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How Fair Is the New York State Education Aid System?

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It's Elementary

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How Fair Is the New York State Education Aid System?

The 2018-19 Executive Budget proposed by New York Governor Andrew Cuomo calls for a $337.63 million increase in funding for the state's foundation aid to public schools.[1] This increase, which is just short of 2%, falls far short of the increase necessary to fully fund the foundation formula that was supposed to be phased in starting in 2007. Indeed, the New York Association of School Business Officials (NYASBO) estimates that a full phase in would cost $4.2 billion, which is over twelve times the increase in the Executive Budget.[2] Moreover, the Executive Budget continues the process of chipping away at local control over their foundation aid by increasing the "set-aside" for community schools.[3] To be specific, the Executive Budget increases this set aside from $150 to $200 million. A foundation formula is intended to provide school districts with unrestricted funds. This set-aside transforms some of the foundation aid into a categorical grant that must be spent on a specific purpose—in this case on turning schools into community "hubs."

These proposals obviously do not significantly alter the distribution of funds across school districts or the share of funds that go to districts with the greatest needs. The question we address in this memo is whether New York's existing state aid system, including foundation aid and other aid programs, adequately recognizes the extra spending and revenue requirements of high-need districts. If the answer is negative, elected officials in New York may want to consider more help for needy districts than is provided by the proposals in the Executive Budget.

Our analysis is an extension of the material in our column for November 2017, which addressed the issue of spending weights for at-risk students. For that column we gathered data for school districts in New York for 2011 through 2015, the most recent year for which

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[1] Information on the Executive Budget comes from New York Division of the Budget's "Description of 2018-19 New York State Executive Budget Recommendations for Elementary and Secondary Education", available at: https://www.budget.ny.gov/pubs/archive/fy19/exec/fy19local/school/1819schoolaid.pdf

[2] New York State Association of School Business Officials, "A Comparison of School Aid Proposals for 2018-19: NYSASBO, Regents, and Executive." https://www.nysasbo.org/uploads/files/1518114622_2018-19%20State%20Aid%20Proposals%20-%20ASBO%20-%20Regents%20Executive.pdf

[3] The foundation aid formula also includes smaller set-asides for magnet schools and teacher support in some districts.

complete data were available. Then we estimated the added costs associated with students in poverty, students with limited English proficiency, and students with a severe disability. The education aid formula in New York and in many other states places additional weight on at-risk students to account for their added costs. We found that the weights in the 2007 foundation formula were a big step in the right direction but still leave many districts short of the funds they need to compensate them for the added costs of at-risk students.

In this column we shift to a broader view. To be specific, we compare a district's total state education aid with a comprehensive measure of its fiscal health. In this context, fiscal health is defined as a district's ability to deliver a given level of educational quality at a given tax rate on its residents, based on factors outside the district's control. Our measure of fiscal health follows the logic of a foundation aid formula.[4] It equals the amount a district must spend to meet the state's student performance target (expenditure need) minus the amount of money the district can raise at a given level of sacrifice by its residents (revenue-raising capacity).

Our first step is to determine each district's relative costs. These costs include the higher costs of educating students from poor families, with limited English proficiency, or with special needs, which were the focus of our November 2017 column. They also reflect the higher wages that some districts must pay to attract teachers, holding teacher quality constant, and the economies or diseconomies of enrollment scale in each district.[5] These cost factors are all determined from the estimation of an education cost function, which is a well-known technique used by scholars in education finance.[6] The net effect of all these cost factors is summarized by a cost index, which equals 1.0 in the average district and, for example, 1.5 in a district where costs are 50% higher than average. As discussed below, this cost index must be multiplied by a spending target in the average district to determine expenditure need.

Our second step is to calculate the amount of money a district could raise using the principal local funding source for public education in New York, namely, the property tax. Because the property tax rate in the average district in New York is about 1.5%, we set the

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[4] Our fiscal health calculations and associated foundation aid formula follow the same philosophy as the New York foundation aid formula, but, as discussed below, the details are not the same.

[5] Costs per pupil are relatively high in very small districts. Some districts could lower these costs through consolidation. See William D. Duncombe and John Yinger, 2010, "School District Consolidation: The Benefits and Costs," *The School Administrator* 67 (5) (May): pp. 10-17. We do not consider consolidation in our calculations.

[6] We use the same cost function estimation that is the basis for our November 2017 column. For scholarly discussions of cost functions, see Duncombe, William D., Phuong Nguyen-Hoang, and John Yinger. 2015. "Measurement of Cost Differentials." In *Handbook of Research in Education Finance and Policy*, 2nd Edition, M.E. Goertz and H.F. Ladd (eds.), New York: Routledge, pp. 260-278. For an earlier application to New York, see Eom, Tae Ho, William D. Duncombe, Phuong Nguyen-Hoang, and John Yinger. 2014. "The Unintended Consequences of Property Tax Relief: New York State's STAR Program." *Education Finance and Policy* 9 (4) (Fall): 446-480.

expected local contribution at this level. In other words, the revenue-raising capacity component of fiscal health is set at 1.5% of property wealth per pupil in each district.[7]

Our third step is to determine New York State's implicit spending target in the average district, which is a component of expenditure need. Because our fiscal health measure is equivalent to a foundation aid formula, we can measure the required state budget for a fiscal-health-based foundation formula at any given spending target. The state's implicit spending target is the one that leads to the same state education aid budget with our foundation formula as the actual state aid budget in 2015.

Figure 1 summarizes our results. This figure plots actual state aid (the vertical axis) and district fiscal health (the horizontal axis) for all districts in New York State except New York City.[8] It shows that actual state aid in New York is correlated with district fiscal health. In other words, districts in poor fiscal health tend to receive more state aid per pupil than other districts.

Nevertheless, three troubling lessons emerge from this figure. First, state aid does not fully compensate low-health districts for their disadvantages. To be specific, a $1 increase in the need-capacity gap leads to only a $0.62 increase in state aid. Moreover, the expected gap between fiscal-health-based aid and actual aid per capita is $5,488 higher in a school district with a 100 percent of its students eligible for a free lunch than in a school district with no student poverty.

Second, many large and/or high-need districts receive far less aid than warranted by their fiscal health. Actual aid falls short of fiscal-health based aid by $3,495 per pupil in Rochester, $4,930 per pupil in Syracuse, $6,612 per pupil in Binghamton, $7,924 per pupil in Schenectady, and an astonishing $13,214 per pupil in Yonkers. Buffalo is the only high-need district that receives more actual aid, almost $2,000 per pupil, than aid based on fiscal health.

Third, the districts that receive more aid than warranted by their fiscal health alone are, on average, remarkably similar to the average district overall. Their average enrollment is slightly smaller (2,160 pupils compared to 2,403 pupils), their free lunch share is slightly lower (33.3 percent compared to 38.3 percent), and their per-pupil wealth is virtually identical. The advantageous aid received by these districts, in other words, cannot be explained by factors related to their fiscal health.

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[7] Using a fixed property tax rate leads to an aid program that is fair across taxpayers, since the aid amount is based on the same tax rate (= sacrifice) in all districts. However, this type of aid system is not fair across students unless the state makes this rate a minimum. Without this provision, which does not exist in New York, some districts will not raise enough money to cover their cost-adjusted spending target.

[8] In these calculations, "actual state aid" includes all the state aid a district receives, not just its foundation aid.

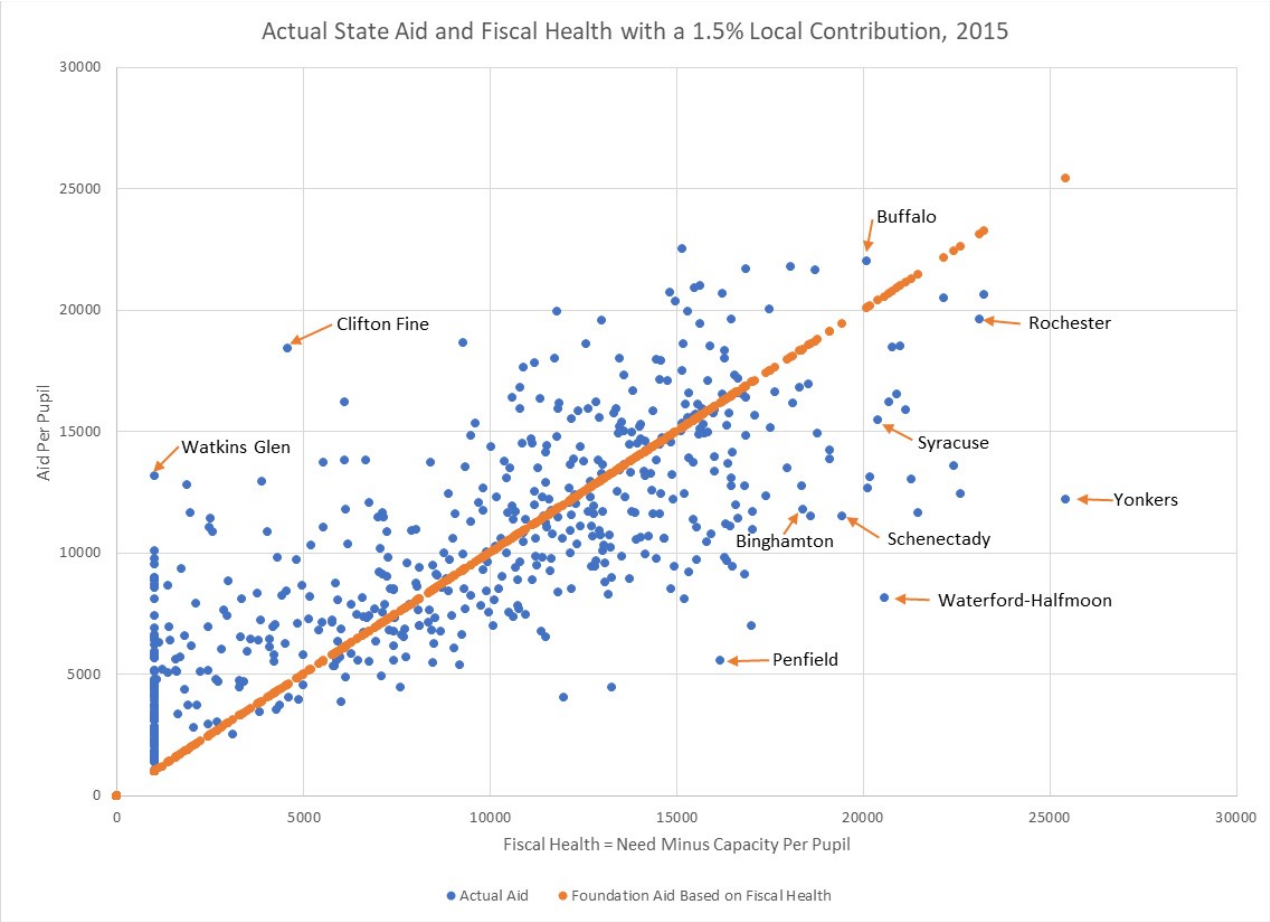
Overall, educational aid in New York State certainly has an equalizing impact, but this impact falls far short of giving the neediest districts the aid they need to meet the state's implicit student performance standards.

Fiscal health is an appealing base for a state educational aid program because it summarizes a district's fiscal situation based on factors outside its control. By offsetting each district's fiscal disadvantages, an aid program based on fiscal health can play a major role in helping New York meet its constitutional requirement to ensure that all districts provide an adequate education.

State policy makers may, of course, want to incorporate factors other than fiscal health into the foundation aid formula.[9] Because fiscal health is such a fundamental measure of a district's ability to deliver a quality education at a given sacrifice by its residents, we believe that any additional factors in the aid formula should have widespread support and a clear justification.

[9] We also recognize that different scholars may come up with different education cost indexes. As discussed in our November 2017 column, we recommend the creation of an office in the New York State Education Department with the responsibility for cost-index estimation.

Figure 1


Actual State Aid and Fiscal Health with a 1.5% Local Contribution, 2015
Aid Per Pupil
30000
25000
20000
15000
10000
5000
0
0
5000
10000
15000
20000
25000
30000
Fiscal Health = Need Minus Capacity Per Pupil
Buffalo
Clifton Fine
Rochester
Watkins Glen
Syracuse
Yonkers
Binghamton
Schenectady
Waterford-Halfmoon
Penfield
Actual Aid
Foundation Aid Based on Fiscal Health