

## How Money Makes a Difference: The Effects of School Finance Reforms on Outcomes for Low Income Students

### About this Brief

This brief is drawn from the paper, *The Effect of School Finance Reforms in the Distribution of Spending, Academic Achievement, and Adult Outcomes*, authored by C. Kirabo Jackson, Rucker Johnson, and Claudia Persico. It was published May, 2014, by the National Bureau of Economic Research. To see the full paper, visit <http://www.nber.org/papers/w20118>.

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**E**nsuring equal educational opportunities for all children has long been an American ideal. However, the rules that determine school funding have not necessarily lived up to this ideal. In most states, prior to the 1970s, the vast majority of resources spent on K–12 schooling was raised at the local level, primarily through local property taxes. Because the local property tax base is generally higher in areas with higher home values, and there were persistently high levels of residential segregation by socioeconomic status, heavy reliance on local financing contributed to wealthier districts’ ability to spend more per student. In response to large within-state differences in per-pupil spending across wealthy and poor districts, state supreme courts overturned school finance systems in 28 states between 1971 and 2010, and many states have implemented legislative reforms that led to important changes in public education funding. These school finance reforms caused some of the largest changes in the structure of K–12 education spending in United States history.

This paper studies the effects of these reforms on school funding and student outcomes by linking spending and reform data to data on more than 15,000 children born between 1955 and 1985 from the Panel Study of Income Dynamics.

The results reveal that increases in per-pupil spending, induced by court-mandated school finance reforms, led to significant increases in the likelihood of high school graduation and educational attainment for poor children, and thereby narrowed adult socioeconomic attainment differences between those raised in poor and affluent families. While there was no effect for children from non-poor families, for poor children a 20 percent increase in per-pupil spending each year for all 12 years of public school was associated with:

- A 23 percentage-point increase in high school completion rates,
- Nearly a full additional year of completed education,
- 25 percent higher adult earnings,
- 52 percent higher annual family income, and
- A 20 percentage-point reduction in the annual incidence of poverty in adulthood.

The magnitude of these effects are sufficiently large to eliminate between two-thirds of the gaps in these adult outcomes between those raised in poor families and those raised in non-poor families.

Districts that experienced a 20 percent increase in spending due to reforms saw reductions in student-to-teacher ratios and school size. Both of these have been found to benefit students in general, with larger effects for children from disadvantaged backgrounds. Schools in these districts also had fewer students per counselor and fewer students per administrator, factors that have also been found to improve student outcomes. These results suggest that the positive effects may be driven, at least in part, by reductions in class size and having more adults per student in schools, as well as potential improvements in staff quality.

The research shows that these effects result directly from shifts in school spending and go above and beyond the benefits that could be attributed to other policies in effect at certain points in time (such as desegregation and “War on Poverty” initiatives and related safety-net programs). The research also showed that different approaches to school finance reform produce different outcomes for spending and the distribution of resources, a key insight that is relevant today, as more than 30 states continue to be engaged in school funding litigation of one kind or another. While all reforms reduce spending inequality, there are important differences by reform type: adequacy-based, court-ordered reforms increase overall school spending, with greater increases for low-spending districts, while equity-based, court-ordered reforms reduce the variance of spending with little effect on overall levels of funding. Reforms that entail high tax prices (the amount of taxes a district must raise to increase spending by one dollar) reduce long-run spending for all districts, and those that incentivize local spending through state matching (“reward for effort” plans) create low tax prices leading to increased spending growth, particularly for low-income districts.

Overall, the results provide compelling evidence that the school finance reforms of the 1970s through 2000s had important effects on the distribution of school spending and the subsequent socioeconomic well-being of affected students. Importantly, the results also speak to the broader question of whether money matters. After Coleman (1966), many have questioned whether increased school spending can really help improve the educational and lifetime outcomes of children from disadvantaged backgrounds. The results in this paper demonstrate that it can and that the results can be substantial.