Generating Revenues to Fund Washington's Public Education System:

Insights from Academic Research to Inform
Adequate and Equitable School Finance Policy Solutions

Washington House Finance Committee
Legislative Work Session
January 11, 2024, 1:30 PM

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My talk will address four key points

From prior research, we know...

1. Additional spending improves outcomes <u>on average</u>, but impacts depend on how funds are allocated and used

2. Schools serving higher-poverty student populations require additional resources to provide equal educational opportunity

And from our recent research at the Univ. of Washington, we know...

3. Washington's state school finance system does not allocate funding such that districts have adequate resources to meet student needs

4. Washington's mechanism for generating local property values is inequitable for taxpayers and school districts

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Additional spending improves outcomes <u>on average</u>, but impacts depend on how funds are allocated and used

Key finding of recent (2024) meta-analysis:
$1,000 increase in per-pupil spending =

⬆ 0.032 SD increase in test scores

⬆ 2.2 pp increase in college-going

Authors:

C. Kirabo Jackson   Claire Mackevicius

Measuring the impact of school spending is challenging, but there is now wide consensus that "money matters"

Panel A. Effect on Educational Attainment

Panel B. Effect on Adult Wages (% increase)
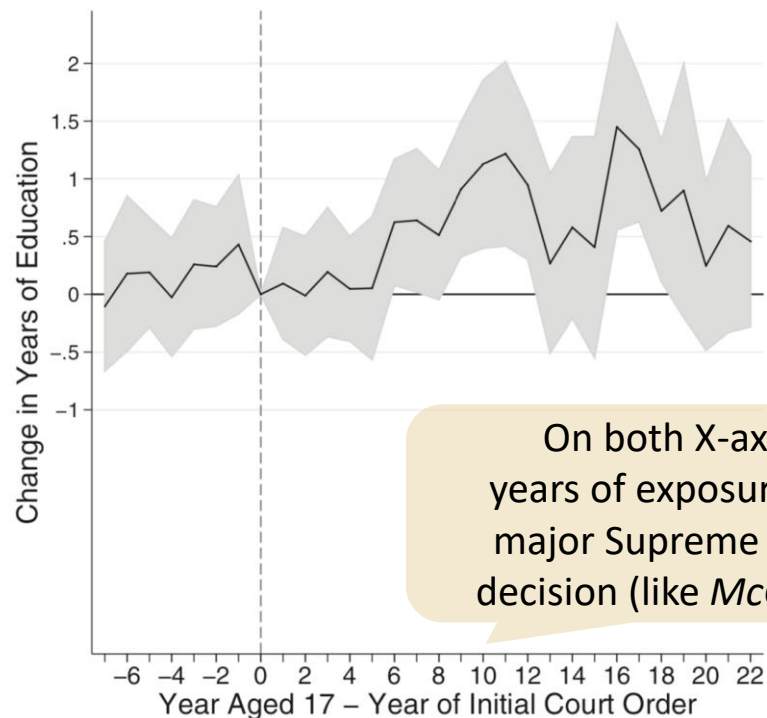
On both X-axes: years of exposure to a major Supreme Court decision (like *McCleary*)
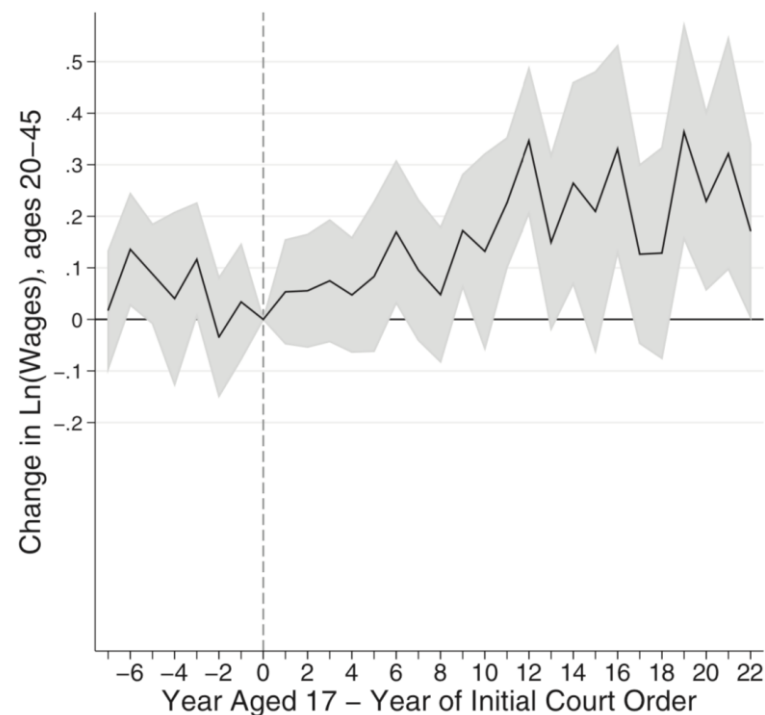
Authors:
C. Kirabo Jackson
Rucker C. Johnson
Claudia Persico

Money matters, but the impacts depend on how funds are allocated and used

Figure 3. Probability of achieving the estimated effect on educational attainment

- <u>90% of the time</u>, we expect a $1,000 increase to increase college attendance by at least 1 pp over; 2.9 pp half the time, and up to 4.5 pp in rare cases (10% of the time)

Authors:

C. Kirabo Jackson   Claire Mackevicius

Money matters, but the impacts depend on how funds are allocated and used

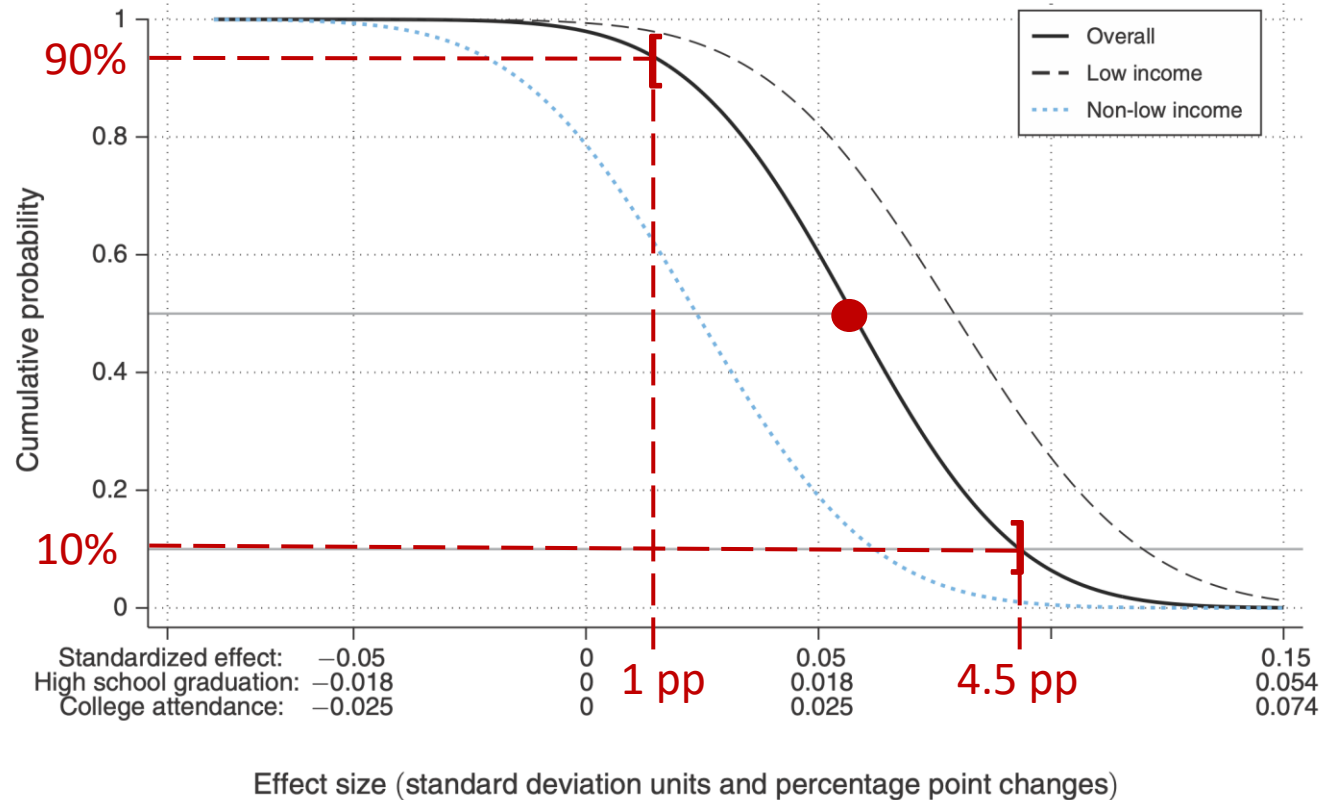Figure 3. Probability of achieving the estimated effect on educational attainment
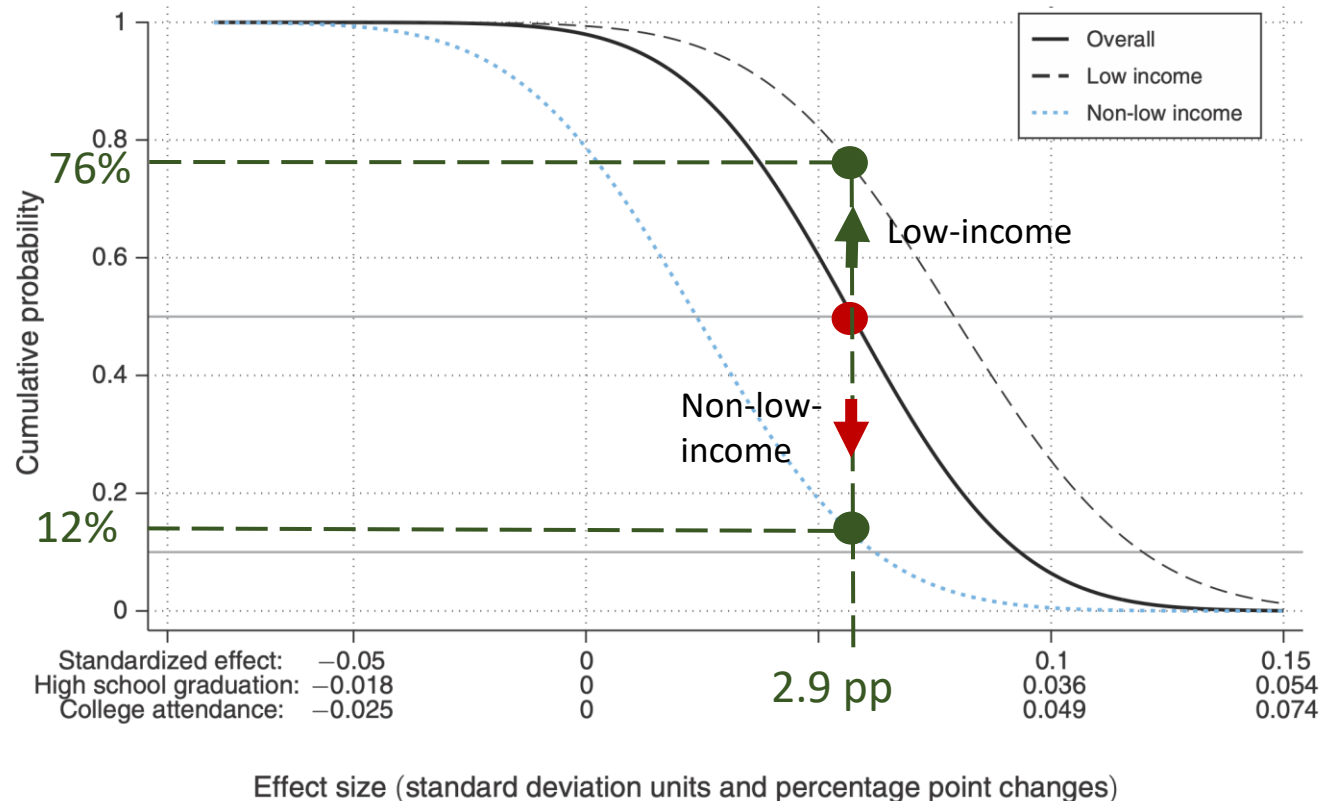
- <u>90% of the time</u>, we expect a $1,000 increase to increase college attendance by at least 1 pp over; 2.9 pp half the time, and up to 4.5 pp in rare cases (10% of the time)

- Expected effects are larger and more consistent for lower-income students.

Authors:

C. Kirabo Jackson   Claire Mackevicius

Source: Jackson, C. K., & Mackevicius, C. L. (2024). What Impacts Can We Expect from School Spending Policy? Evidence from Evaluations in the United States. American Economic Journal: Applied Economics, 16(1), 412-446.

From prior research, we know…

1. Additional spending improves outcomes <u>on average</u>, but impacts depend on how funds are allocated and used

2. Schools serving higher-poverty student populations require additional resources to provide equal educational opportunity. But how much???

   - Scholars <u>do not know</u> the answer to this question
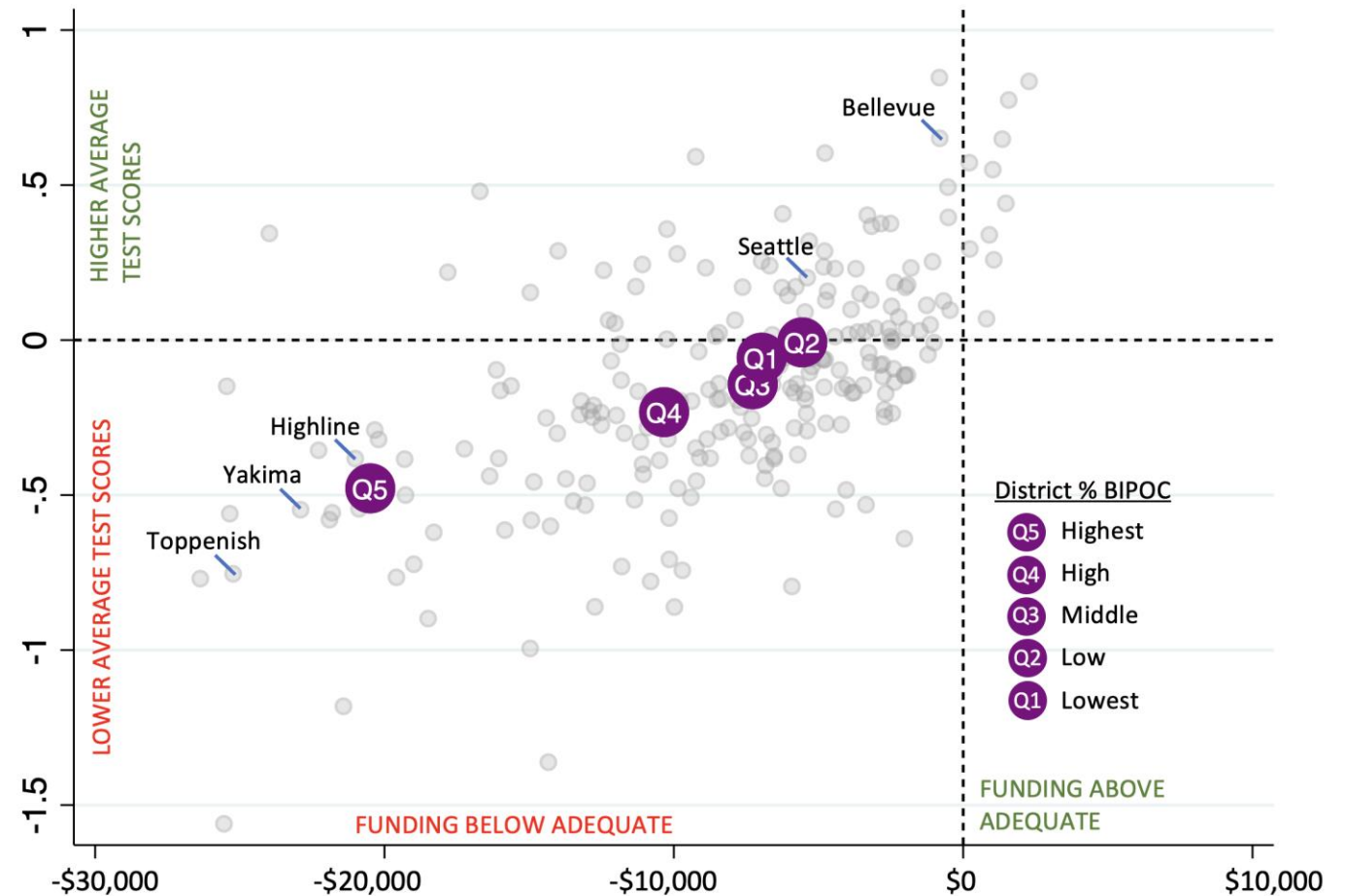   - The research offers <u>some estimates</u> of how the cost differs across context

Part 2: What have we learned from research on recent school finance reforms in Washington?
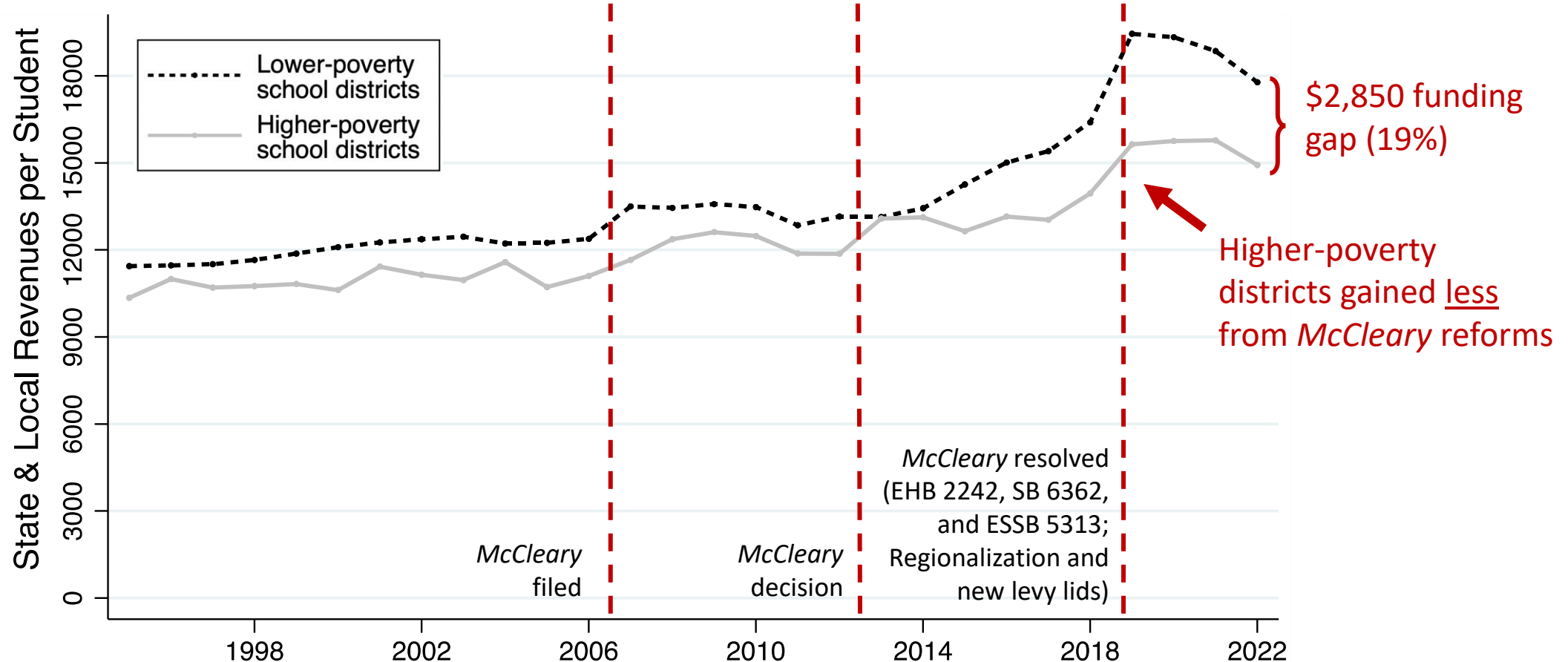
Few districts in Washington are "fully funded" but the size of funding gaps differs across districts

- In a recent policy brief, we combine per-pupil spending data with test score achievement data to estimate the cost of achieving a given level of academic proficiency

- Few districts in WA are fully funded* but the size of funding gaps differs across districts

- Higher-poverty districts are the most under-funded

HIGHER AVERAGE TEST SCORES

LOWER AVERAGE TEST SCORES

Bellevue

Seattle

Highline

Yakima

Toppenish

Q1 Q2 Q3 Q4 Q5

District % BIPOC
Q5 Highest
Q4 High
Q3 Middle
Q2 Low
Q1 Lowest

FUNDING BELOW ADEQUATE

FUNDING ABOVE ADEQUATE

-$30,000   -$20,000   -$10,000 $0 $10,000

Higher-poverty districts did not receive as large of funding increase following *McCleary*

Note: Low poverty refers to mean state and local per-pupil revenues for the 59 districts (20%) with the lowest rate of U.S. Census residential poverty, while high poverty refers to districts in the top 20% of student poverty. Revenues are adjusted for inflation to 2021-22 dollars. Results are similar when we adjust for local cost factors, see Knight, D. S. & Plecki, M. (2020). Establishing Priorities for Education Finance Under Fiscal Uncertainty: Recommendations for Washington State Policymakers. Seattle, WA: University of Washington College of Education.) N=295 school districts.

# Two major changes from McCleary reforms were enacted in 2018-19 (in addition to large funding incr.)

1. Regionalization

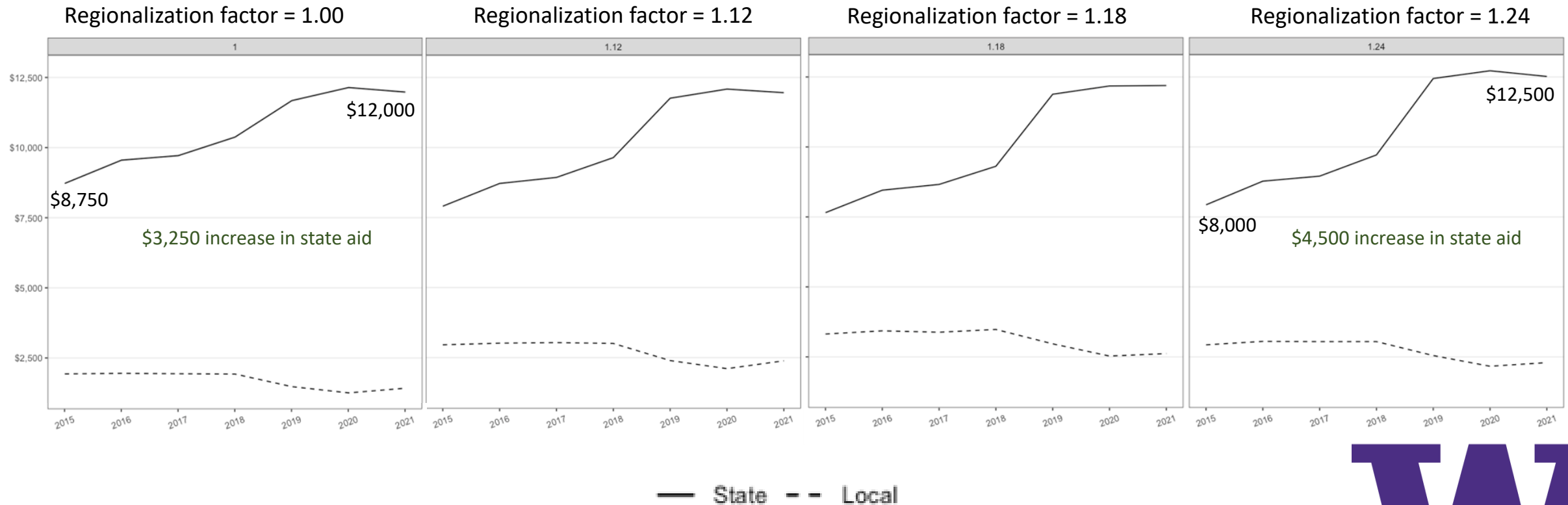2. Levy lids

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Regionalization factors were added in 2018-19 to adjust school funding for local cost of living

- Districts with higher regionalization factors are located primarily in the Puget Sound region

- Districts also receive experience bumps, but these and reg. factors are now being scaled back for many districts

	1
	1.06
	1.12
	1.18
	1.24
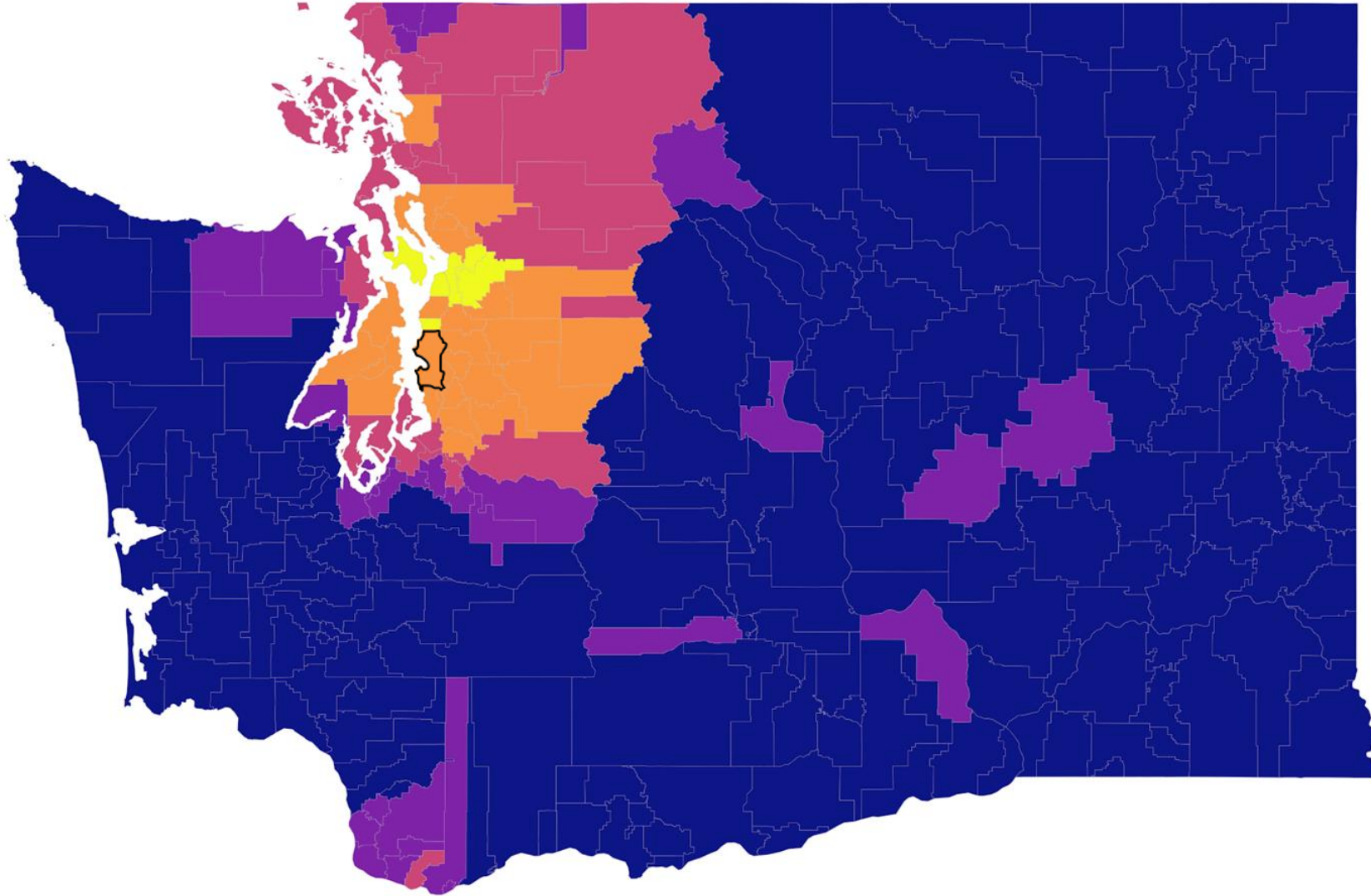
Districts with higher 2018-19 regionalization factors received larger increases in state funding per pupil

Districts with regionalization factors of 1.18 and 1.24 received an additional $4,500 per pupil in state aid, about $1,250 more than districts with no regionalization, who received about $3,250.

Now turning to levy lids

The state switched from a budget-based levy lid to a two-pronged cap (revenue and rate caps)

Before 2018-19
(Pre-Levy Lid Reform):

Districts can pass levies up to 28% of state and fed. revenues ("budget-based" levy lid)

→

Starting 2018-19
(Post-Levy Lid Reform):

Districts can pass levies up to the lesser of $2,500 or $2.50 *

* Note: for one year, during 2018-19, districts could receive levy revenue up to the lesser of $2,500 or **$1.50**, but the rate cap was expanded to $2.50 the next year. Seattle has a special exception of a larger revenue cap. Revenue caps are adjusted each year for inflation.

The state switched from a budget-based levy lid to a two-pronged cap (revenue caps and rate caps)
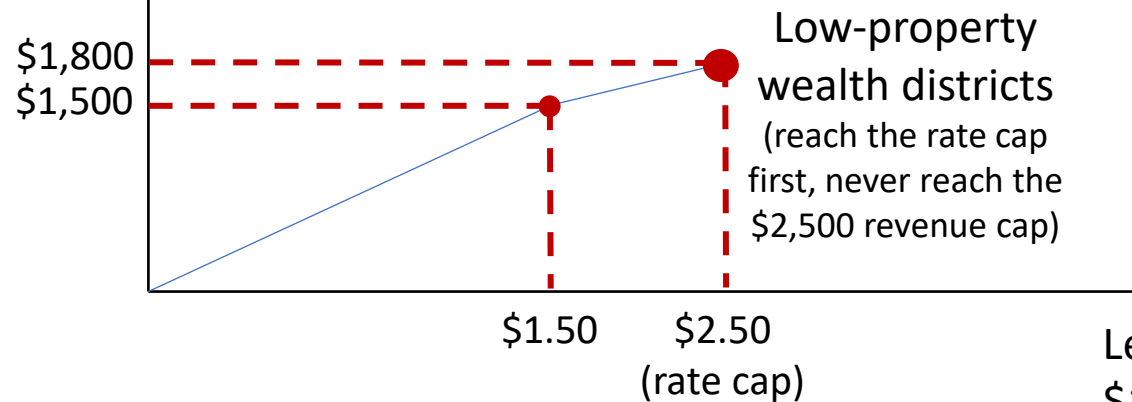
Two key findings related to recent levy lid reforms:

1. Higher-poverty, lower property wealth school districts pay <u>higher levy rates</u>, on average

2. Higher-poverty, lower property wealth school districts generate <u>less levy revenue</u>, and were disproportionately impacted by EHB 2242 *McCleary* levy lid reforms

How do levy lids affect high- and low-property wealth districts? How does Local Effort Assistance work?
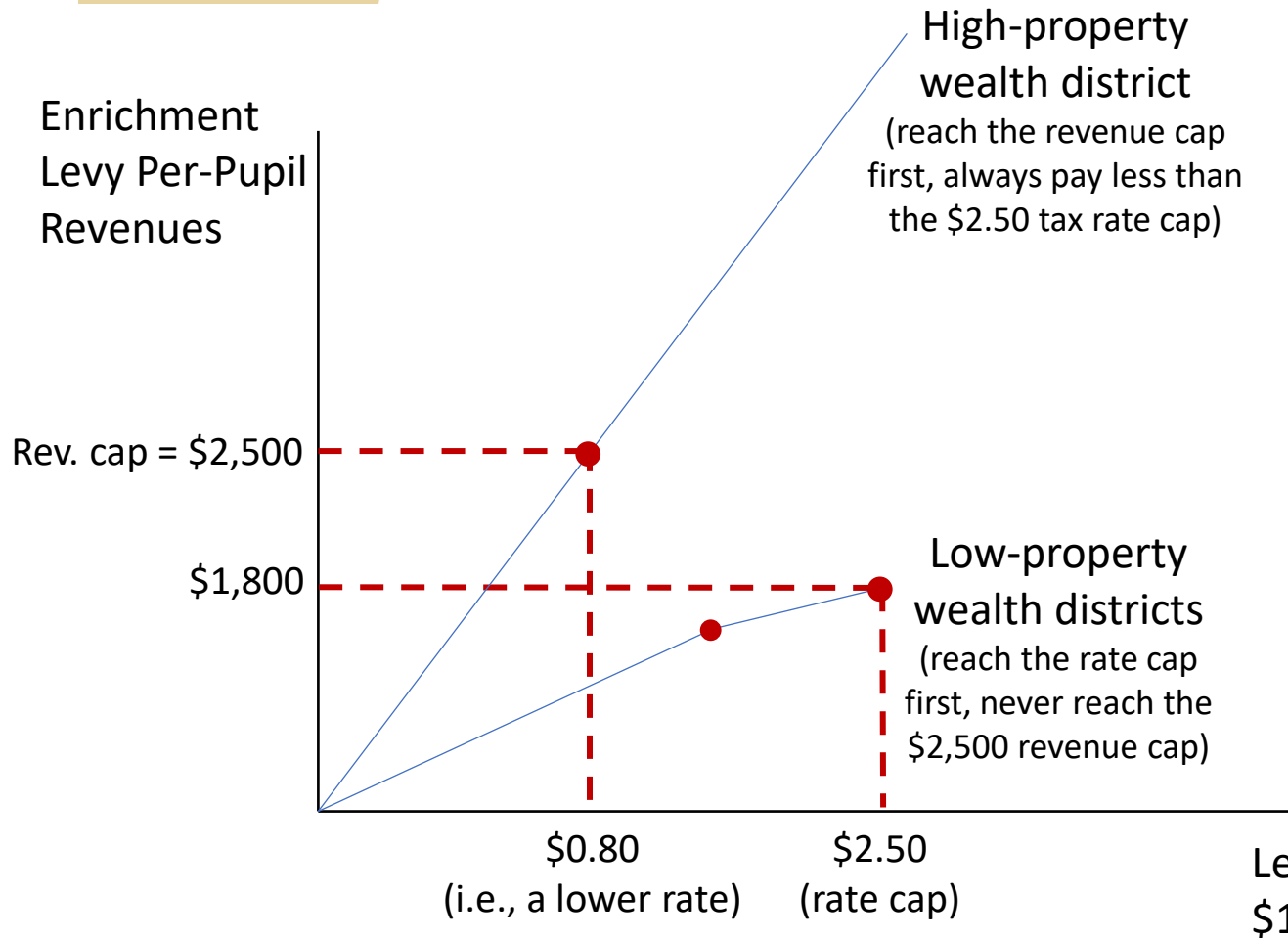
Enrichment Levy Per-Pupil Revenues

$1,800
$1,500

Low-property wealth districts
(reach the rate cap first, never reach the $2,500 revenue cap)

$1.50

$2.50
(rate cap)

Levy tax rate (Dollars per $1,000 of Assessed Value)

- Higher tax rates generate more revenue, but the amount of additional revenue generated (i.e., the "tax price") depends on local property values.

- Districts with lower property wealth have a higher "tax price"

Note: "tax price" = amount of additional tax rate increase required to generate one additional dollar of tax revenue.

# How do levy lids affect high- and low-property wealth districts? How does Local Effort Assistance work?

- Higher tax rates generate more revenue, but the amount of additional revenue generated (i.e., the "tax price") depends on local property values.

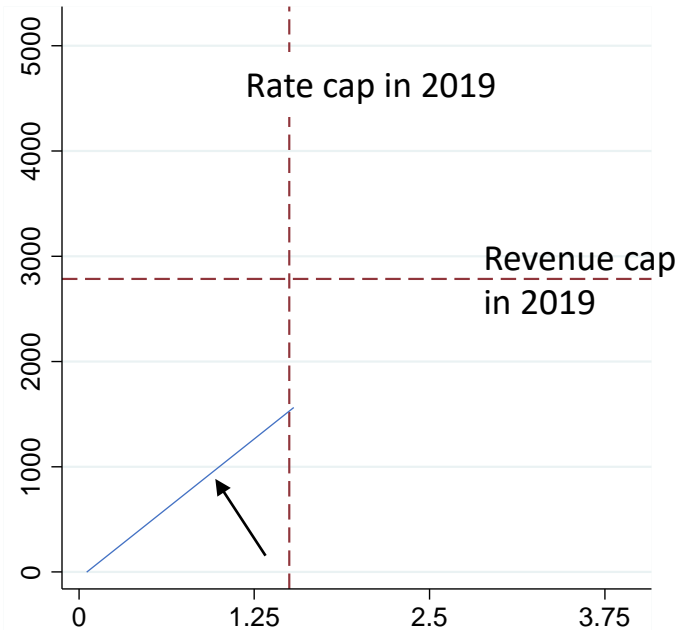- Districts with lower property wealth have a higher "tax price"

High-property wealth district (reach the revenue cap first, always pay less than the $2.50 tax rate cap)

Low-property wealth districts (reach the rate cap first, never reach the $2,500 revenue cap)

Enrichment Levy Per-Pupil Revenues

Rev. cap = $2,500

$1,800

$0.80 (i.e., a lower rate)

$2.50 (rate cap)

Levy tax rate (Dollars per $1,000 of Assessed Value)

Note: "tax price" = amount of additional tax rate increase required to generate one additional dollar of tax revenue.

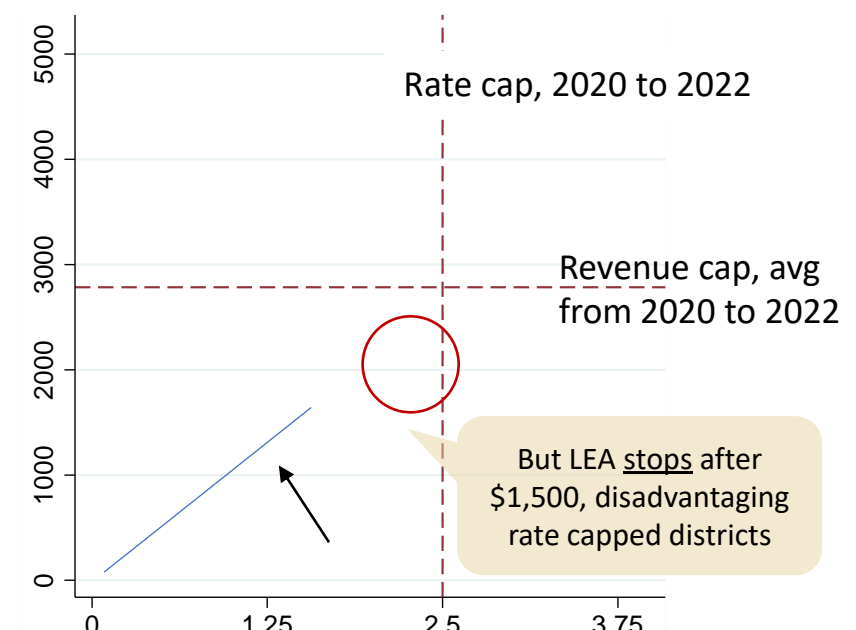# Lower property wealth, "rate capped" districts saw larger declines in local levy revenues (y-axis)

Panel A. 2016 to 2018 Average (pre-reform)
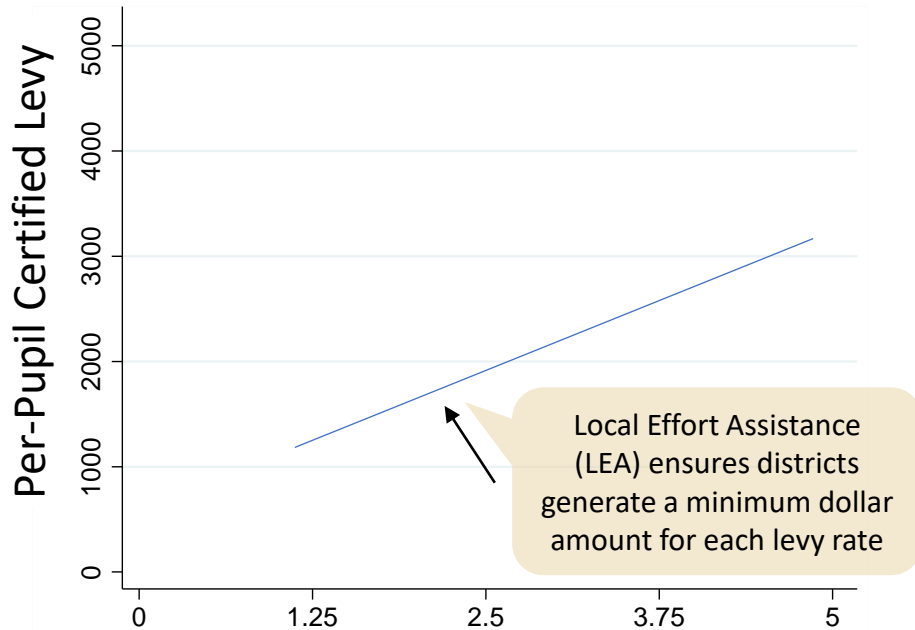
Panel B: 2019 (initial policy change)

Panel C: 2020 to 2022 (post-reform)

Per-Pupil Certified Levy

Levy Rate (Dollars per $1,000 of Assessed Value)

Local Effort Assistance (LEA) ensures districts generate a minimum dollar amount for each levy rate

Rate cap in 2019

Revenue cap in 2019

Rate cap, 2020 to 2022

Revenue cap, avg from 2020 to 2022

But LEA _stops_ after $1,500, disadvantaging rate capped districts

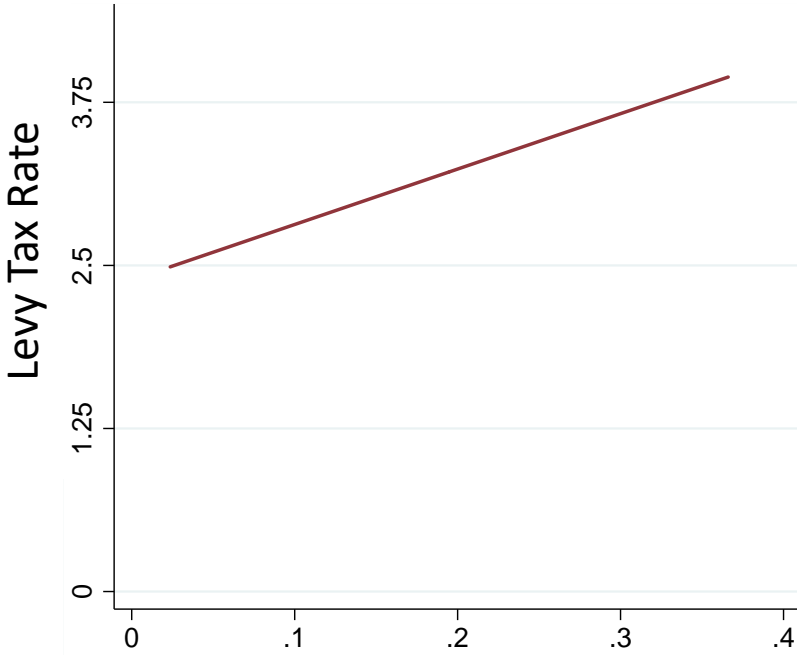Revenue capped districts   Rate capped districts   Not applicable (pre-reform)

A logical question then, is whether higher-poverty, lower-property wealth districts are paying lower tax rates...?
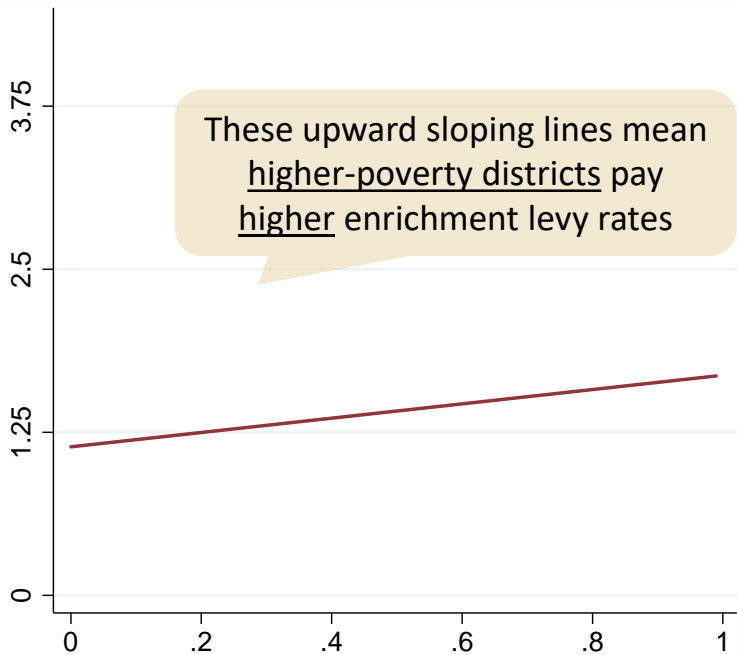
Even with LEA, lower property wealth districts (higher-poverty) pay a higher local levy tax rate

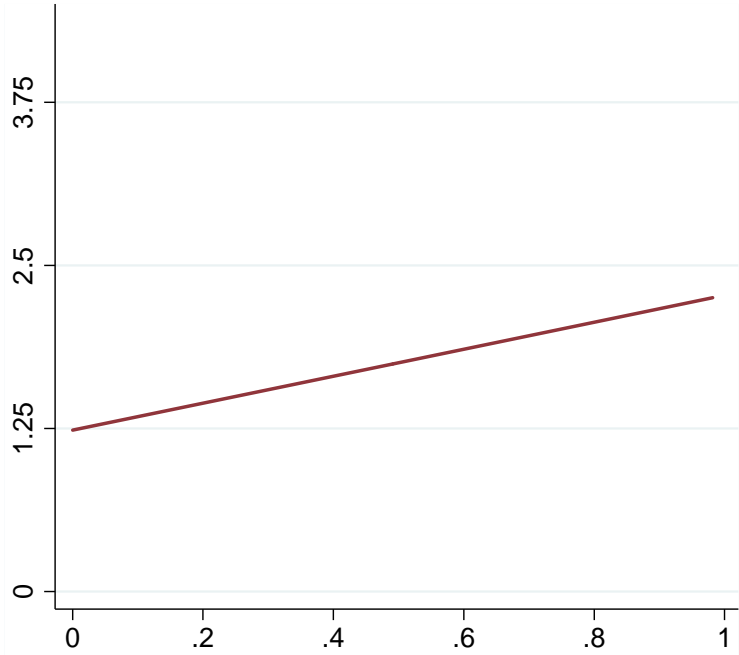**Panel A.** 2016 to 2018 Avg. (pre-reform) **Panel B:** 2019 (initial policy change) **Panel C:** 2020 to 2022 (post-reform)

These upward sloping lines mean <u>higher-poverty districts</u> pay <u>higher</u> enrichment levy rates

% Students Classified as Low Income

Revenue capped districts   Rate capped districts   Not applicable (pre-reform)

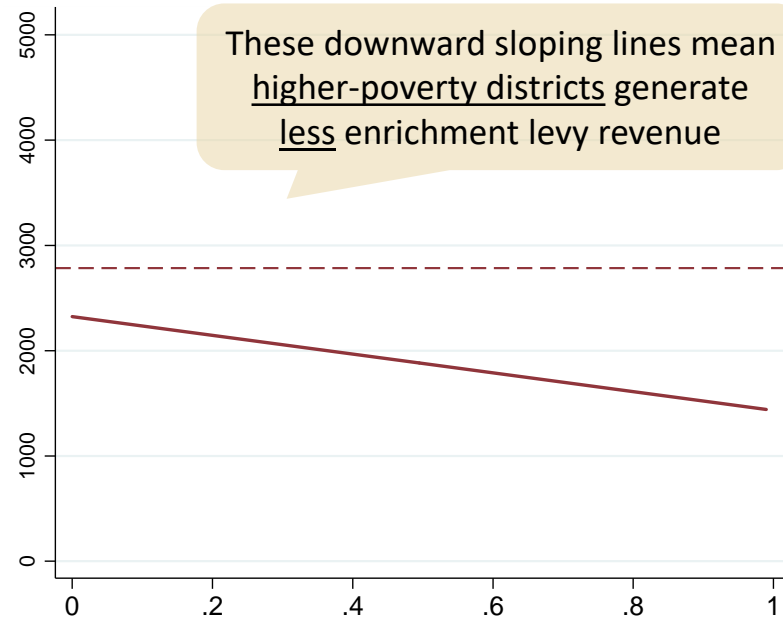But are higher-poverty, lower-property wealth districts are generating more revenues from those higher tax rates…?

And even with LEA, lower poverty wealth districts generate substantially less local revenue
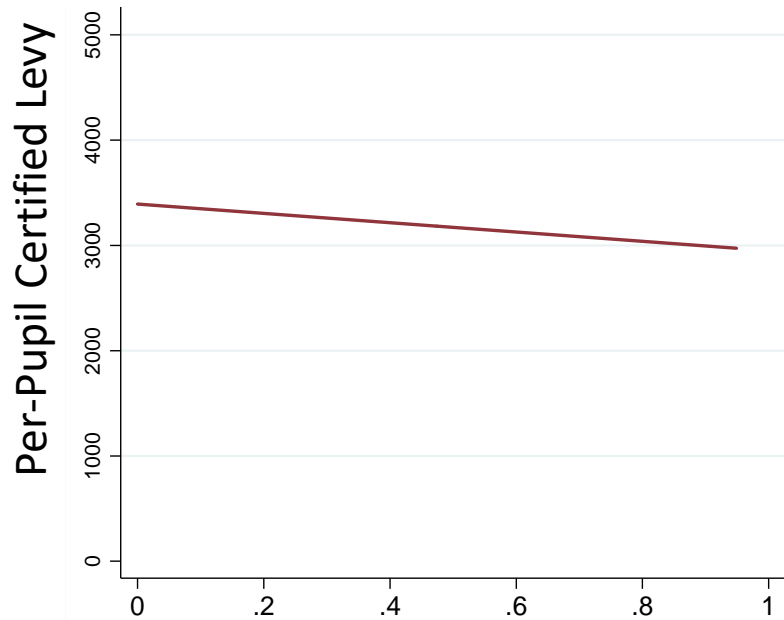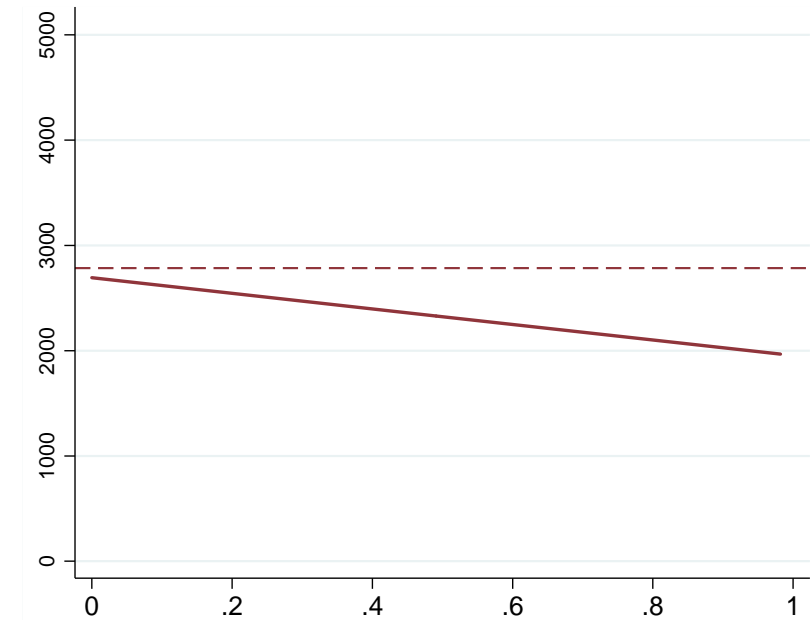
Panel A. 2016 to 2018 Avg. (pre-reform) **Panel B:** 2019 (initial policy change) **Panel C:** 2020 to 2022 (post-reform)

These downward sloping lines mean <u>higher-poverty districts</u> generate <u>less</u> enrichment levy revenue

Per-Pupil Certified Levy

% Students Classified as Low Income

Revenue capped districts   Rate capped districts   Not applicable (pre-reform)

Wrapping up

From prior research, we know…

1. Additional spending improves outcomes <u>on average</u>, but impacts depend on how funds are allocated and used

2. Schools serving higher-poverty student populations require additional resources to provide equal educational opportunity

And from our recent research at the Univ. of Washington, we know…

3. Washington's state school finance system does not allocate funding such that districts have adequate resources to meet student needs

4. Washington's mechanism for generating local property values is inequitable for taxpayers and school districts

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Thank you!

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Ji Ho Yang, M.A.
Alex Lui, M.A.
Claire McMorris, B.A.

Appendix slides

What are the two primary goals of any state school finance system?

1. Provide all children with equal opportunity to achieve common outcome goals
   a) Funding should be both <u>adequate</u> and <u>equitable</u> to meet student needs
   b) Requires more per-pupil resources in some districts (equality v. equity)
   c) WA's policy tools: categorical funding, including Learning Assistance Program (LAP), Transitional Bilingual Instructional Program (TPIB), and special education (SPED), **but** student weights embedded in the Prototypical School Model are only used for SPED.

2. Equalize the tax base to provide equity for taxpayers and school districts
   a) Districts passing levies should have equal opportunity to generate revenues
   b) Households face equal tax burden for given quality of gov. services
   c) WA's policy tool: enrichment levy equalization, called Local Effort Assistance (LEA), **but** no equalization for capital projects levies, tech levies, trans. levies, or bonds.

What policy levers might help address current school finance challenges?

STATE LEGISLATURE

For the short term:
- Increase Local Effort Assistance (LEA)
- Address regionalization
- Increase Learning Assistance Program (LAP)
- Expand capital funding (e.g., SCAP program)
- Assess ESSHB 1238 and ESHB 1436

Broader, bolder changes:
- Add weights to prototypical school model
- Move to a dollar-based funding system, rather than a resource-based

SCHOOL DISTRICTS

For the short term:
- Recognize the inherent inequity in across-the-board cuts
- Consider short term class size increases to avoid RIFs

Broader, bolder changes:
- Develop / strengthen community partnerships to support after school, summer, dual credit, etc.

New funding improved teacher retention

- Most new funding invested in teacher salaries; larger pay increases for veteran teachers (Sun et al., 2022)

- Salary increases improved teacher retention; effects were largest among novice teachers (Sun et al., 2022)

- Preliminary analyses find little impacts on grad rates in years 1 - 4, 2018-19 to 2021-22, or math, ELA prof, but year 2 missing; COVID influence (Candelaria et al., 2023)
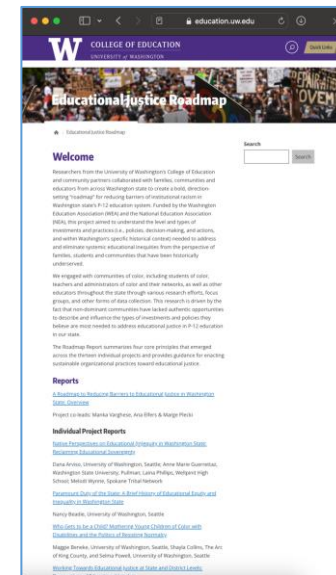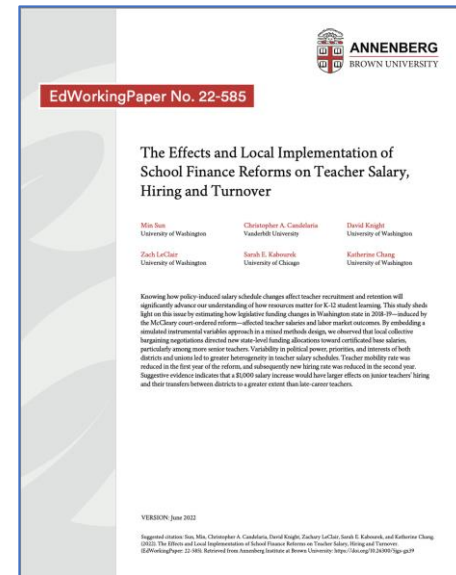
(Sun et al., 2022).
https://www.edworkingpapers.com/sites/default/files/ai22-585.pdf

(Knight et al., 2022).
https://www.education.uw.edu/ejr/

(Candelaria et al., 2023).
https://appam.confex.com/appam/2023/meetingapp.cgi/Paper/48633

Both revenue capped and rate capped districts saw decreases in local revenues (y-axis)

Low property wealth / high-poverty districts pay higher tax price
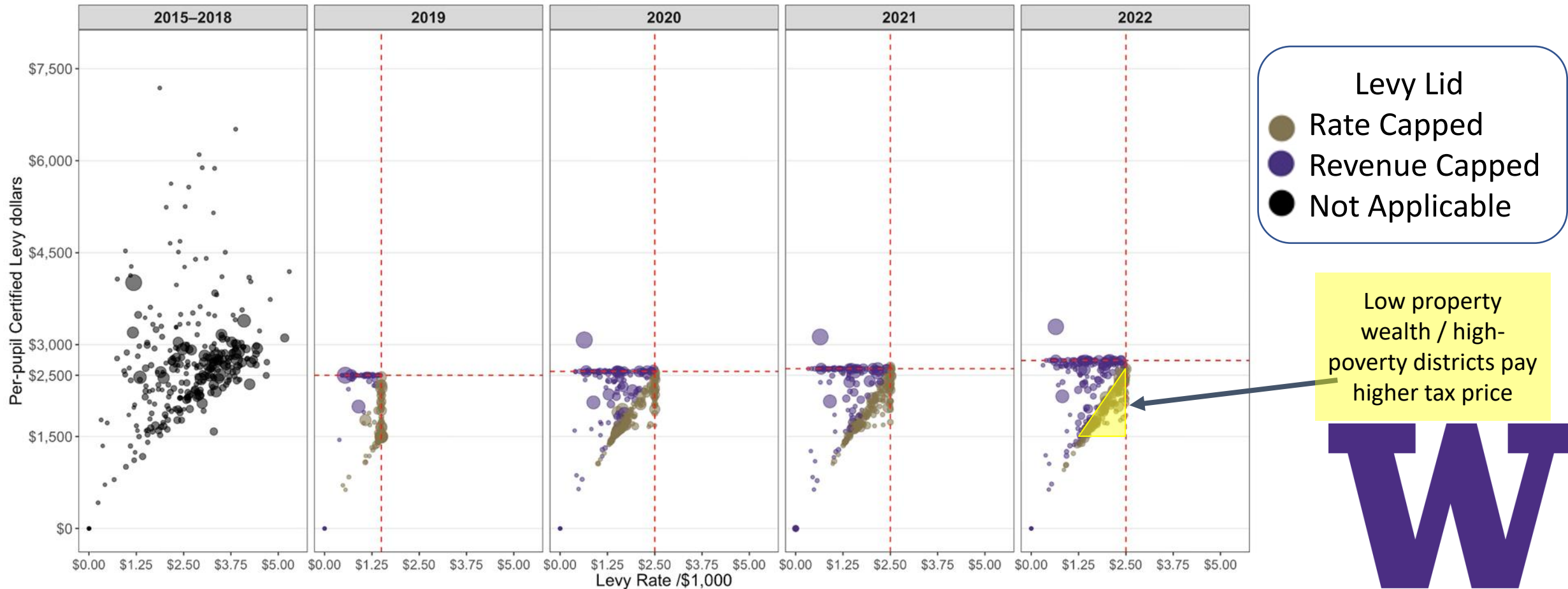
Some districts are levying a tax rate with very high tax price
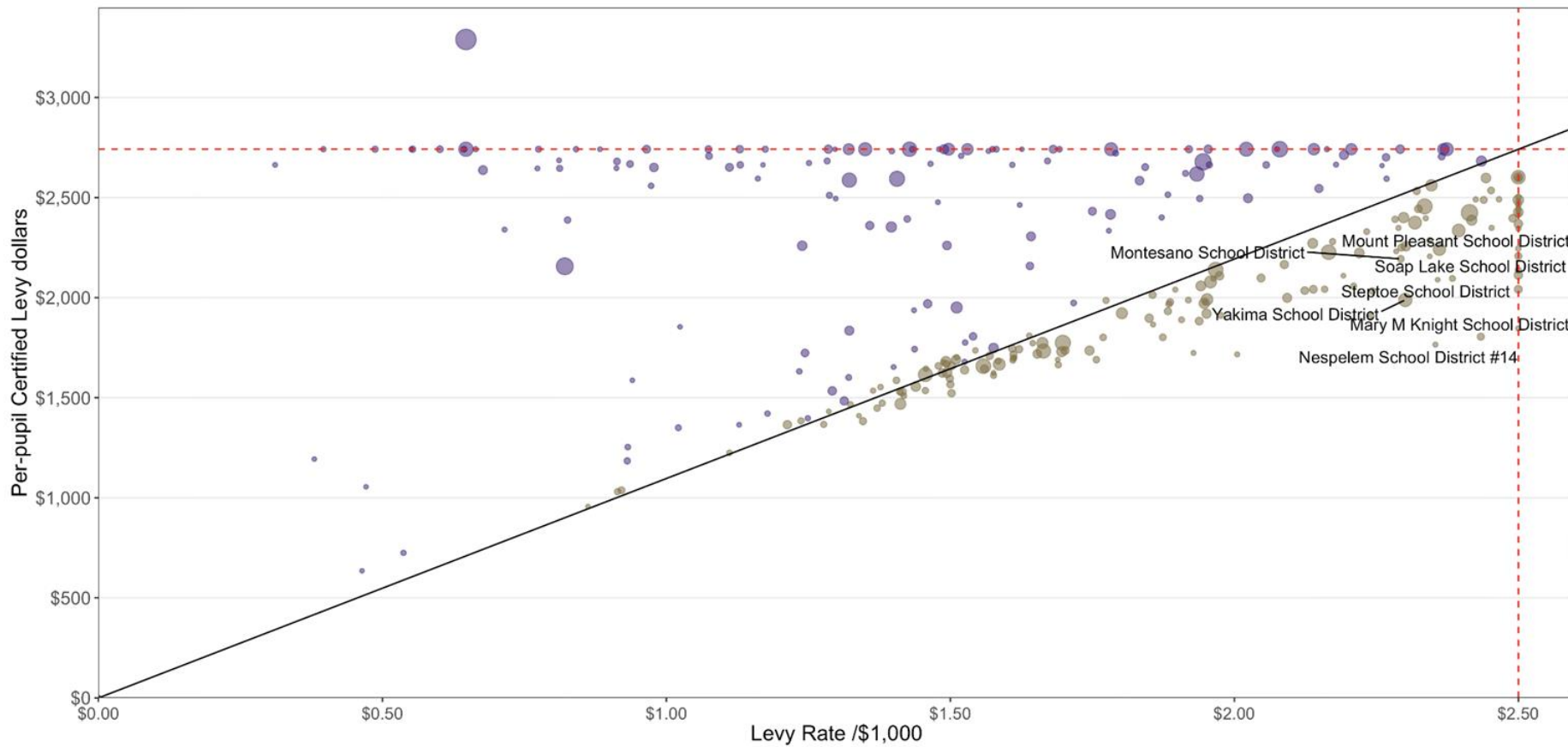
Property values and U.S. Census poverty rates (SAIPE) are positively correlated
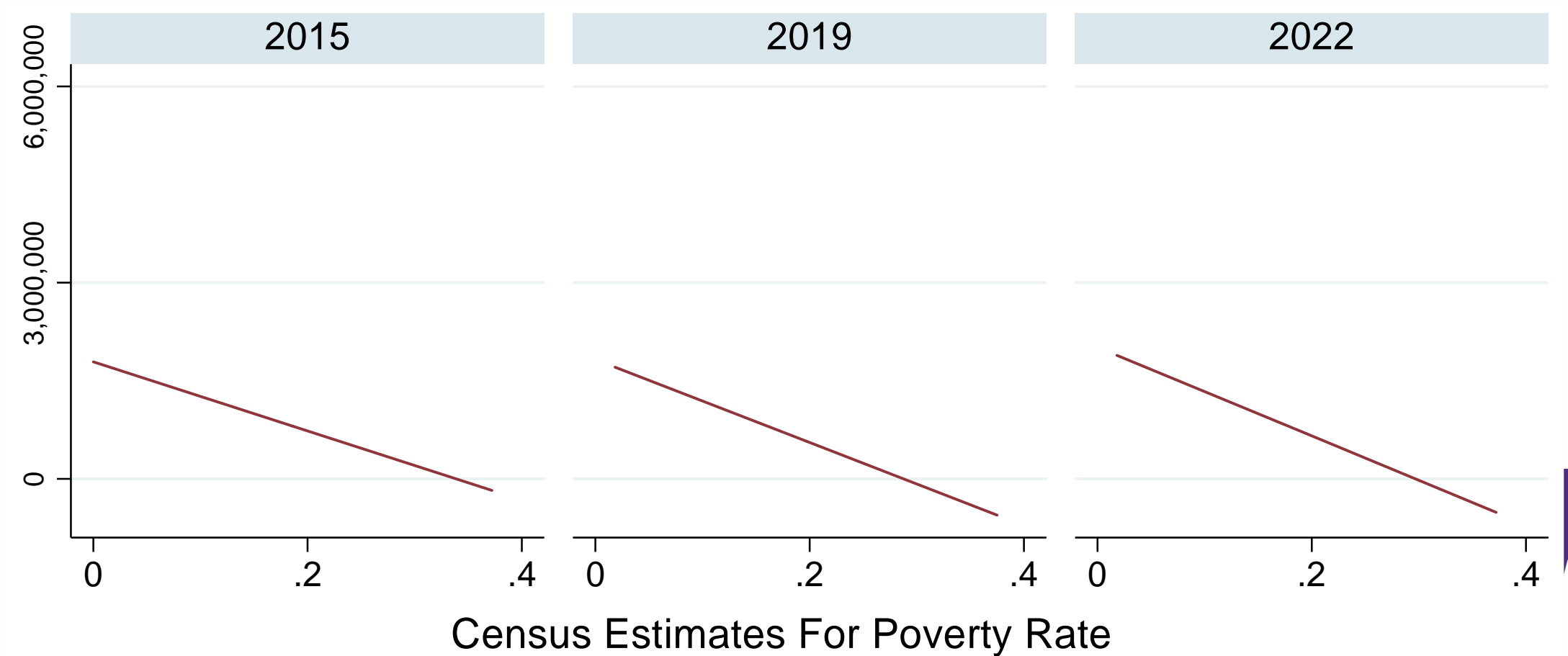
Census Estimates For Poverty Rate

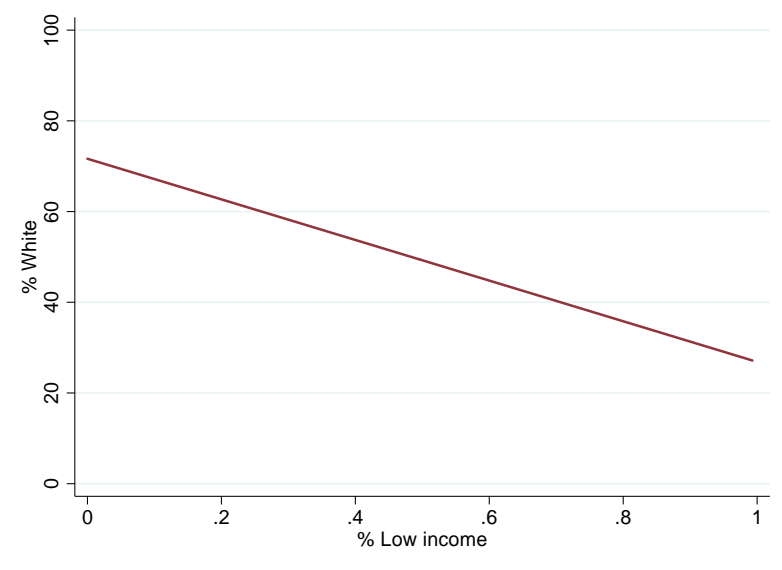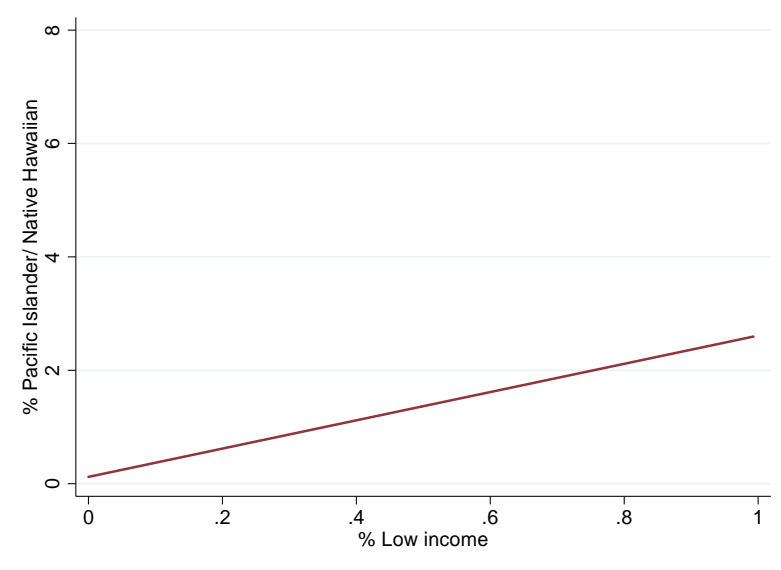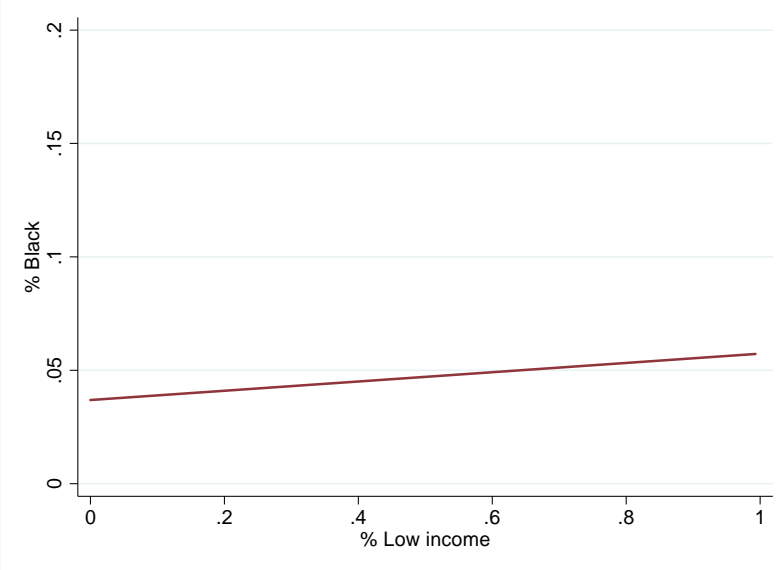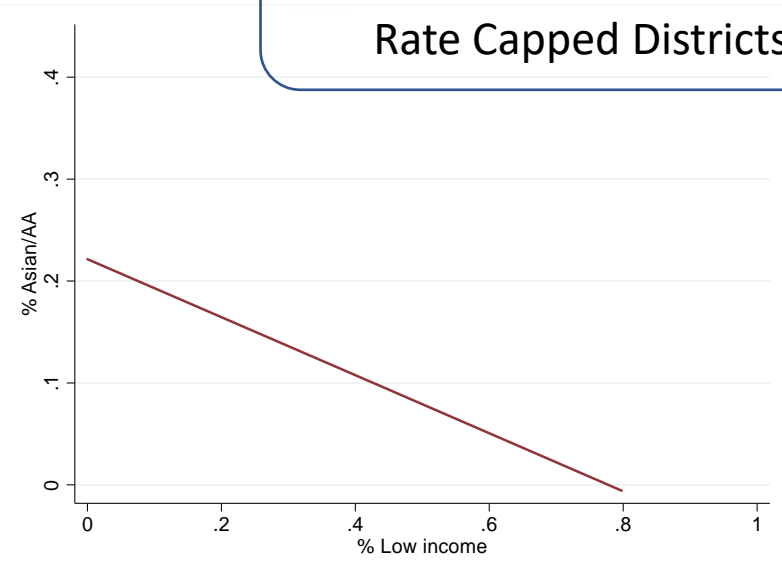# Free/reduced price lunch rates and U.S. Census poverty rates (SAIPE) are positively correlated
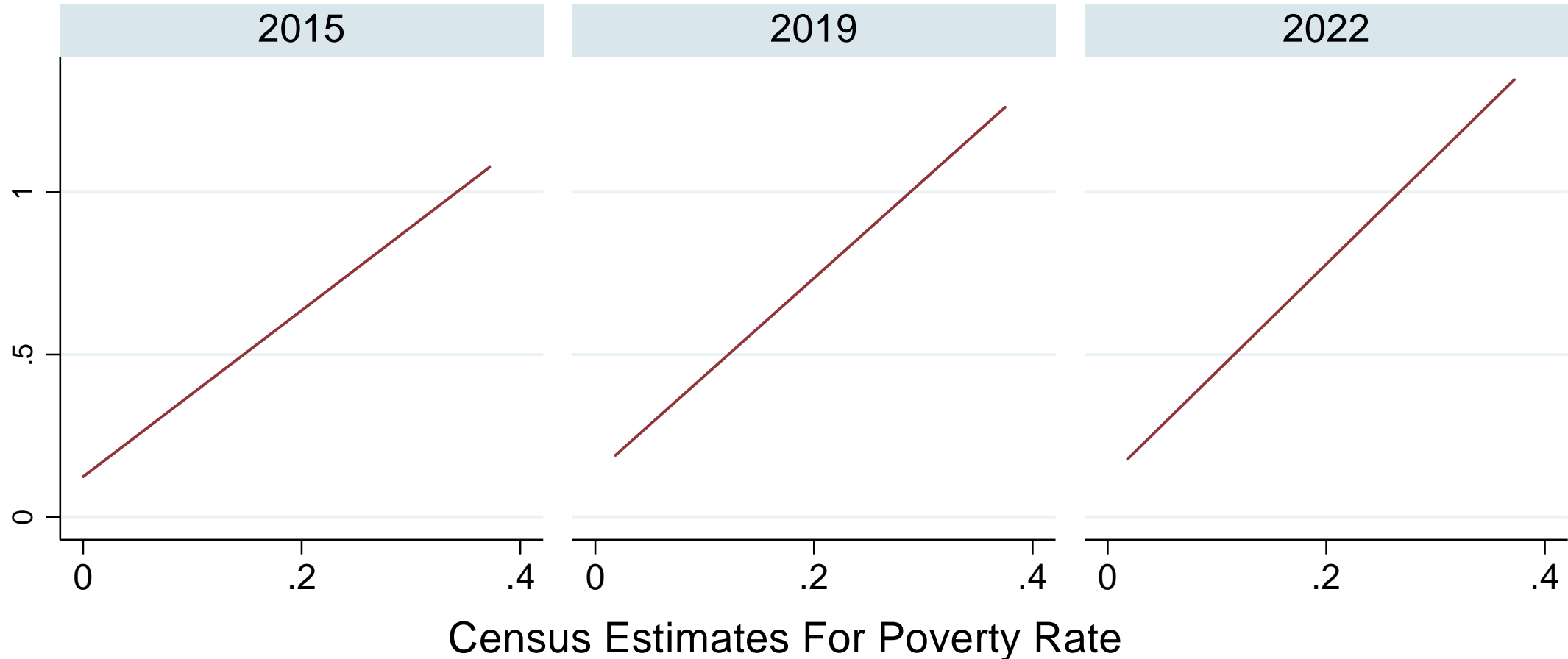
Census Estimates For Poverty Rate

Rate capped districts serve a more racially diverse and higher-poverty student population

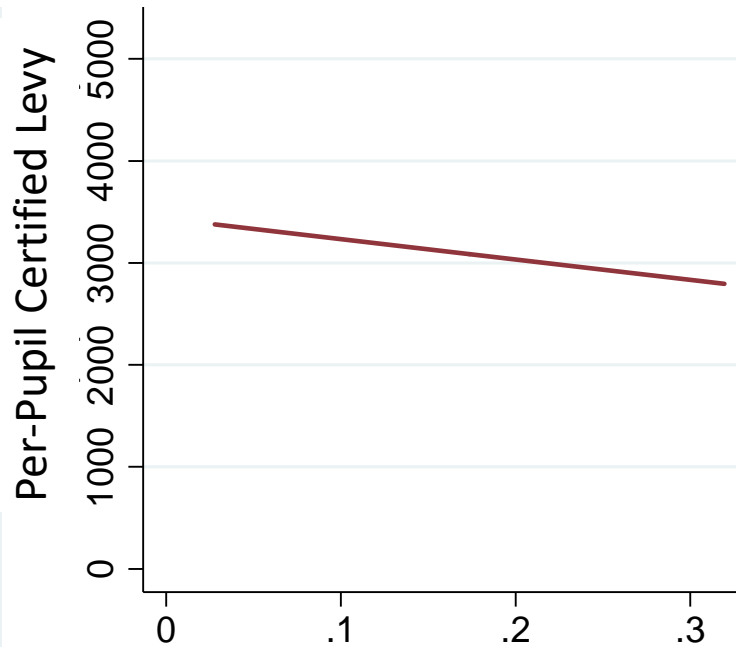

Legend
- Revenue Capped Districts
- Rate Capped Districts
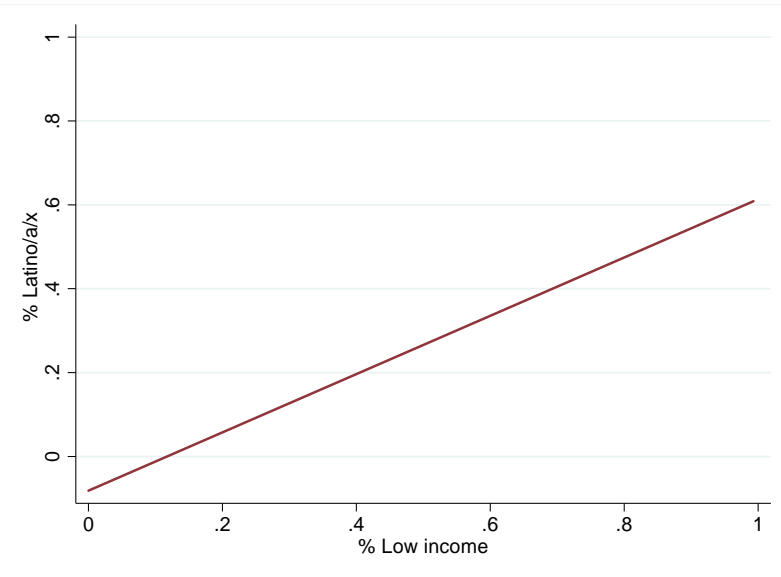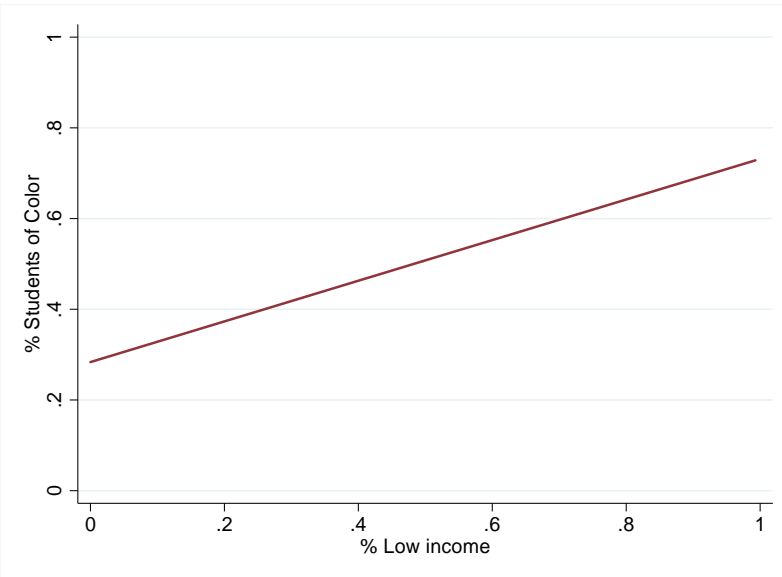
Source: author's calculation based on OSPI enrollment and levy data, school year 2021-22
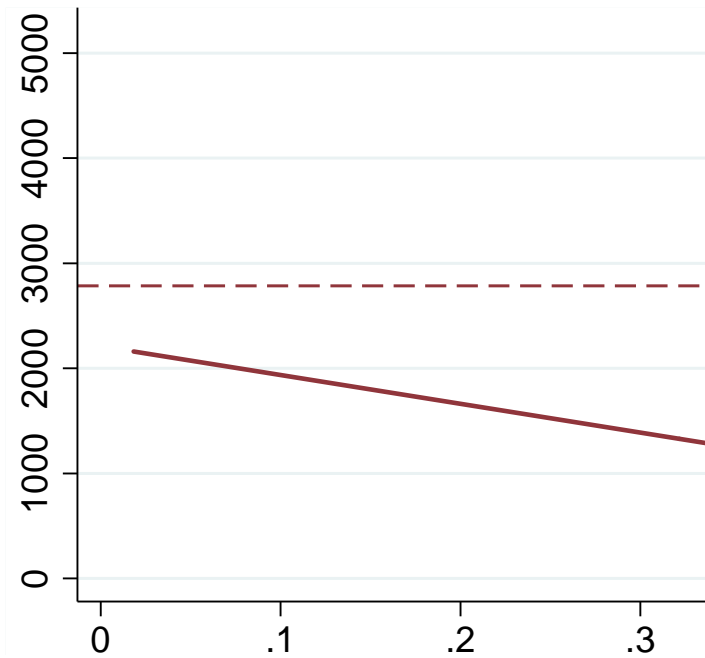
Even with LEA, lower-poverty districts generate substantially less local revenue
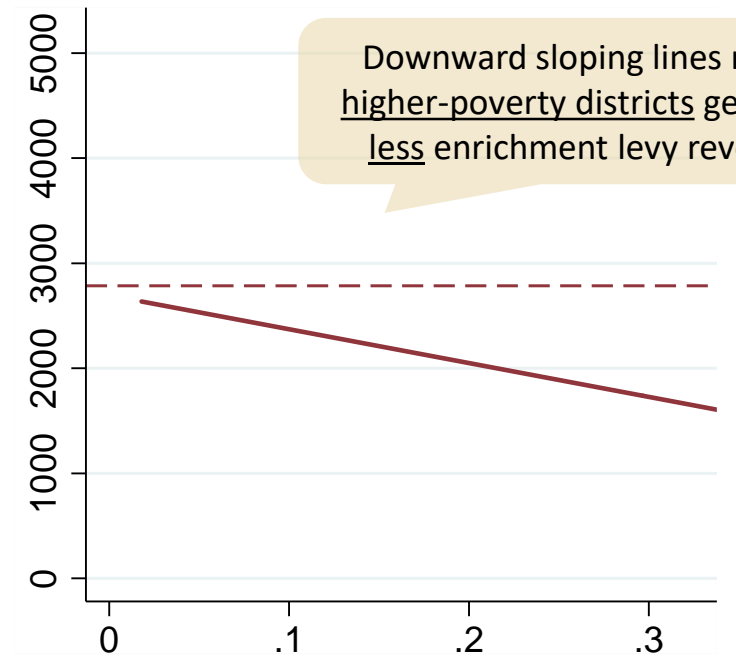
Panel A. 2016 to 2018 Avg. (pre-reform)

Panel B: 2019 (initial policy change)

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Downward sloping lines mean <u>higher-poverty districts</u> generate <u>less</u> enrichment levy revenue

Per-Pupil Certified Levy

Residential Poverty Rate (U.S. Census)

Revenue capped districts

Rate capped districts

Not applicable (pre-reform)