

The Impact of Equity Aid on Reducing Disparities in Per Pupil Expenditures

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Equity aid funding was first distributed to approximately one third of Ohio's school districts in fiscal year 1993. To examine the effect of this "second tier" of the basic aid formula, this paper clusters 602 school districts into four tiers based on per pupil valuation and examines per pupil expenditures for each tier from fiscal year 1989 to fiscal year 1995. The data shows that statewide, the correlation between district valuation per pupil and expenditures per pupil continues to be fairly strong, at 74 percent in fiscal year 1995. However, districts receiving equity aid had the highest per pupil growth rate of any of the four groups of districts from fiscal year 1993 to fiscal year 1995. The per pupil expenditure gaps between the 225 equity districts (tier 1) and the non-equity districts, especially the second tier 225 districts have become smaller since FY 1993. This paper concludes that although disparities in per pupil expenditures still exist, the equity aid program has begun to close the gap between high and low property wealth districts.

As has occurred in many other states, Ohio's property tax-based system of funding public elementary and secondary education has been subjected to legal challenges from time to time based on the alleged non-compliance with various provisions of the Ohio and federal constitutions. These challenges have generally focused on the two basic themes of "equity" and "adequacy." *DeRolph v. State* (or the "Perry County case"), filed in January 1992, is the most recent legal challenge to the constitutionality of Ohio's school funding system. By analyzing per pupil expenditure changes from FY 1989 to FY 1995, this paper attempts to examine the current state of the issue of "equity" and/or "disparity" in per pupil spending in Ohio.

What Does Equity Mean in School Finance?

Equity in school finance is a complex concept and generally implies both student and taxpayer equity.¹ Student equity, the focus of the paper, is often broadly defined as equality of access to educational opportunities based on the principle of "fiscal neutrality" -- the notion that the quality of education a child receives should not be a function of local wealth. Student equity may be defined more precisely if divided into horizontal and vertical dimensions. Horizontally, equity means "the equal treatment of equals." It is generally operationalized as equality of per pupil expenditures, with emphasis on reducing disparities in per pupil expenditures across the school districts. Vertically, equity is more complex as it is defined as "the unequal treatment of

¹ The discussion closely follows *Principles of a Sound State School Finance System*. Denver, Colorado, and Washington, D.C.: Foundation for State Legislatures and National Conference of State Legislatures, 1996. Since there is rarely a consensus within a given state as to the single "right" definition of equity, it is not surprising that the pursuit of equity in school funding can take several different forms. Reducing disparities in per pupil expenditures across school districts, the central focus of the paper, is only one of many approaches to pursue equity in school finance.

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unequals.” It allows differential spending levels based on needs of students, with emphasis on giving consideration to the potential need for additional resources for special populations, such as students with developmental disabilities, family poverty, as well as talented and gifted students, etc. Analyzing Ohio’s school funding system with respect to both horizontal and vertical dimensions of student equity is beyond the scope of this paper. This analysis primarily focuses on horizontal equity and examines disparities in per pupil expenditures among Ohio school districts and the state’s efforts to narrow such disparities.

The Origin of Disparity

Historically, public elementary and secondary education in Ohio has primarily been funded through locally voted property tax levies. Property valuation per pupil is therefore an important measure of a school district’s revenue raising potential. Due to the uneven distribution of taxable property, especially the presence or absence of concentrations of business and public utility property, disparities in property wealth exist among school districts in Ohio. That is, the value of the taxable property located in some districts (for example, districts in which factories, warehouses, power plants, or expensive homes are located) is significantly greater than in other districts (for example, rural areas of southeastern Ohio). In FY 1995, for example, per pupil property valuation ranged from \$17,900 in the Huntington Local School District (Ross County) to \$547,797 per pupil in the Cuyahoga Heights City School District (Cuyahoga County).

Because property values define the local property tax base, the differences in them translate directly into differences in the abilities to fund education programs locally. Per pupil expenditures therefore vary significantly from one school

district to another. The ability to raise taxes varied in the extreme by a ratio of 1:31 in FY 1995, as illustrated by the case of the Huntington Local School District and the Cuyahoga Heights City School District. It would take 31 mills of tax effort to produce the same amount of revenue per pupil in the poorest school district as it did with one mill of tax levy in the wealthiest school district. A single mill generated approximately \$548 in per pupil revenue for the Cuyahoga Heights City School District and only \$18 in per pupil revenue for the Huntington Local School District. The disparity in property valuation per pupil resulted in the following: per pupil expenditures for the Huntington Local School District were \$4,166 in FY 1995, in comparison with \$11,807 for the Cuyahoga Heights City School District in the same year. State aid has reduced the expenditure ratio to less than 1:3. The Huntington Local School District received 78.5 percent of its total operating revenues from the state; the Cuyahoga Heights City School District received only 5.4 percent of its total operating revenues from the state in FY 1995.

The Perry County Case

In the early 1990’s, a coalition of property-poor school districts, located primarily in southeastern Ohio, mobilized support for a challenge to Ohio’s current school funding system. The membership of the coalition eventually grew to include the majority of Ohio’s school districts throughout the state, both urban and rural. This effort culminated in a legal action, filed in January 1992, challenging the constitutionality of Ohio’s school funding system on “equity” and “adequacy” grounds. The first decision in the case of *DeRolph v. State*, (or the “Perry County case”) was rendered by the Perry County Court of Common Pleas in 1994. This decision found that

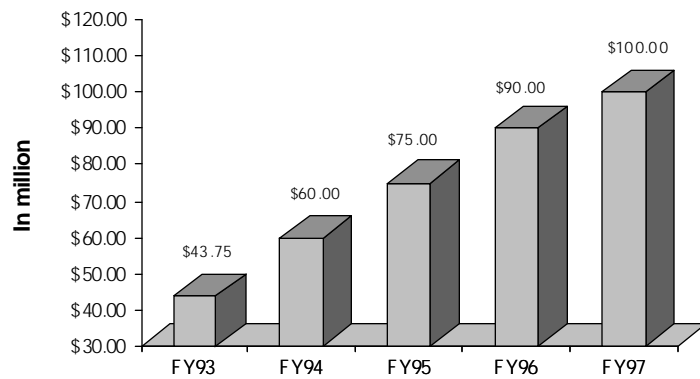
the large disparities in per pupil expenditures among Ohio schools districts resulted in a funding system which was constitutionally deficient on both “equity” and “adequacy” grounds. On August 30, 1995, the Court of Appeals for the Fifth Appellate District in Ohio reversed the decision of the trial court and upheld the constitutionality of the current funding system. As of November 1996, this case is under appeal to the Ohio Supreme Court.

History of Equity Aid

The problem of disparity in school funding has long been recognized in Ohio. The foundation program, the heart of state funding for schools, includes basic aid with an equalization feature and several flat categorical grants. The General Assembly also created the Disadvantaged Pupil Impact Aid (DPIA) and the Disadvantaged Pupil Program Fund (DPPF). These two programs provide additional funding to districts with large percentages of ADC students, since it is believed that increased poverty increases other service needs, making the local funding of education more difficult. It is also believed that increased poverty requires additional compensatory education funding to produce vertical equity. Under the current budget, DPIA and DPPF were combined into one program. The General Assembly established a new formula to distribute the DPIA funding. The purpose of the change was to provide increased state aid to districts with high levels of ADC students and to smooth abrupt steps in the old formula.

Against the backdrop of the Perry County case, the 119th General Assembly passed Sub. H.B. 671 and Governor Voinovich signed the bill into law on June 30, 1992. This law, for the first time, created an equity program to specifically set aside money for

Figure 1: Equity Aid Funding, FY 1993 - FY 1997



property-poor school districts in order to pursue horizontal equity. In FY 93, \$43.75 million was first distributed to qualified districts. Since then equity aid has remained as the second tier of the foundation program and the amount of funds provided for this purpose has increased from \$43.75 million in FY 1993 to \$100 million in FY 1997 (see figure 1). The number of school districts receiving equity aid has also increased annually.

From FY 1993 to FY 1995, there were two components in equity aid: the small district aid and the low wealth aid. The small district aid was distributed to a district with fewer than 1,000 total average daily membership (ADM) and a valuation per pupil below the state median. Under the provisions of Am. Sub. H.B. 117 of the 121st General Assembly, the small district aid was separated from equity aid. Equity aid is therefore comprised of the low wealth aid component only after FY 1996.

Understanding the Equity Aid Formula

In FY 1997, the foundation formula equalizes revenues to \$3,500 per pupil for 23 mills. Equity aid basically ensures that each additional mill (up to 13 mills) levied by eligible school districts will result in specified amount

Ohio's Three Pronged Equity Programs

- *Basic Aid general wealth based equalization*
- *DPIA assists districts with concentrations of poverty*
- *Equity Aid assists property poor districts*

² The equity aid distribution is based on both a district's property and income wealth, attempting to take into consideration both a district's "potential to pay" and "ability to pay." A district's adjusted valuation per pupil is calculated by subtracting from its valuation per pupil, a constant figure of 30,000 times 1 minus the ratio of a district's median income to the state's median income. The adjustment formula is as follows:

$$\text{Adjusted Valuation Per Pupil} = \text{Valuation Per Pupil} - \{30,000 \times [1 - (\text{District Median Income} / \text{State Median Income})]\}$$

³ In FY93 the law provided that the threshold valuation figure should be selected such that a certain number of districts would be included (basically the poorest 218 districts in the state). Therefore, the millage rate was adjusted to a level that used the entire \$43.75 million fund. In this manner the equity aid millage rate was established at 11 mills in FY 1993.

⁴ Total ADM (or ADM) equals to K-12 enrollment minus unauthorized attendance and out of state enrollment, and plus non-attending pupils. Basic ADM, primarily used in the calculation of state basic aid and equity aid, equals total ADM minus adjustments for kindergarten, joint vocational school, and certain special education ADM, etc. Therefore, a district's total ADM is generally larger than basic ADM. Per pupil expenditures are commonly based on total ADM unless indicated otherwise.

Equity aid (or the low wealth aid) is distributed to a district with an income adjusted valuation per pupil below a certain threshold figure established by the equity aid formula.² Beginning in FY 1994, the equity aid millage rate was set by law at 13 mills.³ The threshold valuation per pupil is adjusted every year to a level that uses up the money appropriated by the General Assembly for this purpose. The threshold valuation per pupil for FY 1993, FY 1994, and FY 1995 were \$54,000, \$55,668 and \$60,265 respectively. The equity aid distribution formula can be summarized as follows.

$$\text{Equity Aid} = [(\text{Threshold} - \text{Adjusted Valuation per Pupil}) \times 0.013] \times \text{Basic ADM}^4$$

of actual revenues. (School districts, however, are not required to levy any additional millage to participate in the equity aid program.) For a district that has an adjusted valuation per pupil below the threshold figure, the difference between the threshold and its adjusted valuation per pupil is calculated. This difference is multiplied by 13 mills to get a per pupil low wealth aid amount. The per pupil low wealth aid amount is then multiplied by the basic ADM of the previous year to obtain the total low wealth aid for a qualifying school district. The following are examples of the per pupil equity aid calculation for three low wealth districts in FY 1997. The threshold valuation per pupil is \$68,896 in FY 1997.

It is clear that the equity aid formula is designed so that the higher adjusted valuation, the less equity aid the district receives. Adjusted valuation per pupil for district A is \$40,000 and the district receives \$376 in per pupil equity aid, compared with \$506 in per pupil equity aid for district C with an adjusted valuation per pupil of \$30,000. Meanwhile, as aforementioned, eligible

districts are not required to levy any additional millage beyond 23 mills to receive equity aid. District A's effective millage is 23 mills and district B's effective millage is 30 mills. Under the equity aid formula, district A and B receive the same amount of per pupil equity aid since they have the same adjusted valuations per pupil.

However, without equity aid, seven additional mills only generate \$294 (\$42 per mill) in per pupil revenue for district B. With equity aid, the same seven mills produce approximately \$496 (\$71 per mill) in per pupil revenue for district B. In other words, by providing a low wealth district with an amount of per pupil revenue which equals the difference between the threshold and a district's adjusted valuation per pupil times 13 mills, equity aid guarantees that each additional mill (up to 13 mills) levied by a low wealth district will generate an amount of per pupil revenue, which approximately equals the threshold valuation per pupil times one mill.

District A	District B	District C
Valuation per pupil: \$42,000 Adj. val. per pupil: \$40,000 Effective millage: 23 mills	Valuation per pupil: \$42,000 Adj. val. per pupil: \$40,000 Effective millage: 30 mills	Valuation per pupil: \$32,000 Adj. val. per pupil: \$30,000 Effective millage: 23 mills
Equity aid per pupil = (\$68,896 - \$40,000) x 0.013 = \$376	Equity aid per pupil = (\$68,896 - \$40,000) x 0.013 = \$376	Equity aid per pupil = (\$68,896 - \$30,000) x 0.013 = \$506
Add't local revenue per pupil= \$0	Add't local revenue per pupil= \$42,000 x 0.007 = \$294	Add't local revenue per pupil= \$0
Total revenues per pupil = \$3,500 + \$376 = \$3876	Total revenues per pupil = \$3,500 + \$376 + \$294 = \$4,170	Total revenues per pupil = \$3,500 + \$506 = \$4,006

Methodology

This study is designed to test the assumption that equity aid has increased per pupil expenditures in the low wealth school districts and reduced disparities in per pupil expenditures between equity aid recipient (low wealth) and non-recipient (average and high wealth) districts. The data, including 602 out of the 611 school districts in Ohio, was provided by the Information Management Services of the Department of Education. To simplify the study, this analysis uses the variable of property valuation per pupil while recognizing that equity aid is distributed to qualifying school districts based on income-adjusted valuation per pupil.

For purposes of comparison, the 602 school districts were divided into four district tiers. Tier 1 (or equity-aid school districts) included the 225 school districts that received state equity aid in the form of the low wealth aid and/or the small district aid in all three years from FY 93 to FY 95. The remaining 377 non-equity aid school districts were divided into three tiers. **These three tiers were constructed separately for each year.** The districts were sorted from the lowest valuation per pupil to the highest each year. Then the districts were grouped so that tier 4 included the 60 districts with valuation per pupil rankings in the 90th percentile or above every year. Tier 3 included the 92 districts with valuation per pupil rankings between the 75th and the 90th percentile each year. Tier 2 included the other 225 districts that

had valuation per pupil rankings ranging from the 37.5th to the 75th percentile every year (see table 1).

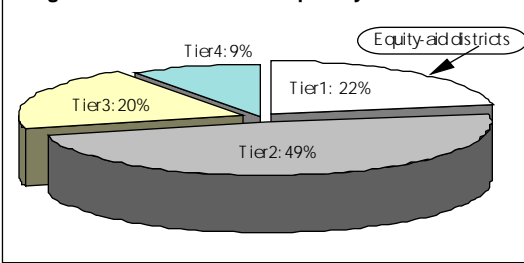
Distribution of Pupils by District Tier

Since state funding is distributed on a per pupil basis, in addition to considering the distribution of districts within the comparison tiers, it is also important to understand the distribution of pupils within the district comparison tiers. Table 2 and graph 2 show that, in FY 1995, 29 percent of pupils resided in the 152 districts with the top 25 percent of

Table 2: Distribution of Pupils by District Tier, FY 95

	% of Pupils	No. of SDs
Tier 1	22%	225
Tier 2	49%	225
Tier 3	20%	92
Tier 4	9%	60
Total	100%	602

Figure 2: Distribution of Pupils by District Tier



valuations per pupil (tier 3 and tier 4); 22 percent of pupils were included in the 225 equity-aid districts that had the bottom 37.5 percent in valuations per pupil (tier 1); and 49 percent of pupils were educated in the other 225 school districts that had the middle 37.5 percent in valuations per pupil (tier 2).

37.5% of districts, but only 22% of pupils, are in the 225 equity districts

Property Valuation Per Pupil by District Tier

Tier 1	Below the 37.5th Percentile
Tier 2	The 37.5th to the 75th Percentile
Tier 3	The 75th to the 90th Percentile
Tier 4	Above the 90th Percentile

As mentioned above, due to the uneven distribution of taxable property, valuations per pupil varied significantly among school districts. Table 3 shows the average property valuation per pupil for each district

Table 3: Valuation Per Pupil by District Tier

	Tier 1	Tier 2	Tier 3	Tier 4
FY89	\$37,732	\$53,813	\$79,249	\$128,249
FY90	\$38,861	\$57,310	\$84,177	\$144,707
FY91	\$39,524	\$58,753	\$83,982	\$143,174
FY92	\$40,207	\$61,843	\$92,244	\$147,831
FY93	\$41,888	\$64,789	\$95,745	\$154,817
FY94	\$45,792	\$68,877	\$104,322	\$166,202
FY95	\$47,509	\$71,369	\$107,278	\$171,021

The gaps in property valuations per pupil are much wider than the disparities in expenditures per pupil among school districts. In FY 1995, the valuation per pupil ratio of tier 4 to tier 1 was 3.6 while the expenditure per pupil ratio of tier 4 to tier 1 was 1.29.

comparison tier. It is clear that there exists a wide disparity in property wealth among Ohio school districts. The per pupil property valuation ratios of tier 1 to tier 2, tier 3, and tier 4 were 1:1.5, 1:2.3, and 1:3.6, respectively, in FY 1995. Furthermore, the per pupil property valuation gaps among four district comparison tiers have consistently increased since FY 1989. The range of per pupil valuation increased from \$90,519 in FY 1989 to \$123,512 in FY 1995.⁵

Expenditures Per Pupil by District Tier

The disparity in property wealth accordingly results in differences in per pupil expenditures across the state. Table 4 shows average per pupil expenditures by district comparison tier. Obviously, per pupil expenditures varied significantly from one district tier to another. In FY 1995, for example, per pupil expenditures ranged from \$4,906 for the equity-aid school districts (tier 1) to \$6,338 for tier 4 districts. The per pupil expenditure ratios of tier 1 to tier 2,

Table 4: Expenditures Per Pupil by District Tier

	Tier 1	Tier 2	Tier 3	Tier 4
FY89	\$3,527	\$3,944	\$4,261	\$4,912
FY90	\$3,805	\$4,276	\$4,617	\$5,273
FY91	\$4,336	\$4,872	\$5,443	\$6,056
FY92	\$4,302	\$4,712	\$5,213	\$5,858
FY93	\$4,487	\$4,875	\$5,403	\$6,120
FY94	\$4,710	\$5,009	\$5,590	\$6,285
FY95	\$4,906	\$5,204	\$5,698	\$6,338

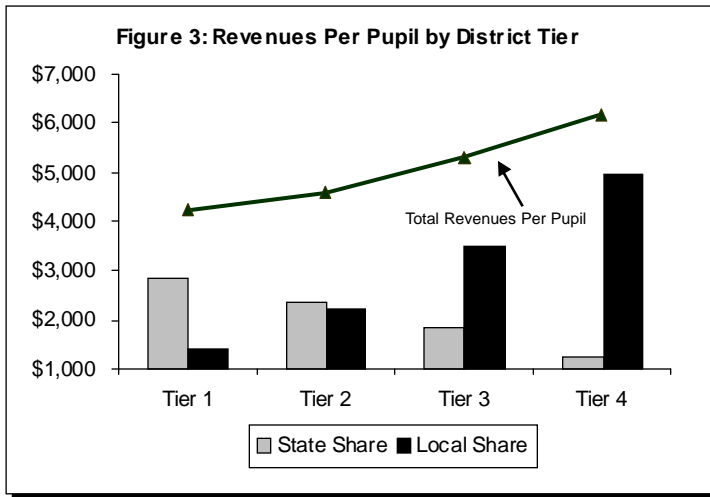
⁵ Based on the Consumer Price Index and in terms of the FY 1995 dollars, the range of per pupil valuation increased from \$112,417 in FY 1989 to \$123,512 in FY 1995.

tier 3, and tier 4 were 1:1.06, 1:1.16, and 1:1.29, respectively, in the same year.

Revenues Per Pupil by District Tier

A comparison of Table 3 and Table 4 clearly shows that property valuation per pupil has a positive relationship with per pupil expenditures. A school district tier with a higher per pupil valuation also has higher per pupil expenditures. Tier 1 or the equity-aid school districts were the group of districts that had the lowest per pupil valuations every year from FY 1989 to FY 1995; accordingly, they had the lowest per pupil expenditures every year in the state. A statistical analysis found an average of 0.71 correlation between valuation and expenditures per pupil during this same period.

However, due to the infusion of state basic aid and equity aid, the disparities in expenditures per pupil are much narrower than the gaps in valuation per pupil across school districts. (The aim of state funding is for a measure of wealth neutrality in expenditures.) For example, the expenditure per pupil ratio of tier 1 to tier 4 was 1:1.29 in FY 1995, compared with the per pupil valuation ratio of 1:3.6. Excluding federal revenue, tier 1 or equity-aid districts received 67 percent of per pupil operating revenues from the state, while tier 4 or high wealth districts received only 20 percent of per pupil operating revenues from the state (see table 5 and figure 3). Obviously, state aid has weakened the correlation between expenditure and valuation per pupil for low wealth school districts. The detailed discussion of the impact of equity aid on reducing disparities in expenditures per pupil across school districts follows below.



	Tier 1	Tier 2	Tier 3	Tier 4
State Share	\$2,837	\$2,357	\$1,832	\$1,225
Local Share	\$1,391	\$2,227	\$3,475	\$4,961
Total	\$4,228	\$4,584	\$5,307	\$6,186

Impact of the Equity Aid Program: Before and After the Creation of Equity Aid

Although disparities in per pupil expenditures currently exist among Ohio school districts, it is important to understand that the state equity aid program has begun to close the per pupil expenditure gaps between high and low property wealth school districts, especially between tier 1 and tier 2 (see figure 4). It should be noted that due to the economic recession and the state constitutional requirement of a balanced budget, the state reduced its public elementary and secondary education funding in FY 1992; therefore per pupil expenditures decreased in FY 1992 across the state. Expenditures per pupil for tier 2, tier 3, and tier 4 decreased at an average rate of 3.60 percent from FY 1991 to FY 1992, while tier 1 school districts' per pupil expenditures decreased at 0.78 percent in the same period (see table 6).

Because of the unusual state funding reduction in FY 1992, the comparison of per pupil expenditure changes

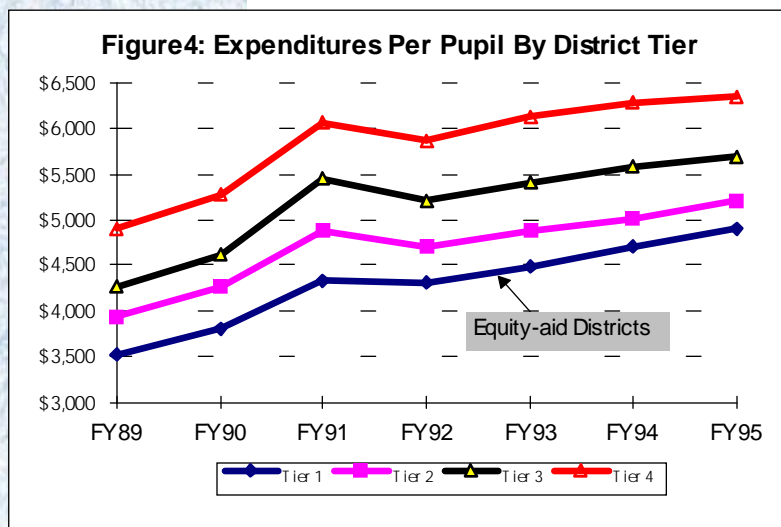
FY 1993 to FY 1995; the average per pupil expenditure growth rate was 4.57 percent per year for tier 1, in comparison with 3.32 percent per year for tier 2, 2.70 percent per year for tier 3, and 1.77 percent per year for tier 4. In contrast, equity aid school districts had the lowest per pupil expenditure growth rate in the state from FY 1989 to FY 1991, the years before the creation of the equity aid program. During this period, equity aid school districts' per pupil expenditures grew at an average annual rate of 10.92 percent, compared with 11.9 percent per year for tier 2, 13.12 percent per year for tier 3, and 11.10 percent for tier 4.

Impact of the Equity Aid Program: With and Without Equity Aid

A comparison of the per pupil expenditure data before and after the inception of the equity aid program clearly indicates the program's positive effect on increasing low wealth districts' per pupil expenditures and narrowing disparities in expenditures per pupil across school districts.

between FY 1989-91 and FY 1993-95 will result in a better understanding of the impact of equity aid on closing the per pupil expenditure gaps. Since the inception of the equity aid program, per pupil expenditures for equity-aid school districts (or tier 1) grew more rapidly than the other three tiers (see table 6). Equity-aid school districts had the highest per pupil expenditure growth rate in the state from

Since the inception of the equity aid program, per pupil expenditures for equity-aid school districts (or tier 1) grew more rapidly than the other three tiers.



Fiscal Year	Tier 1	Tier 2	Tier 3	Tier 4
1989-90	7.87%	8.43%	8.35%	7.34%
1990-91	13.96%	13.94%	17.89%	14.86%
1991-92	-0.78%	-3.29%	-4.23%	-3.27%
1992-93	4.30%	3.47%	3.65%	4.48%
1993-94	4.97%	2.74%	3.45%	2.69%
1994-95	4.16%	3.90%	1.94%	0.84%

However, how much of per pupil expenditure increases for the equity-aid school districts can be attributed to the infusion of equity aid? By analyzing the 1994-95 per pupil expenditure data, this section intends to explore the impact of equity aid on recipient districts from the perspective of “with and without equity aid.” It is recognized that equity aid is distributed to recipient districts based on the number of basic ADM while per pupil expenditure is calculated based on the number of total ADM. For the purpose of comparison, **per pupil equity aid** used in this section is calculated by dividing a district’s total equity aid by its total ADM. This section also assumes that recipient districts used up their equity aid

⁶ In September 1993, the state Department of Education surveyed recipient districts regarding the types of expenditures they made with equity aid funding in FY 1993. The survey results indicated that 44 percent of equity aid funding was used to maintain on-going operational expenses, 17 percent of funding was either encumbered or appropriated, but had not actually been expended by the end of FY 1993, and the other 39 percent of funding was spent in areas such as computer, capital outlay, bus purchase etc.

appropriations in FY 1995 and 100 percent of money was used to maintain operational expenses. The rationale for choosing FY 1995 to conduct this micro-perspective analysis is discussed further below.

The state does not limit the authority of school districts in the use of equity aid; recipient districts can decide how best they can utilize this money to improve their educational services. FY 1993 was the first year in which the state began to distribute equity aid to eligible school districts. At that time, recipient districts were not sure about the future availability of equity aid and might not have had enough time to strategically plan how to best use these moneys; they might have spent the moneys based on “ad-hoc” needs of districts in the first couple of years.⁶ Therefore, FY 1995 is the best year among these three years to examine the equity aid’s impact on recipient districts’ per pupil expenditures from the perspective of “with and without equity aid.”

When each recipient district’s per pupil equity aid was subtracted from its per pupil expenditure, the average per pupil expenditure for equity-aid districts (tier 1) decreased 3.84 percent from \$4,906 to \$4,718 in FY 1995 (see table 7). In other words, equity aid accounted for an average expenditure increase of \$188 per pupil for recipient districts. Without equity aid, the per pupil expenditure ratios of tier 1 to tier

	Tier 1	Tier 2	Tier 3	Tier 4
With the Equity Aid	\$4,906	\$5,204	\$5,698	\$6,338
Without the Equity Aid	\$4,718	\$5,204	\$5,698	\$6,338

	Tier1:Tier2	Tier1:Tier3	Tier1:Tier4
With the Equity Aid	0.94	0.86	0.77
Without the Equity Aid	0.91	0.83	0.74

2, tier 3, and tier 4 would also decrease by 3 percent each in FY 1995 (see table 8). It is clear that equity aid has increased expenditures per pupil for low wealth districts and narrowed gaps in per pupil expenditures across school districts. Under the current equity aid distribution formula and at the level of \$75 million in appropriations, equity aid increased the 225 recipient districts' expenditures by an average of \$188 per pupil in FY 1995, with a range of \$5.18 per pupil in the district receiving the lowest amount of per pupil equity aid to \$513 per pupil in the district receiving the highest amount of per pupil equity aid in the state.

Conclusion

Public elementary and secondary education is primarily funded by locally voted property levies. The uneven distribution of taxable property results in disparities in valuations per pupil across the school districts in Ohio. Since the property tax is the largest revenue source for a local school district, gaps in property valuations per pupil inevitably result in disparities in per pupil expenditures among Ohio school districts.

While recognizing disparities in local abilities to fund education, the State of Ohio has made efforts to narrow such disparities. By providing more state aid to school districts with low valuations per pupil, the equity aid program has made progress in reducing disparities in per pupil expenditures. Since FY 1993, the 225 equity-aid school districts have had the highest per pupil expenditure growth rate in the state. While per pupil expenditures for school districts with the top 10 percent in valuations per pupil continued to be considerably higher than that for the equity-aid school districts, the per pupil expenditure gaps between the 225 equity-aid school districts and the non-equity aid school districts, especially

the second tier 225 school districts have become smaller since FY 1993.

Considering the fact that the per pupil valuation gaps between tier 1 and tier 2 had grown from \$16,081 in FY 1989 to \$23,860 in FY 1995 while the per pupil expenditure gaps between tier 1 and tier 2 had decreased from \$417 in FY 1989 to \$298 in FY 1995, it is clear that the equity aid program has had a positive impact on reducing wealth-based disparities in per pupil expenditures among school districts.

Policy Alternative Discussion

1) Maintain the Current Program with Incremental Changes

As the second tier of the foundation formula, this analysis shows that equity aid has effectively reduced disparities in per pupil expenditures among low and high wealth school districts. Therefore, the first policy choice is naturally to maintain status quo. It should be noted that, under Am. Sub. H.B. 117, the 121st General Assembly already made several significant changes in order to produce a more equitable school funding system in Ohio. In addition to making equity aid a part of permanent law and increasing the equity aid appropriations to more low wealth school districts, the 121st General Assembly also changed the foundation formula, including raising the charge-off as well as increasing the maximum cost-of-doing business factor and incorporating an income factor to adjust a district's property valuation. Meanwhile, it continued the phase-out of the guarantee for districts with extreme high valuations per pupil. For the first time, the 121st General Assembly equalized a portion of the unit funding allowance for special, vocational, and gifted education. Categorical funding has historically been distributed to each school district based on the number of special

The greatest strength of the current equity aid program is its high efficiency. By maintaining equity aid as the second tier of the foundation program, the equity money goes directly to targeted low wealth districts with very little “waste”. The drawback of the current program is the lack of incentive for local voters to pass additional levies beyond the charge-off of 23 mills.

education units as flat grants, regardless of district wealth.¹ As evidenced by the analysis, the equity aid program, coupled with a continued phase-in of these policy changes, will produce a more equitable school financing system in Ohio.

Maintaining equity aid as the second tier of the foundation formula is an efficient way to use limited available resources to achieve the goal of reducing disparities in per pupil expenditures among low and high wealth school districts. Equity aid funding goes directly to targeted low wealth districts with very little “waste” (dollars going to well funded districts). Equity aid is supplemental basic aid for low wealth districts only. The current equity aid distribution formula considers both a district’s property and income wealth. An eligible district with a lower income adjusted valuation per pupil would receive a higher amount of per pupil equity aid, which ensures the effectiveness of equity aid on reducing wealth-based disparities in expenditures among low and high wealth school districts.

However, the current equity aid program also has its weaknesses. The biggest drawback of the program is the lack of incentive for local voters to pass additional levies beyond the charge-off (23 mills). As mentioned before, unlike a matching grant, the current equity aid program does not require a district to levy any additional millage in order to receive equity aid. Therefore, the responsibility of narrowing wealth-based disparities in expenditures per pupil solely falls on the state under the current program.

While reducing disparities in expenditures per pupil across the school districts is an important aspect of pursuing equity in school finance, it should be noted that a flat statewide spending per pupil will not produce real

equity. Differential spending levels are required based on needs of different students. More importantly, the cost of educating the same student varies depending on a district’s location since the cost of living in some areas of the state is higher than in other areas of the state. A cost of doing business factor has been in placed in the foundation formula since 1980, to compensate districts in high cost counties for the higher costs they may incur to operate their districts. Currently, the districts in the county with the highest cost of doing business factor (Hamilton) receive 8.9 percent more than the districts in the county with the lowest cost of doing business factor (Gallia) through the basic aid formula. (The current thinking is to recognize over the next few years an 18 percent cost differential through the formula.) However, the actual difference in the cost of doing business is estimated to be more than 30 percent. If the 30 percent difference in the cost of doing of business were accounted for, \$3,500 in per pupil expenditures in Gallia County and \$4,550 in per pupil expenditures in Hamilton County would be viewed as equivalent. In other words, a differential of \$1,050 should be recognized as a legitimate difference in per pupil spending among the districts in these two counties.

2) Incorporate Equity Aid into the Current Foundation Formula

Essentially, under the new single foundation formula, a separate equity aid would be eliminated. The state would use the equity aid and new education appropriations to increase the foundation level. After the transition period, state aid received by a low wealth districts under the new foundation program would be larger than the total amount of state aid it received from the current basic aid and the equity aid formulas. Therefore, there would be no need for a separate

⁷ For detailed analysis of the impact of the foundation formula changes made by the 121st General Assembly, see *LBO Analysis: Selected Policy Issues of the FY 1996-1997 State of Ohio Operating Budgets*, issued by Legislative Budget Office in October 1995.

equity aid program. During the five year transition period, a low wealth district would be guaranteed to receive the same amount of state aid from the old basic aid and equity aid formulas.

A single foundation formula would be easier to administer and understand. However, incorporating equity aid into the basic aid formula is a difficult way to pursue an equitable school funding system with limited available resources. For example, a low wealth district's total state aid would be frozen for five years under the above proposal. During the transition period, all the new state moneys would go to medium and high wealth districts, which could further increase disparities in expenditures per pupil among low and high wealth districts (this might be an unintentional result of the proposal). More importantly, without significantly increasing the charge-off millage rate, it would require substantial increases in state funding to raise the foundation to a desired level. As mentioned before, in FY 1995 only 22 percent of students resided in the 225 equity aid districts and the other 78 percent of students resided in the non-equity aid districts. At the level of \$75 million in appropriations and under the current distribution formula, the equity fund increased its recipients' expenditures by an average of \$188 per pupil in FY 1995. Since state aid is distributed to districts on a per pupil basis, the same \$75 million certainly could not increase the foundation level by \$188 for 78 percent of students in the non-equity-aid districts; it would require much more than \$75 million to increase the foundation level by \$188. This is another reason why maintaining equity aid as the second tier of foundation formula is an efficient and effective way to use limited resources to reduce wealth-based disparities in expenditures per pupil and to produce a more equitable school finance system.

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Summing up, the final fate of the

Since understanding the basic aid formula is already not an easy task, one may ask why there is a need for a separate equity aid formula to make it even more complex. Is there a way to incorporate equity aid into the foundation formula? In fact, there was a proposal trying to adopt a new foundation formula to include equity aid. The impact of the state aid for low wealth districts under the proposed new foundation formula, especially during the transition period, can be summarized as follows:

Current total state aid for a low wealth district $G = \text{basic aid} + \text{equity aid}$

New total state aid for a low wealth district $T = \text{New foundation amount} + Q = G$
(During the transition period, 5 year, for example)

New total state aid for a low wealth district $T = \text{New foundation amount} (> G)$
(After the transition period)

Incorporating equity aid into a single foundation formula will be easier to administer and understand. However, it is a very difficult way to reduce wealth-based disparities in expenditures per pupil with the limited amount of available resources. Without significantly increasing the charge-off millage rate, the state will have to substantially increase funding in order to raise the foundation to a desired level.

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