The Effects of School Spending on Educational and Economic Outcomes: Evidence From School Finance Reforms

Issue/Topic: Finance--Does Money Matter?
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Background:
School finance reforms of the 1970s and 1980s have raised many questions about their effects on student outcomes. Previous studies have produced conflicting results. This study looks specifically at the impact of court-ordered school finance reforms on long-term, adult outcomes.

Purpose:
To understand whether, how and why school spending affects student outcomes

Findings/Results:
Researchers found that increased per-pupil spending, induced by school finance reforms narrowed adult socioeconomic attainment differences between those raised in low-income and high-income families. They find that money does matter and that better school resources can meaningfully improve the long-term outcomes of recently educated children. Specifically:

- Reform-induced school spending increases were associated with a reduction in the student-teacher ratio, longer school years, and increased teacher salaries-- suggesting that reductions in class size, increases in instructional time and improvements in teacher quality improve student outcomes.
- For children from low-income families, increasing per-pupil spending yields large improvements in educational attainment, wages, family income, and reductions in the annual incidence of adult poverty.
  - A 10 percent increase in per-pupil spending each year for all 12 years of public school is associated with 0.43 additional years of completed education, 9.5 percent higher earnings, and a 6.8 percentage-point reduction in the annual incidence of poverty.
- For children of non-poor families, increased school spending on subsequent educational attainment and family income in adulthood had a smaller effect.
- Court-mandated reforms increase spending in bottom income districts and reduce spending gaps between low and high income districts in the long-run:
  - Bottom income districts saw an increase of $582.81 per-pupil and top income districts saw a reduction of $110.41 per-pupil over the first 10 years.
- The rate of return is similar to those estimated for pre-school programs, smaller than estimates of the rates of return for class size reductions and larger than long-term returns on stocks. Benefits to increased school spending (spent productively) are large enough to justify under reasonable benefit-cost calculations.

Policy Implications/Recommendations:

- Results suggest that money alone might not improve outcomes because the effect of any spending increases will depend on exactly how funds are spent.
- Predictive analytics suggest that a 25 percent increase over all school age years is sufficiently large to eliminate the attainment gaps between children from low- and high-income families.
- School finance reform policies can improve student outcomes and help reduce the intergenerational transmission of poverty.
- Money alone may not be sufficient, but adequate funding may be a necessary condition.
- Spending increases should be coupled with systems that ensure spending is targeted at the most productive uses.

Full Study: http://www.nber.org/papers/w20847

Research Design:
Quasi-experimental, longitudinal study

Population/Participants/Subjects:

Nationally representative sample of more than 15,000 children born between 1955 and 1985 and followed into adulthood in the Panel Study of Income Dynamics (PSID)

Year data is from:
1955-2010

Setting:
National

Data Collection and Analysis:
Analysis of data from: Panel Study of Income Dynamics (PSID) data; Census of Governments; Individual Government Finances (INDFIN) & CCD School District Finance Survey

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