

Cities, Lobbyists, and Representation in Multilevel Government

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Abstract

Why do local governments sometimes hire lobbyists to represent them in other levels of government? I argue that lobbying can substitute for vertical representation when local officials struggle to secure benefits directly from their state and federal representatives. I provide evidence consistent with this theory by examining how municipal governments in the U.S. respond to partisan and ideological mismatches with their state legislators—a common representational challenge. Using almost a decade of original panel data on municipal lobbying in all 50 states, I employ difference-in-differences and a regression discontinuity design to demonstrate that cities are significantly more likely to hire lobbyists when their districts elect non co-partisan state representatives. The results are broadly consistent with a model of intergovernmental lobbying in which local officials purchase advocacy to compensate for the representational gaps that sometimes emerge in multilevel government.

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1 Introduction

“It’s important that the city has a lobbying presence in Harrisburg, and it’s doubly important that Philly, which is a Democratic city, has access to GOP leadership who basically run the show.”

— Pennsylvania Lobbyist Larry Ceisler

Americans distrust lobbyists. In a 2017 Gallup poll that asked respondents to rate the “honesty and ethical standards” of various occupations, lobbyists came in dead last.¹ Public stereotypes of the profession typically revolve around slick power brokers representing wealthy corporations and special interests. But many people may not be aware that they regularly subsidize the salaries of professional lobbyists with their local tax dollars. This is because local governments are active consumers of lobbyist representation. In fact, over 60% of residents in the U.S. live in a city that has hired a lobbyist at some point to advocate for local interests at either the state or federal level.

Why do local governments sometimes hire lobbyists to represent them in other levels of government? Elected officials of all types lobby each other frequently—both in the U.S. and other federal systems—and these efforts can dramatically impact the distribution of intergovernmental transfers and other policy outcomes (De Figueiredo and Silverman 2006; Sorensen 2003; Goldstein and You 2017). But existing theories of lobbying focus primarily on the behavior of interest groups and corporations and are less well-equipped to explain variation in the intergovernmental context. As a result, we know little about why local governments sometimes choose to pay for lobbyist representation.

One of the features that distinguishes local governments from other types of organizations that lobby is that they are geographically nested within state and federal legislative districts that serve the same constituents. But the quality of vertical representation that localities receive can vary dramatically. For example, regions that are overrepresented in the central

¹<https://news.gallup.com/poll/1654/honesty-ethics-professions.aspx>

legislature due to malapportionment enjoy a variety of bargaining advantages, which can translate into increased funding (Ansolabehere, Gerber, and Snyder 2002; Dragu and Rodden 2011), more responsive policies (Ansolabehere and Snyder 2008), and less local inequality (Ardanaz and Scartascini 2013). And local officials that are politically aligned with their representatives in the central government tend to receive more discretionary transfers than their non-aligned counterparts (Levitt and Snyder 1997; Solé-Ollé and Sorribas-Navarro 2008; Brollo and Nannicini 2012).

In this paper, I argue that local governments hire lobbyists to substitute for elected representation when they struggle to secure funding and favorable policies directly from their elected lawmakers. I test this theory by examining how municipal governments in the U.S. respond to partisan and ideological mismatches with their state legislators. While there are many reasons why representational gaps might emerge in multilevel systems, the distributive politics literature offers particularly robust theoretical and empirical support for the idea that political alignment affects the quality of vertical representation (e.g., Arulampalam et al. 2009; Cox 2010; Fourinaies and Mutlu-Eren 2015; Bracco et al. 2015). If local governments are more likely to hire lobbyists when represented by non co-partisans in the state legislature, this would provide evidence consistent with the theory.

Using newly collected panel data on municipal lobbying across the U.S., I employ a difference-in-differences approach and a regression discontinuity design to demonstrate that cities are significantly more likely to hire an outside lobbyist after their district elects a state representative from the opposite political party. The estimates range from a conservative 5 percentage point increase to over 20 percentage points depending on the sample and model specification. Qualitative evidence suggests that cities are hiring lobbyists specifically to compensate for the representational challenges that emerge from these partisan mismatches.

I conduct a variety of additional tests to validate the results and explore possible mechanisms. The type of partisan mismatch that appears to most strongly predict lobbying is between city residents and the state legislators representing them; adding mayoral partisan-

ship to the models explains little additional variance. Cities also lobby primarily in response to mismatches with their own district representatives rather than in response to the overall partisan composition of the state lower chamber. Preliminary evidence from Missouri confirms that municipal lobbyists spend most of their time meeting with legislators from their own district.

Together, these results provide a new perspective on the role of intergovernmental lobbying in facilitating vertical representation in federal systems. When local governments aren't getting their preferred bundles of funding and policy and from their state lawmakers, they can hire lobbyists to advocate for their interests and substitute for elected representation. While the literature on federalism and distributive politics often acknowledges that strategic local actors try to influence the decisions of the central government (e.g., Oates 1972), much of this research fails to explicitly incorporate intergovernmental lobbying into the theoretical models guiding the work. The findings in this paper suggest that in order to understand who gets what and who has power in federal systems, researchers need to take seriously the strategic lobbying behavior of local governments.

2 The Demand for Lobbying: Existing Perspectives

Interest group scholars typically focus on two primary determinants of lobbying: political stakes and organizational resources (Lowery and Brasher 2004). Classic pluralist theories posit that groups are more likely to become politically active when the policy stakes are high (Truman 1951), and the empirical literature has demonstrated that this plays out in a variety of settings. For example, firms lobby more when their industries are more heavily regulated (Stigler 1971; Hansen and Mitchell 2001), when they are more dependent on the government for sales and contracts (Tripathi 2000; Hart 2001), and when their business operations are more sensitive to potential government interventions (Salamon and Siegfried 1977; Grier, Munger, and Roberts 1994).

Organizations are also more likely to become politically active when they have more resources at their disposal—including members, assets, and employees (Drope and Hansen 2006; Richter, Samphantharak, and Timmons 2009). Scholars have proposed various mechanisms to explain these findings. Smaller companies may have only intermittent political concerns that don't warrant the expense of a lobbyist, or they might lack the political expertise to significantly influence outcomes (Bertrand, Bombardini, and Trebbi 2014). Or, perhaps only an elite “top tier” of interest groups can afford to spend enough money on political advocacy to stand out in the complex policy environment, which might deter groups with fewer resources from entering the lobbying arena (Drutman, Grossmann, and LaPira 2014).

This work provides a useful starting point for thinking about reasons why cities might lobby. Using the logic of stakes and resources, we would expect larger and more economically affluent cities to be the most active lobbyists. The stakes are clearly high for major metropolitan areas, which are often disproportionately impacted by state policy and rely heavily on state funding to help them provide services to diverse populations (Nice 1987; Gamm and Kousser 2010). And according to the resources hypothesis, we should see more lobbying from affluent cities with more local revenue and wealthier, more politically active residents (Verba, Schlozman, and Brady 1995). But while existing theories suggest several likely correlates of lobbying across local governments, there are also some important distinctions in the incentives facing local governments and other types of institutions that lobby.

2.1 How Local Governments Are Different: Lobbying and Representation in Federal Systems

One of the key differences between local governments and other interest groups is that local governments are particularly sensitive to their political geography. Membership-based groups and corporations are often regionally dispersed and can target their lobbying efforts across

multiple states and legislators. Businesses can relocate (or threaten to) if they are dissatisfied with the political environment in their district (e.g., Peterson 1981). Even institutions that are fairly fixed in terms of their physical location—like universities or company towns—are better equipped than local governments to shop around the legislature for allies if they aren't happy with the actions of their district representatives. For one thing, these organizations can make campaign contributions, which are valuable to elected officials even when they represent other districts. Local governments, on the other hand, are legally prohibited from contributing to political campaigns (Cammisa 1995), which limits their ability to get the attention of legislators outside of their district.

As a result, the quality of vertical representation that cities receive from their state and federal representatives strongly influences their demand for lobbying. When these relationships work well, local officials can often get everything they need in terms of policy and funding without hiring lobbyists. As a former Airport Director in Flint, Michigan, observed: “We’ve just never really needed [lobbyists]...we’ve been successful enough using our senators and congressman.”² The mayor of Springfield, Illinois, explained that his city relied on the Illinois Municipal League and the city’s elected delegation to represent city interests in state government.³ And the mayor of Kenai, Alaska, asserted that his relationship with his state representatives was strong enough that the city didn’t need a lobbyist. “I’ve got a great relationship with all of our legislative delegation. I felt like local government shouldn’t have to hire a lobbyist to lobby our legislators. We should go directly to them.”⁴

State and federal officials seem keenly aware of their special duty to represent the local governments in their district. According to the Chief of Staff of Congressman Bill Young (R-Florida), “When asked the question whether a city or county needs to hire a lobbyist, he

²http://www.mlive.com/news/flint/index.ssf/2009/12/taxpayers_pay_when_local_gover.html

³<http://www.sj-r.com/article/20130811/News/308119958>

⁴<https://www.adn.com/politics/article/alaska-communities-school-districts-paying-more-lobbyists-cash-strapped-capitol/2016/02/15/>

has always told them they don't need to hire a lobbyist to work with their own congressman. That's his job. Those are the people he was elected to represent. He doesn't need to work through somebody else to schedule a meeting with a mayor or a city council member.”⁵ State Representative Greg Davis of Minnesota was even more explicit: “It's insulting that [they] need to hire a lobbyist when we're elected to make sure our cities are in great shape.”⁶

But not all local governments enjoy such cozy relationships with their representatives. Sometimes, local officials might simply not be able to get the attention of their state and federal counterparts. Representatives might not be aware of local needs—or they might have spending and policy preferences that conflict with those of the local governments in their district. When local governments aren't getting what they want directly from their elected officeholders—whatever the reason—hiring lobbyists provides them with the opportunity to purchase additional advocacy in other levels of government. This perspective is similar to the argument advanced by Goldstein and You (2017), who find that cities are more likely to lobby the federal government when they face a preference incongruence with their state government.

I assume there are a variety of channels through which lobbying might improve representational outcomes. Qualitative evidence suggests that local officials primarily use lobbyists to gain access to elected state legislators and to persuade those legislators to support local projects.⁷ The key observable implication of my theory is simply that, all else equal, cities will lobby more when they face obstacles to effective vertical representation. The rest of this paper leverages electoral turnover among state legislators to generate a variety of evidence consistent with this perspective.

⁵<http://www.nytimes.com/2006/07/02/washington/02earmarks.html>

⁶<http://www.startribune.com/governments-spend-millions-lobbying-government/373685161/>

⁷E.g. <http://archive.sltrib.com/article.php?id=2714828&itype=CMSID>;
<http://www.startribune.com/governments-spend-millions-lobbying-government/373685161/>

3 Lobbying Disclosure Data: Descriptive Overview

The state-level lobbying data used in the following analyses are the product of a multi-year data collection effort that involved gathering, cleaning, and compiling lobbying disclosure data from all 50 states. Each state has its own lobbying disclosure law requiring lobbyists to report their communication with state officeholders—and each state law is at least as restrictive as the 1995 Federal Lobbying Disclosure Act (Lowery and Brasher 2004). But while every state regulates lobbying, this information is more difficult to access than federal disclosure data because each state has its own reporting standards. Some states make their lobbying information publicly available on-line; other states are less transparent and only provide data upon request—and sometimes for a fee.⁸

This 50-state lobbying database runs from 2006 to 2014 and contains nearly half a million total observations. Armed with information about all of the organizations that were lobbying in a given state in each year, I could identify which cities employed lobbyists by matching the names from the disclosure data with the universe of municipalities enumerated by the Census of Governments. The Census of Governments is conducted every five years by the U.S. Census Bureau and provides data on public finances for every local government in the country.⁹

There are two things to note about using disclosure filings to measure lobbying. First, cities (and other organizations) are required to disclose the lobbying activities of both in-house employees as well as external firms. For example, if a large city were to hire a full-time staff member to lobby on its behalf, it would need to report that information. Second, as discussed in the previous section, local officials can also “lobby” by communicating directly with their state representatives. In fact, this happens all the time. State house members

⁸<https://www.followthemoney.org/research/institute-reports/50-state-assessment-of-lobbying-expenditure-data/>

⁹https://www.census.gov/govs/cog/about_the_data.html

spend up to half of each week in their districts attending meetings with local elected officials and constituents (Jewell 1982), and city mayors and council members often have close relationships with their state delegation. The following analyses specifically examine the logic of *paid* lobbying, whereby municipal officials hire an outside firm to lobby on their behalf. To the extent that informal lobbying communication also occurs between cities and their state members, this should attenuate the results.

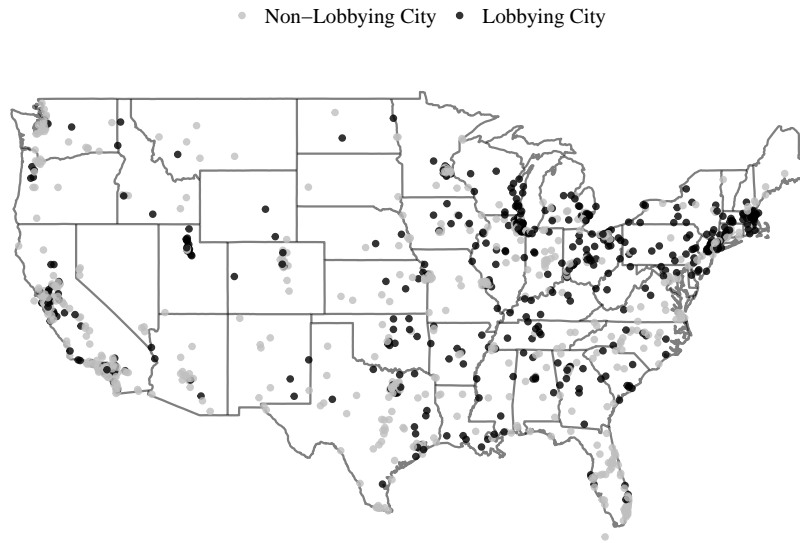
The population of interest is every city with more than 20,000 residents, which is the set of cities for which ideology and vote share estimates exist thanks to work by Tausanovitch and Warshaw (2014). After determining which of these city governments filed state disclosure reports, I merged this information with financial, demographic, and political data from a variety of other sources, including the Survey of Local Government Finances, the American Community Survey, Missouri Census Center geography data, and state legislator party and ideology estimates from Shor and McCarty (2014). The final dataset contains information about municipal lobbying and city characteristics for each of the roughly 1,200 cities in the U.S. with a population of at least 20,000 and spans the period from 2006 to 2014.

City lobbying is common across the U.S. and is not limited to a single state or region. Figure 1 maps every city with a population of 20,000 or more and shows which cities lobbied at least once between 2006 and 2014. Cities hire lobbyists in every state, with particularly high numbers of cities lobbying in Washington, California, Texas, and Florida. States also experience significant variation in the proportion of cities that lobby, and exploring the cross-state institutional features that predict local government lobbying is a topic ripe for further research.

4 Cross-Sectional Correlates of City Lobbying

I begin by establishing some general correlations between city characteristics and lobbying activity across cities. Table 1 shows the predicted probability of lobbying across several

Figure 1: Geographic Distribution of Lobbying Cities, Population 20,000+.



covariates for every city in the sample. These covariates were selected from a battery of financial and demographic variables due to their predictive power, and I later use these them as controls in the fixed-effects models. The marginal correlations are estimated via pooled OLS, and the variables include measures of city population, median income, own source revenue, racial diversity, and median house value.¹⁰

Consistent with other findings from the interest group literature, Table 1 indicates that city population is one of the strongest predictors of lobbying across cities. Each time the size of a city’s population doubles, the probability of lobbying increases by about 13 percentage points—holding other city characteristics fixed. In fact, 63% of the 100 most populous cities reported hiring lobbyists in every year between 2006 and 2014. Perpetual government lobbyists include New York, Los Angeles, and Chicago, as well as Miami, Phoenix, and St. Louis. But many large cities paid for lobbying in some years but not others, like San Francisco and Newark, and a few cities didn’t pay for lobbyist representation at all during

¹⁰Descriptive statistics for all of these variables can be found in Table A1.

Table 1: Correlates of City Lobbying State Government, 2006-2014.

	Probability of Lobbying	
	(1)	(2)
Population (Log)	0.134* (0.011)	0.134* (0.011)
Median Income (Log)	2.249* (0.656)	2.297* (0.665)
Median Income Squared (Log)	-0.107* (0.030)	-0.109* (0.031)
Own Source Revenue (Log)	0.054* (0.009)	0.052* (0.009)
% White	-0.202* (0.029)	-0.200* (0.029)
Median House Value (Log)	0.065* (0.017)	0.069* (0.017)
State FEs	✓	
Year FEs	✓	
State-Year FEs		✓
Observations	10,322	10,322
# Cities	1,244	1,244
Mean Lobbying Probability	0.42	0.42

Robust standard errors clustered by city. *p<0.05

this period—including Boston. Small and mid-sized cities were even more heterogeneous in their lobbying decisions.

Property values and municipal own-source revenue are also important correlates of lobbying. Own-source revenue is generated by cities locally, usually through property taxes, user fees and charges, and sometimes local sales taxes. But cities vary in their ability to raise local revenue, depending on property values and the affluence of the tax base. Cities that are able to raise more revenue locally are generally more well-off economically and rely less on transfers from the state and federal government. And Table 1 shows that cities with more local, own-source revenue available to them are more likely to hire lobbyists, all else equal. This finding supports existing theory and suggests that municipal resources play a role in the decision to lobby.

Interestingly, the median income of a city's residents does not have a linear cross-sectional relationship with city lobbying. Rather, the probability of lobbying steadily increases with income—and then falls for cities at the very top of the income distribution. This likely reflects the fact that some of the most affluent municipalities in the U.S. are quite small and provide relatively few public services. Some of these communities, like Atherton, California, were incorporated expressly with the purpose of allowing residents to control property taxes. Local governments might simply not be active enough in these cases to warrant hiring a dedicated lobbyist.

5 Measuring Partisan Congruence Between Cities and State Legislators

Having established some basic cross-sectional correlates of lobbying, I now examine how the relationships between state representatives and their cities affects the lobbying decisions of local officials. My theory predicts that outside lobbyists can substitute for elected representation when cities have trouble securing benefits directly from their district legislators. The literature on distributive politics suggests that one of the most common ways in which local governments might be disadvantaged in federal systems is when they are represented by members from the opposite political party. If partisan misalignment increases the probability that cities hire lobbyists, this would provide evidence consistent with the theory.

I rely on city ideology and partisanship measures provided by Tausanovitch and Warshaw (2014). The partisanship estimates aggregate precinct returns from the 2008 presidential election, and the ideology measures rely on hundreds of thousands of public opinion survey responses from city residents across the country and use multilevel regression with post-stratification to assign ideal points to cities. It is important to note that these estimates capture average partisan and ideological tendencies within a city rather than the partisanship of the city council or mayor. However, a growing body of research suggests that the policies

of local officials largely reflect voter preferences (Tausanovitch and Warshaw 2014; Einstein and Kogan 2016; De Benedictis-Kessner and Warshaw 2016). I later directly test the effects of mayoral partisanship for the subset of cities with available data and find very similar results.

For the first set of analyses, I define cities as being either Democratic or Republican by binning them into terciles based on their Democratic vote share in the 2008 presidential election.¹¹ Democratic cities are in the top third of the distribution; Republican cities are in the bottom third. I then map cities into their state legislative districts using geographic data from the Missouri Census Center. State legislator partisanship and ideology scores come from Shor and McCarty (2011), and full models include the covariates introduced in the previous section.

5.1 Partisan Mismatches Increase City Lobbying

Having labeled cities as either Republican or Democratic, I define a partisan mismatch as occurring when a Democratic city is represented by a Republican state legislator or when a Republican city is represented by a Democratic state legislator. In the case of a multi-member city, I code a mismatch as occurring when more than 50% of the delegation comes from the opposite party. The resulting estimates are even bigger if higher thresholds are used. I exploit the fact that cities elect different types of representatives over time to estimate the effect of a partisan mismatch on lobbying probability. In other words, the treatment is an election that leads to a switch in alignment. There were 686 such elections over the course of the panel.

¹¹I also examine a time-varying measure of vote share for cities in California. The estimates are slightly larger using the time-varying measure, suggesting that using a fixed measure of partisanship is not introducing upward bias over the short course of the panel.

I estimate generalized difference-in-differences equations of the following form:

$$Lobby_{it} = \beta_1 Mismatch_{it-1} + X'_{it}\beta_2 + \gamma_i + \eta_t + \epsilon_{it},$$

where $Lobby_{it}$ equals one if city i hired a lobbyist in year t . The coefficient of interest is β_1 , which captures the effect of an election in year $t - 1$ leading to a partisan mismatch between a city and its state representative. X_{it} include combinations of the city-level covariates described in the previous section. City fixed effects are captured by γ_i , and η_t include either year or state-by-year fixed effects.

Table 2 presents the results. The two-way fixed effects approach compares the same cities over time when they are represented by either co-partisan or mismatched state legislators. Across specifications, the results indicate that when a city elects a representative from the opposite political party, the probability of lobbying increases by between 4 and 7 percentage points. Given the mean lobbying probability of 45%, this reflects over a 10 percent increase. Reassuringly, including additional covariates and more restrictive temporal fixed effects only increases the size of the estimates. The results are even more precise when I bin cities into medians rather than terciles based on their partisan vote share in 2008 (results in Table A2 Appendix).

I perform several robustness checks to ensure the validity of the two-way fixed effects design. The key assumption of this approach is that aligned and mismatched cities would have followed the same lobbying trend if the mismatched cities had not elected a non-aligned candidate. To probe the likelihood of this assumption, I first introduce leads of the treatment variable (in this case, an election leading to a partisan mismatch between a city and its lower house representatives) to examine if pre-treatment trends are a concern. Figure 2 shows the effects in graphical form.

Interestingly, it appears that the cities that become mismatched have a slightly higher baseline probability of lobbying than other cities. This would make sense if electoral swings

Table 2: Effect of Partisan Mismatch on City Lobbying. When an election leads to a partisan mismatch between a city’s residents and the party of their state representative, the probability of lobbying increases between 4 and 7 percentage points.

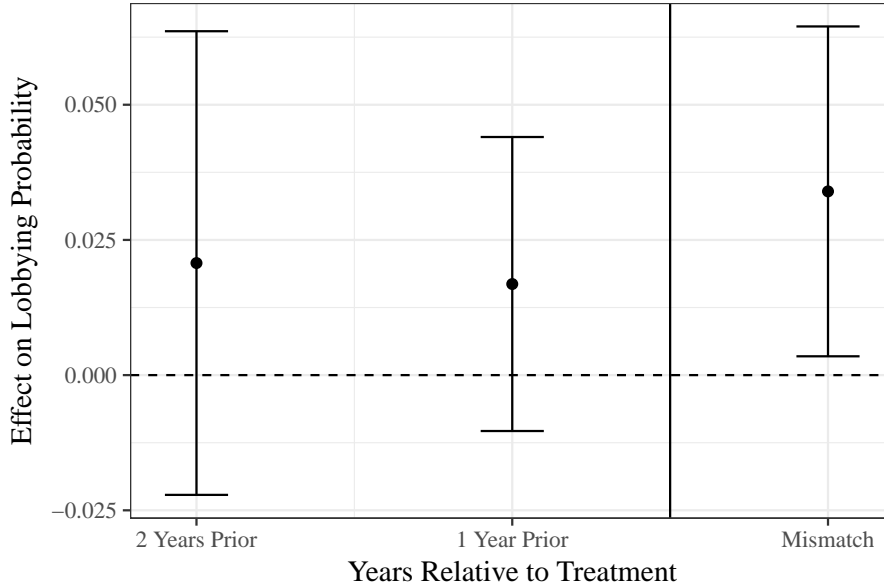
	Probability of Lobbying		
	(1)	(2)	(3)
Partisan Mismatch	0.041* (0.018)	0.060* (0.021)	0.075* (0.026)
Population (Log)	0.197 (0.132)	0.202 (0.153)	0.202 (0.161)
City FEs	✓	✓	✓
Year FEs	✓		
State-Year FEs		✓	✓
Full Controls			✓
Observations	5,903	5,903	4,900
# Cities	738	738	738
Mean Lobbying Probability	0.45	0.45	0.47

Full controls include population, income, own source revenue, percent white, and median house value. Robust standard errors clustered by city. *p<0.05

tend to happen in districts where representatives are performing poorly. Cities in those districts would potentially have reasons to lobby even before they became mismatched. However, there doesn’t appear to be a concerning pre-treatment trend in the lobbying behavior of cities leading up to the election, which would be the key threat to inference with the fixed effects approach. To further assess the parallel trends assumption, I explicitly examine the lobbying behavior of 173 cities in the sample that follow a pattern of being aligned for two years before electing a mismatched representative. Comparing the probability of lobbying for these cities with a matched control sample provides additional evidence that the two groups of cities had very similar trends before the election (Figure A2 in Appendix).

Still, when districts switch parties there are likely a variety of factors that could lead municipal leaders to lobby that may or may not be related to the fact that the city is now represented by a non co-partisan. The RDD results that I present later in the paper help to allay some of these concerns. I uncover an even larger effect when comparing cities that

Figure 2: Partisan Mismatch: Leads and Lags. When a state representative from the opposite political party is elected to office, cities are more likely to lobby. There is also some indication that these cities lobby more before the election, although there does not appear to be evidence of a pre-treatment trend.



narrowly elect an aligned or mismatched candidate, and these cities should have similar sorts of electoral dynamics around the margin of victory threshold. And to be clear, the theory predicts that local governments hire lobbyists when they face representational obstacles. To the extent that the election of a mismatched state legislator might be bundled with other circumstances that might make it difficult for cities to receive effective representation in state government, this is still compatible with the theoretical framework.

5.2 Lobbying in Response to Ideological Congruence

The results in the previous section demonstrate that cities are more likely to hire lobbyists when their districts elect representatives from the opposite political party. But in addition to information about partisanship, the Tausanovitch and Warshaw and Shor and McCarty data also provide estimates about the relative ideological preferences of cities (compared to other cities) and state representatives (compared to other state representatives). I now ex-

amine how the ideological congruence between cities and state legislators affects the lobbying decisions of local officials. This approach allows me to introduce more nuanced, continuous measures of preferences and to check the robustness of the main results.

It is important to note that the ideology estimates for cities and state legislators were derived on different scales. For a city with a given MRP ideology estimate, it's unclear which state legislator ideology score comes closest to corresponding with the preferences of that city. Nevertheless, the two measures correlate strongly. Cities with more liberal Tausanovitch and Warshaw scores have, on average, representatives with more liberal Shor and McCarty scores. Figure 3 plots state representative ideology measures (lower chamber) against city ideology estimates.¹² Positive values are more conservative, and negative values are more liberal. While the range of the city ideology scores is more compressed than that of the legislator scores, the relationship is clear. The most liberal city in the sample, Berkeley, California, is represented by the most liberal state legislator, while cities and their representatives in the south tend to be more conservative.

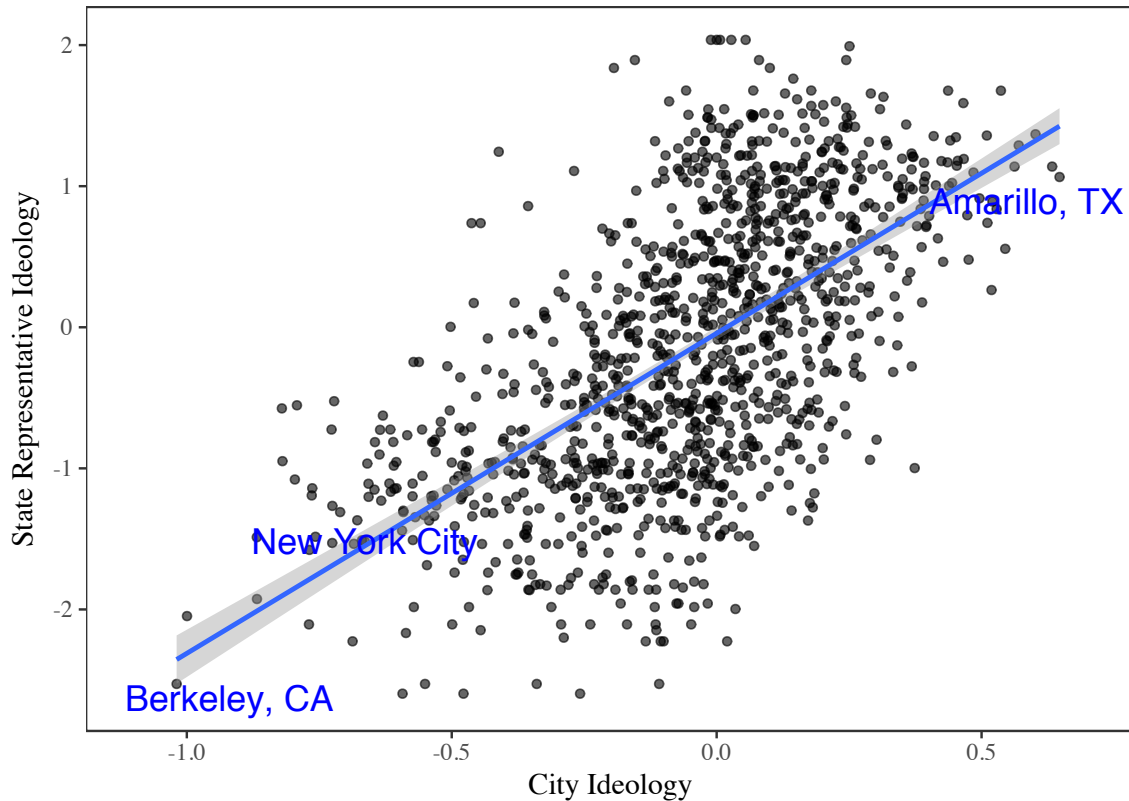
However, some cities appear to be ideologically more distant from their state legislators than others. Several relatively liberal cities are represented by more conservative representatives, and vice versa. For example, Little Rock, Arkansas, is a fairly liberal city. Its residents are 40 percent African-American and include many well-educated white voters, and a majority of the city voted for Obama in 2008. But one of the state legislators representing part of Little Rock in 2012 was Allen Wade Kerr (R-Pulaski County), an ultra-conservative who supported abortion bans and co-sponsored legislation allowing handguns to be carried on church and school properties.¹³

To test how different levels of ideological congruence affect city lobbying, I bin both cities and their representatives into various quantiles based on their ideology scores. This allows

¹²When a city is represented by more than one legislator, the y-axis shows the average ideology score across legislators.

¹³<https://votesmart.org/candidate/key-votes/80920/allen-kerr>

Figure 3: Correlation Between City and State Representative Ideology. On average, a city’s ideology correlates strongly with the ideology of its state representative. Negative values are more liberal; positive values are more conservative.



me to flexibly estimate how representational patterns affect city lobbying without making assumptions about the functional form of the relationship. As in the previous section, I divide cities into terciles, with cities in the most liberal third of the distribution coded as “Liberal” and cities in the most conservative third of the distribution coded as “Conservative.” I then assign legislators to quintiles (consisting of “Most Liberal,” “Liberal,” “Moderate,” “Conservative,” “Most Conservative”). This allows me to see how cities that are relatively more liberal (or conservative) respond when they are represented by state delegates that fall at different points along the ideological distribution.¹⁴

¹⁴Other binning strategies (e.g. medians and quartiles) produce very consistent results and are shown in the on-line replication files.

Table 3: Effect of Representative Ideology on City Lobbying. Cities are especially likely to lobby when they are represented by a house member with a relatively extreme opposing ideology.

	Probability of Lobbying	
	Liberal Cities	Conservative Cities
	(1)	(2)
Liberal Rep.	-0.006 (0.033)	-0.091 (0.064)
Moderate Rep.	0.020 (0.044)	-0.051 (0.057)
Conservative Rep.	0.049 (0.053)	-0.080 (0.055)
Very Conservative Rep.	0.116* (0.058)	-0.107* (0.054)
City FEs	✓	✓
State-Year FEs	✓	✓
Full Controls	✓	✓
Observations	2,541	3,011
# Cities	362	433
Mean Lobbying Probability	0.51	0.37

Models control for population, income, own source revenue, percent white, and median house value. Robust standard errors clustered by city. *p<0.05

Using the same two-way fixed effects approach as before, I estimate the effect of lobbying across a variety of city and state legislator ideology pairings. Table 3 shows the results for both liberal and conservative cities. The omitted category for state representative ideology is “very liberal,” and the coefficients show the probability of lobbying across legislator ideology types compared to this baseline. This flexible approach demonstrates that the probability of lobbying increases as state legislators become more extreme in their ideology. Liberal cities are almost 12 percentage points more likely to lobby when represented by a very conservative house member compared to a very liberal representative. Similarly, conservative cities are 11 percentage points *less* likely to lobby when they elect an extreme conservative as opposed to an extreme liberal.

Figure 4: Effect of Ideological Mismatch on Lobbying. City fixed effects models demonstrate that cities are more likely to lobby when they are represented by a house member with a relatively extreme opposing ideology.

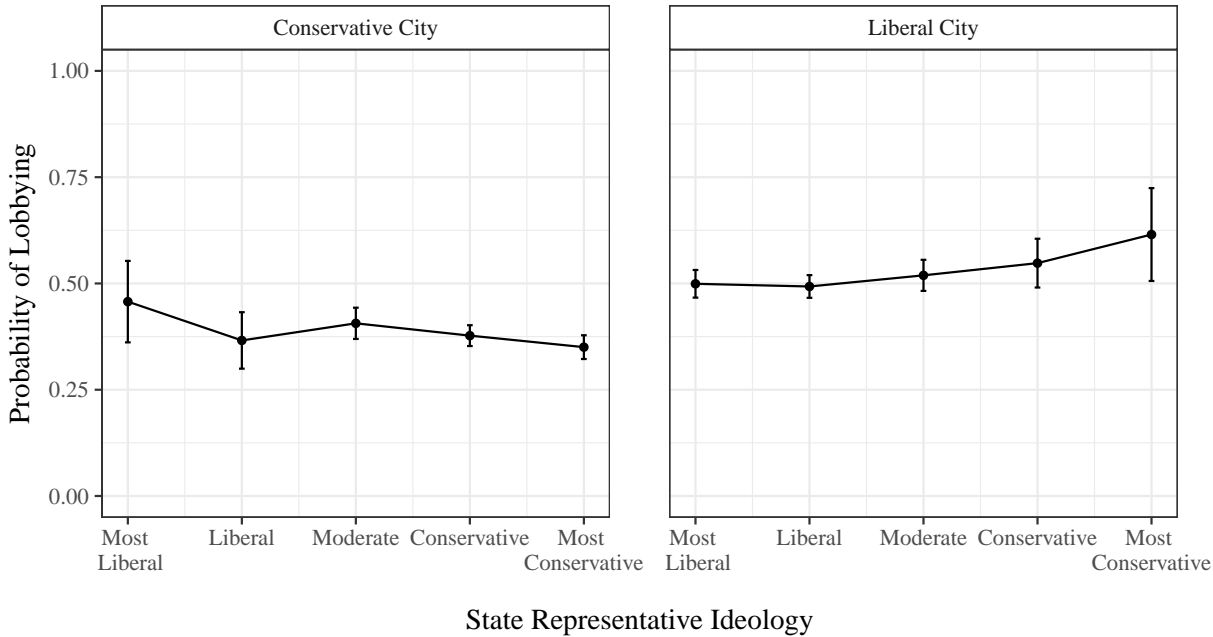


Figure 4 illustrates the marginal effect of representative ideology on the probability of lobbying for conservative and liberal cities. The prediction intervals are a bit imprecise given the relatively small sample size in each condition, but the pattern is clear. The probability that cities hire a lobbyist generally increases as their state legislators become more ideologically distant. Cities lobby when their districts elect representatives from the opposite party, and this effect is even larger for the most liberal (or conservative) lawmakers.

6 Examining Lobbying Decisions Across Close Elections: Supplementary RDD

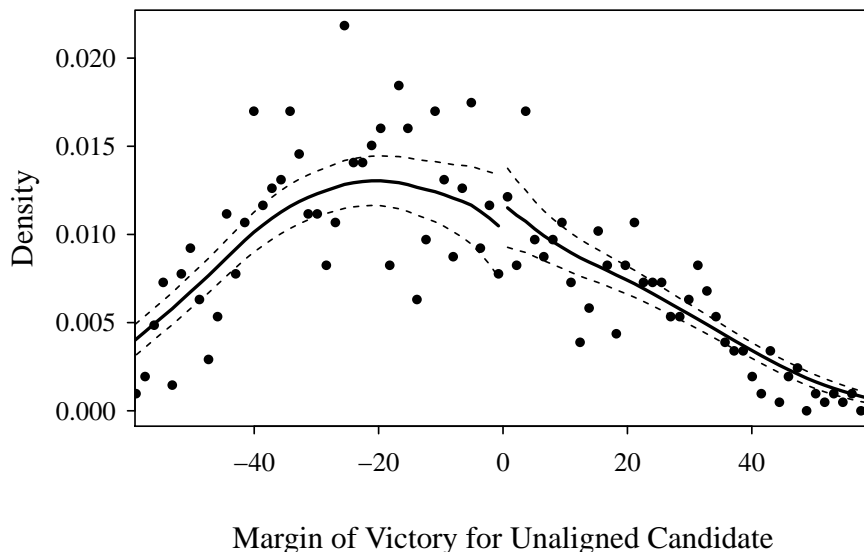
The previous section used panel regression methods to identify the effect of different types of partisan and ideological mismatches on city lobbying. This approach compares the lobbying decisions of cities before and after their districts elect representatives with different ideological characteristics. Another, complementary approach would be to compare the lobbying decisions of cities that narrowly elect either co-partisan or mismatched candidates. If a sufficient number of these close elections occur, a regression discontinuity design can uncover the local average effect of state representative alignment on city lobbying.

To employ the RDD, I merged the dataset used in the previous section with state legislative election returns from Klarner et al. (2013). I restrict the analysis to races in which the top-two vote getters are a Republican and Democrat competing for one seat. I focus specifically on races in districts that represent at least 50 percent of a city’s population, because these are cases in which a victory by either the aligned or unaligned candidate would change the majority party of a city’s delegation in the statehouse. Of the cities in my sample, 1,030 (out of 1,244) have a district large enough to meet this requirement.

As in the panel regression analysis, I define candidate alignment in terms of average city partisanship. For cities falling above the median in terms of Democratic vote share or liberal ideology, a Democrat is considered to be an aligned candidate and a Republican is a mismatch (and vice versa for Republican cities).¹⁵ The running variable is the margin of victory for the mismatched candidate—for example, the Republican candidate votes share minus the Democrat candidate vote share in a city coded as being Democratic. Values near zero indicate very close elections that might have gone either way. The key assumption for the design to recover a valid estimate of the treatment effect is that candidates are not able

¹⁵I present the more conservative results based on binning cities into medians here. The results are even larger and stronger when I define mismatches in terms of city terciles.

Figure 5: RDD Sorting Test. Aligned candidates win more elections than mismatched candidates. However, a roughly equal number of aligned and mismatched candidates fall immediately on either side of the margin of victory cutoff.



to sort around this winning threshold and that potential outcomes for cities are continuous at the cutpoint.

To probe these assumptions, I begin by examining the density of the running variable at the cutoff using the sorting test proposed by McCrary (2008). Intuitively, if state legislators are unable to precisely manipulate their vote share, there should be a similar number of aligned and mismatched candidates falling just above and below the winning threshold. Figure 5 shows the results graphically. On average, co-partisan candidates are more likely to win their elections than unaligned candidates. But there are a roughly equal number of aligned and mismatched candidates appearing immediately on either side of the margin of victory cutoff, suggesting the validity of the RDD approach. I also examine the distribution of several key covariates like city population and median income around the cutoff and find no significant differences across treated and control units (Figure A3 in the Appendix).

Table 4 shows the results of implementing the RDD using the `rdrobust` package in R.

Table 4: RDD Results. Effect of narrowly electing either a copartisan or non-copartisan state representative on the probability of lobbying.

	Probability of Lobbying					
	Simple RDD			Covariate Adjusted		
Mismatched Candidate Wins	0.13 (0.09)	0.15 (0.12)	0.16 (0.14)	0.13 (0.08)	0.19 (0.12)	0.25 (0.14)
N	1,414	1,414	1,414	1,414	1,414	1,414
RDD Bandwidth	20.212	25.313	31.095	22.063	23.480	27.362
Polynomial	1	2	3	1	2	3

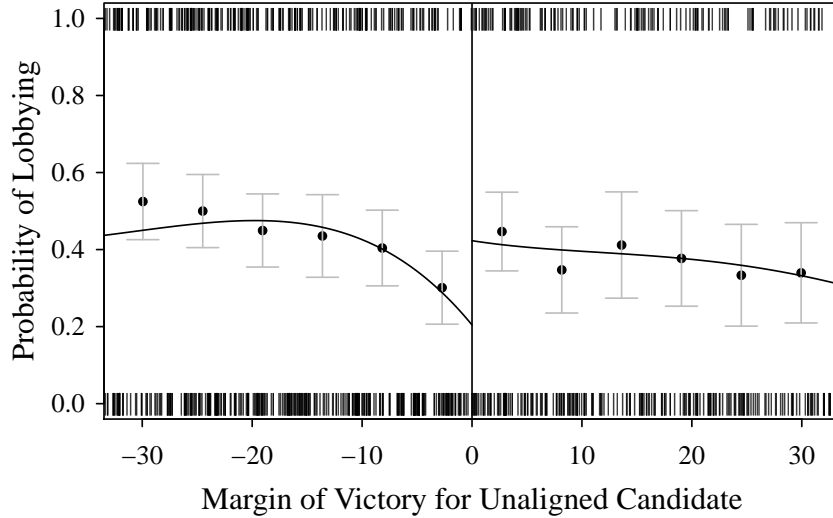
Triangular kernels. Calonico, Cattaneo, and Titiunik (2014) MSERD optimal bandwidths with robust standard errors clustered by city. Adjusted models include log population as a covariate.

The bandwidths were selected via the Calonico, Cattaneo, and Titiunik (2014) MSERD optimal procedure, and estimates are shown across various polynomial specifications. When a mismatched statehouse candidate narrowly wins an election, cities dramatically increase their probability of lobbying by between 13 and 25 percentage points. The estimates are a bit noisy, but the pattern is clear. And after including a covariate adjustment for city population, the effects become more precise as well as larger (columns 4-6).

Figure 6 displays these results graphically. The points represent equally spaced binned averages across different margins of victory, and the smoother uses a fourth order polynomial fit. At the cutoff where a mismatched candidates wins the election, there appears to be a jump in the probability that a city hires a lobbyist. A sensitivity analysis confirms that smaller bandwidths typically produce noisier effects; larger bandwidths recover fairly consistent estimates of the effect of an electoral mismatch on lobbying (shown graphically in Figure 7). As I final robustness check, I examine the effect of narrowly electing a non-co-partisan on a lagged value of the dependent variable. Reassuringly, these effects are much smaller and less precise.

The difference-in-differences approach and regression discontinuity design both have strengths and weaknesses. The analyses rely on different assumptions and recover different quantities

Figure 6: Effect of Narrowly Electing Aligned vs. Mismatched State Legislator on City Lobbying. Equally spaced bins generated via `rdrobust` in R.

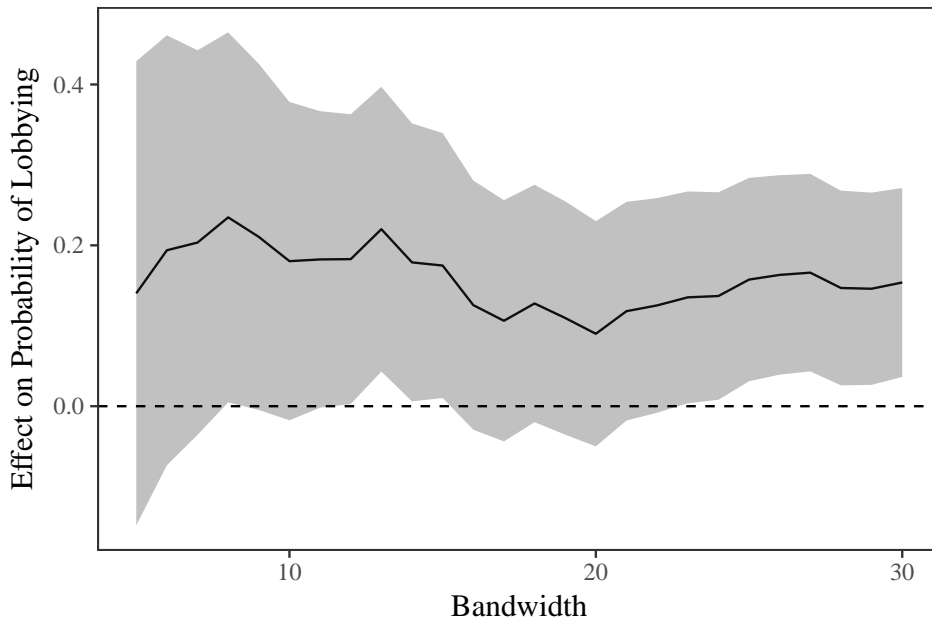


of interests. The two-way fixed effects regressions recover the within-city effect of lobbying as cities elect co-partisan and non co-partisan state legislators, but there is always the possibilities that time varying confounders might bias the results. The RDD captures the local average treatment effect conditional on a relatively mild set of assumptions (Lee and Lemieux 2010), but these effects should be extrapolated away from the cutpoint with caution (De la Cuesta and Imai 2016). However, it is reassuring to observe that both approaches yield positive, substantively large estimates. In a variety of contexts, municipal officials are more likely to hire lobbyists when state legislators from the opposite party are elected.

7 Mechanisms and Additional Robustness Checks

The results presented so far define cities as being Democratic or Republican based on their presidential vote share in the 2008 election. If cities are relatively stable in their partisanship between 2006 and 2014, then this might not be problematic. But if partisanship fluctuates,

Figure 7: Effect of Mismatch on Lobbying Across Bandwidths. Local linear regression estimates with robust errors across bandwidths. Models include log population as a covariate. 95% confidence intervals.



then this could introduce measurement error in how mismatches are specified and potentially bias the results. Unfortunately, obtaining city-level election returns is challenging because elections are administered by counties, and many states do not have publicly available sub-county election data that can be reliably aggregated to the city level. However, California makes precinct election data available along with geographic conversion files via the California Statewide Database. As a result, I could map electoral returns to cities and construct time-varying measures of municipal partisanship based on their Democratic vote share in 2006, 2008, 2010, and 2012.¹⁶

Reassuringly, 98.2% of Democratic cities and 99.2% of Republican cities were classified in the same way using either the fixed or time-varying measure of city partisanship. Defining mismatches with the time-varying measure also produces very similar estimated increases

¹⁶I use presidential vote share in 2008 and 2012 and congressional vote share in midterm election years.

Table 5: Effect of Partisan Mismatch on City Lobbying: CA Robustness Check. Allowing city partisanship to vary over time when specifying mismatches yields coefficients that are similar and even slightly larger than estimates obtained using a fixed measure of partisanship.

	Probability of Lobbying	
	(1)	(2)
Mismatch (Fixed City Partisanship)	0.046 (0.041)	
Mismatch (Time-Varying City Partisanship)		0.067 (0.036)
City FEs	✓	✓
State-Year FEs	✓	✓
Observations	1,142	1,142
# Cities	374	374
Mean Lobbying Probability	0.41	0.41

Models control for population. “Fixed partisanship” mismatches use a city’s Democratic vote share in 2008 to define city partisanship. The time-varying measure uses city vote share in the most recent election (2006, 2008, 2010 or 2012) to define partisanship. Robust standard errors clustered by city.

in city lobbying. Table 5 shows the results. While the estimates are a bit noisy given the smaller sample size, they are very similar to the main results. If anything, the time-varying specification yields a slightly larger coefficient, suggesting that the fixed-partisan models are unlikely to be upwardly biased. Using city vote share in 2008 to approximate city partisanship therefore appears to be a valid or even conservative modeling strategy.

Next, I examine the effect of mayoral partisanship on city lobbying decisions. The main results in the paper define city partisanship and ideology in terms of city residents. But perhaps Democratic cities are likely to have Democratic mayors, and it might be the political alignment between the mayor and the state representative that more strongly predicts lobbying. To test this, I add data collected by de Benedictis-Kessner (2018) on mayoral elections and partisanship for the 640 cities in my sample for which this information is available.

As would be expected, 79% of cities that are coded as “Democratic” in terms of vote

Table 6: Effect of Mayoral Partisan Mismatch on City Lobbying. The partisanship of the mayor relative to the state legislator matters less for lobbying than the overall partisan tendencies of city residents.

	Probability of Lobbying		
	(1)	(2)	(3)
Partisan Mismatch	0.060*		0.059
	(0.023)		(0.033)
Mayor Mismatch		0.038	0.018
		(0.031)	(0.031)
City FEs	✓	✓	✓
State-Year FEs	✓	✓	✓
Observations	5,441	3,176	3,176
# Cities	738	456	456
Mean Lobbying Probability	0.47	0.5	0.5

Models control for population, income, own source revenue percent white, and median house value. Robust standard errors clustered by city. *p<0.05

share have a Democratic mayor, and 69% of Republican cities have a Republican mayor. I specify a mayoral mismatch as existing when a Republican mayor is represented by a Democratic state legislator, and vice versa.¹⁷ Table 6 shows the effects of different types of mismatches on lobbying. The first column replicates the main results from column 2 of Table 2. The second column uses the mayoral mismatch variable to predict lobbying for the subset of cities with available data. The effect of a city electing a state representative from the opposite party as the mayor still has a positive effect on lobbying, but it is a bit smaller and less precisely estimated. When I include both types of mismatches (column 3), the partisan mismatch between city residents and the state legislator dominates.

To reiterate, the point of examining how partisan alignment affects city lobbying is to evaluate whether cities are more likely to lobby when they face the disadvantages associated with being represented by a non co-partisan in state government. It makes sense that a state

¹⁷Or, in the case of cities with multiple state legislators, when more than 50% of the delegates come from the opposite party.

legislator’s ability to effectively represent a community might depend more strongly on the overall partisan preferences of city residents rather than just the party of the mayor. At the same time, it is reassuring that the results follow a similar pattern across a variety of model specifications that operationalize mismatches in different ways. One of the next steps for this research will be to examine the scope conditions of the theory and assess how local governments lobby in response to a wider variety of representational dynamics.

7.1 Does Representative or Chamber Ideology Matter More?

The findings presented so far indicate that cities are more likely to hire lobbyists when they are represented by lower statehouse members from opposite sides of the partisan and ideological spectrum. But how does the general ideological composition of the state legislature affect municipal lobbying? Are cities lobbying primarily in response to ideological mismatches with their own representative, or does their alignment with the chamber as a whole also matter? Table A8 in the Appendix tests whether cities lobby more as the proportion of legislators from the opposite political party increases in the state lower house.

There is some weak evidence that cities are more likely to hire lobbyists as the proportion of members from the opposite party comprise a larger portion of the legislature. However, this effect is small and imprecisely estimated. The results show that cities are much more likely to lobby when they face ideological mismatches with their own representatives. These findings are consistent with the qualitative evidence provided earlier in the paper. City officeholders regularly discuss the importance of their relationship with their district delegation. They view their elected members as local representatives in the state legislature, and they often mention the role of their individual legislators in securing earmarks and other favorable policies for the district.

Table 7: City Lobby Contacts in Missouri. While small cities contact their district representative almost exclusively, larger cities are more likely to contact other representatives as well as their own.

	N	% Lobbyist Contact with Own-District Rep.
Population < 10,000	876	95%
Population < 75,000	65	78%
Population 75,000+	8	52%

7.2 Exploring Mechanisms: Evidence From Missouri

If individual legislators matter so much for city lobbying, we would expect to see municipal lobbying efforts geared primarily toward a city’s district representatives rather than other members of the legislature. Although few states keep this type of information on file, Missouri is an exception and collects detailed information on all meetings between lobbyists and state officials, as well as the clients being represented. These data show that a majority of meetings between municipal lobbyists and legislators target a city’s own elected officials. However, this rate is higher for small cities. Table 7 shows the percentage of city lobbyist meetings that are with a city’s district representative, broken down by city size. Smaller municipalities like Branson, Centralia, and St. Peters contacted their own district legislators almost exclusively. Lobbyists for large cities like Kansas City and Springfield also met most often with local district lawmakers, but just under half of their meetings were with other state house legislators—typically senior members or chairs of important committees.

When thinking about the lobbying goals of local governments, it makes sense that cities would largely target their own representatives. These are elected officials that represent the same constituents, and the requests that local governments make directly affect the ability of state legislators to serve their districts and eventually get re-elected. Historically, there is

also some evidence that the most important step for cities hoping to secure particularistic policies from state government was getting their state delegation on board (Teaford 1984). The data from Missouri, though a bit speculative, lends some credence to the idea that local officials are, in fact, focusing their lobbying efforts on the representatives that serve their districts.

8 Discussion

Local governments are some of the most prolific but understudied lobbying actors. This paper offers a simple theory of intergovernmental lobbying that emphasizes the importance of political geography. Local governments are embedded in the federal system and face different lobbying incentives than other interest groups. They rely heavily on their elected legislators for funding and favorable policies, and they are particularly attuned to their relationship with these legislators when deciding whether to invest money in lobbyist representation.

This paper opened with a quote by a Philadelphia lobbyist who claimed the city needed to lobby in order to deal with a dominant Republican legislature. This idea reflects a large body of empirical evidence in the distributive politics literature emphasizing that partisan misalignment can undermine the vertical representation received by local governments. If local officials are more likely to lobby when their cities are ideologically mismatched from their elected officials in state government, this would suggest that one of the reasons that cities hire lobbyists is to help them respond to representational challenges.

The interest group literature has consistently found that larger, more economically powerful groups are more likely to participate in politics. This is also true for local governments lobbying in the statehouse: Cities with more residents, more own-source revenue, and higher property values are the most active lobbyists. But the data also indicate that representational dynamics play a large role in determining municipal lobbying behavior. Local officials are more likely to lobby when they are represented by state house members from the opposite

political party—especially when those legislators are ideologically distant from the average city resident.

As Goldstein and You (2017) observe, “Despite their intense activities, governments as interest groups have received little attention from scholars as important players in the lobbying landscape.” While the current study advances our understanding of the conditions under which cities lobby, there are several promising avenues for future research. For example, there are a variety of representational challenges that can emerge in multilevel government beyond partisan misalignment, including coordination problems arising across fragmented legislative districts (Chen 2010) and common pool problems induced by overlapping local jurisdictions (Berry 2009). Do local officials also use lobbyists to help them navigate these hurdles? It’s further possible that under certain conditions lobbying might complement the activities of elected officials rather than always serving a substitutive role. Determining the scope conditions of the theory will be an important next step for this research agenda.

Classic research on interest groups often emphasizes the potential equity concerns that might arise if certain groups are more likely to participate than others (e.g., Schattschneider 1960). But this paper uncovers new evidence highlighting one of the potential benefits of lobbying in the intergovernmental context. If local governments can’t secure policy and funding benefits directly through their elected legislators in other levels of government, lobbying provides an alternative channel through which cities can advocate for local needs. As a result, intergovernmental lobbyists appear to play an important and largely overlooked role in facilitating vertical representation in multilevel government.

References

- Ansolabehere, Stephen, Alan Gerber, and Jim Snyder. 2002. "Equal Votes, Equal Money: Court-Ordered Redistricting and Public Expenditures in the American States." *American Political Science Review* 96(4): 767–777.
- Ansolabehere, Stephen, and James M. Snyder. 2008. *The End of Inequality: One Person, One Vote and the Transformation of American Politics*. WW Norton.
- Ardanaz, Martin, and Carlos Scartascini. 2013. "Inequality and Personal Income Taxation: The Origins and Effects of Legislative Malapportionment." *Comparative Political Studies* 46(12): 1636–1663.
- Arulampalam, Wiji, Sugato Dasgupta, Amrita Dhillon, and Bhaskar Dutta. 2009. "Electoral Goals and Center-State Transfers: A Theoretical Model and Empirical Evidence From India." *Journal of Development Economics* 88(1): 103–119.
- Berry, Christopher R. 2009. *Imperfect Union: Representation and Taxation in Multilevel Governments*. Cambridge University Press.
- Bertrand, Marianne, Matilde Bombardini, and Francesco Trebbi. 2014. "Is It Whom You Know or What You Know? An Empirical Assessment of the Lobbying Process." *American Economic Review* 104(12): 3885–3920.
- Bracco, Emanuele, Ben Lockwood, Francesco Porcelli, and Michela Redoano. 2015. "Intergovernmental grants as signals and the alignment effect: Theory and evidence." *Journal of Public Economics* 123: 78–91.
- Brollo, Fernanda, and Tommaso Nannicini. 2012. "Tying Your Enemy's Hands in Close Races: The Politics of Federal Transfers in Brazil." *American Political Science Review* 106(4): 742–761.

- Calonico, Sebastian, Matias D Cattaneo, and Rocio Titiunik. 2014. “Robust nonparametric confidence intervals for regression-discontinuity designs.” *Econometrica* 82(6): 2295–2326.
- Cammisa, Anne M. 1995. *Governments as Interest Groups: Intergovernmental Lobbying and the Federal System*. Westport, CT: Praeger.
- Chen, Jowei. 2010. “The effect of electoral geography on pork barreling in bicameral legislatures.” *American Journal of Political Science* 54(2): 301–322.
- Cox, Gary W. 2010. *Swing Voters, Core voters, and Distributive Politics*. Cambridge University Press.
- 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.
- De Benedictis-Kessner, Justin, and Christopher Warshaw. 2016. “Mayoral Partisanship and Municipal Fiscal Policy.” *Journal of Politics* 78(4): 1124–1138.
- De Figueiredo, John M., and Brian S. Silverman. 2006. “Academic Earmarks and the Returns to Lobbying.” *Journal of Law & Economics* 49(2): 597–625.
- De la Cuesta, Brandon, and Kosuke Imai. 2016. “Misunderstandings about the regression discontinuity design in the study of close elections.” *Annual Review of Political Science* 19: 375–396.
- Dragu, Tiberiu, and Jonathan Rodden. 2011. “Representation and Redistribution in Federations.” *Proceedings of the National Academy of Sciences* 108(21): 8601–8604.
- Drope, Jeffrey M., and Wendy L. Hansen. 2006. “Does Firm Size Matter? Analyzing Business Lobbying in the United States.” *Business and Politics* 8(32): 1–17.
- Drutman, Lee, Matt Grossmann, and Tim LaPira. 2014. “The Interest Group Top Tier: More Groups, Concentrated Clout.” Presented at the Annual Meeting of the American Po-

- litical Science Association, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2453733 (Accessed Aug. 2, 2017).
- Einstein, Katherine Levine, and Vladimir Kogan. 2016. "Pushing The City Limits: Policy Responsiveness in Municipal Government." *Urban Affairs Review* 52(1): 3–32.
- Fourinaies, Alexander, and Hande Mutlu-Eren. 2015. "English Bacon: Copartisan Bias in Intergovernmental Grant Allocation in England." *The Journal of Politics* 77(3): 805–817.
- Gamm, Gerald, and Thad Kousser. 2010. "Broad bills or particularistic policy? Historical patterns in American state legislatures." *American Political Science Review* 104(1): 151–170.
- Goldstein, Rebecca, and Hye Young You. 2017. "Cities as Lobbyists." *American Journal of Political Science* 61(4): 864–876.
- Grier, Kevin B., Michael C. Munger, and Brian E. Roberts. 1994. "The Determinants of Industry Political Activity, 1978–1986." *American Political Science Review* 88(4): 911–926.
- Hansen, Wendy L., and Neil J. Mitchell. 2001. "Globalization or National Capitalism: Large Firms, National Strategies, and Political Activities." *Business and Politics* 3(1): 5–19.
- Hart, David M. 2001. "Why Do Some Firms Give? Why Do Some Give a Lot? High-Tech PACs, 1977-1996." *Journal of Politics* 63(4): 1230–1249.
- Jewell, Malcolm E. 1982. *Representation in State Legislatures*. University Press of Kentucky.
- Klarner, Carl, Williams Berry, Thomas Carsey, Malcolm Jewell, Richard Niemi, Lynda Powell, and James Snyder. 2013. "State Legislative Election Returns Data, 1967-2010."
- Lee, David S, and Thomas Lemieux. 2010. "Regression discontinuity designs in economics." *Journal of economic literature* 48(2): 281–355.

- Levitt, Steven D., and James M. Snyder. 1997. "The Impact of Federal Spending on House Election Outcomes." *Journal of political Economy* 105(1): 30–53.
- Lowery, David, and Holly Brasher. 2004. *Organized Interests and American Government*. New York: McGraw-Hill.
- McCrary, Justin. 2008. "Manipulation of the running variable in the regression discontinuity design: A density test." *Journal of econometrics* 142(2): 698–714.
- Nice, David C. 1987. *Federalism: The Politics of Intergovernmental Relations*. New York: St. Martin's Press.
- Oates, Wallace E. 1972. *Fiscal Federalism*. New York: Harcourt Brace Jovanovich.
- Peterson, Paul E. 1981. *City Limits*. University of Chicago Press.
- Richter, Brian Kelleher, Krislert Samphantharak, and Jeffrey F. Timmons. 2009. "Lobbying and Taxes." *American Journal of Political Science* 53(4): 893–909.
- Salamon, Lester M., and John J. Siegfried. 1977. "Economic Power and Political Influence: The Impact of Industry Structure on Public Policy." *American Political Science Review* 71(3): 1026–1043.
- Schattschneider, E.E. 1960. *The Semisovereign People*. New York: Holt, Rinehart and Winston.
- Shor, Boris, and Nolan McCarty. 2011. "The Ideological Mapping of American Legislatures." *American Political Science Review* 105(3): 530–551.
- Solé-Ollé, Albert, and Pilar Sorribas-Navarro. 2008. "The Effects of Partisan Alignment on the Allocation of Intergovernmental Transfers. Differences-in-Differences Estimates for Spain." *Journal of Public Economics* 92(12): 2302–2319.

- Sorensen, Rune J. 2003. "The Political Economy of Intergovernmental Grants: The Norwegian Case." *European Journal of Political Research* 42(2): 163–195.
- Stigler, George J. 1971. "The Theory of Economic Regulation." *Bell Journal of Economics and Management Science* 2(1): 3–21.
- Tausanovitch, Chris, and Christopher Warshaw. 2014. "Representation in Municipal Government." *American Political Science Review* 108(3): 605–641.
- Teaford, Jon C. 1984. "The Unheralded Triumph: City Government in America, 1870–1900."
- Tripathi, Mickey. 2000. "PAC Contributions and Defense Contracting." *Business and Politics* 2(1): 53–73.
- Truman, David B. 1951. *The Governmental Process: Public Interests and Public Opinion*. New York: Alfred A. Knopf.
- Verba, Sidney, Kay Lehman Schlozman, and Henry E. Brady. 1995. *Voice and Equality: Civic Voluntarism in American Politics*. Cambridge, MA: Harvard University Press.

A On-line Appendix

Cities, Lobbyists, and Representation in Multilevel Government

Supplementary information intended for on-line publication

Figure A1: Palo Alto City Council Meeting Memo.



City of Palo Alto City Council Staff Report

From: City Manager

Lead Department: City Manager

Recommendation

1. Approve a recommendation from the Policy & Services Committee to hire a state lobbyist.
2. Approve the staff recommendation to issue a request for proposals (scope attached) for state legislative advocacy services and return to the Policy & Services Committee for direction on final contract scope of services.
 1. Protect local revenue sources and prevent unfunded mandates.
 2. Protect and increase local government discretion, balancing that with City values and priorities.
 3. Ensure that legislation, policies and budgets retain or increase, but generally don't decrease, the amount of local discretion held by the City and protect local decision making.
 4. Oppose legislation, policies and budgets that reduce the authority and/or ability of local government to determine how best to effectively operate local programs, services and activities. The City retains the right to exceed State goals, standards or targets.
 5. Protect and increase funding for specific programs and services.
 6. Proactively advocate on behalf of the City.
 7. Identify key legislative areas to monitor annually. Take a proactive role in working with Federal and State legislators to draft and sponsor legislation around key City priorities.

Table A1: Municipal Descriptive Statistics, 2006-2015

Statistic	N	Mean	St. Dev.	Min	Max
Lobby State Government					
All Cities	12,440	0.41	0.49	0	1
Never Lobby	5,190	0.00	0.00	0	0
Sometimes Lobby	7,250	0.70	0.46	0	1
# of State Lower Representatives					
All Cities	12,430	3.19	3.70	1	66
Never Lobby	5,180	2.52	1.99	1	18
Sometimes Lobby	7,250	3.67	4.48	1	66
Population					
All Cities	12,439	106,103.30	305,040.20	17,344	8,550,405
Never Lobby	5,190	55,928.07	56,069.69	17,344	678,889
Sometimes Lobby	7,249	142,026.80	392,854.20	22,126	8,550,405
Median Income					
All Cities	12,436	55,833.00	20,981.91	19,161	187,656
Never Lobby	5,186	56,600.93	22,741.99	19,592	187,656
Sometimes Lobby	7,250	55,283.70	19,609.50	19,161	169,579
Own Source Revenue (Log)					
All Cities	10,327	18.53	1.05	15.38	25.09
Never Lobby	4,312	18.12	0.80	15.38	22.02
Sometimes Lobby	6,015	18.82	1.11	15.54	25.09
% White					
All Cities	12,436	0.70	0.18	0.01	0.97
Never Lobby	5,186	0.73	0.18	0.03	0.97
Sometimes Lobby	7,250	0.68	0.18	0.01	0.97
Median House Value					
All Cities	12,436	251,879.90	182,086.30	37,100	2,000,000
Never Lobby	5,186	240,334.10	175,868.60	37,100	2,000,000
Sometimes Lobby	7,250	260,138.60	185,979.50	44,900	1,862,200
Presidential Vote					
All Cities	11,080	0.59	0.15	0.22	0.99
Never Lobby	4,270	0.58	0.15	0.22	0.98
Sometimes Lobby	6,810	0.59	0.15	0.23	0.99

Table A2: Effect of Partisan Mismatch on City Lobbying: City Median Specification. Binning cities into medians rather than terciles to define a partisan mismatch produces similar estimates to the tercile specifications.

	Probability of Lobbying		
	(1)	(2)	(3)
Partisan Mismatch	0.037* (0.015)	0.041* (0.017)	0.052* (0.017)
Population (Log)	0.216* (0.108)	0.196 (0.121)	0.175 (0.135)
City FEs	✓	✓	✓
Year FEs	✓		
State-Year FEs		✓	✓
Full Controls			✓
Observations	8,923	8,923	7,385
# Cities	1,136	1,136	1,136
Mean Lobbying Probability	0.43	0.43	0.45

Robust standard errors clustered by city. *p<0.05

Table A3: Effect of Partisan Mismatch on City Lobbying: Different Mismatch Thresholds. For cities with multiple state legislators, the main results define a mismatch as occurring when more than 50% of the state legislators come from the opposite party. The results are robust to using higher thresholds.

	Probability of Lobbying			
	50%	60%	80%	100%
Partisan Mismatch	0.071* (0.025)	0.075* (0.026)	0.069* (0.031)	0.063* (0.030)
Population (Log)	0.203 (0.161)	0.202 (0.161)	0.197 (0.161)	0.196 (0.161)
City FEs	✓	✓	✓	✓
State-Year FEs	✓	✓	✓	✓
Full Controls	✓	✓	✓	✓
Observations	4,900	4,900	4,900	4,900
# Cities	738	738	738	738
Mean Lobbying Probability	0.47	0.47	0.47	0.47

Models indicate the percentage of state legislators from the opposite party that define a mismatch. Full controls include population, income, own source revenue, percent white, and median house value. Robust standard errors clustered by city. *p<0.05

Table A4: Effect of Partisan Mismatch on City Lobbying (Excluding Largest Cities). The effects of a partisan mismatch are even larger when restricting the sample to cities with a population below 100,000

	Probability of Lobbying		
	(1)	(2)	(3)
Partisan Mismatch	0.054* (0.021)	0.069* (0.026)	0.094* (0.032)
Population (Log)	0.258 (0.179)	0.218 (0.193)	0.259 (0.216)
City FEs	✓	✓	✓
Year FEs	✓		
State-Year FEs		✓	✓
Full Controls			✓
Observations	4,655	3,660	3,660
# Cities	592	592	592
Mean Lobbying Probability	0.37	0.37	0.37

Full controls include population, income, own source revenue, percent white, and median house value.

Robust standard errors clustered by city. *p<0.05

Table A5: Effect of Partisan Mismatch on City Lobbying: Leads and Lags.
 Leads variables are not statistically distinguishable from zero.

	Probability of Lobbying			
	(1)	(2)	(3)	(4)
Mismatch, t-2				0.021 (0.023)
Mismatch, t-1		0.037 (0.020)	0.042 (0.025)	0.017 (0.014)
Mismatch	0.075* (0.026)	0.046* (0.018)	0.037* (0.018)	0.034* (0.016)
Mismatch, t+1			0.009 (0.025)	
City FEs	✓	✓	✓	✓
State-Year FEs	✓	✓	✓	✓
Observations	4,900	4,306	3,780	3,569
# Cities	738	738	738	738
Mean Lobbying Probability	0.47	0.47	0.47	0.47

Robust standard errors clustered by city. *p<0.05

Figure A2: Parallel Trends. When a city elects a statehouse delegation with members from the opposite political party, they become more likely to lobby.

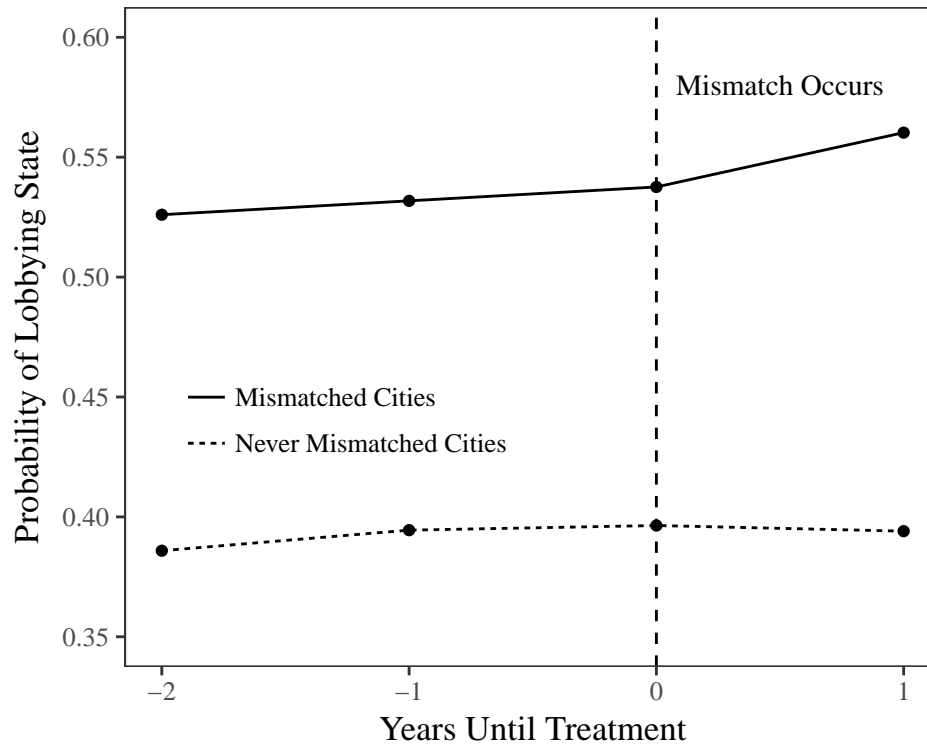


Table A6: RDD Results: Tercile Specification. Effect of narrowly electing either a copartisan or non-copartisan state representative on the probability of lobbying. Results are even larger when cities are defined as being Democratic or Republican based on their tercile distributions (rather than medians).

	Probability of Lobbying					
	Simple RDD			Covariate Adjusted		
Mismatched Candidate Wins	0.17 (0.13)	0.21 (0.15)	0.25 (0.17)	0.25 (0.12)	0.32 (0.15)	0.38 (0.17)
N	1,134	1,134	1,134	1,134	1,134	1,134
RDD Bandwidth	13.83	20.45	30.35	14.41	19.78	26.32
Polynomial	1	2	3	1	2	3

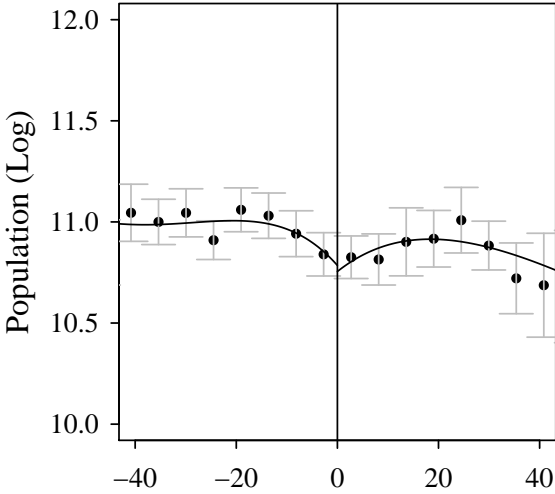
Triangular kernels. Calonico, Cattaneo, and Titiunik (2014) MSERD optimal bandwidths with robust standard errors clustered by city. Adjusted models include log population as a covariate.

Table A7: RDD Results: Lagged DV. Effect of narrowly electing either a copartisan or non-copartisan state representative on the probability of lobbying in the year before the election. Estimate are smaller and noisier than main results.

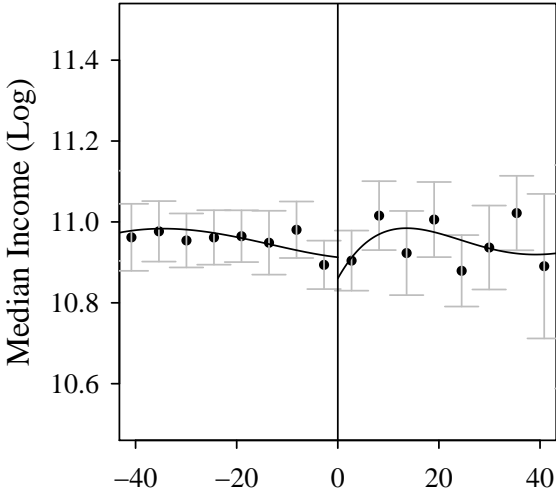
	Probability of Lobbying					
	Simple RDD			Covariate Adjusted		
Mismatched Candidate Wins	0.063 (0.085)	0.073 (0.110)	0.066 (0.122)	0.076 (0.075)	0.090 (0.108)	0.079 (0.117)
N	1,414	1,414	1,414	1,414	1,414	1,414
RDD Bandwidth	21.365	27.748	39.983	24.903	26.501	39.751
Polynomial	1	2	3	1	2	3

Triangular kernels. Calonico, Cattaneo, and Titiunik (2014) MSERD optimal bandwidths with robust standard errors clustered by city. Adjusted models include log population as a covariate.

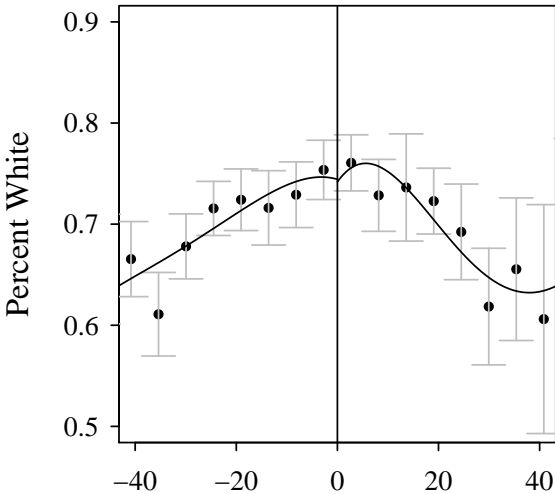
Figure A3: RDD Balance Checks. Cities that elect either aligned or mismatched state legislators have similar observable characteristics around the cutpoint.



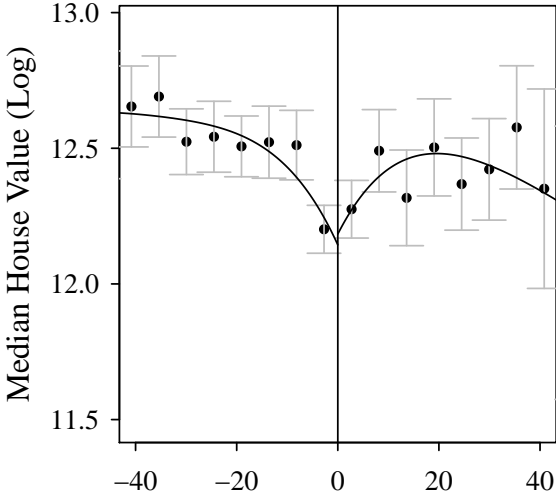
Margin of Victory for Unaligned Candidate



Margin of Victory for Unaligned Candidate



Margin of Victory for Unaligned Candidate



Margin of Victory for Unaligned Candidate

Table A8: Effect of Individual Representative vs. Chamber Mismatch on City Lobbying. The party of a city’s district representative increases lobbying more than the party of the lower chamber as a whole. Cities are also not more likely to lobby when the opposing party controls both chambers of the legislature and the governorship.

	Probability of Lobbying	
	(1)	(2)
Partisan Mismatch	0.059* (0.023)	0.060* (0.023)
Chamber Mismatch	0.031 (0.029)	
Party Control Mismatch		-0.004 (0.046)
City FEs	✓	✓
State-Year FEs	✓	✓
Observations	5,403	5,439
# Cities	734	738
Mean Lobbying Probability	0.47	0.47

Robust standard errors clustered by city. *p<0.05