

# Off-Cycle and Off-Center: Election Timing and Representation in Municipal Government

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## Abstract

Who governs America's cities: organized interests or mass publics? Though recent scholarship finds that local governments enact policies that align with citizens' preferences, others argue that it is organized interests, *not* mass publics, that are influential. To reconcile these perspectives, we show that election timing can help shed light on when voters or groups will be pivotal in city politics. Examining 1,600 large US cities, we find that off-cycle elections affect city policy responsiveness asymmetrically, weakening responsiveness on those issues where there is an active and organized interest whose policy objectives deviate from the preferences of the median resident. Here, we focus on public employees interests and find that local governments that are elected off-cycle spend more on city workers than would be preferred by citizens in more conservative cities. We conclude by discussing the implications of these findings for the study of interest groups and representation in local politics.

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Debates over community power have long focused on a simple, but profound question—who governs: organized interests or mass publics? In local politics, recent scholarship indicates that the public are pivotal (Berkman and Plutzer 2005; Einstein and Kogan 2016; Tausanovitch and Warshaw 2014). As one review summarizes, “local policies in the modern era tend to largely reflect the partisan and ideological composition of their electorates” (Warshaw 2019, 462). Yet other scholars reject this Downsian account of American politics in favor of a Schattschneiderian “policy-focused” perspective, where the answer to “who governs” hinges on the constellation of groups organized around a given policy issue (Dahl 1961; Wilson 1973; Hacker and Pierson 2014).<sup>1</sup> According to today’s Schattschneiderians, it is organized vested interests, *not* mass publics, that are pivotal in US policymaking (Moe 2015; Disalvo 2018; Hacker and Pierson 2014), especially in sub-national politics (Anzia 2019).

How can we reconcile these two conflicting perspectives? In this paper, we show that the institution of *election timing* helps clarify when voters or organized interests will be pivotal in city politics. We begin by re-evaluating municipal policy responsiveness, estimating it separately for cities that hold on- versus off-cycle elections. Consistent with the Schattschneiderian view, we find that off-cycle elections diminish responsiveness to a city’s median resident. However, off-cycle elections do not render organized interests all-powerful. Instead, we show that such elections weaken responsiveness on policy issues where the political objectives of an active and organized interest deviate from those of the city’s median resident. To illustrate these dynamics empirically, we focus on one important and active group in city politics – public employees – showing that off-cycle municipalities spend more generally and on city workers than would otherwise be preferred by the citizens of politically conservative cities.<sup>2</sup> Though past work has shown that off-cycle elections advantage organized groups (Anzia 2013), we are the first to show that they can move city policymaking “off-center,” diminishing responsiveness to the public. In contrast to prior work (Tausanovitch and Warshaw 2014), this signals that institutions can play a

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<sup>1</sup> See Hajnal and Trounstein (2010) for a detailed review of scholarly debates on community power.

<sup>2</sup> In the conclusion, we discuss how these findings may apply to other types of groups and policy issues.

key role in shaping representation in municipal government, an important finding as political science begins to focus more attention on the importance of local politics in the US system of government (e.g., Warshaw 2019).

## Theoretical expectations

Why would off-cycle elections – those held apart from state and federal elections – produce city governments that are less responsive to their citizens? First, off-cycle elections reduce voter turnout by 29 to 37 percentage points (Hajnal 2010, 177). By encouraging “selective” participation among a narrower subset of citizens who have vested interests in city politics (Berry 2009; Oliver and Ha 2007), off-cycle elections stand to enhance the influence of organized groups (Anzia 2013).<sup>3</sup> Consequently, we anticipate that the electioneering efforts of such groups – their endorsements, financial support, and mobilization – can be *relatively* more impactful in off-cycle environments. Whereas organized groups mobilize consistently, any potential political opposition (competition) from a city’s mass public is lessened in off-cycle races where marginal voters are less likely to participate (Anzia 2013). In sum, city officials that are elected off-cycle – wherein turnout is lower and the electorate is less representative of the community (Kogan, Lavertu, and Peskowitz 2018) – have less incentive to respond to their median constituent. Moreover, as Anzia (2012) explains in her theory of when activists and parties should favor having off-cycle elections, better organized local groups will benefit more from off-cycle elections when the median voter in on-cycle elections is unsympathetic to the local interests’ political preferences. Taken together, these incentives should move policymaking “off-center” (weakening responsiveness) when (1) city officials address issues that *are* highly relevant to an organized interest in city politics and (2) the preferences of that interest diverge from the preferences held by the city’s mass public.

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<sup>3</sup> Anzia finds that teachers unions leverage off-cycle school board elections to negotiate higher teacher salaries. She likewise finds that firefighter pay is higher in off-cycle municipalities.

City employees offer an excellent case for theory testing. They are one of the most active and organized groups in US local politics (Anzia 2020; Sieg and Wang 2013). Whereas mass publics reliably vary in their tastes and preferences for large government (Tiebout 1956), public employees have a uniform vested interest in more government spending (Anzia and Moe 2015, 2019; Niskanen 1971) specifically on public workers (Dahlberg and Mörk 2006; Hyytinen et al. 2018; Spizman 1980) through a mixture of higher pay and more hiring (Schneider 1989, 254). The potential benefits are quite concentrated and the costs (in terms of revenue and less spending on other programs) are diffuse and often out of the sight of the broader public (Anzia 2020). Moreover, public employees in the vast majority of the cities in our sample already comprise a non-trivial portion of the potential pool of voters and activists. Given their size and unique motivations to pursue concentrated benefits, even those public employees without collective bargaining rights stand to be better organized than their potential competition—individual taxpayers and fiscal conservatives who face collective action problems in fashioning themselves into an organized constituency base. Public employees therefore provide a compelling and straightforward test of our theory—we should find that off-cycle elections enable them to push city fiscal policy “off center” in those communities where the median resident is more conservative and prefers smaller government (i.e., lower taxes, less spending, and fewer public employees).

## **Research Design**

Our empirical analysis uses Tausanovitch and Warshaw’s (2014) sample of the roughly 1,600 American cities with populations above 20,000. Tausanovitch and Warshaw measure residents’ policy conservatism at the city-level, which is estimated by applying multilevel regression with poststratification (MRP) to hundreds of thousands of survey responses to a variety of municipal- and federal-level issue position questions posed to respondents between 2000 and 2011 (Tausanovitch and Warshaw 2013, 2014). Higher scores indicate a more conservative ideology among a city’s local citizenry. We then expanded de Benedictis-Kessner’s

(2018) dataset of municipal election-timing,<sup>4</sup> classifying cities as “off-cycle” if their municipal elections are *not* held at the same time as regular elections for national- or state-level offices.

Our dependent variables come from two sources. First, we examine the four policy outcomes from Tausanovitch and Warshaw’s (2014) analysis: city expenditures per capita, taxes per capita, share of taxes from sales taxes, and a city policy scale where higher values indicate a more conservative set of city environmental/sustainability policies. Second, we use US Census Bureau data on local government spending in 2012 (as provided by Pierson, Hand, and Thompson 2015) to measure outcomes that are the most directly relevant to public employees: per capita city expenditures on full-time public employee salaries, the number of full-time city employees per capita, and the average full-time employee salary.<sup>5</sup> Since there is an inherent trade-off between these last two outcomes, we pay particularly close attention to each city’s overall expenditures on full-time salaries, which should be higher regardless of whether public employee groups lobby for higher pay or more hires.

## Initial Results

We begin with a series of regressions that directly extend the core finding of Tausanovitch and Warshaw (2014, Table 2). Our key innovation is to examine whether city responsiveness differs based on when municipal elections are held. In Table 1, we run separate regressions, first for the full sample of cities (column 1) and then for two subsamples: cities with off-cycle elections (column 2) and cities with on-cycle elections (column 3). Here, we show only the estimates for our primary independent variable: Residents’ Policy Conservatism.<sup>6</sup> The left-hand column of Table 1 displays the specific dependent variable estimated.

{Table 1 about here}

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<sup>4</sup> This involved searching government and newspaper websites to identify cities’ municipal election timing *prior* to 2010 so as to precede our dependent variables (mostly measured at or after 2010).

<sup>5</sup> We elect to focus on full-time employees since public employee union interest groups primarily tend to advocate for full-time employees while opposing the use of part-time employees as a cost-savings strategy. Our results hold when including part-time employees.

<sup>6</sup> See Tables A1 and A2 in the supplementary appendix for the full results.

The patterns in these initial results are consistent with our expectations. Column (1) replicates Tausanovitch and Warshaw (2014), showing that cities with more conservative residents enact more conservative policies. However, this relationship is, as expected, far weaker in cities with off-cycle elections (column 2) than cities with on-cycle elections (column 3) on the two policy outcomes that are relevant to public employees—per capita expenditures and taxes. For example, the negative correlation between city expenditures and residents’ conservatism increases 60% in cities with on-cycle elections. With taxes, the negative correlation is 5 times greater. However, for the other two outcomes, environmental policy and sales tax use, off-cycle elections do not appear to diminish citizen representation; the coefficients are nearly identical in columns 2 and 3. This is expected since overall expenditures and tax rates (to provide revenue for those expenditures) clearly help fulfill city employees’ goals of securing larger budgets for city workers. However, the exact mix of sales taxes or environmental/land-use policies are not directly tied to these goals, and these issues are not similarly constitutive of client politics, where a single well-organized interest group faces little to no organized political opposition (Wilson 1973; Anzia 2020).

## **Election-Timing & Public Employee Interests**

We next turn to the fiscal policy outcomes that should matter most to public employees. Here, we estimate a series of regression models where the explanatory variable of interest is the interaction between a city’s (mass) conservatism and an indicator for off-cycle elections. Additionally, we subject this set of analyses to an even tougher test by following Anzia’s (2011) approach of including state-level fixed effects to leverage within-state variation in city election timing, ruling out time-invariant state-level confounders.

Endogeneity is a concern if cities that historically adopted on/off-cycle elections did so because they tend to be more/less systematically responsive to their residents. However, the vast majority of cities have not altered their election calendar in the modern political era (Anzia 2013). Moreover, in the appendix, we examine survey data of municipal officials from Butler

and Dynes (2016) and find no evidence that election-timing relates to municipal officials' beliefs in the importance of adhering to their constituents' preferences.<sup>7</sup> We also present several other robustness checks in the appendix that show that our findings are not driven by differences in other types of institutions (e.g., city-manager forms of government, partisan elections) nor by variation in the scope of cities' functional responsibilities.

Figure 1 displays the results of our analysis for six separate policy outcomes. In each panel of the Figure, the black solid lines show the predicted relationship between residents' policy conservatism and each policy outcome in cities that have off-cycle elections while the gray dashed lines show this relationship among cities with on-cycle elections. The shaded area around each line (dark gray for off-cycle and light gray for on-cycle) shows 95% confidence intervals.

{Figure 1 about here}

Consistent with our theoretical expectations, for the first five outcomes (panels A-E) we find that the negative slope on the relationship between citizens' preferences and these outcomes increases significantly ( $p < .05$ ) in cities with on-cycle elections. In fact, for three of these outcomes (expenditures, tax rates, and number of full-time employees), the negative relationship is *only* statistically significant (at the .05 level) in cities with on-cycle elections. In other words, in cities with off-cycle elections, there is *not* a statistically significant difference in expenditures, tax rates, or number of full-time employees between liberal and conservative cities. On the other hand, we can clearly see in Figure 1 that among cities with on-cycle elections, conservative cities have lower taxes and spend less (in general and on public employees) compared to more liberal cities. For example, with expenditures per capita spent on salaries (Panel A), moving 1 standard deviation below the mean in terms of citizens' conservatism (std dev=.26; mean=-.05) to 1 standard deviation above it predicts a \$70 drop in per capita salary expenditures in cities with off-cycle elections ( $p < 0.05$ ). But in cities with on-cycle elections, the drop more than doubles to

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<sup>7</sup> See Table A20.

\$175 ( $p < .05$ ). As with our initial analysis in Table 1, overall expenditures and taxes per capita decline at a steeper rate in cities with on-cycle elections compared to those with off-cycle ones.

Notably, our findings also show that both conservative and liberal electorates can experience diminished responsiveness in off-cycle settings.<sup>8</sup> As the blue lines in panels A-E show, in very liberal cities, governments chosen in off-cycle elections actually spend and tax less than do on-cycle municipalities. How can this be if off-cycle elections uniformly advantage organized interests? Recall that off-cycle elections also reduce turnout among marginal voters. In very liberal cities, this often means that off-cycle elections reduce turnout among large numbers of low-income and racial minority citizens, thereby ensuring that the electorate in off-cycle races is older, wealthier, and whiter—in other words, less representative of the median liberal resident in these cities (Kogan, Lavertu, and Peskowitz 2018). Although public employees also turn out in these off-cycle races, in very liberal cities they stand to lose sympathetic voters, reducing the overall size of the liberal voting bloc that would ordinarily favor liberal fiscal policies.

Finally, as a placebo test, we examine whether off-cycle elections reduce policy responsiveness on a policy issue that does *not* pit a numerically large, organized interest group against a city's mass public (Anzia 2020). Specifically, we examine the relationship between residents' political conservatism and cities' LGBTQ policies (panel F of Figure 1) based on the Human Rights Campaign's 2013 Municipal Equality Index (Warshaw 2019), where higher values indicate more LGBTQ-friendly policies. As Panel F reveals, off-cycle elections do not, as our theory would predict, dilute city policy responsiveness on LGBTQ rights issues nor (as shown in the appendix) do they influence whether a city's mass ideology is predictive of whether that city prohibits employment discrimination based on gender identity. We also find similar results on the scaled policy outcome and share of taxes from sales taxes. (See section C of the online appendix.)

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<sup>8</sup> This is a potentially important finding given that some speculation about election timing presupposes that off-year elections uniformly advantage Democratic constituencies (see Hersh 2015).



## Discussion

In her path-breaking study of election timing, Anzia (2013) concludes by summarizing the stakes of the debate for American democracy. “At the bottom of all of this,” she explains, “is concern about [political] representation.” We agree. Indeed, closer attention to the impact of election timing on the behavior of local governments can help shed light on one of the oldest debates in the discipline concerning “who governs” (Dahl 1961). However, Anzia explains that scholars have not yet answered “whether off-cycle elections... produce [policy] outcomes that are less representative of the whole of the eligible electorate” (Anzia 2013, 207). In this study, we provide evidence that speaks directly to this question in city politics, and the stakes are high because most local governments in the US (78% in our sample) are chosen in off-cycle elections.

Though we find that off-cycle city elections can weaken representation, the advantage that off-cycle elections provide to organized groups do not render them omnipotent. Instead, city governments remain responsive when the issue being contested does not involve a large and organized interest advocating for policies that run counter to the preferences of the city’s median resident. Practically speaking, however, since (1) debates over the size of city government are always relevant to the millions of public employees who have a vested interest in jobs and pay (Moe 2015), and (2) payrolls consume a large share of the average city’s expenditures, off-cycle elections can have serious ramifications for the tone and direction of political representation cities provide to their residents.<sup>9</sup>

Altogether, our findings have broad implications for American politics. First, they provide new evidence that informs an active and ongoing debate across states about reforming the electoral calendar (National Conference of State Legislatures 2016). Many sub-national policymakers have begun to push for consolidated on-cycle elections. These proponents frequently draw attention to cost savings for local governments and the ability to increase voter

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<sup>9</sup> We leave to others to address more fully whether governments should be more responsive to mass publics than interest groups on less salient issues (e.g., Burstein 2006), like spending on municipal employees. At the same time, this spending can lead to higher taxes or crowd out budgets for issues that are more salient to mass publics.

participation (Anzia 2013). However, our findings suggest that consolidation also stands to enhance and strengthen democratic representation.

Second, this study contributes to a growing emphasis on the dynamics of representation in sub-national governments. Though past work questioned whether we should even anticipate policy congruence at the local level (e.g., Peterson 1981), a more recent body of work shows strong evidence that it occurs. Yet, Tausanovitch and Warshaw (2014) failed to find any evidence that local political institutions influence municipal policy responsiveness. However, missing from their analysis was the institution of election timing. By showing that oddly-timed elections can impact mass-elite policy congruence, our findings should encourage other scholars to revisit the role of mediating institutions in shaping representation in local government.

More attention to the interaction between institutions and which groups and types of constituents receive better or worse representation as a consequence could be one fruitful direction for future research. For example, if off-cycle elections reduce participation in marginalized communities, does this also reduce substantive representation for racial minorities in local politics in addition to descriptive representation (Hajnal and Trounstein 2005)? Scholars should also examine whether other organized groups, beyond public employees, are able to use off-cycle elections to push politics off center. Do developer interests in liberal cities, for example, override the mass public's preferences for affordable housing when elections are off-cycle and the developers' electioneering efforts stand to pack more punch?

Above all, our finding that election timing impacts representation speaks to the foundational role that organized interests play in American democracy. By showing that off-cycle elections can allow vested interests to push sub-national politics "off-center" on important fiscal issues that influence the size of government, we contribute to renewed debates about whether voters or groups should be at the center of our understanding of American politics (Anzia and Moe 2019; Bawn et al. 2012; Hacker and Pierson 2014). Specifically, our work highlights the limitations of the median voter model for understanding the dynamics of political representation

in the US, especially in sub-national politics where off-cycle elections are pervasive and interest groups are particularly well-positioned to influence policymaking (Anzia 2019).

**Ethics and Transparency in Research Statements:**

The authors affirm this research did not involve human subjects. The authors declare no ethical issues or conflicts of interest in this research. The authors received no financial support for the research, authorship, and/or publication of this article. Research documentation and/or data that support the findings of this study are openly available in the APSR Dataverse at <https://doi.org/10.7910/DVN/QTJGR5>.

## References

- Anzia, Sarah. 2012. "Partisan power play: The origins of local election timing as an American political institution." *Studies in American Political Development* 26(1): 24-49.
- . 2013. *Timing and Turnout: How off-Cycle Elections Favor Organized Groups*. University of Chicago Press.
- . 2019. "Looking for Influence in All the Wrong Places: How Studying Subnational Policy Can Revive Research on Interest Groups." *Journal of Politics* 81(1): 343–51.
- . 2020. *Local Interests: Interest Groups and Public Policy in U.S. City Government*. Book Manuscript.
- Anzia, Sarah, and Terry M. Moe. 2015. "Public Sector Unions and the Costs of Government." *Journal of Politics* 77(1): 114–27.
- . 2019. "Interest Groups on the inside: The Governance of Public Pension Funds." *Perspectives on Politics* 17(4): 1059–78.
- Bawn, Kathleen et al. 2012. "A Theory of Political Parties: Groups, Policy Demands and Nominations in American Politics." *Perspectives on Politics*: 571–97.
- de Benedictis-Kessner, Justin. 2018. "Off-Cycle and out of Office: Election Timing and the Incumbency Advantage." *The Journal of Politics* 80(1): 119–132.
- Berkman, Michael B., and Eric Plutzer. 2005. *Ten Thousand Democracies: Politics and Public Opinion in America's School Districts*. Georgetown University Press.
- Berry, Christopher R. 2009. *Imperfect Union: Representation and Taxation in Multilevel Governments*. Cambridge University Press.
- Burstein, Paul. 2006. "Why Estimates of the Impact of Public Opinion on Public Policy are Too High: Empirical and Theoretical Implications." *Social Forces* 84(4): 2,273-2,289.
- Dahlberg, Matz, and Eva Mörk. 2006. "Public Employment and the Double Role of Bureaucrats." *Public choice* 126(3–4): 387–404.
- Dahl, Robert A. 1961. *Who governs?: Democracy and power in an American city*. Yale University Press.
- Disalvo, Daniel. 2018. "Medicaid Politics in New York: Vested Interests and Policy-Focused Analysis." *Political Science Quarterly* 133(2): 291–317.
- Butler, Daniel M., and Adam M. Dynes. 2016. "2016 AMOS." *American Municipal Officials Survey*. [http://www.municipalsurvey.org/wp-content/uploads/2017/12/AMOS2016\\_details-of-sample.pdf](http://www.municipalsurvey.org/wp-content/uploads/2017/12/AMOS2016_details-of-sample.pdf)

- Einstein, Katherine Levine, and Vladimir Kogan. 2016. "Pushing the City Limits: Policy Responsiveness in Municipal Government." *Urban Affairs Review* 52(1): 3–32.
- Hacker, Jacob S., and Paul Pierson. 2011. *Winner-Take-All Politics: How Washington Made the Rich Richer - And Turned Its Back on the Middle Class*. Simon and Schuster.
- . 2014. "After the 'Master Theory': Downs, Schattschneider, and the Rebirth of Policy-Focused Analysis." *Perspectives on Politics* 12(3): 643–62.
- Hajnal, Zoltan L. 2010. *America's Uneven Democracy: Race, Turnout, and Representation in City Politics*. New York: Cambridge University Press.
- Hajnal, Zoltan L., and Paul G. Lewis. 2003. "Municipal Institutions and Voter Turnout in Local Elections." *Urban Affairs Review* 38(5): 645–68.
- Hajnal, Zoltan L., and Jessica Trounstine. 2005. "Where Turnout Matters: The Consequences of Uneven Turnout in City Politics." *Journal of Politics* 67(2): 515–535.
- Hajnal, Zoltan L., and Jessica Trounstine. 2010. "Who or What Governs?: The Effects of Economics, Politics, Institutions, and Needs on Local Spending." *American Politics Research* 38(6): 1130–1163.
- Hersh, Eitan. "How Democrats Suppress the Vote." *FiveThirtyEight*, November 3, 2015. Accessed February 17, 2021. <https://fivethirtyeight.com/features/how-democrats-suppress-the-vote/>
- Hyttinen, Ari et al. 2018. "Public Employees as Politicians: Evidence from Close Elections." *American Political Science Review* 112(1): 68–81.
- Kogan, Vladimir, Stéphane Lavertu, and Zachary Peskowitz. 2018. "Election Timing, Electorate Composition, and Policy Outcomes: Evidence from School Districts." *American Journal of Political Science* 62(3): 637–51.
- Moe, Terry M. 2015. "Vested Interests and Political Institutions." *Political Science Quarterly* 130(2): 277–318.
- National Conference of State Legislatures. 2016. "The Canvass: Election Dates May or May Not Matter."
- Niskanen, William A. 1971. *Bureaucracy and Representative Government*. Transaction Publishers.
- Oliver, J. Eric, and Shang E. Ha. 2007. "Vote Choice in Suburban Elections." *American Political Science Review* 101(3): 393–408.
- Peterson, Paul E. 1981. *City Limits*. University of Chicago Press.

- Pierson, Kawika, Michael L. Hand, and Fred Thompson. 2015. "The Government Finance Database: A Common Resource for Quantitative Research in Public Financial Analysis." *PLoS ONE* 10(6):1-22. Accessed June 8, 2020.  
[http://www.willamette.edu/mba/research\\_impact/public\\_datasets/](http://www.willamette.edu/mba/research_impact/public_datasets/)
- Schneider, Mark. 1989. "Intermunicipal Competition, Budget-Maximizing Bureaucrats, and the Level of Suburban Competition." *American Journal of Political Science*: 612–28.
- Sieg, Holger, and Yu Wang. 2013. "The Impact of Unions on Municipal Elections and Urban Fiscal Policies." *Journal of Monetary Economics* 60(5): 554–67.
- Spizman, Lawrence M. 1980. "Unions, Government Services, and Public Employees." *Public Finance Quarterly* 8(4): 427–42.
- Tausanovitch, Chris, and Christopher Warshaw. 2013. "Measuring Constituent Policy Preferences in Congress, State Legislatures, and Cities." *Journal of Politics* 75(2): 330–42.
- . 2014. "Representation in Municipal Government." *American Political Science Review* 108(3): 605–41.
- Warshaw, Christopher. 2019. "Local Elections and Representation in the US." *Annual Review of Political Science*. 461-479.
- Wilson, James Q. 1973. *Political Organizations*. New York: Basic Books.

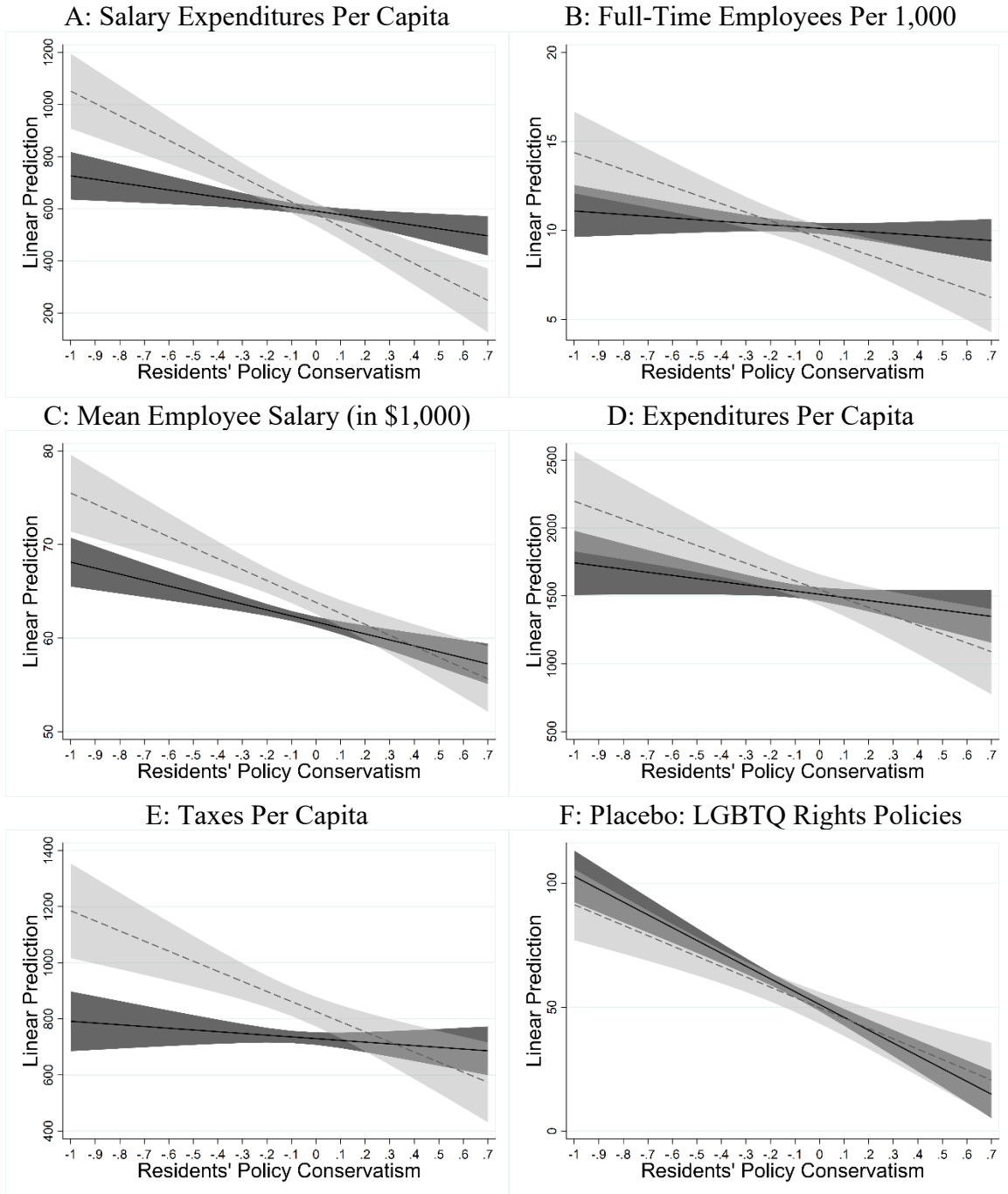
## Tables & Figures

**Table 1: Association Between Citizens' Preferences and Expenditures and Taxes by Election Timing**

Dependent Variable	(1) All Cities	(2) Off-Cycle	(3) On-Cycle
Expenditures Per Capita	-384.11* (117.94)	-356.15* (124.94)	-592.47* (290.06)
Obs.	1,615	1,247	353
# of State Random Effects	51	45	23
Taxes Per Capita	-153.96* (53.18)	-95.96^ (54.79)	-487.04* (156.04)
Obs.	1,574	1,229	330
# of State Random Effects	50	45	22
Scaled Policy Outcomes (on environment & sustainability)	1.03* (0.19)	1.02* (0.21)	0.98* (0.42)
Obs.	436	335	101
# of State Random Effects	43	37	14
Share of Taxes from Sales Tax	0.05* (0.01)	0.05* (0.02)	0.05^ (0.03)
Obs.	1,613	1,245	353
# of State Random Effects	51	45	23

Note: Results show the coefficient on the variable, Residents' Policy Conservatism, from regressions with state-level random effects, following Table 2 of Tausanovitch and Warshaw (2014). The dependent variable is indicated in the left column. Standard errors are in parentheses. \*  $p < 0.05$ , ^  $p < 0.1$  (two-tailed).

**Figure 1: Election Timing and the Association between Citizens' Preferences and Policy Outcomes Relevant to Public Employees**



Off Cycle:	On Cycle:
95% CI's	95% CI's
Reg. Line	Reg. Line

Notes: This figure shows the relationship between residents' policy conservatism and several outcomes (within each panel) based on whether the municipalities' elections are held off-cycle (black line and dark gray CI's) or on-cycle (gray dashed line and light gray CI's).

See Table A3 in the appendix for full regression results.