on School Finance

The Finance Task Force of the Governor's Commission on Schools recommended a three-tier formula[34] for the distribution of current operating funds for education. According to the recommendation, the first tier would consist of a basic grant given to all students regardless of the district in which they reside to ensure a minimum level of education. The second tier would consist of a chosen level of expenditure per pupil which would be equalized by the state to ensure that school districts with a comparable tax effort would receive equal revenues per pupil. The final tier provides for additional revenue through increased local effort.

The three-tier formula would weight pupils by grade level as well as by economic disadvantage.[35] Special education students would also be weighted to reflect the proportionately higher costs of special education over regular school programs.[36] Some of the weights recommended by the task force are shown in Table XI. The task force also recommended the use of a WADM for elementary school pupils and the use of WADA for secondary school students.

TABLE XI

RECOMMENDED WEIGHTS FOR THE REGULAR AND ECONOMICALLY DISADVANTAGED PUPIL

Grade Level	Weight	
	Regular	Disadvantaged
Kindergarten (1/2 day)	0.55	0.6875
Grades 1 - 3	1.10	1.3750
Grades 4 - 8	1.00	1.2500
Grades 9 - 12	1.25	1.5625

Source: Final Report of the Finance Task Force, Governor's Commission on Schools: A New Design: Financing for Effective Education in Illinois December, 1972

The impact of the three-tier formula would vary according to how the formula is operationalized. Three alternative formulations suggested by the task force are shown in Table XII.

As shown in Table XII, the first alternative resembles a Strayer-Haig formula with a flat grant provision. The larger flat grant would not help in equalizing educational tax burden since the monies would go to every district regardless of wealth. The second tier, with the minimum tax rate and an expenditure range of $600, would have limited equalization effect; whereas, the third tier is obviously tolerant of unequal spending. The weighting of students and the use of membership rather than attendance for counting elementary pupil population would provide more resources to schools serving a disadvantaged pupil population.

TABLE XII

PRESENT THREE-TIER FORMULA ALTERNATIVES

Alternative	Tier 1	Tier 2	Tier 3
I	Flat grant of $400 per weighted student.	. District chooses a level of expenditure per pupil between $500 and $1,000. . Districts levy a minimum tax rate.* . State aid would make up the difference between the chosen level of expenditure and locally raised revenue per pupil. *Minimum tax rate equal to the tax rate needed state-wide to raise $100 in revenue for each weighted pupil.	School District has option to levy tax in addition to the tax required in Tier 2. The additional tax levy would be subject to periodic voter approval.
II	No flat grant.	. The state guarantees the amount of money that a district's tax rate would produce if every 12-grade district had an assessed valuation of $42,000 per weighted pupil; every K-8 district $64,615 and every 9-12 district $120,000 per weighted pupil. . Maximum tax rates would be: $3.00 per $100 assessed valuation in K-12 district, $1.95 per $100 assessed valuation in K-8 district, $1.05 per $100 assessed valuation in 9-12 district. . The maximum tax rate would produce $1,260 per weighted pupil. . The proceeds would be used for all education related purposes other than bond retirement, interest, rent and transportation.	Legislature to draft guidelines for districts interested in exceeding the maximum tax rate as well as for the districts that currently exceed the maximum tax rate.
III	No flat grant.	. School districts to select a base tax rate from an approved schedule. The state would guarantee the expenditure level associated with the selected tax rate regardless of the revenue raised from the local property tax.	District has the option to levy tax beyond the 2.50 ceiling of Tier 2.

The second alternative is a resource equalizing formula. Elimination of the flat grant found in tier one would reduce some inequitable effects of the formula. The expenditure ceiling of $1260 per weighted pupil (and the tax ceiling of $3.00 per $100 assessed valuation) would help districts with low assessed valuation. Given the extreme variation in assessed valuation per pupil in the state, it is quite conceivable that some districts would be able to raise more than $1260 per weighted pupil at the maximum designated tax rate. For such districts, the legislature would have to determine what to do with any revenue raised in excess of $1260 per weighted pupil. The task force report was also vague in regard to school districts with present tax rates exceeding the proposed maximum tax rate. The second alternative would reduce disparities in per pupil expenditures by local school districts.

The third alternative proposed is a power equalizing formula. Under such a formula, the state would establish a schedule of per pupil expenditure and a corresponding base tax rate. School districts selecting a given expenditure level would have to tax themselves at the rate associated with their selected expenditure level. State aid to the school district would amount to the difference between the selected expenditure level and the revenue raised from local property tax. A power equalizing formula can have a built-in incentive for school districts to make greater local effort. The possible equity effects of the formula would be largely determined by the selected levels of expenditure and the associated tax rates. This formula encourages disparities in expenditure levels.

Through the use of the weighted pupil membership measure which gives special consideration to socioeconomically as well as physically and mentally handicapped pupils, all three alternatives of the three-tier formula proposed by the task force would be responsive to educational need. In terms of equity of tax burden, however, one may expect differential effects. The first alternative would be the least equitable of the three. Without more specific information pertaining to excess revenue raised with the designated maximum tax rate (in the second alternative) and to the established expenditure and tax rate ceiling (in the third alternative) it would be difficult to determine the tax burden which would be imposed on school districts. All three alternatives, however, advocate continued reliance on the property tax base of local districts for raising revenue, even when it is well known that the property tax is regressive and inelastic.

Plans Recommended by State Superintendent's Advisory Committee

The State Superintendent's Advisory Committee failed to reach consensus regarding a system of financing public schools in Illinois. The committee, however, recommended three plans. The plan preferred by most of the committee members was "full state funding." Under such a plan, education in Illinois would be financed through a state property tax. The state aid formula would allow for the additional costs associated with programs for atypical children when distributing resources to school districts. Next in preference to the "full state funding" plan, was an "equal expenditure for equal effort" plan by which the state would establish a schedule of tax rates with corresponding expenditure levels. Thus, all school districts which tax at

a particular rate, i.e., make equal effort, would be guaranteed the same dollar amount per pupil expenditure. This plan is identical to the second alternative of the Governor's Task Force on School Finance. The third finance plan recommended by the advisory committee was merely a modified Strayer-Haig formula. The proposed changes in the existing formula included: an increase in the foundation level; use of a varying foundation level; an increase in percentage add-ons; an increase in the qualifying tax rates; the elimination of the flat grant; and the elimination of the alternative means of computing state aid.

Aside from the three general approaches to school finance, the committee also recommended various measures that would make the school finance system more equitable and effective. The committee recommended the discontinuation of categorical funding of special programs as well as the density bonuses, and recommended using a system of weighting factors instead. The programs for which weighting factors would have to be developed include prekindergarten, kindergarten, basic programs, special education, prevocational education, vocational education, bilingual education, compensatory education, and gifted education. The weighting factors would be derived from the differential costs of these programs. The basic program cost would be the base for deriving the differential cost ratios of other programs. The derived cost ratios would then be used to weight pupils enrolled in the various special programs (the pupils in the regular program would have a weight of 1.00) to obtain Weighted Pupil Instructional Units (WPIU). The committee suggested

the use of WPIU instead of ADA for the funding of all educational programs.

"Full State Funding". Among the alternative school finance programs proposed by the superintendent's advisory committee, the one pertaining to full state funding of schools would be most equitable; however, it would also be most difficult to implement. Some of the most frequently expressed reservations about full state funding concern possible loss of local control over schools and the possibility of state-wide teacher contracts.

Many Americans fear that a centralized state school system would necessarily be insensitive to local needs and problems, and that state control of school finance would ultimately result in state-wide standardized curriculum and an end to local autonomy in educational matters. The proponents of full state funding have been careful to point out that under their plans the goverance of schools would be left with the local boards of education.[37] The state would levy the necessary taxes to raise the revenue required for supporting schools and distribute the resources to the local school districts. The Fleischmann Commission did recommend a two-tier bargaining system where the major economic issues--salaries, hours of work, workload, fringe benefits--could be dealt with at the state level while local issues--transfer regulations, extra duties, paraprofessional assignment--would be negotiated at the local district level.[38] State-wide teacher contracts are, however, not inherent in full state funding.

Under full state funding, more elastic sources of revenue than real property could be utilized as the future resource requirements of schools increase. In terms of distributing the revenues raised, the state could distribute funds to school districts using formulas which would take into account the differential needs of the pupils and regional cost variations. The state would also be able to distribute resources to larger units of government than school districts, as well as to children or their parents. Diverse special educational needs may be better met by either centralizing facilities offering a variety of special programs or by decentralizing and allowing the prospective recipients to choose the place where they would purchase the needed services.

"Equal Expenditure for Equal Effort". The equal expenditure for equal effort or the power equalizing formula based on arguments presented by Coons, Clune, and Sugarman[39] would remove the correlation between local wealth and expenditures. This procedure would also preserve flexibility in local expenditures and make it easier for expenditures to be related to educational needs. Combined with a distributive formula that would allocate resources according to some adequate measure of educational need, the power equalizing formula would provide equity in the distribution of tax burden, and at the same time, distribute educational resources in the spirit of equalizing educational opportunity.

Strayer-Haig. The modified Strayer-Haig version with no flat grant or alternative computation of aid provisions, as well as with changes

such as increase in the foundation level and qualifying tax rate and the use of Weighted Pupil Instructional Units (WPIU) instead of WADA, would remove many of the inequities in the existing foundation program.

Alternative Resource Equalizer Formula

Both the governor's task force and the superintendent's advisory committee recommended measures that would make school finance in Illinois more equitable and effective. The proposed changes ranged from modifying a Strayer-Haig type foundation program to instituting full state funding of public education. On July 18, 1973, however, the governor signed into law House Bill 1484 and instituted an alternative resource equalizer formula for financing public schools of Illinois.

Under the auspices of the alternative resource equalizing state aid formula, all the school districts in Illinois will be able to have an expenditure level of $1260 per weighted pupil within the next four years. The official formula closely resembles the second alternative recommended by the Finance Task Force of the Governor's Commission on Schools discussed earlier.

According to the formula, each school district in Illinois would receive the same amount of state aid per weighted pupil regardless of the assessed value of property in the school district, provided that the district levies a property tax at the rate of $3.00 per $100 assessed valuation in the case of a K-12 district; $1.95 per $100

assessed valuation in the case of K-8 district; and $1.05 per $100 assessed valuation in the case of 9-12 district.[40] Taxing at the rates mentioned above, a K-12 school district would be able to raise $1260 per WADA pupil, if it had an assessed valuation of $42,000 per weighted pupil. To raise $1260, a K-8 district would require an assessed valuation of $64,615 per WADA pupil, and a 9-12 district an assessed valuation of $120,000 per WADA pupil. School districts currently taxing at higher rates than those newly established would have to roll back taxes to conform with the requirements of the formula or have the excess tax approved by a local referendum.

If a school district levies the appropriate established tax rate, the amount of state aid received would be the difference between $1260 and the actual amount of local revenue per WADA pupil. No district would receive an increase in state aid greater than 25 percent of the prior year's state aid claim.

Two categories of pupils would be weighted at a level higher than 1.00. The ADA of all pupils in grades 9 through 12 would be multiplied by 1.25. The number of pupils in a district considered as eligible under Title I of the Elementary and Secondary Education Act (ESEA) of 1965 would result in an increase in the WADA ranging from 1.375 to 1.750 per pupil. The disadvantaged factor would be determined by the ratio of the percentage of pupils eligible for Title I in the district to the percentage of pupils eligible for Title I in the state.

Under the resource equalizer formula, school districts with lower assessed valuation per weighted pupil than those set in the formula would have $1260 per weighted pupil for educational purposes regardless of the amount of money raised through local property tax. The lower an assessed valuation per weighted pupil of a school district in comparison with the one prescribed by the formula, the greater the amount of state aid per pupil a school district would be entitled to receive. If the resource equalizer formula were the only educational resource distribution formula in force, the state legislature would have had to decide what to do with revenues in excess of $1260 per weighted pupil raised by the very rich districts of the state when taxing at the prescribed level. By providing the school districts with the option of choosing between the resource equalizer and the Strayer-Haig formula, the state has endowed school districts with a high assessed valuation with the benefits of the flat grant and percentage add-on features of a foundation program. Thus, one may expect some disparities in educational expenditures between school districts to continue to exist, although the range in per pupil expenditure may be reduced.

One would not expect an equitable distribution of the total tax burden to be obtained under the resource equalizer plan because of the low correlation between income and wealth in the form of real property. The equity effects of the plan would also be constrained, as the educational tax imposed would not take into consideration other non-educational property taxes.

The association between the amount of state aid a school district receives and the per pupil assessed valuation may provide sufficient financial incentive for local governments to underassess property. A state-wide assessment of property, however, might effectively eliminate such a deficiency.

The provision giving higher weight to ESEA eligible pupils recognized the additional resource requirement of socioeconomically disadvantaged pupils. The channeling of additional resources to school districts serving disadvantaged pupils would contribute towards equalization of educational opportunity among children attending schools in Illinois.

Despite the improvement in the school finance system brought about by the addition of the resource equalizer formula, it will be necessary in the future to tap more elastic sources of revenue for the financing of educational enterprise. In the distribution of educational resources, a more comprehensive system that would take cognizance of higher resource needs of socioeconomically disadvantaged as well as of physically and mentally handicapped pupils and of pupils whose first language is other than English would be required if progress is to be made towards equalizing educational opportunity among different population groups.

V. SUMMARY AND IMPLICATIONS

Bringing about equity in taxation and distributing educational resources so as to equalize educational opportunity are the two major concerns of school finance programs.

The assessment of equity in taxation is made particularly difficult by the lack of correlation between various measures of wealth and income. The property tax, which is the local source of revenue for financing schools, is regressive and inelastic. For financing any future increases in educational expenditures, it will be necessary to tap more elastic tax bases than the property tax.

In the distribution of educational resources, the primary concern is maximizing the production of embodied human capital in the children attending schools, under the constraint that as equal a distribution of productive capacities as possible be achieved among the various segments of the population.

The limitations of most finance programs become apparent when the responsiveness of such programs to the resource requirements of large urban school population is examined. The proportion of pupils requiring high cost special programs and services is higher in the central cities of large metropolitan areas than in suburban or rural areas of the country. To deliver the required resources to meet the needs of an urban school population, substantial changes in the school resource distribution formulas would be necessary.

Some of the suggested changes, such as using achievement scores in reading and mathematical ability to weight pupils requiring more than average amount of resources, would channel more resources to school districts with educationally disadvantaged pupils. As new and better criteria to govern the distribution of the educational dollar are developed, accurate information on the criteria concerned would be necessary. In the State of Illinois, for example, complete data on standardized tests in reading and math for all school districts are not available. Accurate data on pupil characteristics in the form that would enable identification of pupils with multiple disadvantages are nonexistent. State leadership in the designing and administering of an information system that would provide data necessary for a need based educational resource distribution system is absolutely necessary.

A reliable information system would also be a prerequisite to the development of an effective system of educational accountability. Monitoring of the distribution of resources and of the educational results achieved would hopefully lead to improvement in the efficiency of the educational sector of the public economy. A comprehensive pupil data system would also be invaluable for educational planning. To better estimate the future resource requirements of the schools, accurate projections of pupil populations as well as the expected distribution of educational needs in the population would be necessary.

Finally, it is essential to recognize that the benefits of schooling

are not confined just to the recipients of instruction in a school and their local school district. The benefits of schooling also accrue to the state and to the nation. Similarly, the costs of incomplete or inadequate schooling of individuals are borne, not only by such individuals themselves, but also by their state and nation. Individuals often move from the school district or the state where they first receive schooling. Thus, it is likely that the benefits of an investment in schooling made by one school district or state would accrue to another school district or state.

In view of the externalities associated with schooling and of the mobility of population, it is essential that the responsibility for the financing of education rest more on the state and the federal government. In order to ensure the delivery of required school services to pupils, however, it is equally essential that the administration and control of schools remain under local governments.

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