

# The Impact of State and District Wealth on Educational Outcomes Emily Claffey, Professor Katherine Levine Einstein Department of Political Science

## **ABSTRACT**

The correlation between higher student achievement and higher amounts of money is practically indisputable. It is the mechanisms through which money affects schooling that are more controversial. Most often, this relationship is studied in terms of a student's socioeconomic status, or the quality of the school she attends - both rather individually focused.

This study seeks to look at this school-money relationship from a broader level. Analyzing state's wealth and its relationship to standardized test scores, evidence suggests that wealthier states have higher average test scores than less wealthy states. Analyzing school district wealth, evidence suggests that the same trend exists at the district level, but the effects of district wealth are greater for less wealthy states than wealthy states.

# DATA

Wealth = per capita income of each state

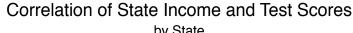
**District wealth** = per capita income of each district

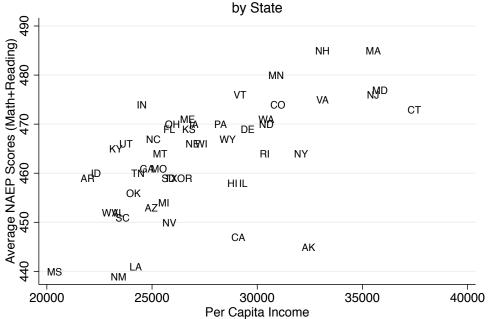
**Student achievement** = average NAEP scores

**Student district achievement** = percent of students who passed the respective state test (eg. MCAS, FCAT)

# **HYPOTHESIS 1: STATES**

Wealthy states will have higher test scores. This is true even when controlling for education funding and teacher qualifications.





A regression analysis was run to determine the significance of this correlation and found that income was statistically significantly correlated with average test scores.

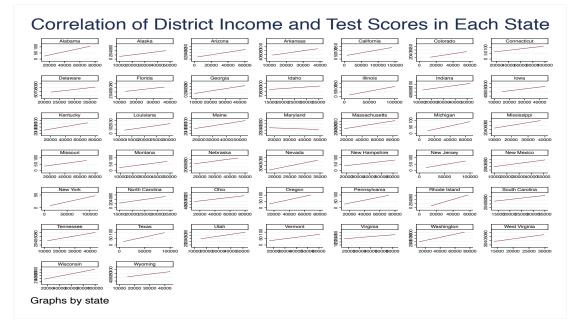
#### CONCLUSIONS

Both state and school district per capita income was shown to have a statistically significant effect on the test scores of students. These regression analyses were run against various control variables, including education funding and teacher qualifications to ensure higher accuracy of results.

State wealth appears to have a greater effect than district wealth, as the effect of district wealth varies depending on states' wealth. Further research should be conducted to determine the extent of this effect.

## **HYPOTHESIS 2: DISTRICTS**

Wealthy districts will have higher test scores. This is true even when controlling for education funding.



Separate regression analyses were run for each state (omitting six because of insufficient data) and found that for every state except Delaware and Maryland, district wealth has a statistically significant correlation with standardized test scores.

The effect of district wealth diminishes as state wealth increases. The following graph displays the states' income against the coefficients from the regression analysis shown graphically above.

