Local Money: Evaluating the Effects of Municipal Campaign Contributions on Housing Policy Outcomes*

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Abstract

Money in politics is the subject of great debate at every level of government, yet it has principally been studied at the federal level in the US. Where scholars have analyzed local campaign donations, their work has largely focused on understanding who donates and to what kind of candidates. The actual effects of political donations on local policy outcomes remain essentially unstudied. In this paper, we describe and leverage a novel data set of over 3 million municipal election campaign contributions across five U.S. states and covering thousands of U.S. cities. Using generalized difference-in-differences panel research designs, we examine the causal impact of real estate industry contributions to local political candidates on permitted housing units and buildings. Our results show that campaign contributions from organized interests appear to play an important role in dictating policy outcomes at the local level. Specifically, more contributions from real estate development groups lead to increases in multi-family housing development. These results contribute to a broader understanding of the financial influence of interest groups in municipal policy as well as local politics more broadly.

Keywords: organized interests, interest groups, local politics, local policy, money in politics

Word Count: XX

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Introduction

Municipal politics provides the perfect testing ground for theories of interest group influence. There are nearly 20,000 incorporated cities, towns, and villages in the United States, providing major variation that should allow us to better understand how interest groups influence policy. However, due to the lack of available data, there have been few studies that analyze municipalities outside the largest cities or that look at the financial influence of local interest groups.

This project represents a significant step forward in understanding interest group financial behavior at the local level. In addition to providing new data on contributor type, our data represents an advance in coverage. The vast majority of previous studies have focused on large cities. For example, Adams (2006) and Adams (2007) look at fundraising in Seattle, New York, Los Angeles, and San Francisco. Fleischmann and Stein (1998) study campaign contributions in St. Louis and Atlanta elections, Heerwig and McCabe (2019) analyze the 2013 Seattle elections, Krebs (2001) looks at Los Angeles and Chicago city council fundraising, and Hogan and Simpson (2001) dig into three Chicago mayoral elections. Holbrook and Weinschenk (2014) have one of the largest data sets with 165 cities, but these are the 165 most populous cities in the country and their analysis is restricted to campaign spending rather than campaign *contributions*. While this work provides important insights and fascinating case studies, it cannot provide information about interest group contribution behavior in the majority of municipal elections that occur outside of large cities. In addition to several cities in Florida, the city of Chicago, and Washington, D.C., our data consists of 86 cities in Washington and 41 cities in California. In fact, the median city in the Washington data has a population of 136,588.

We combine our novel data set with data on policy outcomes in order to assess the impact of campaign contributions on housing development policy. We analyze what kind of candidates real estate contributors donate to and how often they win. We also analyze how their contributions affect policy in the realm where we can most expect their influence to matter: new housing. As the U.S. confronts an acute housing crisis – particularly in states like California and Washington – understanding real estate industry political behavior and how it impacts housing outcomes is vital to understanding how decisions are made in this important policy space.

Background

Scholars have recently recognized that local politics is an excellent realm in which to examine the dynamics influencing policy formulation (Anzia 2019*a*). The potential for interest group influence over local policy has been well-established over the past decade (Anzia 2011, 2013, 2019*b*, 2022). Partisanship and ideology have been found to be fairly predictive in fiscal policy areas (de Benedictis-Kessner and Warshaw 2016; Tausanovitch and Warshaw 2014; de Benedictis-Kessner and Warshaw 2020) and can even have impacts on housing policy (de Benedictis-Kessner, Jones and Warshaw 2024). Yet partisanship may only be influential in certain areas that hew to ideological divides in national politics and are devoid of interest group activity at the local level. As a result, we might expect interest group influence to have effects that dominate those of partisanship on critical non-fiscal policy domains such as housing and policing (Anzia 2021; Gaudette 2023).

Housing is a particularly intriguing policy area in which to study interest group influence because of its oppositional nature that does not fall along traditional liberal/conservative or Democrat/Republican lines. The vast majority of homeowners are strongly opposed to new housing (Hankinson 2018; Sahn 2021; Yoder 2020), while the real estate industry – developers in particular – and renters support new development (Hankinson 2018). New interest groups loosely termed the YIMBY ("Yes In My Backyard") Movement have also emerged in recent years in support of increased housing with a particular focus on multi-family units.

Housing may seem like a policy area that has been captured by the establishment anti-development interests of the wealthy and existing home owners (Einstein, Glick and Palmer 2019), particularly since the wealthy contribute a disproportionate share of donations in local politics (Heerwig and McCabe 2019) and incumbents collect the majority of donations in municipal elections (Fleischmann and Stein 1998; Holbrook and Weinschenk 2014). However, past work on campaign finance in local politics has demonstrated that candidates rely upon contributions from a broad base that extends beyond those aligned with their interests, with research showing that candidates gather donations from contributors who are not residents of their city (Adams 2006). The limited work that has analyzed interest group participation in municipal politics has found that industry groups contribute a large share of candidate money (Hogan and Simpson 2001).

Given the scarcity of data, this work broke important ground by establishing that interest groups participated in municipal politics. However, previous work on campaign finance in local elections has attempted to measure the size of industry financial participation without analyzing the potential *financial influence* of interest groups (Adams 2011). This project takes that next step by assessing the impact of interest groups on local policy. More specifically, we analyze how real estate industry contributions affect housing policy outcomes at the local level, contributing to a burgeoning literature on a crucial area of local governance.

Data

To address these questions, we collect data on both contributions to local political candidates and local government policy in cities in the United States. We collect original data on campaign contributions from 132 cities in five states across the country. Due to the lack of uniform data reporting requirements across states and (in many cases) across cities within states, these data come from a variety of sources. We download the entirety of campaign contributions data in all cities and towns in Washington, where local election donations of $25 or more are required to be reported and the data is made publicly available from 2009 onward. Outside of Washington's universal coverage, we collect data opportunistically from a few sources. We targeted large cities that had any data available, as well as any city with data stored using a common data contractor, NetFile, whose API makes campaign contributions data available.

Using a combination of automated and hand-coding, we code the contributor type of every single contribution in the data set. This represents a major contribution to the municipal politics literature as it gives us the ability to analyze political behavior by interest group type. As discussed, we focus on real estate industry contributors for purposes of this project.

Our data encompasses contributions from 1999 to 2022 for city council and mayoral elections. In Table 1, we present descriptive statistics on our contributions data for the top ten states in which we have the greatest number of contributions as well as the entire contributions dataset across 24 states. The bulk of our data is concentrated in New York, California, and Washington. In California, much of the data comes from Los Angeles, though over 50% are from mid-sized cities.

In Washington, cities of all sizes are represented. Seattle makes up about 20% of the observations, meaning the remainder of the data comes from small to mid-sized cities. Florida data comes from Miami, Tallahassee, Bradenton, and Tampa, while Illinois data is predominantly from Chicago, though it also includes Springfield. The median donation in all states is $100, while the average in our dataset is $463.

Table 1: Descriptive statistics of contributions data

State	# cities	# donations	# candidates	Avg. donation ($)	Median donation ($)
New York	9	992,270	1,910	597	100
California	54	939,570	1,650	520	250
Washington	114	422,485	1,941	137	100
Massachusetts	47	390,314	723	204	100
District of Columbia	1	193,272	273	356	125
Illinois	2	133,116	392	1,269	500
South Carolina	233	111,695	3,259	306	150
Alaska	1	54,583	60	215	100
Florida	4	41,756	119	310	200
Colorado	2	36,765	109	307	100
Total	545	3,431,937	11,515	463	100

Figure 1 further presents our full dataset of campaign contributions in local elections. This map further demonstrates the geographic spread of our cities along with the concentration of our data in several states for which we were able to collect universal contributions data.

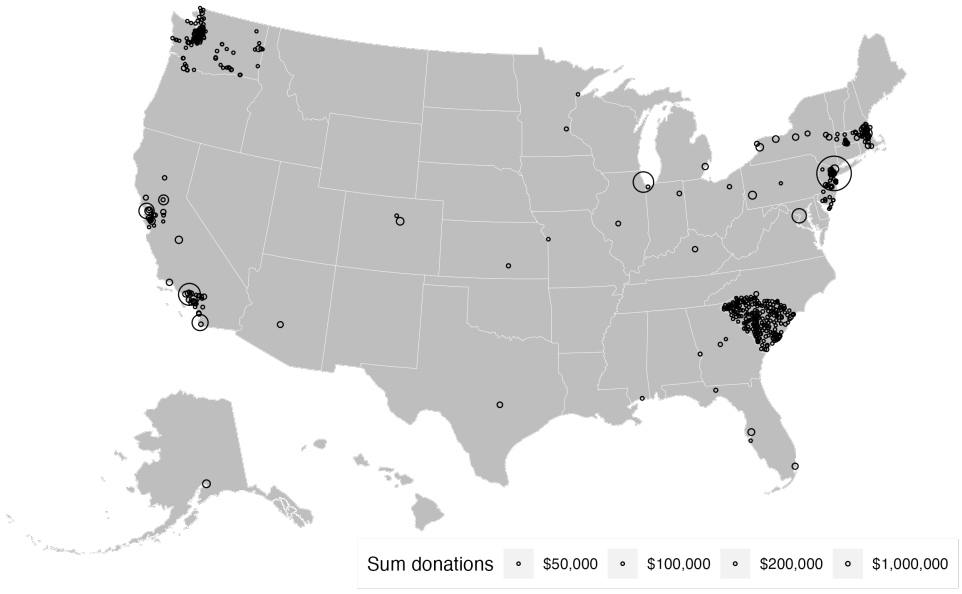


Figure 1: Map of cities included in our contributions dataset

From this larger dataset, we focus on the subset of contributions from the real estate industry. Using an automated dictionary-based approach as well as hand-coding of all contributors in one state (WA), we identified the subset of contributions that were made by real estate industry-affiliated groups. Once we compiled this subset of contributions, we used a team of undergraduate RAs to collect the partisan affiliation, incumbency status, election outcome, and election percentage for every candidate that received a donation from these groups. The team compiled these data by matching donation recipients to existing election results data sets (de Benedictis-Kessner et al. 2023), internet searches of candidate websites and newspapers, and official election records from county and state websites.

Results

Descriptive Evidence on Local Campaign Donations from Real Estate Industry Groups

Our original data set enables us to see the kinds of candidates that real estate industry interest groups are most interested in supporting in local elections. Given how few observations come from Illinois and Florida, we omit them from some descriptive figures for clarity.

In Figure 3, we set forth the percentage of candidates affiliated with the Democratic party, the Republican party, and any other party. As might be expected given that larger cities are more likely to be more Democratic (Rodden 2018) – and the general partisan lean of urban areas in California – 85% of contributions to candidates in California are to Democratic-aligned candidates. In Washington, where our data covers all cities and therefore the median city size for our data is 136,588, candidates who receive real estate industry donations are more evenly divided in terms of partisan affiliation: about 56% are Democrats and 41% are Republicans. As should be no surprise, there are essentially no contributions to Republicans in D.C., where the Republican party is essentially non-competitive.

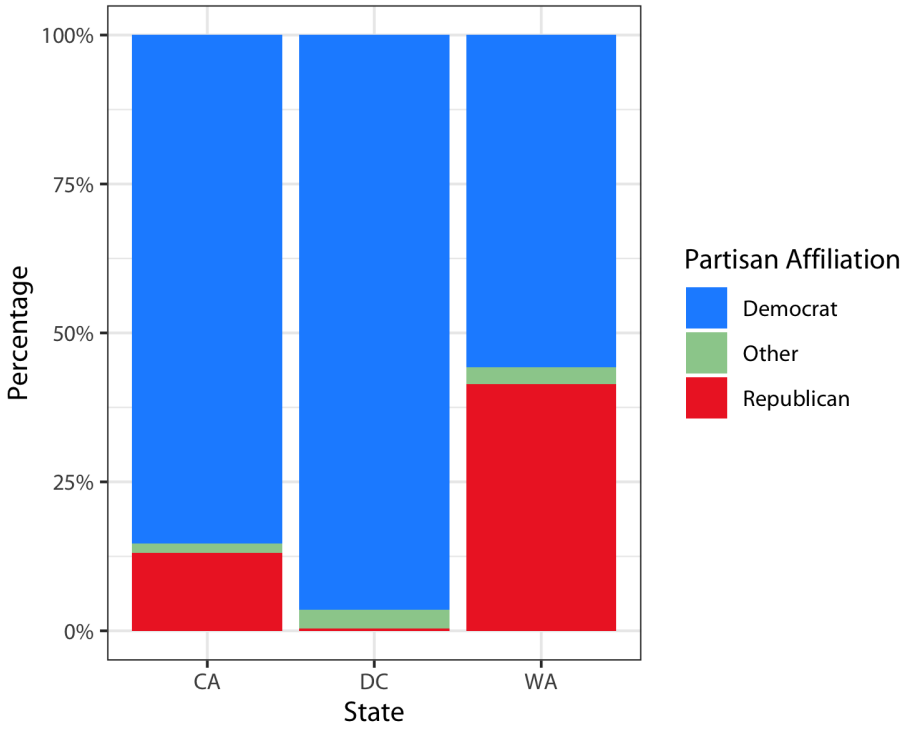


Figure 2: Partisan affiliation of candidates who received real estate industry donation by state.

While this partisan composition of candidates to which the real estate industry donates makes sense from a strategic perspective, it is also notable given recent findings that partisanship is related to housing policy (de Benedictis-Kessner, Jones and Warshaw 2024). That work establishes that electing a Democrat as mayor leads to increased multifamily housing production, and our results suggest that Democrats are much more likely to receive contributions from real estate industry contributors. This connection suggests that developer preferences over candidates could be related to partisan differences in housing policy at the local level.

We are also able to see the donation patterns by incumbency status. Here, an interesting trend emerges for real estate industry contributors. While candidates seeking re-election have a well-known incumbency advantage in municipal politics (de Benedictis-Kessner 2018; Trounstine 2011), incumbents are not the preferred candidates for donations. In fact, in California, only 27.7% of candidates who received real estate industry donations were incumbents. Despite dissimilar profiles, Washington state and Washington, D.C. are similar, with real estate industry donations going to

45% and 42% incumbents, respectively. These patterns suggest that donors may be more interested in changing the composition of municipal governance than they are changing the minds of those already in office.

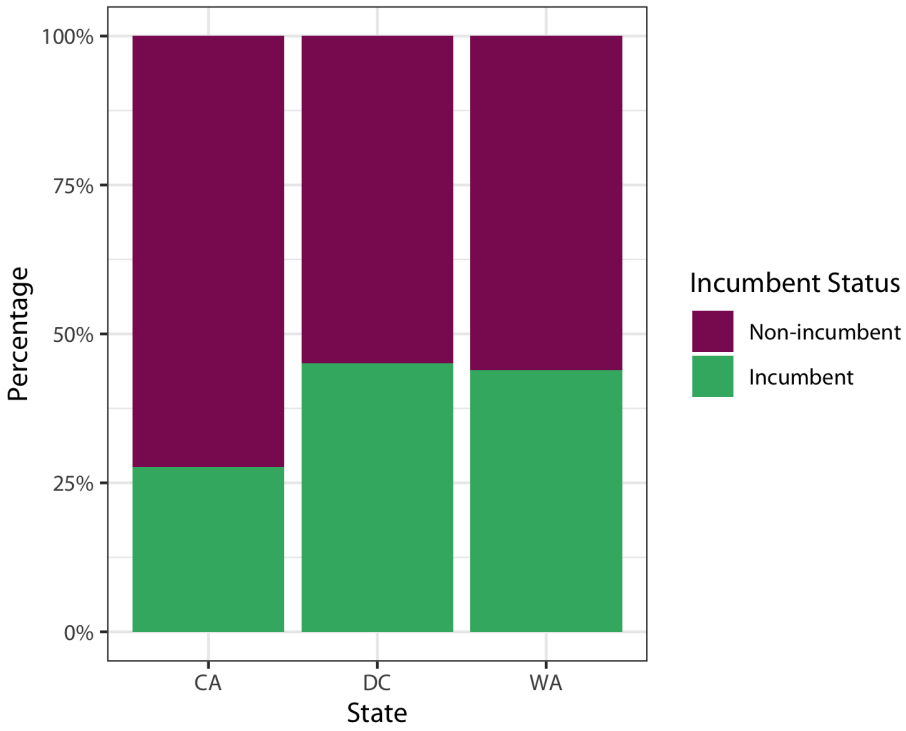


Figure 3: Incumbent status of candidates who received real estate industry donation by state.

The fact that real estate industry donors contribute more to non-incumbents is particularly striking given that incumbency tends to be the greatest determinant for fundraising success (Krebs 2001) and that challenger spending has a major influence on the vote share for challengers (Holbrook and Weinschenk 2014). Well-resourced challengers are much more likely to win than poorly-resourced ones, but incumbents typically attract the most donations. An industry group that specifically favors non-incumbents may therefore have greater clout with that group given the importance of money in securing victory. Since real estate industry contributions tend to be larger than donations from other groups and individuals (as we discuss below), their contributions could play a meaningful role in changing the composition of municipal government.

Indeed, if real estate donors are seeking to change the composition of who governs in municipal

politics, they appear to be fairly successful as evidenced by Figure 4. A majority of candidates to which real estate industry donors contribute win their election. Sixty-two percent of contributions to candidates by real estate donors in California are to the candidate that ultimately wins the election. That percentage is even higher in Washington state and Washington, D.C., at 65% and 70.7%, respectively.

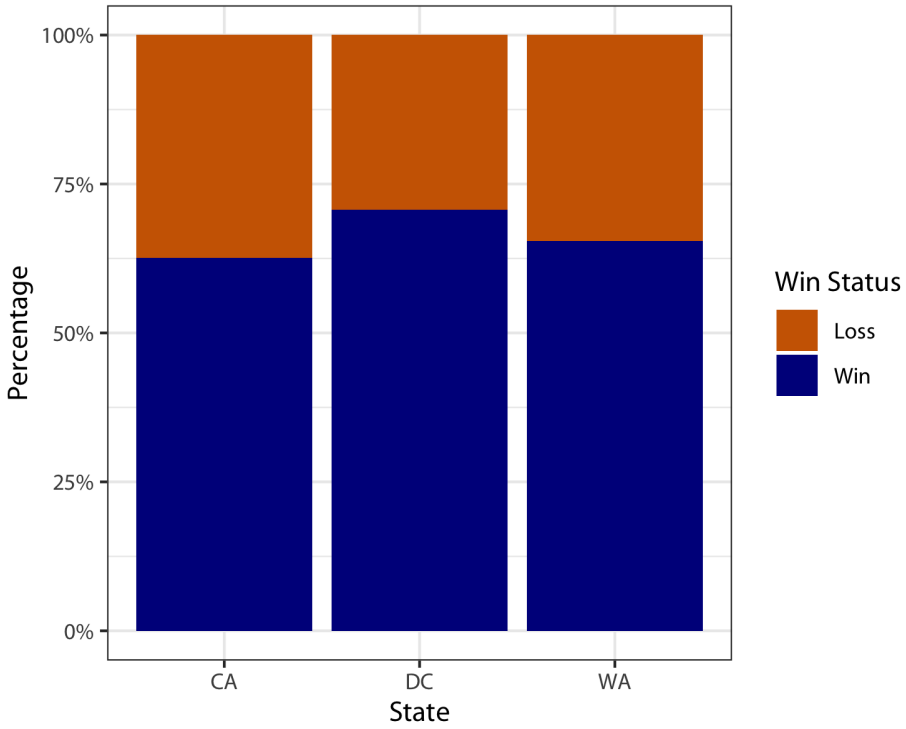


Figure 4: Win vs. loss status of candidates who received real estate industry donation by state.

Because we have a broader data set of contributions in local elections, we can compare real estate industry contributions to the broader contribution pool in order to see how they compare. In Figure 5, we plot a cumulative distribution function for real estate industry contributors (in turquoise) and non-real estate industry contributors (in purple). As evidenced in Figure 5, the contributions of non-real estate groups and individuals are, on average, lower in their dollar amounts. The median non-real estate contribution is $100 while the median real estate contribution is $500, and over ten percent of contributions are more than $1,000.

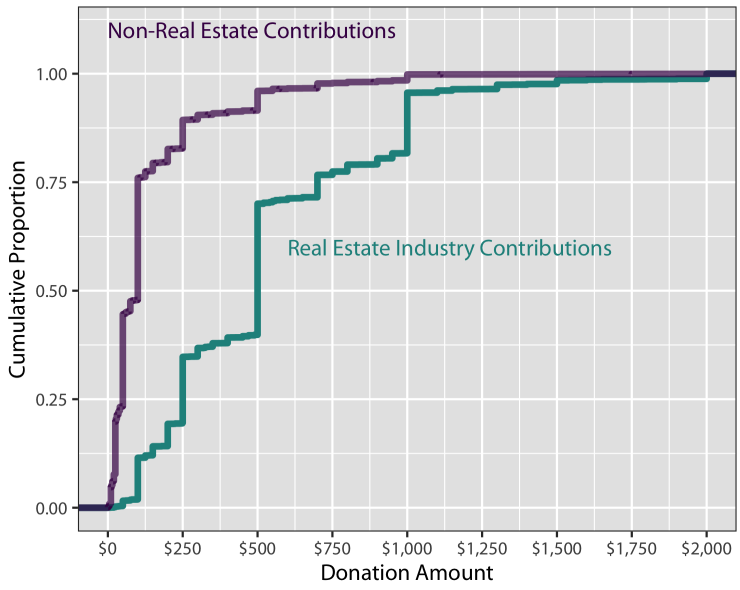


Figure 5: Cumulative distribution of donation amounts for real estate industry and non-real estate contributors (donations over $2,000 omitted).

These descriptive statistics and figures make clear that the real estate industry is active in local politics and has clear patterns of political giving. Yet these results do not establish whether these political contributions have policy consequences. We turn to this question next.

In order to analyze the consequences of local political contributions, we combine our contributions data with several different measures of local policy outcomes. First, to test the influence of campaign contributions in the hotly debated policy area of housing, we use data on permitted housing units and buildings from the Census Bureau's annual Building Permits Survey. The Census Bureau's Manufacturing and Construction Division sends this survey to officials who manage the issuance of building permits who then return their responses via mail or an online survey, which the Census Bureau then compiles into yearly summaries of new construction in each permit-issuing jurisdiction.[1] These data encompass nearly all new residential construction each year by private entities.

From these data, we focus specifically on the total numbers of buildings and units permitted as well as the total numbers of single-family and multi-family buildings and units.[2]

[1]For more information on these data, consult U.S. Census Bureau (2011).

[2]The Census divides the permits data into single-family buildings (i.e. one-family detached homes), buildings

While the permitting of new housing – and different types of new housing – is far from the only possible outcome to measure local governments' influence on housing markets, it is a suitable one for several reasons. First, debate over new housing construction in cities often focuses on the construction of new *multi-family* housing in particular, which is often more contentious than single-family construction (Einstein, Glick and Palmer 2019; Hankinson 2018). As a result, building denser multi-family housing is a primary dimension of partisan conflict and influence in cities (de Benedictis-Kessner, Jones and Warshaw 2024). Second, we focus on multi-family housing due to its historical importance as a tool of exclusion in U.S. cities – specifically, use of single-family zoning to restrict the construction of multi-family housing (Sahn 2021; Whittemore 2021). Finally, while there are within-city data on housing policy that may represent a more immediate outcome of government without reliance on the private market, these data are often not available in comparable formats across cities, with the Census Bureau data are in a standard format across years and geographies.

Panel Fixed Effects Models

Using these combined contributions and policy outcome data, we conduct a number of analyses using generalized difference-in-differences models. Given our focus on the causal effects of campaign contributions, we choose to focus on this research design to leverage within-city changes in the number and amount of political contributions and the outcome of those changes in the years that follow. A contrasting approach that we do not take might be to look at simple cross-sectional differences between outcomes in those cities with higher levels of contributions and those cities with lower levels of contributions. Yet this approach would capture the effects of those contributions along with a large amount of potential confounding from other features of cities that are different between those with high levels of contributions and those with low levels. And it would be confounded by potential broader trends over time in either outcomes or contributions that affect many cities at once.

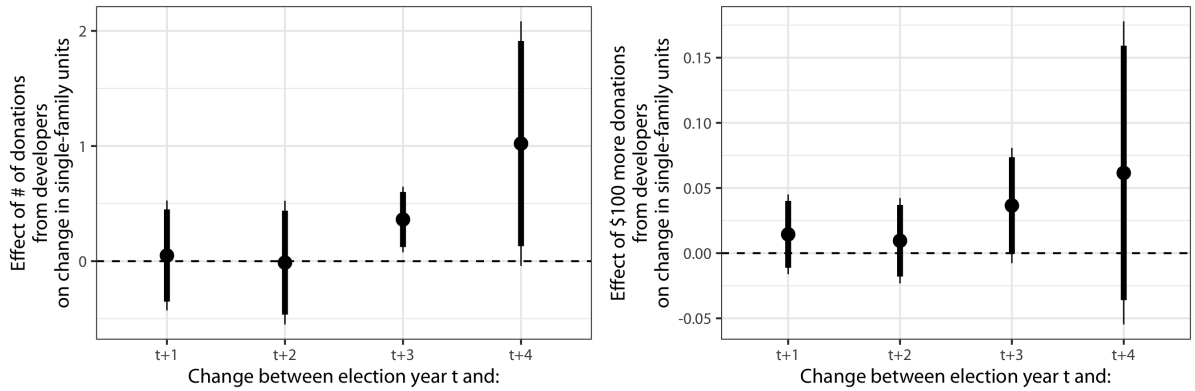
Therefore our main models use a strategy of two-way fixed effects at the city and state-year

with two units, buildings with 3 units, and buildings with four or more units. We group all buildings with two or more housing units as multi-family buildings for use in our analyses.

levels.[3] This allows us to assess the effects of contributions netting out the effects of time-invariant city-level features or shocks to multiple cities within a given state in certain years. This approach, in order to produce an estimate that represents the causal effect of contributions, relies on an assumption that there are no time-variant confounders – an assumption which we attempt to validate in Appendix B.

The results of these analyses looking at multiple types of housing outcomes are presented in Figure 6, for the permitting of single-family units, and Figure 7, for the permitting of multi-family units. Tabular versions of these results looking at outcomes three years after contributions were made are presented in Table 2.

Figure 6 shows, in the left panel, the effect of the number of real estate industry donations on the change in the number of single-family units permitted between the year in which the donations were made (year t) and the years that follow (one, two, three, and four years afterwards). The right panel shows similar estimates of the effect of the total sum dollar amount of real estate donations on the change in the number of single-family units permitted. Both panels indicate that there are small effects of increased numbers and amounts of donations on the permitting of single-family units three and four years subsequently.



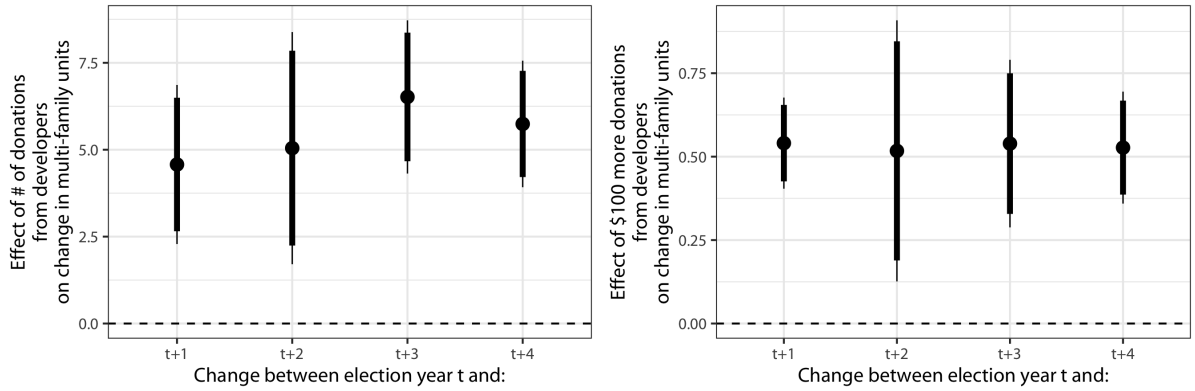
(a) Number of donations (b) Sum of donations

Figure 6: Effects of donations on single-family units permitted

Figure 7 assesses similar effects of the number of donations (left panel) and sum of donations (right panel) on the permitting of multi-family housing units. These results indicate that increased

[3] We show results using alternative fixed effects specifications in Appendix C.

real estate donations appear to lead to an immediate and sustained effect on the number of multi-family units permitted. When real estate industry donations increase, cities permit more multi-family housing units.



(a) Number of donations (b) Sum of donations

Figure 7: Effects of donations on multi-family units permitted

Table 2 corroborates the visual results from the previous figures. Increases in real estate industry donations are accompanied by increases in the number of total buildings, total units, and multi-family buildings and units permitted three years later.

Table 2: Housing permits results

	Δ between election year and t+3 in:											
Dependent Variables:	Total buildings		Total units		Single-family buildings		Single-family units		Multi-family buildings		Multi-family units	
Model:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Variables												
# donations from developers	0.475*		6.20**		0.221		0.221		0.253***		5.98**	
	(0.272)		(2.55)		(0.254)		(0.254)		(0.054)		(2.37)	
Sum donations from developers		0.002***		0.011***		0.001*		0.001*		0.0005***		0.010***
		(0.0006)		(0.003)		(0.0005)		(0.0005)		(7.06×10^{-5})		(0.002)
Fixed-effects												
City	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
State-year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Fit statistics												
Observations	8,432	8,432	8,432	8,432	8,432	8,432	8,432	8,432	8,432	8,432	8,432	8,432
R^2	0.570	0.574	0.516	0.517	0.555	0.557	0.555	0.557	0.618	0.626	0.492	0.491
Within R^2	0.003	0.011	0.032	0.035	0.0007	0.006	0.0007	0.006	0.045	0.067	0.038	0.036

Clustered (City) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Discussion and Conclusion

This manuscript represents preliminary efforts to understand (1) what kind of candidates real estate industry donors contribute to, and (2) whether those contributions impact policy outcomes. We find that this industry appears to exert powerful influence in local politics, at least in our data. Real estate donors are either excellent at picking winning candidates or their contributions are significantly more likely to go to winning than losing candidates. Further, they appear to focus on changing policy by altering the composition of municipal governing bodies since their contributions overwhelmingly go to non-incumbents.

Real estate industry donations also have significant positive effects on the permitting of multi-family housing. Greater numbers of contributions and increased amounts from real estate donors are both significantly related to higher numbers of permitted multi-family units in the years that follow, and these results appear to persist. The average effect of $100 more donations from developers results in roughly .5 more permits issued. Since the median real estate industry donation is $500, that means the median real estate donation is associated with 2.5 more units of multi-family housing being approved. Our preliminary analyses corroborate what survey evidence of policymakers from Anzia (2022) suggests: real estate developers are major sources of influence in local politics. Their contributions appear to be followed by changes in housing policy outcomes.

However, we caution that our results should not necessarily be interpreted as causal. Real estate industry contributions may not necessarily be *causing* changes in housing policy. In particular, the placebo test results which we present in Appendix B suggest that real estate industry contributions are greater in places with *lower* pre-donation amounts of multi-family housing permitted. In other words, there are differences in housing permitting and construction trends between cities that have increased donations in the years that precede those donations. The pre-treatment increases in multi-family housing units permitted suggest that real estate industry donations may, rather than *causing* increases in permitting, be simply anticipating pent-up demand for multi-family housing in supply-constricted locations. We leave the further exploration of these results for future analyses.

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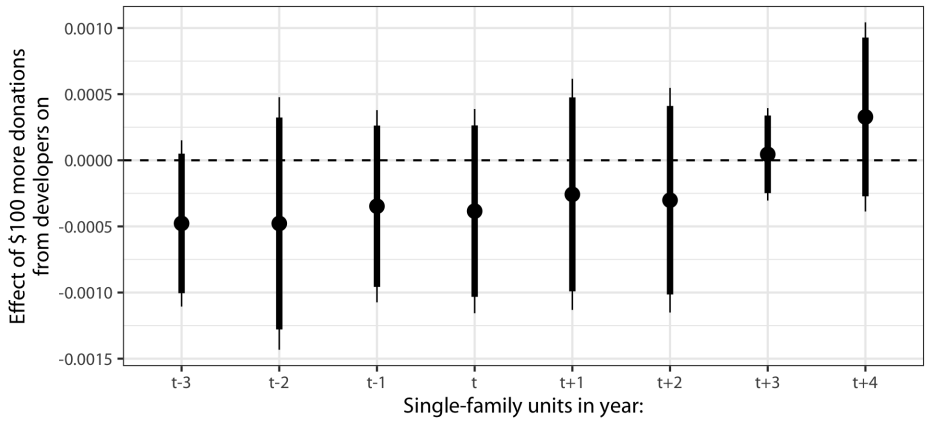
Supplementary Appendix for
"Local Money: Evaluating the Effects of Municipal Campaign Contributions on Policy Outcomes"

A Local Donation Data Collection

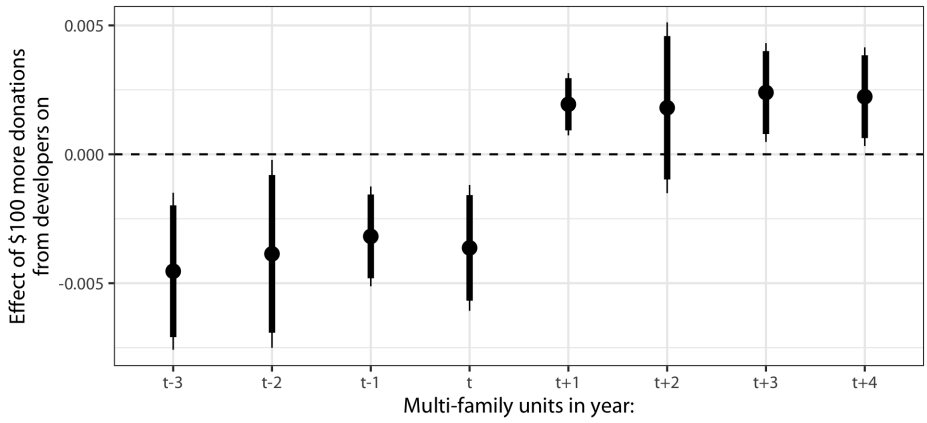
B DID Placebo tests

In this section, we present placebo tests in an attempt to validate the assumption that there are not time-varying confounders – colloquially known as the parallel trends assumption.

First, in Figure **??**, we present the effects of greater real estate industry contributions on pre-and post-treatment outcomes measured as levels (rather than changes). Evidently real estate industry groups donate more to local candidates in places where there are lower numbers of multi-family housing units permitted *prior* to donations. So the increases in multi-family housing units following interest group contributions may be simply reversion to the mean, or the release of pent-up demand for multi-family housing units.



(a) Sum of donations and single-family units

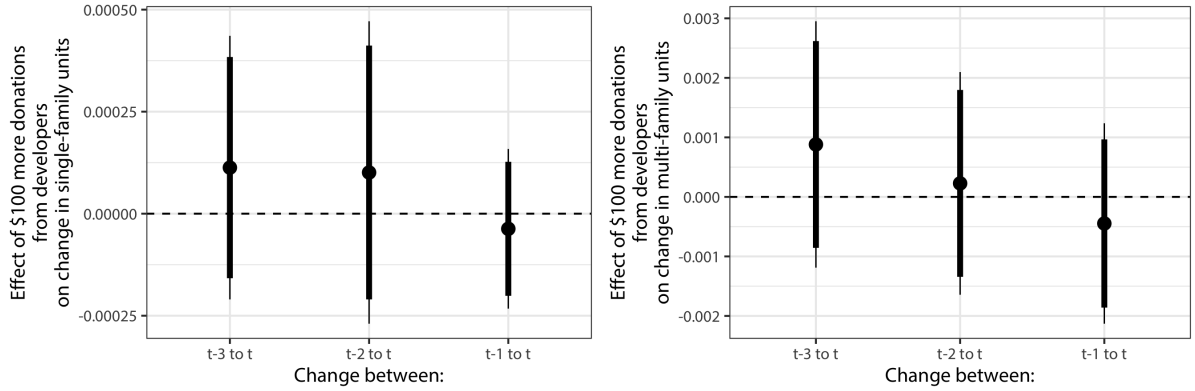


(b) Sum of donations and multi-family units

Figure A1: Placebo effects of donations on levels of single- and multi-family units permitted

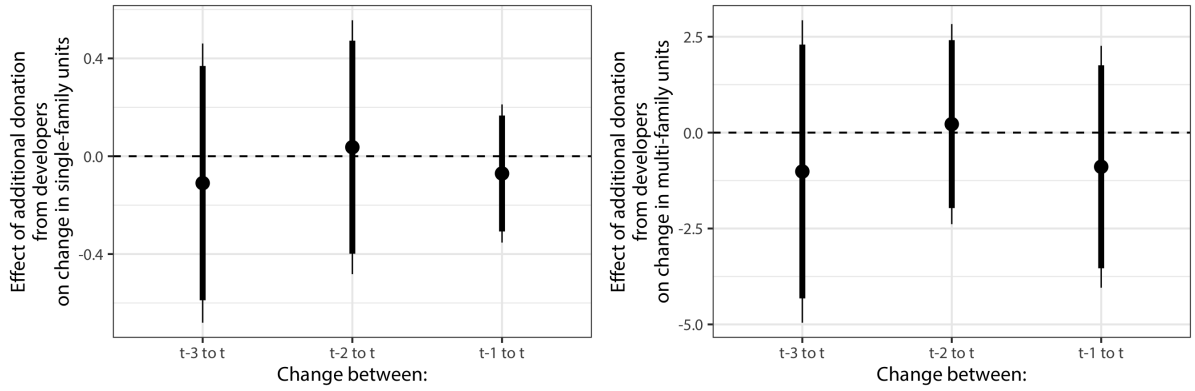
These results indicate that places with greater and lesser industry-affiliated contributions are different from one another, but this does not necessarily indicate a violation of the assumption that there are no *time-varying* confounders.

To more rigorously assess this assumption, we turn to placebo tests examining the impact of increased industry contributions on *changes* in outcomes prior to those donations. The results of these analyses are displayed in Figure A2 and Figure A3. They indicate little difference in pre-treatment trends in the permitting of either single- or multi-family housing between cities with more or fewer real estate industry contributions.



(a) Single-family units (b) Multi-family units

Figure A2: Placebo effects of the sum of donations on pre-treatment changes in housing units permitted



(a) Single-family units (b) Multi-family units

Figure A3: Placebo effects of the number of donations on pre-treatment changes in housing units permitted

C Results from Alternative Model Specifications

In the tables below, we show that our primary results are robust to alternative specifications. In Table A2, we show that our results are similar to those in the main text using city and state-year fixed effects when we use only city and year fixed effects. In Table A1, we use outcomes measured two years after the election rather than three years (as shown in the main text).

	Δ between election year and t+2 in:											
Dependent Variables:	Total buildings		Total units		Single-family buildings		Single-family units		Multi-family buildings		Multi-family units	
Model:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Variables												
# donations from developers	-0.397		4.97*		-0.483		-0.483		0.086		5.46**	
	(0.497)		(2.56)		(0.441)		(0.441)		(0.072)		(2.17)	
Sum donations from developers		-9.99×10^{-5}		0.010**		-0.0004		-0.0004		0.0003**		0.011***
		(0.0007)		(0.004)		(0.0006)		(0.0006)		(0.0001)		(0.004)
Fixed-effects												
City	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
State-year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Fit statistics												
Observations	9,425	9,425	9,425	9,425	9,425	9,425	9,425	9,425	9,425	9,425	9,425	9,425
R^2	0.498	0.497	0.500	0.510	0.493	0.491	0.493	0.491	0.550	0.557	0.496	0.506
Within R^2	0.003	6.88×10^{-5}	0.032	0.050	0.005	0.001	0.005	0.001	0.006	0.023	0.047	0.066

Clustered (City) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Table A1: Alternative models: Housing results two years after election

	Δ between election year and t+3 in:											
Dependent Variables:	Total buildings		Total units		Single-family buildings		Single-family units		Multi-family buildings		Multi-family units	
Model:	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Variables												
# donations from developers	0.686***		6.88***		0.362**		0.362**		0.324***		6.52***	
	(0.166)		(1.21)		(0.145)		(0.145)		(0.033)		(1.12)	
Sum donations from developers		0.0007**		0.006***		0.0004		0.0004		0.0003***		0.005***
		(0.0003)		(0.001)		(0.0002)		(0.0002)		(7.23×10^{-5})		(0.001)
Fixed-effects												
City	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Fit statistics												
Observations	8,432	8,432	8,432	8,432	8,432	8,432	8,432	8,432	8,432	8,432	8,432	8,432
R^2	0.494	0.494	0.407	0.394	0.482	0.482	0.482	0.482	0.397	0.390	0.364	0.346
Within R^2	0.011	0.010	0.067	0.045	0.004	0.003	0.004	0.003	0.096	0.085	0.076	0.050

Clustered (City) standard-errors in parentheses
*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Table A2: Alternative models: Housing results with city and year fixed effects

D Results from Alternative Sample Modifications