Responsiveness in a Fragmented Local Politics

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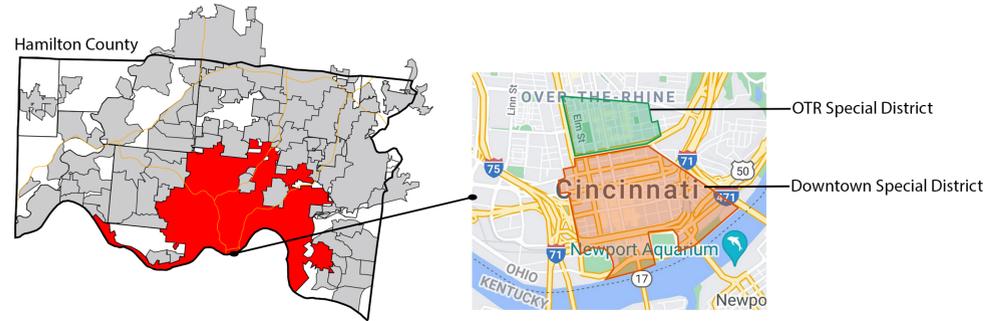
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Responsive Politics or Static Cities?

Are local governments responsive given their overlapping nature? To examine responsiveness at this level, I **implement** a framework that takes into account multiple overlapping institutions and **estimate** a novel measure of local preferences for cities over time. I have three major findings using a within-between random-effects model: (1) cross-sectional responsiveness exists; (2) I find mixed evidence for dynamic responsiveness; (3) I find suggestive evidence that consolidated governance fosters greater responsiveness. In all, I **reframe** the responsiveness discussion away from a single governing unit to a holistic system of overlapping institutions.

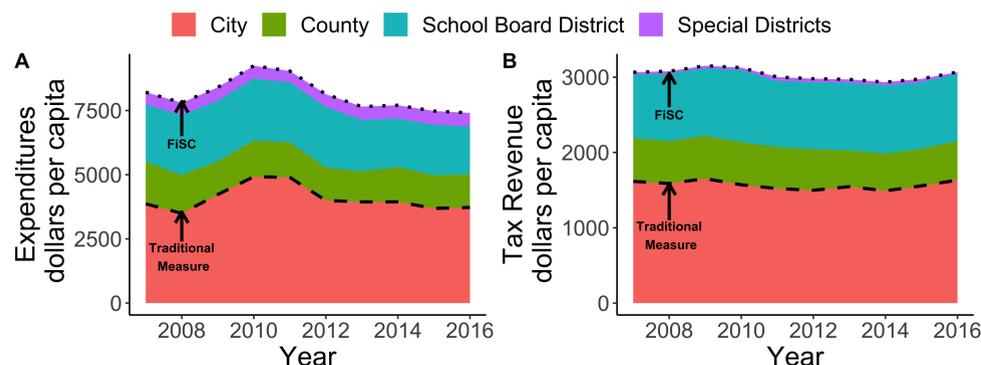## Motivation: Overlapping Institutions of Cincinnati, OH

Research Questions

- RQ1: Does cross-sectional responsiveness exist?
- RQ2: Does dynamic responsiveness exist?
- RQ3: Does consolidated government modify the effect of public opinion on policy outcomes?

Sample: Fiscally Standardized Cities

- Fiscally Standardized Cities (FiSC) provide an **aggregate measure** of taxation and spending of overlapping governments within the geographic boundaries of cities (Langley 2013)
- Sample includes **200 cities** across **10 years**
- Traditional measure of expenditures and tax revenue fail to capture the full range of goods, services, and costs of local government
- The FiSC measure of government provides a better approach to analyze local governance

Stacked Expenditures and Tax Revenue for FiSC: Cincinnati, OH

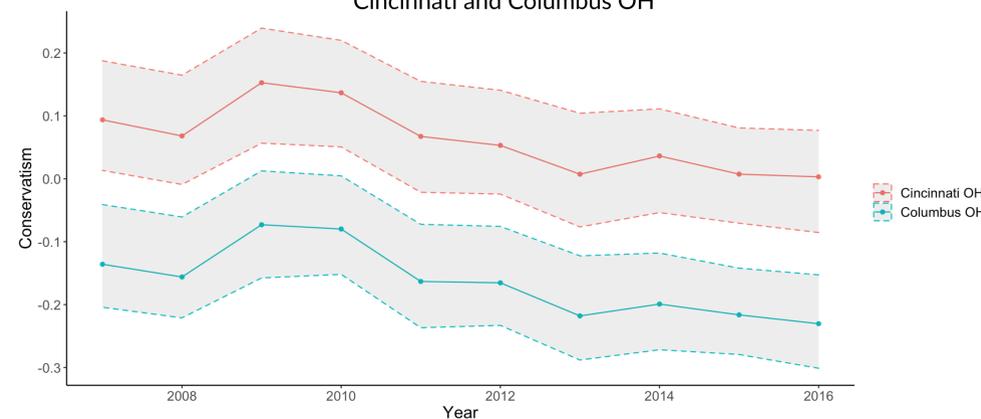## Novel Measure of Dynamic Local Ideology (N > 500,000)

- New dataset including self-placement ideology from multiple surveys:
  - Cooperative Election Study
  - National Annenberg Election Survey
  - Gallup Social Series Poll
- Over a half a million respondents
- Dynamic Multilevel Regression and Post-Stratification (MRT) (Gelman et. al. nd.)

$$x_{it} = \gamma_1 \text{year\_std} + \gamma_2 \text{year\_std\_sq} + \alpha_{r[i]}^{\text{race3}} + \alpha_{e[i]}^{\text{education3}} + \alpha_{g[i]}^{\text{gender2}} + \alpha_{l[i]}^{\text{location}} + \alpha_{t[i]}^{\text{year}} + \alpha_{r[i],t[i]}^{\text{race3,year}} + \alpha_{e[i],t[i]}^{\text{education3,year}} + \alpha_{g[i],t[i]}^{\text{gender2,year}} + \alpha_{l[i],t[i]}^{\text{location,year}} + \epsilon_{it} \qquad (1)$$

- x_{it} = Ideology
- i = respondents
- t = Year
- γ_1 = Year (Standardized)
- γ_2 = Year Squared (Standardized)
- race3 = White, Black, Other
- education = No high school, Some College, BA or higher
- gender = Male, Female
- location = cities (via zipcode)

Estimates of Conservatism Over Time: Cincinnati and Columbus OH

Modeling Strategy: Within-Between Random Effects Model

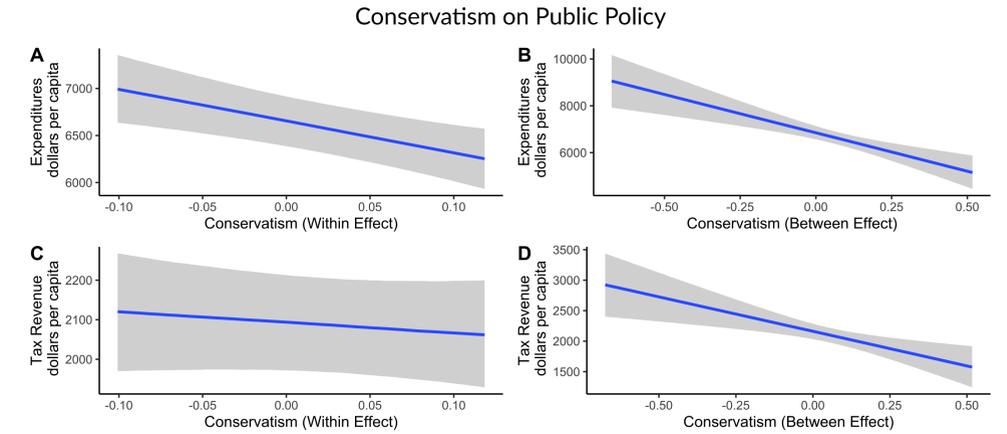Mundlak (1978), Bell and Jones (2015):

$$y_{jt} = \beta_0 + \beta_1(x_{jt} - \bar{x}_j) + \beta_2\bar{x}_j + \beta_3 z_j + (\mu_j + \epsilon_{jt}) \qquad (3)$$

- j = city
- t = year
- y_{jt} = Total Expenditures, Total Tax Revenue
- x_{jt} = Level 1: Mean Centered Time-Varying Variables (Ideology)
- $\bar{x}_j$ = Mean of Time-Varying Variables (Between City Effects)
- z_j = Level 2: Time-Invariant Variables
- μ_j = Level 2 error (Aggregated unobserved group-level effect)
- ϵ_{jt} = Level 1 error

Advantages of Within-Between Random Effects Model

- Dynamic and Cross-Sectional variation in single model
- Same results as Two-Way Fixed Effects and Pooled Cross-Sectional models
- Ability to include time-invariant features

Main Results: Support for RQ 1; Mixed for RQ 2

Conservatism on Public Policy

- Results robust to the inclusion of time-variant and time-invariant covariates:
  - Median Income
  - Median Home Value
  - Population
  - Black Share
  - Income Inequality
  - Consolidated Government
- Results less strong using traditional measure of policy outcomes

Effect Modification: Support for RQ 3

	Expenditures	Taxation
A. Between Unit Effects (RQ 1)		
Intercept	−2660.89	−3470.26*
	[−7587.77, 2205.63]	[−5629.74, −1288.07]
Ave. Conservatism (Cross-sectional)	−3279.37*	−1125.86*
	[−4808.82, −1742.47]	[−1805.18, −423.13]
Consolidated Government	293.89	183.53
	[−416.58, 1023.96]	[−152.88, 514.46]
B. Within Unit Effects (RQ 2)		
Conservatism (Dynamic)	−3293.64*	−254.64
	[−5256.02, −1340.93]	[−970.36, 455.89]
C. Cross-Level Interactions (RQ 3)		
Conservatism*Consolidated Gov.	−1712.52*	−657.24*
	[−2672.73, −745.11]	[−1008.77, −301.05]

Takeaways

- Clear evidence of cross-sectional representation in local government
- Evidence that dynamic responsiveness exist for expenditures
- Dynamic responsiveness for tax revenue is inconclusive
- Suggestive evidence that more concentrated governance fosters responsiveness

References

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[4] Yair Mundlak. On the pooling of time series and cross section data. *Econometrica: Journal of the Econometric Society*, pages 69–85, 1978.

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