

Fair and Equitable Reductions to State Education Budgets

Evidence and Considerations for the 2020/21 Fiscal Year

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In the wake of public-health stay-at-home orders prompted by the coronavirus, the United States faces a nearly inevitable economic recession in the coming months. With a slowing economy will come a contraction in state revenues, including funding for public education. States are beginning to make budget-cutting calculations and are bracing for the effects of those cuts,¹ even as they take into account likely support from the recent series of federal aid packages, with potentially more aid to come. Given these realities, now is an opportune time for policymakers to consider lessons learned from the Great Recession, as well as guidance from research about how funding and resource allocation affect the academic achievement of the country's most vulnerable student populations.

Lessons Learned from the Great Recession

The Great Recession prompted the American Recovery and Reinvestment Act of 2009 (ARRA), a federal stimulus package intended, in part, to mitigate

the recession's negative effect on crucial sectors, including education. WestEd conducted a review of the research literature looking at the effects of ARRA on state and local education operations, as well as the impact — including negative side

KEY TAKEAWAYS

State education leaders and policymakers are planning approaches to state education budgets in the face of what is likely to be a severe recession. To ensure that cuts in education expenditures are fair and equitable, states should consider three key strategies:

- Apply a sliding-scale reduction to account for differential student needs.
- Account for differences in districts' abilities to raise revenue.
- When enacting reductions, consider the length of the economic recession, as well as the potential availability of funds from other sources.

¹ National Council of State Legislators. (2020). *Coronavirus: State budget update and revenue projections*. <https://www.ncsl.org/research/fiscal-policy/coronavirus-covid-19-state-budget-updates-and-revenue-projections637208306.aspx>

effects — of state policy decisions at that moment in the country's history. As intended, the ARRA funds did stabilize state and local education employment by supplementing revenue in the 2010/11 fiscal year. ARRA also generated gross domestic product (GDP) growth at a rate that exceeded — by 0.5 to 2.4 times — its investment in state and local government (inclusive of the State Fiscal Stabilization Funds).² In other words, ARRA-prompted GDP growth more than offset the costs of state and local ARRA investment.

However, policy decisions that states made as they cut education budgets exacerbated funding inequities between lower- and higher-wealth school districts across the country.³ With the intention of treating all districts equally, many states decreased their per-student funding by the same amount across districts, regardless of district contexts. In response, higher-wealth school districts raised property tax rates (or otherwise increased local funding support) to help offset lost revenue. But lower-wealth districts lacked such options. As a result, state funding declines had a sharp and disproportionate effect on lower-wealth districts. Research shows that such funding differences matter in terms of student achievement.

With state policymakers again planning approaches for reducing education budgets, we offer a closer look at differential impact

of equal cuts, and also at the inequality in districts' abilities to compensate for budget cuts by raising revenue locally.

Differential Impact of Resource Changes on Student Outcomes

A long-standing and growing body of research underscores that changes in per-student funding to school districts are unlikely to have an equal academic effect on all students.⁴ How funding cuts affect the academic achievement of individual students depends on numerous factors, including the efficiency of current levels of funding and complementary investments by the students' families.

The differential student impact is best illustrated by the widely used logic of diminishing marginal returns from education investments. Simply stated, by this logic, the more resources a student has, from innate cognitive ability to an academically nurturing home life to current school funding, the less the student will gain from an additional amount of resources, and the less the student will lose from a reduction in resources.⁵ We developed figure 1 to illustrate this relationship by showing levels of resources, the x-axis, in relation to test scores, the y-axis. In this figure, "resources" can mean revenue, specifically, or any number of other factors that contribute to a particular outcome of interest — in this case,

2 Congressional Budget Office. (2015). *Estimated impact of the American Recovery and Reinvestment Act on employment and economic output in 2014*; Evans, W., Schwab, R. M., & Wagner, K. L. (2014). *The Great Recession and public education*. Russell Sage Foundation.

3 Center on Education Policy. (2012). *What impact did education stimulus funds have on states and school districts?* George Washington University.

4 A summary of this research can be found in Jackson, C. K. (2018). *Does school spending matter? The new literature on an old question* (No. w25368). National Bureau of Economic Research.

5 This is akin to the logic that a billionaire benefits less from an additional thousand dollars than does a person of average wealth.

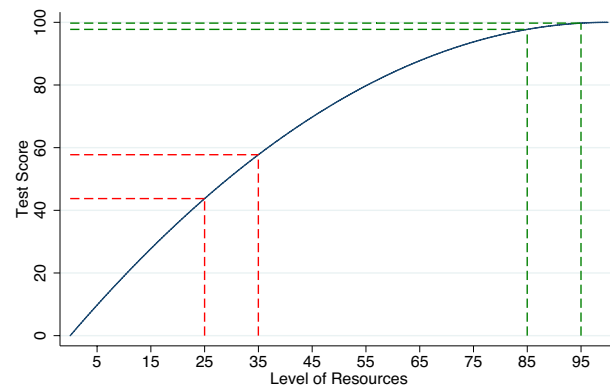
student test scores. Similarly, test scores are used here as a stand-in for any outcome of interest, from scores on a numeracy test to adult wages. The scales of the axes used in this figure are arbitrary and are merely intended to illustrate the relative influence of changes at different points in the resource distribution. As the figure makes clear, a 10-point decline at the high end of resource availability, from 95 to 85, results in test scores falling by 2 points, whereas the same 10-point decline at the lower end, from 35 to 25, results in a 14-point fall. The message is clear: Changes in resources at the higher end of the scale have almost no impact on test scores, while changes in resources at the lower end affect test scores dramatically.

If the relationship between resources and test scores were not one of diminishing marginal returns (i.e., if the line in the graph were straighter), the same losses and gains would be felt more equally across students at different points in the resource distribution. Unfortunately, the empirical social science literature lacks strong evidence as to the shape of the relationship between resources and test scores.⁶

However, decades of school finance reforms have increased funding to low-wealth districts and, consequently, increased test scores in those districts.⁷ Even within low-wealth districts, recent evidence from California points to much stronger gains among comparatively disadvantaged students when their districts are given more revenue from

the state.⁸ This points to what is likely to be a marked difference in student responses to school resources, as illustrated in figure 1.

Figure 1: Diminishing Marginal Returns to Educational Resources



Ability to Raise Local Funding Cushions the Fall for Some School Districts

As seen in the aftermath of the Great Recession, higher-wealth districts may be able to compensate for cuts in state funding by raising school funding locally, most commonly through voter-approved property tax increases. Following that recession, many such districts experienced only a modest overall decline from the recession-related state budget cuts; with a state cut of \$1,000 per pupil, district per-pupil revenues fell by less than \$1,000. By contrast, in lower-wealth districts, which serve communities that cannot afford to pay higher taxes, nearly the entire loss of state funding is experienced.

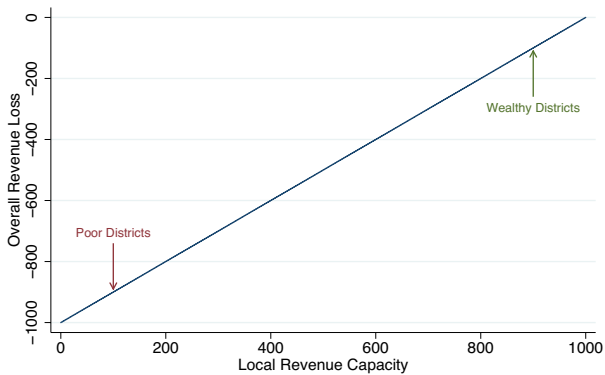
6 Mere correlations between school revenue and student achievement do not yield unbiased estimates of this relationship, for the obvious reason that unobserved variables (parental investments, neighborhood quality, etc.) are not being accounted for.

7 Lafortune, J., Rothstein, J., & Schanzenbach, D. W. (2016). *School finance reform and the distribution of student achievement* (No. 22011). National Bureau of Economic Research.

8 Johnson, R. C., & Tanner, S. (2018). *Money and freedom: The impact of California's school finance reform on academic achievement and the composition of district spending* (Getting Down to Facts II). Learning Policy Institute. http://gsppi.berkeley.edu/~ruckerj/Johnson_Tanner_LCFFpaper.pdf

Figure 2 illustrates the disparate impact of local capacity on real losses from declining state revenue, by looking at overall revenue loss and local revenue capacity. Local revenue capacity is the x-axis, which starts at zero and goes up to 1,000 dollars, while the y-axis is overall revenue loss, which starts at negative 1,000 dollars and goes up to zero. The straight line with a slope of one emanates from the bottom left of the graph, signifying that as local revenue capacity increases, a district will feel less reduction overall from a loss of \$1,000 per pupil from the state.

Figure 2: Local Compensation and Total Revenue Loss



Beyond the student equity problem, shifting the burden of education funding from states to local property owners can create fairness issues of its own, especially when it transfers tax burdens from prime-working-age citizens (via income taxes) to elderly homeowners (via property taxes). Moreover, state contexts will determine how strongly this local compensation effect will be felt.

Texas, for example, exempts senior citizens from property tax increases aimed at school funding, which increases the likelihood that local funding measures will pass.⁹ Other states place severe restrictions on local tax increases. For example, to raise local school revenue via property taxes in Massachusetts, voters must override a state property tax cap by attaining a supermajority for passage. Californians, meanwhile, can only raise local revenue for schools by way of a regressive parcel tax.¹⁰

Considerations for State Leaders in Reducing State Education Budgets

With this evidence in mind, it is critical for state leaders who are faced with reducing public education budgets in this time of pandemic to do so in a manner consistent with ensuring that local education agencies are able to serve those students who are most at risk for poor academic performance. Toward that goal, we offer the following considerations:

Budget solutions should give priority to maintaining spending levels for students with the greatest needs.

The return on dollars invested is not equal across different types of districts, schools, or students. Not only do low-wealth districts and schools need more resources, but investments in them and their students result in greater returns in terms of expanded educational opportunity. Across-the-board, or flat-rate cuts, run the

9 Kogan, V., Lavertu, S., & Peskowitz, Z. (2018). Election timing, electorate composition, and policy outcomes: Evidence from school districts. *American Journal of Political Science*, 62(3), 637–651.

10 Roscoe, D. D. (2014). Yes, raise my taxes: Property tax cap override elections. *Social Science Quarterly*, 95(1), 145–164; Lee, S. (2019). Political economy of the parcel tax in California school districts. *Public Finance Review*, 47(5), 864–892.

risk of disproportionately affecting students who are most at risk for academic failure, in part because their schools have more limited capacity to buffer significant resource declines without hurting core programming. States should make every effort to at least maintain, if not increase, spending levels for highest-need students.

Budget solutions should give priority to supporting communities where the local tax base has been hit hardest by coronavirus-related business interruptions.

Local capacity to generate revenues to pay for schooling has been affected by coronavirus-related business interruptions. This impact will differ by locale, however. In the hardest-hit places, it will pose a serious risk of shrinking the tax dollars available for public school funding. State education aid decisions should consider not only communities' historical wealth, but also their near-term abilities to assess and collect property taxes. For example, new circumstances may require a short-term redistribution in state aid to address new inequities in the capacity of

property taxes or other education-related taxes to maintain equity in educational opportunities across schools.

When enacting cuts, state leaders should consider the likely length of the economic recession, as well as the potential availability of funds from other sources.

When thinking about the fairness of spending cuts, the instinct may be to minimize, to the extent possible, overall reductions in education spending, by using a larger proportion of rainy-day reserves. However, if the financial contraction of state revenue is likely to continue for multiple years, state leaders should consider adopting a spending plan that spreads reductions somewhat evenly over a multi-year timeline. This would provide some horizon for school district planning, enabling district leaders to make choices with an awareness of funds that are likely to be available in the foreseeable future. State and local planners should also consider how available funds may be used in concert with other potential resources, such as federal aid, to reduce the programmatic impact of the budget crisis.

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