Paying for Ohio's Public Schools: Funding Trends and Revenue Sources

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This paper examines education funding trends in Ohio and the nation during the past decade, describes the methods by which local and state revenues are provided to Ohio's school districts, and describes various options for the funding of public education. School district expenditures have grown steadily and have outpaced inflation since 1985; district revenues have grown less steadily. Although state aid to the districts has increased continually since the 1930s, the state's share of total funding has been declining recently because local revenues have been growing significantly faster than inflation. While the state's foundation plan has succeeded in orienting more state aid to the less-wealthy districts, issues of revenue distribution remain, raising interest in alternative methods of education finance.

The total operating expenditures of Ohio's public school districts will approach the sum of $10 billion for the 1996-97 school year. At that level, expenditures will have almost doubled during the preceding decade and can be expected to continue to rise in the future. The size of this annual bill for educating Ohio's children, together with its rate of growth, can present major fiscal consequences to both state and local governments as they work to provide the necessary revenues to the school districts. Therefore, the Legislative Budget Office considers a closer look at this trend to be warranted. This paper illustrates the growth in education spending in more detail, describes the two main sources of the school districts' revenues, and points out some of the funding options available to state government.[1]

Expenditures and Enrollment

Ohio school districts' operating expenditures rose steadily during the last decade, as shown in Figure 1. The districts' total expenditures increased at an average annual rate of 5.8%, from $6.0 billion in 1987 to $9.4 billion in 1995. This rate of increase, if continued to the year 2000, will require the districts to spend $3.1 billion more in that year than they did in 1995.

Expenditures increased, school population didn't. These expenditures have grown despite the fact that Ohio's school population has not. The number of students in public schools has remained relatively flat during the past decade (Figure 2). In fact, the 1995 average daily membership (ADM) of 1.75 million was the same as that in 1987. Actually, as Figure 2 shows, the ADM declined slightly in the first half of the recent decade, to a low point of 1.68 million in 1990; it then began a very gradual increase to its 1995 level.

It might be noted that the changes in ADM from year to year have not been uniform across grade levels. During the decline in ADM up to 1990, the

$10 billion per year: It's the amount Ohio is spending on its schools.

Expenditures are up from $6 billion in 1987.

But the number of pupils has grown little.

[1] The majority of the data for this article was obtained from the Ohio Department of Education. Exceptions are noted.

Figure 1

Ohio spends more on schools each year . . .

Statewide School District Expenditures, by Type of District

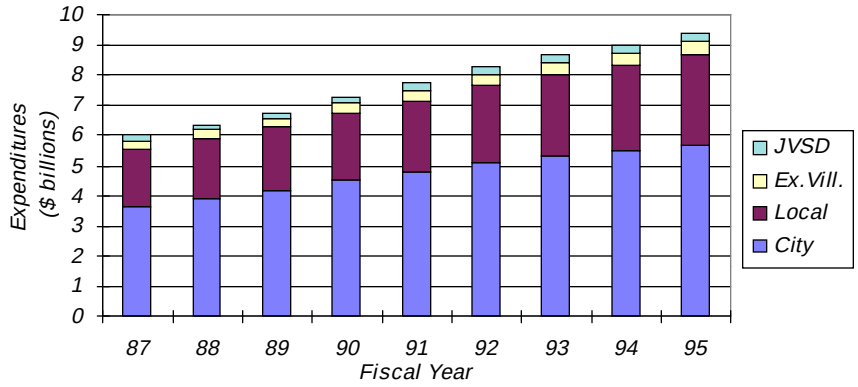
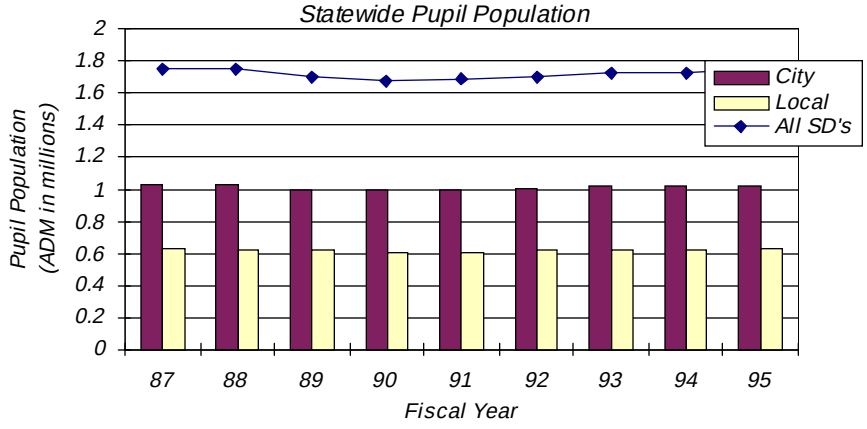


Figure 2

. . . despite no increase in pupil population.

Statewide Pupil Population



Ohio's per-pupil expenditures have surpassed the national average.

They have also exceeded inflation.

analogous decline in student enrollment figures came from two opposing trends: secondary-school enrollments declined by from two to four percent per year for several years (even up to 1992), and were only partially offset by increases in elementary-school enrollments of just one percent per year during the same period. In 1993, secondary enrollments turned around and have since been increasing at from one to two percent per year. However, during the same time elementary enrollments have leveled off, with near-zero annual changes since 1993. The result of these two trends has been a rate of increase in total enrollment of only approximately one-half percent annually. Thus, these opposing elementary and secondary enrollment trends have combined to generate the very gradual post-1990 increase in overall enrollment noted above.

Looking ahead, this current enrollment trend is not expected to continue. Projections by the Ohio Department of Education indicate a tapering-off of the total enrollment growth rate to near-zero in 1998.

Per-pupil expenditures rose, too. Pupil populations can vary greatly across districts and from one state to another, as well as over time. In order to better compare one school district's expenditures to another's or to its own at a different time, expenditures are usually expressed in terms of their values per pupil. During the past decade, given the growth in the school districts' total operating expenditures despite the nearly constant pupil population, it might be expected that Ohio's expenditure per pupil would show equivalent growth and, indeed, it did grow at the same average annual rate, 5.8%. The spending per pupil in Ohio increased from just over $3,400 in 1987 to almost $5,400 in 1995, as shown in Figure 3. (For the fiscal year 1996, one preliminary estimate is $5,700.)

Ohio overtook U.S. During the recent decade, in fact, this growth in Ohio's annual per-pupil expenditure has caused the state to overtake the U.S. average. Figure 4 shows that, through 1988, Ohio consistently spent less than

the average U.S. school district by from $100 to $300 per pupil on an average daily attendance (ADA) basis. This lag was then quickly erased as Ohio roughly equaled the average during the next three years. Then, in 1992, Ohio moved ahead when it exceeded the U.S. average by $270 per pupil; for 1993 this difference rose to $410.[2] While these differences are significant, it can be seen from Figure 4 that Ohio's gains during the early '90s came chiefly from a lessening of the growth of the U.S. average, since Ohio's growth in expenditures has been rather steady.

Figure 3

Per-pupil expenditures are also increasing . . .

Statewide School District Expenditures Per Pupil, for City, Local and All Districts

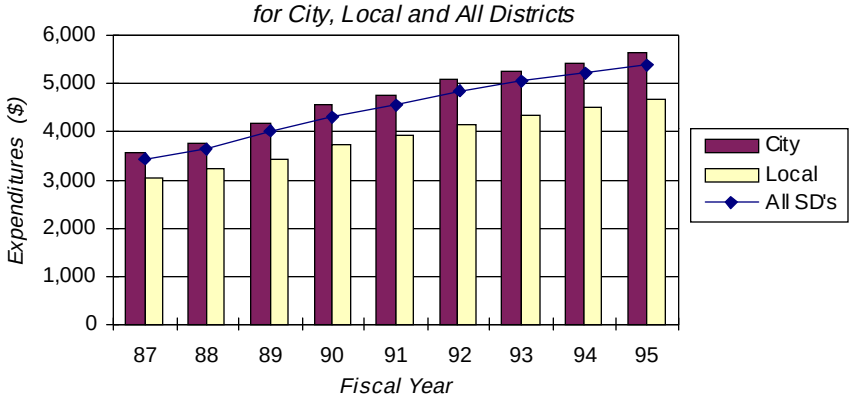
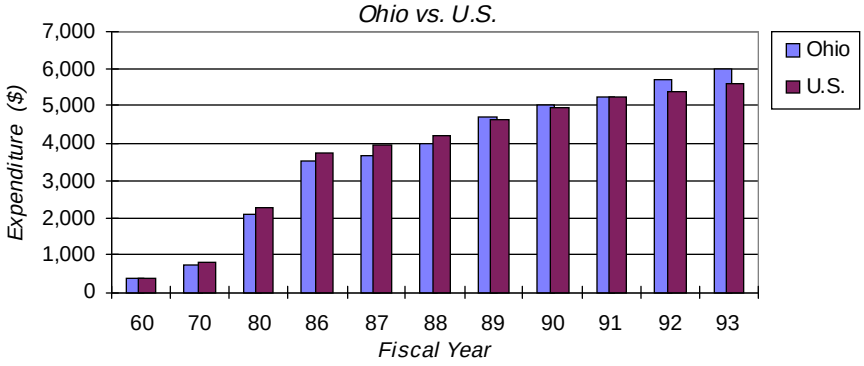


Figure 4

. . . in fact, Ohio's per-pupil spending has overtaken the U.S. average

Statewide School District Expenditures Per Pupil (ADA), Ohio vs. U.S.



Expenditure growth came from inflation plus real spending. Since per-pupil expenditure values are, for the most part, independent of pupil population, growth in these expenditures must be attributed to other factors, including growth in the real amounts of spending per student (e.g. educational services, materials and infrastructure), and compensation for inflation.

Both of these factors have apparently been at work in Ohio during the last decade, since the statewide per-pupil expenditure has grown even faster than inflation. Figure 5 shows that the annual growth rates of the districts' per-pupil expenditures have consistently exceeded the consumer price index (CPI) for most of the past decade by from one to four percentage points in each year, although in recent years this difference has moderated to about one percentage point. These excesses of spending above inflation reflect increases in real per-pupil expenditures. Such expenditures, besides adding to the state's educational inputs, have contributed to Ohio's gains vs. the U.S. average expenditure, as noted above.

Revenues

Since the school districts' expenditures must be funded by equivalent revenues, it might be expected that these two fund categories would exhibit very nearly the same growth over the decade. This relationship does obtain, as shown by

[2] National Center for Education Statistics, *Digest of Education Statistics 1995 (Washington, D.C., October 1995), 164.* These difference values, along with the total values in the chart, are necessarily approximate, as the center must adjust the fifty states' data to make them roughly comparable. This process is a long one, so that results for 1994 and 1995 are not yet available. Further, the data are based on average daily attendance (ADA), rather than ADM.

Figure 5

Per-pupil expenditure growth even exceeds inflation.

Growth Rates of Statewide School District Expenditures Per Pupil, for City, Local and All Districts, vs. Inflation

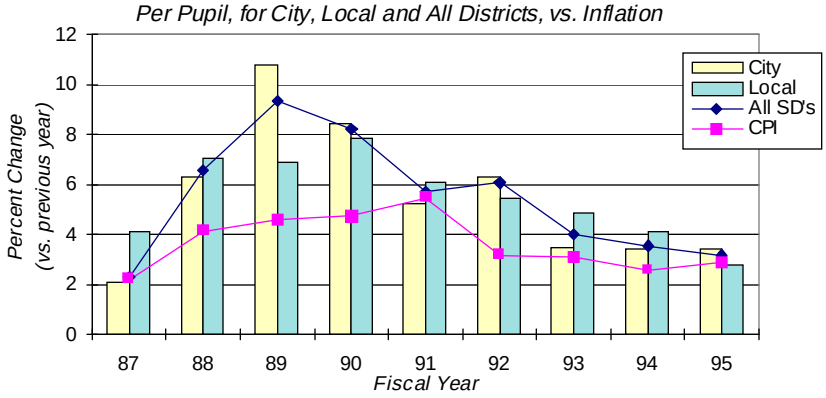
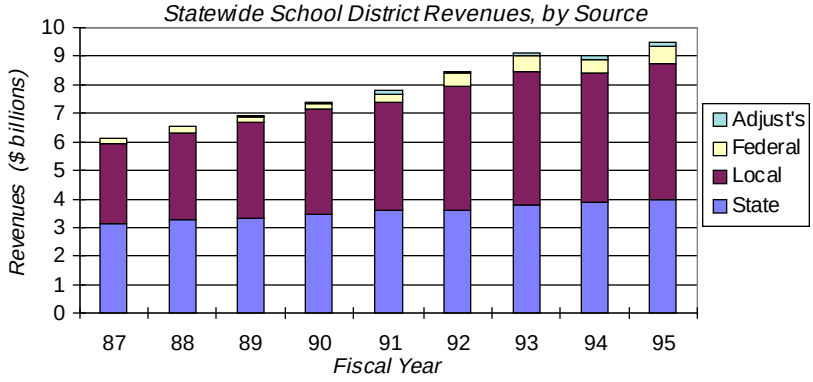


Figure 6

The districts' revenues have increased to support the increasing expenditures.

Statewide School District Revenues, by Source



Revenues per pupil grew with expenditures. The per-pupil revenues received by the districts also exhibited a growth similar to that of the per-pupil expenditures, as is shown by a comparison of Figure 7 and Figure 3. Their year-to-year growth rates did show more volatility during this period than did the expenditures' growth rates; however, as Figure 8 shows, they usually exceeded inflation and have recently been moderating.

Revenues vs. Expenses

The school districts' per-pupil revenues exceeded expenditures over the recent decade, although the differences were generally small. As can be seen in Figure 9, the statewide surpluses ranged from zero to $240 per pupil. These amounts were only zero to 4% of expenses (or revenues), with the average over the nine years being 1.9%.

Figure 9 further shows that the surpluses have diminished in recent years, with city school districts even showing small deficits overall. Such a squeezing of the surpluses could be caused by any of several factors affecting school funding. One significant factor might be the composition of the school districts' revenues among their several sources and the change in that composition that

Figure 6. The yearly increases and the dollar values are quite similar to those of the expenditures in Figure 1.[3]

Revenues come from three sources. Figure 6 also shows that Ohio's school districts receive funds from three main sources: federal (usually program funds), local (predominantly property tax revenues, but also income tax revenues), and state (basic aid and other, specific, funds). This method of sourcing of funds to the districts has become a topic of debate, as the relative amounts contributed by these three sources are undergoing changes in Ohio and elsewhere; this trend will be discussed later.

[3] The Ohio revenue data in the remaining figures are total adjusted operating revenues. The Department of Education's data base includes a component of approximately 1% to 2% of revenues as "adjustments". These mostly state funds are provided to centralized facilities such as joint vocational school districts, county educational service centers and joint data collection sites, etc., for services that benefit the school districts.

Figure 7

Per-pupil revenues are also increasing . . .

Statewide School District Revenues Per Pupil for Selected Types of Districts

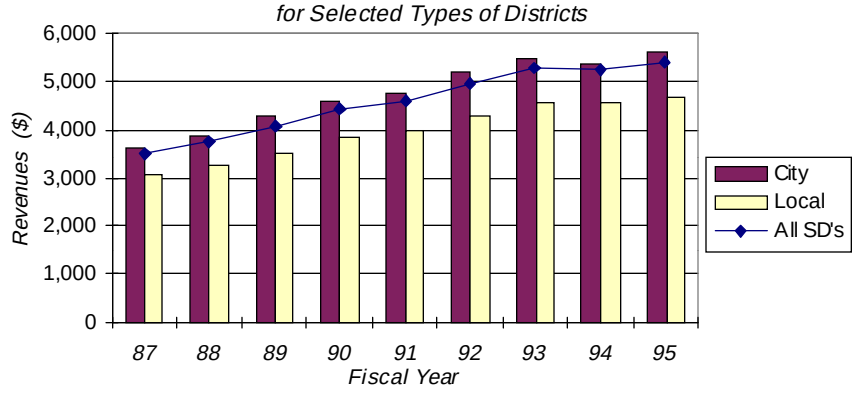
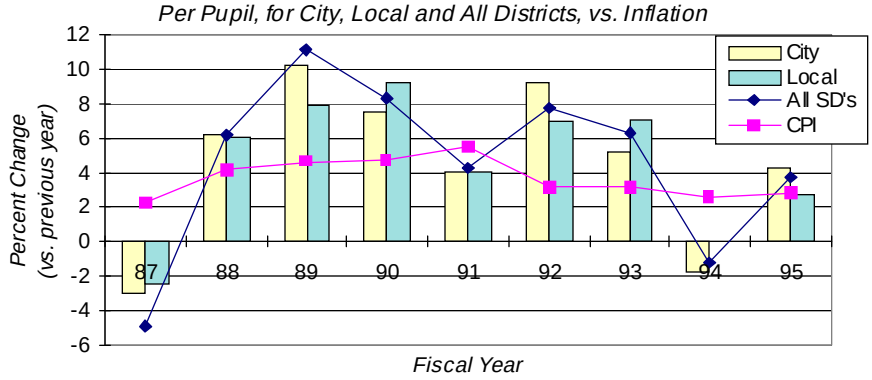


Figure 8

. . . and this revenue growth usually exceeds inflation.

Growth Rates of Statewide School District Revenues Per Pupil, for City, Local and All Districts, vs. Inflation



Local, state and federal funds contribute to districts' revenues, whose growth matches that of expenditures.

Revenue growth usually exceeds inflation.

The districts' small per-pupil surpluses have declined recently.

has been taking place in Ohio and across the country during the decade. This trend bears discussion here.

Composition of the School Districts' Revenues: the U.S.

As described earlier, in Ohio the school districts' three sources of revenues are local property and income taxes and donations; federal program funds; and state funds, including basic aid. This combination of three sources is not unique to Ohio, however; it has provided revenues to the nation's school districts for most of this century, although during that time the sizes of the three components have been both different and changing.

History: the trends changed. The history of the contributions from these three sources nationwide is illustrated in Figure 10.[4] The federal proportion grew from negligible amounts initially to about ten percent before falling back to the 7-8% level during the 1980s. The local component was, until the late 1940s, by far the largest source of funds (83% of total funds during the 1920s), as the school districts chiefly supported themselves.

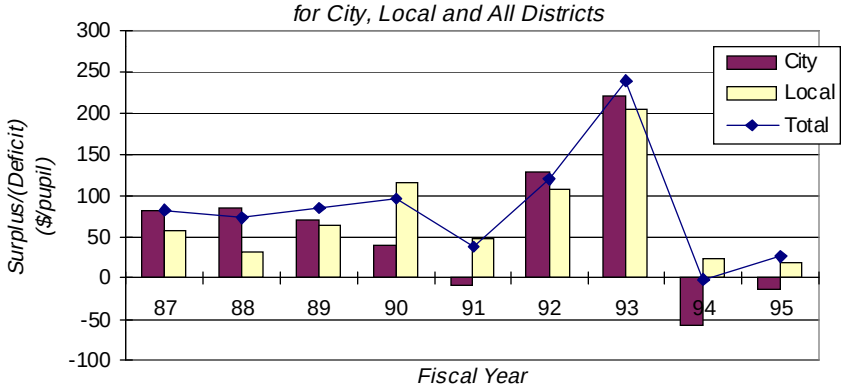
Local support declined. Beginning in the 1930s, however, this local

[4] National Center for Education Statistics, *Digest of Education Statistics 1995 (Washington, D.C., October 1995), 154.* The earliest data provided are for fiscal year 1920.

Figure 9

The districts have had surpluses until recently.

Surplus/Deficit (Revenues less Expenses) Per Pupil, for City, Local and All Districts



proportion of the total school district revenues began a decades-long decline (Figure 10), which was continuously offset by a concurrent rise in the state component as state governments significantly increased their subsidies to the districts.

One of the reasons for the beginning of this trend is given by the example of Ohio. During the depression of the 1930's, local governments encountered difficulties collecting the taxes owed them by property owners; hence the school districts incurred revenue shortfalls. In order to aid financially troubled schools and local governments, Ohio's state government in 1935 discarded the traditional method of funding schools (based only on local property and land taxes). Instead, it instituted the school foundation program, which augmented the districts' local taxes with revenues from the state based on a new 3% retail sales tax. With this program, the state assumed responsibility for approximately one-half of the revenues required by the districts; and, hence, the local-revenue proportion of school funding was cut in half.[5]

Nationwide, the average proportion of state support of schools also rose

Nationwide, local, state and federal contributions to school districts' revenues have changed since the 1930's.

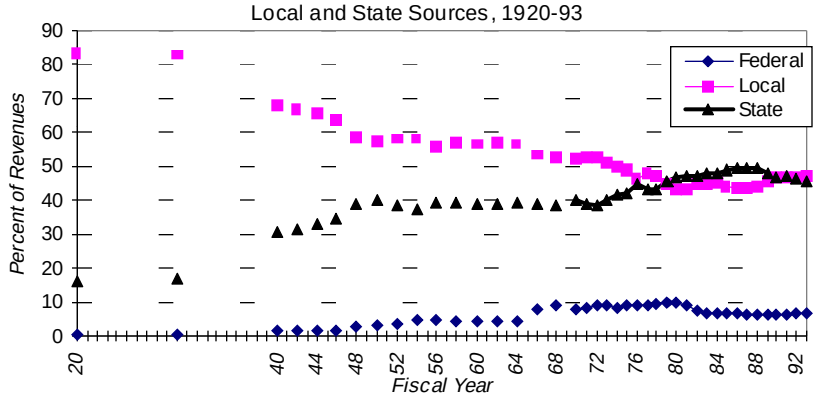
The federal percentage was negligible until the 1950's and is still less than 10 percent.

The local percentage declined over the years; and the state percentage grew.

Figure 10

State proportion of revenues is declining in the U.S. . .

Composition of U.S. School District Revenues among Federal, Local and State Sources, 1920-93



[5] Ohio Department of Education, *The Ohio Law for State Support of Public Schools: Biennium 1994-95* (Columbus, 1994), 2.

during the late 1930s and 1940s, although it lagged Ohio's rate, as it did not rise above approximately 40% until the 1970s (Figure 10). However, by 1965 the average state level exceeded Ohio's now-lower 30%. Given the relatively flat average component from the federal government, nationwide increases in state support over the long period from the 1930s to the 1980s effectively mirrored the decline of the local contribution, with the two curves finally crossing in 1979 as state support took up the larger share.

Then federal and state shares declined. The 1980's, however, saw two major changes in this nationwide trend. First, the Federal component of public education revenues in the U.S. dropped by three percentage points over just a four-year period, 1981-84 (Figure 10). This reduction was absorbed by increases in both state and local proportions. The reduced federal proportion has since held steady at between six and seven percent since 1983.

The second change occurred a few years later, as a long-term trend reversed direction. In 1988, the state governments' share of school district funding began to decline, to the extent that in 1992 the states' proportion dropped back below that of the local governments. By 1993 the average state component had fallen by more than four percentage points. The federal share, meanwhile, had remained flat at 6-7 percent.

The states' decline was only relative. The reduction in the states' proportions of school district funding was, however, only a relative change. As can be seen in Figure 11, for the entire decade since 1983 state governments actually increased the dollar amounts they provided to the school districts, and at growth rates even greater than those of inflation. This additional spending responded to a perceived need to improve public education. Despite this growth in dollars, however, the state proportion still fell relative to the local component. Therefore, the decline must have occurred because local tax revenues were growing even faster than the state aid.

Local revenues grew faster. And, in fact, this more-rapid growth of local revenues was the case; Figure 11 shows that, for all but one year since 1987, the nation's local tax revenues grew at rates higher than the growth rates of state aid and significantly higher than the rates of inflation.

Thus, this higher growth rate of local revenues has played a major part in the decline of the states' proportions of the total revenues raised by the nation's school districts. Besides reversing a trend in effect since 1930, the recent nationwide rise in the local component has been the longest sustained rise in the local share of school districts'

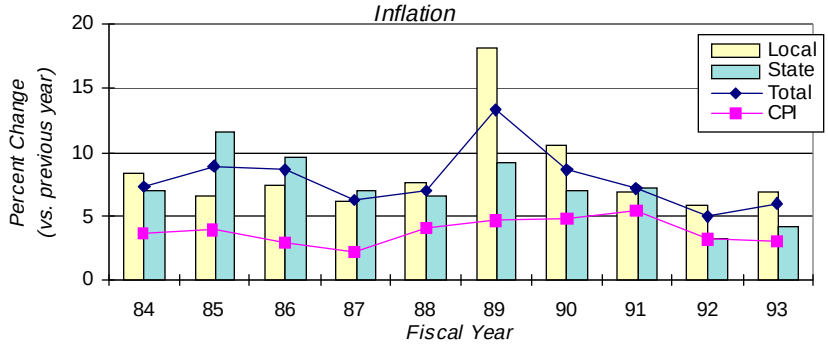
But in 1988 the nationwide trend reversed: The state percentage began declining because local revenues began growing faster than the states' aid to the school districts.

Ohio has mirrored these U.S. trends since 1935.

Figure 11

. . . since school districts' local revenues have been growing faster than state aid.

Growth Rates of U.S. School District Revenues, by Source, vs. Inflation



Ohio's foundation program began in 1935. Its current version dates from the "equal yield" foundation formula of 1975.

revenues in three generations. It has also been the longest decline in the state government proportion of the districts' revenues.

Composition of the School Districts' Revenues: Ohio

Since its inception in 1935, Ohio's foundation program has been revised frequently by successive legislatures in order to meet new standards, provide education improvements, and distribute state aid in fairer and more efficient ways.

The state continued to contribute approximately one-half of the districts' revenues until 1946, after which state support fell to approximately 30% by 1965 as property-tax revenues climbed. In the early 1970s, state government enacted an income tax and raised the state's contribution to 35% of the school districts' revenues.

In 1975 the state revised the foundation program significantly, adopting a new formula for the distribution of aid. Called the "equal yield" formula, it was the state's first version of what are called "foundation formulas". It provided aid to the districts in each of two tiers.[6] This revision of the program effectively created the forerunner of the current foundation program, which will be described later.

In 1982 the foundation program was modified in two ways. The second tier of the foundation formula was deleted to provide a simpler formula; and, to allow for the different expenditure levels encountered from one district to another in the delivery of a basic education, the so-called "cost-of-doing-business" factor was adopted to augment the foundation amount for each district according to its relative cost indicator.

In the early 1990s, the state provided for supplemental appropriations to districts that have property valuations (adjusted for relative personal incomes) below a designated threshold.[7] This additional state support has been known as the "low-wealth subsidy" or "equity aid".

These and other moves by state government affected both the state's share of education funding in Ohio and the methods by which that aid was allocated to the school districts. By the late 1980s, the state component of the districts' total revenues had risen to approximate parity with the local component (Figure 12).

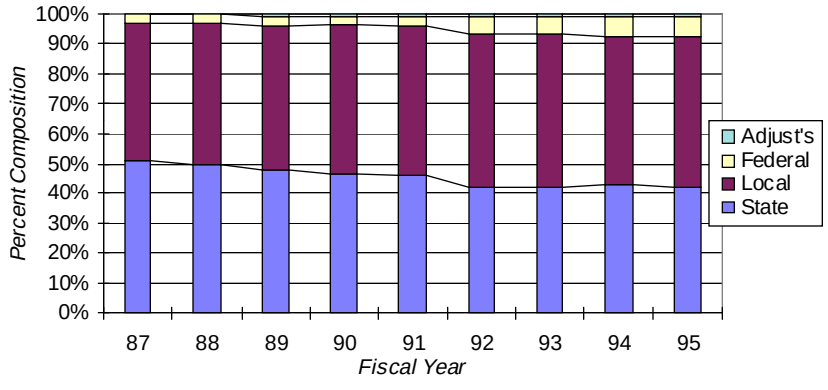
[6] The first tier provided sufficient aid to raise a school district's revenues to a predetermined target amount (the foundation amount) from an "actual" amount taken as the product of the district's property valuation and a given property-tax rate (set at 2% for all districts). The second tier provided an additional state subsidy as a reward for local tax effort above 2%; this additional aid was proportional to the amount by which the actual local tax rate exceeded 2%, up to a maximum of 3%.

[7] Ohio Department of Education, op. cit., 3.

Figure 12

The state proportion is also declining in Ohio . . .

Composition of Statewide School District Revenues, by Source



The nationwide decline since 1987 in the proportion of school district revenues contributed by state governments, as described above, has been paralleled in Ohio. Figure 12 shows that the state's share of school district funding dropped nine points, from 51% in fiscal year 1987 to just 42% in 1995.

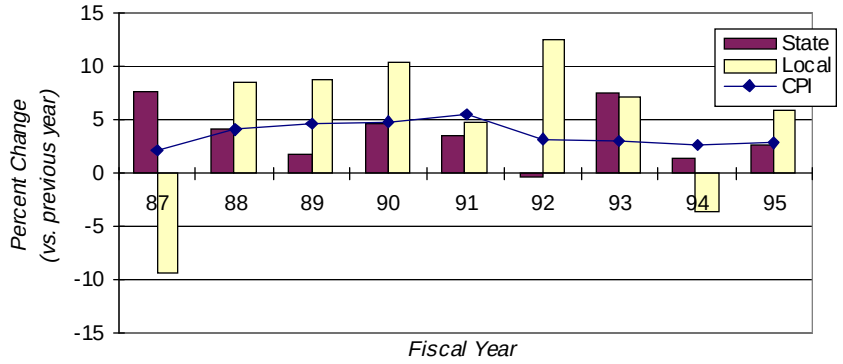
This decline in Ohio's state component was partially offset by increases in the

federal proportion; this federal increase, from 3% in 1987 to 6% in 1995, ran contrary to the flat nationwide federal component of 6-7% during this period.

Figure 13

. . . as local revenues grow faster than state aid.

Growth Rates of Statewide School District Revenues by Source, vs. Inflation



The state's decline was only relative. As with the nationwide trend, this decline in the state's proportion of Ohio school district revenues was a relative one, since the state government's dollar contributions to the districts actually kept growing after 1987 (although at lower rates than they had been enjoying since the early 1980s, when state government was emphasizing education). Despite state aid's continued dollar growth since 1987, however, it was overtaken by still greater increases in local tax revenues. The two growth rates are shown in Figure 13; since 1987, local revenues have grown faster than state aid in all but two years. (Note also that the local revenues' growth rate almost always far exceeded that of inflation, while state aid rarely grew faster than inflation.)

Budget priorities slowed state growth. The more-limited growth of state aid in Ohio since 1987 can be attributed, at least in part, to the state's budget necessities. In the late 1980s, moneys had to be shifted in order to fund mandated levels of Medicaid and increased spending on corrections; these reallocations somewhat reduced the state aid available for education. An additional reason for limiting the rate of growth of educational spending was government's desire for a respite from the education expansion of the early-to-mid 1980s, especially since those several years of additional spending had not produced the expected improvements in education outputs.

Local revenues grew. As for local tax revenues, their significant growth since 1987 can be laid to two factors: rapid appreciation of the state's taxable properties and the school districts' continuing ability to gain their electors' approvals to levy taxes on those properties. A discussion of local revenues and these factors is included below.

Ohio declined faster than U.S. The situation in Ohio might be more noteworthy than in other states, since the state government's proportion of school district revenues declined faster in Ohio than it did nationwide, as shown in Figure 14. After the peak year 1987, the state component began to fall in both Ohio and the nation as a whole. At first the national average led the decline; however, Ohio soon began falling faster. By 1989 Ohio had fallen below the national average and was leading the decline; the gap grew steadily to 1993,[8] as both Ohio and other states saw their local taxing districts pick up a proportionately larger share of the school district revenue burden.

State budgeting necessities since 1987 have limited the growth of state support. This, plus the rapid growth of property valuations, caused the districts' local revenues to grow faster than state aid. So the percentage of state support has declined.

[8] It should be noted, however, that, since 1993, Ohio's state component has leveled off; its 1995 value was equal to 1993's, at 42%.

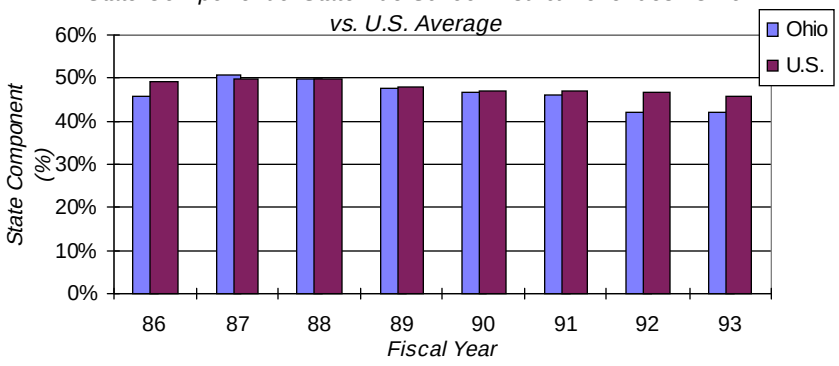
The school districts have seen growth in both their local and state revenues during the past decade.

But local revenues, chiefly from property taxes, grew faster.

Figure 14

Ohio's state proportion of school district revenues has declined even faster than the U.S. average.

State Component of Statewide School District Revenues: Ohio vs. U.S. Average



Ohio's Local Revenues: Growing Despite Limits

In summary, Ohio's school district expenditures, both total and per-pupil, have increased each year in the past decade at rates greater than inflation (Figure 5). Further, these expenditures have been supported by increased operating revenues to the districts (Figure 8), as the funds provided by all three sources (local, state and federal) have grown.

Yet the state's proportions of these increasing revenues have eroded by several percentage points in the past decade as the local shares of the revenues have increased significantly (Figure 12).

While this phenomenon was influenced by a modest reduction in the growth rate of state aid, the main cause was the significant increase in local revenues statewide caused by greater property appreciation and the continued success of the school districts in obtaining voter approval of tax levies.

Property taxes are determined by two factors: assessed property valuations and the tax rate, or millage.

Most local revenues come from property taxes. As the school districts have obtained increasing proportions of their revenues locally over the past decade, the nature and origin of these local revenues have become more noteworthy.

As mentioned earlier, most local revenues are generated by levying taxes on properties. Thus, the amount of local revenue a district obtains is determined by the product of two factors: the valuations of the properties in the district and a rate of taxation, or millage, applied to those valuations.[9] Further, given that property valuations are an uncontrollable factor, debates about the level of property taxes in a district usually boil down to what level of tax rate, if any, should be applied to the valuations of the district's properties.

A district's property tax rate is composed of inside (unvoted) and outside (voted) mills.

Districts' taxes come from inside and outside mills. Tax rates on property in Ohio can be categorized into two types: unvoted, or inside, millage and voted, or outside, millage. Currently a county is allowed by the state constitution to levy up to 10 mills (1%) on properties without obtaining the electors' approval. A school district receives a portion of the revenues raised by these ten unvoted mills. The millage allocations, determined years ago by county budget commissions and rarely changed, might provide one district a revenue equivalent to a rate of just five mills (0.5%) on its

[9] Millage is an alternative term to "percentage" and is used in property taxation. A mill is one-tenth of one percent; thus, 10 mills equal 1%, 32 mills equal 3.2%.

properties' valuations; another district, six mills; and still another district, four mills. These inside millage rates allocated to school districts by local governments in Ohio usually range from 3 to 7 mills. The revenues from the remaining mills, those not allocated to the districts, are retained for use by county, city or township governments.

Since the school districts need more than just a share of the ten inside mills in order to operate their schools, they periodically ask their electors to approve additional millage; these mills are the voted, or outside, mills. A district keeps all the revenues raised by an outside-millage levy passed by its own electors; it does not share these revenues with other school districts or with other jurisdictions.

The taxable (i.e., assessed) valuation of a property is determined by applying an assessment percentage to the appraised market value of the property; there is a statewide statutory assessment rate for each category of real and tangible property in Ohio.

The combination of the inside and outside mills, applied to the various properties' taxable valuations, determines the total property-tax revenues obtained by a school district.

Both the state and the districts control local revenues. The primary control over the level of local revenues in a district rests, of course, with the electors, who must approve the property tax or income tax levies. Besides the constitutional limit of 10 mills on inside (unvoted) millage, the state's main influences over these revenues are its designations of the statewide property value assessment rates (e.g., 35% on all real property) and the minimum effective local tax rate that a district must impose (currently 20 mills) in order to remain eligible for state basic aid.[10] Thus, the state could change the expected amounts of future local taxes by adjusting the above factors; however, the local voters would ultimately accept or reject the adjustments by voting for or against future levies.

It should be noted that the state provides property owners some relief from real-property taxes. For example, by state law, owners are relieved of 10% of such taxes; for owner-occupied residences the amount is 12.5%. However, the state reimburses the school districts for the tax revenues lost because of these property-tax rollbacks.

Voted taxation is limited. The amounts of revenues raised from property taxes in Ohio are subject to a major limitation, arising from a restriction on the application of the outside (i.e., voted) millage.

The outside millage differs from the inside millage in one very significant respect: the number of additional outside mills (i.e., the increase in the tax rate) approved by the electors in a given levy does not remain effectively constant thereafter. Instead, it is the *dollar* amount of additional tax revenues from that levy, determined as the product of the additional millage and the property valuations at the time of the levy, that is required to remain constant through subsequent years.

In other words, the amount of the tax increase provided by a new levy will be fixed in the additional dollar amount arising from the levy, rather than being fixed in the voted additional millage rate. Thus, a district's tax revenues, arising from one or more levies passed in previous years, will remain constant over time (barring, of course, a new levy).[11] Since this dollar amount remains constant, it will not grow to allow for inflation in school district operating expenses. (A tax increase fixed in a number of additional mills,

A district's outside millage is determined by local vote, but the state determines the property value assessment rates and the eligibility requirements for state basic aid.

The outside millage is subject to a major limitation: the dollar amount, not the tax rate, remains fixed thereafter, so the district's total tax revenues from a given levy remain constant for existing property.

[10] The district must meet two additional main requirements to remain eligible for state basic aid: (1) it must pay its teachers in conformity with a state-mandated minimum pay scale, and (2) it must have schools in session for 182 days per school year.

[11] As an exception to this requirement, a district's tax revenues may increase from one year to the next by the amount of taxes on newly constructed properties. The taxes on these new properties are levied at the same rate that is used for current property. Statewide, this new construction generally increases the tax base (statewide property valuation) by about 1 to 2 percent per year.

Because of this limitation, a district's voted property taxes don't increase. It's good for the taxpayers but the school districts' revenues do not grow to provide for inflation and for enrollment increases.

As property valuations increase and tax revenues remain fixed, the effective tax rate (revenues divided by valuations) declines. This is the tax reduction factor.

The tax reduction factor causes districts to propose additional tax levies.

however, would have provided some adjustment for inflation by applying those constant mills to presumably increasing property valuations in subsequent years.)

But tangible property is exempt. Certain categories of property, particularly tangible property, have been exempted from this limitation.

Tangible property normally depreciates until it reaches a lower salvage value. Thus, increases in the overall value of statewide tangible property occur because new inventories and equipment are purchased each year; without these purchases, this value would decline.

Under the exemption for tangible property, the voted millage rates are kept constant and dollar tax amounts are allowed to increase as property valuations increase year by year.

However, the overall value of tangible properties in Ohio is exceeded by the value of the vast numbers of residential, industrial and agricultural real properties, which are affected by the limitation.

The effective tax rate declines: the tax reduction factor. Since the amount of real-property tax dollars produced by a given levy remains fixed over time, the effective rate of taxation on the district's properties (equal to tax dollars divided by valuation dollars) must decline over time, assuming the district's property valuations continue to increase. This decline in the effective tax rate on district properties is known as the tax reduction factor.

The tax reduction factor necessitates local levies. This revenue-limiting system is an important influence in public education finance in Ohio. The tax reduction factor has, as intended, constrained the school districts' abilities to increase their revenues and, hence, their expenditures. It is the chief reason that most school districts must continually propose additional tax levies to their voters.

As the districts struggle with the problems of inflation and (for some) increasing enrollments, the tax reduction factor necessitates additional levies. These levies are needed because, apart from the taxes from new construction (see footnote 11), the reduction factor leaves the districts with only two sources of property-tax revenues that are allowed to increase with rising property valuations (thereby providing some hedge against rising costs). These two sources are (1) the amounts arising from the district's portion of the ten inside (fixed-rate) mills and (2) the tangible-property amounts from the voted rates (since these rates are fixed when applied to tangible properties).

However, the revenues from these two fixed-millage components are usually only fractions of a typical district's total property-tax revenues, so the increases in these revenues (from increasing valuations) are often insufficient to enable the district's entire property tax revenue stream to keep up with inflation. Thus, to obtain the additional revenues that the districts see as necessary, they must propose the levies.

The tax reduction factor has a history. The use of state policy to limit local property-tax revenues has a long history in Ohio (see box). The property-tax limitation system had its Ohio origin early in the century in response to complaints about perceived excessive increases in property taxes as a result of applying fixed millage rates to rising property valuations. In response to the complaints, state government instituted a system of millage rollbacks (see box). These millage reductions were applied in

Chronology Leading to H.B. 920

An article by Howard Fleeter[12] provides a chronology of the important property tax limitation legislation: "Temporary legislation to reduce millage rates in response to inflation was first introduced in 1910, with permanent legislation arising in 1925. Millage rates were reduced in proportion to reappraisal increases until 1967, when Senate Bill 350 provided for millage rate rollbacks whenever per pupil increases exceeded 35 percent. In 1969, House Bill 531 modified SB 350 to allow revenue growth of one-half the increase in local property valuation. In 1971, Senate Bill 455 returned to the 1925 approach, rolling back millage rates in the year of reappraisal, with the intention of leaving the dollar amount of taxes collected unaffected by inflationary increases in property values (however, growth in tax revenues from new construction was allowed). These millage rate rollbacks applied to tangible as well as to real property. Although SB 455 effectively prevented inflationary forces from increasing overall property tax payments, differential growth rates in residential, agricultural, and business property led to shifts in property tax burdens toward residential and agricultural taxpayers. As a result, HB 920 was drafted in 1976, excluding tangible property from the rollback provisions. Despite this provision, differential inflationary increases in residential, agricultural and business and commercial real property still created inequities. To address this issue, State Issue I was approved in a 1980 statewide referendum, resulting in a constitutional change to allow for the splitting of real property wealth into Class 1 residential and agricultural property, and Class 2 commercial, industrial, mineral and utility property. Millage rollbacks are now computed separately for the two types of property."

order to limit increases in a district's tax revenues whenever its total property valuation increased. This approach to real property tax limitation was modified several times until 1976, when H.B. 920 abolished the reduction of millages. Instead, since that time, a district's nominal total tax levy for a current year has been reduced by the percentage factor (the tax reduction factor) needed to keep its actual tax revenues on existing properties at the same level as for the preceeding year.

Hence, the expression "H.B. 920" is frequently used to describe Ohio's current revenue limitation system, although this bill only modified existing tax-reduction law into essentially its current form, save for the additional property-classifying effects of State Issue I in 1980 (see box).

Local revenues grow anyway. There is no question but that the decades-long existence of Ohio's H.B. 920 property-tax limitation system has imposed difficulties on the school districts' efforts to raise revenues. However, it must be noted that, despite the effects of the tax reduction factor and the districts' often-stated concerns about it, statewide local revenues have grown substantially in the past decade (Figures 6, 11). This increase in local property taxes can be attributed both to a significant rise in property valuations, including new construction, and to the districts' successes at obtaining voter approvals of new tax levies. According to the Ohio Department of Taxation,[13] the statewide assessed (taxable) valuation of Ohio's real and tangible properties for school districts increased from $102.2 billion in 1986 to $155.6 billion in 1995, for an annual compounded growth rate of 4.8%. During the same period the current taxes on these properties increased from $3.0 billion to $5.5 billion, for a growth rate of 6.9%.[14] Both these rates well exceeded the rate of inflation, 3.8%, during that period.

As for the tax levies, the passage rate for these levies during the ten years 1985 to 1994 ranged from 41.4% to 55.0%; during that period, an average of 47.3% of the levies was approved by the districts' electors. This combination of property valuation increases and levy approvals has been the major contributor to the growth in local revenues to the school districts during the past decade (Figure 6).

The tax reduction factor's limitation of property tax revenues has also become known as the H.B. 920 effect.

Despite H.B. 920, local property-tax revenues have grown in the past ten years because of voter approval of new tax levies, the application of those levies to rising property values, and the addition of newly constructed properties to the tax base.

[12] Howard R. Fleeter, *An Analysis of the Impact of Property Tax Limitation in Ohio On Local Revenue for Public Schools*, Journal of Education Finance, 21 (1996), 343.

[13] Ohio Department of Taxation, *Tax Data Series: Property Tax Data by School District, 1986* and *1995 (Columbus, 1996),* by Internet: http://www.tax.state.oh.us/tax/

[14] The 1995 property tax revenues statewide were equivalent to average effective tax rates of 32 mills on real property and 46 mills on tangible property. The average property valuation came to $86,000 per pupil.

The wide range of per-pupil expenditures among districts ($3,700 to $11,800 for 1994-95) has been described as representing a lack of "equity", both in some districts' provisions for education and in state aid.

Further, local revenues vary even more widely; many districts' taxation capacities are limited.

Local income taxes fight inflation. Some school districts obtain additional revenues through local taxes on incomes. These revenues may increase with time since, for this tax, it is the tax rate, rather than the original tax amount, that is held constant and can be applied to usually increasing income levels. However, only about one-sixth of Ohio's school districts currently levy income taxes, although the number has grown significantly since the 1980s, when state government first allowed districts to propose income tax levies to the electors. For the 1990 tax year (equivalent to the 1990 calendar year), property owners in 22 districts incurred a total of just $3.6 million in income taxes. By 1995, however, 105 districts were imposing income taxes, for a total of $72.8 million; the average revenue for these (mostly small) districts was $693,000 although the range was wide, from $5.0 million down to only $19,000.[15]

Note, however, that the income tax revenues comprise less than 2% of the total revenues raised locally by the districts statewide; the property tax remains the predominant method of raising local funds for education.

Yet many districts claim financial problems. Despite the statewide increase in school district expenditures and revenues, many districts are currently indicating that they are in financial difficulty, or are close to such difficulty, or are operating on very tight and/or pared-down budgets. The recent shrinkage of the districts' overall surplus (Figure 9) illustrates this tightening. The concern includes not only the operation of the school systems but also their physical infrastructures, since some of the revenues the districts receive are used to service the debt issued to finance building construction.

It is true that expenditures per pupil vary widely among Ohio's 611 school districts. Further, the revenues from property taxation (and income taxation) also vary greatly among the districts. These matters are briefly described below.

Per-pupil expenditures vary among districts. Despite the growth in the statewide average per-pupil expenditure in Ohio (Figure 3), the expenditures per pupil still vary greatly from district to district. This wide range (from $3,700 to $11,800 for the 1994-95 school year[16]) has for several years been described by some parties as constituting a lack of "equity" among the districts' provisions for education. Consequently, the range has also been described as constituting a lack of equity in the state's aid to the districts (because state aid does not fully compensate for the differences in local revenues among the districts). Hence, these variations in expenditures have provided a starting point for the debate on education finance.[17]

Local revenues vary, also. Even though statewide local revenues have increased significantly during the past decade (Figures 6, 7), the amounts of local revenue vary greatly from one district to another. In 1994-95, for example, local revenues to individual districts ranged from less than $1,200 to more than $10,000 per pupil.[18]

These differences arise from various factors that affect the capabilities of the districts to generate local tax revenues. Some districts enjoy large amounts of taxable property, high property valuations (through, for example, high residential values or significant industrial/utility facilities), high average incomes, high voter interest in supporting schools, or combinations of these factors. Such districts usually have few difficulties obtaining the funds needed to operate their schools.

[16] Ohio Public Expenditure Council, *Education Report 96-2* (Columbus, March 1996), 3. In these and other OPEC data, the island districts are excluded as anomalous.

[17] The debate often focuses on the wide range of expenditures and sometimes seems to imply that many districts are spending over $10,000 per pupil. In reality, however, only six of 610 districts were above this level in fiscal year 1995; further, only these districts plus four others were above $8,000 per pupil.

[18] Ohio Public Expenditure Council, op. cit., 3.

On the other hand, many districts' taxation capacities are limited by scarcities of taxable properties and/or low valuations of those properties. An additional restraint has been the low and/or slow-growing average incomes in some districts, which limit the abilities of the electorates to pay additional property taxes. Further, some districts' electors decline to provide as much financial support to their schools as other districts' electors provide. Any one of these factors can limit the amount of tax revenues obtainable through the taxation of either property or income.

Among the 611 districts, then, the different amounts of taxable property, the different valuations of those properties, the different average incomes and the different degrees of voter support together create a wide spectrum of taxing capacities and, consequently, create the previously-noted wide spectrum of school district revenues.

Thus, the several factors that influence taxation capacity can create a situation in which property-tax revenues can grow rapidly statewide, yet can still vary greatly from district to district, causing some districts to claim the need for help in financing their schools.

Ohio's State Aid to School Districts: Attempting to Fill the Gaps

As mentioned earlier, Ohio maintains a system of state aid to the school districts. This system is represented by many individual line items in the state education budget, although it is dominated by just a few line items.

Several of these line items comprise the foundation program, the largest single item of which is the one for basic aid, comprising non-specific grants to the districts.

Basic aid is formulated. The amount of state basic aid for each district is determined by the foundation formula, mentioned earlier. This formula calculates the difference between a total expenditure target (the foundation amount) for each district and the amount of local revenue the district is assumed to obtain (the charge-off amount); the difference is supplied by the state as basic aid.

Described simply, for a given district the formula for state basic aid starts with an assumed statewide target level of expenditure *per pupil*, as determined by state government in the budget process. This per-pupil target level, called the foundation level (or formula level), is multiplied by the district's pupil population (basic ADM) and the relative cost-of-doing-business factor (which varies by county) to obtain the total target expenditure amount (or foundation amount) for the district. From this amount is subtracted the local revenue attributed to the district (the charge-off amount); it is determined by the product of the district's total property valuation and a number of "charge-off" mills (this millage is specified by the state and is the same for all districts). The difference between the foundation amount and the charge-off amount is, as noted above, the state's basic aid amount provided to the district.

These calculations of basic aid (and other major program amounts) are published on a form known as the SF-12, prepared for each school district by the Ohio Department of Education.

Changes in basic aid have come from changes in foundation levels and charge-off millages. For most of Ohio's school districts, basic aid contributions are the largest components of their state-sourced revenues. Over the years, increases in the foundation formula's per-pupil

Ohio's basic aid to a district is determined by finding the total expenditure target for the district (the foundation amount) and subtracting the amount of local revenue that district is assumed to obtain (the charge-off amount).

The starting point is the setting of the per-pupil expenditure target (the foundation level) and the charge-off millage. Changing these two factors is the main way to change basic aid.

Increasing both the foundation level and the charge-off millage distributes more aid to the poorer districts. Over time, the revenue gap among the districts should narrow.

foundation level (and, hence, in the districts' foundation amounts) have increased these contributions. The foundation level has risen from $1,943 per pupil in the 1984-85 school year to $3,035 in 1994-95, $3,315 in 1995-96 and $3,500 in 1996-97.

In recent years, however, the state has also been increasing the millage rate used to determine each district's charge-off amount (the district's imputed local revenues).[19] Such an increase in the charge-off millage, of course, increases a district's charge-off amount and, in the case of an unchanged foundation amount, reduces the amount of basic aid provided to the district.

However, in the case of an *increased* foundation amount (intended to increase the state's total basic aid), an increased charge-off amount would merely moderate the increase in basic aid to the district (although, if the district's charge-off increase happened to exceed its foundation increase, its basic aid would actually decrease).

Basic aid is oriented toward the poorer districts. During the past several years, the process of increasing both the foundation level and the charge-off millage has served (1) to increase the total amount of state basic aid and (2) to orient its distribution more toward the low-valuation (poorer) districts and away from the high-valuation (wealthier) ones.

This orientation occurs because a given increase in the charge-off millage increases the charge-off amount by fewer dollars in a low-valuation district than it does in a high-valuation district (since the amount is simply the millage times the valuation). The low-valuation district's smaller charge-off increase translates (by subtraction from the foundation amount) into a larger increase in basic aid than what the wealthier district gets.[20]

Basic aid orientation helps equalize revenues. This trend of orienting the basic aid distribution toward the poorer districts reflects Ohio's current policy to more nearly equalize, over time, the districts' total revenues. That is, by making larger and larger portions of districts' actual property millages subject to the charge-off (through increases in the charge-off millage), the poorer districts are expected to gradually narrow the revenue gap with the wealthier districts.

As a result of this policy, in 1994-95 the lowest amount of total state aid was less than $500 per pupil to a relatively wealthy district, while the highest exceeded $2,600 to a relatively poor one.[21]

But the orientation of state aid does not completely fill the gaps. Despite the overall growth in state aid and despite the just-noted orienting of that aid toward the poorer districts, inequalities remain among the districts' per-pupil expenditures. The previously noted range was from $3,700 to $11,800 in 1994-95. But in that year the average expenditure was $5,365 per pupil,[22] so that some districts' expenditures were well below average.[23]

Thus, the formula's effect of providing more state aid to the lower-wealth districts still does not bring some of them up to near-average levels. Further, it does not keep wealthy districts from spending much more than the average (in spite of much less state aid) by contributing more of their local tax revenues to education.

The foundation formula is adjustable. The state's aid to the districts is controlled chiefly through its designations of the main parameters in the foundation formula for basic aid. These parameters include the statewide foundation level ($3,500 per pupil in

[19] The charge-off tax rate had been held at 20 mills (2%) for several years through the 1992-93 school year; since then it has been gradually increased to 22 mills in 1995-96 and 23 mills in 1996-97.

[20] For example, if one district's valuation is $100,000 per pupil while another's is only $20,000, an increase of one mill in the charge-off formula would raise the wealthier district's imputed local tax revenues by $100 per pupil, while the poorer district's would rise by only $20 per pupil. Then, if the foundation amount were also raised by, say, $150 per pupil, the wealthier district's basic aid amount would increase by $150-$100, or $50 per pupil, while the poorer district's basic aid amount would increase by $150-$20, or $130 per pupil. So the poorer district would receive a much higher increase per pupil in basic aid.

[21] Ohio Public Expenditure Council, op. cit., 3.

[22] Ibid., 3.

[23] However, most of the districts' expenditures are not far from the average. Fully 93% of the districts spent between $4,000 and $7,000 per pupil in fiscal year 1995. Only eight districts were below $4,000 and only 33 were above $7,000.

1996-97), the relative cost-of-doing-business factor for each district (from 1.0 to 1.095), and the charge-off tax rate (23 mills) used in calculating each district's charge-off amount.

The latest change in the foundation formula itself was made in fiscal year 1996 with the introduction of a new factor that affects a district's charge-off amount. Based on a district's median personal income, this factor adjusts the property valuation used to determine the charge-off. In effect, the factor imputes somewhat higher valuations and, hence, higher charge-off amounts, to higher-income districts than to lower-income ones. Since a higher charge-off means a lower basic aid amount, the change has the effect of enhancing the existing orientation of basic aid away from the wealthier districts and toward the poorer ones. This new factor is being phased in gradually over a fifteen-year period.

The state provides other types of aid. State government also controls other types of aid provided to the districts. In addition to the "equity aid" mentioned earlier, these other types include (1) categorical aid (including, e.g., vocational and special education, gifted students, disadvantaged pupil impact aid, joint vocational school districts, and student transportation); (2) grants for various programs; and (3) property tax rollback reimbursement (as indicated earlier, the state mandates several such tax rollbacks and exemptions to property owners, for which it reimburses the localities).[24]

State funding for these items is distributed according to the districts' student needs, rather than by district wealth. Since the needs can vary widely from district to district for such categories as transportation, special education, cost-of-doing-business, and compensatory education (e.g., Disadvantaged Pupil Impact Aid), the funding provided to the districts can also vary widely. By ignoring the relative wealth of the districts, state aid for these needs helps ensure funding in each district, regardless of whether or not a given district could meet its needs without this aid.

Options in School Funding

The funding of public education in Ohio has undergone continual debate, especially concerning the relative levels of local and state support that are appropriate to achieve the educational goals of both the state and the school districts. Many and varied funding options have been considered by Ohio and other states over the years; a few of the current ideas are briefly described below.

The state provides other types of aid: special and vocational education, DPIA, property tax rollback reimbursement, equity aid, etc. The amount of aid is based on a district's need in each case, rather than upon its wealth.

State revenues could be earmarked. If the state government were to decide that it wanted to spend more money on education, it could earmark certain state tax revenues for use as state aid to schools. Such earmarks would change the source of the state's funds for the districts, from the general revenue fund (GRF) to portions of particular taxes that now support the GRF. The earmarks would normally be designated as certain percentages of the tax revenues from a given source.

As an alternative funding method, state revenues could be earmarked for education; but this approach would make the tax structure more complex, and it might decrease public support.

For example, earmarking could be applied to some combination of the income and sales taxes; this combination would have less volatility than an income tax-corporate tax combination.[25] As long as the earmarking percentages are set high enough, the state could increase the state share for K-12 education in the first year, and let growth in the economy provide school revenue growth.

The effect, in general, would be the designation of a certain constant portion of moneys for aid to school

[24] Ohio Legislative Service Commission, *Financing Ohio Schools*, Members Only, Volume 121, Issue 10 (Columbus, March 23, 1995), 1-18.

[25] The corporate tax is much more volatile than the income tax. For that reason, there have been proposals to earmark just the income tax, although the income tax is also adversely affected by recessions.

As another alternative, the state could increase its percentage of the districts' revenues, either by increasing state aid or by limiting local revenues.

Wisconsin in 1993 took a mild approach: limiting local millage increases. Later the state went further, cutting proeprty taxes and setting a target for increased state aid. And, in 1997, tighter local millage controls will reduce local revenues even more.

districts and would also imply a certain degree of fixed financial commitment to education. Note, however, that this approach does not say anything about the allocations of the state aid among the districts; the allocation model could be developed independently.

The only major state tax that is currently earmarked in this way is the motor vehicle fuel tax; the Ohio constitution requires that the fuel tax be used for highway-related purposes. This earmarking of the fuel tax obtains its theoretical support from the "benefit principle" of taxation: those persons who pay the fuel tax (i.e., the drivers) are generally the ones that benefit from the improvements that are purchased by the fuel tax revenues. That is, there is a linkage between the taxes paid and the benefits received: persons who drive more buy more fuel and pay more taxes; they also, presumably, receive more benefits from road construction and maintenance.

It should be noted, however, that this kind of linkage would be much less direct in the case of earmarking the income or sales tax for education.

As an example involving education, much of the revenue from the Ohio state lottery is now earmarked for state aid to schools. In this case, however, the amounts from the lottery are small compared to total state aid, so state government must still make a major decision on how much additional funding must be obtained from the GRF. Thus, the lottery funds, although earmarked, are insufficient to cause the funding of state aid to education to be earmark-driven; rather, they just constitute another source.

Earmarking does have its problems. Such a system adds a complication to the tax structure, one that could impede future changes in state tax policy. The addition of subsequent earmarks over time could create a very complex structure of funds. Earmarking would also necessitate an additional rainy-day fund, which could become the subject of debates over the most appropriate uses of its moneys.

Finally, there are many taxpayers (e.g., those with no children in school) who would not directly benefit from the earmarking of tax revenues for education. Still more taxpayers could observe that the earmarked revenues do not follow the benefit principle; i.e., the sources of the revenues are not related to their use in education. Thus, the earmarking of such revenues might serve to decrease public support for education spending.

The state could increase its leverage. In providing funds to the school districts, the state might decide to increase its leverage in order to more nearly equalize the districts' revenues. Such leverage is usually obtained either by increasing state aid or by limiting local revenues.

In the state-aid approach, the goal would be to send still more money to the poorer districts (and, possibly, less to the wealthier ones).

As for limiting local revenues, the state's goal would be to limit tax rates or taxes per pupil, or to reduce the capacity of the property tax base.

There are various ways by which this additional state leverage might be achieved. Several methods are discussed below, beginning with the examples of two mid-western states.

Wisconsin: School district spending is not specifically limited. Beginning with the state budget in 1993, Wisconsin implemented a system of relatively mild controls on the school

districts' local revenues by limiting their millage increases. This approach enabled a given amount of state aid to assume a larger role in the funding of the school districts.

Wisconsin went much further in its 1995-97 budget, establishing a target for state support of public education. The state will supply two-thirds of school district funding, while local revenues will supply only one-third. In its pursuit of this target, Wisconsin has increased state aid to schools by $1.3 billion over the fiscal year 1994-97 period, while property taxes have been cut by an average of 11.5% or $245 for a median-valued dwelling.[26]

In 1997 Wisconsin will adopt an even more stringent local revenue limitation. Those school districts designated as K-12 (there are two other grade designations, also) will be limited to 10 mills of property tax. Because Wisconsin's assessment rate is 100% of market value (rather than Ohio's 35%), this limitation is not as draconian as it might at first seem; Wisconsin's 10 mills is the equivalent of 28.6 mills in Ohio. Still, the limitation on millage will cause further reductions in local property taxes in Wisconsin, making it easier for the state to reach and maintain its two-thirds funding target. Without such a cap on local property taxes, a two-thirds state funding target would act like an open-ended two-thirds matching grant from the state to the school districts. If the local electors had only to vote for an additional one dollar in tax in order to obtain an additional three dollars in spending, the incentive for locals to vote additional millage would become strong and the state might have to provide far more funds than it could afford.

Michigan: School district spending is limited. In its reform of 1994, Michigan's goal was two-fold: to provide a major reduction in property taxes and to change education funding with a view to reducing inter-district disparities.

Before reform, Michigan's property taxes were well above the national average and, thus, placed a higher-than-average burden on the local property owners for the support of education. To bring the property tax burden more nearly into line with the other main state taxes (sales and income), the state moved to limit the districts' taxation capabilities and to raise the state sales tax (by half, from 4% to 6%) and other taxes (e.g., tobacco).[27]

The change in property taxation consisted of a reduction in the millage rates that districts may levy on non-homestead property. The maximum rate is now 18 mills, as compared to a previous average rate of 35 mills. The rates on homesteads are limited to six mills, while higher rates are allowed for commercial and industrial property. (The assessment rate in Michigan is 50%.) In addition, state government imposed a state property tax of six mills as a means of redistributing a portion of the property-tax revenues. It is still possible for the districts to levy additional millages, although state-imposed requirements make such moves difficult.

In addition to the property-tax rate reductions, the state capped the rate at which the property valuations may increase for tax purposes. The annual allowed increase is either 5% or the rate of increase of the consumer price index (CPI), whichever is lower. At the time of transfer (e.g. sale) of a property, however, the assessed valuation immediately reverts to 50% of the actual market value; the limitation on increases is then reapplied.

These limitations on the districts' property taxes caused a major change in the state/local school funding

Michigan raised sales taxes, reduced property taxes and capped the districts' millage rate on property. The state also capped the rate of increase of property valuations. Result: the local component of school funding was reduced from two-thirds to one-fifth.

Michigan also established a three-tier foundation system that limits the districts' total spending per pupil.

[26] Scott Mackey, *State Tax Actions 1996*, National Conference of State Legislatures (Denver, October 1996), 11-13.

[27] Michigan's funding reform also included a number of lesser-known moves to increase state education aid, such as transfers from various funds to the newly created School Aid Fund.

Increasing the state's leverage or just aiding the low-revenue districts: both approaches reduce districts' incentives to raise local revenues.

Reducing the districts' taxation capacity would limit the revenue disparities.

proportions. Before the reform, two-thirds of total school district revenues (excluding federal) came from local property-tax revenues. After the reform (which did not designate an explicit target for the level of state support), the local proportion was effectively reduced to only 21%. Thus, the state now carries 79% of the districts' state/local revenue burden, instead of its former one-third share.

To address the disparities among the school districts' total per-pupil expenditures, which ranged from $3,300 to $10,800, the state established a three-tier foundation system that limits total spending per pupil by the districts. The three tiers are as follows: (1) for districts spending less than $4,200 per pupil, the state provides aid to bring the district up to $4,200; (2) for districts spending from $4,200 to approximately $6,500, the state provides aid on a sliding scale that gives the least amounts to the districts closest to the $6,500 level; and (3) for districts spending more than approximately $6,500, the state provides no aid, although, by a hold-harmless provision, these districts may vote additional millage in order to prevent their total expenditures from falling below those of the previous year.[28] With this three-tier system of state aid, the state aims to limit the disparities in total expenditures among the school districts.

Thus, Michigan has specifically limited district spending by limiting local revenues and by specifying state aid according to the wealth (i.e., current spending level) of each district.

State aid can reduce local incentives. The method of increasing the state's aid leverage has a corollary: the state could increase aid to those districts whose expenditures are below a certain threshold. Both of these methods, while arising from peoples' natural desire to equalize districts' expenditures, suffer from a problem inherent in the implementation of such plans.

Under Ohio's current H.B. 920 property-tax limitation scheme, either the increase in state leverage to shift aid funds to poorer districts, or the guarantee of state aid up to a threshold amount, would enable some school districts to get by without raising additional local revenues. Thus, either situation would require the state to take on more and more of the support of the districts' expenditures as their effective property tax rates declined to the 20-mill floor. This reduction of the districts' incentives to raise local revenues for their schools could raise the state's burden to unnecessary levels.

Reduce local taxation capacity. Another approach to limiting the disparities of revenues and, hence, spending among the school districts would be to limit the capacity of the districts to obtain local revenues.

One method would have the state reduce the taxation of certain types of property. For competitive reasons, the general business tangible and public utility tangible taxes are all open to elimination or significant reduction. If these were eliminated, many fewer districts would remain wealthy under the property tax.[29]

As an example, the portion of the business tangible tax that is the focus of most complaints is the commercial inventory tax. This tax could be eliminated or reduced through a decrease in the assessment percentage. The state could then compensate all but the wealthy districts, thereby achieving a narrowing of the range of the districts' total revenues. Such a move would have the added benefit of improving the attractiveness of the state to industrial investment, thereby assisting in increasing total revenues.

[28] These dollar spending brackets were the values in effect for 1994; since then, all the brackets have increased.

[29] See also in this volume the paper on the coming restructuring of public utility taxes and its implications for school finance.

Another approach to limiting local taxation capacity would be to reduce the property tax base by eliminating local taxes on business property and by taxing such property only at the state level. One problem with this approach is that a district's local schools would not benefit from new business property; thus, one of the incentives for local residents to accept manufacturing development would be eliminated.

Other approaches exist, including full state funding. One system that would provide strictly equal per-pupil revenues to all the districts is that of complete state control of all revenues, including those from a statewide property tax. Such a system, known as "full state funding", would ensure expenditure equity and, possibly, increased efficiency and accountability. But it would also raise the issues of local control of and responsibility for property taxation and the uses of local taxes, and local control of and accountability for schools.[30] These matters are significant to many of Ohio's citizens.

Still other options exist, including (1) the "flat grant" system, in which each district receives the same amount per pupil (or other funding unit), without regard to local revenues; (2) the "guaranteed tax base" system, which ties district tax rates directly to school spending per pupil by requiring the state to match the amounts that the districts raise (but at a variable rate based on local wealth); and (3) the "percentage equalizing" system, in which the state matches the districts' prior-year spending levels at percentages varying with district wealth.

These options are a few among many by which state government might try to change the financing of public education, whether its purpose be to increase the statewide total expenditure, more nearly equalize the revenues to the school districts, or shift the relative burdens among the parties that support education.

Full state funding would replace local property taxes with a state property tax. But what about local control of property taxes and schools?

[30] Thomas H. Jones, *Introduction to School Finance* (New York: MacMillan, 1985), 102.

A NOTE ABOUT SCHOOL DISTRICT DATA

It should be noted that most of the school-district data used in this paper, whether they were obtained from the Department of Education or from federal sources, were originally taken from reports generated by Ohio's 611 school districts.

Usually there are no other sources for these school-district data, so that corroboration is often impossible. However, in the case of aid funds received by the districts from the state, there is another source besides the districts' own revenue reports; this other source is the Department of Education's own records of disbursements of state aid to the districts. A comparison of the state-aid data from these two sources shows a significant discrepancy.

The discrepancy consists of the large differences between the amounts of state-aid revenues reported by the school districts and the amounts reported by the department of education as having been paid to those districts. Specifically, the districts indicate that they receive much less revenue from the state than the state says it provides. Estimates of this discrepancy range up to $245 million in fiscal year 1995.

Such amounts are substantial; they comprise approximately 2.5% of the school districts' annual expenditures and cannot be dismissed as round-off errors, as "noise" in the data, or as some other minor fluctuation. The discrepancy has been verified to exist and to be growing.

The consequences of this state-aid discrepancy for education finance policy could be significant. As one notable example, this paper reports that the school districts have assumed a much larger share of the funding of public education in Ohio over the past decade (see Figure 12, prepared from the districts' reported revenue data). Specifically, the state's proportion of funding is shown as falling from 51% of total district revenues in 1987 to 42% in 1995. However, if the districts' revenue data were replaced by the department's disbursement data, this nine-point decline in the state's share would shrink to a six-point reduction. Thus, the trend illustrated by the chart could be quite overstated: while the state's role in funding the districts has declined, it could well have declined less than believed.

Despite the problem, the data reported by the districts have continued to be used by the Legislative Budget Office, which has not attempted to compensate for them or to qualify the conclusions drawn from them, especially concerning the state/local revenue composition. However, it is quite likely that at least some of the reported lack of growth in state support of the school districts has arisen from the underreporting of state revenues by the districts.

Possible causes of the discrepancy abound. For example, the property-tax rollback reimbursement could be accounted for differently by the districts than it is by the state. Or the districts could be handling their retirement system pre-payment deductions differently than intended. A question arises as to whether or not the state auditors test the districts' accounting systems for the proper methods of accounting for state-source revenues, rather than, for example, looking only for unrecorded revenues. It would be useful if a district routinely noted the receipt codes of revenues before they are deposited into its general fund.

In any event, the state revenues reported by the school districts' probably overstate the proportion of local contributions to district expenditures. Besides its potential effect on the amount of aid the state decides to provide to the districts, this revenue discrepancy raises the wider question of the general reliability of data in the reporting system.

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