

# The Impact of School Tax Referenda on District Administration and Student Achievement

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## Setting the Stage

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- ▶ Limits on tax rates, collections, or assessments
- ▶ Example: Massachusetts Proposition 2  $\frac{1}{2}$
- ▶ Common feature: Voter override provision

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- ▶ Or do they overestimate savings from cutting Department of Waste, Fraud, and Abuse?

# Voters and Taxes

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**The state government has been facing large budget deficits over the past several years. Some people believe that by simply eliminating waste and inefficiencies our state government can provide roughly the same level of services that it currently does, even if its budget has to be cut by \$20-\$25 billion dollars. Do you agree with this view?**

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*Statewide:* 57%

Democrats: 49%

Republicans: 69%

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## When Voters Say "No"

- ▶ How do the decisions voters make on Election Day affect service quality?
- ▶ How do public administrators respond to the failure of tax proposals?
- ▶ If cuts are necessary, what types of expenditures are targeted and how do these cuts affect services?
- ▶ How do voters respond to these cuts?

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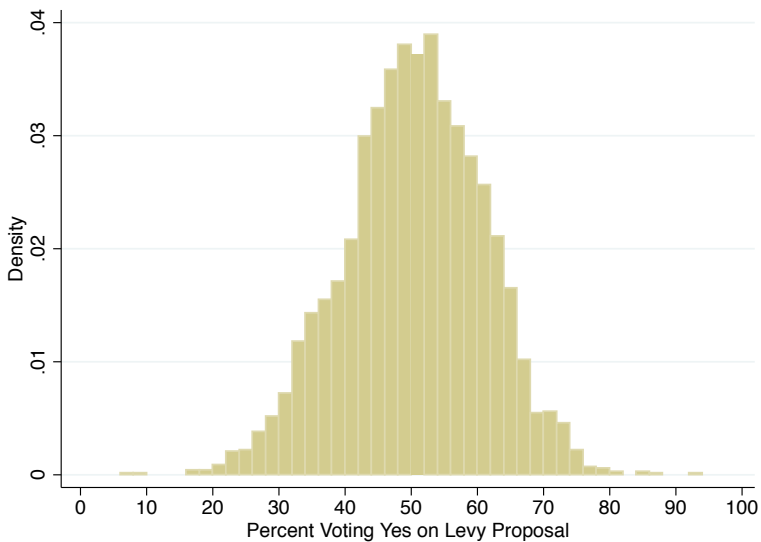
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  - ▶ All school district tax referenda in Ohio from 2003-2013 (over 3,300 proposals)
  - ▶ Combine election results with district-level administrative data, including “value added” measures of student achievement

# Motivation





# Regression Discontinuity Design

- ▶ Challenge for causal inference: Service quality both a cause *and* effect of voter decisions

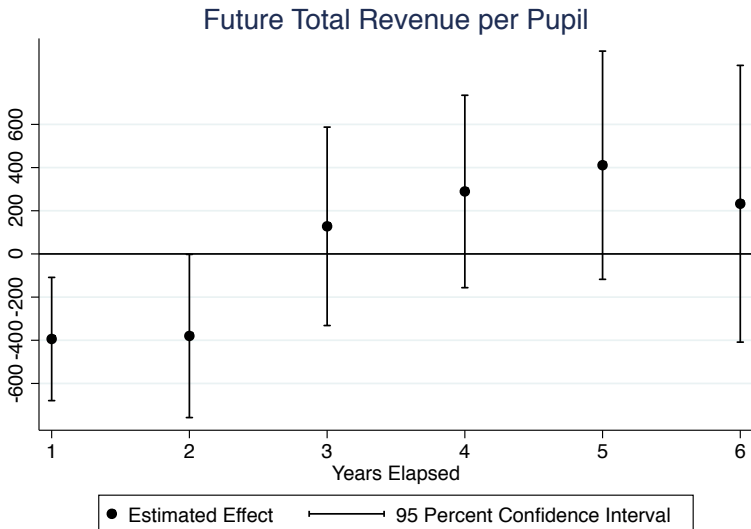
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- ▶ Treatment status — levy failure — changes discontinuously at 50 percent vote threshold

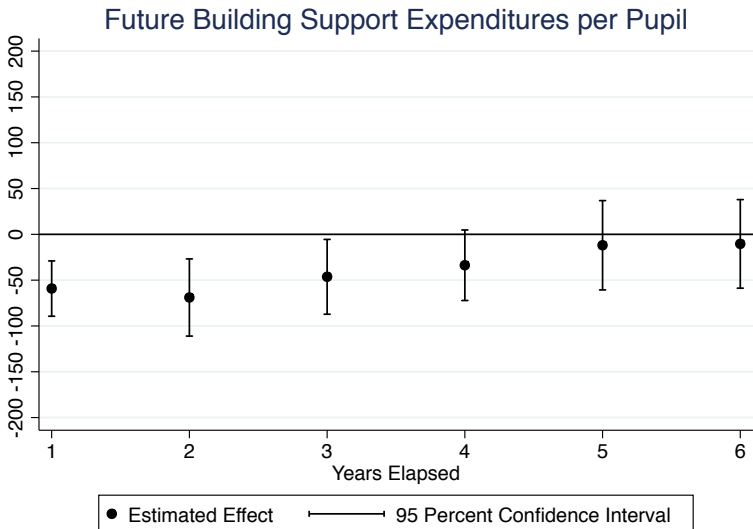
# Regression Discontinuity Design

- ▶ Challenge for causal inference: Service quality both a cause *and* effect of voter decisions
- ▶ Treatment status — levy failure — changes discontinuously at 50 percent vote threshold
- ▶ Approximate randomized experiment: Compare school districts where levies *barely* pass to those where they *barely* fail

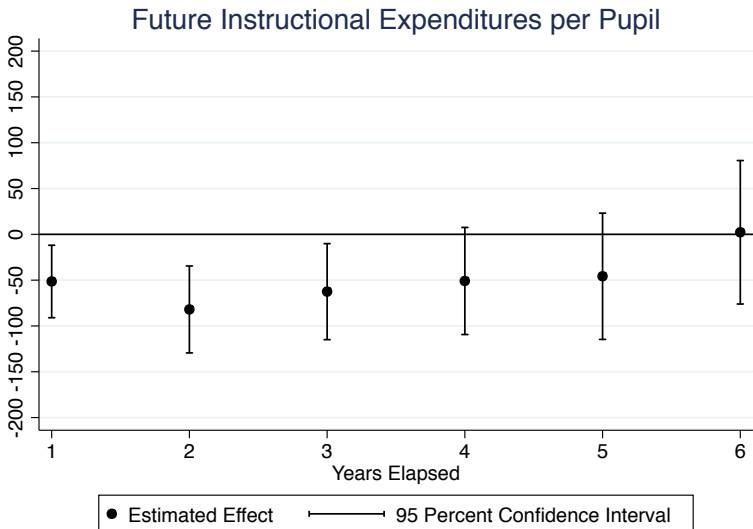
# Total Revenue



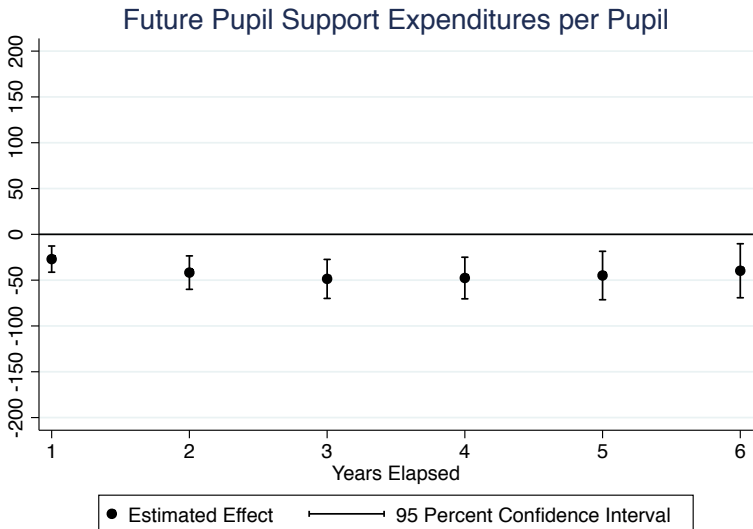
# Building Support Expenditures



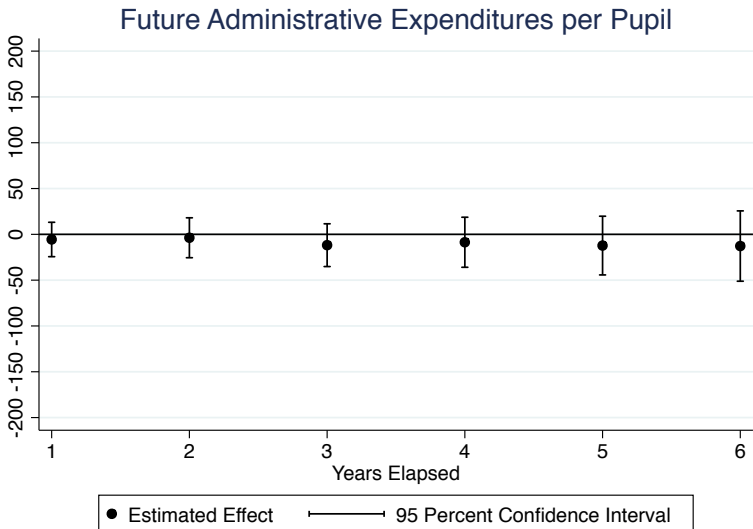
# Instructional Expenditures



# Pupil Support Expenditures

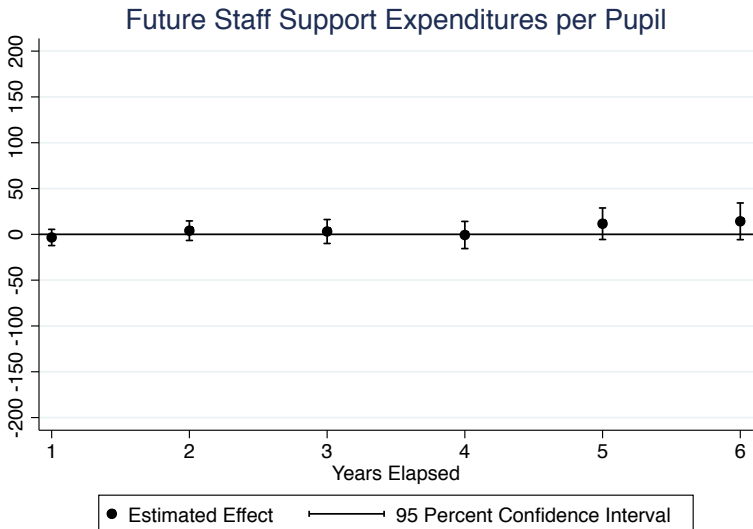


# Administrative Expenditures



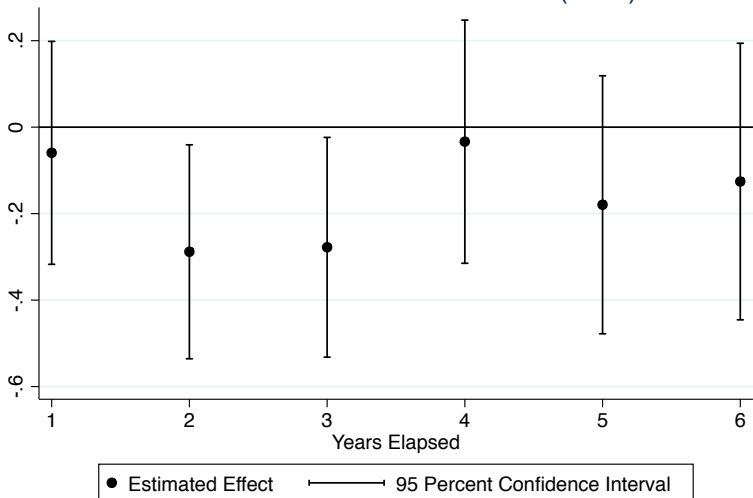


# Staff Support Expenditures

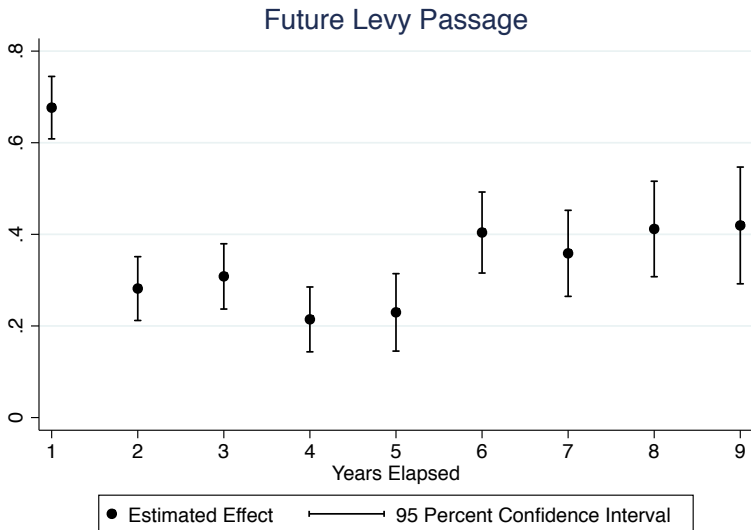


# District Value-Added

## Future Value-Added Gain Score (ODE)



# Future Levy Passage



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- ▶ However, their minds can be changed by observing consequences
- ▶ Best way to change their mind is target cuts to most essential services
- ▶ But this is politically risky!