

# The Value of Public Libraries

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# What I'm going over...

1. How Economists model public goods and public value.
2. Libraries are a local service providing public value.
3. Framework for talking with local decisionmakers, such as city councils.
4. Research on the public value of libraries.



# Community Sorting Reveals Preferences for Local Public Services/Goods

- ❑ Preferences for private goods are revealed through purchases;
  - ❑ buying a sandwich reveals preferences and price reveals value.
- ❑ **Challenge understanding preferences and value for local public services.**
  - ❑ Individuals reveal preferences for local public goods when they move.
  - ❑ Comparison of communities' public value.
- ❑ **Librarians need to be knowledgeable of what their community values.**

# Property Taxes Reveal Willingness to Pay

- ❑ **Voting on property taxes reveals a willingness to pay and value.**
- ❑ Votes represent how much they value the local public institution.
- ❑ Voting outcomes often reflect ‘the ask’.
  - ❑ Impacted by other ballot measures and timing.



# Underinvestment in Public Education

- ❑ **Economists find individuals tend to underinvest in public education.**
  - ❑ Vote ‘no’ on too many ballot measures than what is optimal for society.
  - ❑ Freerider problem: Do not fully contribute, relying on others.
  - ❑ Omit positive externalities for themselves and the community.

*Tend to underinvest because personal ‘value’ is less than societal ‘value’.*

# Libraries Create Public Value and Improve Societal Wellbeing

- ❑ Improve societal well-being by creating public value.
- ❑ Sustaining public value is challenging due to technological progress:
  - ❑ Difficult and time-consuming to obtain.
  - ❑ Individuals' preferences change.
  - ❑ Consider the needs and preferences of potential and future patrons.

*Role of public servants is to articulate public value to gain community support.*

# Local Policymakers

*Decisionmakers are community impact-orientated and then input-orientated.*

*Objective: maximize public value subject to budget constraints by choosing allocations of public dollars.*

# Communicating with Local Policymakers

## Steps to communicate with local policymakers

1. Recognize the community's values and needs.
2. Showcase library providing public value based on community-level issues.
3. Library usage statistics linked to community-level issues.
4. Discuss resources needed to address a community-level issue.

*Stay within your mission, but be flexible, open-minded to change, and adaptable.*



# Things change... a lot!

*Society relies on public servants to be responsive, dynamic, and value creating.*

- Must be adaptable and efficient in generating ideas to create public value.
- Based on observations, expertise, feedback, and network.
- Must direct resources and operational budgets to produce value.
- Must request resources to produce additional value.

# Research on public value of public libraries

- ❑ [Bhatt \(2010\)](#): Increases children's reading time and reduces TV consumption. Parents spend more time reading to children.
- ❑ [Porter \(2014\)](#): Decreases crime.
- ❑ [Karger \(2021\)](#): Increases child education attainment and non-wage income.
- ❑ [Berkes and Nencka \(2021\)](#): Increase patent rates.
- ❑ [Neto et al. \(2023\)](#): Reduces crime.
- ❑ [Gilpin et al. \(2024\)](#): Improves reading scores.
- ❑ [Hanzl and Gilpin](#): Improves reading and math scores.

*Questions*

# **The Returns to Public Library Investment**

**Greg Gilpin, Montana State University**

**Ezra Karger, FRB Chicago**

**Peter Nencka, Miami University**

# Research Design and Questions

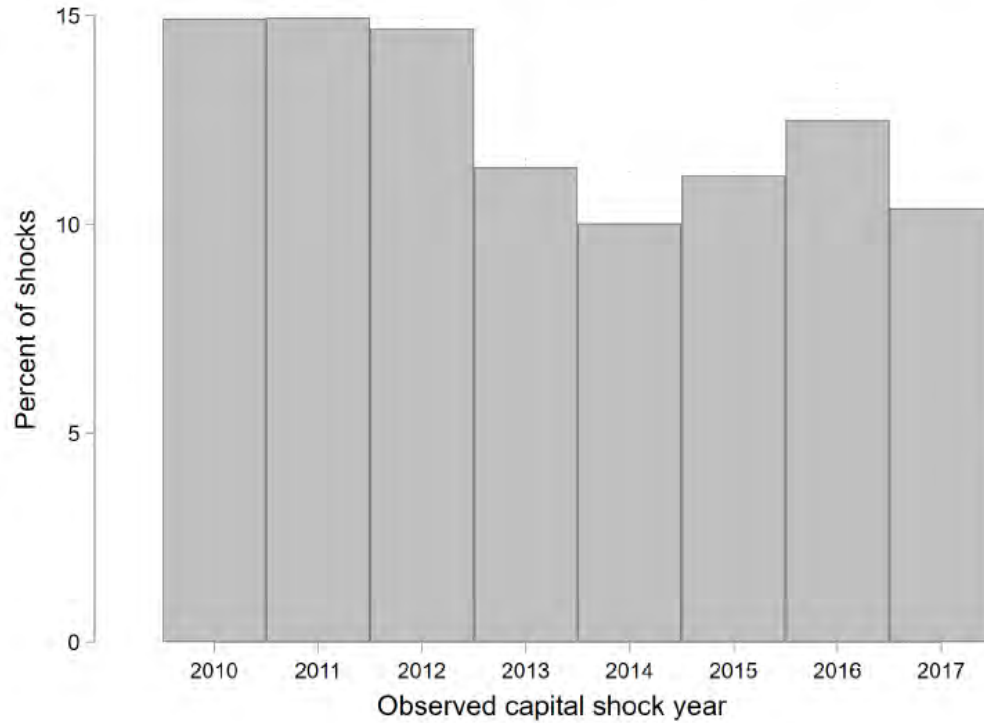
Use sharp variation in library capital investment to study how library capital spending translates to other library input spending, how users react, and whether nearby children are affected.

- ❑ Do public libraries impact student achievement?
- ❑ If so, are impacts heterogeneous?

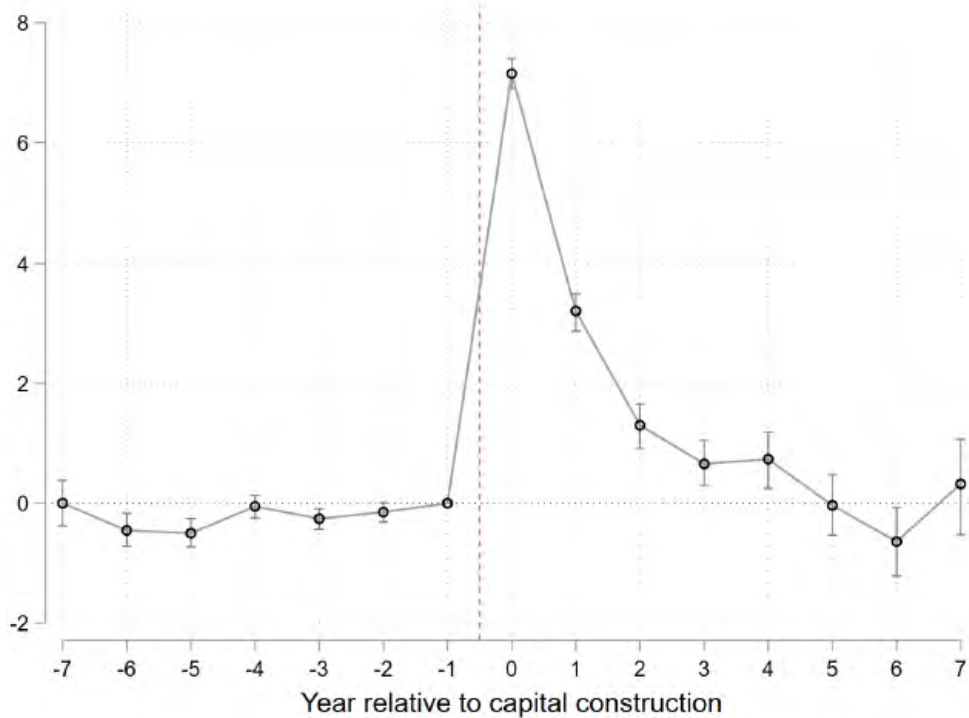
# Data

- ❑ Public library data (IMLS).
- ❑ Student achievement school district data (SEDA/NAEP).
- ❑ Map school districts to libraries (2 miles).
  - ❑ We relax this to 1, 5, 10, 15, 20, and then 30-50.
- ❑ Limit main analysis to districts that have at most 5 library buildings (including branches) within 2 miles.
  - ❑ Restricts 2.8% of sample.

Figure A1: Distribution of library shocks in the school district sample



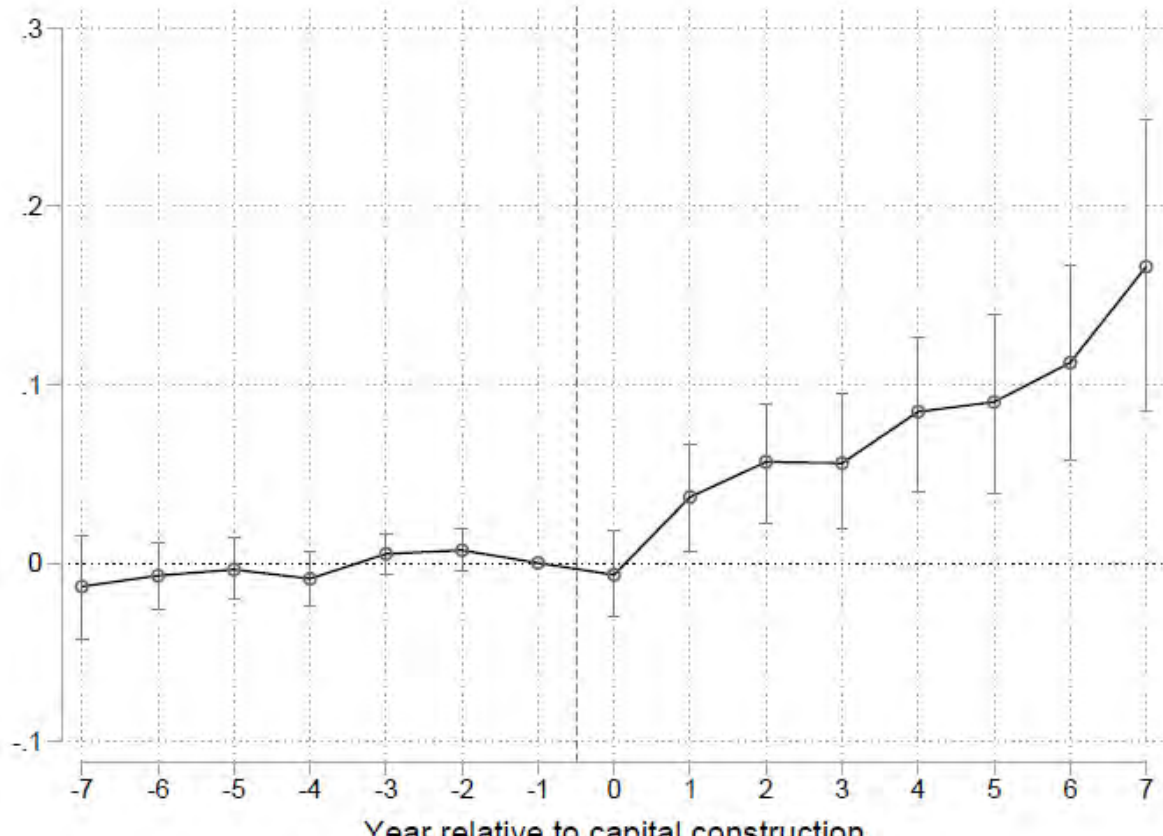
### (A) Log capital spending



In the year of the first large capital expenditure for a library system, there is a sharp increase in capital spending that decreases to baseline levels after 3-4 years

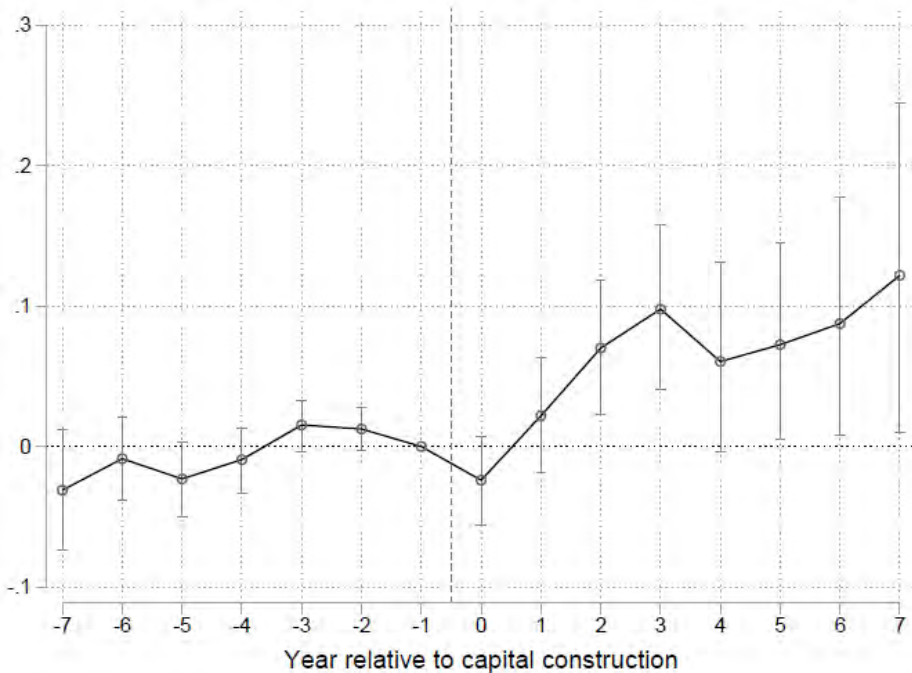


## (B) Log children's circulation

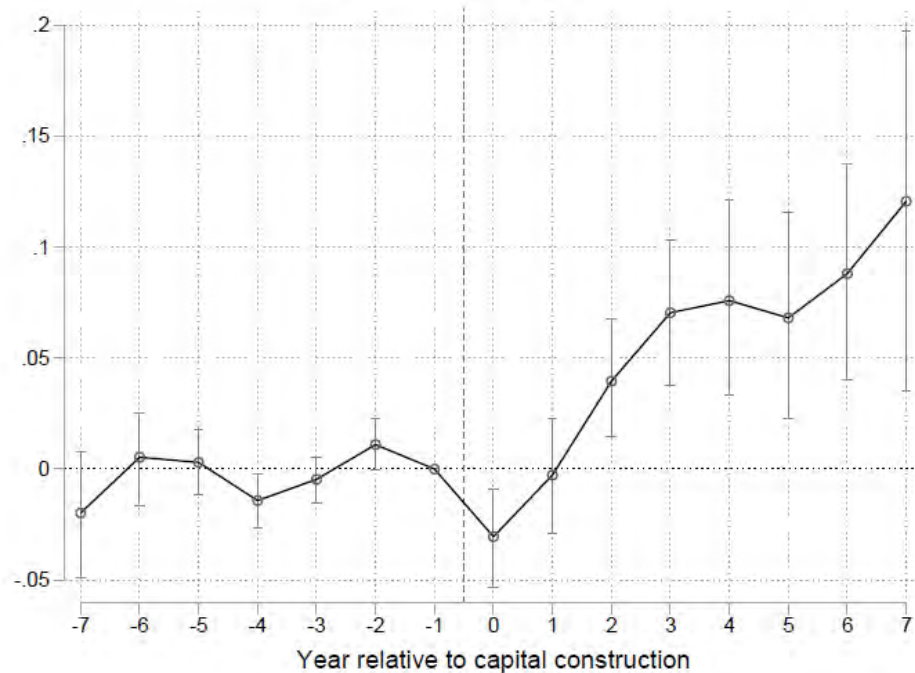


We observe a sharp and persistent 5–15% increase in child library use that lasts for seven years after the capital investment

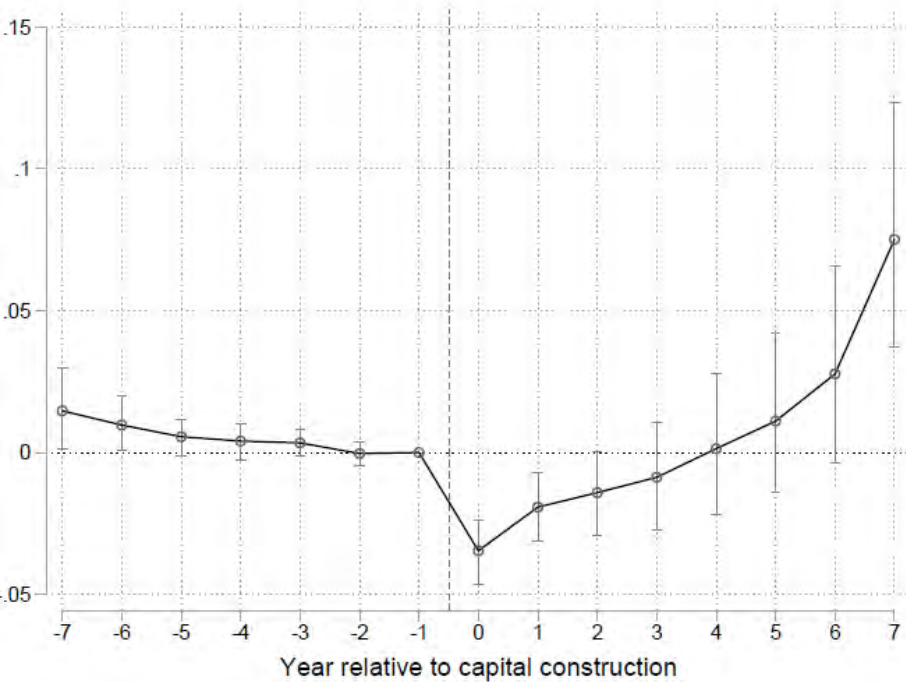
(C) Log children event attendance



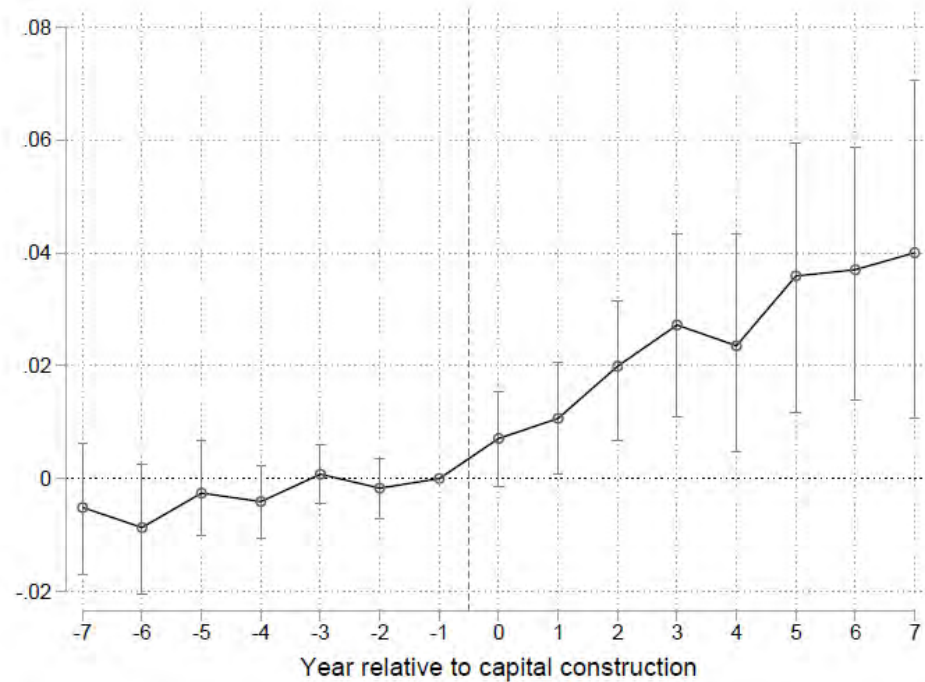
(D) Log visits



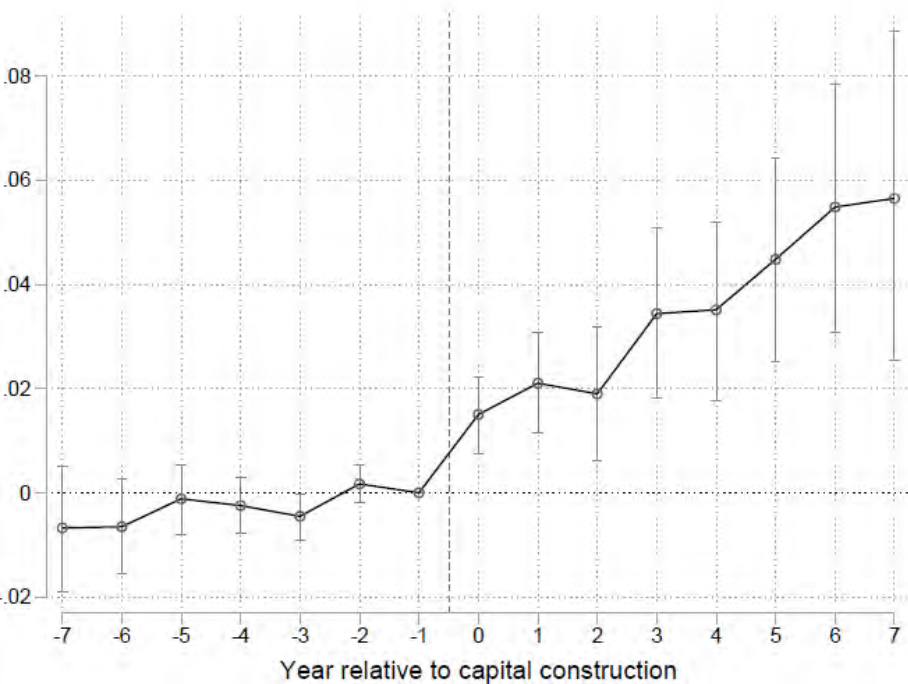
(A) Log book stock



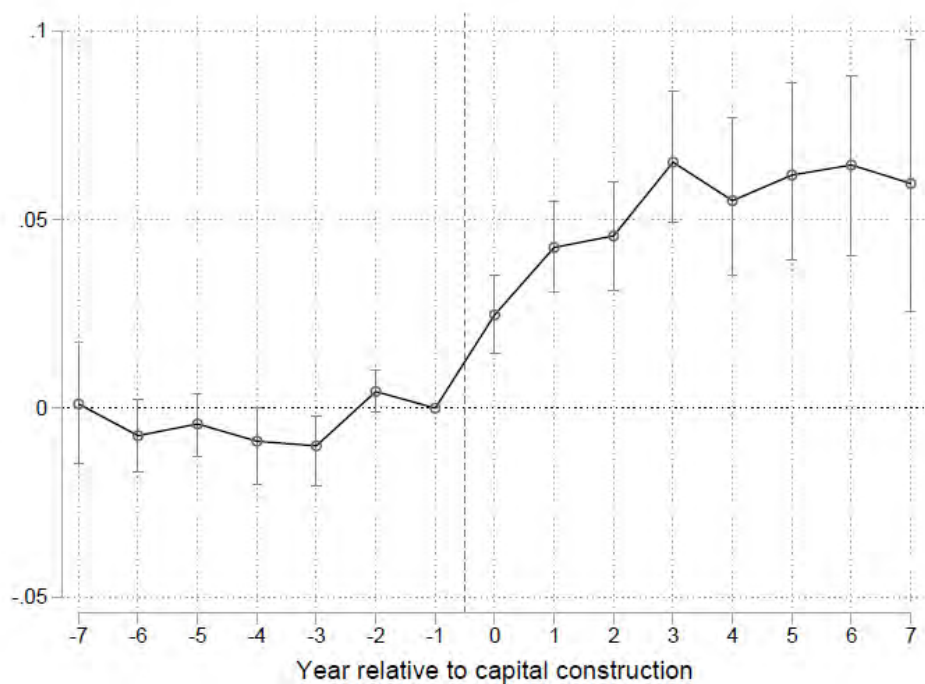
(B) Log number employees



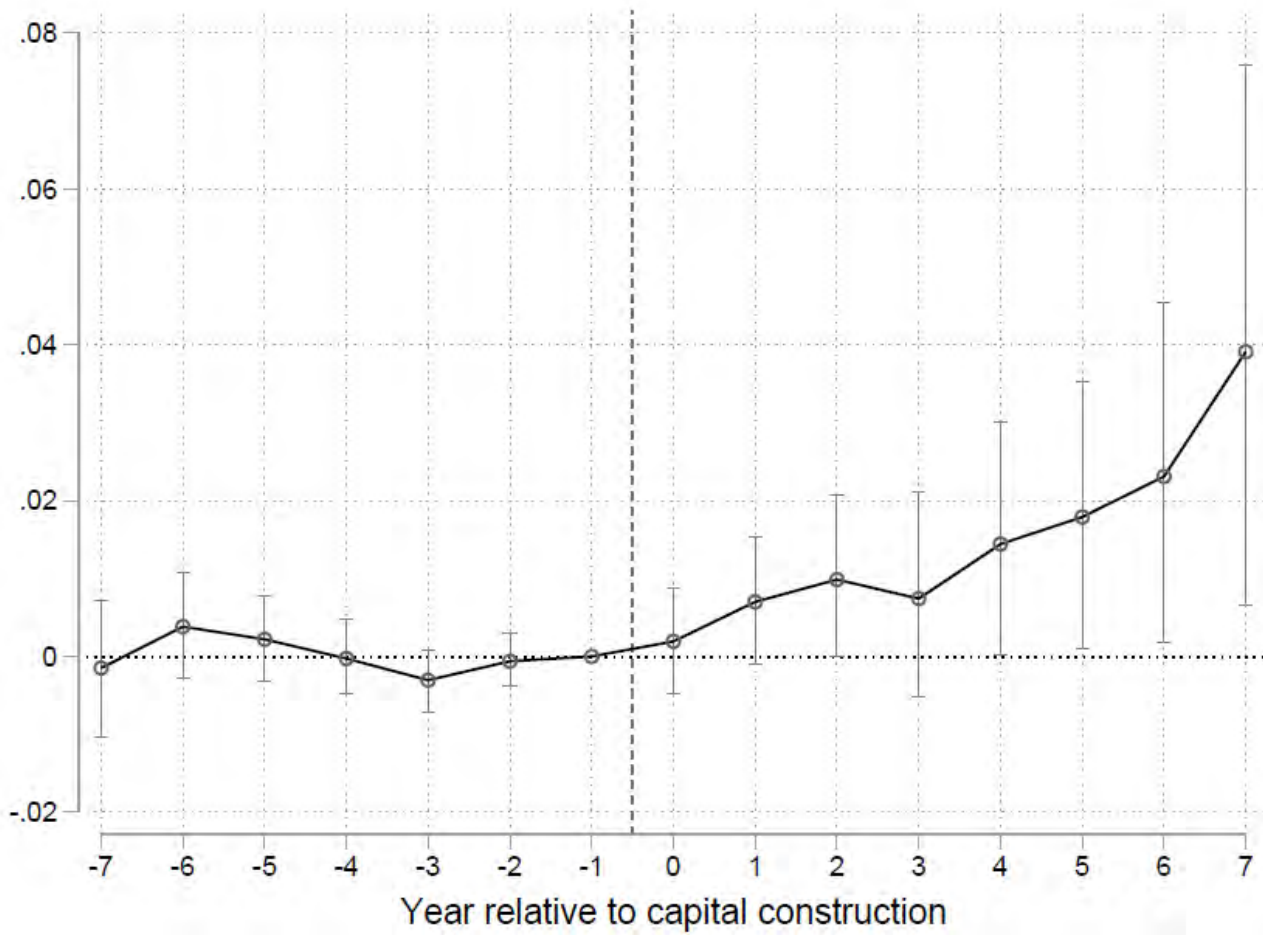
(C) Log salary spending



(D) Log operating spending



(a) Reading test scores



Reading scores increase by 0.01 sd.

Same increase as building a new elementary school.

*Questions*

# **Unequal Access: How Public Library Closures Affect Educational Performance**

**Lisa Hanzl, Freie Universität Berlin**  
**Greg Gilpin, Montana State University**



# Motivation

- ❑ Inequality in access to educational resources persists in the US school system, leading to significant gaps in academic outcomes for different groups of children.
- ❑ Local public institutions, such as libraries, have the potential to mitigate these disparities by serving as equalizers for access to educational resources.
- ❑ Between 2008 and 2019, 766 public library outlets closed across US.



# Research Design and Questions

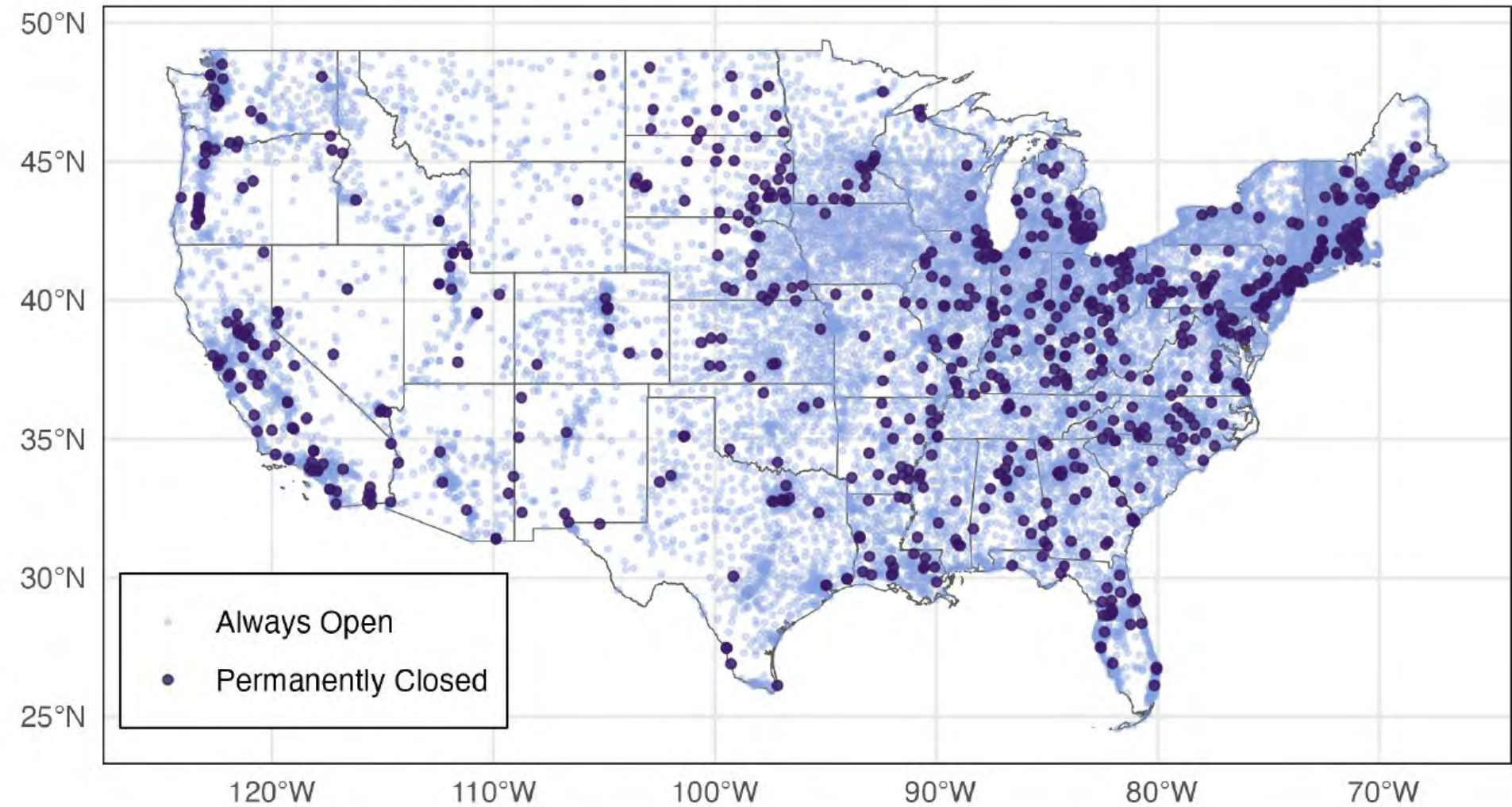
Use sharp variation in library outlet closures to study how library systems adjust, how users react, and whether nearby children are affected.

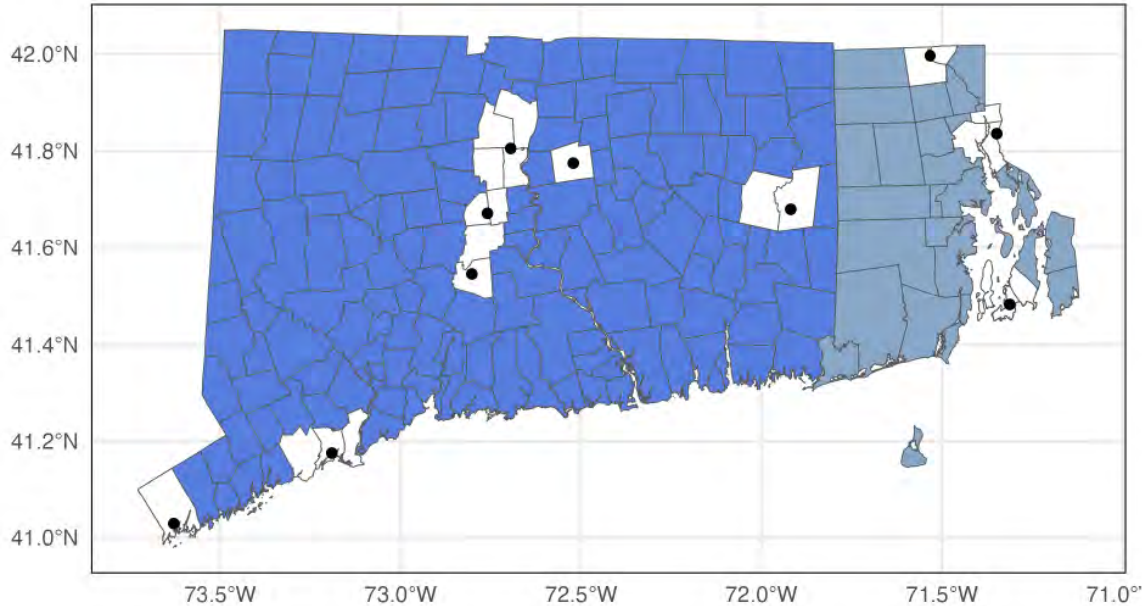
- ❑ Do public libraries impact student achievement?
- ❑ If so, are impacts heterogeneous?

## Closures

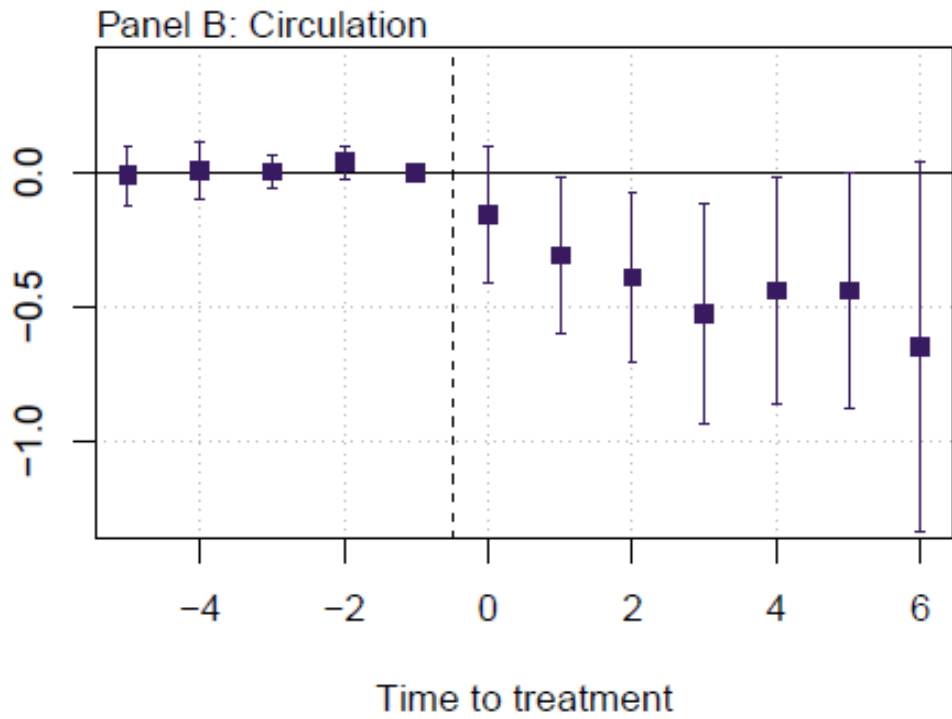
	Metro	Urban	Rural	All
Physical Outlet	339	139	62	540
Non-Physical Outlet	149	65	12	226
Total	488	204	74	766

*Notes:* Authors' calculations. Data: PLS and USDA.

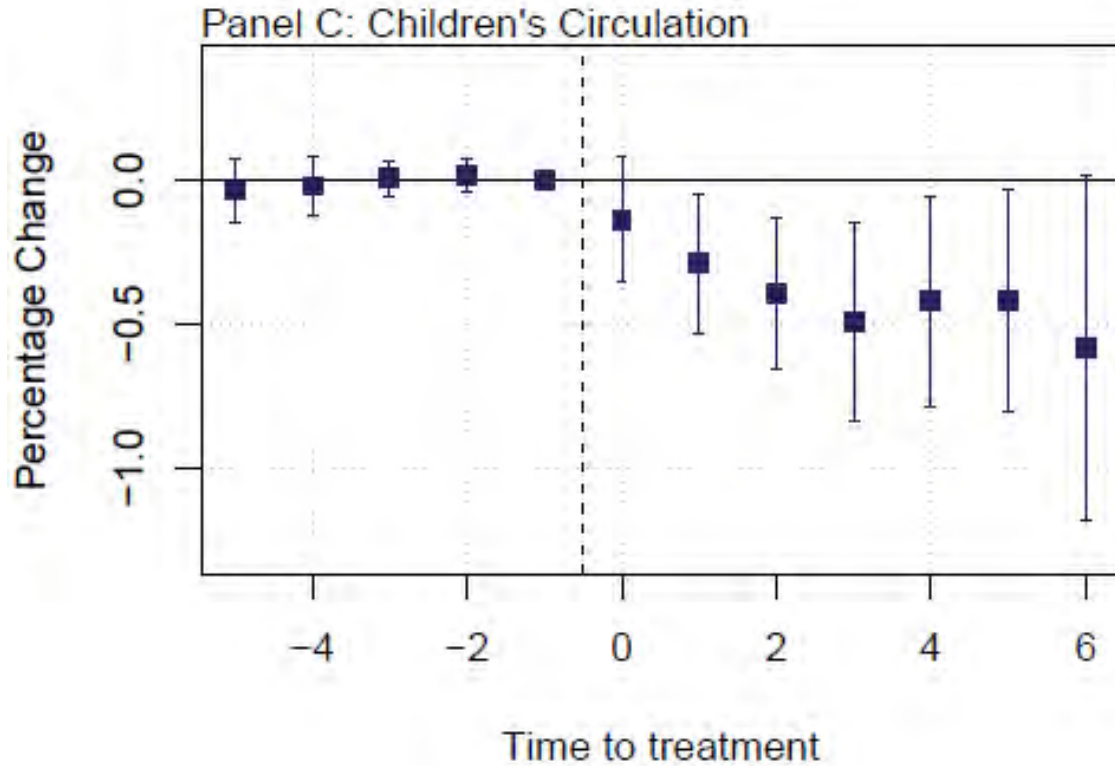




- School districts are treated if they are **within a 2-mile radius** of a closed library outlet.
- Within state borders.
- Vary treatment radius  
[▶ Radius Figures](#)
- Non-metro sample.

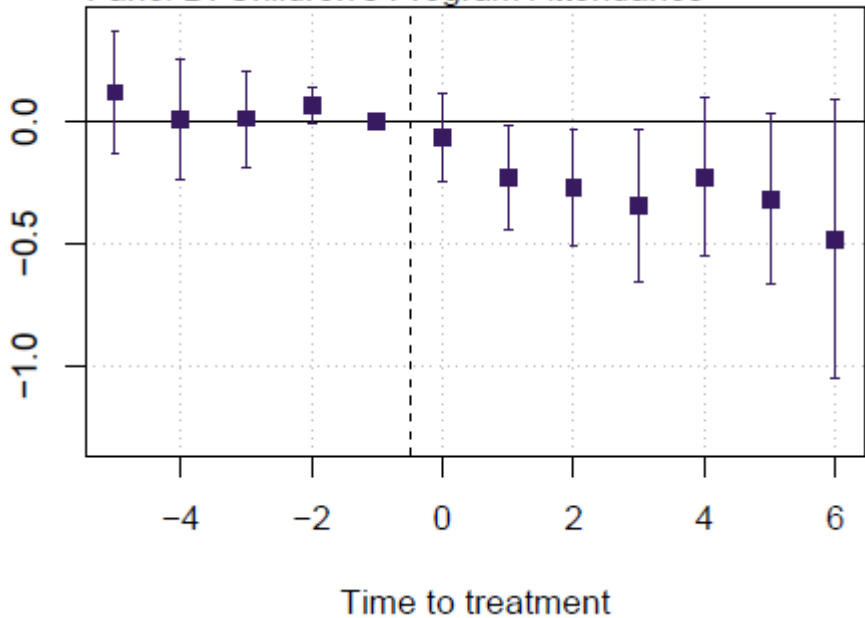


*Library use falls by 32 pp.*

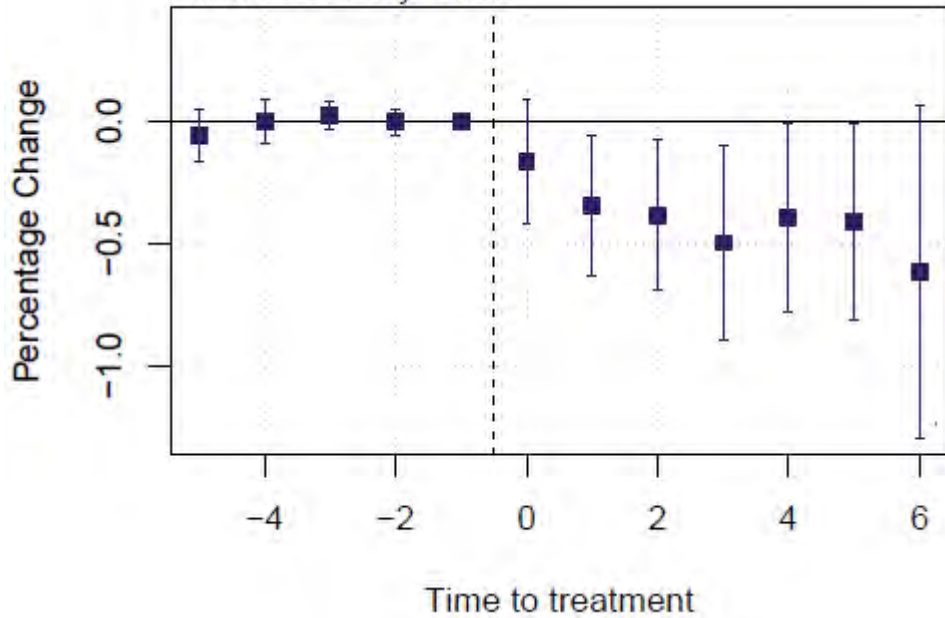


*Children's  
circulation falls  
by 31 pp.*

Panel D: Children's Program Attendance



Panel A: Library Visits

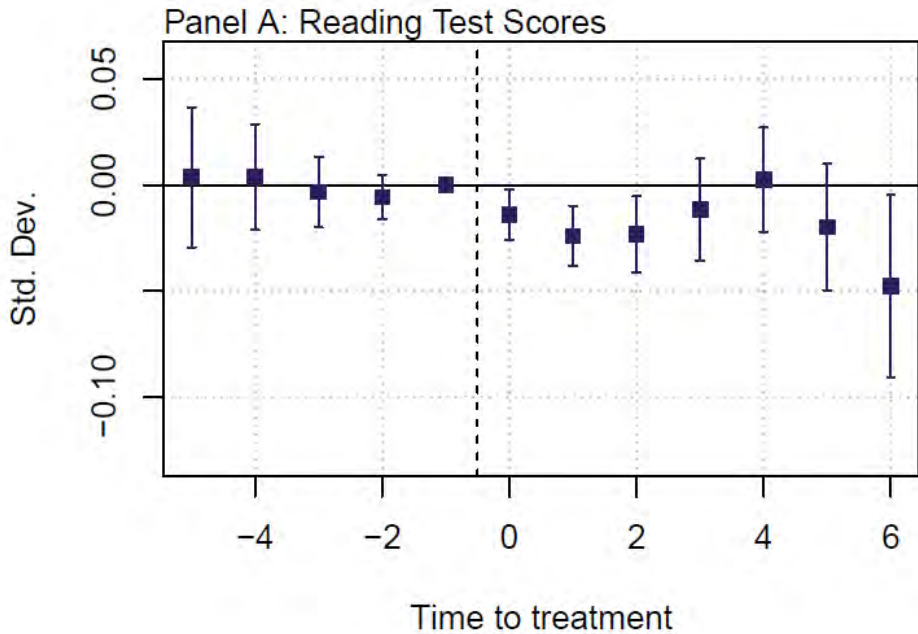


*Children's program attendance falls by 23 pp.*

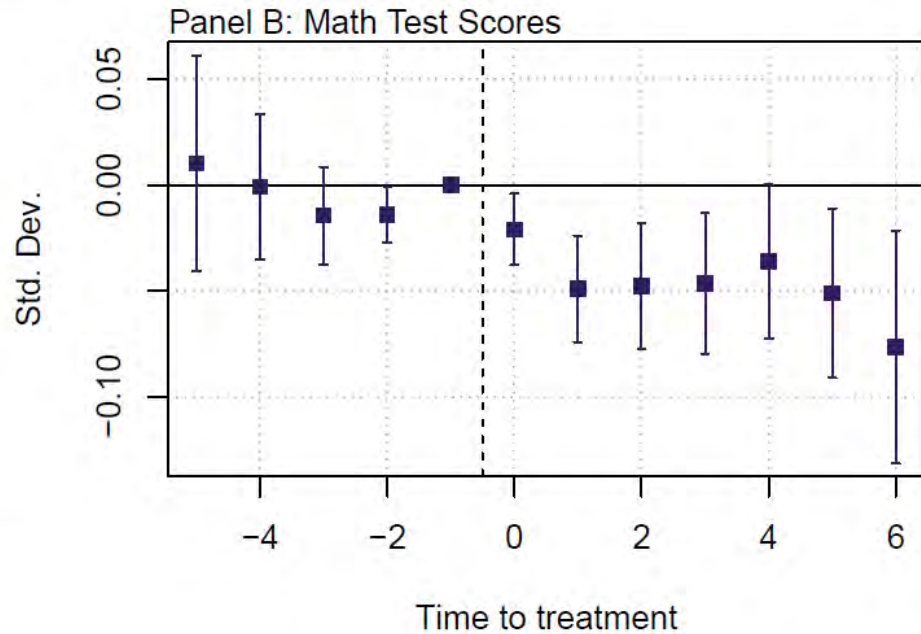


	Total Staff	Op. Expend.	Kids' Programs	Computers
	-0.092** (0.041)	-0.542** (0.210)	-0.199** (0.091)	-0.110** (0.045)
Dep. var. mean	6.964	404,097	160.302	19.647
Observations	27,402	27,402	27,402	27,402
School dist.-Grade-Subject	✓	✓	✓	✓
State-Year	✓	✓	✓	✓





Reading scores decline by 0.021 sd.



Math scores decline by 0.046 sd.

***The effect of a public library outlet closure is twice as large as an investment. Reading and math scores are impacted. No effects on hs graduation rates.***

*Questions*

*Thank you for your time!*

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