City Lobbying and Member's Legislative Performance

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Abstract

Why do cities spend scarce resources lobbying Congress? Existing theory posits that cities lobby when there is preference incongruence between local and state governments. Alternatively, I develop a theory of city lobbying emphasizing both the variation of cities' demands and the associated MC's legislative performance. Specifically, more populated cities associated with lower-performing legislators have greater lobbying demands than other cities. Using city-level data collected from 2003 to 2016, I find that, among cities nested inside the boundary of one congressional district, those linked to high-performing legislators are less likely to lobby than cities associated with low-performing legislators, conditional on cities' population sizes. Also, cities are less likely to lobby at the federal level when their associated legislators take seats on influential committees. A difference-in-differences analysis using redistricting provides additional support showing that legislator performance matters. These findings further our understanding of local politics and intergovernmental lobbying.

Keywords: local politics, city lobbying, legislative performance

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Introduction

Why do cities spend scarce resources lobbying Congress? Lobbying from cities may seem counter-intuitive, since cities differ from other organized interest groups by having natural allies in Congress: Members of Congress (hereafter MCs) who represent them. As the elected representative of the congressional district, such an MC's foremost obligation is to voice the needs of her district in the national legislature.[1] That said, cities are still active participants in national politics, and many hire professional lobbyists in Washington, DC. Information from lobbying disclosure reports shows that, between 2003 to 2016, 534 cities lobbied the national legislature at least once, with total spending exceeding 498 million dollars (in January 2022's dollar value). Moreover, cities of all sizes participate in lobbying activities. For example, a *Politico* report notes shows that large cities, such as Denver, Colorado (700 thousand residents), and much smaller counterparts, such as Coral Springs, Florida (120 thousand residents), have turned to K Street to help them secure funding from the national legislature (Meyer, 2020). Conversely, another notable finding is that, although many cities lobby, an equal or even larger number of cities do not.[2] All these observations lead us to ponder what factors might explain variations in cities' lobbying activities.

Drawing from existing work on lobbying, legislative effectiveness, and representation quality, I develop a theory of city lobbying that emphasizes both the variation of the city's demands to lobby and the associated MC's ability to effectively represent those demands in the national legislature (Hall and Deardorff, 2006; Volden and Wiseman, 2014; Payson, 2020*b*, 2021). Specifically, I highlight that both mechanisms lead to variation in a city's lobbying decisions. Per the demand side, scholars have long recognized that cities have

[1] In this paper, MCs specifically refer to House representatives, while members of the Senate are specifically referred to as Senators.

[2] See Appendix: Figure A.1 for the geographical distribution of cities that lobby, and Appendix: Table A.1 for the yearly change of cities' lobbying activities.

different demands to lobby, influenced by their population sizes, economic situations, and the support they get at the state level (Burns et al., 2009; Loftis and Kettler, 2015; Goldstein and You, 2017; Payson, 2021). For example, Burns et al. (2009); Rodden (2019); Payson (2021) all argue that city population is an effective moderator for a city's lobbying decision: larger cities are more likely to lobby upper governments than smaller cities. Larger cities have greater and more diversified needs than small cities and are disproportionately influenced by policy changes at the national level (Loftis and Kettler, 2015).[3] Hence, larger cities are more likely to be sensitive to the associated MC's legislative performance.

Additionally, per the supply side, the willingness and ability of a relevant MC to effectively champion a city's interest at the national level also vary. Potential reasons for this variation are twofold: how a legislator's interests match a city's interests and how effective the MC is relative to her peers. First, legislators are not equally willing to represent cities' interests, with some more responsive than others (Payson, 2021). Second, there are also huge variations in terms of each MC's performance. Existing research, including Volden and Wiseman (2014); Box-Steffensmeier and Grant (1999); Cox and Terry (2008), point out that both MC's innate legislative ability and institutional constraints influence relative performance in lawmaking. For example, in the 110th Congress, Rep. Rangel sponsored 61 bills and successfully navigated 13 bills into laws, more than quadrupling the chamber average in both parameters.[4] Consistent with the logic of lobbying as the legislative subsidy literature, cities have a higher needs to invest in lobbying when their associated MCs are relatively low performers.

[3]Also, lobbying is costly, so bigger cities are financially more capable of lobbying than smaller municipalities (Zhang, 2019; Payson, 2021).

[4]Legislative effectiveness only measures an MC's performance to move policy. Under some situations, legislators need to block policy changes (which is unobservable). The embedded assumption is that MC's performance to move policy positively links with MC's performance to maintain the status quo.

To assess my theory, I collect a comprehensive dataset on cities' lobbying activities from 2003 to 2016 (108th to the 114th Congress) to examine the importance of legislative effectiveness and whether it interacts with population size. I build upon Goldstein and You (2017)'s city lobbying dataset, further extending coverage to 2016 using data provided by OpenSecrets.[5] I then match the congressional district of all cities. Around 80% of the cities considered are nested inside the boundary of one congressional district, accounting for nearly 23% of the U.S. population. Data on MC's relative legislative performance comes from the Center for Effective Lawmaking's dataset on MCs' legislative effectiveness.

Indeed, my analysis shows that an MC's legislative performance explains both the chance of a city lobbying and the investment involved conditional upon its population size. Specifically, for those cities nested inside the boundary of a single congressional district (hereafter single-district city), I find an inverse relationship between the associated MC's legislative performance and the city's lobbying decisions. For instance, for a city with seventy thousand residents (the mean single-district city population), a one-standard-deviation increase in a MC's legislative effectiveness corresponds to a 5.8% decrease in lobbying probability and an 11.2% decrease in spending. I also find an effect of an MC's committee assignment on single-district cities' lobbying activities, with cities less likely to lobby when the associated MCs take seats on powerful committees (Appropriations, Ways and Means, and Rules).[6]

I conduct a variety of additional tests to validate the results. To boost the validity of my argument on lobbying as a legislative subsidy, I examine how congressional redistricting influences those affected cities' lobbying decisions. Congressional redistricting disproportionately

[5]I cannot for now further extend the dataset temporally, as the *Census of Governments* survey that provides data on the fiscal features of cities, is conducted every five years, with the most recent one including data through 2017.

[6]For cities encompassing multiple districts (multiple-district cities), the one-to-one connection between the city and the MC is weaker, and these cities own options in intergovernmental lobbying. See data section and Appendix: Table A.14 and Table A.15 for some preliminary results for multiple-district cities.

influences the connection networks of MCs from affected districts and subsequently influences those associated MCs' legislative performance. I employ a difference-in-differences approach to demonstrate that congressional redistricting leads to noticeable changes in affected cities' lobbying activities. Cities from affected states with a decreasing delegation are significantly more likely to lobby after redistricting, and to spend more.

My results enrich our understanding of city politics and effective representation at the local level. With the growing professionalization of city officials and the increasing development of the lobbying industry, other than passively receiving de facto representations from their corresponding MCs, cities employ lobbying to advocate their interests and needs. Also, officials from city governments are likely to observe differences in their associated MCs' relative legislative performances, and they adjust lobbying accordingly. Big cities, historically underrepresented in state-level representation, are more capable and likely to seek lobbying as a substitute to advance their interests. Therefore, lobbying acts as an effective mechanism to make up the representation gap for those underrepresented cities.[7]

Theoretical Motivations

City Lobbying and its Benefits

Intergovernmental lobbying addresses the needs of American cities. Payson (2020*b*) has provided an excerpt of a lobbying report from Palo Alto, California, to the Californian state legislature. In that report, the city manager lists three primary goals for lobbying the upper government: "protect and increase funding for specific programs and services," "oppose the legislation, policies, and budgets that reduce the authority of local government," and "protect local revenue service." As shown by earlier research, all three goals speak directly to the

[7]City lobbying is also likely to increase the representation gap between the rich and the poor, as more affluent communities are financially more capable of lobbying than poorer communities.

benefits lobbying can potentially bring. Scholars of the transactional school of lobbying have found that lobbying and contributions can bring concrete legislative benefits to the participants, such as voting decisions, legislation, meetings, and bureaucratic outcomes (Grossman and Helpman, 1992; Wright, 1990; Brooks, Cameron and Carter, 1998; Wawro, 2001; Fellowes and Wolf, 2004; Esterling, 2007; Rocca and Gordon, 2013). Also, as the lower-level government in the intergovernmental system, cities face many constraints when generating revenues, and they often turn to higher government for funding (Wong, 1988; Loftis and Kettler, 2015; Oliver, Ha and Callen, 2012). Other research has shown the substantial economic returns of lobbying at both the state and national levels, which further lends support to the effectiveness of intergovernmental lobbying (Loftis and Kettler, 2015; Goldstein and You, 2017; Payson, 2020*a*, 2021). Randy Neugebauer (R-TX) provides additional support for this perspective, saying: "The reality of the situation is that federal monies are currently available to cities who choose to utilize them" (Hallman, 2010).

Lobbyists act as agents for information transmission between lower and higher governments. Compared with local governments, lobbyists are experts in the trade (Leech, 2014; Zhang, 2019). A considerable number have prior working experience in Congress, and they have links that should facilitate the information transmitting process.[8] For example, Pascagoula, Mississippi, often stays on the list as the smallest city (population-wise) that lobbies the federal government. From 2004 to 2011, Pascagoula hired Adams & Reese as its lobbying firm, and the primary lobbyist for Pascagoula was Wayne Weidie, who worked as the long-term Chief of Staff to Pascagoula's Rep. Gene Taylor (MS-4). A lobbying report submitted for Auburn, Washington by Washington2 Advocates illustrates such linkages even more starkly. The specific goal of the lobbying was to communicate with congres-

[8]See Drutman (2015) and Shepherd and You (2020) for discussions on the prevalence of revolving-door lobbyists. See Payson (2021) for detailed examples of how lobbyists of intergovernmental lobbying assist the information transmission process between local and upper governments.

sional offices regarding economic development projects in the city (Auburn). Of the four lobbyists mentioned in the lobbying report, two had previous experience working for Senator Gorton (R-Washington), and another had served as the chief of staff to Rep. Rick Larson (Washington 2nd district).

The message-exchanging nature of intergovernmental lobbying also fits into the broader discussion of informational lobbying (Austen-Smith, 1993; Austen-Smith and Wright, 1996; Bennedsen and Feldmann, 2002; Schnakenberg, 2017).[9] Lobbying keeps legislators informed about organized interests' needs and priorities, highlighting the existence of a symbiotic relationship (Baumgartner and Leech, 1998). In local politics, officials in city governments have the most direct and comprehensive knowledge about cities' needs and priorities, while officials in upper governments are less informed. Participation in intergovernmental lobbying benefits officials and legislators both in the local and upper governments. Bottom-up, through intergovernmental lobbying, professional lobbyists transmit requests to associated MCs after carefully listening to requests from cities (their clients). Top-down, transmitting information is also valuable for legislators, as it saves legislators (and their teams) time from collecting information and drafting proposals (Wright, 1996; Hall and Deardorff, 2006).

If lobbying is a helpful tool for the city government, why do variations exist in lobbying participation and investment across cities? Next, I discuss the distinctive features of legislators and cities that might explain such differences.

Member Performance and City Lobbying

Unlike other organized interests, MCs are the formal representatives of congressional districts on Capitol Hill. In Congress, MCs voice local concerns and ask for public funding transfers from the federal government (Cammisa, 1995). It is also important to note that

[9]Different from transactional lobbying, informational lobbying specifically emphasizes asymmetry of information and expertise between clients and targets (Bombardini and Trebbi, 2019).

cities, unlike other organized interests, routinely establish an extremely close tie with associated MCs because of spatial geography and electoral connection. Per one, a majority (around 80%) of cities are single-district cities.[10] Per another, constituents (city residents) can directly punish the associated MC through votes, guaranteeing a minimum degree of responsiveness from the MC (Hertel-Fernandez, Mildenberger and Stokes, 2019). As neatly put by Payson (2021), cities exercise little clout with lawmakers outside of their districts.[11] It is rare, if not entirely impossible, for a single-district city to receive attention (or representation) from MCs from other districts.[12] Not surprisingly, existing research has found that the MC of the district is the most frequent target in intergovernmental lobbying (Payson, 2021).[13] In Congress, cities also receive de facto representation from same-state Senators, who are also frequent targets of intergovernmental lobbying. Admitting that, Senators (especially those from larger states) often have much broader and more heterogeneous constituencies than the House representative, resulting in far weaker ties than those of the city and the corresponding House representative.

Ideally, MCs can fully represent cities' interests and satisfy their demands in Congress. However, not every legislator is equally willing or able to achieve those goals. Existing research on intergovernmental politics has recognized and uncovered the impact of preference

[10]See Appendix: Table A.2 for the comparisons between the two types of cities.

[11]Payson (2021) quotes a former Commissioner in Michigan to contextualize the argument: "We just don't have nature avenues for building strong relationships beyond the reach of our immediate delegation."

[12]Cities may still possibly receive a certain level of coincidental representation from other MCs because of preference congruence with other cities. However, Payson (2021) shows that cities often advocate for city-specific requests if participating in intergovernmental lobbying. This pattern further reduces the chance of coincidental representation.

[13]In chapter 2 of *Why Cities Lobby*, Payson conducts an extensive discussion on why the district representative is the frequent target in intergovernmental lobbying (state level). She further provides support for her argument using qualitative evidence from interviews.

incongruence on local government's representation gaps (Burns et al., 2009; Goldstein and You, 2017; Payson, 2020*b*). For example, as suggested by Goldstein and You (2017), state legislatures in red states provide relatively less service to blue cities; hence blue cities in red states are more likely to lobby at the federal level. Acknowledging the difference in willingness, not every legislator is equally capable of advancing her legislative goals. There are huge within and across member variations in performance.[14] For example, in the 109th Congress, eight bills sponsored by Frank Sensenbrenner (R-WI-5) became law, while none from neighboring legislator Tom Perti (R-WI-6) were enacted. While not definitive, there is at least a *prima facie* case suggesting that Sensenbrenner has a higher lawmaking performance than Perti.

Per the supply side, a high-performing MC is better equipped to achieve her legislative goals and advance her constituents' requests than a low-performing MC.[15] Cities associated with low-performing MCs, facing greater gaps in representation, have stronger incentives to provide legislative subsidies to MCs as information and service increase the potential participation (investment) of MCs in lawmaking (Hall and Deardorff, 2006).[16] Also, both Grasse and Heidbreder (2011) and Butler and Miller (2021) find that interest groups' investments

[14]MCs' typical legislative goals are policy-making, accruing distributive politics, fundraising, and constituency service (Mayhew, 2004; Guenther and Searle, 2019).

[15]Thomsen et al. (2019) stress that only knowledgeable constituents can observe the subtle differences in legislative performance across candidates, which helps explain why some under-performing legislators are not immediately electorally punished.

[16]See Hall and Deardorff (2006) H.5: "As lobbying increases, so will the participation or "effort" of allies." Also, as mentioned earlier in this section, most cities, different from other interest groups, cannot shop among legislators. A city's immediate delegate is the primary or even the sole target of lobbying. Therefore, Hall and Deardorff (2006)'s other hypotheses on productive allies can not be applied to single-district cities. See Appendix: Table A.14 and Appendix: Table A.15, for an examination of cities encompassing multiple districts as the unit of analysis.

(effort) into lobbying corresponds to positive legislative outcomes. Hence, cities' increasing investments in intergovernmental lobbying should increase corresponding MCs' likelihoods to fulfill cities' requests.

Putting aside the variations of supply from associated MCs, cities have differences in their demands in the first place. For example, Loftis and Kettler (2015) show that cities with a high unemployment rate (10%) are twice as likely to lobby the national government than cities with a low unemployment rate (3%). Goldstein and You (2017) find that cities are more likely to lobby the national government when the state-local transfer divergence gap increases. Existing research has shown that population size influences a city's lobbying activities. Specifically, large cities (in terms of population) are far more likely to lobby than smaller cities. On the one hand, larger cities have greater and more diverse needs than smaller cities (Burns et al., 2009; Zimmerman, 2012; Rodden, 2019; Payson, 2021). On the other hand, potential legislation and regulatory modifications exert more aggregate impact on larger cities, and they have higher stakes lobbying to prevent adverse policy changes (Zimmerman, 2012; Payson, 2021).[17] Furthermore, existing studies have shown that large cities are disproportionately underrepresented at the state level (Rodden, 2019; Burns et al., 2009). For example, Rodden (2019) finds that state districts are gerrymandered to amplify rural and exurban interests, while Burns et al. (2009) argue that delegates from small cities and rural areas often collaborate to deter policy motions from large cities. Therefore, larger cities are not only more sensitive to federal-level policies than smaller cities but are also more reliant upon received representation from the federal level.

Another related but slightly different argument involves differing levels of city resources. As described by both Payson (2020*a*) and Loftis and Kettler (2015), the financial resources of a city are often limited, and many times cities are operating under tight fiscal constraints.

[17] Payson (2021) specifically mentions that cities are more likely to lobby for policy immobility than policy change.

Allocating a large amount to lobbying is a real hurdle for those cities with relatively scarce city revenues, and a city's total revenue positively correlates with its population size. In addition, Zhang (2019) points out that a city is more likely to engage in intergovernmental lobbying when it has professionalized assembly and legislative staff. Large cities are also more likely to fit these criteria than small cities. Therefore, population size is a valid moderator of the city's lobbying decisions: larger cities tend to be more sensitive to an associated MC's legislative performance than smaller cities.[18] The above discussion leads to my first hypothesis:

Hypothesis 1*: Conditional upon population size, a city's likelihood of, and investment into, lobbying decrease if the corresponding congressional member is of high legislative performance.*

An MC's legislative performance can be seen as a function of both institutional context and innate ability. As Volden and Wiseman (2014) suggest, roughly 40% of an MC's legislative performance, measured in terms of effectiveness, links with innate legislative ability. The other 60% correlates with institutional factors. [19] Comparatively speaking, it is much easier for a city official to get a sense of the associated MC's legislative performance from associated institutional factors than her innate ability, as the those institutional factors can

[18] Admittedly, cities may redouble their lobbying efforts given a favorable legislative situation. However, as suggested by Payson (2021), there exist huge differences between city lobbying and business interests lobbying: most cities, rather than lobbying strategically, lobby when needs emerge. City councils allocate funds for other goals once the window period to meet that specific need is closed. To contextualize, Goldstein and You (2017) found a huge surge of city lobbying after the 2009 financial crisis, but lobbying declined immediately after 2011 when the financial relief was lifted.

[19] An MC's innate legislative ability includes, but is not limited to, skills to connect with colleagues, become an issue specialist, build alliances, efficiently allocate finite time and resources, timely make adjustments, and make correct strategic decision (Battaglini and Patacchini, 2019; Battaglini, Sciabolazza and Patacchini, 2020).

be easily observed. Starting from Ferejohn (1974) and Mayhew (2004), generations of scholars have studied potential determinants of legislative success. Those previous studies have well-established the importance of institutional factors on MC's legislative success both for lawmaking and the ability to accrue distributive benefits (Roberts, 1990; Box-Steffensmeier and Grant, 1999; Cox and Terry, 2008; Volden and Wiseman, 2014; Berry and Fowler, 2016, 2018). For instance, research on distributive politics has shown that Appropriations committee members, especially chairs and subcommittee chairs, bring more earmarks to their districts than other MCs (Ferejohn, 1974; Lazarus, 2010; Berry and Fowler, 2016), while research on legislative success reveals that committee chairs are the most effective lawmakers in Congress, followed by subcommittee chairs, other majority party MCs and finally minority party MCs (Volden and Wiseman, 2014).

Also important to note is that the relative performance of an MC's different legislative goals are closely correlated, as Berry and Fowler (2018) find that being a committee chair corresponds to a 2.5 point increase in an MC's LES, and a 68% increase in campaign contributions, no such positive effect is found for rank for file MCs. Other than the differences in committee position, differences in committee assignment also impact MCs' legislative power. Mayhew (2004) lists House Rules, Ways and Means, and Appropriations committees as "control committees" in Congress. As he neatly summarized "It is hard to see how Congress could maintain its prestige and power without them." Several decades later, control committees still have high legislative power. As Lowande (2019) finds that agencies are more responsive to MCs with high legislator power, specifically majority party MCs and MCs with seats on the corresponding overseeing committees. A closer look into lobbying report data reveals that cities mainly lobby for public funds transfers. More than one-half of the cities list federal budget and appropriations as the issue why they lobby Congress.[20] Therefore, those MCs who take seats on the House Appropriations Committee are more capable of representing

[20]See Appendix: Table A.4 for the summary statistics of top issues and targeted agencies in city lobbying.

cities' interests than other MCs, as the Appropriations committee decides the allocation of public spending. Meanwhile, as suggested by Payson (2021), cities also care about taxes. Hence, cities associated with MCs having seats on the Ways and Means committee are also more advantageous than other cities. The above discussion yields my second hypothesis:

This yields my second hypothesis:

***Hypothesis 2**: A city's likelihood and investment in lobbying decreases if the corresponding congressional member has an advantageous institutional position.*

Data and Descriptive Statistics

I build a dataset containing all cities' (with a population exceeding 20,000) lobbying activities from 2003 to 2016. The unit of analysis is city × year. Early information (before 2013) on the city's lobbying activities was collected by Goldstein and You (2017). I extend their dataset to 2016, and include lobbying activities from consolidated cities.[21] An individual city's lobbying activities can be found on OpenSecrets's website. I match cities with their associated MCs using congressional district maps provided by the Census. In the Census map, an asterisk is marked if the city's boundary encompasses multiple congressional districts. I then merge it with Volden and Wiseman (2014)'s dataset on MC legislative effectiveness. Information on the city's demographic and fiscal features comes from the American Community Survey and the Census of Governments. I drop those observations before the 2003 round of redistricting, as the Census does not provide the digitized district maps for earlier Congresses.

In total, the dataset includes 1,256 cities, and the sample size is 17,584, spanning 14

[21] A consolidated city-county forms when one or more cities and their surrounding county merge into one unified jurisdiction. Several major cities are consolidated cities, such as San Francisco, Denver, and Nashville.

years. From 2003 to 2016, 534 cities lobbied the national legislature at least once, while the remaining 722 cities never lobbied. Among those 534 cities that lobby at least once, 115 lobby every year. New Orleans spent the most on lobbying, exceeding eight million dollars (using January 2022's dollar value). During this decade, 182 cities also invested more than one million dollars into lobbying, and cities on this list include Phoenix, Cleveland, Reno, and San Francisco.[22] Under the 2003 redistricting map, 1006 (80.1%) cities were single-district cities while, under the 2013 redistricting map, 993 cities (79%) were single-district cities. Among these cities, Anchorage, Alaska, contributed the most, at nearly 4.7 million dollars. Ninety-four other cities also spent over a million dollars and had a single representative. Cities on this list include Santa Clarita, Folsom, Denver, and Virginia Beach.

Key for examining my hypotheses are three independent variables: (1) city population, (2) power committee, and (3) associated MC legislative performance. The first (city population) comes from the American Community Survey. From 2005 to 2013, the American Community Survey is collected every three years, and I extrapolate values of the city population in available years to earlier years. For example, I assign values from the 2013 Survey to the years between 2011 and 2013. After 2013, the American Community Survey: Supplements updated city population size annually. The variable *city population* is log-transformed, ranging from 9.9 to 13.45. Among those cities inside a single district's boundary, Denver, Colorado, has the largest population size at roughly 700 thousand residents, while Prichard, Alabama, has the smallest at just over 20 thousand. Using 2016's population estimate, around 73 million residents live in these cities, accounting for 22.6% of the total U.S. population. Information on MCs' committee assignments comes from Stewart III and Woon (2008)'dataset. Around 32.1% of the observations are represented by MCs who take seats at one of the power committees (Appropriations, Ways and Means, or Rules).

[22]See Figure A.1 for the distribution of lobbying and non-lobbying cities, and Table A.3 for a more detailed comparison between lobbying and non-lobbying cities.

As mentioned, LES comes from the Center for Effective Lawmaking (hereafter Center) (Volden and Wiseman, 2014). Five factors are mainly used to measure an MC's legislative effectiveness: (1) bills introduced, (2) bills receiving action in the committee, (3) bills receiving action beyond the committee, (4) bills passing the House, and (5) bills becoming law. Bills are categorized into three groups: commemorative, substantive, and bills that are both substantive and significant. Higher weights are given to bills belonging to later categories. For example, navigating a commemorative bill adds 0.1 to MC's LES, navigating a substantive bill adds 0.45 to MC's LES, while navigating substantive and significant bills adds 1 to an MC's LES. In each Congress, the LES mean is set to be 1. Charles Rangel (D-NY) has the highest LES of 18.69, achieved in the 110th Congress. In this Congress, Rangel sponsored 61 bills, of which 13 became laws. To give a sense of its magnitude, Rangel in this Congress sponsored 3.5 times more bills than the chamber average, with a passage rate four times greater than the chamber average (21.3% vs. 4.2%). Around 13.1% of the observations in this analysis have LES scores two times greater than the average, while 45.8% have scores less than half of the average, with a minimum of 0.[23]

Following the literature, I include two sets of control variables found to condition outcomes such as lobbying: one on the city level and another at the MC's level. City-level controls include covariates on the city's fiscal features, such as the amount of its revenue, expenditure, and intergovernmental revenue (Loftis and Kettler, 2015; Goldstein and You, 2017). City-level controls also include a battery of covariates on the city's demographic features, such as its poverty rate, unemployment rate, median income, and senior resident percentage. I also control the population percentage of a city in the district, as the city and district level population growth may vary. MC level controls include an MC's majority party status, seniority, ideological score, ideological distance to the floor median, committee

[23]A detailed description of the methodology can be found at Center for Effective Lawmaking's website at https://thelawmakers.org/methodology.

assignment, and committee service (chair or rank and files). As suggested by Payson (2021), cities in GOP-gripped states are more likely to encounter a shortage of state fund transfers, so I include several controls at the state level, such as Governor's party and state legislature's majority party status.[24] In addition, I include a set of control variables at the Senator level for robustness checks. The complete list and more detailed description of the control variables can be found in Table A.5.

Descriptive Statistics

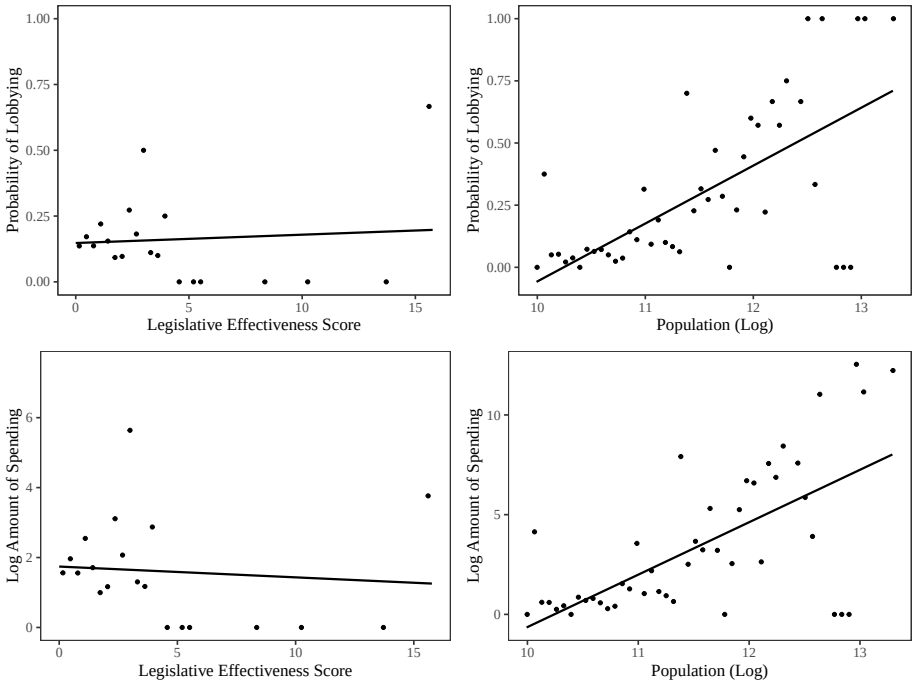

Figure 1: Bivariate Relationships Plot

As a preliminary, I provide descriptive information regarding the relationships between the key independent variables and single-district cities' lobbying activities. Specifically, the right-side panel of Figure 1 presents the bivariate relationships between *Population*, and

[24] Also, Gamm and Kousser (2021) find state legislature party competition leads to differences in public funding spending at the state level.

two key-dependent variables—*Lobbying Entry* and *Log Amount of Spending*, while the left-side panel of Figure 1 presents the bivariate relationships between MC's lagged *Legislative Effectiveness Score* and the two key dependent variables.

There is a strong, positive correlation between city population size and the city's lobbying activities in the right-side panel. Among cities with a log-transformed population exceeding 12 (163 thousand), the chance of lobbying approaches fifty percent (as shown in the upper panel), and the lobbying investment of those largest cities is also significantly higher than smaller cities (as shown in the lower panel). Using 2016's population estimate, out of the 27 cities with over a quarter million residents, 24 (89%) at least lobbied the national legislature once, and 16 lobbied the national legislature that year. On average, a big city invests around 78 thousand dollars into lobbying, with a median of 48 thousand dollars.[25] As shown in the left panel, there is a weak relationship (almost a flat line) between an associated MC's legislative performance and the city's lobbying activities, so any inferences of a meaningful linkage need to be drawn from estimates produced by the full empirical model.[26]

Model Results

I examine a city's lobbying activity as a function of the MC's legislative performance and city's population size, along with other measures. The empirical specification is as follows:

$$\begin{aligned} \text{Lobby}_{jc} = \alpha_j + \alpha_c + \beta_1 \text{Lagged LES}_{jc} + \beta_2 \text{Population}_{jc} \\ + \beta_3 \textit{Power Committee}_{jc} + \beta_4 \textit{Lagged LES*Population}_{jc} + \Gamma X_{jc} + \varepsilon_{jc}, \end{aligned} \tag{1}$$

[25] See Table A.2 for a more detailed description of the city's lobbying activities by population size.

[26] See Table A.9, when the quadratic form of lagged LES is added to control for the possibility of nonlinearity.

where j indicates Congress and c indicates city. y_{jc} is the outcome variable. I produce results for two outcome variables: (1) *Lobbying Entry*, a city's choice to lobby at the federal level, and (2) *Lobbying Spending*, the log-transformed value of a city's lobbying investment.[27] α_j is a Congress FE that captures a time trend and temporal shocks which influence all cities' lobbying engagement, such as the 2009 financial crisis. α_c is the city FE which denotes the time-invariant city characteristics that might be relevant for a city's demands to lobby the national legislature. X_{jc} is a vector that includes control variables that could affect the city's lobbying decision, such as the city's fiscal and demographic features and the MC's institutional factors.

Table 1 shows the results of cities' lobbying decisions in a given year. Models 1 and 2 present the regression results for cities' lobbying entries. Model 1 presents the results when the city FE are included; Model 2 shows the results when both Congress and City FEs are included; while Models 3 and 4 present the results for the city's lobbying investment. Model 3 includes the city FE, while Model 4 presents the results when the additional Congress FE is introduced. Standard errors for all models are clustered at the city level. Using Models 2's and 4's estimates, I present the conditional impact of legislative effectiveness on cities' lobbying activities in Figure 2. Consistent with *Hypothesis 1*, there is an inverse relationship between the associated MC's *Lagged LES* and a city's lobbying activities both in terms of its probability and investment in lobbying. As shown in Figure 2, fitted curves in both panels present decreasing trends. The fitted value crosses zero when the log population reaches 10.45 (35 thousand), and the conditional effect becomes statistically different from zero when the log population reaches 10.94 (56 thousand). The effect of *Lagged LES* on both outcomes is relatively modest. Using Model 2 and 4's estimates, when an MC's *Lagged LES* increases by one unit, for a hypothetical city with a mean population size of seventy thousand, city

[27] I use the dollar value in January 2022 as the reference. One dollar in January 2003 equals the purchasing value of 1.55 dollars in January 2022.

lobbying probability decreases by 0.0076. For a one-standard increase in the MC's *Lagged LES*, which is 1.56, the city's lobbying probability decreases by 0.012. The mean value of *Lobbying Entry* is 0.2052, and a one-standard-deviation increase of an MC's *Lagged LES* leads to a 5.8% decrease in the city's lobbying probability. Per lobbying investment, a one-unit increase in an MC's *Lagged LES* corresponds to a 7.2% decrease in the city's lobbying investment, and a one-standard-deviation increase of an MC's *Lagged LES* is associated with an 11.2% decrease in lobbying spending.

Table 1: Lobbying from Cities: 2003-2016

	Lobbying Entry		Log Amount of Spending	
	Model 1	Model 2	Model 3	Model 4
Lagged LES	0.118**	0.115**	1.363**	1.322**
	(0.054)	(0.054)	(0.602)	(0.603)
Population (Log)	0.040	0.136	0.575	1.727
	(0.154)	(0.162)	(1.728)	(1.811)
Power Committee	-0.029*	-0.030*	-0.309*	-0.323*
	(0.016)	(0.016)	(0.175)	(0.176)
Committee Chair	-0.041**	-0.034*	-0.473**	-0.385*
	(0.019)	(0.019)	(0.207)	(0.207)
Lagged LES × Population (Log)	-0.011**	-0.011**	-0.128**	-0.125**
	(0.005)	(0.005)	(0.057)	(0.057)
Full Controls	Yes	Yes	Yes	Yes
City FEs	Yes	Yes	Yes	Yes
Congress FEs	Yes	Yes	Yes	Yes
N	11,854	11,854	11,854	11,854
Adjusted R^2	0.686	0.689	0.697	0.700

Note: Robust standard errors clustered at the city level are reported in parentheses. *p<0.1; **p<0.05; ***p<0.001. See Appendix: Table A.6 for the full regression results

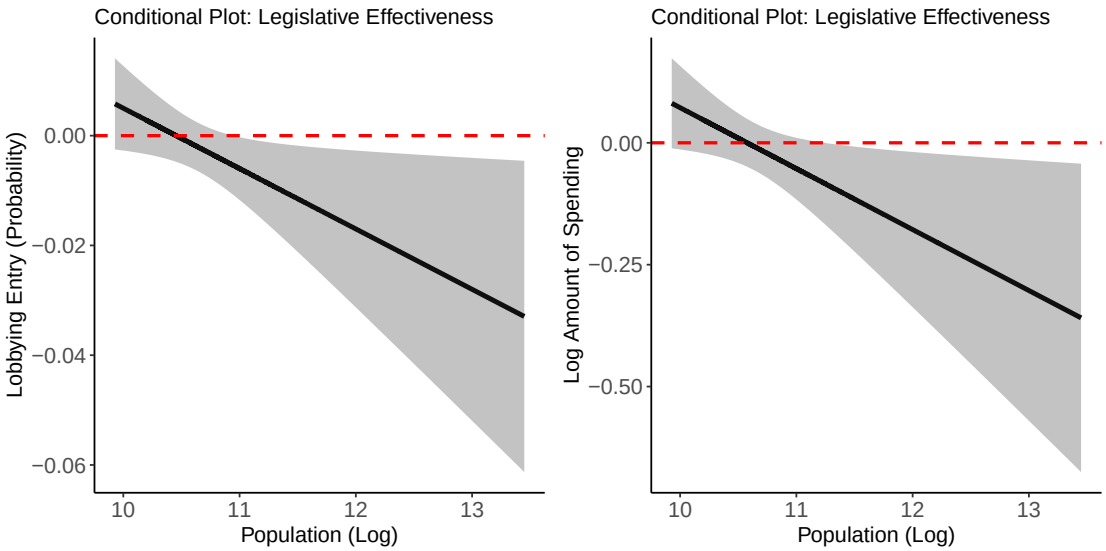

Figure 2: Conditional Effect of Legislative Effectiveness

Surprisingly, *population (log)* is found not to have a significant effect on city lobbying activities. One potential explanation is that city fixed effects mitigate the impact of city population size. Conforming to *Hypothesis 2*'s prediction, I find that cities decrease their lobbying activities, both in terms of entry and investment, when the associated MC is in an advantageous position. Using Model 2's estimate (only at 0.1 level), the chance of a city's lobbying probability decreases by 0.03 if the associated MC takes a seat on the power committee. The effect of gaining a seat on the power committee on the city's lobbying entry is substantial, as the mean of lobbying entry is 0.2052, corresponding to a 14.6% decrease. Also, having a seat on one of the power committees leads to a 32.3% decrease in the city's lobbying investment. Conforming to Berry and Fowler (2016)'s finding, committee chairs are more powerful than rank and file MCs. Using Models 2 and 4's estimates (only at 0.1 level), the chance of a city's lobbying probability decreases by 0.034, and the investment decreases by 38.5% if the associated MC serves as committee chair.

The first outcome *Lobbying Entry* is binary, so I also present logit results specification (see Table A.7). I also separate the sample into two groups based on the city's lobbying

records. For those cities that never lobby in these two decades, lobbying may not be a viable option (see Table A.8). Analogous results to those in Table 1 are found both for the logit specification and the subset of samples. In Table A.10, I present regression results with additional Senator-level controls. Neither Senator's lagged LES nor the interaction term of Senator's lagged LES and city population has a significant effect on city lobbying activities. I also conduct tests substituting the log-transformed LES for MC legislative performance (see Table A.11) and using city population in thousands as the measurement for population (See Table A.12). These substitutions also yield similar results as those reported in Table 1. Additionally, as relevant city officials may not have complete information regarding an MC's efforts in legislation, besides using the LES I follow Box-Steffensmeier and Grant (1999) and include the passage rate of bills as another measurement for an MC's legislative performance (see Figure A.3). Also, city officials may focus more on their MC's legislative efforts at later stages (such as bills becoming laws), so I conduct another test analyzing the specific effect of lawmaking at later stages (see Figure A.4). As shown in both Figures A.3 and A.4, the fitted curves for lobbying entry and lobbying spending all display decreasing trends as population increases, but with upper bounds of the confidence intervals (95%) crossing the horizontal axis. Moreover, as highlighted in the theory section, cities care disproportionately about certain issue areas, so instead of using the overall LES performance, in Figure A.5, I present the conditional effect plot when substituting LES as ILES (LES in issue areas). The conditional effect plots in Figure A.4 and Figure A.5 all present the same trend as that in Figure 2, but with the upper bounds of confidence intervals (95%) crossing the horizontal axis. To reduce the concern that the raw LES may underscore the relative performance of low-performing MCs and minority party MCs, in Table A.13, I substitute *LES Relative to Benchmark* as the measurement for MC's legislative performance. Table A.13 produce analogous but non-significant results as Table 1, and the conditional effect plot figure A.6

presents similar trend as figure 2. [28]

Finally, roughly 20% of cities are not nested inside a single district's boundary (multiple-districts cities), and many are important ones. For example, under the 2010 congressional district map, New York City (NYC) encompasses 13 different districts, while Los Angles includes ten districts (fully or partially). Also, MCs from the same city possess huge variations in terms of legislative performance. In the 114th Congress, among all MCs from NYC, Eliot Engel (NY-16) had an LES score of 2.795, while Yvette Clarke only scored 0.071. Engel ranked first among all Democrats in that Congress, while Clarke scored in the lowest 5%. NYC is spatially linked with a double-digit number of MCs possessing considerable variations in performance, highlighting the possibility that the NYC government can shop around different legislators. Admittedly, there is a correlation between city population and the number of congressional districts, but that relationship is not guaranteed, with a quarter of cities encompassing multiple districts having a population smaller than 50,000. The theory hypothesized for single-district cities may not apply for multiple-districts cities, with more ambiguities on multiple district cities' motives to lobby. Cities may care more about the average performance of different MCs or focus heavily on the MC with the best legislative performance. In Appendix: Table A.14, I present regression results for multiple-district cities' lobbying decisions taking the average of related MCs' performance. In Appendix: Table A.15, I present analogous results for multiple-district cities' lobbying decisions using the best-performing MC's LES. As shown in Appendix: Figure A.7, fitted curves under both conditions present increasing trends. Unlike single-district cities, multiple-districts cities are more likely to double their lobbying investment under a favorable legislative environment.

[28]LES Relative to Benchmark is the ratio between the raw LES and the benchmark LES. See https://thelawmakers.org/methodology for the detailed description of benchmark LES.

Additional Evidence for the Mechanism: Supplementary DID

Following the information school of lobbying (Hall and Deardorff, 2006), *Hypothesis 1* assumes city lobbying as a type of legislative subsidy, stressing the logic of filling the gap in received representation. Nevertheless, cities may reduce their effort level under unfavorable legislative situations. To further validate my argument that the legislative subsidy mechanism prevails for lobbying of single-district cities, I conduct a robustness check utilizing 2013 congressional redistricting, and check how cities respond to this political shock. With the enumeration of population changes, states can gain, lose or keep their delegation size. After the 2010 census, becoming effective with the 113th Congress, 12 seats were swapped among 18 states. Eight states, including Texas, Georgia, and Arizona, gained seats, while ten states, including New York, Ohio, and Pennsylvania, lost delegates. Previous studies have uncovered the importance of connection webs and regional networks on MCs' legislative performance (Caldeira and Patterson, 1987; Pellegrini and Grant, 1999; Fowler, 2006; Volden and Wiseman, 2014; Garro, 2020). A decrease in state delegation negatively reduces the size of in-state connection webs, which disproportionately impacts legislators from that state. Garro (2020) points out that MCs suffer a 16% decrease in their legislative effectiveness when the relevant state delegation size suddenly decreases. Specifically, in the DID design, MCs from unaffected states are in the control group, while MCs from affected states (losing delegates) are in the treatment group.[29] I examine whether associated cities from affected states further increase their lobbying activities.[30]

[29]MCs from states with fewer post-census seats may suffer varying levels of losses from redistricting because of differences in innate legislative abilities. Higher ability MCs should be better able to make adjustments than other MCs. The effects of shocks induced by shrinking delegation size should be smaller for high-ability legislators. This analysis only measures the average loss associated with a smaller delegation size.

[30]I cannot examine those with an increasing state delegation size due to the lack of parallel trend.

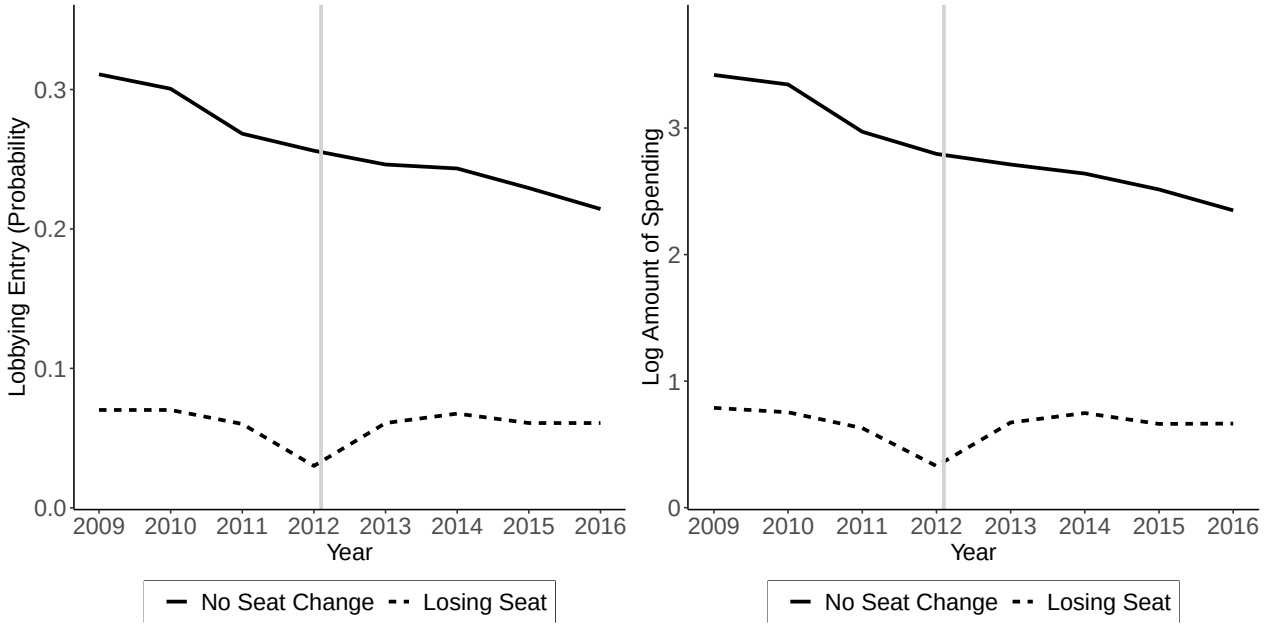

Figure 3: Lobbying Decision by Cities: Trend

Note: Figures depict the trend for cities' lobbying activities (decision and investment) from 2009 to 2016 (111th to 114th Congress). The sample is based upon the constant sample and only includes cities represented by MCs with seats at the start of the 111th Congress. Cities in states with no size change of the delegation (control) are marked with the solid line, and cities from states with a decrease of the delegation size (treatment) are marked using the dotted line.

The parallel trend assumption needs to be satisfied to ensure the validity of DID research design. Figure 3 provides the graphical evidence, and there is a parallel trend before congressional redistricting, suggesting that the parallel trends assumption necessary for the DID design is valid.[31] In line with *Hypothesis 1*, after congressional redistricting the line seen in Figure 3 reveals a noticeable change between cities from affected states and cities associated with unaffected states. Cities participated more in lobbying activities when the state delegation size decreased. Empirically, as shown in Table 2, the interaction term *Losing Delegates* $\times$ *Post-Redistricting* is positive and significant (only at 0.1 level) in both outcomes.[32] The

[31]See Table A.18 for the additional lead and lag test on pre-treatment trend.

[32]See Table A.16 for the regression results using states with increasing delegates as treatments.

DID result lends additional support to the direction of association hypothesized in *Hypothesis 1*, demonstrating that cities are more likely to lobby the federal government encountering an unfavorable legislative environment.

Table 2: Redistricting and City Lobbying

	Lobbying Entry	Log Amount of Spending
Losing Delegate	-0.109***	-1.270***
	(0.039)	(0.431)
Post Redistricting	-0.064***	-0.725***
	(0.018)	(0.193)
Losing Delegate × Post Redistricting	0.040*	0.503*
	(0.023)	(0.258)
Full Controls	Yes	Yes
N	2,992	2,992
Adjusted R^2	0.253	0.261

Note: Standard errors clustered at the state level are reported in parentheses. *p<0.1; **p<0.05; ***p<0.001. Full regression results is displayed in Table A.17.

Conclusion and Implications

In this article, I ask what factors might explain the variations in cities' lobbying activities. Using a large dataset of all American cities with a population greater than twenty thousand residents, I first find an inverse association between the corresponding MC's legislative performance and a city's lobbying activities conditional upon the city's population size among single-district cities. I also find that single-district cities associated with influential MCs are less likely to lobby and spend less than other cities. These findings first suggest that the quality of representation influences the behaviors of city governments. These findings also highlight a potential mechanism to make up for the underrepresentation of big cities' interests in intergovernmental politics. Larger cities have more resources than smaller cities, and they can invest those resources in lobbying for effective representation.

These findings have particular importance in understanding city politics. Relatively lit-

tle known is about a city's motive to lobby. Following the traditional federalism literature, Goldstein and You (2017) and Payson (2020*b*) argue that policy incongruence (mismatch) is the major driver behind a city's lobbying decision. This mismatch can cause the under-representation of a city's interest, leading to the underprovision of public goods, whereas intergovernmental lobbying provides the city with another mechanism to prioritize its preferences. My theory differs from the existing research by pointing out that under-representation can also happen because of MCs legislative performances vary. Given similar levels of city-MC preference incongruence, some MCs are more adept at translating policies on their agendas to concrete legislative outputs than others. Cities largely depend upon their immediate delegates for representation in intergovernmental politics. With lower performing represented, they then respond by lobbying, providing legislative subsidies to these MCs to make up the supply gap. The specific reason leading to under-representation is different in this study but, in essence, the results support the central argument that under-representation or the fear of under-representation is the key motive behind cities' lobbying motives. Positively speaking, this study shows that lobbying can be an effective mechanism for cities to cope with under-representation. Other than official representation from legislators, cities can utilize lobbying to voice their local needs in the higher-level government.

This analysis also speaks to the literature on responsiveness and legislative effectiveness. Recent research has raised concerns showing that MCs are less responsive to constituents, as constituents cannot tell differences in legislator performance. This study provides some response to those studies by showing that at least local governments of medium to large cities can differentiate the relative legislative performance of MCs. Like other organized interests, city governments invest more heavily in lobbying when their associated MCs encounter difficulty achieving legislative goals. The conditional impact of city population size also speaks to the literature on responsiveness and representation. Scholars like Rodden worry about the level of representation and responsiveness received by cities from associated

MCs (Rodden, 2019). Big cities are more capable of using the alternative of lobbying than small cities. Specifically, intergovernmental lobbying provides big cities with an alternative means to voice their needs in national politics when de facto representation from MCs is relatively constrained and the election of a new MC is not achievable. That said, this finding on population size raises the concern that inequalities across cities are likely to grow.

Going forward, I see several directions for further research. The first is incorporating diversification of interests within the city. Current research assumes a city as an entity with a singular voice, which is far from reality. Like different cities in the same congressional district, different groups within a city have diversified interests and priorities. How does this diversification translate into a city's lobbying decision? Another potential topic is to study the impact of different lobbying strategies in cities. A city can lobby MCs or federal agencies, and little is known regarding the effect of targetting different subjects. For the city, is it more fruitful to influence the appropriation or project implementation process? Finally, future researchers can study how residents respond to a city's lobbying activities.

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Online Appendix

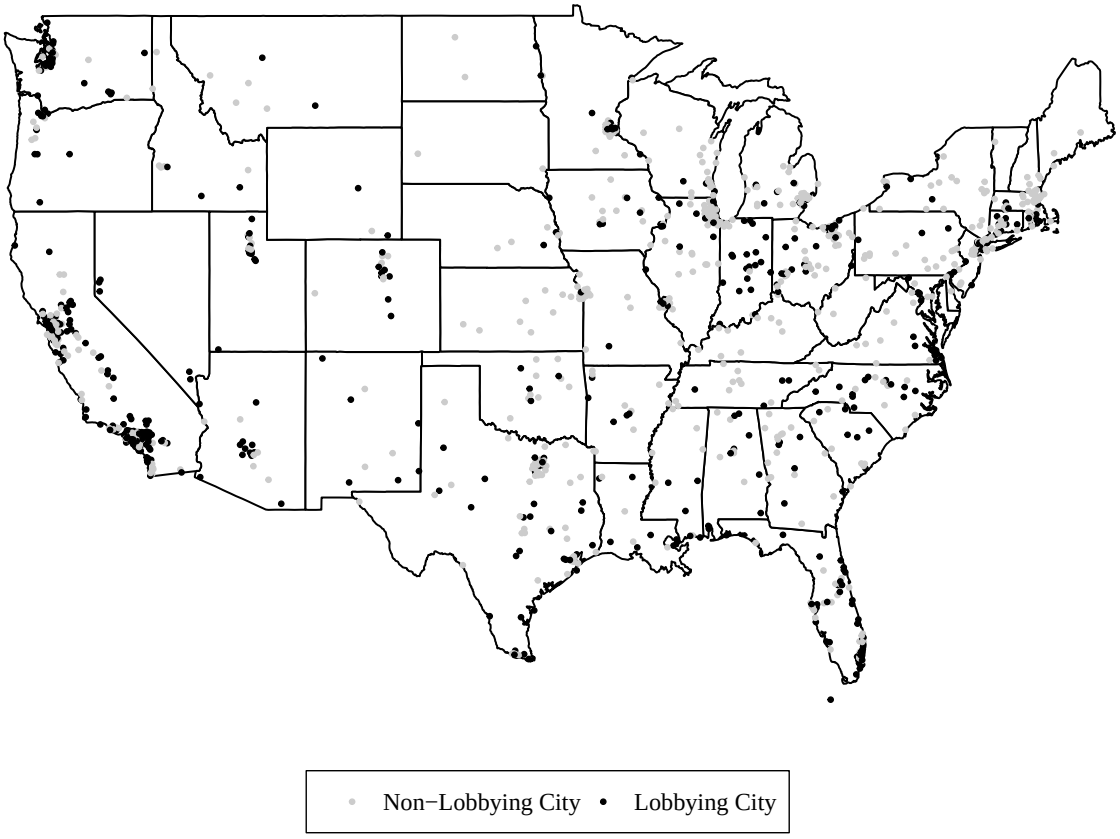

Figure A.1: Geographical Distribution of Lobbying and Non-Lobbying Cities

Figure A.1 provides the geographical distribution of lobbying and non-lobbying cities. The dataset include cities from all 50 states and cities of 48 states that at least lobby the national legislature once (the two exceptions are Vermont and South Dakota).

Table A.1: Summary Statistics of City Lobbying Activities

Year	Lobbying Cities	Single-District Cities	Total Spending (in thousand)
2003	239	155	31905
2004	250	159	35674
2005	291	191	37825
2006	305	202	40074
2007	329	221	40544
2008	344	237	41265
2009	379	261	42542
2010	368	251	42030
2011	350	238	37699
2012	317	214	32196
2013	302	205	30484
2014	301	203	29764
2015	288	190	29455
2016	276	185	27182

Note: Lobbying cities include all cities which engage into intergovernmental (federal-level) lobbying in a given year. The second column (single-district cities) report the number of single-district cities which engage into intergovernmental lobbying in a given year. Total spending is calculated using the January, 2022's dollar value.

Table A.2: Summary Statistics: Single-district Cities and Multiple-district Cities

Year	Lobbying Probability	Lobbying Investment	Population
2003	0.15 , 0.35	17114 , 61037.34	66426.83 , 255214.9
2004	0.16 , 0.38	18416.75 , 71338.31	66426.83 , 255214.9
2005	0.19 , 0.42	20399.74 , 71244.41	66881.05 , 250914.3
2006	0.2 , 0.43	22069.97 , 73543.86	66881.05 , 250914.3
2007	0.22 , 0.46	22154.86 , 76501.09	67017.64 , 255054.2
2008	0.23 , 0.46	23437.44 , 73984.27	68959.87 , 260163.6
2009	0.26 , 0.5	23321.78 , 79943.03	68959.87 , 260163.6
2010	0.25 , 0.5	23237.23 , 78126.98	68959.87 , 260163.6
2011	0.23 , 0.48	21043.05 , 69201.17	70929.64 , 268055.3
2012	0.21 , 0.44	17422.97 , 61492.51	70929.64 , 268055.3
2013	0.2 , 0.38	17613.59 , 50663.14	70550.24 , 254755.5
2014	0.2 , 0.39	16637 , 51687.15	71841.1 , 260993.2
2015	0.19 , 0.39	15929.34 , 53271.82	72489.98 , 263910
2016	0.18 , 0.36	15176.45 , 47273.69	72899.95 , 265358.1

Note: The number before the comma is the mean value for a single-district city in a given year, and the number after the comma shows the mean value for a multiple-district city in a given year. Lobbying investment is calculated using the January 2022's dollar value and measured in thousands.

Table A.2 provides the comparison of mean values between a single-district city and a multiple-district city in terms of lobbying activities and population. Not surprisingly, multiple-district cities are larger in population and have a higher probability of lobbying at the federal level than single-district cities. They also spend relatively more than single-district cities. These patterns have been consistent over the years, suggesting the potential of intrinsic differences in lobbying motives.

Table A.3: Summary Statistics: Lobbying and Non-Lobbying Cities in 2016

Variables	Population	Median Household Income	Revenue	Expenditure	Poverty Rate
Mean	178.93, 55.13	68685, 74411	802.94, 152.94	810.71, 156.80	0.155, 0.140
Median	87.51, 44.21	62808, 63965	210.42, 98.54	214.70, 99.30	0.147, 0.127
SD	462.79, 42.52	24709, 33386	574.56, 268.39	594.88, 286.02	0.073, 0.086

Note: The number before the comma is the number for cities ever lobby, and the number after the comma is the number for cities never lobby. *Population* records the number of residents in a city (in thousands), while *Revenue* notes down the total revenue generated by the city in thousand dollars. *Expenditure* notes down the total revenue generated by the city in thousand dollars.

Table A.3 provides the summary statistics about the mean, median, and standard deviation of several variables include in the dataset. Lobbying cities are generally larger than non-lobbying cities in terms of population and fiscal resources, which supports the observational findings in the Data section. Also, lobbying cities tend to have slightly worse economic performance than non-lobbying cities. Both the mean and median values of the poverty rate at non-lobbying cities are roughly 2 to 3 points lower than lobbying cities. The median household income of non-lobbying cities is also consistently higher than lobbying cities, which echoes the economic distress argument (Wong, 1988; Loftis and Kettler, 2015).

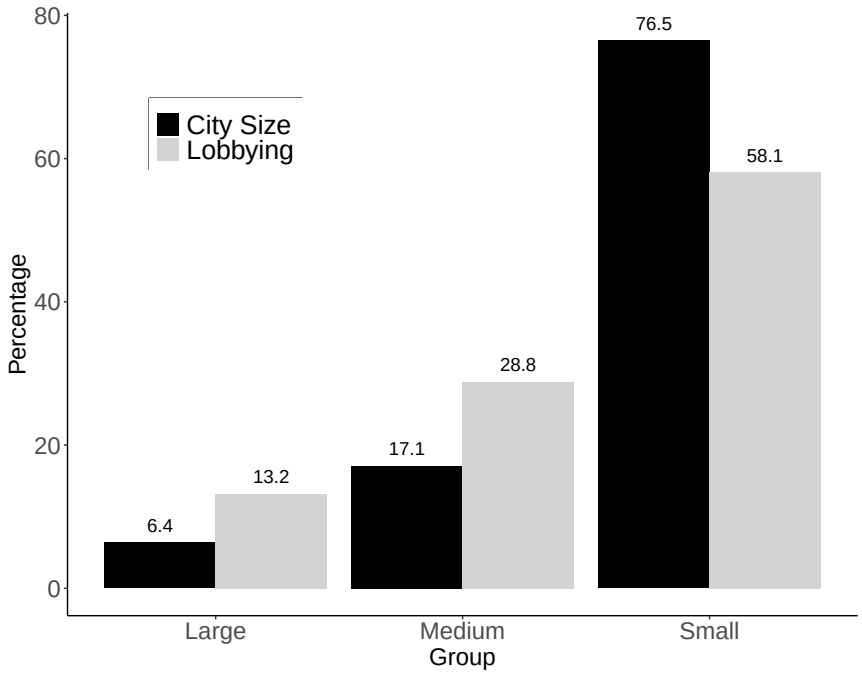

Figure A.2: Share of cities and share of lobbying decision across groups

Note: Small cities have population size smaller than 100 thousand; medium cities have population size in between 100 thousand to 250 thousand; large cities have population size greater than 250 thousand.

Figure A.2 above charts the proportion of cities and lobbying activity in each of the three city groups (by city population): small, medium, and large. As the figure suggests, large and medium cities are over-represented among lobbying observations relative to their share of the total observations, while small cities are underrepresented. Large cities constitute only 6.4 % of the total city-year observations, but 13.2% of the lobbying observations. It creates a gap of nearly 6% and translates into an over-representation rate over 200%. Medium cities are also over-represented, with an over-representation rate of 68%. Small cities are seriously underrepresented. 90% of the large cities lobbies at least once during this period, 73% of the medium-sized cities do, and only 33% of the small cities ever lobby.

Table A.4: Top 20 Issues and Targeted Agencies

Rank	Issue	Frequency	Agency	Frequency
1	Budget & Appropriations	157	Dept of Transportation	90
2	Transportation	118	Dept of Housing & Urban Development	53
3	Urban Development	81	Dept of Justice	37
4	Taxes	57	Army Corps of Engineers	36
5	Housing	45	Environmental Protection Agency	33
6	Environment & Superfund	44	White House	24
7	Natural Resources	42	Dept of Commerce	23
8	Law Enforcement & Crime	37	Federal Aviation Administration	23
9	Economics Development	35	Federal Emergency Management Agency	20
10	Homeland Security:	30	Federal Transit Administration	19
11	Aviation, Airlines & Airports	29	Dept of Homeland Security	18
12	Clean Air & Water	24	National Highway Traffic Safety Admin	18
13	Disaster & Emergency Planning	19	Dept of the Interior	16
14	Labor, Antitrust & Workplace	17	Dept of Labor	15
15	Telecommunications	17	Bureau of Reclamation	12
16	Defense	16	Federal Highway Administration	12
17	Energy & Nuclear Power	12	Dept of Energy	11
18	Government Issues	12	Dept of Health & Human Services	10
19	Education	9	Dept of Agriculture	9
20	Health Issues	9	Dept of Air Force	9

Note: The above table displays the top 20 issues and targeted agencies covered in the lobbying reports submitted in 2016. The issue area classification comes from OpenSecrets, and the complete list can be found at https://www.opensecrets.org/federal-lobbying/alphabetical-list?type=u. The unit of analysis is city-year. For example, lobbyists for a city can mention Budget & Appropriations in each quarter's report, but it is only counted once. Summary statistics on issue and agency frequency are suggestive, as the lack of standard requirements for lobbyists when submitting the lobbying report. Some lobbyists fill out the form in a much more detailed manner, including more information.

Table A.5: Full List of Control Variables

Variable Names	Measurement
Member Level Controls	
Power Committee	Dummy variable, scores 1 if MC is in appropriations, finance or transportation committee in a given year, zero otherwise.
City-MC Mismatch	Dummy variable, scores 1 if the city and the associated MC are of different parties (eg: Democratic city with Republican MC), zero otherwise (Payson, 2021).
Seniority	Measured by how many terms an MC has served in Congress.
Majority Party Status	Dummy variable, scores 1 if the legislator is a member of the majority party, zero otherwise.
MC's Ideological Score	Measured as an MC's first dimension DW-nominate score.
Ideological Distance to the Floor Median	The absolute distance between an MC's first dimension DW-nominate score and the chamber median's first dimension DW-nominate score.
Vote Share	Percentage of votes win by the MC in the previous election.
Competitive District	Dummy variable, scores 1 if the vote share is less than 55%.
Speaker	Dummy variable, scores 1if the MC is the Speaker of the House in a given year, zero otherwise.
Majority Leader	Dummy variable, scores 1 if the MC is the majority party leader in a given year, zero otherwise.
Minority Leader	Dummy variable, scores 1 if the MC is the minority party leader in a given year, zero otherwise.
Committee Chair	Dummy variable, scores 1 1 if MC is a committee chair in a given year, zero otherwise.
Subcommittee Chair	Dummy variable, scores 1 1 if an MC is a subcommittee chair in a given year, zero otherwise.
Black Legislator	Dummy variable, scores 1 1 if an MC is African American, zero otherwise.
Latino Legislator	Dummy variable, scores 1 1 if an MC is Latino, zero otherwise.
Asian Legislator	Dummy variable, scores 1 1 if an MC is Asian, zero otherwise.
Gender	Dummy variable, scores 1 1 if an MC is female, zero otherwise.
Partisanship	Dummy variable, scores 1 if an MC is Democrat, zero otherwise.

Variable Names	Measurement
City Level Controls	
Unemployment Rate	The percentage of a city's unemployed population /civilian population in labor force in a given year.
Median Household Income	City household income (in 2022 inflation adjusted dollars).
Poverty Rate	A city's poverty rate in a given year.
Gini Index	A continuous measurement on city's wealth distribution.
Senior (%)	The percentage of senior (over 65) in the population.
Student (%)	The percentage of student (less than 18) in the population.
Revenue	A city's total revenue (logged).
Expenditure	A city's total general expenditures (logged).
Intergovernmental Transfer	City total intergovernmental expenditures(logged).
Federal Transfer	City total intergovernmental revenue from the federal government (logged). government (in millions).
Total Area	City's total land area as stipulated in the Community Survey.
State Delegation Size	Number of delegates from city's state.
Governor's Party	Dummy variable, scores 1 if the governor is a member of the Democratic party, zero otherwise.
State House Majority	Dummy variable, scores 1 if Democratic party is the majority party in the state House, zero otherwise.
State Senate Majority	Dummy variable, scores 1 if Democratic party is the majority party in the state Senate, zero otherwise.
Transfer Divergence	The difference between each city's direct expenditure per capita and the concordant state government's direct expenditure per capita (Goldstein and You, 2017).
Population Percentage	The percentage of city's population out of the district population.
Additional Senator Level Controls	
Lagged LES (Senator)	The mean of associated Senators' legislative effectiveness score lagged by one term.
City-Senator Mismatch	Dummy variable, scores 1 if the city and the Senators are of different groups in terms of ideology (eg: The mean ideology of two Senators are liberal, but the city has a conservative leaning), zero otherwise
Senator's Seniority	The mean of associated Senators' seniority.
Senator's Ideological Score	The mean of associated Senators' first-dimension nominate score.
Ideological Distance to the Floor Median (Senator)	The absolute distance between Senator's first dimension nominate score and the chamber median's first dimension nominate score.
Senate Majority Leader	Scores 1 if both Senators are majority party leaders in a given year, 0.5 if one of the Senator is the majority party leader, zero otherwise.
Senate Minority Leader	Scores 1 if both Senators are minority party leaders in a given year, 0.5 if one of the Senator is the minority party leader, zero otherwise.
Senate Committee Chair	Scores 1 if both Senators are committee chairs in a given year, 0.5 if one of the Senator is the committee chair, zero otherwise.
Senate Subcommittee Chair	Scores 1 if both Senators are subcommittee chairs in a given year, 0.5 if one of the Senator is the subcommittee chair, zero otherwise.
Senate Majority Status	Scores 1 if both Senators are majority party members in a given year, 0.5 if one of the Senator is the majority party member, zero otherwise.
Senate Power Committee	Scores 1 if both Senators are power committee members in a given year, 0.5 if one of the Senator is the power committee member, zero otherwise.
City Population Percentage (State)	A city's population percentage in the state population.
Lagged LES(Senator)* Population(Log)	The interaction term of Senator's lagged LES and city population.

Table A.6: Lobbying from Cities: 2003-2016

	Lobbying Entry		Log Amount of Spending	
	Model 1	Model 2	Model 3	Model 4
Lagged LES	0.118**	0.115**	1.363**	1.322**
	(0.054)	(0.054)	(0.602)	(0.603)
Population (Log)	0.040	0.136	0.575	1.727
	(0.154)	(0.162)	(1.728)	(1.811)
City-MC Mismatch	0.021	0.022	0.250	0.257
	(0.037)	(0.038)	(0.408)	(0.418)
Seniority	0.0008	-4.952×10^{-5}	0.009	-0.0001
	(0.002)	(0.002)	(0.017)	(0.017)
Gender	0.028	0.030	0.334	0.357
	(0.021)	(0.022)	(0.238)	(0.241)
Black Legislator	0.014	0.015	0.183	0.196
	(0.065)	(0.065)	(0.756)	(0.753)
Asian Legislator	-0.182***	-0.182**	-2.097***	-2.092**
	(0.070)	(0.072)	(0.808)	(0.828)
Latino Legislator	-0.020	-0.023	-0.230	-0.262
	(0.058)	(0.059)	(0.644)	(0.649)
Majority Party Status	-0.016	-0.024	-0.166	-0.248
	(0.021)	(0.021)	(0.235)	(0.235)
Power Committee	-0.029*	-0.030*	-0.309*	-0.323*
	(0.016)	(0.016)	(0.175)	(0.176)
Ideological Score	-0.011	-0.006	-0.143	-0.079
	(0.051)	(0.051)	(0.578)	(0.574)
Ideological Score to the Chamber Median	-0.088*	-0.097**	-0.941*	-1.035*
	(0.047)	(0.047)	(0.530)	(0.530)
Vote Share	0.0005	0.0005	0.005	0.006
	(0.0004)	(0.0004)	(0.005)	(0.005)
Competitive District	0.016	0.016	0.190	0.192
	(0.013)	(0.013)	(0.145)	(0.145)
Partisanship	-0.009	-0.012	-0.134	-0.159
	(0.040)	(0.040)	(0.442)	(0.442)
Speaker	-0.114	-0.097	-1.281	-1.080
	(0.141)	(0.142)	(1.623)	(1.625)
Majority Leader	-0.031	-0.040	-0.329	-0.429
	(0.030)	(0.030)	(0.339)	(0.336)
Minority Leader	0.077**	0.083**	0.849**	0.918**
	(0.035)	(0.035)	(0.389)	(0.386)
Committee Chair	-0.041**	-0.034*	-0.473**	-0.385*
	(0.019)	(0.019)	(0.207)	(0.207)
Subcommittee Chair	-0.019	-0.019	-0.223	-0.217
	(0.013)	(0.013)	(0.143)	(0.142)
Unemployment Rate	0.744***	0.289	8.858***	3.789
	(0.226)	(0.229)	(2.530)	(2.561)
Median Income	-0.847	-0.220	-8.620	-1.812
	(0.909)	(0.935)	(10.10)	(10.38)
Poverty Rate	-0.310	-0.199	-3.735	-2.332
	(0.257)	(0.271)	(2.945)	(3.100)
Gini Index	-0.476*	-0.353	-5.273*	-3.807
	(0.259)	(0.262)	(2.888)	(2.931)
Student Percentage	-0.356	-0.421	-3.622	-4.522
	(0.399)	(0.399)	(4.445)	(4.434)
Senior Percentage	-0.468	-0.048	-5.154	-0.170
	(0.413)	(0.434)	(4.642)	(4.878)
Revenue	0.002	-0.0005	-0.024	-0.056
	(0.047)	(0.047)	(0.526)	(0.523)
Expenditure	0.069*	0.030	0.776*	0.379
	(0.038)	(0.038)	(0.425)	(0.420)
Intergovernmental Revenue	-0.020	-0.021	-0.198	-0.218
	(0.014)	(0.014)	(0.152)	(0.149)
Federal Transfer	0.007***	0.006**	0.073**	0.065**
	(0.003)	(0.003)	(0.029)	(0.029)
Transfer Divergence	-0.015***	0.003	-0.150**	0.043
	(0.006)	(0.007)	(0.063)	(0.081)
Governor's Party	0.0005	0.002	0.010	0.023
	(0.010)	(0.010)	(0.112)	(0.113)
State House Majority	0.014	-0.004	0.179	-0.025
	(0.013)	(0.014)	(0.148)	(0.160)
State Senate Majority	0.027*	0.018	0.295*	0.191
	(0.016)	(0.016)	(0.177)	(0.177)
City Population Percentage	-0.097	-0.265	-3.144	-5.365
	(0.870)	(0.907)	(10.02)	(10.40)
State Delegation Size	-0.008	-0.006	-0.094	-0.075
	(0.008)	(0.008)	(0.088)	(0.088)
Area	0.0004	-0.0006	0.002	-0.010
	(0.003)	(0.003)	(0.030)	(0.030)
Lagged LES × Population (Log)	-0.011**	-0.011**	-0.128**	-0.125**
	(0.005)	(0.005)	(0.057)	(0.057)
City FEs	Yes	Yes	Yes	Yes
Congress FEs		Yes		Yes
N	11,854	11,854	11,854	11,854
Adjusted R^2	0.686	0.689	0.697	0.700

Note: Robust standard errors clustered at the city level are reported in parentheses. *p<0.1; **p<0.05; ***p<0.001.

Table A.7: Lobbying from Cities: 2003-2016 (Logit)

Lagged LES	2.4964**	2.1835**
	(1.0435)	(1.0303)
Population (Log)	-1.0322	0.8517
	(2.2721)	(2.3924)
City-MC Mismatch	0.3528	0.3618
	(0.7298)	(0.8744)
Seniority	0.0152	-0.0150
	(0.0341)	(0.0353)
Power Committee	-0.6733**	-0.6347**
	(0.2959)	(0.3124)
Ideological Score	-0.5243	-0.7113
	(1.1270)	(1.1043)
Ideological Distance to the Chamber Median	-2.2033**	-2.4497**
	(1.0275)	(1.0762)
Committee Chair	-0.7774**	-0.6144*
	(0.3391)	(0.3446)
Subcommittee Chair	-0.3404	-0.2732
	(0.2447)	(0.2472)
Lagged LES × Population (Log)	-0.2327**	-0.2049**
	(0.0960)	(0.0950)
Full Controls	Yes	Yes
City FE	Yes	Yes
Congress FE	Yes	Yes
N	3,429	3,429
R^2	0.351	0.381
BIC	8,958.46	8,947.44

Note: Robust standard errors clustered at the city level are reported in parentheses. 8,425 observations removed because of only zero (or only one) outcomes.*p<0.1; **p<0.05; ***p<0.001.

Table A.8: Lobbying from Cities: Separated Samples

	Lobbying Entry	Log Amount of Spending
	Model 1	Model 2
Lagged LES	0.226**	2.580**
	(0.107)	(1.190)
Population (Log)	0.061	1.050
	(0.333)	(3.708)
City-MC Mismatch	0.045	0.525
	(0.092)	(1.019)
Seniority	−0.001	−0.012
	(0.004)	(0.046)
Power Committee	−0.084**	−0.908**
	(0.039)	(0.439)
Ideological Score	−0.071	−0.821
	(0.127)	(1.436)
Ideological Distance to the Chamber Median	−0.256**	−2.777**
	(0.118)	(1.320)
Committee Chair	−0.076*	−0.884*
	(0.041)	(0.456)
Subcommittee Chair	−0.035	−0.412
	(0.030)	(0.338)
Lagged LES * Population (Log)	−0.021**	−0.243**
	(0.010)	(0.108)
Full Controls	Yes	Yes
City FE	Yes	Yes
Year FE	Yes	Yes
N	4,619	4,619
Adjusted R^2	0.453	0.474

Note: Robust standard errors clustered at the city level are reported in parentheses. Samples only include those cities which lobby at once during this period. *p<0.1; **p<0.05; ***p<0.001.

Table A.9: Lobbying from Cities: LES Squared

	Lobbying Entry	Log Amount of Spending
	Model 1	Model 2
Lagged LES	0.113**	1.329**
	(0.055)	(0.611)
Lagged LES Squared	0.0001	−0.0002
	(0.0004)	(0.004)
Population (Log)	0.136	1.728
	(0.162)	(1.810)
City-MC Mismatch	0.022	0.257
	(0.038)	(0.418)
Seniority	−0.00002	−0.0002
	(0.002)	(0.017)
Power Committee	−0.030*	−0.322*
	(0.016)	(0.177)
Ideological Score	−0.006	−0.078
	(0.051)	(0.574)
Ideological Distance to the Chamber Median	−0.097**	−1.034*
	(0.048)	(0.534)
Committee Chair	−0.034*	−0.385*
	(0.019)	(0.207)
Subcommittee Chair	−0.019	−0.217
	(0.013)	(0.142)
Lagged LES * Population (Log)	−0.011**	−0.125**
	(0.005)	(0.057)
Full Controls	Yes	Yes
City FE	Yes	Yes
Congress FE	Yes	Yes
N	11,854	11,854
Adjusted R^2	0.656	0.668

Note: Robust standard errors clustered at the city level are reported in parentheses. *p<0.1; **p<0.05; ***p<0.001.

Table A.10: Lobbying from Cities: Senate Level Controls

	Lobbying Entry	Log Amount of Spending
	Model 1	Model 2
Lagged LES	0.117**	1.310**
	(0.056)	(0.624)
Lagged LES (Senator)	−0.217*	−2.284*
	(0.120)	(1.337)
Population (Log)	0.179	2.223
	(0.187)	(2.067)
City-MC Mismatch	0.017	0.189
	(0.040)	(0.445)
City-Senator Mismatch	0.067	0.776
	(0.052)	(0.563)
Power Committee	−0.038**	−0.407**
	(0.018)	(0.198)
Power Committee (Senate)	0.038	0.440
	(0.028)	(0.310)
Committee Chair	−0.034	−0.393
	(0.022)	(0.242)
Committee Chair (Senate)	−0.027	−0.300
	(0.024)	(0.269)
Lagged LES * Population (Log)	−0.011**	−0.125**
	(0.005)	(0.059)
Lagged LES (Senator) * Population (Log)	0.021*	0.226*
	(0.011)	(0.124)
Full Controls	Yes	Yes
Senate Level Controls	Yes	Yes
City FE	Yes	Yes
Congress FE	Yes	Yes
N	9,499	9,499
Adjusted R^2	0.674	0.685

Note: Robust standard errors clustered at the city level are reported in parentheses. *p<0.1; **p<0.05; ***p<0.001.

Table A.11: Lobbying from Cities: Log-Transformed LES

	Lobbying Entry	Log Amount of Spending
	Model 1	Model 2
Lagged LES (Log)	0.305*	3.623*
	(0.178)	(1.988)
Population (Log)	0.141	1.782
	(0.162)	(1.814)
City-MC Mismatch	0.022	0.257
	(0.038)	(0.419)
Seniority	0.00001	0.0004
	(0.002)	(0.017)
Power Committee	−0.030*	−0.323*
	(0.016)	(0.177)
Ideological Score	−0.007	−0.086
	(0.051)	(0.573)
Ideological Distance to the Chamber Median	−0.099**	−1.055**
	(0.048)	(0.533)
Committee Chair	−0.033*	−0.382*
	(0.018)	(0.206)
Subcommittee Chair	−0.019	−0.216
	(0.013)	(0.142)
Lagged LES (Log) * Population (Log)	−0.029*	−0.345*
	(0.017)	(0.185)
Full Controls	Yes	Yes
City FE	Yes	Yes
Congress FE	Yes	Yes
N	11,854	11,854
Adjusted R^2	0.656	0.668

Note: Robust standard errors clustered at the city level are reported in parentheses. *p<0.1; **p<0.05; ***p<0.001.

Table A.12: Lobbying From Cities: Substituting Log Population

	Lobbying Entry	Log Amount of Spending
	Model 1	Model 2
Lagged LES	0.003	0.039
	(0.003)	(0.038)
Population (Thousand)	0.002	0.019
	(0.002)	(0.018)
City-MC Mismatch	0.021	0.245
	(0.038)	(0.418)
Seniority	−0.0001	−0.001
	(0.002)	(0.017)
Power Committee	−0.030*	−0.320*
	(0.016)	(0.175)
Ideological Score	−0.006	−0.071
	(0.051)	(0.574)
Ideological Distance to the Chamber Median	−0.096**	−1.026*
	(0.047)	(0.528)
Committee Chair	−0.033*	−0.377*
	(0.019)	(0.207)
Subcommittee Chair	−0.019	−0.218
	(0.013)	(0.142)
Lagged LES * Population (Thousand)	−0.0001*	−0.001**
	(0.0001)	(0.001)
Full Controls	Yes	Yes
City FE	Yes	Yes
Congress FE	Yes	Yes
N	11,854	11,854
Adjusted R^2	0.656	0.668

Note: Robust standard errors clustered at the city level are reported in parentheses. *p<0.1; **p<0.05; ***p<0.001.

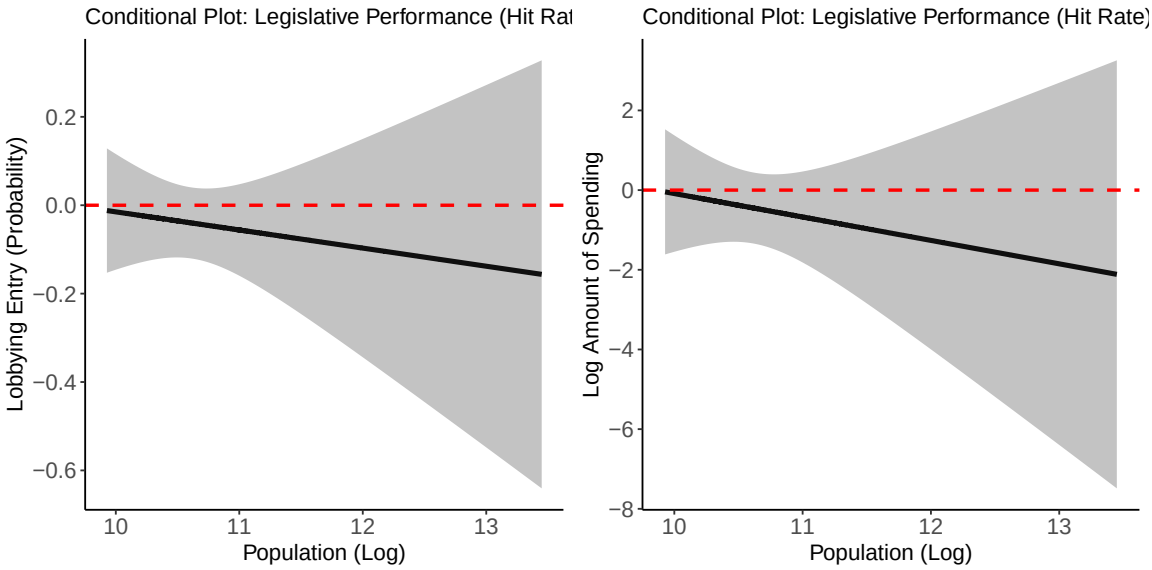

Figure A.3: Conditional Effect of Legislative Effectiveness: Hit Rate

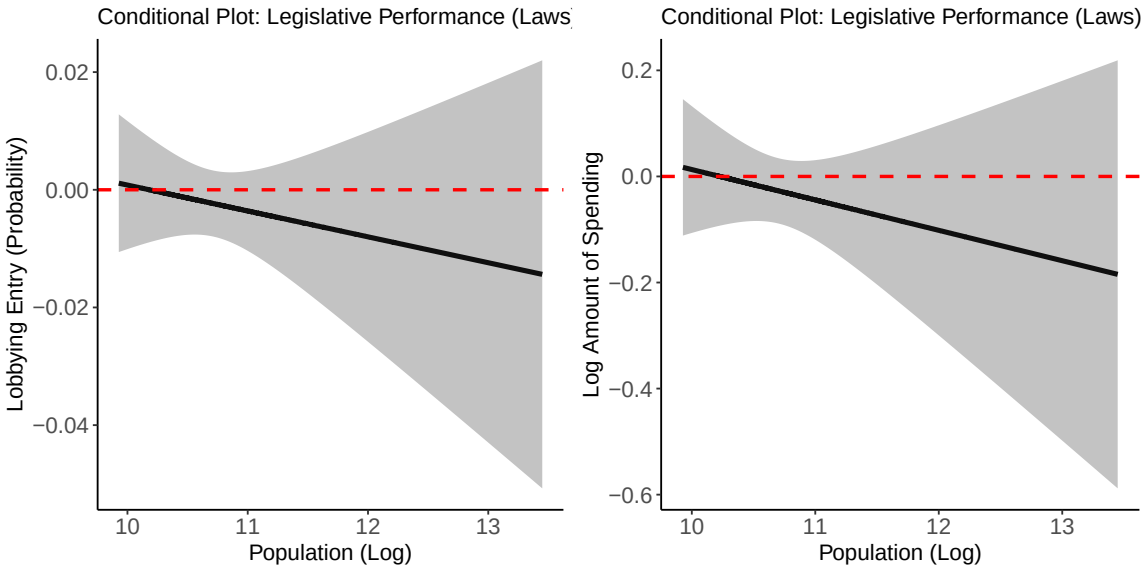

Figure A.4: Conditional Effect of Legislative Effectiveness: LES (Laws)

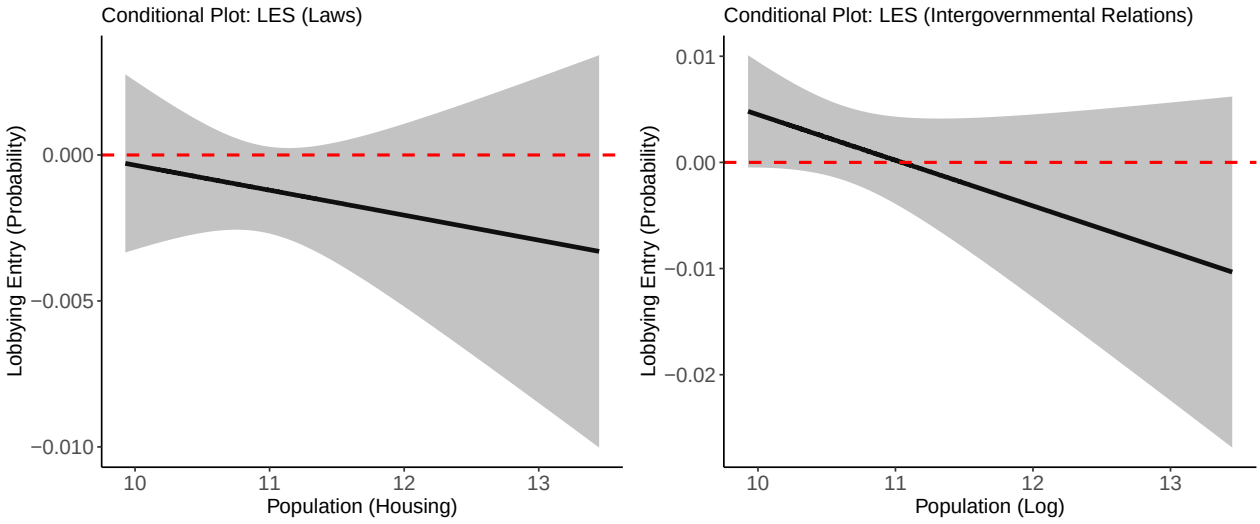

Figure A.5: Conditional Effect of Legislative Effectiveness: LES (Policy Issues)

Figure A.5 above charts the conditional effect plots for government operation issues and housing issues. Legislation on housing issues includes legislation related to housing and urban affairs, such as housing development, community development, rural housing and low-income assistance Legislation on government operations includes issues related to general government operations, including appropriations for multiple government agencies. Detailed classification can be found at https://www.comparativeagendas.net/pages/master-codebook.

Table A.13: Lobbying from Cities: Substituting LES Per Benchmark

	Lobbying Decision	Log Amount of Spending
	Model 1	Model 2
LES Per Expectation	0.065	0.830
	(0.095)	(1.062)
Population (Log)	0.137	1.738
	(0.160)	(1.787)
City-MC Mismatch	0.022	0.254
	(0.038)	(0.427)
Seniority	−0.001	−0.006
	(0.002)	(0.017)
Power Committee	−0.033**	−0.355**
	(0.016)	(0.175)
Ideological Score	−0.009	−0.113
	(0.051)	(0.576)
Ideological Distance to the Chamber Median	−0.099**	−1.064**
	(0.048)	(0.538)
Committee Chair	−0.033*	−0.385*
	(0.018)	(0.205)
Subcommittee Chair	−0.018	−0.209
	(0.013)	(0.142)
LES Per Expectation * Population (Log)	−0.007	−0.086
	(0.009)	(0.097)
Full Controls	Yes	Yes
City FE	Yes	Yes
Congress FE	Yes	Yes
N	11,842	11,842
Adjusted R^2	0.657	0.668

Note: Robust standard errors clustered at the city level are reported in parentheses. *p<0.1; **p<0.05; ***p<0.001.

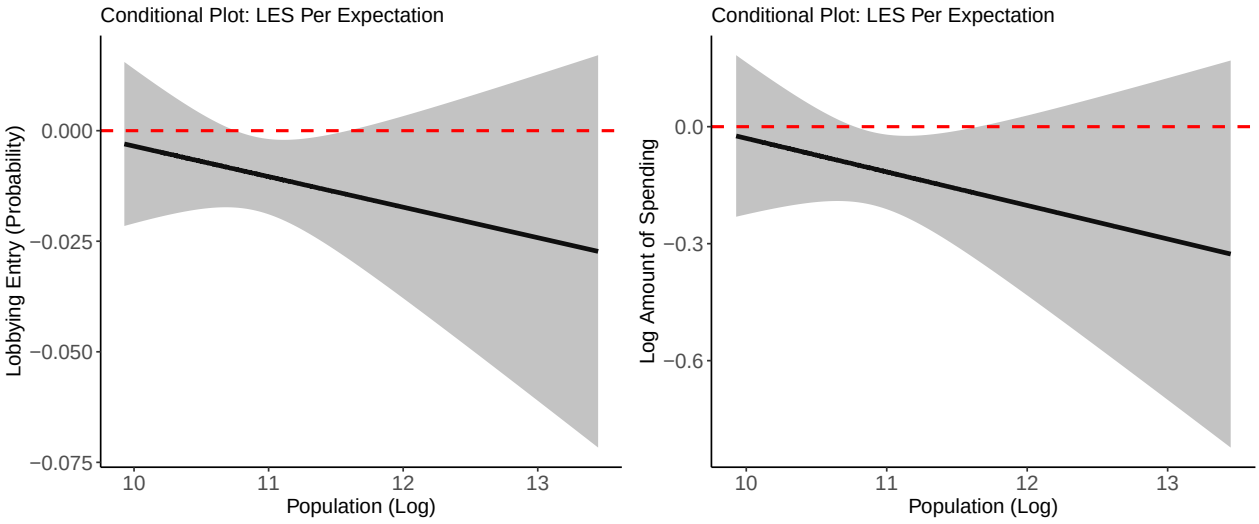

Figure A.6: Conditional Effect of Legislative Effectiveness: LES Per Expectation

Table A.14: Lobbying from Multiple-District Cities: 2003-2016 (Average)

	Lobbying Decision	Log Amount of Spending
	Model 1	Model 2
Lagged LES (Mean)	−0.169*	−1.943*
	(0.089)	(1.152)
Population (Log)	−0.059	−0.924
	(0.205)	(2.378)
Unemployment Rate	−0.683	−7.882
	(0.593)	(6.901)
Seniority	0.006	0.073
	(0.004)	(0.047)
Power Committee	−0.030	−0.295
	(0.040)	(0.461)
Ideological Score	0.020	0.178
	(0.058)	(0.679)
Committee Chair	−0.026	−0.172
	(0.073)	(0.835)
Subcommittee Chair	−0.015	−0.122
	(0.036)	(0.418)
Lagged LES (Mean) * Population (Log)	0.015*	0.169*
	(0.008)	(0.100)
Full Controls	Yes	Yes
City FE	Yes	Yes
Congress FE	Yes	Yes
N	3,303	3,303
Adjusted R^2	0.724	0.744

Note: Robust standard errors clustered at the city level are reported in parentheses. Mean value is given for MC-level variables. For example, committee chair scores 0.5 if one out of the two MCs scores 1. *p<0.1; **p<0.05; ***p<0.001.

Table A.15: Lobbying from Multiple-District Cities: 2003-2016 (Maximum)

	Lobbying Entry	Log Amount of Spending
	Model 1	Model 2
Lagged LES (Max)	-0.085^{***}	-1.106^{***}
	(0.027)	(0.376)
Population (Log)	-0.028	-0.610
	(0.204)	(2.375)
Unemployment Rate	-0.734	-8.461
	(0.589)	(6.851)
Seniority	0.005^{*}	0.063^{*}
	(0.003)	(0.034)
Power Committee	-0.003	-0.027
	(0.024)	(0.276)
Ideological Score	0.006	0.030
	(0.047)	(0.538)
Committee Chair	-0.017	-0.161
	(0.028)	(0.324)
Subcommittee Chair	0.009	0.131
	(0.017)	(0.195)
Lagged LES * Population (Log)	0.008^{***}	0.099^{***}
	(0.002)	(0.032)
Full Controls	Yes	Yes
City FE	Yes	Yes
Congress FE	Yes	Yes
N	3,303	3,303
Adjusted R^2	0.727	0.747

Note: Robust standard errors clustered at the city level are reported in parentheses. Maximum values is given for MC-level variables. For example, committee chair scores 1 if at least one of the MCs scores 1. *p<0.1; **p<0.05; ***p<0.001.

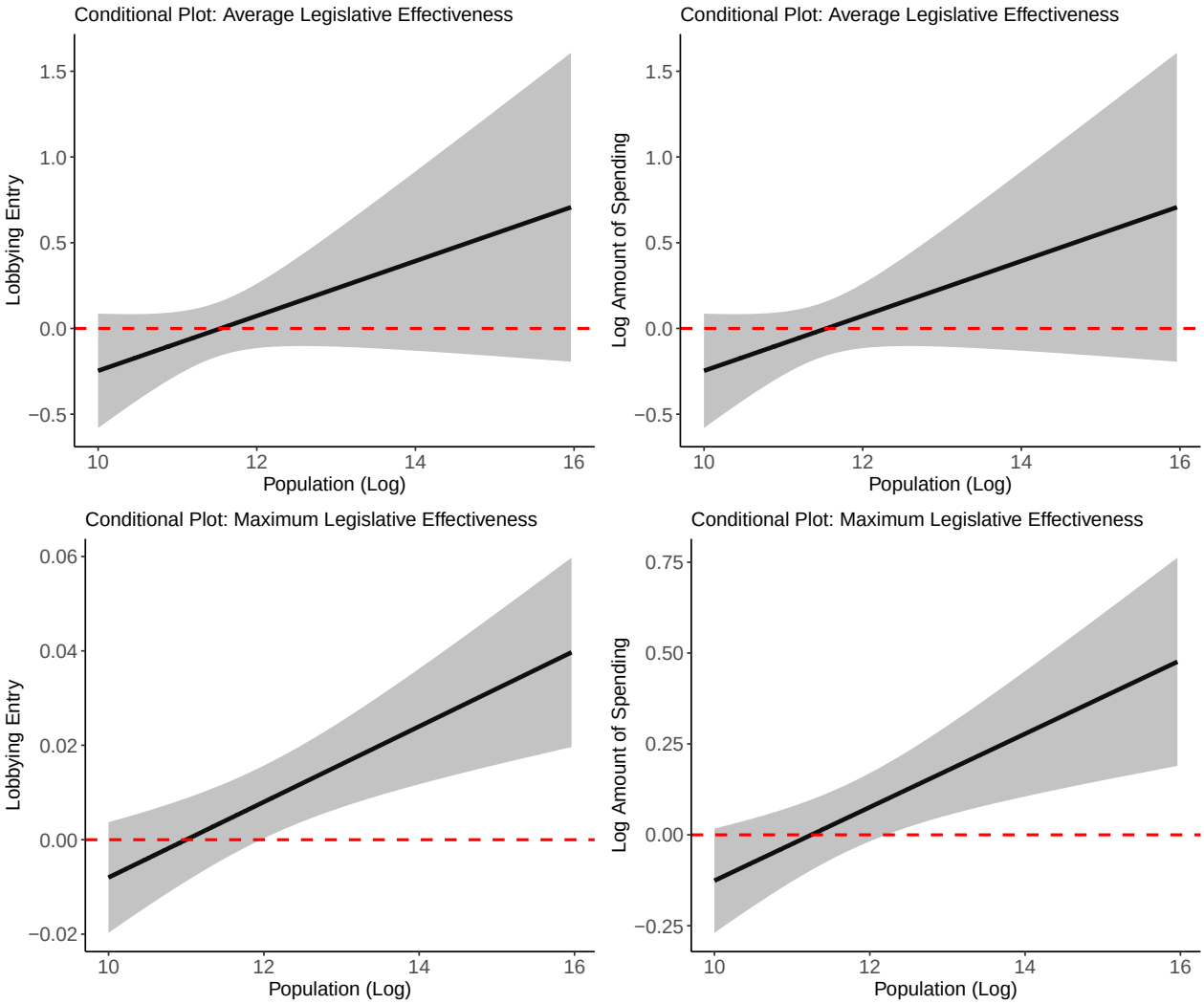

Figure A.7: Conditional Effect of Legislative Effectiveness: LES (Multiple-Districts Cities)

Table A.16: Redistricting and Lobbying: Increasing Delegation Size

	Lobbying Entry	Log Amount of Spending
Gaining Seat	0.199**	2.279**
	(0.083)	(0.930)
Post Redistricting	-0.054**	-0.610**
	(0.021)	(0.238)
Population (Log)	0.281***	3.055***
	(0.097)	(1.119)
Seniority	0.004	0.038
	(0.004)	(0.044)
City-MC Mismatch	0.188	2.014
	(0.203)	(2.193)
Power Committee	-0.008	-0.130
	(0.026)	(0.293)
Ideological Score	-0.391***	-4.704***
	(0.114)	(1.322)
Ideological Distance tot the Chamber Median	-0.010	-0.092
	(0.149)	(1.712)
Committee Chair	0.080	0.914
	(0.054)	(0.622)
Subcommittee Chair	0.052	0.628
	(0.039)	(0.450)
Gaining Seat × Post Redistricting	-0.063	-0.742
	(0.047)	(0.515)
Full Controls	Yes	Yes
N	2,618	2,618
Adjusted R^2	0.236	0.242

Note: Robust standard errors clustered at the state level are reported in parentheses. *p<0.1; **p<0.05; ***p<0.001.

Table A.17: Redistricting and Lobbying: Decreasing Delegation Size

	Lobbying Entry	Log Amount of Spending
Losing Delegate	-0.109***	-1.270***
	(0.039)	(0.431)
Post Redistricting	-0.064***	-0.725***
	(0.018)	(0.193)
Population (Log)	0.146**	1.525*
	(0.070)	(0.799)
Seniority	-0.0006	-0.008
	(0.004)	(0.041)
City-MC Mismatch	0.096	0.976
	(0.151)	(1.643)
Power Committee	0.012	0.124
	(0.025)	(0.279)
Ideological Score	0.003	-0.076
	(0.091)	(1.032)
Ideological Distance tot the Chamber Median	-0.096	-1.246
	(0.106)	(1.189)
Committee Chair	0.050	0.609
	(0.050)	(0.571)
Subcommittee Chair	0.034	0.435
	(0.038)	(0.418)
Losing Delegate × Post Redistricting	0.040*	0.503*
	(0.023)	(0.258)
Full Controls N	2,992	2,992
Adjusted R^2	0.253	0.261

Note: Robust standard errors clustered at the state level are reported in parentheses. *p<0.1; **p<0.05; ***p<0.001.

Table A.18: Effect of Losing Delegates After Redistricting: Leads and Lags

	Lobbying Entry			Log Amount of Spending		
	(1)	(2)	(3)	(4)	(5)	(6)
Redistricted, t+1		−0.017	−0.012		−0.161	−0.125
		(0.016)	(0.019)		(0.165)	(0.193)
Redistricted, t	−0.010	−0.013	−0.010	−0.123	−0.140	−0.109
	(0.013)	(0.014)	(0.017)	(0.136)	(0.150)	(0.186)
Redistricted, t-1			0.005			0.057
			(0.018)			(0.184)
N	3,022	2,529	2,036	3,022	2,529	2,036
Adjusted R^2	0.811	0.811	0.799	0.823	0.823	0.811

Note: Robust standard errors clustered at the city level are reported in parentheses. *p<0.1; **p<0.05; ***p<0.001.