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POLITICIANS' NEIGHBORHOODS: WHERE DO THEY LIVE AND DOES IT MATTER?

by

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Färre flerbostadshus med lokalpolitiker i grannskapet

Kommunpolitiker tenderar att bo i relativt välbärgade bostadsområden och favoriserar dessa områden i beslut om var det ska byggas nya flerbostadshus.

Politiker bestämmer över en rad byggprojekt på lokal nivå. De bestämmer vilka projekt som ska byggas och var någonstans i kommunen de ska placeras. Dessa beslut påverkar livsmiljön i kommunens olika områden. Ett ökat antal flerbostadshus kan påverka livsmiljön i ett område genom att försämra ljus- och trafikförhållanden samt genom att öka trycket på kommunala tjänster som barnomsorg eller primärvård.

Vår studie bygger på detaljerade data för lokalpolitikers bostadsområden och nya beslut om bygglov för flerfamiljshus under tre valperioder (2002–2014, N=39 312 fullmäktigeledamöter). Vi länkar dessa data till Statistiska centralbyråns register för hela den svenska befolkningen.

En jämförelse av bostadsområden med mer eller mindre politiker bland invånarna visar att svenska lokalpolitiker tenderar att bo i relativt välbärgade områden. Områdena har fler högutbildade, fler höginkomsttagare och fler bostadsägare, samt en lägre andel personer som är utrikes födda. Både politiker inom höger- och vänsterblocket bor i mer välbärgade områden än sina respektive väljare.

Fler politiker i ett bostadsområde minskar sannolikheten att nya flerbostadshus ges bygglov i området. Denna effekt kan inte förklaras av politiska eller ekonomiska fördelar av att allokera dessa nya byggprojekt till ett visst område. Ett maktskifte inom en kommun innebär att ungefär 10% av alla nya flerbostadshus byggs i områden där det bor en högre andel politiker från den nya oppositionen jämfört med den nya majoriteten, istället för i områden med motsatt fördelning bland politikerna.

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Politicians' Neighborhoods: Where do they Live and does it Matter?*

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Abstract

This paper studies the political economy of local politicians' residential neighborhoods. We use Swedish data on the location of all politicians' and citizens' homes, and their socioeconomic traits. A descriptive analysis shows that politicians live in neighborhoods with more socio-economically advantaged residents and more of their own party's voters. Next, we analyze whether having politicians in a neighborhood reduces the likelihood that new buildings are placed there, since these projects often generate local opposition. This analysis compares the neighborhoods of politicians with different degrees of political power and is restricted to close elections. We find that the presence of more politicians with governing power reduces the neighborhood's proportion of new approved building permits for multifamily homes, but not for single-family homes. The result is most likely explained by undue favoritism. We conclude that spatial political representation matters, and that unequal spatial representation can increase geographic economic inequality.

Keywords: Political geography, Geographic inequality, Proportional representation, Local politics, Descriptive representation

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1 Introduction

Geography is at the heart of politics. Many of the most important political decisions are not about which public goods the government should provide, but where it should locate them. This paper examines a specific geographic aspect of politics – the neighborhoods in which politicians live within their electoral district. We draw on unique data from Sweden, where local elections are based on proportional representation (PR) with flexible-lists. We first investigate whether politicians live in more affluent neighborhoods within the electoral district, and then test whether the spatial distribution of politicians' homes affects their decision-making regarding the spatial allocation of new building permits.

Our analysis of where politicians live offers new insights into descriptive political representation. Existing research on this phenomenon largely focuses on demographic traits like gender, ethnicity, and social class. Prior studies show that women, ethnic and racial minorities, and working-class people are chronically under-represented in political assemblies around the world. At the same time, politicians' neighborhoods have been largely overlooked in this literature (for notable exceptions, see Bartanen et al., 2018; Put, 2016). Contextual theories of politics underscore the importance of neighborhoods by describing how a person's physical surroundings shape their attitudes. A person's preferences are a function not only of their own traits but also the characteristics and predispositions of people in their proximity (Enos, 2017; Huckfeldt et al., 1993). By studying the traits of politicians' neighborhoods, we improve the understanding of a relatively under-studied dimension of descriptive political representation, with likely implications for substantive representation.

Our analysis of the allocation of new building permits extends our understanding of how the political system shapes the surrounding environment. Local politicians make crucial decisions about local development and land use since they decide where (and which type of) buildings can be constructed. They also choose where to place public services like schools, public transportation, parks, affordable housing, and cultural and sports facilities. Although these

services provide value for the surrounding society, the directly affected neighborhoods might resist specific projects. Our study of the implications of geographic representation focuses on a type of political decision that offers a large number of observed spatial allocation decisions and is expected to be seen as undesirable in individuals' own neighborhoods, namely new housing. In particular, the construction of new multi-family homes tends to be opposed by current residents since it often brings poorer residents and is expected to decrease property values (see e.g. Einstein et al., 2019; Trounstine, 2020).

Swedish administrative records contain highly accurate demographic and economic variables for the country's entire population. They also contain a complete list of municipal politicians in three elections (2002, 2006, and 2010). Sweden's 290 municipalities are divided into approximately 6,000 voting precincts of similar size. These precincts follow boundaries in the natural environment, and their size and boundaries hence overlap with the common definition of a neighborhood. We use precincts as our unit of analysis and map all politicians and citizens to their home precincts. We combine this data with information on all approved building permits for new multi-family and single-family housing from the Building Permit Register.

Our descriptive analysis shows that politicians' neighborhoods generally share two key features. First, their neighborhoods have larger shares of socio-economically advantaged groups – more high-income earners, residents born in the West, homeowners, and people with tertiary education. This pattern is stronger for politicians in center-right parties than for those on the ideological left. We replicate this finding for an alternative definition of neighborhoods, which leverages our detailed geographical coordinate data to construct smaller-scale areas consisting of the physically closest "nearest neighbors" to each person. A second feature is that politicians tend to live in neighborhoods where their party received a larger vote share.

Our analysis of the placement of building permits finds a strong statistical association between new permitted floor space and the location of politicians' homes. Neighborhoods with

a greater concentration of homes of politicians in the governing majority relative to homes of politicians in the political opposition see less approved floor space for multi-family homes. We see no effect for single-family homes, which local residents are typically less likely to resist (Einstein et al., 2019; O'Grady, 2020). We quantify the magnitude of the results by calculating what happens when the governing majority changes. According to this calculation, a switch in the governing majority re-allocates 11% of the new construction of multi-family homes in neighborhoods dominated by politicians from the new majority.

We argue that the estimated association between politicians' homes and the spatial allocation of building permits should be interpreted causally. Our empirical approach sidesteps the concern of omitted variables by carefully designing the treatment variable and sample. Our treatment variable is the differences in the residential concentration of politicians with more or less power (belonging to the political majority or the political opposition). The sample is restricted to data from municipalities where the governing majority won power with a small vote margin (i.e., in a close election) and, as an additional and separate empirical precaution, there was at least one political turnover of power in the last three elections. With this design, the treatment variable offers quasi-random variation in the political power of politicians who live in a neighborhood.

To empirically support our claim of causality, we show that the treatment is not associated with possibly omitted variables. First, there is no correlation with variables that capture the neighborhood's (anticipated) protest intensity or presence of swing voters, namely the level of turnout and the socio-economic and demographic composition. Second, there is no correlation with proxies for the economic rationale to construct new buildings in a neighborhood: its composition of existing buildings, the average housing prices, and the population density. Finally, the treatment is not correlated with the allocation of new approved construction in the previous election period. As an additional, alternative, evidence of causality, we provide results from Oster's (2019) method that tests for imbalance in unobserved neighborhood traits. We also show that our results replicate in a statistically underpowered fuzzy RD

design.

Does the location of politicians' homes matter because politicians co-reside with their party's voters? An extended analysis of the mechanisms suggests that this is not the case. Flexible control variables for the spatial allocation of voters do not affect our main results. In addition, we find that the estimated treatment effect for politicians with stronger ties to the neighborhood (based on residency length or having relatives or colleagues living there) is larger than for politicians with weaker ties. Together, these results suggest that conscious or unconscious favoritism of politicians' home neighborhoods in the political decision-making process is a more likely explanation. We discuss how this might be the case if politicians' impartiality is compromised by economic self-interest, localized information flows, or personal interactions with agitated neighbors.

Our analysis of the spatial allocation of undesirable building projects contributes to three ongoing, and related, scholarly debates. First, our results contribute to the large literature on the political determinants of the spatial distribution of public funds. They echo earlier findings that electoral districts with more politicians receive more public funds in majoritarian systems (Ansolabehere et al., 2002; Knight, 2008). They also align with the finding that parliamentarians' hometowns benefit from more funds in PR systems (Baskaran and Lopes da Fonseca, 2018; Fiva and Halse, 2016) and that switching from at-large to district elections reduces geographic inequality in the allocation of housing projects (Hankinson and Magazinnik, 2023). We add the important insight that the location of politicians' homes affects decisions about land uses with negative local externalities *within* electoral districts. Interestingly, our results align with contemporaneous research on local politicians' homes in Finland's open-list PR system, showing that politicians shield their neighborhoods from school closures (Harjunen et al., 2021).

Second, we add to the literature on whether parties affect policy (e.g. Ferreira and Gyourko, 2009; Folke, 2014; Gerber and Hopkins, 2011) by showing that who is in government affects the geographical allocation of public bads. Third, we add to the literature on the effects of de-

scriptive representation on policy outcomes (e.g. Chattopadhyay and Duflo, 2004; O'Grady, 2019) by showing that the neighborhood where a politician lives matters for decisions regarding geographical allocations. These findings also have implications for vote choices. They imply that voters benefit from casting votes for parties with politicians living in their own neighborhood, providing a rationale for the so-called "friends and neighbors' voting effect" (see e.g. Key, 1950).

Our results have important implications for the broader academic discussion of neighborhood traits. Prominent research in economics and other disciplines has underscored that local living conditions are crucial determinants of the life trajectories of adults and children (Chetty et al., 2016; Chetty and Hendren, 2018; Johnston and Pattie, 2014). We show how local political factors help shape these conditions. In turn, our results suggest that local political institutions are a potentially fruitful area of policy intervention to improve the level and equity of local living environments. The increasing geographic segregation and inequality observed in many countries (see e.g. Storper, 2018) highlight the urgency of these findings.

2 Political economics of politicians' neighborhoods

We build on previous research to develop three hypotheses about the political economics of politicians' neighborhoods. The first two predict that politicians live in neighborhoods that are relatively socio-economically advantaged and have larger vote shares for their own party. The third predicts that politicians favor their home neighborhoods in the allocation of local public bads.

2.1 Traits of politicians' neighborhoods

In order to predict where politicians live, we start by examining supply and demand factors that determine who becomes a politician. On the supply side, affluent individuals are more likely to participate in politics and (of course) live in well-off areas. Socio-economic advantage

encourages people's political activity by offering skills, money, and networks (Brady et al., 1995; Verba and Nie, 1972). Affluent groups might also enter politics because they have more to gain by influencing political decisions about their own neighborhoods. For instance, Yoder (2020) report that homeowners, whose house value is directly tied to local political decisions, are more active than non-homeowners in local politics.

On the demand side, party behavior may exacerbate the selection of affluent citizens. For example, parties may want immigrant minorities as members, but be reluctant to let them run in competitive districts (e.g., Blomqvist, 2005). Such party behavior likely reinforces the well-established pattern that politicians tend to have higher incomes and education than the people they represent (Bhusal et al., 2020; Dal Bó et al., 2017).

At the same time, two centrifugal forces work to disperse politicians' homes across rich and poor neighborhoods. The first is political parties' organizational structures. Local parties often consist of clubs spread out among neighborhoods. These clubs recruit members, hold meetings, and oversee the day-to-day aspects of election campaigns. To the extent that clubs recruit members and nominate candidates, the decentralized nature of party organizations is expected to lead to the dispersion of politicians' homes. In line with this, Put (2016) finds that decentralized candidate selection methods produce candidate lists with higher levels of geographical representation.

The second centrifugal force is electoral incentives. Voters may prefer to vote for candidates who live close to them (see e.g. Arzheimer and Evans, 2012; Åberg-Bengtsson, 2009). One strand of research has observed that factors ranging from personal friendships to shared political preferences and local pride generate a "friends and neighbors' voting effect" (Key, 1950; Lewis-Beck and Rice, 1983). Other research has observed that voters "look for locals" when making their vote choice because they interpret local ties as knowledge of the area's needs and concerns (Cain et al., 1987; Carey and Shugart, 1995). Although such preferences to vote for neighbors have mainly been observed in candidate-centered systems, there is also some evidence from party-centered ones (see e.g., Jankowski, 2016).

In sum, while parties' organizational and electoral incentives work to geographically disperse politicians' homes across neighborhoods, advantaged groups' self-selection into candidacy and parties favor them in the nomination process. As long as the second force has some empirical relevance, the net effect will produce a distribution of candidates' homes that is skewed toward advantaged neighborhoods and we predict that:

Hypothesis 1a: Politicians live in socio-economically advantaged neighborhoods.

Politicians from different parties may have a tendency to live in different parts of electoral districts. The main reason for this expected pattern is that different social classes tend to live in different neighborhoods, and a person's social class helps determine both their voting (e.g., Lipset and Rokkan, 1967; Kitschelt, 1994) and political candidacy (Dal Bó et al., 2017; O'Grady, 2019). Although the socio-economic distinctions between voters for different parties may have decreased in importance over time (Abou-Chadi and Hix, 2021), we still expect parties to systematically recruit politicians from different social groups. Given the spatial segregation of these groups across neighborhoods, we predict that:

Hypothesis 1b: Politicians live in neighborhoods in which their party has a larger vote share.

While hypothesis 1b will push the total distribution of politicians to be more equally dispersed across different neighborhoods, we do not expect it to completely counteract hypothesis 1a. Although parties attract politicians from different socio-economic classes, we still expect politicians to have relatively higher incomes compared to individuals with a similar background.

2.2 Local public bads and politicians' neighborhoods

We follow Aldrich (2008) and define a local public bad as a project that benefits a larger geographic area but, at the same time, has negative (perceived) effects on the immediate vicinity where it is placed. The general positive effects give politicians an incentive to place

these bads *somewhere* in the municipality. But resistance from neighborhoods makes their exact placement a contentious decision. Empirical research has shown that the closer to a person's home the local public bad is placed, the greater the opposition (Hankinson, 2018; Tighe, 2010).

The specific case of housing construction exemplifies the political trade-off between aggregate benefits and localized costs. The municipality benefits from new construction by bringing in new taxpayers and alleviating housing shortages. Construction also makes the city more affordable for low- and middle-income families (see Been et al., 2019, for a review). On the other hand, new construction implies disruptions to the physical environment, such as blocking natural light or displacing green areas, and can change the number as well as the composition of residents in the neighborhood. This, in turn, affects property values and access to local public goods for current residents. Studies show that homeowners tend to be more involved in local politics (specifically housing policies) to defend both the value of their property and their quality of life (Einstein et al., titb; Yoder, 2020). Surveys even suggest that home ownership matters more than self-reported ideology in determining resistance to dense housing development (Marble and Nall, 2021). Regarding different types of construction, opposition to multi-family homes is generally more intense than to single-family homes (Einstein et al., 2019).[1] The fact that multi-family homes have more and poorer residents can constitute larger (perceived) threats to property values and competition for local goods, in addition to triggering anti-poor sentiments or racial prejudice (Tighe, 2010; Trounstine, 2020)

There are two main reasons that the presence of politicians' homes in a neighborhood might cause fewer local public bads to be placed there. The first is political representation. If Hypothesis 1b (that politicians live in neighborhoods where their parties have larger vote

[1] A survey experiment by Trounstine (2021) show that when respondents compare multi- and single-family homes, apartments are viewed as decreasing property values, increasing crime rates, lowering school quality, increasing traffic, and decreasing desirability.

shares) is correct, parties could be delivering benefits to these neighborhoods as part of a clientelistic exchange for votes. However, there is not much evidence of this behavior in advanced democracies with PR systems.[2] Programmatic considerations might be more important and arise if party platforms cater to the economic interests of different socio-economic groups. Local public bads might form part of these agendas. For example, constructing new apartments in a neighborhood with more affluent people might serve a left-leaning party's agenda of economic redistribution.[3]

The second mechanism is favoritism, which can arise from both conscious and unconscious thought processes. Politicians may consciously act in their own economic self-interest. By protecting their neighborhood from local public bads, they also protect the (perceived) value of their own property or that of friends and relatives who live there. Information flows may lead to favoritism in a more unconscious way. Politicians cannot obtain full information on the costs and benefits of all placement options for every local public bad, and their information flow may be skewed toward their home neighborhood. People obtain information via social networks, and interactions with neighbors serve as vehicles for the transmission of political information and guidance (Huckfeldt and Sprague, 1987; Huckfeldt et al., 1993). These information flows deliver the localized public opinion to the politician, for example on the environmental concerns about new housing construction.

[2]For example, (Carozzi and Repetto, 2019) find no evidence that parties allocate more stimulus funds to partisan neighborhoods in Spain. Likewise, Dahlberg and Johansson (2002) reject the hypothesis that incumbent Swedish governments purchase votes by investing in regions with high levels of support.

[3]In majoritarian systems, politicians might cater to personal constituencies in the form of targeted sub-constituencies within electoral districts (Fenno, 1977), for instance by granting pork-barrel favors via committee service, which could include the type of decisions on local public bads studied in this paper. However, personal constituencies are minimal in closed-list PR systems (Fiva and Halse, 2016; Karlsson, 2018).

To the extent that neighbors protest the local public bads, a politician could perceive citizen opposition to be more intense if it occurs in his or her own neighborhood (as in Huckfeldt and Sprague, 1987). Put differently, neighbors' direct access to politicians might create a local accountability effect around visible projects.[4] It is also possible that a politician's home functions as an opportunity structure for protests and thereby makes them more likely (Meyer and Minkoff, 2004). Given the ideas summarized in this section, we predict that:

Hypothesis 2: The presence of politicians' homes in a neighborhood reduces the likelihood that local public bads will be placed there.

Three other factors may affect the placement of local public bads, and may also correlate with the placement of politicians' homes. First, politicians might live in neighborhoods where socio-economic traits of the population make protests more likely (e.g., Aldrich, 2008). Second, they might live in neighborhoods with more swing voters who are willing to switch parties between elections, which would create a different type of political rationale for shielding the neighborhood. Third, politicians might live in neighborhoods that are more (or less) economically suitable for the placement of the local public bad. In the empirical sections that follow, we develop an identification strategy to address omitted variable bias from these three sources.

3 Local politics in Swedish municipalities

The empirical context of Swedish municipalities offers a large number of observations without sacrificing political relevance.[5] Each of the 290 municipalities is governed by a municipal council with between 21 to 101 members depending on population size (the median is 41).

[4]Jankowski (2016) argues that an expectation of greater accountability to the local population motivates people to preference vote for a politician who lives in their electoral district.

[5]Municipalities are responsible for large policy areas such as child care, K-12 education, and local infrastructure, and they set their own income tax rates, usually around 20%.

Councilors are "leisure politicians" who receive small lump sum payments to attend meetings while holding regular jobs (Dal Bó et al., 2017). There is no evidence that winning a council seat generates monetary gains (Berg, 2020) that would, for example, allow the politician to move to a wealthier neighborhood.

Local elections take place every four years. People vote in their electoral precinct, and turnout is usually high at around 90% of the 18+ population. Under the flexible-list PR system, voters chose between parties but can also cast a voluntary preference vote. Given the low share of voters who do so, combined with the high vote threshold to obtain a seat via preference votes, politicians rarely win seats through that mechanism (Folke et al., 2016). Councilors are elected in multi-member districts. Two-thirds of Sweden's municipalities have one district, and most of the others have two districts. We ignore these administrative borders since they lack the typical functions of electoral districts. Candidates are required to live in their respective municipality, but not the district, and parties almost always field the same ballot throughout the municipality.

In larger municipalities, many political parties have regional clubs that serve as the initial point of entry for new members. These clubs form the basis for political meetings and grassroots activism and constitute the organizational foundation for candidate nominations. Ballot papers typically list the politician's neighborhood next to their name, along with their age and occupation (74% of the ballots in our sample period contained this information; authors' calculation).

We use electoral precincts to approximate neighborhoods. The median number of precincts per municipality is 10, and there are about 6,000 precincts in the country. Two features make precincts suitable proxies for neighborhoods. The first is their similarity in terms of size. In our sample period, the median precinct has 1,200 adult inhabitants, and 90% of the precinct-year observations fall within the range of 644 to 1,799.[6] Second, precinct borders usually follow the intuitive borders of neighborhoods, such as water divisions (streams or

[6]Figure A1 shows the full distribution of precinct sizes and precincts per municipality.

islands) or infrastructure (large roads or other hard-to-pass elements). This is because each precinct has a single polling station, and the borders are drawn to facilitate physical access to the polling station.

Parties' seat shares in the council correspond to their vote shares. A single party can form a governing majority if it obtains more than 50% of the seats. If no party wins 50% of the vote, parties come together in coalitions to reach this threshold. A crucial fact for our empirical analysis is that governing majorities nearly always consist of parties from the same ideological bloc – left (Social Democrats, Left Party, Green Party) or center-right (Conservatives, Center Party, Liberal Party, Christian Democrats). The Sweden Democrats, Sweden's radical right party, played an unimportant role in local coalition formation during our study period.

The governing majority controls the municipality's political agenda and appoints all executives, including the mayor and policy committee chairs. The building committees sends formal proposals for decisions on building permits to the council, which makes the final decision. Bureaucrats are involved in the processes but do not make formal proposals or take decisions, with the exception of small-scale and routine building permits.[7]

4 Data

We use population-wide administrative data that covers all local politicians and all permanent residents in Sweden. Variables include individuals' education level, income, region of birth, and the electoral precinct of residence. Statistics Sweden collects this data from administrative records and makes it available for research in a de-identified format. Table A1 summarizes our final precinct-level data set.

Before each election, political parties must report their candidate lists (ballots) to the gov-

[7]Swedish law prohibits the delegation of substantive decisions on building permits to bureaucrats, and in many municipalities, bureaucrats are not allowed to make rejection decisions (Boverket, 2020).

ernment and they also provide all candidates' personal ID codes. The Electoral Agency collects data on candidates and elected councilors, and we use these data for three elections (2002, 2006, and 2010) for a total of 39,312 municipal election-councilor observations. The Agency also maintains precinct-level data on election results, such as turnout and party vote shares. Our dataset covers 17,422 precinct-year observations. In the average municipality, more than 90% of these precincts are inhabited by at least one elected politician.[8]

Data on approved housing construction come from the yearly register of building permits (1998–2014). The register contains all approved permits for a floor space above 25 m^2, which number approximately 7,300 per year. Each permit details the electoral precinct, month and year of approval, the number of housing units, the total floor space, and whether it is for a single-family or multi-family home.

The building permits can be matched exactly to the individual-level data by precinct. At the precinct level, we also have information on all existing properties from the Property Register. To merge our dataset with information on homeownership from the database GeoSweden and information about house prices from the Swedish network of real estate agents, we instead have to rely on the precinct grid using 500×500-meter geocoded identifiers (details available in Section A.1).

5 Where do politicians live?

We examine whether politicians live in neighborhoods with more socio-economically advantaged residents (Hypothesis 1a) or more voters from their own party (Hypothesis 1b). Setting up this description is not straightforward. Simply comparing neighborhoods with and without politicians is not an option because politicians live in most neighborhoods. Instead, we use a *concentration measure* to capture how politicians' homes are geographically

[8]As an illustration, the map in Figure A2 shows where individual politicians live within a specific municipality.

concentrated across neighborhoods within a municipality. This measure compares the spatial distributions of a focal group (such as politicians) and a non-focal group (non-politicians) which together make up 100% of the municipal population.

Denoting the focal group X and the non-focal group Y, and letting sub-indices n and m denote the number of people in these groups in the neighborhood and municipality, our concentration measure is defined as:

$$C_{nm} = \frac{X_n}{X_m} - \frac{Y_n}{Y_m}$$

In this equation, the first term $(\frac{X_n}{X_m})$ is the share of the focal group that resides in the neighborhood, and the second term $(\frac{Y_n}{Y_m})$ is the share of the non-focal group residing there. The difference between these shares tells us the proportion of the focal group that would need to leave or enter each neighborhood to make the groups evenly spread out across neighborhoods.[9] For example, a neighborhood may have 20% of the municipality's politicians and 10% of its non-politicians. This puts the concentration of politicians at +0.1, as the neighborhood is home to 10 percentage points more of the municipality's politicians than non-politicians. To give the neighborhood a proportional share of the municipality's politicians, 10% of the politicians would need to move out (section A.2 shows a more detailed example).

The concentration measure has several attractive features. Most importantly, it is independent of the size of the focal group in the municipal population. This is particularly important when we compare the distributions of small groups (such as politicians) to those of large groups (such as people born in the West). Another advantage is that the measure can be easily adapted to calculate distributions of variables other than people, such as lo-

[9]Our measure is equivalent to the neighborhood sub-component of the most commonly used measure of segregation, the Dissimilarity index (Massey and Denton, 1988). This index is defined as: $D_m = \frac{1}{2}\sum_{n=1}^{N} |\frac{X_n}{X_m} - \frac{Y_n}{Y_m}|$ and captures the proportion of the focal group that would have to move to another neighborhood *as a share of the municipality's total population* in order for the group to be evenly spread out among all neighborhoods.

cal public bads. Finally, since we construct the measure for each municipality and election period, the municipality average of our concentration measure is, by design, zero. This is equivalent to adding fixed effects for the interaction of municipality and election period since we only use within-municipality-election variation in our analysis. We thereby hold constant any across-municipality, or over-time, variation in municipality characteristics such as size, population density, and municipal-level population characteristics.

To test the first hypothesis, we calculate the concentration measure for politicians and four different socio-economically advantaged groups: (1) people in the *Top income quartile*, i.e. the top 25% of the national distribution of disposable income, (2) *Tertiary educated* people who completed at least one semester of tertiary education, (3) individuals *Born in the West*[10], and (4) *Homeowners* who own rather than rent their housing unit.[11] In each case, we define the focal group as the advantaged category (for example people in the top income quartile) and the non-focal group as their counterpart (the lower three quartiles). To test the second hypothesis, we calculate the concentration measures for voters for each party, using voters for all other parties as the non-focal group.

We relate the concentration of politicians to the concentrations of advantaged citizens and voters by estimating bivariate OLS regressions. These estimates tell us how similar the politicians' residential patterns are to members of the affluent group.[12] By standardizing all concentration measures to have a mean of zero and a standard deviation of 1, we can interpret the estimated coefficient as the standard deviation change in the dependent vari-

[10]This captures the main socio-economic delineation between labor and refugee immigrants in the Swedish context (Åslund et al., 2017).

[11]More details about the variables are provided in Section A.3, and the distributions are displayed in Figure A3.

[12]By relating two spatial distributions to each other for *a given* set of neighborhoods within a municipality, we avoid the critique that is sometimes raised against the Dissimilarity Index, namely that it is sensitive to both the number of neighborhoods within a municipality and to exactly how the borders of the neighborhoods are drawn.

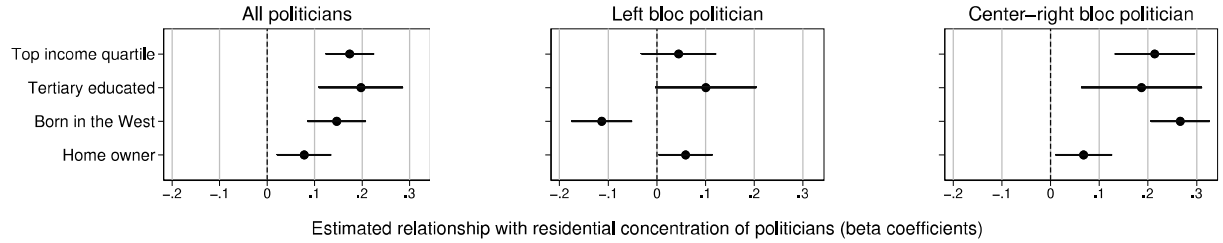
able (the four concentration measures for affluent groups) that follows from changing the concentration measure for politicians with 1 standard deviation. The standard errors are clustered at the municipality level. Throughout all analyses, we adjust for municipality size with weights. This weighing does not affect the substance of our findings but ensures that large municipalities are not given greater importance in the analysis (the three largest cities account for 16% of the precinct-year observations).

Results: Socio-economic advantage. Figure 1 shows the estimated relationships between the concentration of politicians and the concentration of the four advantaged groups. We pool all politicians in the left-most graph to test Hypothesis 1a, and then split the sample by political bloc (left and center-right) in the other two graphs. The full sample show that politicians' homes are co-located with the homes of more socio-economically advantaged citizens across all four groups, which confirms Hypothesis 1a. Politicians' neighborhoods have greater concentrations of high-income people, people with tertiary education, homeowners, and people born in Western countries. For high-income, high-education, and people born in the West, the correlation coefficients are about 0.15. This means that a 1 standard-deviation higher concentration of municipal councilors is associated with a 0.15 standard-deviation larger concentration of these advantaged groups. The correlation with homeowners is also positive, but approximately half the size at 0.07. All estimated relationships are statistically significant at the 5% significance level.[13]

The split by political ideology reveals a substantial difference. For all four measurements of advantage, center-right politicians' homes are more strongly concentrated in advantaged neighborhoods than left-wing politicians' homes. Another striking result is that left-wing

[13]The results in Figure 1 are not sensitive to municipality size (see Appendix Figure A5) or to replacing the concentration measure with simple neighborhood population shares of the focal and non-focal groups (see Figure A6). They are also not sensitive to re-defining neighborhoods as concentric geographic circles of the nearest neighbors around each person's home (see Appendix Section A.5).

Figure 1: The residential concentrations of politicians and socio-economically advantaged groups.



Note: The figure shows estimated bivariate relationships between the concentration of politicians and affluent citizen types across neighborhoods within municipalities. Horizontal lines represent 95% confidence intervals. Observations are weighted by the inverse of the number of precincts in the municipality, and the standard errors are clustered at the municipality level. N=17,422 neighborhood-year observations from three pooled cross-sections (2002, 2006, and 2010).

politicians are not counterbalancing the locations of center-right politicians in terms of living in opposite types of places. The skew of politicians' homes as a whole toward advantaged neighborhoods comes from a strong skew of the center-right and a weaker, and not statistically significant, skew for the left.

The result for the political blocs begs the question of whether politicians' homes are skewed compared to the distribution of *their own voters*. To look at this, we re-calculate the concentration measures for the politicians, but replace the non-politicians as the non-focal group with non-politicians who voted for the political bloc. The results show that both left and center-right politicians are more likely than their own voters to live in socio-economically advantaged neighborhoods (see Figure A4). For three of the four groups (high income, high education, and homeowners) this pattern is stronger for left bloc politicians.

Do politicians live in more advantaged areas because they could afford to move there due to holding political office? We replicate Figure 1 for residential neighborhoods in election years

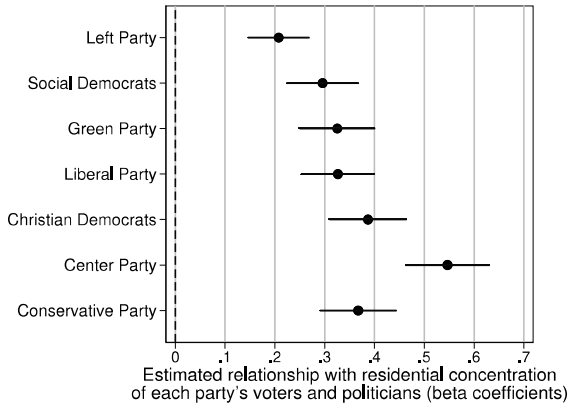
for first-time councilors and demonstrate that this is not the case (see Figure A5). In section A.4, we also verify that councilors are not more likely to move than the average citizen in the municipality, or more likely to move to a more advantaged neighborhood. First-time councilors are somewhat more likely to move, but the magnitude is small.

Politicians might live in advantaged neighborhoods because they are themselves advantaged. While there is no straightforward method for analyzing if this is the case, it is notable that politicians often belong to our advantaged groups. More than half (54%) of the politicians have incomes in the top quartile, 48% have tertiary education (compared to 24% in the population), and 97% (compared to 96%) are born in a Western country. This over-representation exists in both political blocs, but is more pronounced in the center-right one.

Results: Voters. Figure 2 plots the residential concentration of politicians from our two political blocs against the residential concentration of their voters. Although the size varies between parties, the estimated correlations are positive for all of them. This confirms Hypothesis 1b by showing that politicians from all parties are more likely to live in a neighborhood where a larger proportion of the party's voters live. For most parties, a 1 standard-deviation higher concentration of the party's voters is associated with a 0.2–0.4 standard deviation higher concentration of its politicians.[14]

[14]The results in this sub-section are robust to replacing the concentration measure with simple neighborhood population shares (see Figure A6), to re-calculating the concentration measure by including non-voters in the non-focal group, and to municipality size (see Figure A7).

Figure 2: The residential concentration of political parties' politicians and voters



Note: The figure shows the estimated bivariate relationship between the concentration of politicians across neighborhoods within municipalities and the concentration of voters for the same party. Horizontal lines are 95% confidence intervals. Observations are weighted by the inverse of the number of precincts in the municipality, and standard errors are clustered at the municipality level. N=17,422 neighborhood-year observations from three pooled cross-sections (2002, 2006, and 2010).

6 Politicians' homes and the spatial allocation of building permits

After showing that politicians are over-represented in affluent areas, we turn to our second question – does it matter where politicians live? To be precise, we want to test whether politicians' homes cause fewer public bads to be located in the neighborhood (Hypothesis 2). As explained above, we analyze building permits. Compared to other local public bads under the control of local politicians, such as homeless shelters or criminal justice facilities, building permits offer a large number of observed spatial allocation decisions.[15] The average

[15]In all three election periods in our sample, nearly two-thirds of municipalities approved at least one permit for multi-family homes, and more than 98% approved at least one permit for single-family homes.

municipality approved 5.7 multi-family home permits per election period, and 103 permits for single-family homes.

While we examine permits for the construction of both *single-family homes* and *multi-family homes* (which are apartment buildings), we expect multi-family homes to be a greater local public bad (recall section 2.2). Our data clearly show that multi-family homes are larger: the average building permit for multi-family homes had 17 times more floor space than the average permit for single-family homes. A comparison of the residents of single- and multi-family homes in Sweden also shows that multi-family homes tend to have more and poorer residents (Table A2). Moreover, data for permit appeals show a larger tendency to appeal multi-family homes than single-family homes, suggesting that these decisions are more politically delicate (see section A.6).

For each category of permits, we sum up the amount of approved floor space in each neighborhood and election period, starting in October in one election year and ending in September of the next election year. We then calculate the concentration of approved floor space across neighborhoods within each municipality, using the municipal population as the non-focal group.[16] This concentration measure tells us the neighborhood's share of all the approved floor space in the election period relative to its share of the municipal population.

Notably, we analyze permits rather than finished buildings in order to reduce measurement error caused by long implementation times. Construction may drag into the next election period and make it more difficult to identify the politicians in charge of the placement decision. A potential limitation of our approach is, however, that decisions may be reversed before implementation, meaning that we fail to capture actual changes in people's life conditions. Fortunately, our data show that such reversals are quite rare.[17]

[16]Figure A8 illustrates the distributions for each type of building permit.

[17] Starting in 2010, each newly constructed building in the Swedish property register can be linked to its building permit. Of all permits issued in 2010, two-thirds resulted in a finished building within three years, and 95% were completed after eight years, i.e. before

Identification strategy. Since politicians live in advantaged neighborhoods, we expect to have problems with omitted variables. Affluent areas are likely to have more protests since money and personal networks are particularly important resources in mounting political opposition to unwanted projects (Einstein et al., 2019; van Stekelenburg and Klandermans, 2013). These protests make neighborhoods less attractive for new buildings. They raise costs by causing delays, increasing the bureaucratic workload, and may even force an early termination of an unfinished project. It is therefore no surprise that empirical research shows that politicians take anticipated protests (often approximated by electoral turnout) into account when deciding where to site local public bads (Aldrich, 2008; Grimes and Esaiasson, 2014).

Another reason for omitted variables may be that affluent areas have systematically smaller or larger profitability with respect to new construction. A neighborhood's profitability for new housing is shaped by both its demographics and economic geography. Housing construction may be more profitable in affluent areas, which tend to have more complementary infrastructure and more construction companies willing to invest there, and where land sales bring in more money to the public budget.

Finally, political calculations may cause omitted variables if parties center their efforts on neighborhoods where they are most likely to produce more votes (for Swedish evidence see e.g. Dahlberg and Johansson, 2002). According to the probabilistic voting models (Dixit and Londregan, 1996), there is a trade-off between political preferences and income. The stronger citizens' political preferences are and the richer they are, the harder they are to "buy" for the incumbent. The likelihood that voters will switch party allegiances may, hence, be associated with traits that are correlated with income.

Our identification strategy has two components that seek to address the problem of omitted variable bias. The first component is to disaggregate the concentration measure for politicians by accounting for political power. Specifically, we calculate the concentration

the end of our sample period in 2017.

measure separately for majority and opposition politicians and subtract one from the other in each neighborhood. The new variable captures whether a neighborhood contains a larger (or smaller) concentration of homes of majority relative to opposition politicians (Figure A9 shows the distribution). When we use this treatment variable, the identifying variation comes from the election result, which assigns more political power to some neighborhoods than others depending on which bloc of parties forms the majority and which forms the opposition. Since the concentration measure cannot be calculated when no permits have been issued, and since we lack information on the ruling majority in some municipalities, our sample is smaller for this analysis (13,163 precinct-election period observations for multi-family home permits and 15,656 for single-family home permits).

The identification strategy's second component restricts the sample to municipalities with competitive political environments between the left and center-right political blocs. The purpose is to select contexts where the home neighborhoods of majority and opposition politicians have similar observed and unobserved characteristics. We use two versions of this sample restriction. The first, denoted "Close elections", draws on the RD literature to define a close election based on the electoral *win margin* for the winning bloc. We follow Folke et al. (2017) to define a close election as a win margin of 5% or less of the total vote. When the win margin is small, the winning bloc is determined by chance and so is the degree of political power of the politicians living in a particular neighborhood. The second version of the sample restriction seeks to overcome a weakness in the first, namely that incumbency may not be entirely random within the 5% window (see e.g. Snyder et al., 2015). We further restrict the sample to municipalities with at least one power shift between the political left and right blocs in the last three elections. We label this second sample "Close election without a dominant bloc".[18] Appendix Figure A10 shows that municipalities in both sub-samples of competitive political environments are geographically spread out across the country.

[18]This restriction fully removes the imbalance in incumbency since the proportion of times the incumbent bloc wins is 50%, compared to 64% in the close election sample.

We regress the concentration measures for the two types of building permits (L_{nt}) on the difference in residential concentrations of majority and opposition politicians (P_{nt}) using the following equation:

$$L_{nt} = \alpha + \beta P_{nt} + \gamma \mathbf{X'}_{nt} + \epsilon_{nt} \qquad (1)$$

where β is our estimate of interest. We report the results from this bivariate regression before and after adding a vector of control variables ($\mathbf{X}_{nt}$). Note that we do not need fixed effects for municipality and election period, because both the treatment and outcome variables have a mean of zero within the municipality and election period. Standard errors (ϵ_{nt}) are clustered at the municipality level.

Testing the identifying assumption. Our identifying assumption is that the treatment variable – the difference in the concentration of homes for majority and opposition politicians in a neighborhood – is independent of other variables (both observable and un-observable) that could also affect the allocation of local public bads. Regression analysis presented in detail in Appendix Section A.8 supports this assumption. The treatment variable lacks meaningful substantive and statistical correlations with measurements that proxy for omitted variables stemming from public protests, swing voter residents, or profitability concerns. These include measurements of the neighborhood's population composition, turnout rate, pre-existing built environment, population density, and housing prices. The treatment is also unrelated to the lagged outcome variables (building permits) in the sub-samples of competitive political environments. Because these correlations all approach zero, we assume that differences in un-observable neighborhood traits are also likely to be balanced.

Results. We estimate Equation (1) and report the estimated treatment effects in Figure 3. The left graphs show estimates for the full sample of municipalities, and the other two columns report the results for the two sub-samples. The bivariate estimates are shown first, followed by estimates from specifications that gradually add the groups of variables from the previous section as controls; these capture the population composition, turnout, and

economic geography, as well as the lagged dependent variables.[19]

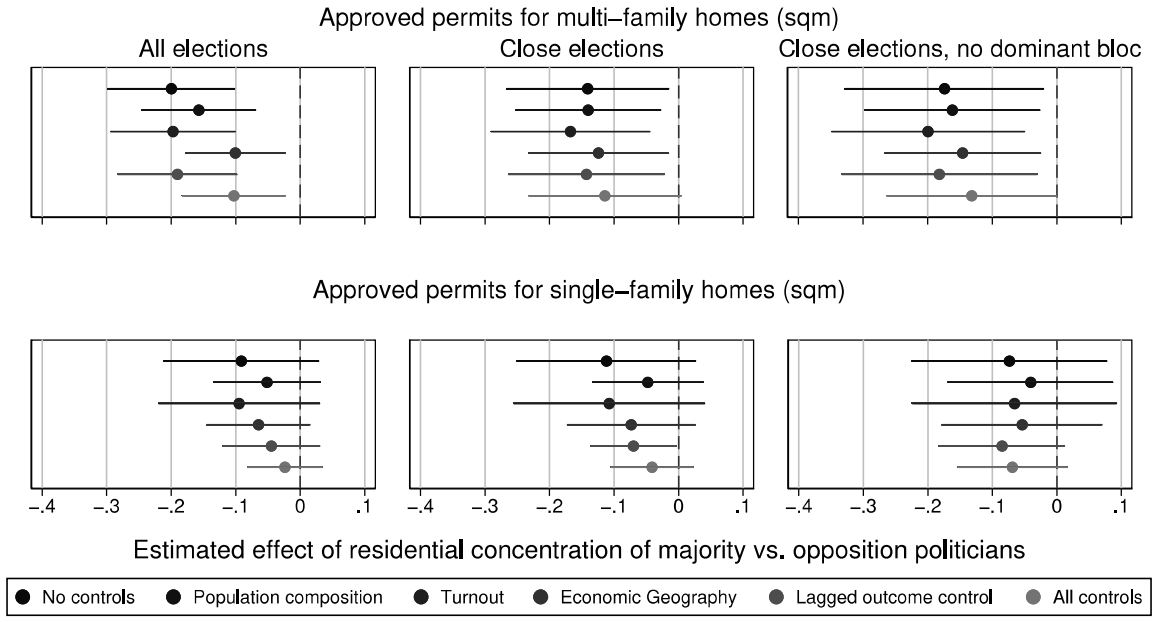
The results show that there is less approved floor space for multi-family homes in neighborhoods with more majority politicians than opposition politicians. The estimate with no controls in the upper-left graph shows that a 10 percentage-point increase in the relative concentration of majority politicians reduces the allocation of new floor space for multi-family homes by 2 percentage points. The estimates are only somewhat smaller for the two sub-samples of close elections and they remain statistically significant at the 5% level.

The only set of control variables that affects the point estimates are those for economic geography, which includes a control for the concentration of existing multi-family homes. While these variables are only weakly related to the treatment variable (recall Figure A8.1), they are highly predictive of the concentration of new permits, which is why they shift the estimates. When testing whether the point estimate obtained for the treatment variable in the model without controls is significantly different from the point estimate obtained in the model with all controls, we find it reassuring that they are not significantly different from each other in any of the close election samples (p-value= 0.54 for close elections and p-value= 0.43 for close elections with no dominant bloc). This implies that we cannot reject the null hypothesis that the estimated parameters are stable over the different specifications.[20] Also, the point estimates for the treatment effect in the specification with all controls are very similar across the three samples. Given that we drop approximately half of the observations when going from the sample with all elections to the close election specification (and approximately a further 1/3 when adding the restriction of no dominant bloc), it is not surprising that we

[19]Note that house prices are not included in the economic geography category (although they are included in Figure A8.1), since the variable is missing for all neighborhoods where no property was sold.

[20]In the model with all elections, the corresponding p-value is 0.001. Note that in all close election specifications, the treatment effect is significant at the 5% level in all but two specification (which have a 6.1 and 5.3% significance level).

Figure 3: Geographical allocation of building permits



Note: The figure shows OLS estimates of Equation (1). Horizontal lines indicate 95% confidence intervals. Close elections are those in which the vote margin to seat majority for either the left or center-right bloc is less than 5%. In the sub-sample without a dominant bloc, we further restrict the sample to municipalities with at least one shift in the governing majority within the three last elections. Control variables within each category are as follows (see Appendix A.3 for exact definitions of the variables): *Population composition*: Top income quartile, Tertiary educated, Non-immigrant, Homeowner, Age 65+ years, Children 7-15 years. *Turnout*: Voted in election. *Economic geography*: Existing stock of multifamily homes, Existing stock of single family homes, Population density, Floor area per capita. *Lagged outcome control*: Building permits for multifamily homes, Building permits for single family homes. Standard errors are clustered at the municipality level. See Appendix Tables A3 and A4 for the full estimation results.

lose some precision in the point estimates.

We find few indications that the concentration of majority politicians' homes impacts the allocation of permits for single-family homes. The estimated coefficients are negative, just like for multi-family homes, but smaller in size and with p-values that make it difficult to reject the null hypothesis of no effect. It can also be noted that in the full sample and the sub-sample of close elections, the point estimates approach zero as control variables are included. These results indicate that single-family homes are considered as less of a local public bad than multi-family homes, as discussed above.

So far, we have estimated the treatment effect at the neighborhood level. To better understand the magnitude, we calculate the aggregated treatment effect from changing the governing majority in a typical municipality (see section A.7 for details). The size of this aggregated impact depends both on the size of the treatment effect, and how much the difference in residential concentration between majority and opposition politicians would change across all of the municipality's neighborhoods following the power shift. We approximate that a shift in the governing majority leads to a re-allocation of 11% of the permits for new multi-family homes. For comparison, Hankinson and Magazinnik (2023) show that switching from a PR to majoritarian electoral system would generate an approximately 50% reduction in this type of building permit, since all neighborhoods would gain representation.

Sensitivity analysis. Several complementary analyses and tests confirm our results (full results in Appendix Section A.9). The test by Oster (2019) supports the assumption of balancing on un-observables and, in turn, the causal interpretation of our estimates (Table A9.1). Next, we show that the sign and size of our estimates are not affected by varying the size of the threshold for defining close elections (Figure A9.1). An alternative approach to our main analysis is to use a fuzzy regression discontinuity design (RDD). We summarize the complications involved in implementing this method in our empirical setting and show that such a design nevertheless replicates the main results, but with larger and less precise estimates (Tables A9.2 and A9.3). Finally, we show that the estimates for multi-family homes

are somewhat bigger in smaller municipalities compared to larger municipalities (Figure A9.2).

Mechanisms: Political representation and favoritism. Our theoretical framework specified two possible reasons why politicians' homes may produce fewer local public bads in a neighborhood – undue favoritism or reactions to the party's (or political bloc's) larger vote share. To test whether vote shares explain our main result, we add control variables for the residential concentration of voters to Equation (1). The intuition is that if co-residence with voters explains why fewer local public bads are allocated to majority politicians' neighborhoods, the estimates should approach zero when we include these controls.

We specify the controls for the concentration of voters as either the difference in residential concentration between voters for the majority and the opposition, or as dummy variables for deciles and quartiles of that continuous variable. Figure 4 shows the bivariate estimates from our main analysis as a reference point and then adds each of the vote controls.

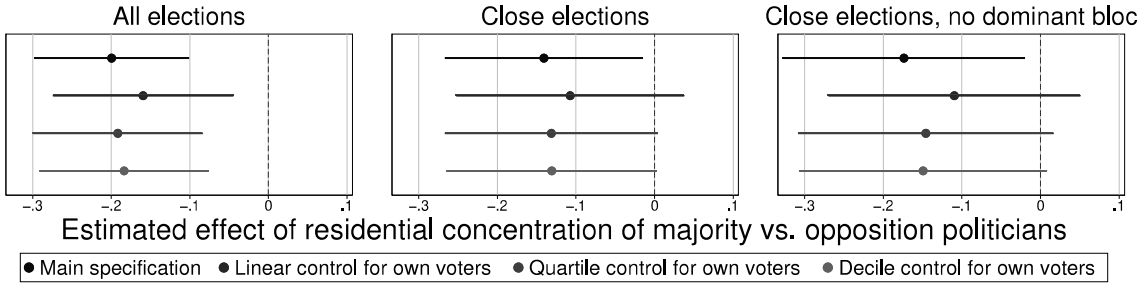


Figure 4: Results with added controls for voters' concentration in the neighborhoods

Note: The figure shows OLS estimates of Equation (1). Vertical lines indicate 95% confidence intervals. The linear control variable is defined as the difference in residential concentration between voters for the majority and the opposition. The quartile and decile controls are dummy variables for deciles and quartiles of the linear control variable, calculated for each municipality. Standard errors are clustered at the municipality level.

Irrespective of the sample or how we control for the concentration of voters, there is only a marginal reduction in the estimated treatment effect. When testing the null hypothesis

that the treatment effect in the main specification is equal to the effect in the augmented specifications, we are unable to reject it. Thus, there is little evidence that the location of politicians' homes affects decisions about how to allocate local public bads because such decisions cater to their own voters. Similar to the results for local public goods in Carozzi and Repetto (2019), we do not find that parties benefit their own voters.

As an additional test, we examine if the effect varies for politicians with strong or weak ties to their neighborhood (based on residency length or having relatives or colleagues living there). We expect stronger ties to increase incentives for favoritism, while not affecting electoral considerations. Irrespective of the definition of neighborhood ties, the estimates for politicians with stronger ties to the neighborhood are larger than the estimates for politicians with weaker ties (see section A.10).

The results in this section suggest that our main results are likely explained by politicians favoring their home neighborhoods. This might imply that the large aggregated treatment effect calculated above represents a lower bound, because favoritism is likely to be less prevalent in more competitive environments with close elections. In those contexts, the opposition might be able to place more restrictions on the behavior of the majority, and bad behavior is more likely to result in a loss of votes.

Geographic inequality. We have shown that (i) politicians live in more affluent areas than the rest of the population and that (ii) fewer multi-family homes are located in neighborhoods with a larger concentration of homes of majority relative to opposition politicians. In order to study the causal impact of politicians' homes, we constructed our treatment variable and sample to ensure a lack of statistical relationships between the treatment variable and proxies for neighborhood affluence. To approach the question of whether the presence of politicians' homes exacerbates geographic economic inequality, we therefore need an alternative approach. We re-define the treatment variable as the concentration of majority politicians' homes relative to the rest of the population. Since the left and right are as likely to be in power, the relationship between the co-concentration of affluent residents and

majority politicians is positive and of similar size as the co-concentration with all elected politicians. Re-estimating Equation (1) with this treatment variable shows negative point estimates, and, when including all controls, the results are not far from the point estimates obtained in the main analysis (see Figure A11). This indicates that majority politicians' neighborhoods, which are typically affluent locations, receive fewer local public bads. Even if this analysis does not provide causal estimates, it suggests that governing politicians' favoritism toward their home neighborhoods exacerbates geographic inequality.

7 Conclusion

Where do politicians live, and does it matter? We find that local politicians live in neighborhoods with more affluent citizens and more voters for their own party. We also find that where they live matters because neighborhoods in which more politically influential politicians reside receive fewer permits for multi-family homes, a public bad typically resisted by the local population.

Even if politicians tend to live in the same neighborhoods as their voters, this does not seem to explain why these neighborhoods receive fewer local public bads. Our results suggest that favoritism is the most likely mechanism, meaning that politicians (either consciously or unconsciously) are positively biased toward their own neighborhood in decisions about new construction. Such behavior might erode trust in the local political system and may lead to economically and socially sub-optimal allocation decisions. Future research could more carefully evaluate the potential mechanism of undue favoritism and the channels through which it might operate.

Regarding geographical economic inequality, we find that less new construction of multi-family homes is approved in neighborhoods with a higher concentration of majority politicians' homes compared to the rest of the population. Unlike for the main results, we do not argue that these findings are causal. Nevertheless, they suggest that governing politicians'

tendency to live in more affluent neighborhoods produces geographic inequality, because these neighborhoods are less likely to be selected for the allocation of new local public bads.

It may be somewhat surprising to find these results in Sweden, which typically ranks among the countries with the lowest levels of corruption in the world (TI, 2020). Yet, such international corruption indices usually apply to the national level. Local decisions, which often have a great impact on people's lives, may go unnoticed if the media and public civil servants focus on monitoring national political decisions. At the local level, surveys show that 40% of Swedes agreed with the statement that "local politicians often use their political positions to benefit themselves or people close to them" (Bergh et al., 2013).

More broadly, our results suggest that neighborhood traits might be an important aspect of political representation. Prior research has concluded that socio-economically disadvantaged groups are descriptively under-represented in politics (Blomqvist, 2005; Carnes, 2020). Our results extend this literature by demonstrating that these groups are also more likely to live in politically under-represented neighborhoods. Our findings also relate to concerns regarding politicians' preferences. Earlier literature has observed that politicians under-represent the preferences of low-income citizens (Broockman and Skovron, 2018; Page et al., 2013). While this may stem from their high personal income, it could also reflect their lived environments in relatively affluent neighborhoods.

Finally, several policies might be relevant to address the potential problem of geographic favoritism in political decision-making. Clear and enforceable rules could be put in place to exempt politicians from decisions that involve their own neighborhoods. More broadly, reforms to electoral systems that affect where politicians live might make decision-making more spatially equitable, for example by dispersing politicians' homes across single-member districts. But while this might lead to a more equitable distribution of local public bads, it could also prevent implementation of decisions that are viewed as beneficial at the aggregate level (Hankinson and Magazinnik, 2023). Other policy alternatives could target parties' internal nomination practices to increase the geographic representativeness of a party's politicians.

For example, some local parties in Sweden voluntarily print candidates' residential neighborhoods next to their names on their ballot; making this mandatory would give all voters the opportunity to consider geographic representation when selecting parties and candidates.

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References

Åberg-Bengtsson, Lisbeth. 2009. "The Smaller the Better? A Review of Research on Small Rural Schools in Sweden". *International Journal of Educational Research* 48 (2): 100 – 108.

Abou-Chadi, Tarik and Simon Hix. 2021. "Brahmin Left versus Merchant Right? Education, Class, Multiparty Competition, and Redistribution in Western Europe". *The British Journal of Sociology* 72 (1): 79–92.

Aldrich, Daniel P. 2008. *Site Fights: Divisive Facilities and Civil Society in Japan and the West* (1 ed.). Cornell University Press.

Ansolabehere, Stephen, Alan Gerber, and Jim Snyder. 2002. "Equal Votes, Equal Money: Court-Ordered Redistricting and Public Expenditures in the American States". *American Political Science Review* 96 (4): 767–777.

Arzheimer, Kai and Jocelyn Evans. 2012. "Geolocation and Voting: Candidate–Voter Distance Effects on Party Choice in the 2010 UK General Election in England". *Political Geography* 31 (5): 301–310.

Åslund, Olof, Anders Forslund, and Linus Liljeberg. 2017. "Labour Market Entry of Non-Labour Migrants – Swedish Evidence". *Nordic Economic Policy Review* 520 : 115–158.

Bartanen, Brendan, Jason Grissom, Eli Joshi, and Marc Meredith. 2018. "Mapping Inequalities in Local Political Representation: Evidence from Ohio School Boards". *AERA Open* 4 (4).

Baskaran, Thushyanthan and Mariana Lopes da Fonseca. 2018. "Appointed Public Officials and Local Favoritism: Evidence from the German States".

Been, Vicki, Ingrid Gould Ellen, and Katherine O'Regan. 2019. "Supply Skepticism: Housing Supply and Affordability". *Housing Policy Debate* 29 (1): 25–40.

Berg, Heléne. 2020. "On the Returns to Holding Political Office (Is it worth it?)". *Journal of Economic Behavior & Organization* 178 : 840–865.

Bergh, Andreas, Gissur Erlingsson, Mats Sjölin, and Richard Öhrvall. 2013. "Allmän nytta eller egen vinning? en eso-rapport om korruption på svenska".

Bhusal, Bhishma, Michael Callen, Saad Gulzar, Rohini Pande, Soledad Prillaman, and Deepak Singhania. 2020, October. "Does Revolution Work? Evidence from Nepal's People's War". Working Paper WPS-116, Center for Effective Global Action. University of California, Berkeley.

Blomqvist, Paula R. 2005. *Närvarons politik och det mångetniska Sverige: om att ta plats i demokratin.* Förvaltningshögskolans avhandlingsserie. Göteborgs universitet.

Boverket. 2020. "Delegering av beslutanderätt". Online publication, available at `https://www.boverket.se/sv/PBL-kunskapsbanken/lov--byggande/roller-och-ansvar/byggnadsnamnden/delegering-av-beslut/`.

Brady, Henry E., Sidney Verba, and Kay Lehman Schlozman. 1995. "Beyond Ses: A Resource Model of Political Participation". *The American Political Science Review* 89 (2): 271–294.

Broockman, David E and Christopher Skovron. 2018. "Bias in Perceptions of Public Opinion among Political Elites". *American Political Science Review*: 1–22.

Cain, Bruce, John Ferejohn, and Morris Fiorina. 1987. *The Personal Vote. Constituency Service and Electoral Independence*. Harvard University Press.

Carey, John M and Matthew Soberg Shugart. 1995. "Incentives to cultivate a Personal Vote: A Rank Ordering of Electoral Formulas". *Electoral Studies* 14 (4): 417 – 439.

Carnes, Nicholas. 2020. *The Cash Ceiling: Why Only the Rich Run for Office–and What We Can Do about It*, Volume 16. Princeton University Press.

Carozzi, Felipe and Luca Repetto. 2019. "Distributive Politics Inside the City? The Political Economy of Spain's Plan E". *Regional Science and Urban Economics* 75 : 85 – 106.

Chattopadhyay, Raghabendra and Esther Duflo. 2004. "Women as Policy Makers: Evidence from a Randomized Policy Experiment in India". *Econometrica* 72 (5): 1409–1443.

Chetty, Raj and Nathaniel Hendren. 2018. "The Impacts of Neighborhoods on Intergenerational Mobility: Childhood Exposure Effects". *The Quarterly Journal of Economics* 133 (3): 1107–1162.

Chetty, Raj, Nathaniel Hendren, and Lawrence F. Katz. 2016, April. "The Effects of Exposure to Better Neighborhoods on Children: New Evidence from the Moving to Opportunity Experiment". *American Economic Review* 106 (4): 855–902.

Dahlberg, Matz and Eva Johansson. 2002. "On the Vote-Purchasing Behavior of Incumbent Governments". *American Political Science Review* 96 (1): 27–40.

Dal Bó, Ernesto, Frederico Finan, Olle Folke, Torsten Persson, and Johanna Rickne. 2017. "Who Becomes a Politician?". *The Quarterly Journal of Economics* 132 (4): 1877–1914.

Dixit, Avinash and John Londregan. 1996. "The Determinants of Success of Special Interests in Redistributive Politics". *The Journal of Politics* 58 (4): 1132–1155.

Einstein, Katherine L., David M. Glick, and Maxwell Palmer. 2019. *Neighborhood Defenders: Participatory Politics and America's Housing Crisis.* Cambridge University Press.

Einstein, Katherine L., Maxwell Palmer, and David M. Glick. 2019*b*. "Who Participates in Local Government? Evidence from Meeting Minutes". *Perspectives on Politics* 17 (1): 28–46.

Enos, R. D. 2017. *The Space between Us: Social Geography and Politics.* Cambridge University Press.

Fenno, Richard F. 1977. "US House Members in their Constituencies: An Exploration". *American Political Science Review* 71 (3): 883–917.

Ferreira, Fernando and Joseph Gyourko. 2009. "Do Political Parties Matter? Evidence from US Cities". *The Quarterly Journal of Economics* 124 (1): 399—422.

Fiva, Jon H. and Askill H. Halse. 2016. "Local Favoritism in At-Large Proportional Representation Systems". *Journal of Public Economics* 143 : 15 – 26.

Folke, Olle. 2014. "Shades of Brown and Green: Party Effects in Proportional Election Systems". *Journal of the European Economic Association* 125 (5): 1361–139.

Folke, Olle, Torsten Persson, and Johanna Rickne. 2016. "The Primary Effect: Preference Votes and Political Promotions". *The American Political Science Review* 110 (3): 559.

Folke, Olle, Torsten Persson, and Johanna Rickne. 2017. "Dynastic Political Rents? Economic Benefits to Relatives of Top Politicians". *The Economic Journal* 127 (605): F495–F517.

Gerber, Elisabeth and Daniel Hopkins. 2011. "When Mayors Matter: Estimating the

Impact of Mayoral Partisanship on City Policy". *American Journal of Political Science* 55 (2): 326—399.

Grimes, Marcia and Peter Esaiasson. 2014. "Government Responsiveness: A Democratic Value with Negative Externalities?". *Political Research Quarterly* 67 (4): 758–768.

Hankinson, Michael. 2018. "When do Renters Behave like Homeowners? High Rent, Price Anxiety, and NIMBYism". *American Political Science Review* 112 (3): 473–493.

Hankinson, Michael and Asya Magazinnik. 2023. "The Supply-Equity Trade-Off: The Effect of Spatial Representation on the Local Housing Supply". *The Journal of Politics* 85 (3): 000–000.

Harjunen, Oskari, Tuukka Saarimaa, and Janne Tukiainen. 2021. "Love Thy (Elected) Neighbor? Residential Segregation, Political Representation and Local Public Goods". Aboa Centre for Economics Discussion paper No. 138, available at https://ace-economics.fi/kuvat/dp138.pdf.

Huckfeldt, Robert, Eric Plutzer, and John Sprague. 1993. "Alternative Contexts of Political Behavior: Churches, Neighborhoods, and Individuals". *The Journal of Politics* 55 (2): 365–381.

Huckfeldt, Robert and John Sprague. 1987. "Networks in Context: The Social Flow of Political Information". *American Political Science Review* 81 (4): 1197–1216.

Jankowski, Michael. 2016. "Voting for Locals: Voters' Information Processing Strategies in Open-List PR Systems". *Electoral Studies* 43 : 72–84.

Johnston, Ron and Charles Pattie. 2014. "Social Networks, Geography and Neighbourhood Effects". In *The SAGE Handbook of Social Network Analysis*, pp. 301–310. SAGE Publications.

Karlsson, David. 2018. "Putting Party First: Swedish MPs and their Constituencies". *Representation* 54 (1): 87–102.

Key, Valdimer O. 1950. *Southern Politics in State and Nation.* Borzoi book. A.A. Knopf.

Kitschelt, Herbert. 1994. *The Transformation of European Social Democracy.* Cambridge Studies in Comparative Politics. Cambridge University Press.

Knight, Brian. 2008, 09. "Legislative Representation, Bargaining Power and the Distribution of Federal Funds: Evidence from the US Congress". *The Economic Journal* 118 (532): 1785–1803.

Lewis-Beck, Michael S and Tom W Rice. 1983. "Localism in Presidential Elections: The Home State Advantage". *American Journal of Political Science*: 548–556.

Lipset, Seymour M. and Stein Rokkan. 1967. *Party Systems and Voter Alignments: Cross-National Perspectives.* Toronto: The Free Press.

Marble, William and Clayton Nall. 2021. "Where Self-Interest Trumps Ideology: Liberal Homeowners and Local Opposition to Housing Development". *The Journal of Politics* 83 (4): 1747–1763.

Massey, Douglas S. and Nancy A. Denton. 1988. "The Dimensions of Residential Segregation". *Social forces* 67 (2): 281–315.

Meyer, David S. and Debra C. Minkoff. 2004. "Conceptualizing Political Opportunity". *Social Forces* 82 (4): 1457–1492.

O'Grady, Tom. 2019. "Careerists Versus Coal-Miners: Welfare Reforms and the Substantive Representation of Social Groups in the British Labour Party". *Comparative Political Studies* 52 (4): 544–578.

O'Grady, Tom. 2020. "NIMBYism as Place-Protective Action: The Politics of Housebuilding". SocArXiv, available at `https://osf.io/preprints/socarxiv/d6pzy/`.

Oster, Emily. 2019. "Unobservable Selection and Coefficient Stability: Theory and Evidence". *Journal of Business & Economic Statistics* 37 (2): 187–204.

Östh, John. 2014. "Introducing the EquiPop Software: An Application for the Calculation of k-nearest Neighbour Contexts/Neighbourhoods.".

Page, Benjamin I, Larry M Bartels, and Jason Seawright. 2013. "Democracy and the Policy Preferences of Wealthy Americans". *Perspectives on Politics* 11 (1): 51–73.

Put, Gert-Jan. 2016. "Determinants of Geographical Representation on Candidate Lists in Flexible-List Systems: Lessons from the Belgian Case". *Politics* 36 (2): 180–196.

Snyder, James M, Olle Folke, and Shigeo Hirano. 2015. "Partisan Imbalance in Regression Discontinuity Studies Based on Electoral Thresholds". *Political Science Research and Methods* 3 (2): 169–186.

Storper, Michael. 2018. "Separate Worlds? Explaining the Current Wave of Regional Economic Polarization". *Journal of Economic Geography* 18 (2): 247–270.

TI. 2020. "Corruption Perceptions Index". Report, Transparency International.

Tighe, J. Rosie. 2010. "Public Opinion and Affordable Housing: A Review of the Literature". *Journal of Planning Literature* 25 (1): 3–17.

Trounstine, Jessica. 2020. "The Geography of Inequality: How Land Use Regulation Produces Segregation". *American Political Science Review* 114 (2): 443–455.

Trounstine, Jessica. 2021. "You Won't be My Neighbor: Opposition to High Density Development". *Urban Affairs Review* forthcoming .

van Stekelenburg, Jacquelien and Bert Klandermans. 2013. "The Social Psychology of Protest". *Current Sociology* 61 (5-6): 886–905.

Verba, Sidney and Norman H. Nie. 1972. *Participation in America. Political Democracy and Social Equality.* Harper and Row.

Yoder, Jesse. 2020. "Does Property Ownership Lead to Participation in Local Politics?

Evidence from Property Records and Meeting Minutes". *American Political Science Review* 114 (4): 1213–1229.

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Appendix to "Politicians' Neighborhoods: Where do they Live and does it Matter?"

A.1 Data

We use population-wide administrative register data compiled and de-identified by Statistics Sweden. The data sources come from several different government agencies, such as the Tax Authorities, the Election Agency, the Public Employment Services, and the Agency for Education. Given that all citizens and individuals with a residence permit in Sweden have a unique ID number, it is easy to merge information from multiple sources. Since we follow elected politicians, we focus on three elections – 2002, 2006, and 2010. We drop the smallest municipality since it only has one precinct and thereby no within-municipality variation.

We add data from five additional sources to the individual-level data. Municipal-level election results are merged at the electoral precinct level from 2002 to 2010. The data includes the number of eligible voters, the number of people who voted, and the election result for each precinct. Because Sweden does not have voter registration but takes this information directly from the population register, eligible voters amount to all permanent residents 18+ who have a home in a given precinct.

The property register divides the country into plots of land, i.e. properties, and lists information about the buildings located on these plots for the period 1998–2014. The register contains information about the plot size which buildings stand on, the size of each property, the number of housing units on each plot, each building's floor area, and the type of building (multi-family or single-family home). The building permit register contains approved building permits in all municipalities for the period 1998–2014. The Swedish Planning and Building Act of 1987 requires municipalities to report this data. Each permit details the intended neighborhood of construction, the month and year of approval, the number of housing units, whether the building(s) are single-family or multi-family homes, and the total floor space. A single permit often incorporates several buildings located on the same plot of

land. The property and building permit register includes information about precincts and can therefore be directly merged at the precinct level with our individual-level data.

To calculate house prices in the neighborhood, we add data from the Swedish network of real estate agents (Mäklarstatistik AB) 2005–2014. Brokers in this network report data on their individual sales to a joint database, which comprises approximately 80% of all real estate transactions in the country in a given year. For each sale, we know the location, size of the property, and final price. The data also indicates whether a sale belongs to a newly constructed building. We drop these sales from the measurement since we are interested in capturing the economic geography of the neighborhood rather than the direct impact on the housing market from the new residential construction (i.e. our dependent variable). Information on home ownership comes from the database GeoSweden 1998–2014, which contains full population register information about whether a person owns or rents their house or apartment. Note that there can be some measurement error if individuals sublease an apartment that they own. Statistics Sweden collects and anonymizes the register information in this database, which is hosted by the Institute for Housing and Urban Research at Uppsala University.

For house prices and home ownership, we lack information about what precincts they are located in, and geocoded shape files for precincts are not available for all election years. To add the data we instead aggregate the information about house prices and homeowners to 500×500-meter geocoded squares before merging them into the grid in our dataset. We assign 500×500-meter squares to precincts if all properties in the square belong to the precinct (80–90% of the squares). The remaining squares, which straddle several precincts, are assigned to the precinct to which the largest fraction of buildings belong.

Table A1 summarizes the final data set.

A.2 Concentration measure

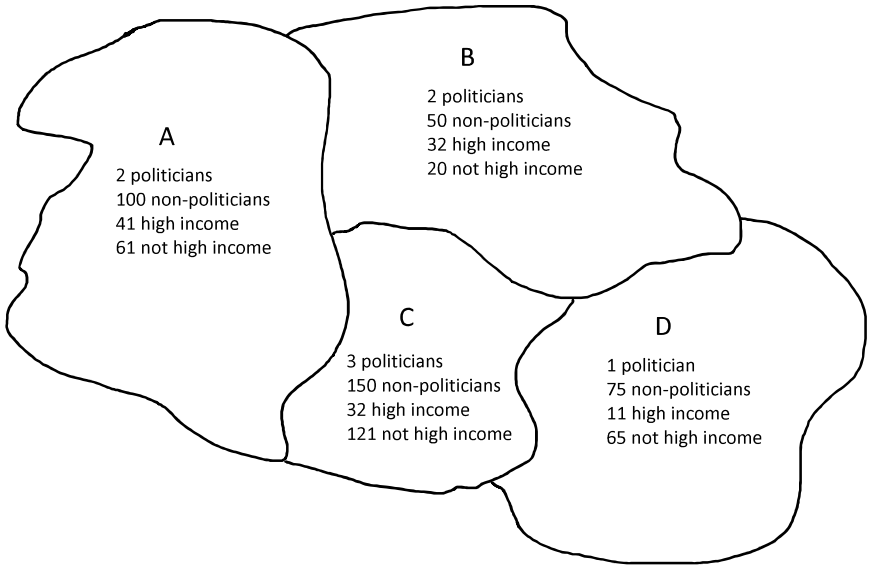
Figure A2.1 illustrates a municipality with four neighborhoods and two focal groups, politicians and high-income earners. For the sake of illustration, we have varied the population sizes more than the variation in our data (recall that precincts are of similar size). This fictitious municipality has 383 inhabitants, of whom eight are politicians and 116 are high-income earners.

To calculate the concentration of politicians in each neighborhood, we use the 375 non-politicians as the non-focal group. Neighborhood B has the highest concentration of politicians (25% of the politicians and 14% of the non-politicians); its concentration measure is 0.11 (see Table A2.1). This means that for the two shares to be equal, 11% of the politicians would have to move out of neighborhood B. The concentration of politicians is the lowest in neighborhood D, where 13% of the politicians and 20% of the non-politicians live, which gives it a concentration measure of -0.07. To make the shares equal, 7% of the municipality's politicians would need to move into this neighborhood. Neighborhoods A and C also have negative concentrations of politicians (-0.02 and -0.02), meaning that an inflow of 2% of the municipality's politicians would equalize the shares. Together, these four flows into and out of each neighborhood would equalize the share of politicians and non-politicians throughout the municipality.

Given that we can not divide a single politician between several neighborhoods, it is not possible to completely avoid segregation. However, if one politician moves from neighborhood B to D, the politicians and non-politicians would be more equally distributed.

To calculate the concentration of the 116 high-income earners in each neighborhood, we use the 267 non-high-income people as the non-focal group. The concentration of high-income earners is also largest in neighborhood B, where 28% of the high-income earners and 7% of the non-high-income earners live, which yields a concentration measure of 0.21. The concentration is lowest in neighborhood C, where 28% of the high-income earners and 45%

Figure A2.1: Illustration of municipality with four neighborhoods



of the non-high-income earners live; its concentration measure is -0.17. The sum of the "over-concentration" of high-income earners in neighborhoods A and B is 0.31. This means that 31% of the high-income earners would have to move from neighborhoods A and B and into C and D to end segregation (i.e. for high-income earners to have the same geographical distribution as the non-high-income earners).

Table A2.1: Illustration of the calculation of concentration measurements

Neighborhood	Concentration of municipal politicians			Concentration of high-income earners		
	Share of politicians (1)	Share of non-politicians (2)	Concentration (1)-(2)	Share of high-income citizens (3)	Share of non-high-income citizens (4)	Concentration (3)-(4)
A	$\frac{2}{8} = 0.25$	$\frac{100}{375} = 0.27$	−0.02	0.35	0.23	0.12
B	$\frac{2}{8} = 0.25$	$\frac{50}{375} = 0.14$	0.11	0.28	0.07	0.21
C	$\frac{3}{8} = 0.38$	$\frac{150}{375} = 0.4$	−0.02	0.28	0.45	−0.17
D	$\frac{1}{8} = 0.13$	$\frac{75}{375} = 0.2$	−0.07	0.09	0.24	−0.15

A.3 Definition of variables

Top income quartile is based on the national distribution of disposable income, which is the net annual sum of labor earnings (from jobs or business ownership) and income from government programs or transfers (e.g. unemployment benefits or pension).

Tertiary educated includes people with any kind of post-high school education. Universities and schools update information on new, completed course credits each year in the administrative data. Information about immigrants is collected by the Employment Office and via targeted surveys by Statistics Sweden.

Born in the West includes people born in the EU or North America. Immigrants' country of birth is recorded by the authorities as part of the immigration process.

Home ownership is based on register information about whether a person lives in a housing unit that is owned rather than rented. Note that some individuals living in an owned house might sublet it from someone else.

Age 65+ years is the concentration of people aged 65+ in the neighborhood, and *Children 7–15 years* is the concentration of children of primary school age. The rest of the population is used as the non-focal group when calculating the concentration measure.

Voted in election is the concentration of people who turned out to vote in the municipal

election. Eligible voters who did not vote are used as the non-focal group.

Existing stock of multi-family homes and *Existing stock of single-family homes* rely on property register data that captures the type and floor area of each existing building in the neighborhood. Note that single-family homes also include small proportions of semi-detached houses (0.5% of the permits) and townhouses or row houses (4%). We sum up the existing floor space in square meters in each neighborhood and for each type of building, and calculate the concentration index using the adult population as the non-focal group.

Floor area per capita is the sum of the floor area in each neighborhood divided by the number of adult inhabitants, based on property register data. The unit of measurement of this variable is the number of square meters of living space per adult in the neighborhood. The variable is normalized to the deviation from the municipality mean.

Population density sums the area of all plots of land in each neighborhood and divides it by the number of adult inhabitants. The unit of measurement is square meters per adult inhabitant, and the variable is normalized to the deviation from the municipality mean.

Housing prices are measured as the average log selling price per floor square meter in each neighborhood during the election period. Before calculating the variable, we exclude all sales of new buildings from the data. The variable is normalized to the deviation from the municipality mean.

Concentration of majority vs minority politicians is constructed by first calculating the concentration measure separately for majority and opposition politicians (using the population as the non-focal group), and then subtracting one from the other in each neighborhood.

Building permits for multi-family homes and *Building permits for single-family homes* sums up the amount of approved floor space for each category, in each neighborhood. Note that single-family homes also include small proportions of semi-detached houses and townhouses or row houses. We calculate the concentration of approved floor space, relative to the distribution of the municipal population across neighborhoods. The variables are defined

for all municipalities with at least one approved permit in a given election period.

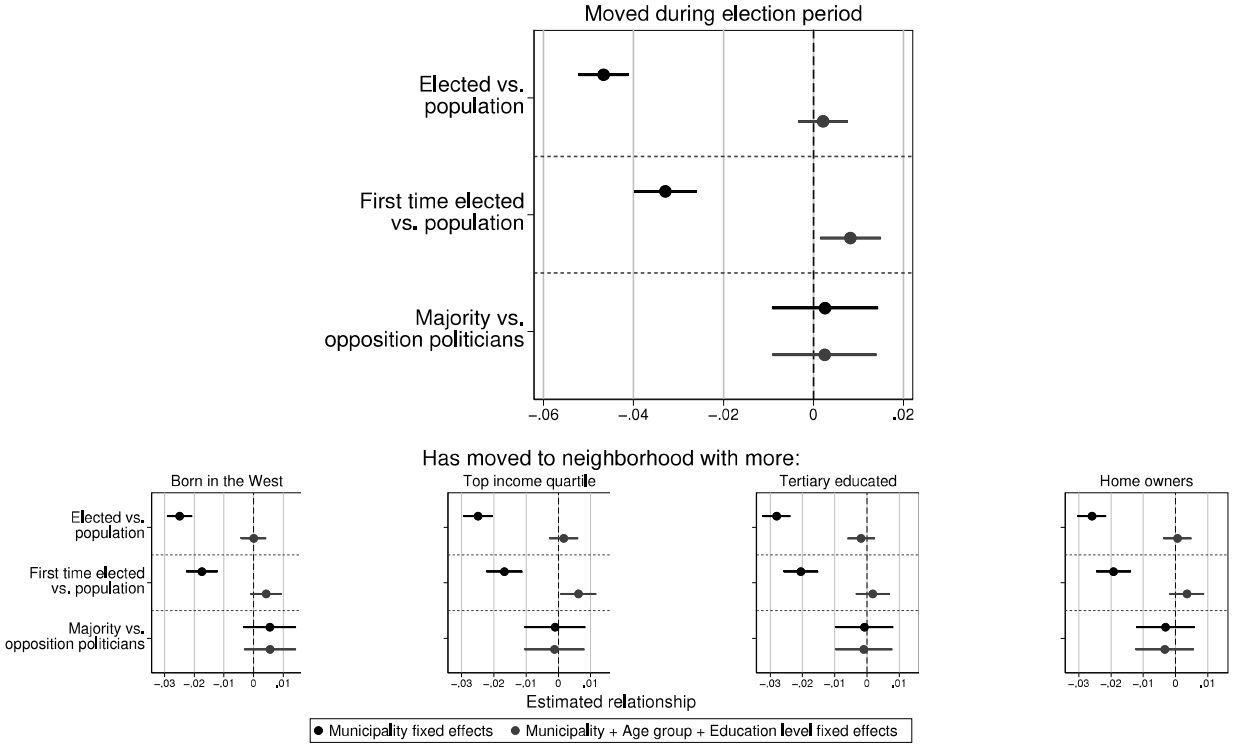
A.4 Residential re-location

We examine if politicians are more likely to move to affluent areas. Given that precinct boundaries change between elections, residential re-locations cannot be measured as an individual living in another precinct. Instead, we measure re-locations using geocodes. Our yearly administrative data include identification codes for 500x500-meter geocoded squares of people's homes. We create a dummy variable that takes the value 1 for persons whose home moves to a different geocoded square between election years, and 0 for non-movers and people who make very short moves that keep them within the square. We exclude observations for people who move to a different municipality. To make this analysis comparable to our main analysis we still measure neighborhood traits at the precinct level, and create additional variables to test whether moves take people to more (or less) socio-economically advantaged neighborhoods. We then calculate the difference in the proportion of each of the four advantaged groups in the person's neighborhood before and after the move. Because we are mainly interested in whether moves take people "upward" in terms of neighborhood affluence, we create four binary indicators that take the value 1 for people who move to a neighborhood with a higher share of the group. These indicators are 0 for people who move "downward," or who do not move.

We use OLS regressions to estimate the differences in the probability of moving, and moving to a more affluent neighborhood, between the following groups: politicians compared to the adult population, freshmen councilors compared to the population, and majority versus opposition councilors. Regressions are run both bivariately (comparing the two groups by regressing moves on a binary indicator) and including fixed effects for life cycle patterns (fixed effects for 5-year age brackets and seven educational level categories).

The results are shown in Figure A4.1. It is apparent that elected politicians move less frequently than the overall population, but that this gap can be ascribed to differences

Figure A4.1: Analysis of moves to a new neighborhood between election years.



Note: The figure shows estimates from regressing dummy variables for moving (top) or moving to neighborhoods with more advantaged citizens (bottom). Black markers show estimates from bivariate regressions and gray markers from specifications that include age and educational level fixed effects. Data is pooled cross-sections of three election years (2002, 2006, and 2010).

in the distributions of age and education, i.e. life cycle effects. After holding age and education constant, the results show that first-time councilors are somewhat more likely to move compared to the population as a whole. The size of this difference is substantively small. An average of 19% of the population moves during the average election period, while the average among freshmen politicians is 1 percentage point higher. Politicians who are elected for the first time are also about 0.5 pp. more likely to move to an area with more high income inhabitants. There is no difference in the probability of moving or moving to a more advantaged area between majority and minority politicians.

A.5 Individualized neighborhoods

We use coordinates for the 500 × 500 square meter of each person's home and calculate new individualized neighborhoods by drawing concentric circles around each person. The

method, called the k-nearest-neighbor approach, was originally developed by Östh (2014). This approach puts the home of each person at the center of their neighborhood and allows us to vary neighborhood size. The algorithm identifies the k number of nearest neighbors by expanding the concentric circle around the individual until k neighbors have been found. Since we have coordinate points that measure 500×500 meters, we will not always get this exact number. For example, assume that we are looking for the $k = 50$ nearest neighbors of a specific individual. If more than 50 persons live at the same 500×500 coordinate point, all those individuals are included. Likewise, if there are fewer than 50 people in that area, the algorithm starts searching in the neighboring coordinate points. If the sum of all individuals on those two points equals or exceeds 50, all those individuals will be used to calculate the neighborhood's characteristics. Since the algorithm does not take municipality borders into account, an individual's closest neighbors may live in another municipality if they live close to the border.

Once the k nearest neighbors have been identified, we can measure the characteristics of each individual's neighbors, such as the share of the k nearest neighbors who are socio-economically advantaged. This allows us to compare the traits of the k nearest neighbors for different types of individuals, such as politicians and non-politicians. Since we do not have home ownership connected to our main data at the individual level, we exclude it from the k-nearest-neighbor analysis.

Since the k-nearest-neighborhood boundaries are individual and not the same across all individuals (unlike precincts) we cannot calculate and correlate the concentration measures. Instead, the analysis compares the shares of socio-economically advantaged neighbors between politicians and non-politicians. To account for the fact that the share of affluent individuals varies across municipalities and years, we first calculate the average share ($\bar{y}$) within each municipality m and year t, and then take the ratio of the politicians' share (x) to the average share (i.e. $\frac{x_{tm}}{\bar{y}_{tm}}$). If the ratio is above 1, the politicians are more likely to have socio-economically advantaged neighbors, and vice versa if it is below 1. Unlike the

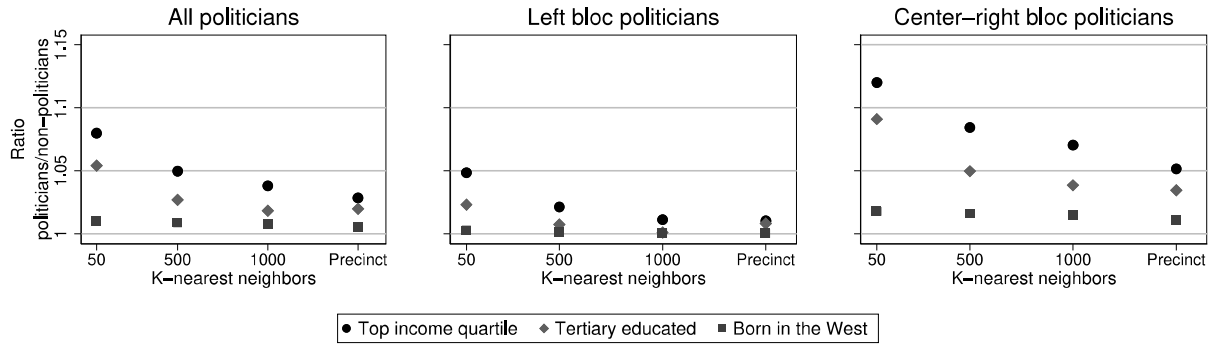
concentration measure in the main analysis, this ratio is not independent of the relative size of the advantaged group, which makes differences in the magnitudes of the ratios across groups less interpretable.

We present the results in Figure A5.1, starting with the ratios for all politicians in the left figure, left bloc politicians in the middle, and center-right bloc politicians to the right. We calculate the ratios using three neighborhood sizes, $k = 50, 500, 1000$ nearest neighbors. As a reference point, we also calculate the ratios using the precinct boundaries to define neighborhoods. The results in the top of Figure A5.1 confirm the results of our main analysis: politicians live in socio-economically advantaged neighborhoods. The more narrowly we define the neighborhood in terms of the number of nearest neighbors, the stronger this pattern becomes. Comparing the results based on precincts to the k nearest neighborhoods, we see that the ratios are larger for the latter, even when we use neighborhoods based on the 1,000 nearest neighbors. This suggests that the fact that precincts include individuals living both in its center and close to the borders will underestimate the degree of segregation.

The difference between left and center-right bloc politicians also holds up in the k-nearest-neighbor analysis. Politicians from the center-right bloc are much more likely to have socio-economically advantaged individuals among their closest neighbors than those in the left bloc. As mentioned above, it is hard to compare the magnitudes of these results across different affluence variables due to differences in their baseline levels. The ratios are the smallest for those born in the West because this group makes up a much larger share of the politicians. To substantiate this point, we calculate the ratios after reversing the coding of the affluence variables, i.e. making the non-affluent group the focal group and vice versa. In this analysis, shown in Figure A5.2, the relative sizes of the ratios across the affluence variables all drop below zero. However, the two groups that were furthest from 1 in the first graph are now closest to 1, while the group that was previously closest is furthest away. This shows that the relative size of the groups is a key explanation of the differences across groups in how far the ratios are from 1.

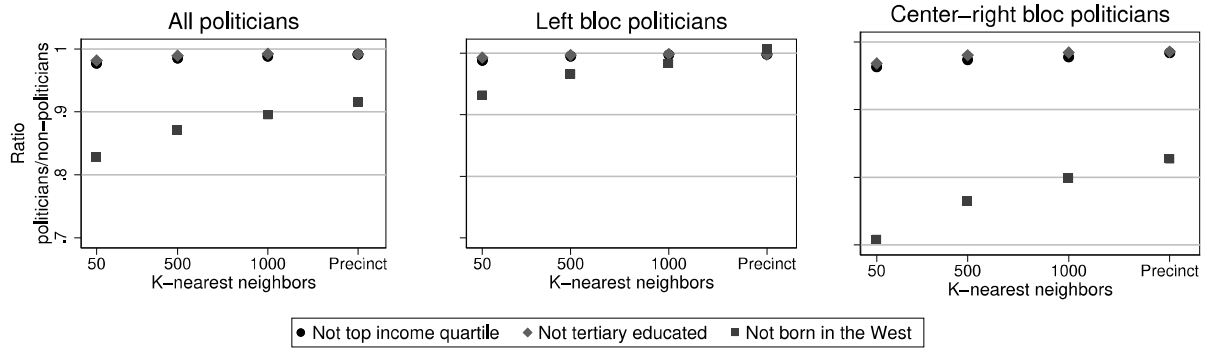
Overall, this analysis verifies that the results in Figure 1 are not created by the use of precincts to define neighborhoods. If anything, it leads us to underestimate the degree to which politicians live with socio-economically advantaged neighbors.

Figure A5.1: Relationships between the residential concentrations of politicians and socio-economically advantaged groups: Individualized neighborhoods



Note: The figure shows the share of the k nearest neighbors who are socio-economically advantaged, calculated separately for politicians and non-politicians. To account for the fact that the share of affluent individuals varies across municipalities and years, we first calculate the average share ($\overline{y}$) within each municipality m and year t, and then take the ratio of the politicians' share (x) to the average share (i.e. $x_{tm}/\overline{y}_{tm}$). Individualized neighborhoods are defined using the closest 50, 500, or 1,000 individuals.

Figure A5.2: Relationships between the residential concentrations of politicians and socio-economically disadvantaged groups: Individualized neighborhoods



Note: The figure shows the share of the k nearest neighbors who are socio-economically disadvantaged, calculated separately for politicians and non-politicians. The ratios are calculated in the same way as in Figure A5.1. Individualized neighborhoods are defined using the closest 50, 500, or 1,000 individuals.

A.6 Appealed building permits

After a municipality has made a decision on a building permit application, the decisions can be appealed to the county administrative board (within 4 weeks). We requested data on appeals from all 21 Swedish county boards for the years 2013-2017 (since our data on building permits ends in 2017). Two of them were not able to provide any data, but 19 submitted data from their case files. Note that it is possible that multiple appeals refer to the same municipal decision, and we are not able to distinguish if this happens.

Six of the county boards did not code if the appealed decision referred to a building used for housing or for other purposes (e.g. a garage or playground) and we do not study these counties further. The remaining 13 county boards include this information since 2017. For all appeals that refer to buildings used for housing, we then coded the type of housing (multi-family or single-family) based on the words mentioned in the text field describing the case. It is up to individual caseworkers to add this information, and while some simply describe the location of the property, many mention the type of building (e.g. "single-family home", "townhouse", "apartments", "multi-family home"). For 3 of the counties, we could classify less than 50 % of the permits, and we, therefore, drop them from the analysis. For

the remaining 10 county boards we were able to classify between 50-98 % of the appeals as referring to either a multi-family or single-family building.[21]

To determine how common it is to appeal we divide the number of appeals with the number of approved permits for each type of housing. Ideally, we would have liked to have information on the total number of building permit decisions since individuals can appeal both approved and rejected applications, but this information is not readily available. 2017 is the only year for which we have data on both appealed and approved building permits, and we compute the numbers for this year. For single-family homes, 361 appeals were made (corresponding to 7 % of approved single-family permits in these counties). For multi-family homes, 155 appeals were made (corresponding to 26 % of approved multi-family permits).

If we instead focus on the 7 county boards where we could classify at least 70 % of the appeals, the numbers are very similar. There are 335 appeals referring to single-family homes (corresponding to 8 % of approved single-family permits) and 149 appeals referring to multi-family homes (corresponding to 29 % of approved multi-family permits). Overall, the pattern suggests that relatively more appeals are made regarding multi-family building permit decisions.

A.7 Aggregated treatment effects

To get a sense of the importance of the geographic distribution of political power for the geographic allocation of building permits, we calculate what would happen to the allocation if a municipality experienced a shift in power from the existing majority to the existing opposition.

A rough calculation would proceed in three steps. First, we need to calculate how the shift in power would change the treatment variable in each neighborhood. Second, we calculate how the change in the treatment variable would affect the allocation of permits to each neighbor-

[21] These included the county boards in Jämtland, Jönköping, Skåne, Stockholm, Uppsala, Värmland, Västerbotten, Västmanland, Östergötland, and Halland.

hood. Finally, we aggregate the changes in the allocation of permits across all neighborhoods within a municipality. This final step tells us how much a power shift would geographically reallocate the building permits for multi-family homes within the municipality.

To illustrate, for an imaginary municipality X, we provide the key statistics in Table A7.1. The municipality has six neighborhoods – three "majority" neighborhoods (i.e. a higher concentration of majority politicians than opposition politicians) and three "opposition" neighborhoods. A power shift would cause opposition neighborhoods to become majority neighborhoods, and vice versa. Based on our main results, the neighborhoods turning from opposition to majority neighborhoods would get fewer new building permits, and the former majority neighborhoods would get more.

Step 1: In neighborhood A, the treatment variable is -0.1 (column 3). That is, the concentration of opposition politicians is 0.1 greater than the concentration of majority politicians. A power shift would cause the treatment to flip to 0.1; in other words, it would increase the treatment variable by 0.2 (column 4). The change in the treatment variable is calculated for each neighborhood.

Step 2: In our main results, the estimated treatment effect for the concentration of multi-family homes is around -0.12. Multiplying this estimate by the shift in treatment for neighborhood A demonstrates that it would receive 3% less of the municipalities' permitted floor space.

Step 3: To determine how much the allocation would change at the municipality level, we aggregate the change across all neighborhoods. Since an increase in one neighborhood will cause a decrease in another, we take the sum of either all of the positive or all of the negative changes when calculating the total change. We find that a power shift would move 8.4% of the permitted floor space for multi-family homes in the municipality from a current majority neighborhood to a current opposition neighborhood (bottom of column 5).

We can then use these municipality-specific calculations to approximate the aggregate effect

Table A7.1: Illustration of the calculation of aggregate effects when the political majority shifts

Neighborhood	Type	Treatment variable	Change in treatment	Change in concentration of multi-family homes
A	Opposition	−0.1	0.2	−0.024
B	Majority	0.15	−0.3	0.036
C	Opposition	−0.05	0.1	−0.012
D	Opposition	−0.2	0.4	−0.048
E	Majority	0.15	−0.3	0.036
F	Majority	0.05	−0.1	0.012
Aggregate				0.084

of a power shift on the average Swedish municipality. We find that a power shift would move 11 % of the newly approved floor space for multi-family homes.

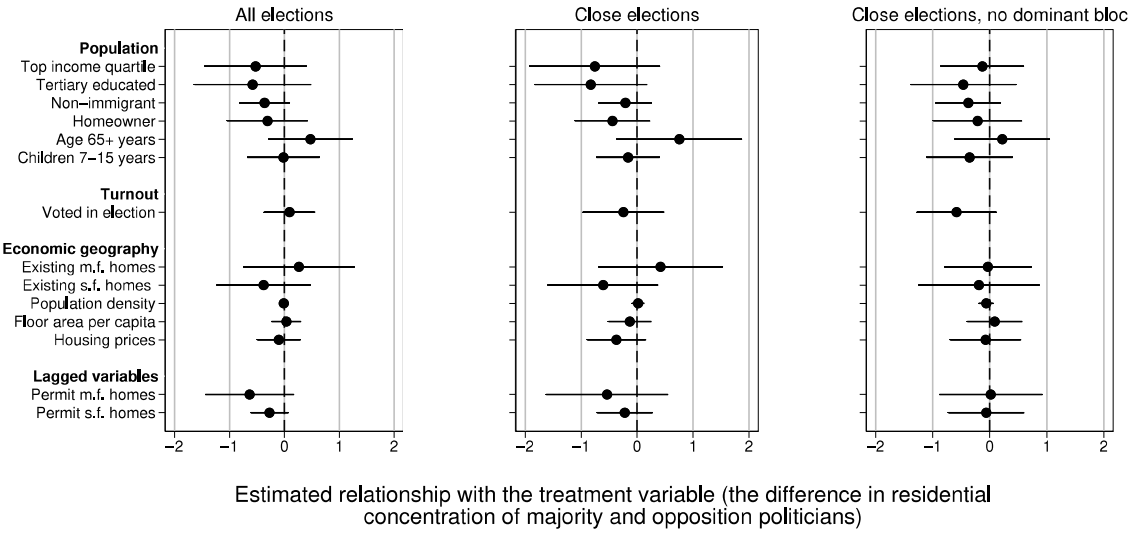
A.8 Testing the identifying assumption

We test our identifying assumption with regression analysis that relates our treatment variable to proxies for omitted variables at the neighborhood level. As discussed in the paper, such omitted variables may stem from public protests, swing voter residents, and profitability concerns. We create a number of variables to capture these dynamics (see details in Section A.3), and then plot estimates from bivariate regressions between them and our treatment variable. We display the results from these regressions using both the full sample and the two sub-samples of municipalities with competitive political environments.

Starting at the top of Figure A8.1, we use the concentration measures for six different groups to capture neighborhoods' population composition: our four socio-economically advantaged groups and two age groups (people aged 65+ and children of primary school age). We see that none of the correlations with our treatment variable are significantly different from zero at the 5-percent level. The same is true for the concentration of people who voted, which we use as a proxy for anticipated protest intensity.

Next, we use five economic geography variables, which are calculated in the first year of each election period and capture the pre-existing built environment in the neighborhood. We examine the concentration of *existing* square meters of multi-family homes and single-family

Figure A8.1: Correlations between neighborhood characteristics and the spatial concentration of politicians.



Note: The figure shows estimates from bivariate ordinary least squares (OLS) regressions between the treatment variable and predetermined neighborhood characteristics. The treatment variable is the difference in the residential concentration of politicians from the political majority and opposition. Multi-family (m.f.) and single-family (s.f.) homes are measured in sqm. Horizontal lines show 95% confidence intervals, standard errors are clustered at the municipality level, and the inverse number of precincts per municipality is used as sample weights. All variables are standardized. The data is compiled from three cross-sections in 2002, 2006, and 2010. Close elections are those in which the vote margin to seat majority for either the left or center-right blocs was less than 5%. In the sub-sample without a dominant bloc, we further restrict the sample to municipalities with at least one shift in the governing majority within the three last elections. All variables are described in section A.3.

homes, the population density, the existing floor space per capita, and the neighborhoods' average house prices. All have insignificant correlations with the treatment variable and are very close to zero.

The bottom rows of the figure show estimates for the one-period time lag of the two dependent variables, i.e. their values in the previous election period. In the sample with all municipality elections, the treatment variable has sizeable and near-significant correlations with both lagged dependent variables. This could reflect a treatment effect in the previous election period due to the slight imbalance in incumbency in the close election sample. If the same political majority stays in power (and the governing politicians thereby continue to live in the same neighborhoods), the treatment variable may become correlated with the lagged outcome

due to our mechanism of interest, i.e., a causal response to the presence of (incumbent) governing politicians' homes. But it could also reflect a more problematic situation. Majority and minority politicians might live in neighborhoods with different probabilities of receiving local public bads for reasons not fully captured by our control variables. Reassuringly, the middle and rightmost panels demonstrate that the correlations between the treatment variable and the lagged outcome variables go towards zero in the samples of close elections, particularly in the sample with no dominant bloc. This suggests that the imbalance in incumbency explains the correlation with the lagged dependent variable in the full sample.

In sum, Figure A8.1 lends strong support to our identifying assumption by documenting an absence of meaningful correlations between the treatment variable and a host of predetermined variables. Analyzing the difference between where majority and opposition politicians live, rather than where all politicians live, removes the correlations with socio-economic affluence seen in the first part of the paper. By restricting the sample to municipalities with competitive political environments, we further ensure the quasi-randomness of the treatment by removing the correlation between the treatment variable and incumbency. Because these correlations all approach zero, we assume that differences in un-observable neighborhood traits are also likely to be balanced.

A.9 Sensitivity analysis

Although the parameter stability observed in Figure A8.1 lends support to the assumption of balance on unobserved variables, we implement the method suggested by Oster (2019) to assess the role of unobserved confounders more formally. Under the assumption that the selection on observed controls is proportional to the selection on unobserved controls, Oster (2019) derives a formula that provides a bound on the estimated treatment effect (β^*):

$$\beta^* = \widetilde{\beta} - [\widehat{\beta} - \widetilde{\beta}]\frac{R_{max} - \widetilde{R}}{\widetilde{R} - \widehat{R}}$$

where $\widehat{\beta}$ and $\widehat{R}$ are the estimated treatment effect and R^2, respectively, obtained from the model without controls, and $\widetilde{\beta}$ and $\widetilde{R}$ are the estimated treatment effect and R^2 obtained from

the model with the full set of controls. R_{max} is a measure of how much of the remaining variance the unobserved variables would explain. Based on a simulation exercise, Oster (2019) suggests using an R^2 that is 1.3 times larger than the R^2 from the regression with the full set of control variables (i.e., $1.3 \times \widetilde{R}$).[22] As a sensitivity check, we also use $1.6 \times \widetilde{R}$.

Under the assumption that the observed variables are at least as important as the unobserved variables, which seems like a reasonable assumption, we get the results provided in Table A9.1. Since the bounded estimates stay so close to the estimated treatment effects in both the close election model and the model for close elections with no dominant bloc, these results indicate that any omitted variable bias only explains a small portion of the estimated treatment effects. This strengthens our belief that the estimates can be given a causal interpretation.

Table A9.1: Selection on un-observables (Oster, 2019)

	No controls $\widehat{\beta}$ $[\widehat{R}]$	All controls $\widetilde{\beta}$ $[\widetilde{R}]$	Bound $(1.3 \times \widetilde{R})$ β^*	Bound $(1.6 \times \widetilde{R})$ β^*
Close elections	-0.174	-0.132	-0.122	-0.109
	[0.006]	[0.195]		
Close elections,	-0.174	-0.132	-0.118	-0.105
no dominant bloc	[0.006]	[0.195]		

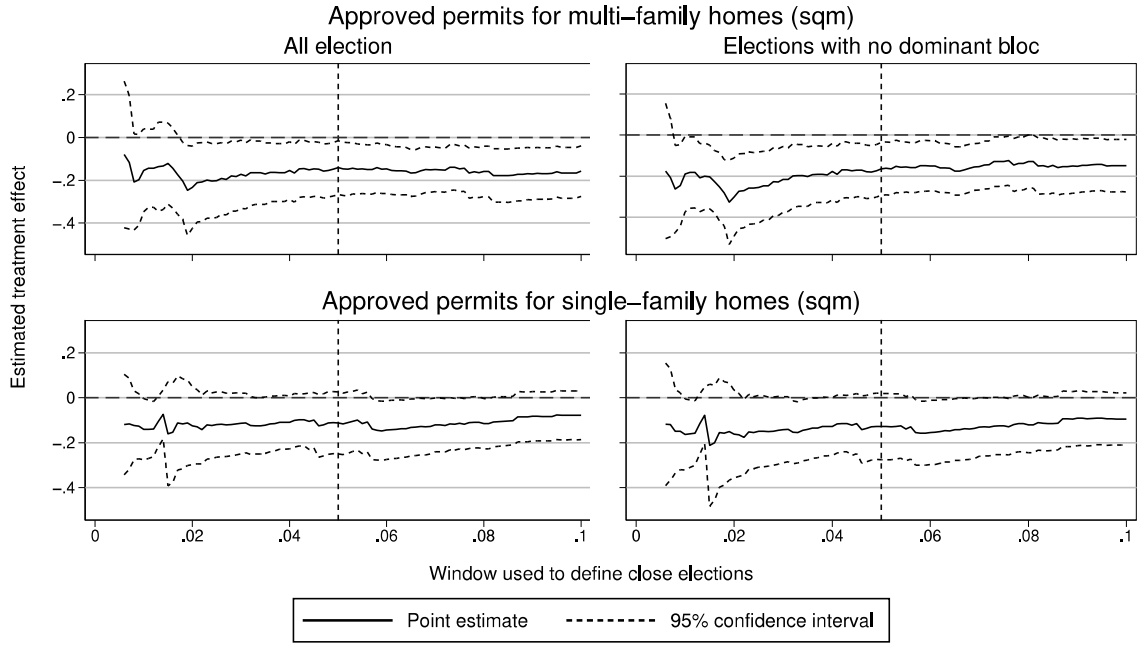
Note: The table provides a bound on the estimated treatment effect (β^*) using the formula from Oster (2019). $\widehat{\beta}$ and $\widehat{R}$ are the estimated treatment effect and R^2, respectively, obtained from the model without controls, and $\widetilde{\beta}$ and $\widetilde{R}$ are the estimated treatment effect and R^2 obtained from the model with the full set of controls.

Second, we address the potential concern that our exact definition of a close election matters for the results. Figure A9.1 shows that the results are not sensitive to varying the vote margin threshold. The treatment effect is of similar size and statistical significance across a wide range, ensuring that our choice of a 5% threshold in the main analysis does not drive the results. The figure also shows that lower vote thresholds produce larger estimates, indicating

[22]Oster (2019) argues that an upper bound of 1 on R^2 is too restrictive, as measurement error and the true idiosyncratic error term contained in most models would prevent the researcher from reaching an R^2 of 1, even in cases where all relevant variables are observed.

that our results are coming from the municipalities where our claim of quasi-randomness is the strongest.

Figure A9.1: Sensitivity check for alternative definitions of close elections



Note: Black lines show OLS estimates of the coefficient on the residential concentration of majority-minority politicians in Equation (1). Dashed lines are 95% confidence intervals. Estimations are run for a sequence of 0.01 increments in the win margin used to define a close election. The size of this margin is shown on the x-axis. Data is pooled cross-sections of three election years, 2002, 2006, and 2010.

Third, an alternative approach to our main analysis is to use a fuzzy regression discontinuity design (RDD). This design uses a seat majority for either of the political blocs as an instrument for the treatment variable. Unfortunately, the method is complicated to implement for several reasons. We have two seat majority thresholds: one for a seat majority for the left-bloc, and another for a seat majority for the center-right, which means that the standard RDD methods cannot be used. The identifying variation in the data is also not sufficient for using them separately. Moreover, since seat majorities affect bargaining power when forming the governing coalition, the exclusion restriction is likely to fail, which makes our estimates upwardly biased. With these caveats in mind, we show that such an analysis replicates the main results but with larger and less precise estimates (results in tables A9.2 and A9.3).

Table A9.2: Results: Fuzzy RDD for multi-family homes

	(1)	(2)	(3)	(4)	(5)
First stage:					
Left seat maj.*left-right conc.	0.875***		0.682***	0.660***	0.710***
	(0.179)		(0.155)	(0.151)	(0.152)
Right seat maj.*right-left conc.		0.925***	0.873***	0.849***	0.800***
		(0.147)	(0.148)	(0.147)	(0.148)
Reduced form:					
Left seat maj.*left-right conc.	-0.233*		-0.155	-0.141	-0.106
	(0.139)		(0.154)	(0.156)	(0.159)
Right seat maj.*right-left conc.		-0.155	-0.235	-0.211	-0.248
		(0.125)	(0.155)	(0.157)	(0.159)
IV:					
Majority-opposition conc.	-0.267*	-0.168	-0.252***	-0.235**	-0.239**
	(0.156)	(0.132)	(0.094)	(0.101)	(0.100)
Instrument	Left	Right	Both	Both	Both
Left threshold	✓				
Right threshold		✓			
Global control 1st pol.			✓	✓	✓
Global control 2nd pol.				✓	✓
Global control 3d pol.					✓
Observations	6872	6409	12961	12961	12961

Note: The fuzzy RDD exploits the fact that a seat majority for the left (center-right) bloc increases the probability that the parties from the left (center-right) bloc form the governing majority. Based on this, we define two instruments by multiplying two dummy variables, one for a left-bloc and the other for a center-right-bloc seat majority, with the difference in residential concentration between left and center-right bloc politicians in a neighborhood. The table indicates if the sample was restricted to a close election (< 0.05) based on the right/left threshold, or if all observations were used with a global control function of the forcing variables with varying polynomial functions interacted with the difference in concentration between left- and center-right-bloc politicians. Since the municipality average of the outcome variable, the treatment variable, and the instrument are all zero within a municipality and election period, the independent seat majority variables and the forcing variable are dropped from the regression. ** $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.*

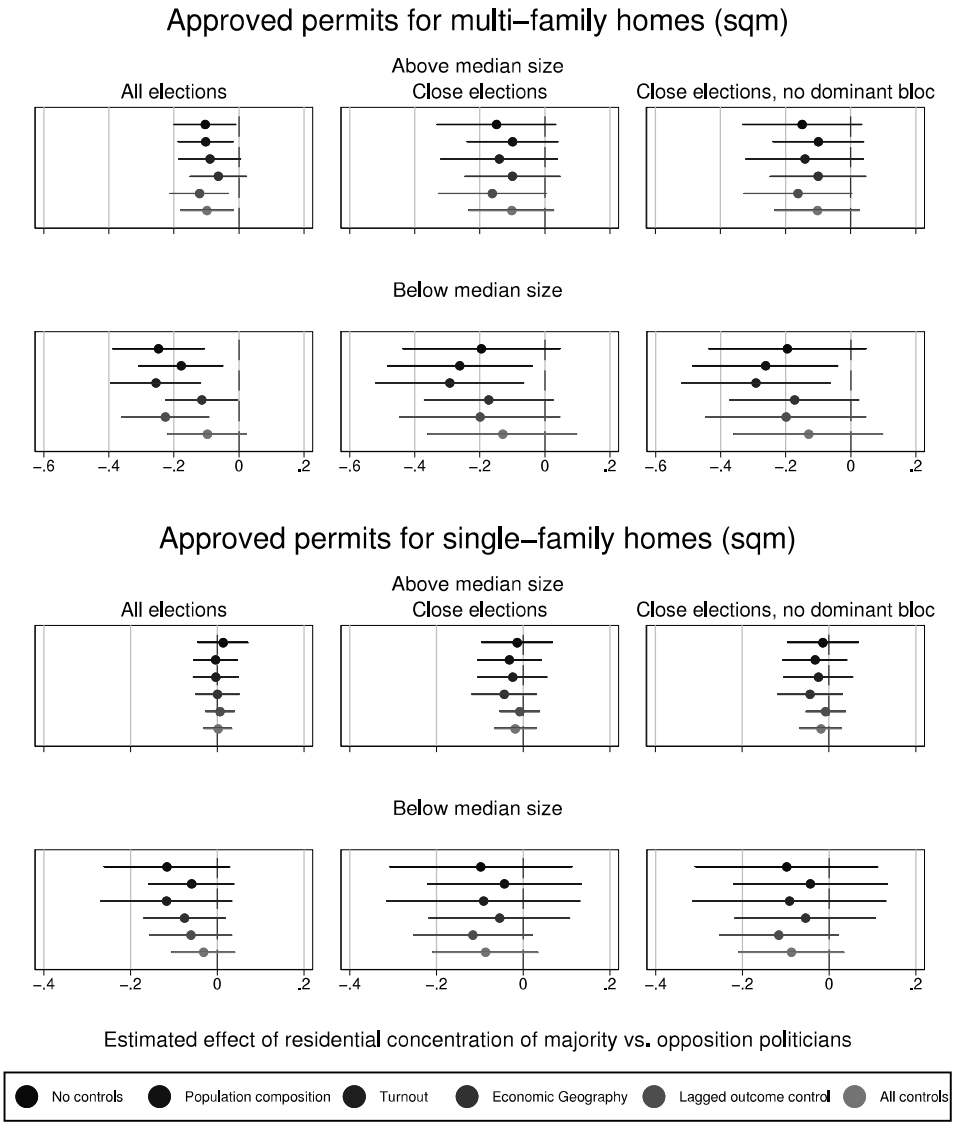
Table A9.3: Results: Fuzzy RDD for single-family homes

	(1)	(2)	(3)	(4)	(5)
First stage:					
Left seat maj.*left-right conc.	0.970***		0.855***	0.845***	0.778***
	(0.147)		(0.138)	(0.137)	(0.133)
Right seat maj.*right-left conc.		0.761***	0.632***	0.630***	0.703***
		(0.145)	(0.123)	(0.123)	(0.123)
Reduced form:					
Left seat maj.*left-right conc.	-0.304**		-0.324**	-0.327**	-0.388**
	(0.144)		(0.140)	(0.140)	(0.159)
Right seat maj.*right-left conc.		-0.153	0.101	0.100	0.046
		(0.146)	(0.125)	(0.125)	(0.150)
IV:					
Majority-opposition conc.	-0.313**	-0.201	-0.163	-0.167	-0.225**
	(0.138)	(0.182)	(0.112)	(0.114)	(0.106)
Instrument	Left	Right	Both	Both	Both
Left threshold	✓				
Right threshold		✓			
Global control 1st pol.			✓	✓	✓
Global control 2nd pol.				✓	✓
Global control 3d pol.					✓
Observations	7643	6938	15432	15432	15432

Note: The fuzzy RDD exploits the fact that a seat majority for the left (center-right) bloc increases the probability that the parties from the left (center-right) bloc form the governing majority. Based on this, we define two instruments by multiplying two dummy variables, one for a left-bloc and the other for a center-right-bloc seat majority, with the difference in residential concentration between left and center-right bloc politicians in a neighborhood. The table indicates if the sample was restricted to a close election (< 0.05) based on the right/left threshold, or if all observations were used with a global control function of the forcing variables with varying polynomial functions interacted with the difference in concentration between left- and center-right-bloc politicians. Since the municipality average of the outcome variable, the treatment variable, and the instrument are all zero within a municipality and election period, the independent seat majority variables and the forcing variable are dropped from the regression. ** $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.*

Fourth, Figure A9.2 shows that the estimates for multi-family homes have a larger magnitude in below median size municipalities compared to above median size municipalities.

Figure A9.2: Sensitivity check by municipality size – above or below median population



Note: Data is pooled cross-sections of three election years, 2002, 2006, and 2010.

A.10 Comparison of politicians with strong or weak neighborhood ties

To examine if our results reflect politicians' favoritism of their home neighborhoods we compare politicians with strong or weak ties to their neighborhood, based on residency time or social network (c.f. Table A10.1).

Our individual-level administrative data tells us the length of time a politician has lived in the same 500*500-meter coordinate square. The median for this variable is 15 years. We also observe whether any of the politicians' siblings or parents live in the same neighborhood as them (22% of the politicians) and whether any current work colleagues do so (53%).[23] Living longer in a neighborhood or having stronger personal ties to its inhabitants should increase the incentives for favoritism, while not affecting electoral considerations. We calculate the treatment variable, i.e. the majority-minority concentration of politicians, separately for each of the three definitions of strong or weak neighborhood ties. The new treatment variables capture the effect of giving more political power to politicians that either have strong or weak ties (in other words we examine how the treatment effect varies based on the strength of neighborhood ties rather than the effect of neighborhood ties). We then introduce both treatment variables into our regressions. Arguably, favoritism would imply a larger effect on local public bads when re-distributing political power among majority and minority politicians with strong rather than weak ties. We provide results based on the full sample (rather than the close election sample) since we lose statistical power when we calculate the treatment variable for subgroups of politicians.

Irrespective of the definition of strong ties, or if we include controls or not, the estimates for politicians with stronger ties to the neighborhood are larger than the estimates for politicians with weaker ties. While the differences are all substantial – at least 50% larger for the

[23]The register data include all parent and sibling ties between the anonymized personal ID codes. We define a college as a person whose largest source of annual labor income derives from the same employer ID code as the politician. Remember that almost all municipal politicians are "leisure politicians", i.e. they have regular jobs and only receive small lump sum payments to attend political meetings.

concentration of politicians with strong compared to weak ties – these two estimates are not significantly different from each other in most specifications. While we cannot design a conclusive test for the mechanism behind our results, we believe that these results (together with the results in Table 4) can be seen as suggestive evidence that our main results are driven by favoritism.

Table A10.1: Comparison of effect on multifamily-homes for politicians with strong or weak neighborhood ties

	Residence > 15 years		At least one parent or sibling		At least one colleague	
Stong ties	-0.253***	-0.157***	-0.429***	-0.207**	-0.215***	-0.116**
	(0.062)	(0.053)	(0.131)	(0.099)	(0.065)	(0.054)
Weak ties	-0.147**	-0.049	-0.128**	-0.072	-0.176**	-0.080
	(0.074)	(0.070)	(0.055)	(0.049)	(0.080)	(0.060)
Full set of controls		✓		✓		✓
Observations	12543	11885	8969	8703	12568	11903

Note: The coefficients display the effect of the concentration of majority vs minority politicians with strong or weak ties, using different definitions of ties. Robust standard errors clustered by municipality in parentheses. The full set of controls is listed in Figure A8.1.
** $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.*

A.11 Tables

Table A1: Summary statistics for neighborhood data

	mean	count
Population	1502.5	17422
Top income quartile	258.4	17422
Tertiary education	296.8	17422
Born in the West	1115.0	17422
Home owners	617.7	16622
Retired	315.2	17422
Children age 7-15	317.7	17422
Voters	907.2	17422
Population density (sq km)	9571.9	17422
Floor area per capita	53.2	17422
Existing multi-family house (sqm)	17466.9	17380
Existing single-family house (sqm)	52663.9	17380
Permits multi-family house (sqm)	617.4	17422
Permits single-family house (sqm)	1294.3	17422
ln(Price per sqm)	9.0	16284
Political majority	2.1	16667
Political minority	1.7	16667

Note: The unit of observation is the neighborhood-election period. Observations are weighted by the inverse of the number of precincts in the municipality. Note that we can only calculate the concentration of politicians for municipalities where we have information about who constitutes the ruling majority. Also, the concentration measures are only calculated for municipalities with at least one approved permit, and the house price variable is only created for neighborhoods with at least one sold house/apartment.

Table A2: Income by tenure type in Sweden (2017)

	Single-family	Multi-family				
	All	All	Rentals	Public rentals	Private rentals	Own
Disposable income (SEK)	197,797	161,296	134,171	125,500	143,415	197,044
Share poor	.20	.30	.35	.39	.31	.22
Share rich	.31	.19	.12	.09	.14	.29
Share on welfare	.01	.06	.10	.12	.07	.01

Note: Share poor is the share of individuals in the first quartile of the disposable income distribution, and share rich is those in the fourth quartile. Column (3)-(6) are sub-components of column (2). *Source*: Own calculations based on data in GeoSweden.

Table A3: Results: Multi-family permits

	All	Close margin	Close margin no dominant bloc
No control	-0.200***	-0.141**	-0.174**
	(0.050)	(0.064)	(0.078)
Population composition	-0.157***	-0.140**	-0.162**
	(0.045)	(0.057)	(0.069)
Turnout	-0.197***	-0.167***	-0.199**
	(0.049)	(0.063)	(0.076)
Economic geography	-0.101**	-0.124**	-0.146**
	(0.039)	(0.055)	(0.062)
Lagged dependent variable	-0.190***	-0.143**	-0.182**
	(0.047)	(0.062)	(0.077)
All controls	-0.103**	-0.114*	-0.132*
	(0.041)	(0.060)	(0.067)
Observations with no controls	13163	9010	6538
Observations with all controls	12399	8298	5954

Note: Each estimate comes from a separate regression. The columns describe the sample, and the rows the included control variables. All observations correspond to one neighborhood-election period observation. Observations are weighted by the inverse of the number of precincts in the municipality. Standard errors are clustered at the municipality level. ** p < 0.1, ** p < 0.05, *** p < 0.01.*

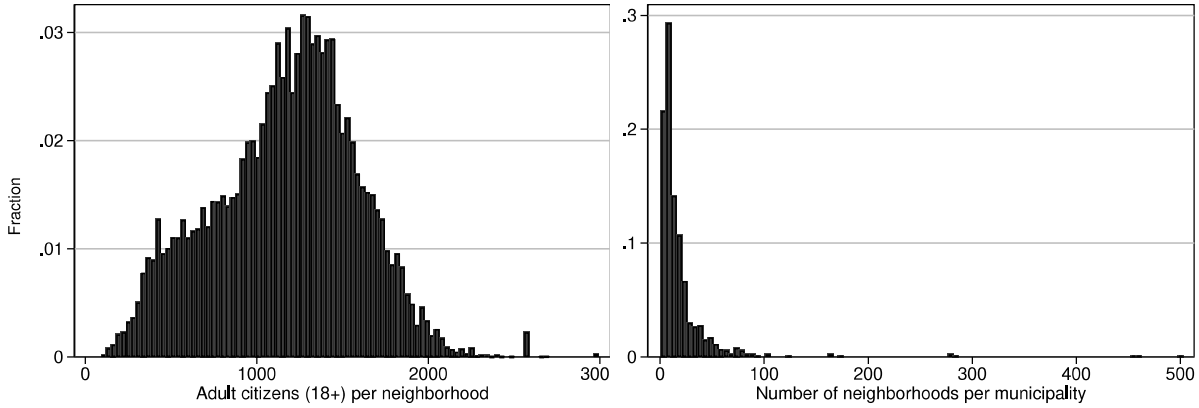
Table A4: Results: Single-family permits

	All	Close margin	Close margin no dominant bloc
No control	-0.091	-0.112	-0.073
	(0.061)	(0.070)	(0.077)
Population composition	-0.051	-0.048	-0.040
	(0.042)	(0.044)	(0.065)
Turnout	-0.095	-0.107	-0.066
	(0.064)	(0.075)	(0.081)
Economic geography	-0.065	-0.073	-0.054
	(0.041)	(0.050)	(0.063)
Lagged dependent variable	-0.045	-0.070**	-0.085*
	(0.038)	(0.034)	(0.050)
All controls	-0.024	-0.041	-0.069
	(0.029)	(0.032)	(0.044)
Observations with no controls	15656	9975	7193
Observations with all controls	14887	9263	6610

Note: Each estimate comes from a separate regression. The columns describe the sample, and the rows the included control variables. All observations correspond to one neighborhood-election period observation. Observations are weighted by the inverse of the number of precincts in the municipality. Standard errors are clustered at the municipality level. ** $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.*

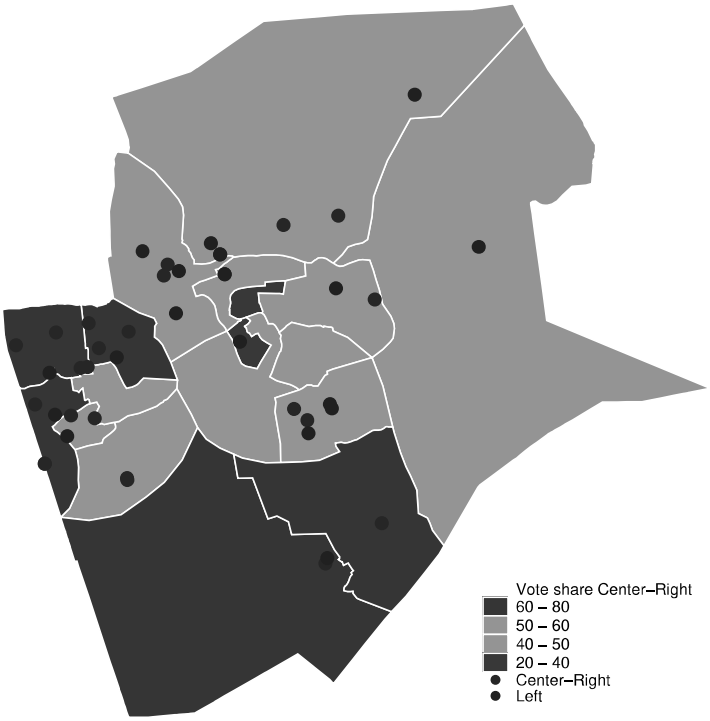
A.12 Figures

Figure A1: Size of neighborhoods (left) and neighborhoods per municipality (right)



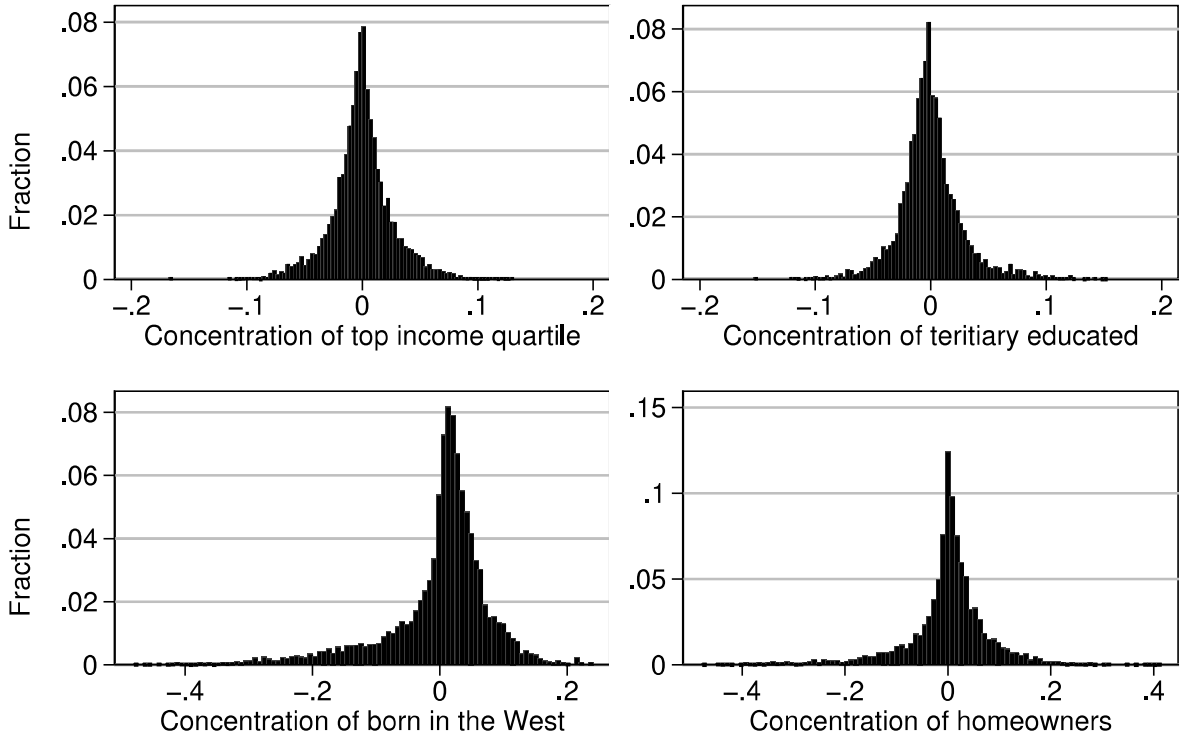
Note: Data is pooled cross-sections of three election years, 2002, 2006, and 2010. We dropped the smallest municipality, which had only one precinct, thus our sample has a minimum of 2 precincts and a maximum of 500 (Stockholm).

Figure A2: Placement of municipal councilors' homes in Partille municipality



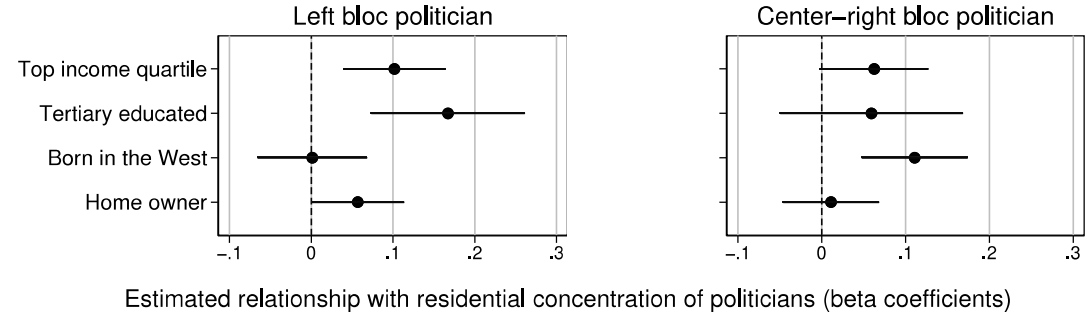
Note: The map shows the location of politicians from the left and center-right blocs following the 2018 election. Borders show precincts, and the shaded colors denote the left (red)–right (blue) balance of votes in the 2018 election. Vote shares are calculated based on the total number of votes going to either political bloc, and thereby exclude votes for local parties and the Sweden Democrats. Home addresses were found via Google searches, as the data used in the empirical analysis only shows the 500×500 meter geocoded squares.

Figure A3: Distributions of concentration indices for socio-economic variables



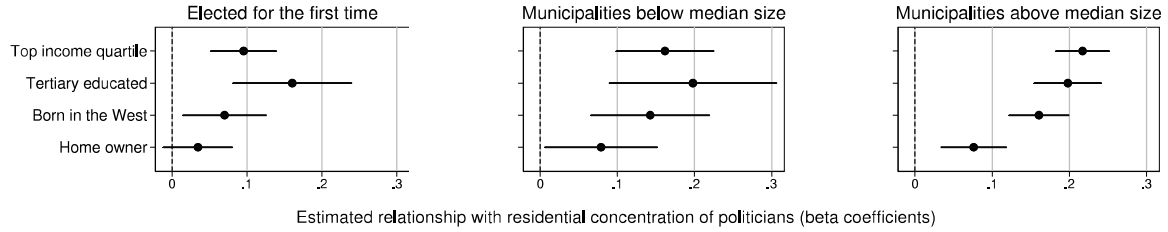
Note: Data is pooled cross-sections of three election years, 2002, 2006, and 2010.

Figure A4: Residential pattern of politicians compared to voters for their own political bloc.



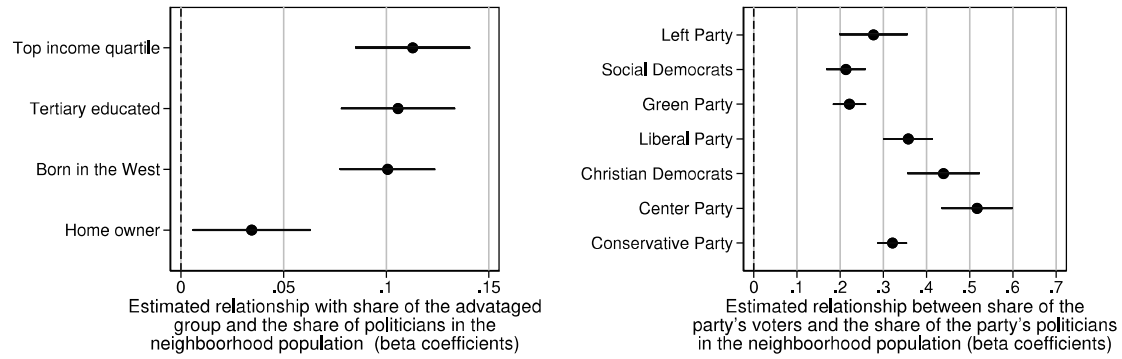
Note: The figure shows the estimated relationship between the concentration of politicians relative to voters for their own political bloc of parties, and the concentration of citizen types across those same neighborhoods expressed in beta coefficients. Observations are weighted by the inverse of the number of precincts in the municipality (N=17,422).

Figure A5: Estimations for first-time elected councilors and sample split by median municipality size



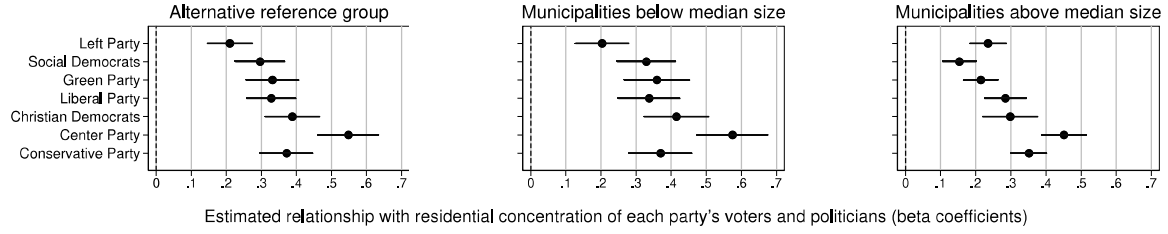
Note: Data is pooled cross-sections of three election years, 2002, 2006, and 2010.

Figure A6: Sensitivity check for neighborhood population shares instead of concentration measures



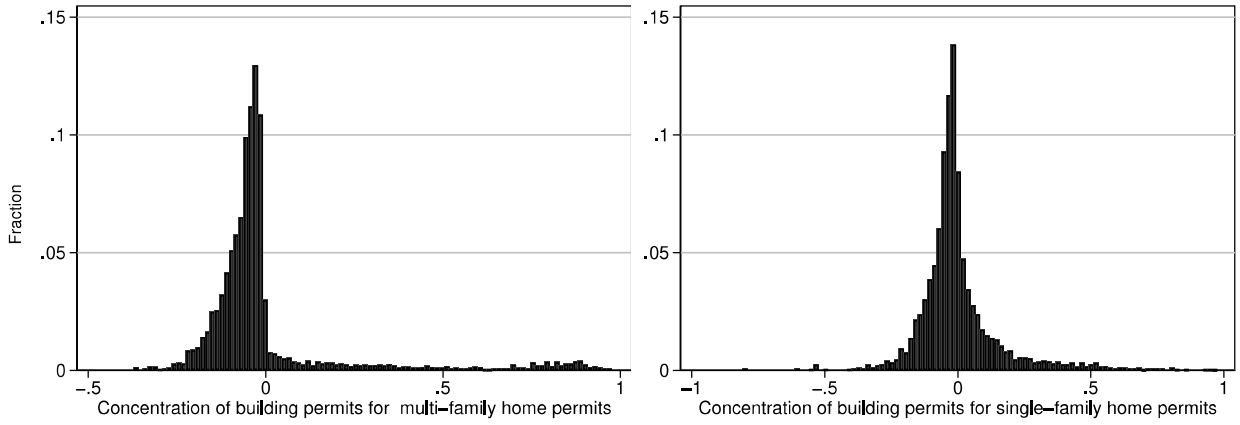
Note: Data is pooled cross-sections of three election years, 2002, 2006, and 2010.

Figure A7: Estimations by political party and sample split by median municipality size



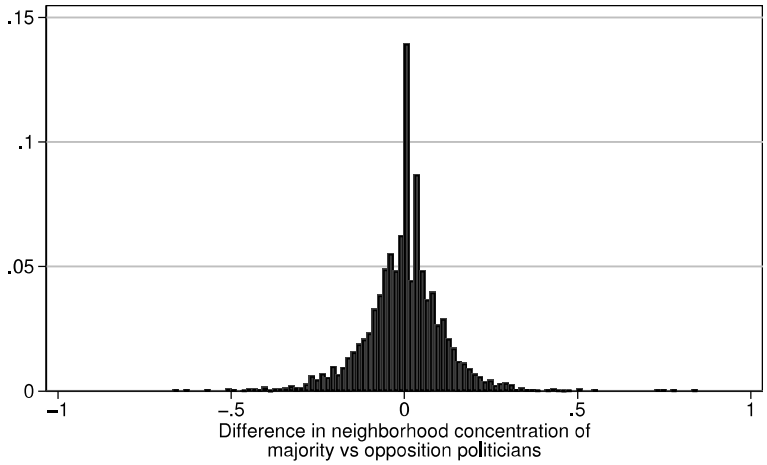
Note: The alternative reference group consists of eligible voters who did not vote for the party. Data is pooled cross-sections of three election years, 2002, 2006, and 2010.

Figure A8: Distribution of dependent variables for building permits



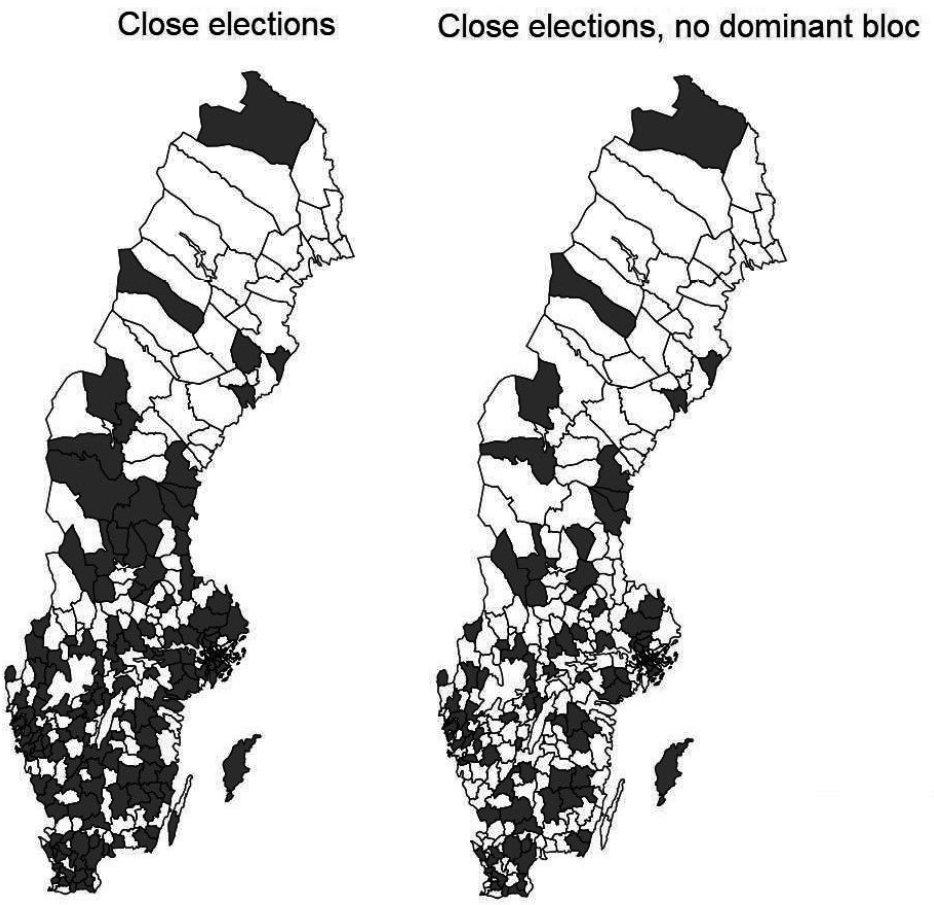
Note: Data is pooled cross-sections of three election years, 2002, 2006, and 2010.

Figure A9: Distribution of the treatment variable



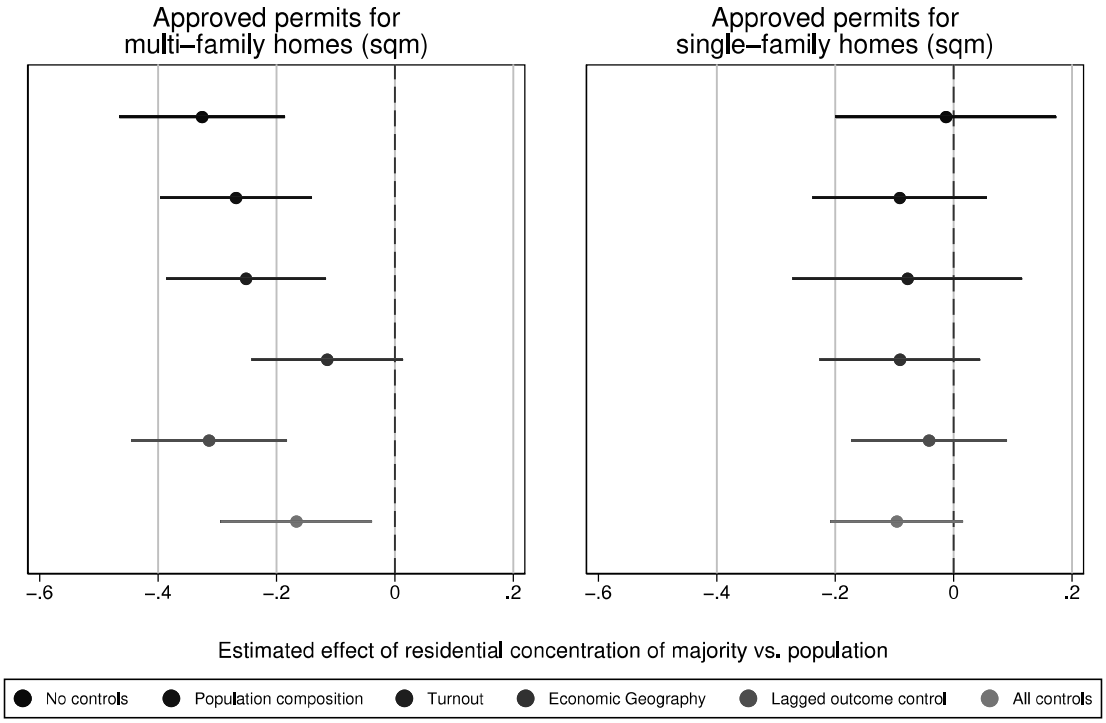
Note: Data is pooled cross-sections of three election years, 2002, 2006, and 2010.

Figure A10: Municipalities with competitive political environments in 2010.



Note: The map uses gray coloring to show the geographical placement of municipalities that belong to the two restricted data samples.

Figure A11: Placement of bads: Majority politicians' neighborhoods vs. neighborhoods of the rest of the population



Note: The figure show the correlation between the placement of building permits and the concentration of majority politicians' homes relative to the rest of the population. Data is pooled cross-sections of three election years, 2002, 2006, and 2010.