

The Role of Property Assessment Oversight in School Finance Inequality

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National Tax Association 53rd Annual Spring Symposium

Inequality in School Funding

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- Our Paper: Differences in property assessment quality (tax base)
 - Local fiscal and institutional capacity
 - Local PF literature: Differences in property assessment quality
 - Hard to study link between assessments and school finance without an intervention

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Local PF literature: Differences in property assessment quality

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Study property assessment intervention in Kentucky

Assessment quality differences exacerbated funding inequality in low wealth districts

Accounts for 25 percent of funding gap

Link Between Property Assessment and School Finance Inequality

“**Sloppy records, out-of-date maps, understaffed** [assessor] offices and **political favoritism** led to frequent abuses of the property tax system -- the linchpin of local education finances.” Lexington Herald-Leader (1989)

Variation in assessment quality

- A nationwide phenomenon (Local PF literature)
- Potential driver of funding gaps across districts



Pre-reform oversight in KY: Indirect equalization

- Uses measure of assessment level: median assessment-to-sales ratio

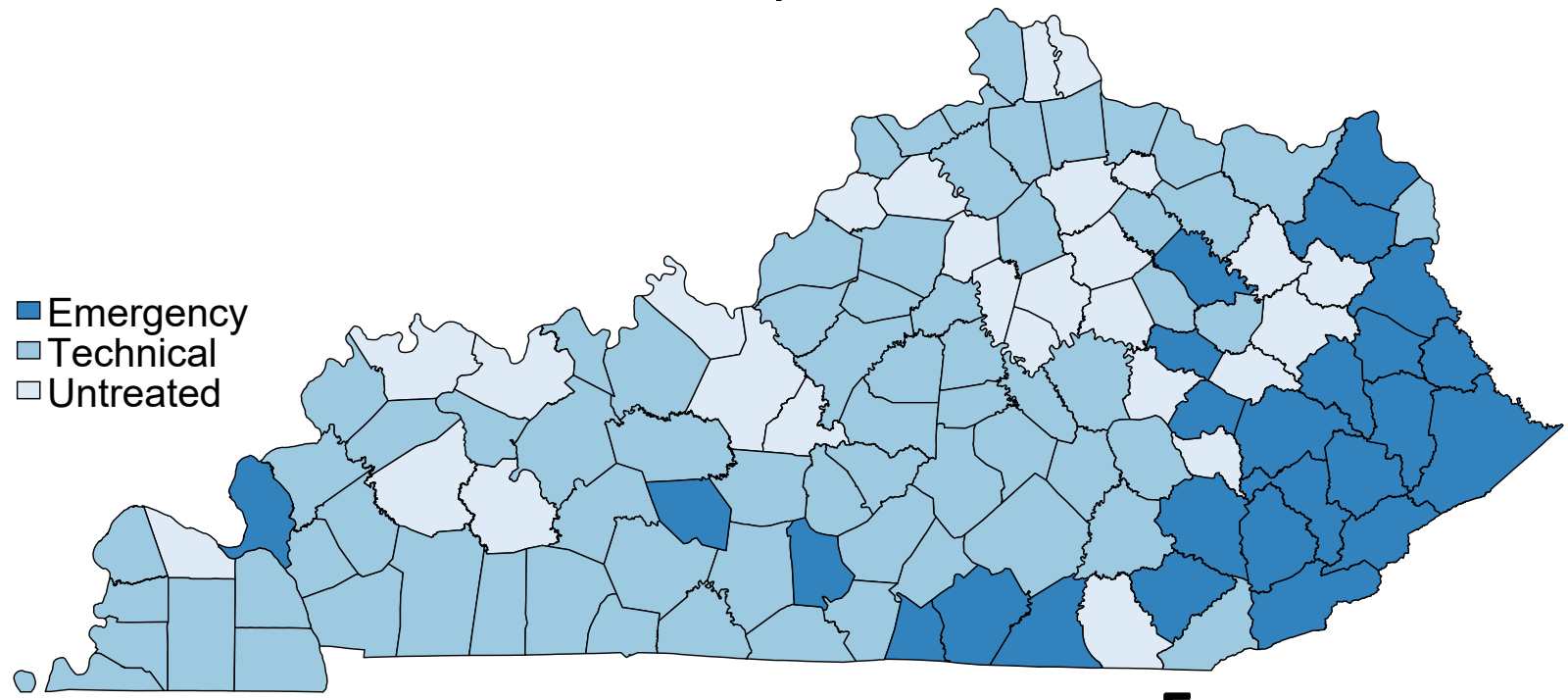
$$\text{Med} \left(\frac{\text{assessment}}{\text{sales price}} \right) = 100 \Rightarrow \text{assessment} = \text{sales price}$$

Policy Intervention

Kentucky school finance reform targets property underassessment

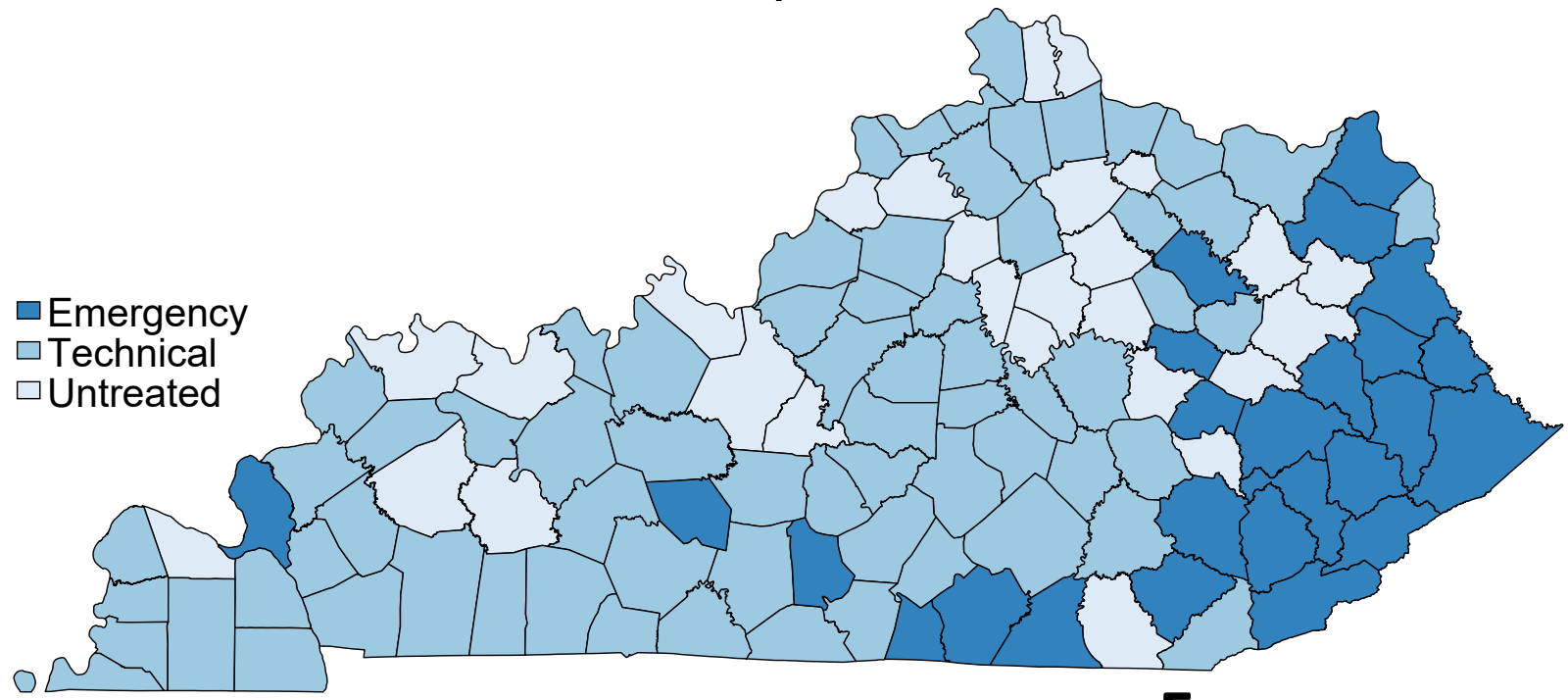
- School reform (1990): More state \$ for districts with lower assessed property values
- Assessment reform (1990-1994): Property re-assessment, technical upgrade program
- Three groups of counties, varying levels of intervention
 - Emergency Reassessment* (N=25), *Technical Assistance* (N=68), *Untreated* (N=27)
- Lifted legal cap temporarily on property tax revenue growth; imposed min tax rates
 - Limit crowd out (offsetting increased in assessments with lower tax rates)

Differences in Assessments and Funding Across County Treatment Groups Pre-Intervention



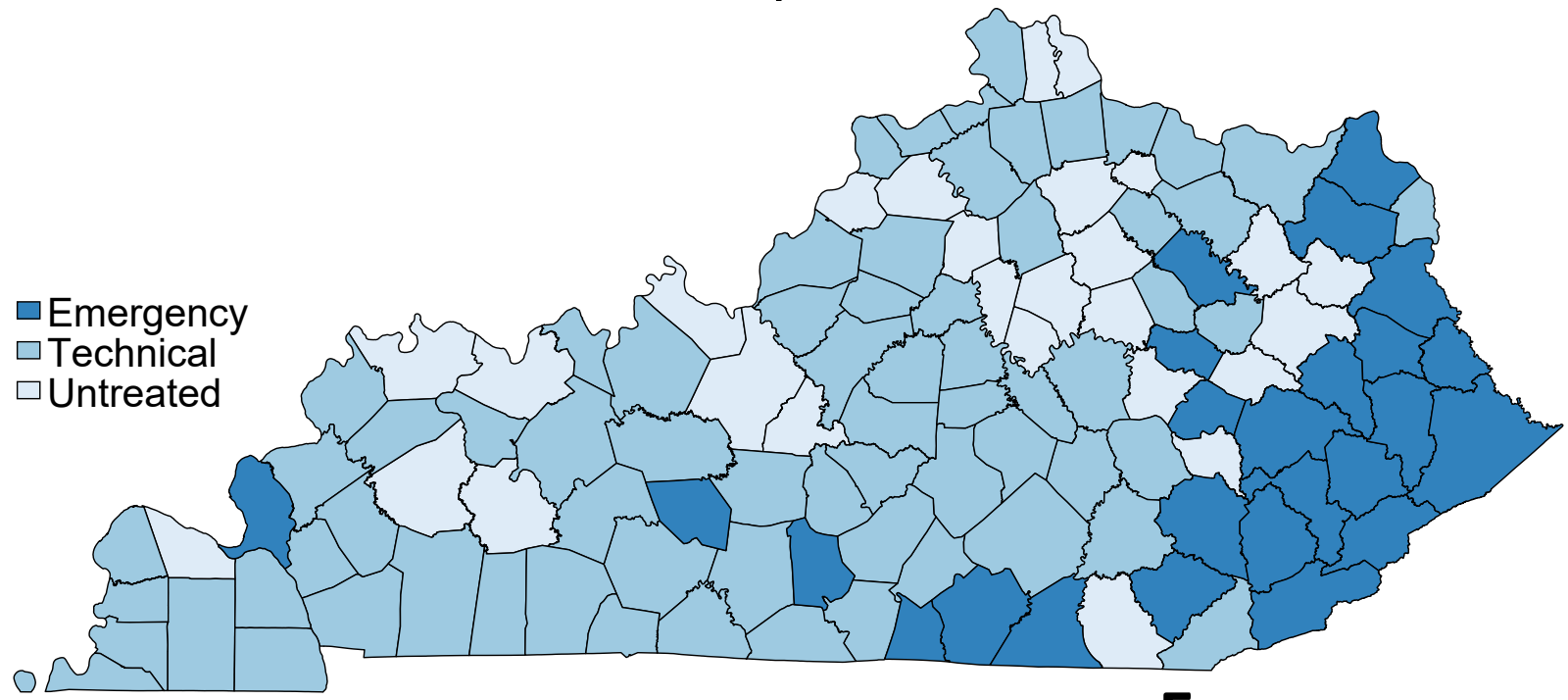
	Emergency	Untreated
Per Pupil Real Assessment, \$1,000	64	145
Res. Median Assessment-to-Sales Ratio (level)	91	92
Res. Coefficient of Dispersion (COD) (spread)	50	26
Total Per Pupil Real School Revenues	5,000	5,400

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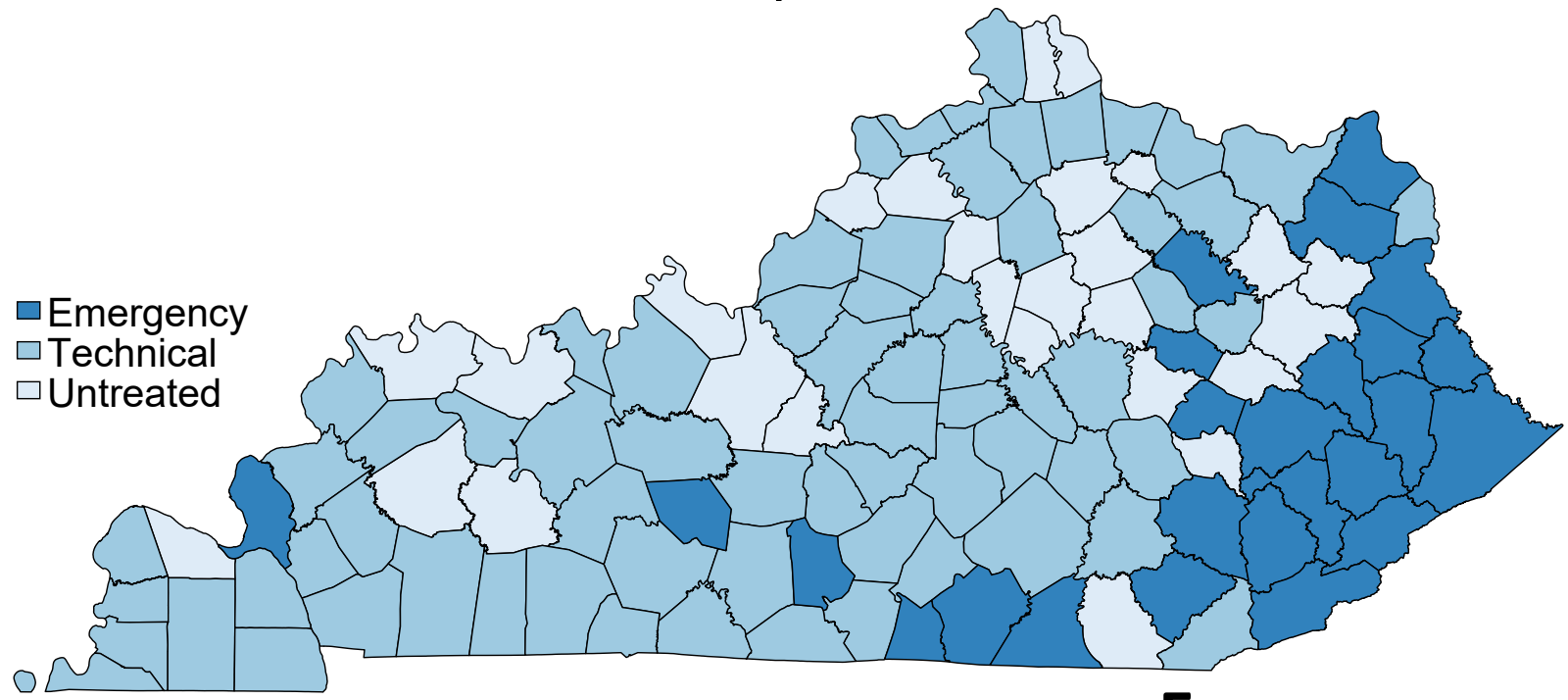
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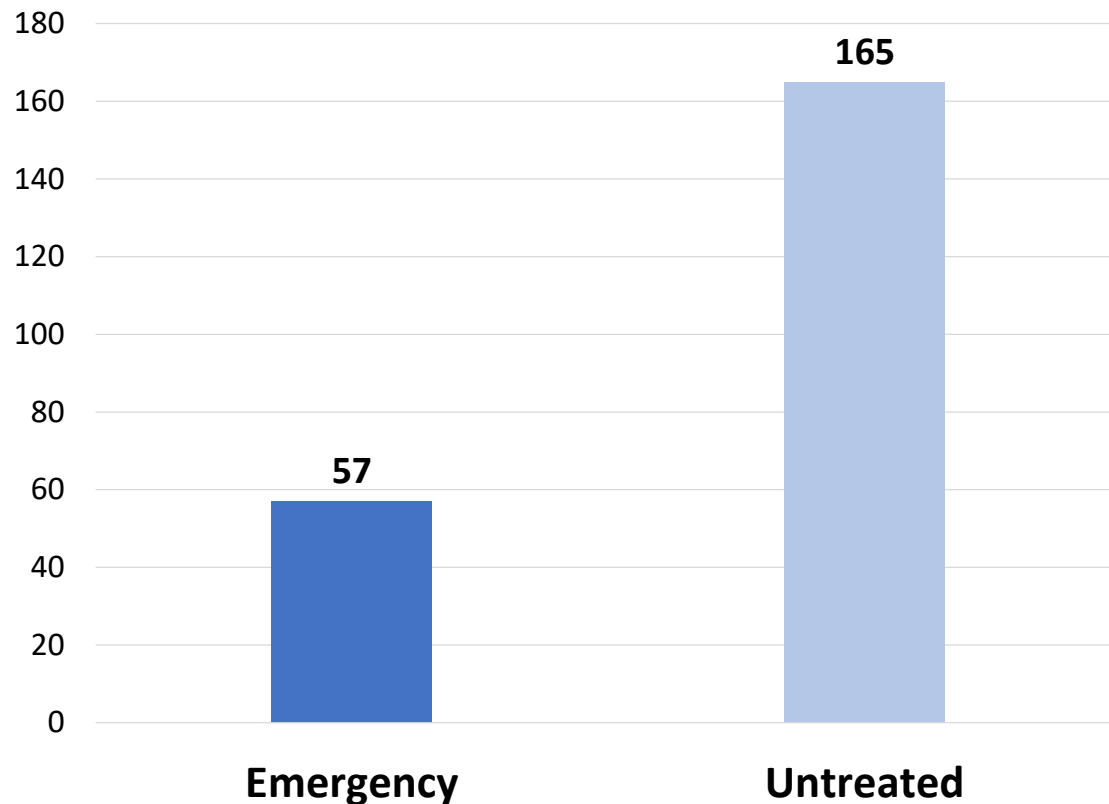


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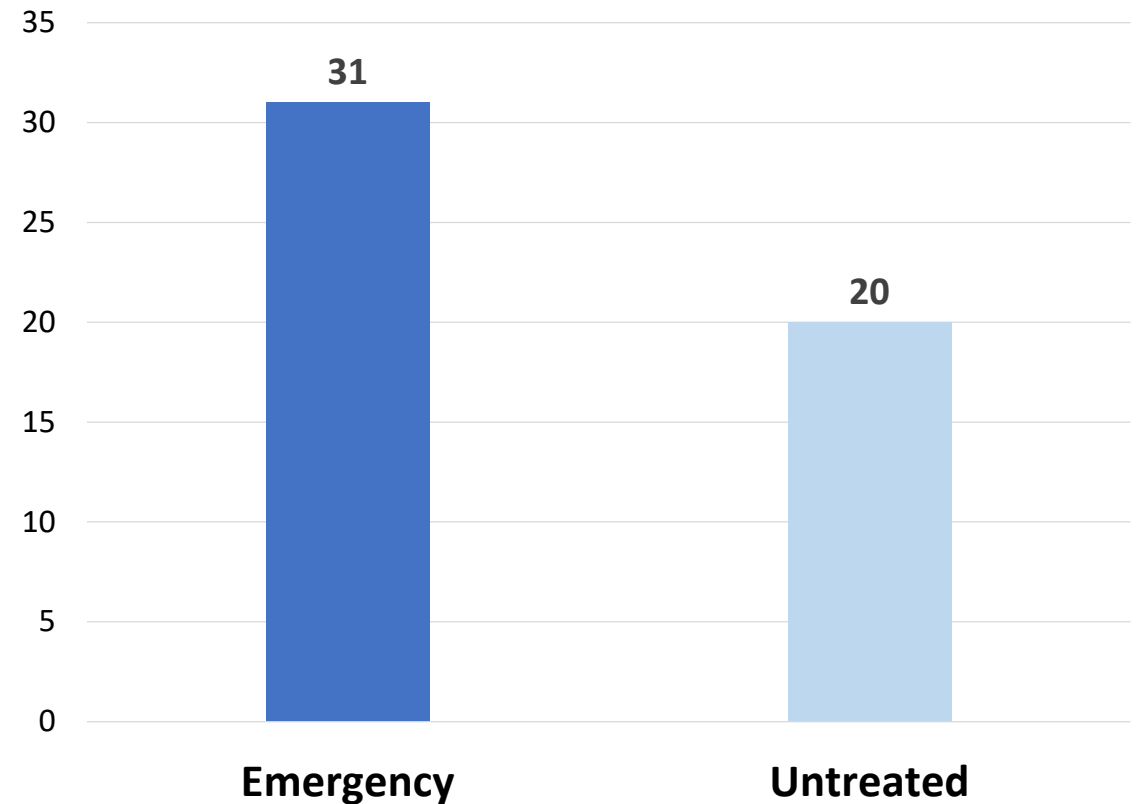
But, Treatment Counties Pre-Disposed to Higher Inequity (CODs)

More rural, “depressed market areas” → Higher inequity in ratios

Population Density (people per mi²), 1990

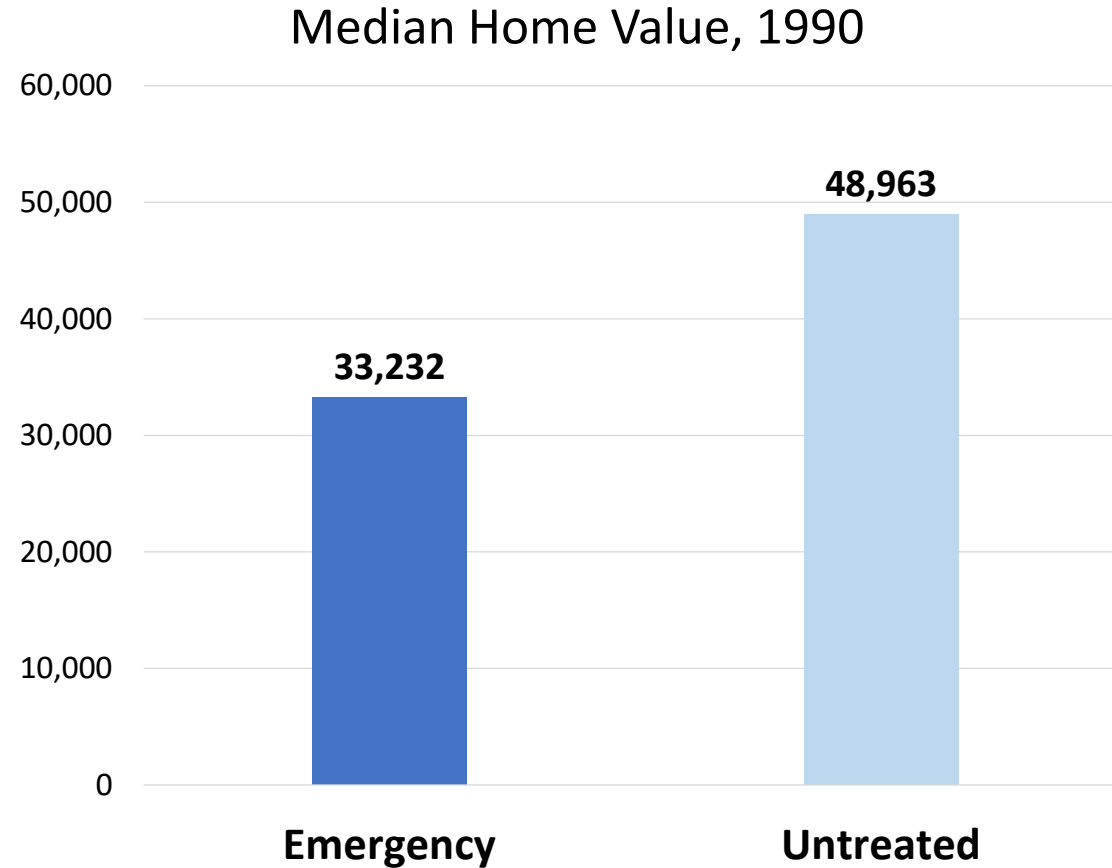


Poverty Rate, 1989



Treatment Counties Also Pre-Disposed to Lower Assessments

Lower median home values → Lower assessments



Tax rates also lower in treatment counties

Empirical Method: Difference-in-Differences

$$y_{it} = \delta_i + \alpha_t + \beta_{1t} \sum_{t \in T} (ER_i \times \alpha_t) + \beta_{2t} \sum_{t \in T} (TA_i \times \alpha_t) + \beta_3 X_{it} + \epsilon_{it}$$

Examine Effects On:

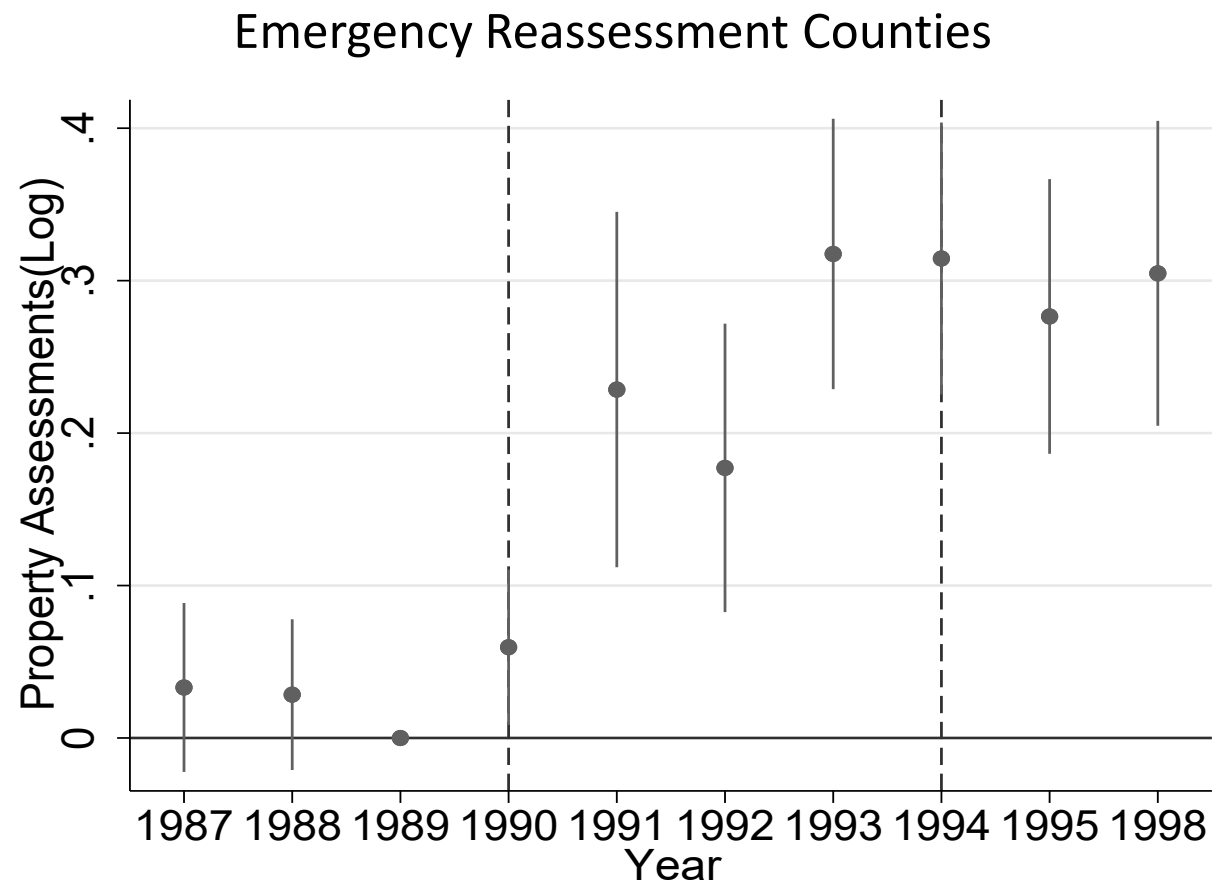
- Property Assessment, County-Level (KY Dept. of Revenue)
Total assessments, median assessment ratios, coefficient of dispersion
- Local Revenues, School District-Level (KY Dept. of Education)

Estimate in calendar time; coefficient at end of intervention period (1994)

Controls

- County and year FE
- Identification challenge: Differential home price growth
 - Direct controls for education finance reform (standard measures from literature)
 - Additional robustness checks

Results: Total Property Assessments Increased

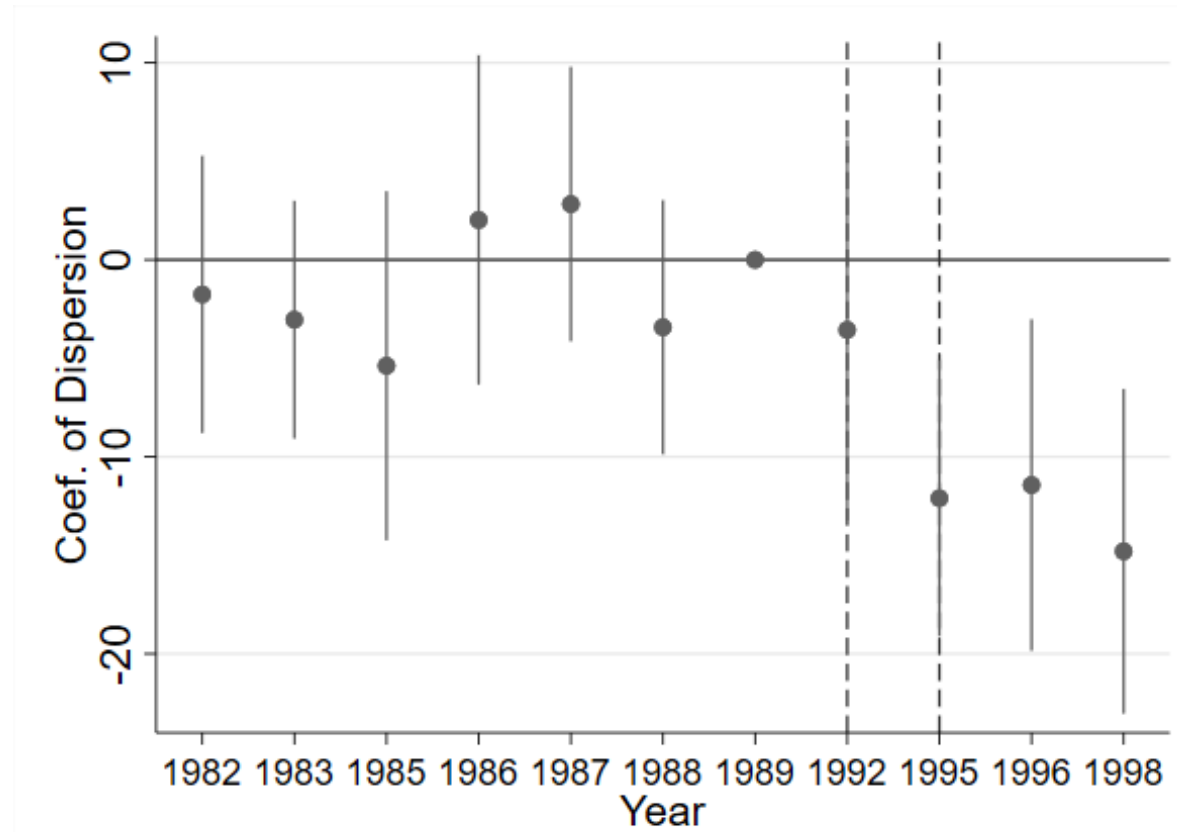


Reduced assessment gap by 25 percent

Results not driven by differential increases in home prices in treatment counties

Results: Assessment Variability (COD) Decreased

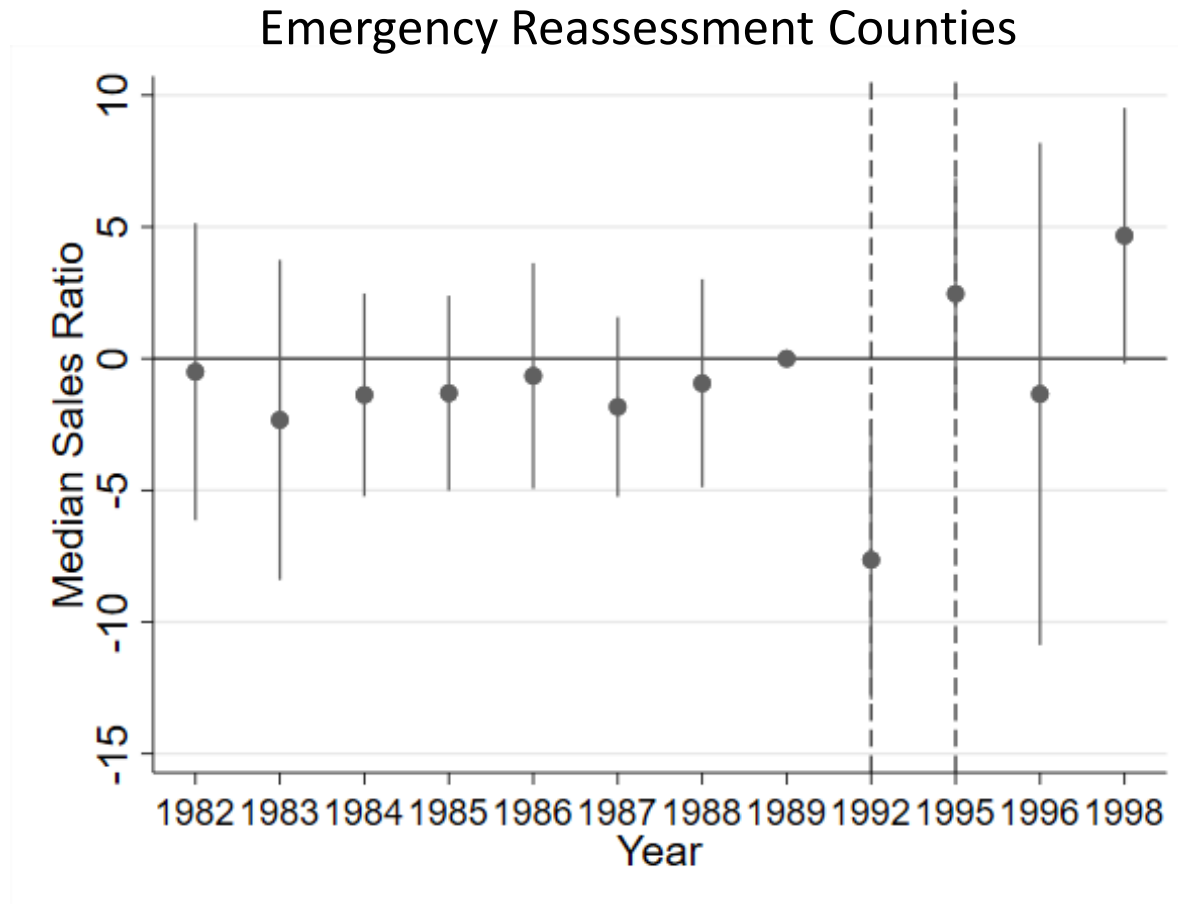
Emergency Reassessment Counties



Emergency County Pre-Intervention Average COD: 50

Results broadly similar for commercial and farm property

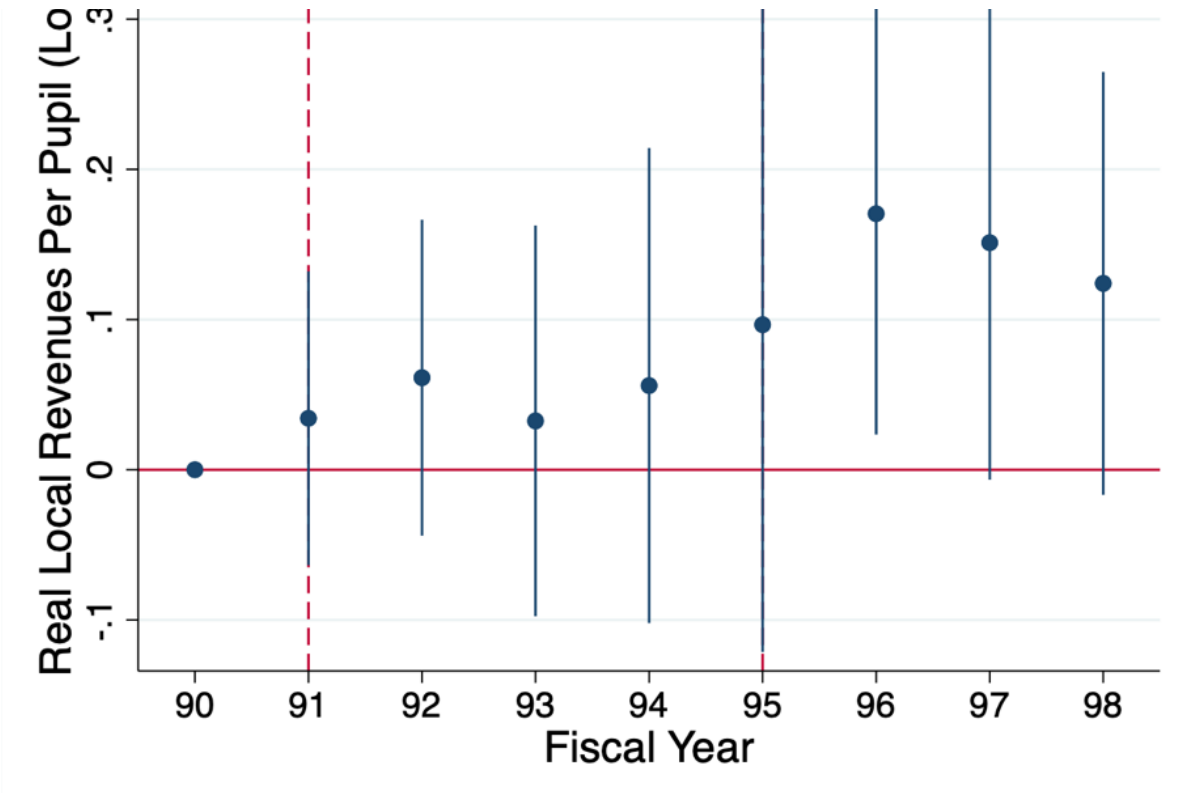
Results: Median Sales Ratios Unchanged



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Results: Total Local Revenue Increased

School Districts in Emergency Reassessment Counties



Approximately \$100 per pupil; **25% of pre-existing funding gap**
[Simulation: 4.5% more funding from the state without intervention]

Results Interpretation & Conclusion

Intervention reduced underassessment and inequity

- Increased total assessments, reduced COD, median ratio unchanged
-> Intervention increased assessment ratios below the median
(Why not above the median? COD would increase, not decrease)

Results suggest favoritism/capacity issues identified by media played a role

- Intervention reduced role of other factors like rurality, depressed markets
- Text analysis shows treatment counties had more favoritism/capacity issues

Main Takeaway

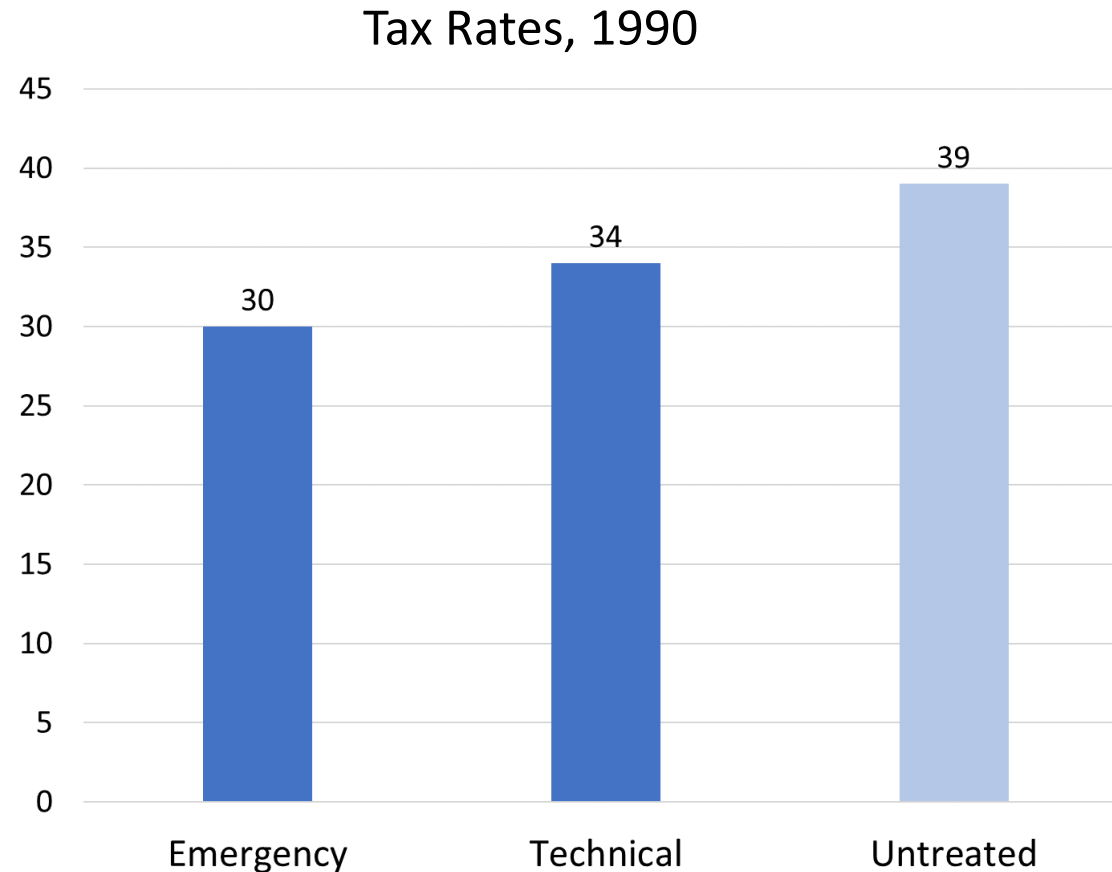
Property assessment is an understudied driver of school finance inequality

Our results suggests its role can be large:

Assessment quality = one quarter of funding disparities across districts

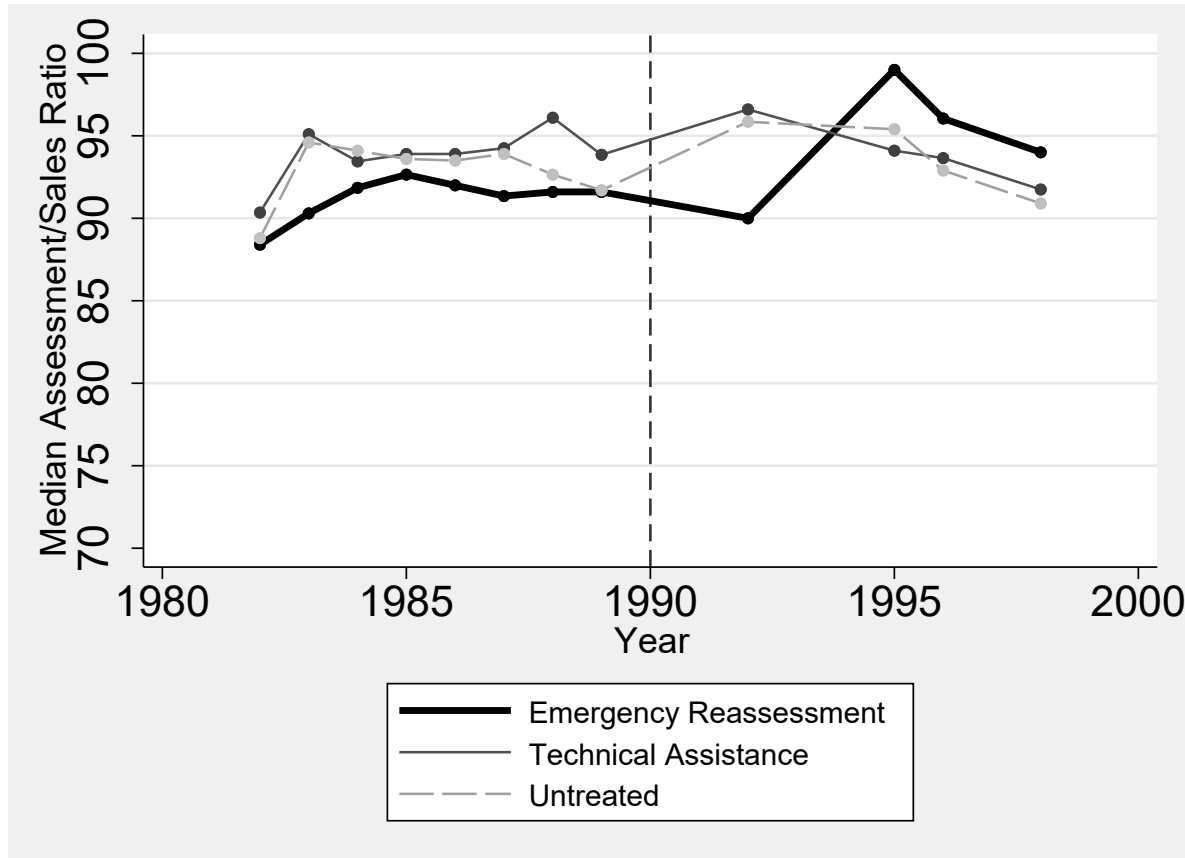
Treatment Counties Have Lower Tax Rates

Do not “offset” lower assessments with higher tax rates

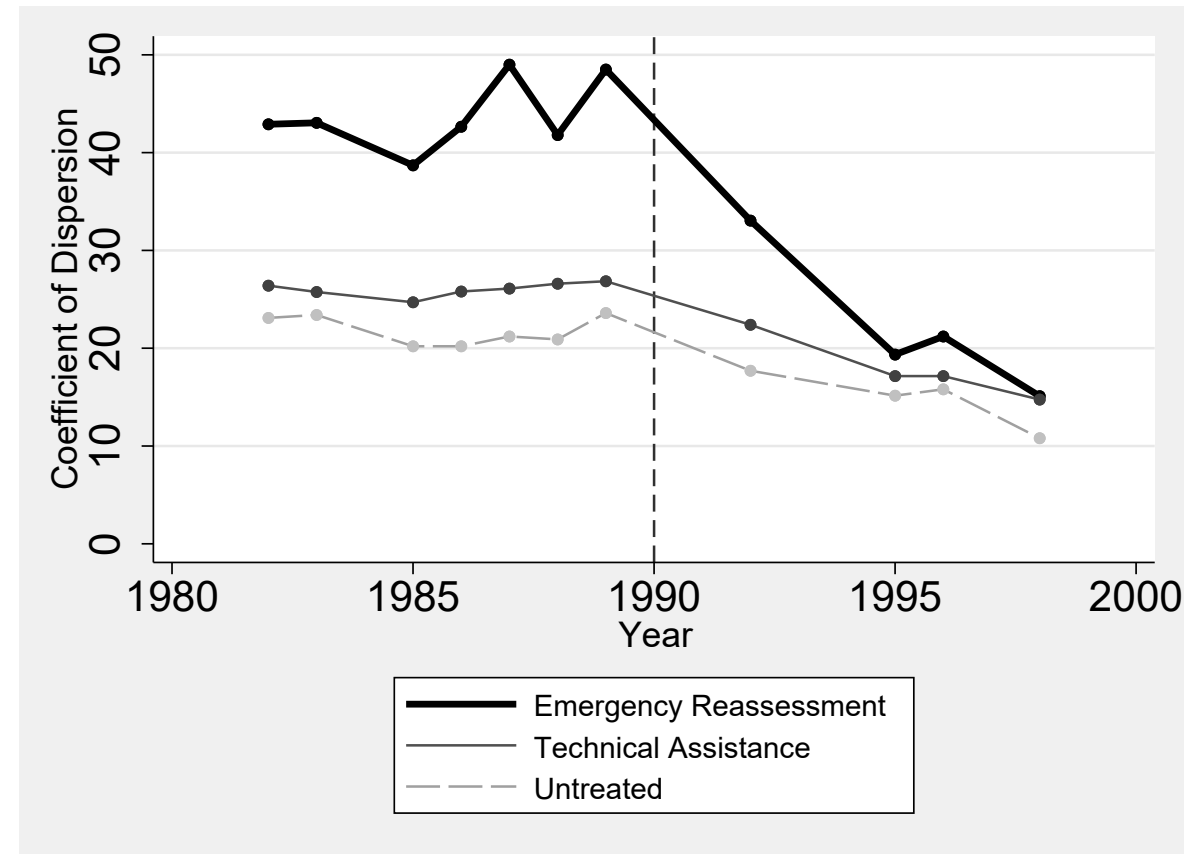


Emergency Counties: Chronic Underassessment and Variability

Assessment to Sales Ratio (Percent), by Treatment Group
"Across The Board Underassessment"



Coefficient of Dispersion, by Treatment Group
"Some Properties Get A Break"



County-year level administrative data from the Kentucky Department of Revenue. Ratio studies data collection was limited due to the re-assessment program for 1990, 1991, 1993, and 1994. COD data also missing for 1984.