Poverty, Party Alignment, and Reducing Corruption through Modernization: Evidence from Guatemala

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Research Question & Motivation

Economics Politics/Institutions $\Rightarrow \downarrow$ Corruption







Literature \Rightarrow Theory

• \downarrow Poverty $\Rightarrow \uparrow$ discount clientelism (e.g., Stokes *et al.* 2013)

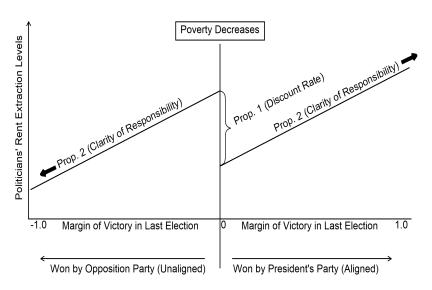
Alignment ⇒ ↑ resources (Greene 2010; Brollo & Nannicini 2012)

 $\bullet \ \mathsf{Alignment} \Rightarrow \mathsf{clarity} \ \mathsf{of} \ \mathsf{responsibility} \ \mathsf{(Schwindt-Bayer} \ \& \ \mathsf{Tavits} \ \mathsf{2016)}$

• Elections $\Rightarrow \uparrow$ control of politicians (Barro 1973; Ferejohn 1986)

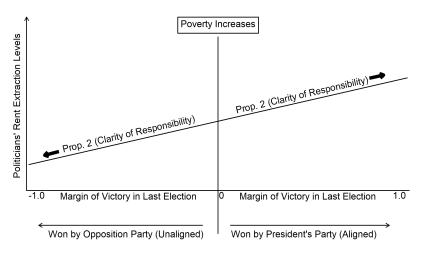
Alignment $+ \downarrow$ Poverty + Close Election $\Rightarrow \downarrow$ Corruption

Theory (Graphic Presentation) [1]



 $Link\ to\ working\ paper\ with\ formal\ model:\ www.mikedenly.com/files/dg-corruption.pdf$

Theory (Graphic Presentation) [2]



Link to working paper with formal model: www.mikedenly.com/files/dg-corruption.pdf

Why Guatemala? (Data)

Poverty rate: 59% (World Bank 2017)

 Governors of departments (provinces/states) appointed by the President

- Supreme Audit Institution (Contraloría General de Cuentas)
 - Independence protected by the Constitution
 - Publish audit data online





Research Design

Method

Close-Election Regression Discontinuity Design

Dependent Variables

- Number of municipal audit infractions in each municipality-year
- Amounts (log) associated with those infractions

Treatment

Alignment: Mayor party matches President's party

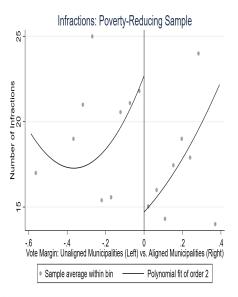
Running Variable

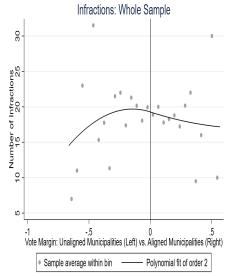
Margin of victory for mayor

Key Subgroups/Results

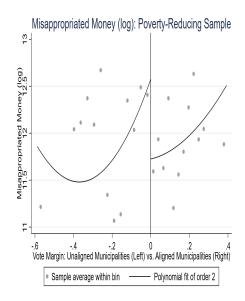
- Poverty reduced since last census (√)
- Poverty increased since last census (X)
- Whole sample (X)

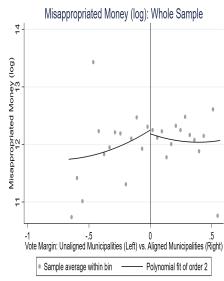
Results: Infractions





Results: Amounts (Log)





Additional Material in the Paper

- Same tests for extreme poverty
- Separate models by year and electoral term
- Testing the poverty, alignment, close election mechanisms individually
- McCrary (2008) density tests of running variable
- Tests for potential endogeneity between poverty and corruption
- AND MUCH MORE:
 - Link to working paper: www.mikedenly.com/files/dg-corruption.pdf

Conclusion

- - BUT \downarrow Poverty + Alignment + Close Election $\Rightarrow \downarrow$ Corruption
 - AND \downarrow Corruption $\Rightarrow \uparrow$ Democracy (Lagunes 2012)
- Limitation: subgroup analyses
 - Different paths (external validity)
- Scope condition: party system stability



Thank you!

Comments/feedback welcome: mdenly@utexas.edu

Link to working paper: www.mikedenly.com/files/dg-corruption.pdf

Party Alignment Patterns by Electoral Term

| Term | | Years | Municipalities | Infractions | Amount | Log Amount |
|---------|----|-----------|----------------|-------------|-------------|------------|
| | | Coded | Aligned | Mean | Mean | Mean |
| 2004-20 |)7 | 2007 | 22% | 4.86 | 181,967.5 Q | 10.51 |
| 2008-20 | 11 | 2008-2011 | 31% | 20.77 | 442,884.8 Q | 12.38 |
| 2012-20 | 15 | 2012-2015 | 36% | 26.10 | 449,274.2 Q | 12.56 |
| 2016-20 | 19 | 2016-2018 | 0 | 31.74 | 568,759.2 Q | 12.60 |

Note: all amounts deflated to account for inflation.

Additional Material in the Paper

- Same tests for extreme poverty
- Separate models by year and electoral term
- Different orders of polynomial fit
- Testing the poverty, alignment, close election mechanisms individually
- McCrary (2008) density tests of running variable
- Tests for potential endogeneity between poverty and corruption

- Placebo tests at varying cutoffs
- Re-estimation of results with only the last two years and final year before the election
- Outlier tests
- Results with covariates using Calonico et al.'s (2019) algorithm
- Tests for political bias in audit distributions

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