Participation, Legitimacy and Fiscal Capacity in Weak States

Evidence from Participatory Budgeting

K. Grieco[1] A. Kamara[2] N.Meriggi[4] J. Michel[1]
W. Prichard[3]

[1]UCLA, Department of Political Science

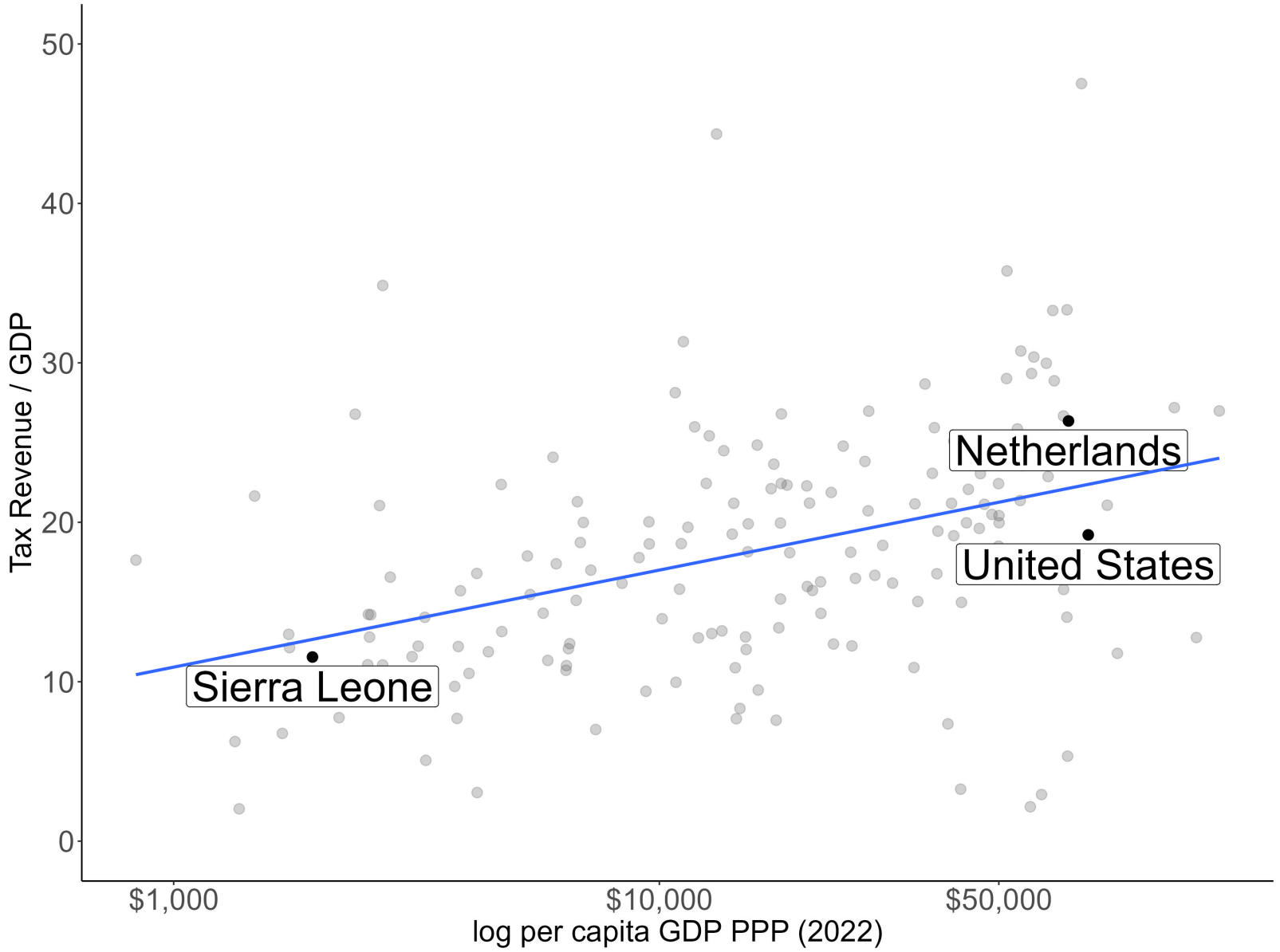
[2]International Growth Centre

[3]University of Toronto, Department of Political Science

[4]University of Oxford, CSAE

World Bank Land Conference, May 2024

Fiscal Capacity and Economic Development



Limited Enforcement in Weak States

Enforcement increases compliance (Kleven et al. 2011; Slemrod 2019)

Limited Enforcement in Weak States

Enforcement increases compliance (Kleven et al. 2011; Slemrod 2019)

Figure: Market during COVID-19 mask mandate

but weak states...

- Unable to enforce (low capacity)
- Unwilling to enforce (citizens' demands ↑, votes ↓)

Limited Enforcement in Weak States

Enforcement increases compliance (Kleven et al. 2011; Slemrod 2019)

Figure: Market during COVID-19 mask mandate

but weak states...

- Unable to enforce (low capacity)
- Unwilling to enforce (citizens' demands ↑, votes ↓)

We ask: In weak states, what strategies boost tax compliance?

Participation, Legitimacy, Compliance

Canonical Argument: Voice in government ↑, compliance ↑

- Voice → legitimacy: Locke's *Second Treatise (1960)*
- Voice → fiscal capacity: North & Weingast 1989; Bates & Lien 1985

Figure: No Taxation without Representation!

Increasing Voice with Participatory Budgeting

PB: Deliberation and direct decision-making about govt budget

Our study: PB in Freetown during tax reform:

- added over 60,000 taxable properties
- property tax potential ↑ (X5); collected revenue ↑ (X3)
- introduced a transparent and objective valuation system.
- was politically fraught and challenged by central government.

Increasing Voice with Participatory Budgeting

PB: Deliberation and direct decision-making about govt budget

Our study: PB in Freetown during tax reform:

- added over 60,000 taxable properties
- property tax potential ↑ (X5); collected revenue ↑ (X3)
- introduced a transparent and objective valuation system.
- was politically fraught and challenged by central government.

Research Questions:

1. Does **PB** increase govt legitimacy?
2. Does **PB** increase tax compliance?

Digital Town Hall in Freetown

1. Digital Town Hall (deliberation via WhatsApp group chats)
   - **Horizontal deliberation**: participants discuss preferred service improvements in ward.
   - **Preference articulation**: participant preferences shared with political representatives.
   - **Vertical interaction**: Councilors respond by video to voiced preferences + reveal list of service projects.
   - **Decision making**: Participants deliberate and vote for services.
     - projects: 15 million leones ($\approx$ \$1,500)
     - Mayor announces winner in each ward through video.
2. Service delivery

Digital Town Hall in Freetown

Vertical interaction:

Decision making:

Q1.
Which project would you like to be implemented in your ward?

Each project is worth 15 million leones.

- Fixing of potholes
- A new water hand pump
- 2 new solar street lights
- Fixing of water pipes
- 50m of truck tracks

→

Digital Town Hall in Freetown

Service Delivery:

Sample, Randomization, Estimation

Sample: Property owners with properties above median value

- N = 3,618 property owners

Sample, Randomization, Estimation

Sample: Property owners with properties above median value

- N = 3,618 property owners

Randomization: Matched pairs, using baseline data

Sample, Randomization, Estimation

Sample: Property owners with properties above median value

- N = 3,618 property owners

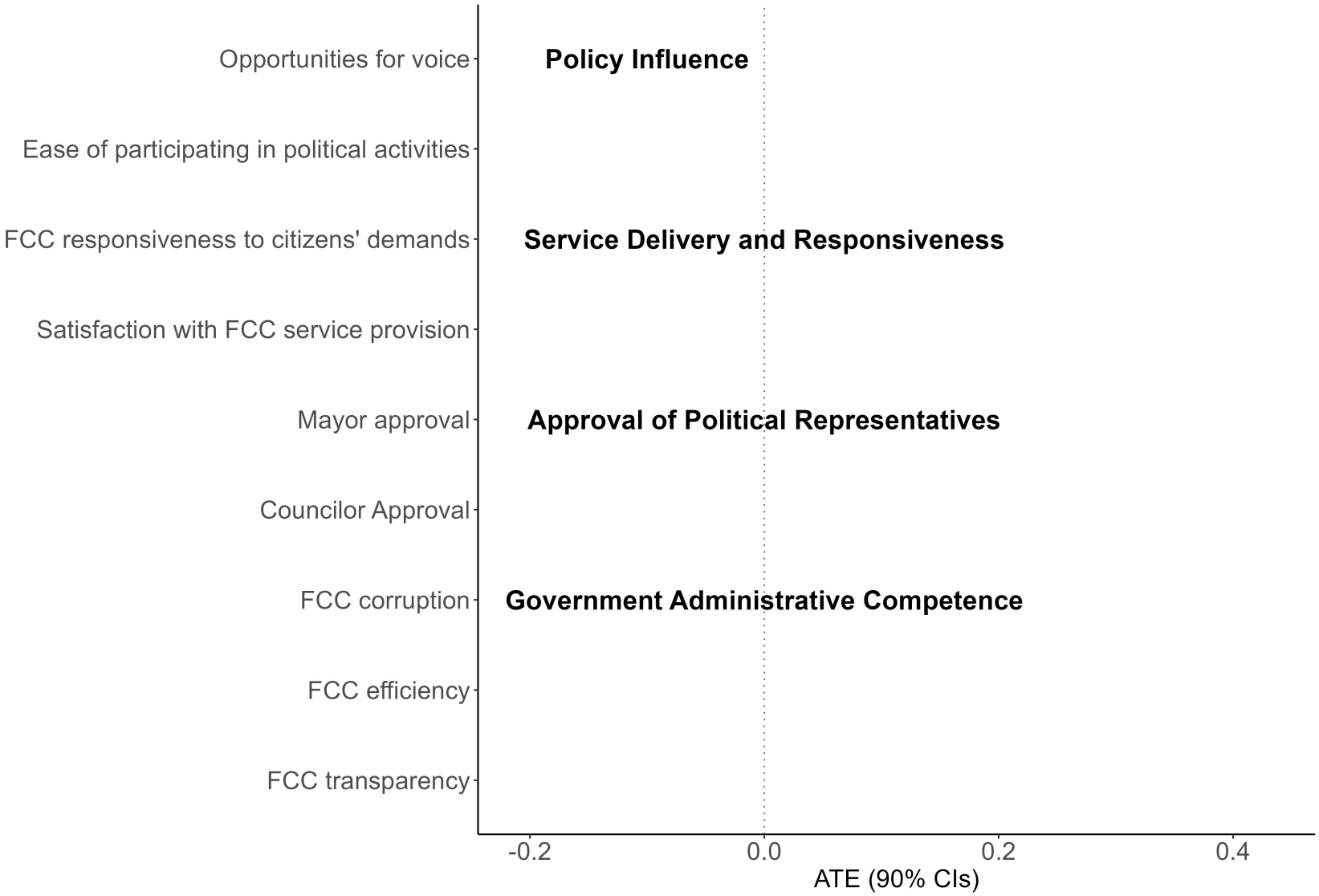
Randomization: Matched pairs, using baseline data

Specification:

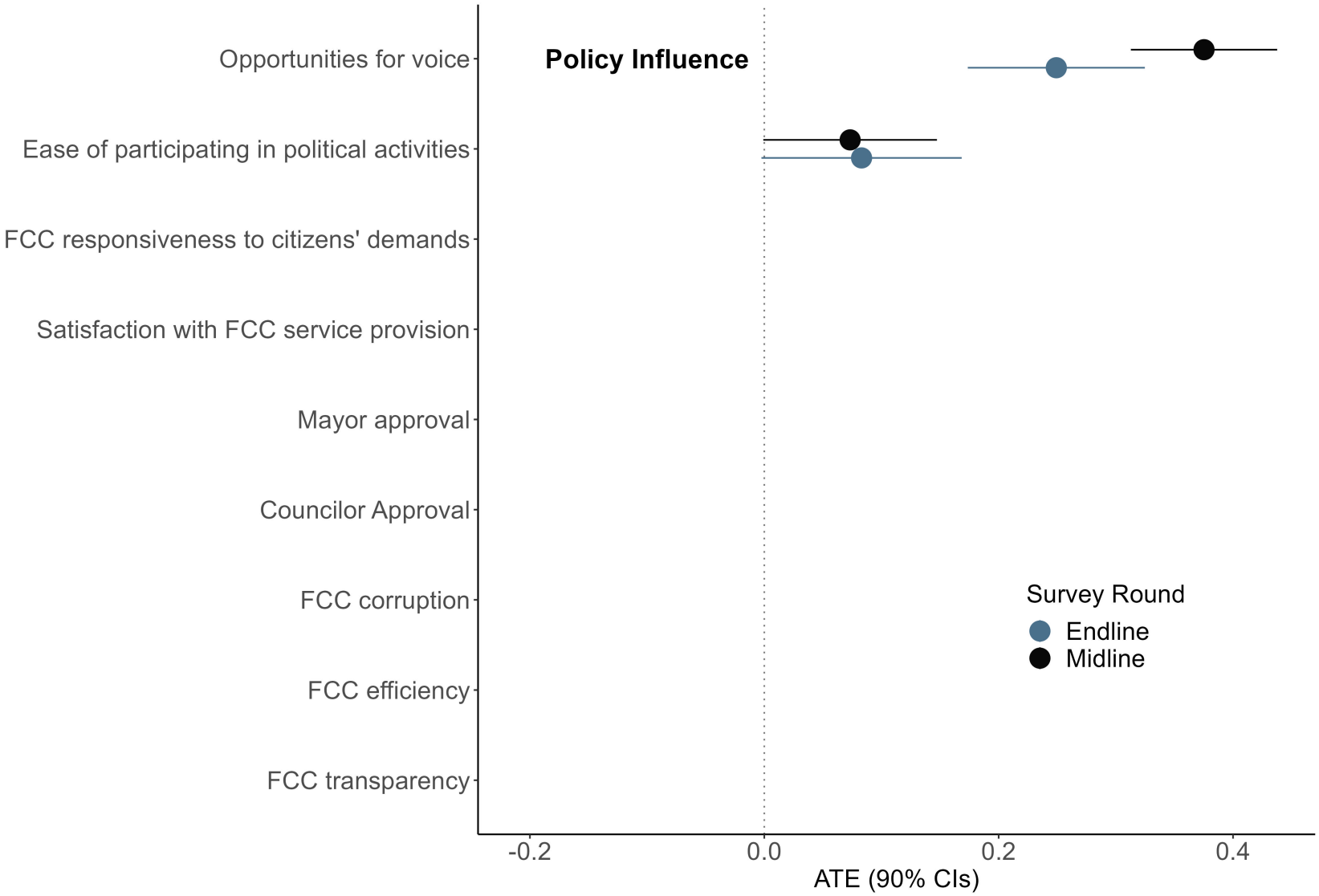
$$Y_{ijt_2} = \beta_1 DTH_i + \gamma Y_{ijt_1} + \lambda \mathbf{X}_i + \theta_j PAIR_{ji} + \delta_w + \epsilon_i$$

- Y_{ijt_2}: post-treatment outcome
- DTH_i: Treatment indicator
- Y_{t_1}: pre-treatment value for outcome of interest
- $\mathbf{X}_i$: Preregistered controls (tax compliance only)
- $PAIR_j$: matched-pair indicator
- δ: ward fixed effects

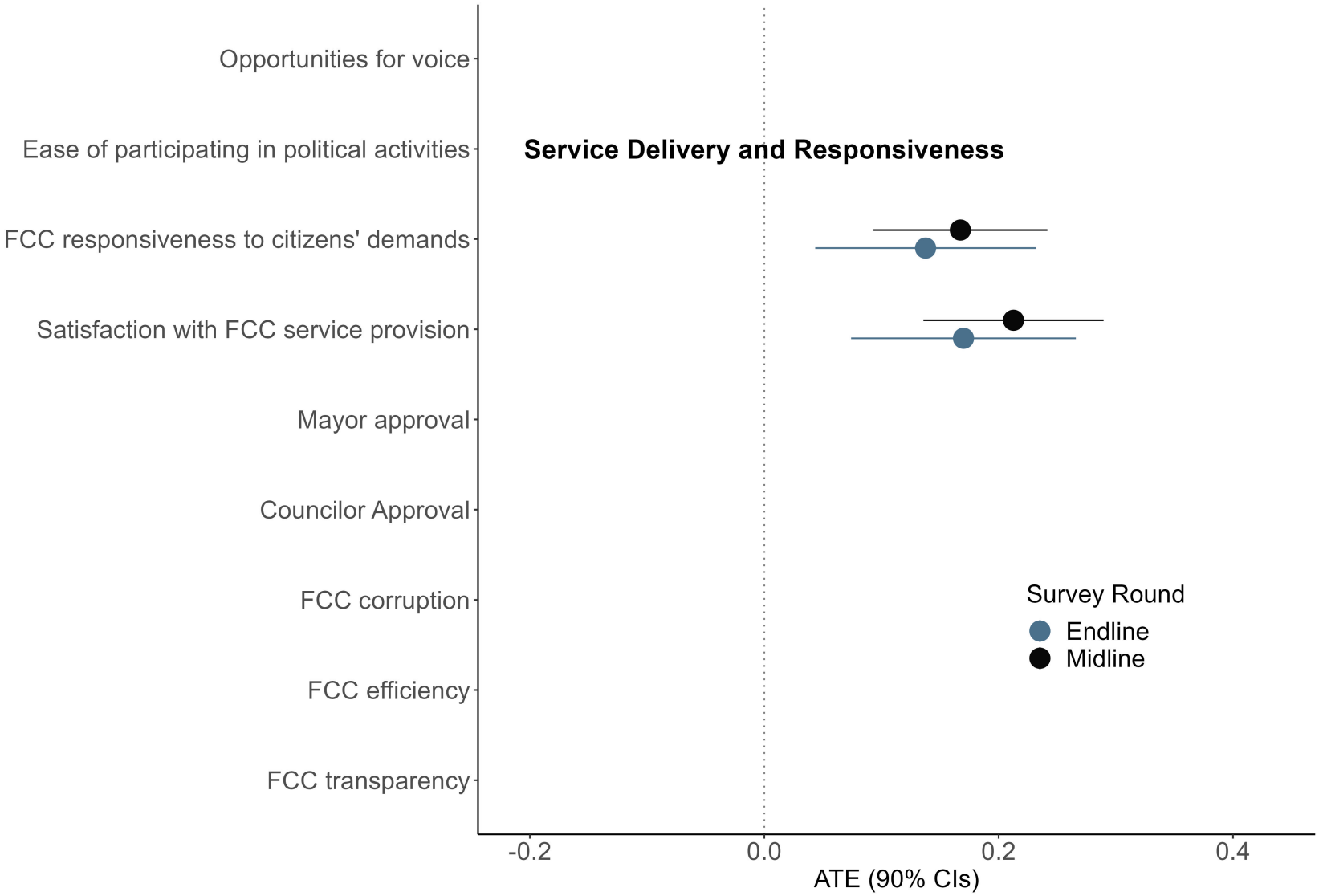
Treatment Effects on Legitimacy Outcomes



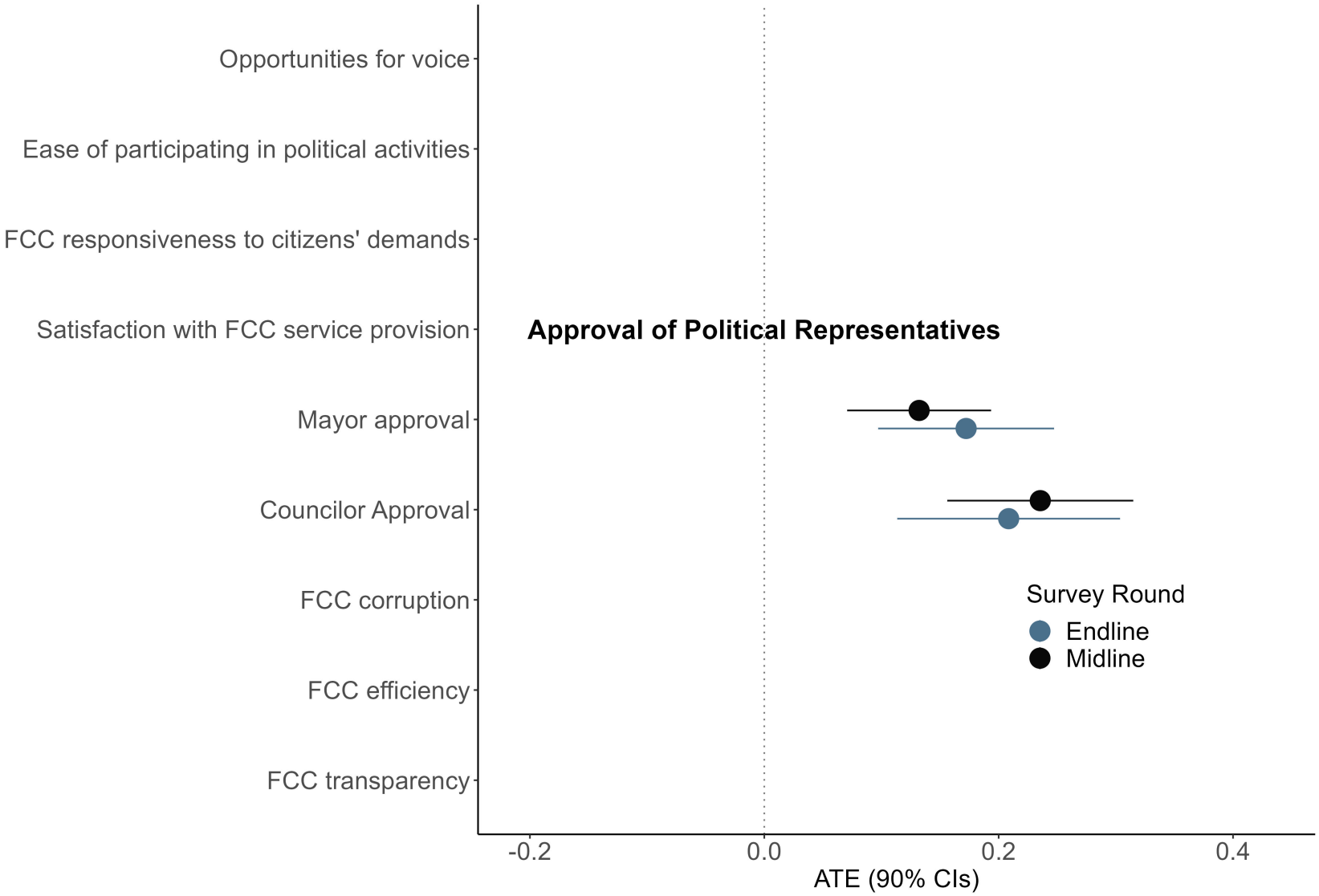
Treatment Effects on Legitimacy Outcomes



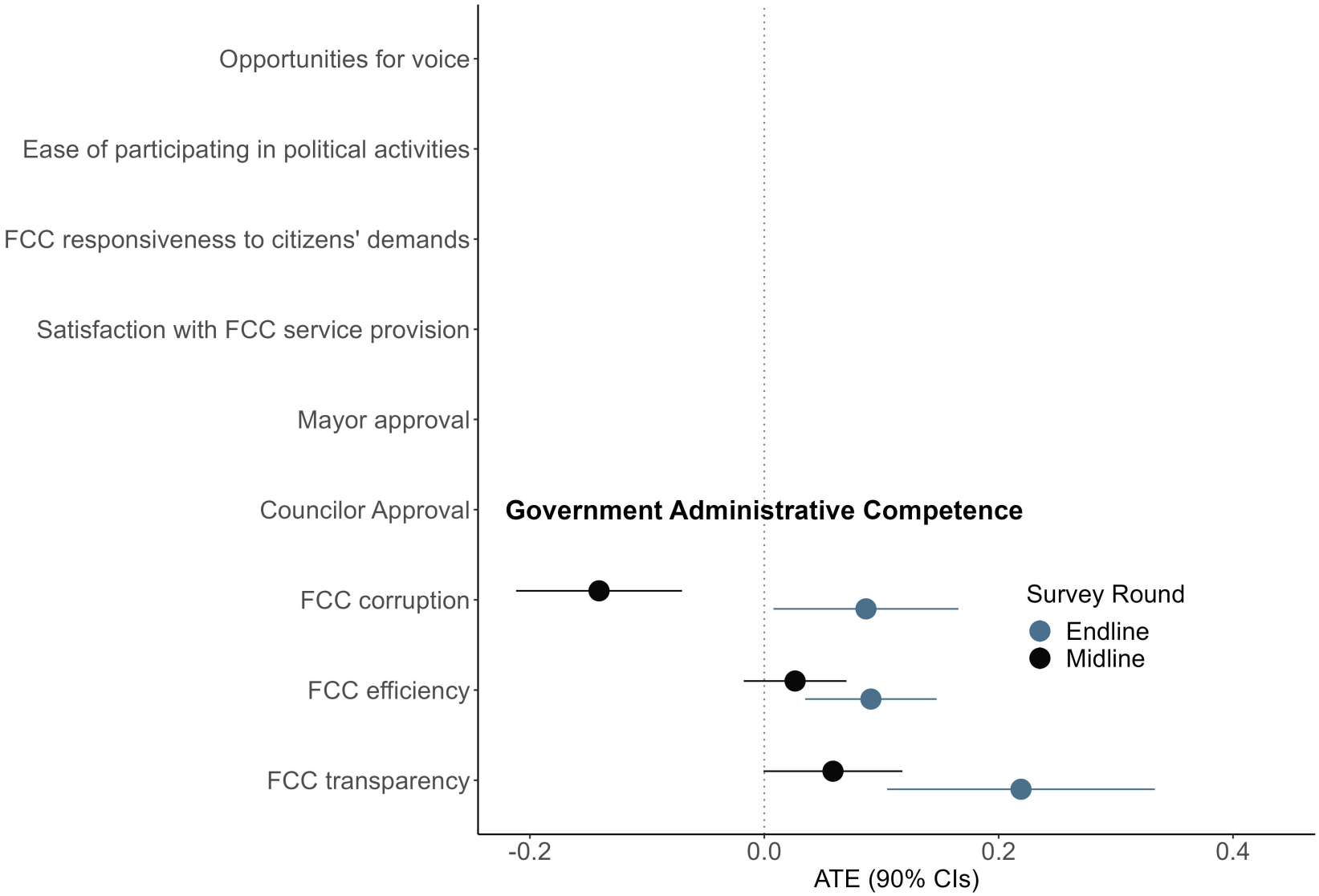
Treatment Effects on Legitimacy Outcomes



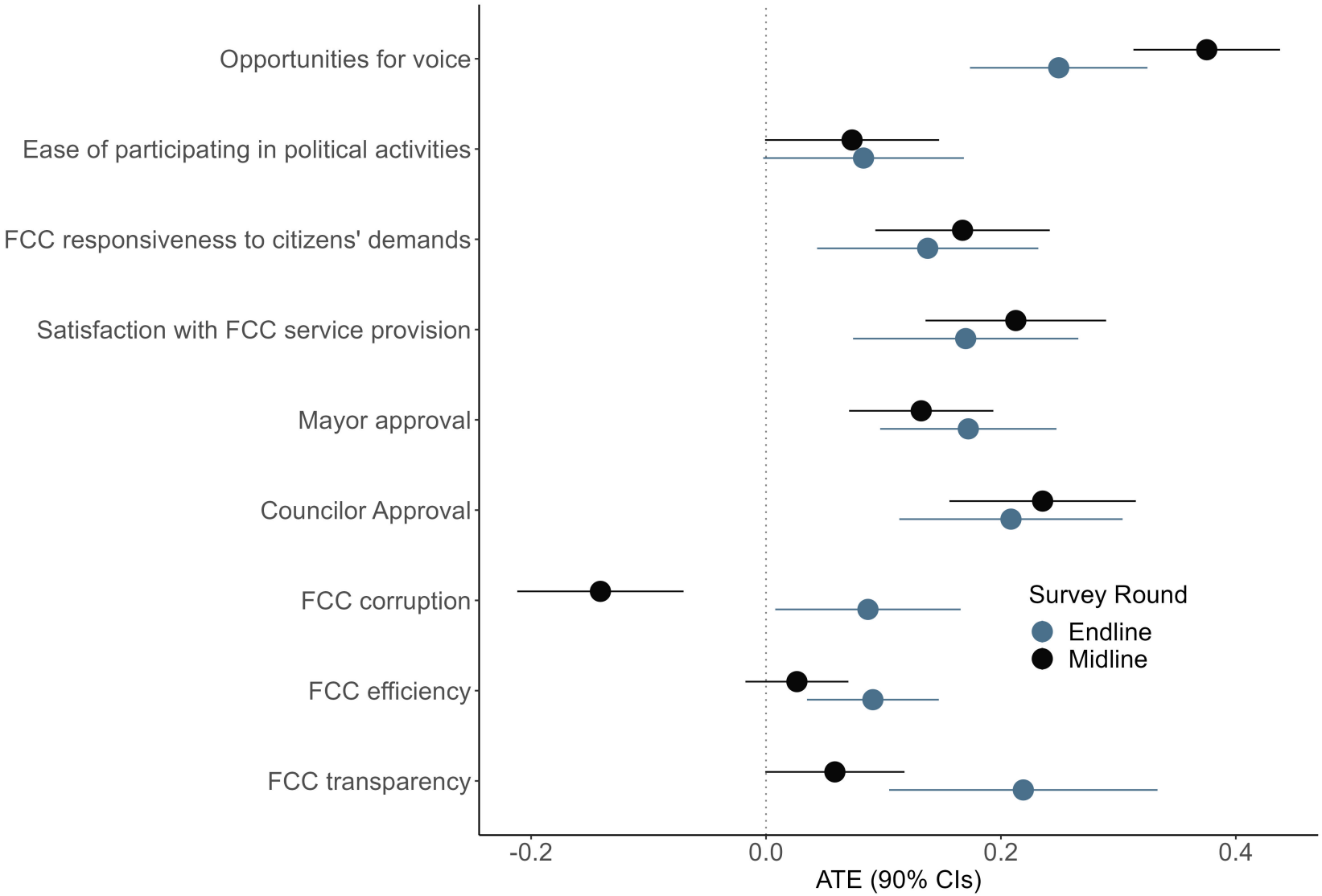
Treatment Effects on Legitimacy Outcomes



Treatment Effects on Legitimacy Outcomes

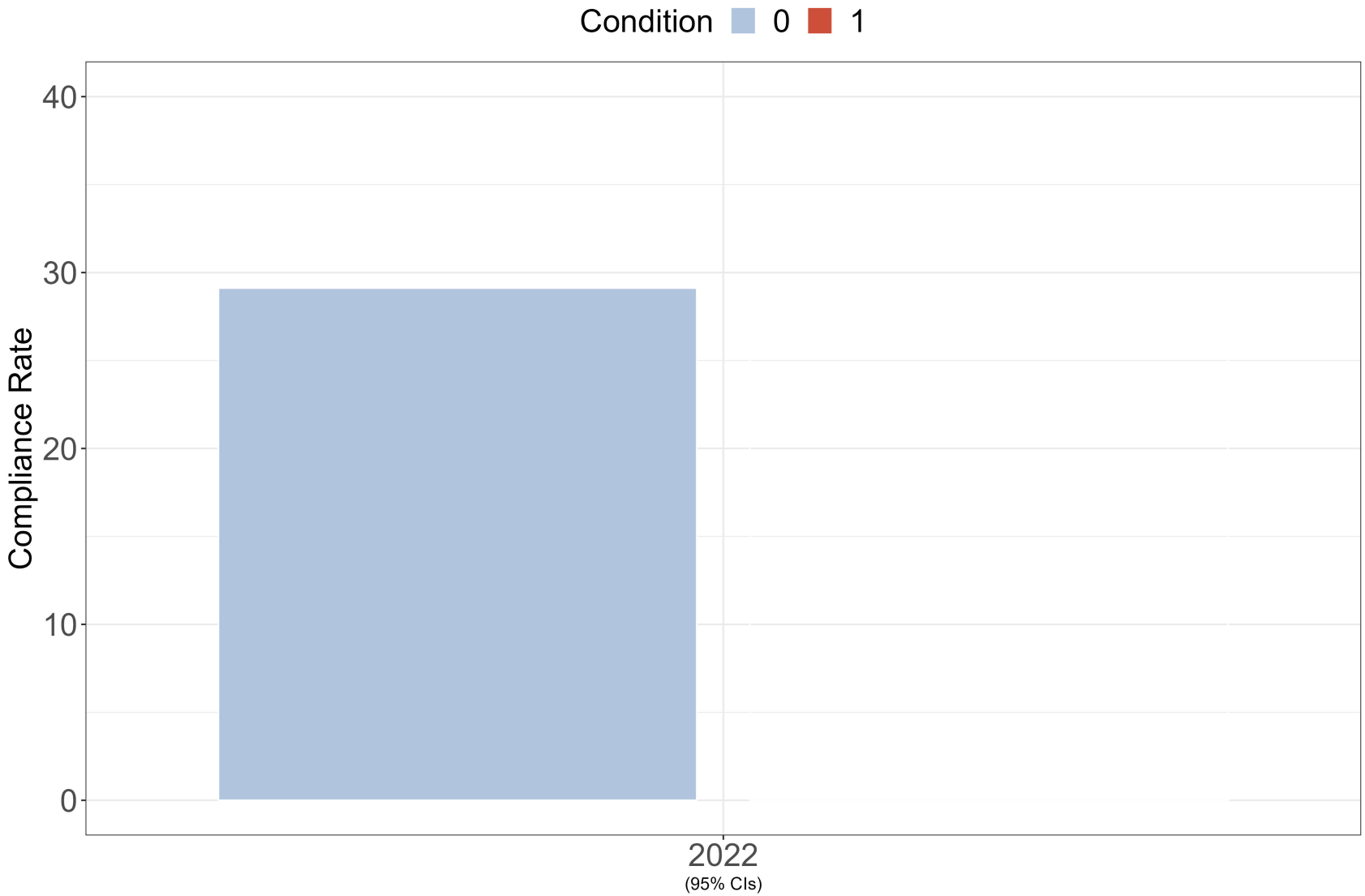


Treatment Effects on Legitimacy Outcomes



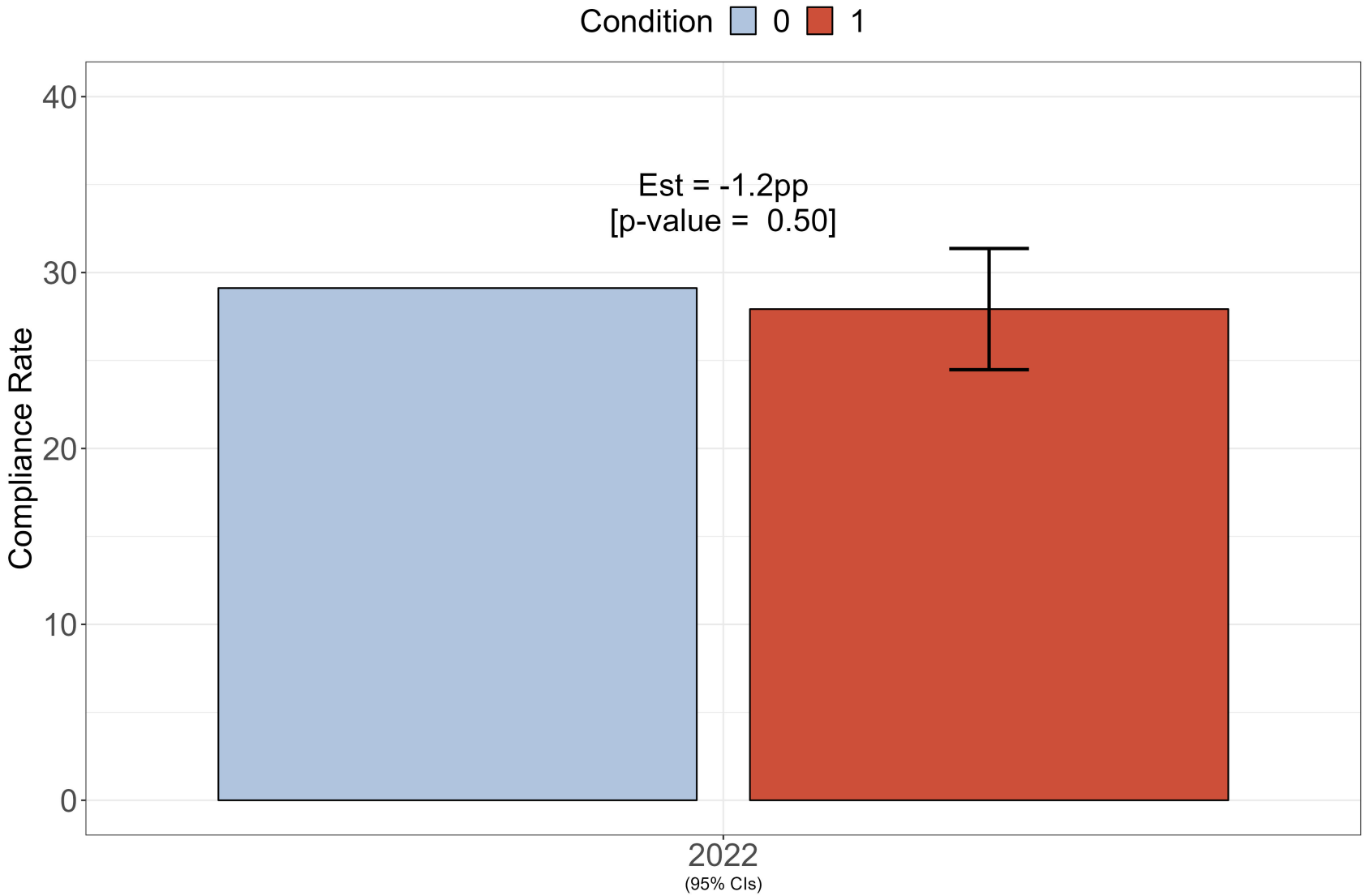
RQ1: Does **PB** increase govt legitimacy? ✓

Tax Compliance, 2022 (main outcome of interest)



RQ2: Does **PB** increase tax compliance?

Tax Compliance, 2022 (main outcome of interest)



RQ2: Does **PB** increase tax compliance? **No.**

Why the null effect on compliance?

Potential explanations:

1. Impacts alternative mechanisms?

Why the null effect on compliance?

Potential explanations:

1. Impacts alternative mechanisms?
   - At endline, no effect on (i) enforcement, (ii) fairness, (iii) Neighbors' compliance

Why the null effect on compliance?

Potential explanations:

1. Impacts alternative mechanisms? **Unlikely**.
   - At endline, no effect on (i) enforcement, (ii) fairness, (iii) Neighbors' compliance

Why the null effect on compliance?

Potential explanations:

1. Impacts alternative mechanisms? **Unlikely**.
   - At endline, no effect on (i) enforcement, (ii) fairness, (iii) Neighbors' compliance
2. Spillover?

Why the null effect on compliance?

Potential explanations:

1. Impacts alternative mechanisms? **Unlikely**.
   - At endline, no effect on (i) enforcement, (ii) fairness, (iii) Neighbors' compliance
2. Spillover?
   - Restricted sampling: 15+ meters between units
   - Spillover analysis: $<$ 1pp. (suggestive)

Why the null effect on compliance?

Potential explanations:

1. Impacts alternative mechanisms? **Unlikely**.
   - At endline, no effect on (i) enforcement, (ii) fairness, (iii) Neighbors' compliance
2. Spillover? **Unlikely**.
   - Restricted sampling: 15+ meters between units
   - Spillover analysis: $<$ 1pp. (suggestive)

Why the null effect on compliance?

Potential explanations:

1. Impacts alternative mechanisms? **Unlikely**.
   - At endline, no effect on (i) enforcement, (ii) fairness, (iii) Neighbors' compliance
2. Spillover? **Unlikely**.
   - Restricted sampling: 15+ meters between units
   - Spillover analysis: $<$ 1pp. (suggestive)
3. Countervailing heterogeneous effects? **Our explanation**.
   - Partisan affiliation
   - Baseline policy preferences

Why the null effect on compliance? Our explanation

Treatment as a **partisan** pitch about tax **policy** (expanding taxation)

Why the null effect on compliance? Our explanation

Treatment as a **partisan** pitch about tax **policy** (expanding taxation)

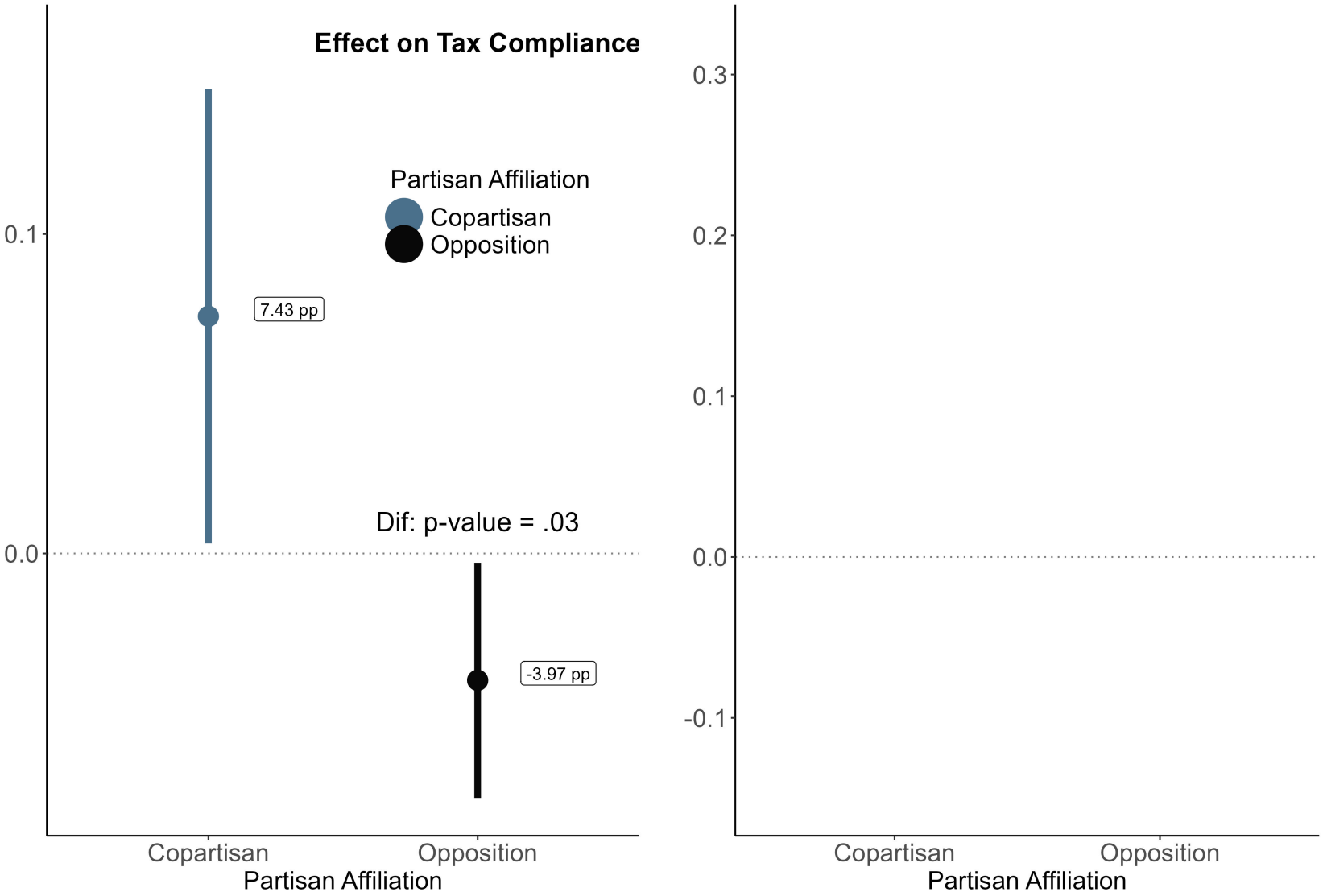
Why the null effect on compliance? Our explanation

Treatment as a **partisan** pitch about tax **policy** (expanding taxation)

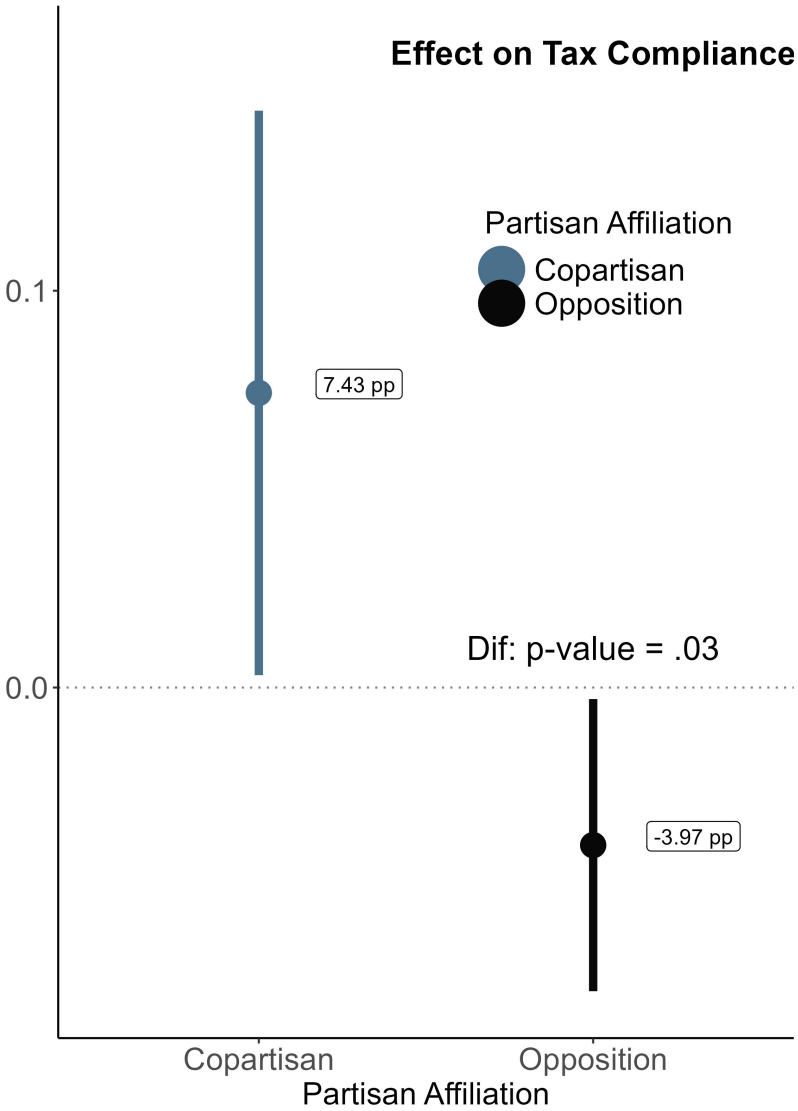
Elite partisan cues can...

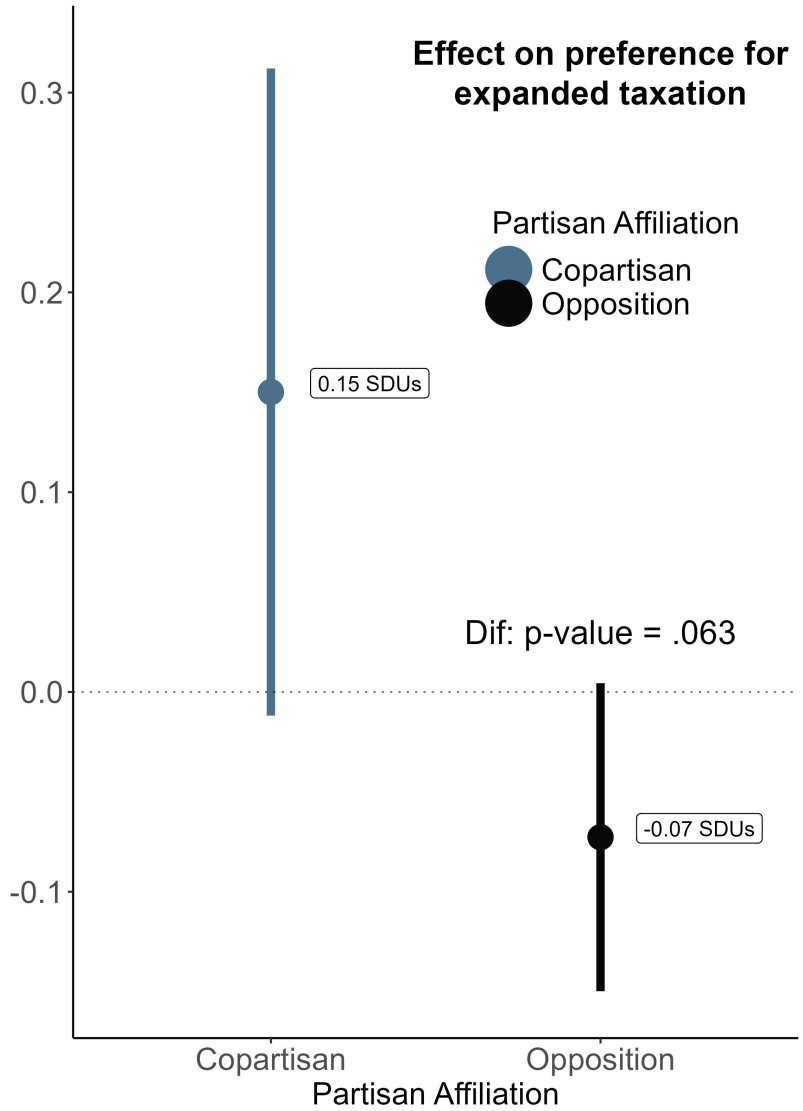
1. Shift policy preferences for copartisan
   - e.g., Broockman and Butler 2017; Tappin et al. 2023
2. and generate backlash from the outgroup
   - Nicholson 2012; Haas and Khadka 2020

Effects Conditional on Partisan Affiliation



Effects Conditional on Partisan Affiliation





Why the null effect on compliance? Our explanation

Treatment as a **partisan** pitch about tax **policy** (expanding taxation)

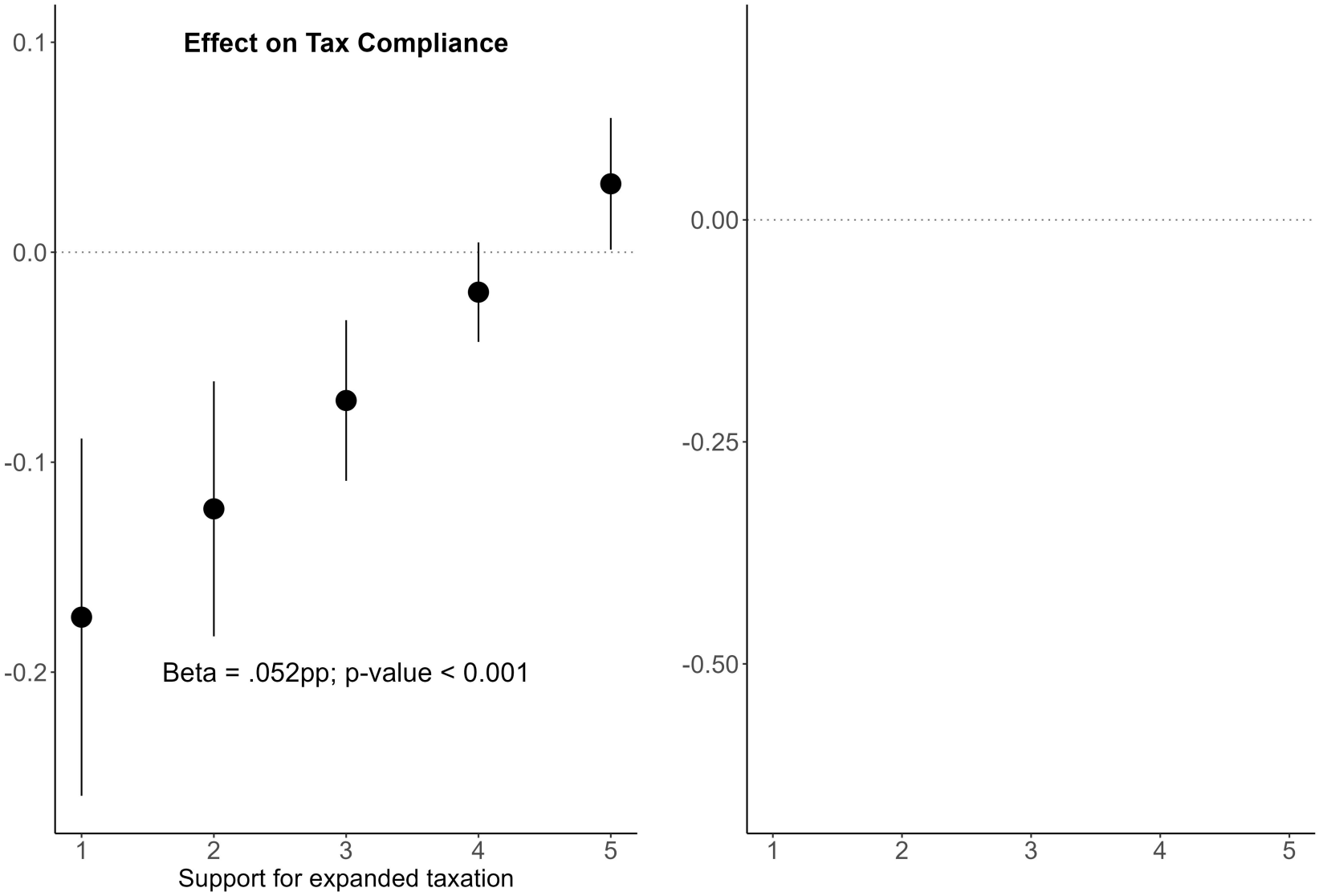
Why the null effect on compliance? Our explanation

Treatment as a **partisan** pitch about tax **policy** (expanding taxation)

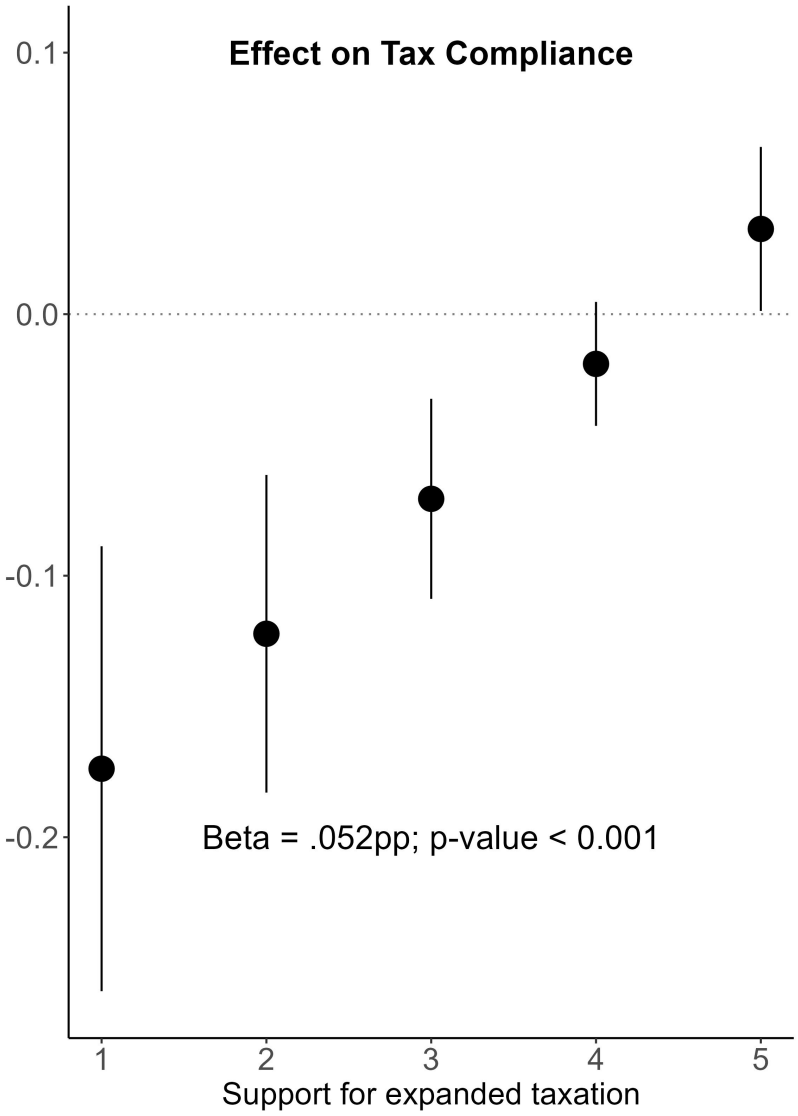
When confronted with persuasive arguments:

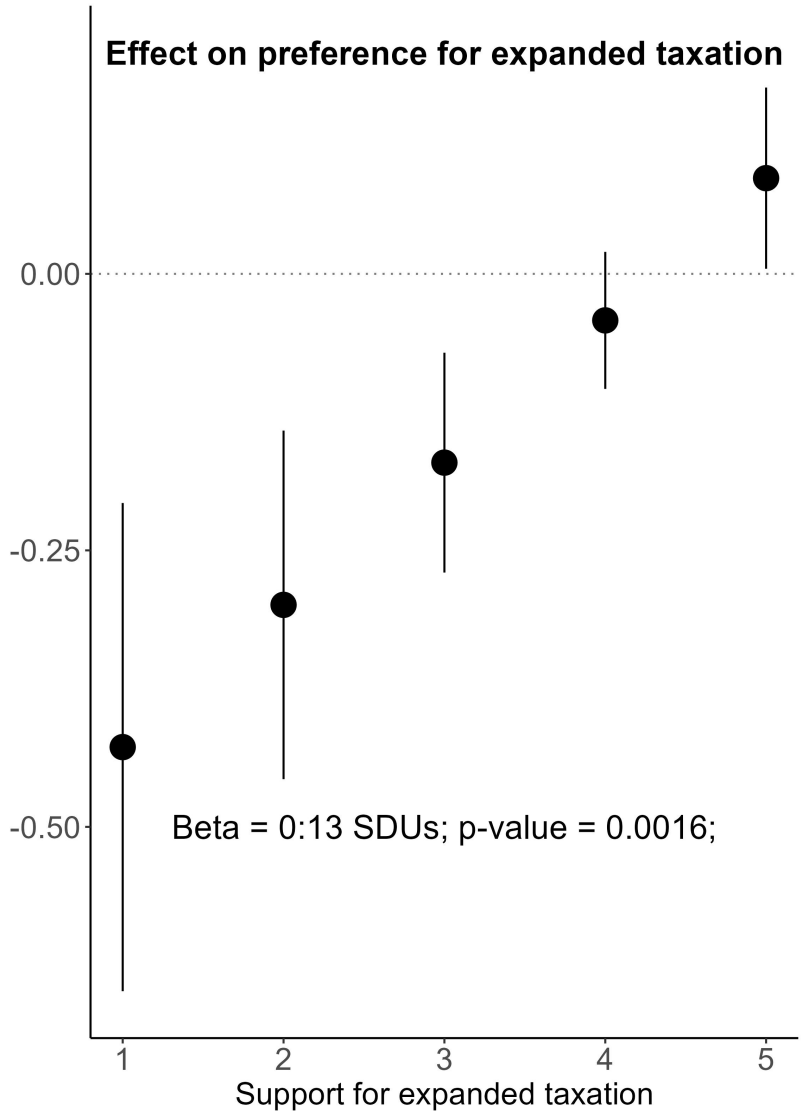
1. individuals motivated to maintain existing (policy) attitudes
   - Slothuus and De Vreese 2010; Stanley et al. 2020.
2. attempts to persuade people their existing beliefs are incorrect may backfire
   - Nyhan and Reifler 2010

Effects Conditional on Baseline Tax Preferences



Effects Conditional on Baseline Tax Preferences





Why the null effect on compliance?

Our explanation: Partisan affiliation and existing tax policy preferences shape the impact of treatment on tax policy preference, which in turn shapes compliance behavior.

Alternative explanations:

Why the null effect on compliance?

Our explanation: Partisan affiliation and existing tax policy preferences shape the impact of treatment on tax policy preference, which in turn shapes compliance behavior.

Alternative explanations:

- Corresponding het effects on legitimacy outcomes.

Why the null effect on compliance?

Our explanation: Partisan affiliation and existing tax policy preferences shape the impact of treatment on tax policy preference, which in turn shapes compliance behavior.

Alternative explanations:

- Corresponding het effects on legitimacy outcomes. No. Go

Why the null effect on compliance?

Our explanation: Partisan affiliation and existing tax policy preferences shape the impact of treatment on tax policy preference, which in turn shapes compliance behavior.

Alternative explanations:

- Corresponding het effects on legitimacy outcomes. No. Go
- Groups have different service preferences.

Why the null effect on compliance?

Our explanation: Partisan affiliation and existing tax policy preferences shape the impact of treatment on tax policy preference, which in turn shapes compliance behavior.

Alternative explanations:

- Corresponding het effects on legitimacy outcomes. No. Go
- Groups have different service preferences. No. Go

Why the null effect on compliance?

Our explanation: Partisan affiliation and existing tax policy preferences shape the impact of treatment on tax policy preference, which in turn shapes compliance behavior.

Alternative explanations:

- Corresponding het effects on legitimacy outcomes. No. Go
- Groups have different service preferences. No. Go
- Groups have different satisfaction with services.

Why the null effect on compliance?

Our explanation: Partisan affiliation and existing tax policy preferences shape the impact of treatment on tax policy preference, which in turn shapes compliance behavior.

Alternative explanations:

- Corresponding het effects on legitimacy outcomes. No. Go
- Groups have different service preferences. No. Go
- Groups have different satisfaction with services. No. Go

Summary and Contributions

Summary:

1. Compliance

Summary and Contributions

Summary:

1. Compliance
    1. Null ATE
    2. Effect of voice conditional on political factors

Summary and Contributions

Summary:

1. Compliance
    1. Null ATE
    2. Effect of voice conditional on political factors
2. Legitimacy

Summary and Contributions

Summary:

1. Compliance
   1. Null ATE
   2. Effect of voice conditional on political factors
2. Legitimacy $\uparrow$ (all sub-groups)

Summary and Contributions

Summary:

1. Compliance
   1. Null ATE
   2. Effect of voice conditional on political factors
2. Legitimacy $\uparrow$ (all sub-groups)

Contributions:

1. Nuances existing work on participation $\rightarrow$ compliance, which finds **positive** effect
   - lab experiments (Dal Bó et al 2010)
   - accounts of development of fiscal capacity in Europe
   - observational research on PB (Touchton et al. 2019)

Summary and Contributions

Summary:

1. Compliance
   1. Null ATE
   2. Effect of voice conditional on political factors
2. Legitimacy $\uparrow$ (all sub-groups)

Contributions:

1. Nuances existing work on participation $\rightarrow$ compliance, which finds **positive** effect
   - lab experiments (Dal Bó et al 2010)
   - accounts of development of fiscal capacity in Europe
   - observational research on PB (Touchton et al. 2019)
2. Strategy for building government legitimacy

Summary and Contributions

Summary:

1. Compliance
   1. Null ATE
   2. Effect of voice conditional on political factors
2. Legitimacy $\uparrow$ (all sub-groups)

Contributions:

1. Nuances existing work on participation $\rightarrow$ compliance, which finds **positive** effect
   - lab experiments (Dal Bó et al 2010)
   - accounts of development of fiscal capacity in Europe
   - observational research on PB (Touchton et al. 2019)
2. Strategy for building government legitimacy
3. Technology in public administration (e-governance)
   - WhatApp as tool for engagement, rather than mis-information

Policy implications

Should govts use participatory budgeting? Three considerations:

Policy implications

Should govts use participatory budgeting? Three considerations:

1. Political context
   - e.g., Is intervention likely to prime partisanship?

Policy implications

Should govts use participatory budgeting? Three considerations:

1. Political context
   - e.g., Is intervention likely to prime partisanship?
2. Total effects of intervention may be larger
   - Effects may spill over (suggestive evidence)
   - Real world PB: opt-in; our study: opt-out

Policy implications

Should govts use participatory budgeting? Three considerations:

1. Political context
   - e.g., Is intervention likely to prime partisanship?
2. Total effects of intervention may be larger
   - Effects may spill over (suggestive evidence)
   - Real world PB: opt-in; our study: opt-out
3. Legitimacy effects may create political capacity for reform

Policy implications

Should govts use participatory budgeting? Three considerations:

1. Political context
   - e.g., Is intervention likely to prime partisanship?
2. Total effects of intervention may be larger
   - Effects may spill over (suggestive evidence)
   - Real world PB: opt-in; our study: opt-out
3. Legitimacy effects may create political capacity for reform

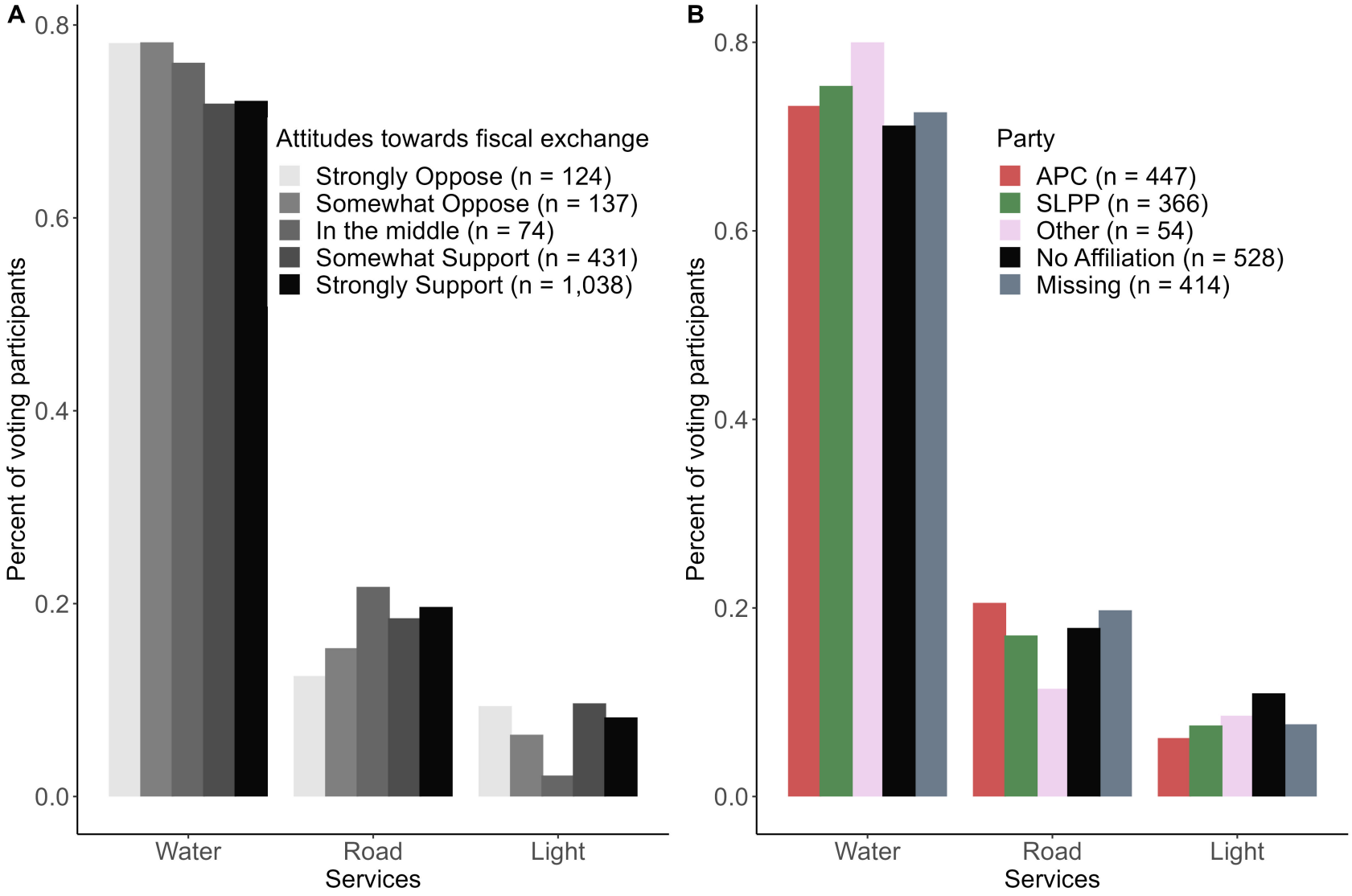
Thank you!

kgrieco@ucla.edu

Additional Slides

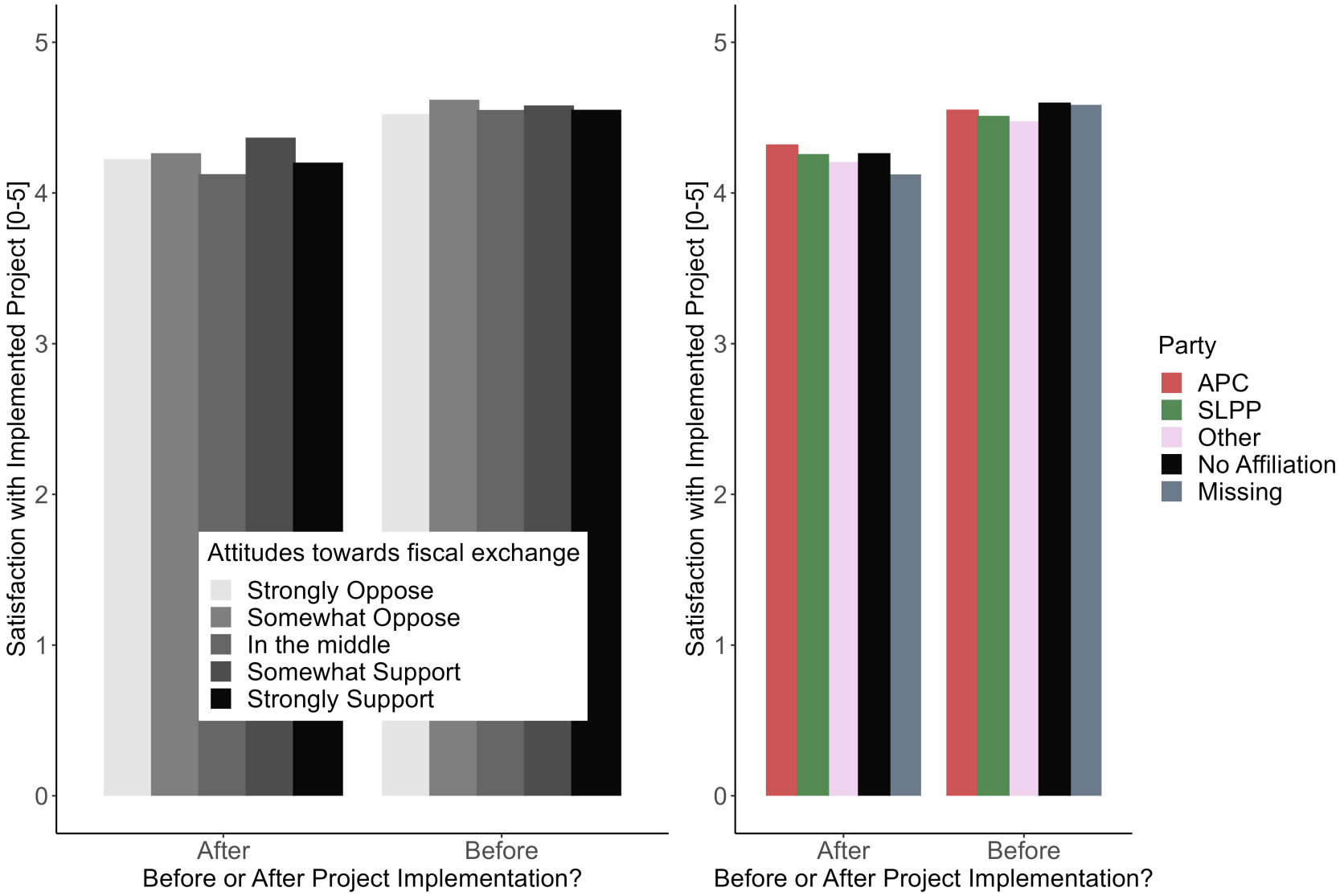
Legitimacy outcomes: Het effects | Service Preferences by Group | Service Satisfaction by Group

Service Preferences by Group



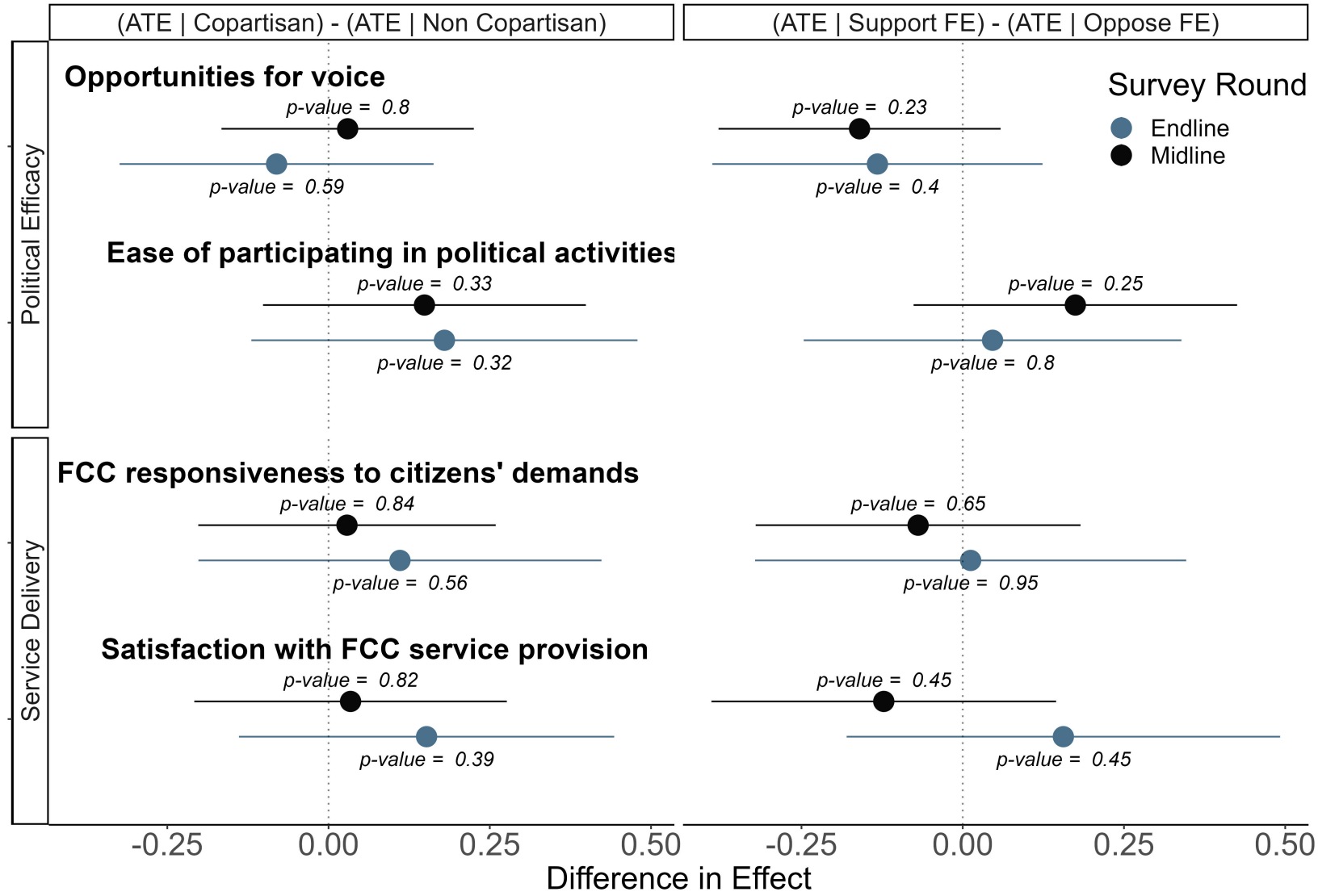
Back

Service Satisfaction by Group



Back

Heterogeneous treatment effects on legitimacy



Back

List of controls in estimation

Preregistered control variables for tax compliance include:

- log total tax liability
- number of properties with any liability
- access to water
- access to drainage
- property in an informal settlement
- property has fencing or gate
- property has garage
- street condition
- street type
- ease of property access
- window quality
- type of tax bill received
- Back to estimation