Choosing Voters ?
Partisan Sorting of Voters following Close Municipal Elections in France.

Abstract

Do local politics and policies influence residential migration ? Applying a regression discontinuity design to micro-level mobility census data in France, I examine whether the partisanship of the local government affects the propensity of individuals in different socioeconomic groups to move in or out. The results demonstrate that retired people and independent workers, who tend to support the Right in municipal elections, have a high propensity to move into the Right-controlled municipalities. The partisan impact was particularly substantial for recent retirees and residents of larger, newly-built homes. I also find that the Right mayors set local property tax lower than their marginally elected Left counterparts. The findings suggest that local politicians could influence residential sorting via policy measures, and hints at their potential incentives to increase their supporters in the area.

In France, the United Kingdom, and the United States, more than 10% of residents move homes each year. In the five years up to 2012, approximately 30% of French and 40% of Swedes moved (Eurostat 2017). People are moving, yet politics are mostly based on specific territories. This potential mismatch leads to important yet empirically under-explored questions about mobility and district-based politics. Do people move in response to local policies and politics? Does the movement of people affect the strategies and incentives of politicians?

Geographic mobility of capital and labor has long been regarded as a virtuous factor for local politics, especially in the literature of fiscal federalism. The threats to move out are believed to discipline underperforming local governments. As local governments have the incentive to attract and retain businesses and taxpayers, the competition would force them to run efficiently or to take the policies that suit the interest of the residents (e.g., Tiebout 1956; Brennan and Buchanan 1980; Weingast et al. 1995). According to these works, a proper provision of public goods and better public finance would attract people, and people's geographic relocation will punish the deviating governments. In line with these theories, Peterson (1981) and Ferreira and Gyourko (2009) claim that residential sorting can limit the scope for partisanship and restrict a politician's desire to pursue highly partisan policies.

However, if mayors and governors have specific supporting blocks, it could be possible that their partisan policies drive their opponents away (Hirschman 1993; Glaeser and Schleifer 2005) or attract their likely supporters. Voters may move in response to partisan or narrowly targeted policies, rather than to the quality of public goods or the state of public finance. Such partisan sorting is not in line with the efficiency-maximizing outcome of the fiscal federalism models and their predictions that local politics become nonpartisan.

Whereas the topics of domestic migration and local politics have attracted attention from various branches of social sciences, the relevant papers are overwhelmingly theoretical, and there have been markedly few empirical investigations on this topic. The difficulty in tracking individual-level migration patterns as well as the complexities of local politics

and policies could have been preventing rigorous observational analysis. Some political scientists investigated "political sorting" in which people are sorting into the communities of politically like-minded people or co-partisans, with mixed results (Cho, Gimpel, and Huo 2013; Mummolo and Nall 2016). However, the local governments and policies are mostly absent in these works. This paper attempts to connect the partisanship of the local government and voters' migration decisions.

In 2018, the French statistics agency made available the micro-level mobility census data of domestic migration in 2015, which contains more than 19 million individuals as a representative sample of the French population. I merged it with an original dataset of the municipal elections in 2008 and 2014, and the local tax rates in 2008, 2014, and 2018. I also used micro-level housing census data in 2016 and 2013 for pre-post analysis. When combined, these datasets enable an unprecedented level of analysis of domestic migration and local politics. I investigate if people move into or out of specific local jurisdictions in response to the partisanship of the local governments, using a regression discontinuity design based on close municipal elections.

The results suggest that the groups that predominantly supported the Right in the municipal elections - the retired - did move to the Right-controlled municipalities in 2015. The effect was particularly significant for early retirees when the election in the recipient municipality was close. Self-employed people, another supporting block of the Right, also showed a moderate tendency to move into the Right-controlled cities. The other politically neutral groups do not display any indication of sorting. Comparing the 2013 and 2016 housing census shows that there was no prior trend observed in 2013, but the same effect was evident in 2016. Municipal-level characteristics, such as share of the retired, are balanced across the cutoff point.

I also found that the narrowly elected mayors of the Left and the Right show a significant divergence in policy decisions in terms of how they increase or decrease local property tax, which can be an indicator of various other policy stances. Interestingly, the partisan impact on the tax rate is significant when the winning margin was small. I surmise that the partisanship of the newly elected government results in a meaningful difference

in policies, which altered the patterns of domestic migration, resulting in partisan sorting.

While it is not possible to know from the data whether the local policies were the primary reason for the observed relocation, I present some suggestive evidence that the tax and other housing-related policies do affect residential flows. The sorting was particularly significant among the retired people who moved into larger, newly built houses or apartments, but retired people in social housing did not show the same sorting pattern. I claim that the Right mayors attracted relatively wealthy, early retirees with the policy options they like, which will, in turn, improve their reelection prospects. There was no pre-election difference in the tax rate.

The theoretical implications of the findings are thus significant, as the political sorting literature would predict that people will sort into homogenous areas, and fiscal federalism claims that the sorting will force mayors to act in a nonpartisan manner. I observed the difference in migration patterns between politically similar areas with a different set of politicians. Rather than people naturally sorting into communities with the same political preferences, I present an explanation based on politicians and policy decisions, which will challenge the conventional understanding of the political sorting process.

Literature review

Public choice theorists have analyzed the topic of domestic migration and local policies for a long time. The literature depicts mobility in a positive light, as it encourages competition and disciplines local governments (Tiebout 1956 ; Brennan and Buchanan 1980 ; Weingast 2009). Tiebout's canonical model demonstrated that sorting of individuals across jurisdiction leads to an efficient provision of public goods. Under the numerous assumptions, including perfect mobility and an infinite number of local jurisdictions, people would move to local areas that fit their tastes for the public goods and local taxation. Competition among local authorities guarantees the efficient provision of public goods as in the market. Brennan and Buchanan (1980) extended the model and suggested that the local governments will be pressured to reduce tax and expenditure, as high tax,

high expenditure policies will lead to emigration of wealthy taxpayers, thereby acting in fiscally responsible ways. Brennan and Buchanan's arguments are instrumental in the concept of *Fiscal Federalism* (Weingast 1995). The Tiebout model was also influential for the famous *City Limits* theory (Peterson 1981), positing that the sorting will hinder subnational authorities from providing generous redistributive programs, and force them to take fiscally conservative policies.

Whether the Tiebout sorting needs politicians at all has been subject to debate (Epple and Zelenitz 1981 ; Henderson 1985), but politics play a minimal role in the model. By design, the model treats the preferences of the incumbent residents as homogenous within a community, and consumer-voters choose the jurisdictions whose residents' preferences are similar to their own. Consequently, the models derived from Tiebout's framework tend to feature no partisan politicians, and many of them predict that any local government would act similarly given the residents' preferences, which will be internally homogenous in the long run.

Empirical investigations of the Tiebout model are notably limited. The difficulty in obtaining comprehensive data of residential movement and local policies may have led to this paucity. As an exception, Epple, Romer, and Sieg (1999) exploited municipal boundaries and structurally estimated the voter preferences for public goods in the Boston metropolitan area, using income quantiles and housing characteristics. They found that people with stronger imputed preferences for public goods live in municipalities with better provision. Their findings support the Tiebout hypothesis, but they do not use the data of movement and assume that the current geographic distribution of households is the result of their past movement.

On the other hand, Young et al. (2013) use the data from the Internal Revenue Service and estimated the tax revenue loss by migration from each state in the US. They find that the state tax rate change does not necessarily affect the migration decisions of millionaires. Young's findings go against the Tiebout model, though the result is limited to the inter-state migration of extremely wealthy individuals. As implied in the methodologies and data choices by those empirical papers, the analysis of domestic migration and local

policies or politics has proved to be extremely challenging, and the Tiebout sorting remains a mostly theoretical endeavor. Nonetheless, the scarcity of empirical research is particularly remarkable given that the widely cited model of fiscal federalism is entirely based on the sorting of business and taxpayers in response to local policies (Weingast 2009).

In the literature on political behavior, there are a couple of behavioral studies on partisan geographic sorting. However, they primarily address the sorting of people into the areas with politically like-minded or co-partisan residents (Cho, Gimpel, and Hui 2013). Mummolo and Nall (2016) analyzed the migration decision of registered party members in the US and examined if they move to the area with their co-partisans. Their surveys reveal that while both Democrats and Republicans have the preferences to live close to their co-partisans, the priority of the political factor is very low in choosing the moving destination. Using voter registration data, the authors detect no empirical support for partisan sorting in the US. Their research supports the macro-level study of Glaeser and Ward (2006) that observes the resilience or increase of politically mixed districts in the United States. Nonetheless, as in the Tiebout sorting, local politics and policies are mostly absent from these works on partisan sorting.

The literature on sojourners and refugees can be relevant to this research in terms of people's movement and local politics. Gaikwad and Nellis (2018) run a nation-wide survey in India and found the hostility of long-time urban dwellers toward the newcomers in the context of local politics. Similarly, Bracco et al. (2017) find that refugees coming to Italy tried to avoid municipalities controlled by the far-right parties. They suggest that migration and local politics do interact. Unlike this paper, however, these authors deal with politically and economically powerless groups that the electorate dislike, and not the migration of voters. How voters migrate in response to local politics and policies, thereby changing the composition of the electorate, remains an open question.

While there are a limited number of works in residential sorting, even fewer empirical papers deal with how the presence of residential sorting could shape politicians' incentives. Ferreira and Gyourko (2009) found no evidence of partisan differences in US local politics

and attributed the results to the Tiebout sorting. The authors cite Peterson's (1981) argument that inter-jurisdictional competitions prevent politicians from taking highly partisan policies, as residents can move to another area. According to their interpretations, the presence of residential sorting would lead to effectively non-partisan local authorities, and politicians would play a minimal role in shaping politics.

Recent works in political science revealed that local politicians do affect the composition of voters by exploiting the timing of elections (Anzia 2013), manipulating registration and micro-targeting different groups (Hersh 2015), or in extreme cases, illegally bringing in the voters from other districts on the election day (Hidalgo and Nichter 2016). While it is also widely known that partisan politicians do lead to different policy choices (de Benedictis-Kessner and Warshaw 2016), the literature does not pay much attention to how politicians could change the compositions of residents via policy measures.

The theoretical paper by Glaeser and Schleifer (2005) presents formal models of racial sorting in which politicians use scare tactics, citing racial politics in Boston in the 19th century. A classic work of Hirschman (1993) also suggests that the exile of intellectuals in the former communist countries in Eastern Europe strengthened the rule of the Communist forces. He indicates that the governments did not stop them leave knowing the positive consequences of their exit for their stable rule. It is yet to be seen whether these theories are applicable in modern liberal democracies.

Facing the same challenge that public choice theorists faced, empirical investigations on the emigration hypothesis are sparse as well. Anelli and Peri (2017) document how emigration from Italian municipalities following the financial crisis resulted in a lack of local political change and more corruption in high emigration areas. However, their analysis relies on the total number of emigration from each municipality, and not the composition of emigrants. Few empirical works dealt with partisan implication of internal migration.

In summary, in the literature of partisan sorting, politicians' incentives and actions are absent. The Tiebout sorting and fiscal federalism look at residents' preferences for tax and public goods, but the local governments should act in non-partisan manner. Glaeser

and Schleifer, as well as Hirschman, introduced politicians to the picture, but they both analyze long-term authoritarian policies to expel voters. Thus, there is a theoretical gap in the literature in that little is known about the systematic sorting process linking politicians' actions and voters' responses in modern democracies. Besides, all the three relevant currents of the literature are rich in theories but empirical investigations are limited.

Argument and hypothesis

The core argument of this paper is simple ; I predict that the policies and politics can cause residential sorting, mainly by attracting voters who are choosing the destinations from various locations. If certain demographic groups tend to support specific parties, I expect those groups to be more likely to move into the areas ruled by the parties they tend to support.

By using a regression discontinuity design, I try to disentangle local government partisanship from local political culture. Comparing politically mixed areas with similar aggregate political preferences, I assess if the partisanship of the local governments makes a difference in voter sorting. These effects of local politics, independent of residents' political inclinations, are not fully dealt with in the existent theoretical works. As emphasized before, the public choice works deriving from the Tiebout model tend to emphasize that sorting suppress partisan divergence rather than accentuate it, as sorting would constrain fiscal freedom (Brennan and Buchanan 1980). [1]

In most advanced countries, subnational politicians and mayors have a significant mandate in local tax, housing, zoning, schooling, policing, and recreation. These policies may well affect the attractiveness and affordability of the community for specific demographic groups, thereby affecting the composition of residents in the future.

Unlike Glaeser and Schleifer, I expect that the pull effect (attracting supporters) is more significant than the push effect (expelling the opponents). Admittedly, policy

1. What Tiebout himself would have said about the role of local politicians has been a subject of a long debate (Epple and Zelenitz 1981 ; Henderson 1985) and its interpretation is beyond the scope of this paper.

variables would explain a small fraction of people's decisions to move (Mummolo and Nall 2016). Dominant reasons for movement are career opportunities, having children, living with someone else, retirement options, or the availability and price of dwellings for rent or purchase (Eurostat 2017). However, even if people move due to reasons unrelated to policies, people can choose the destination community with policies they favor, among the set of municipalities from which they can have access to the workplace, markets, schools, or those of their partners. When people need to move due to job changes, for example, they would still consider local property tax and public services when purchasing houses.

Moreover, local policies often affect the factors people consider when they move. For example, whereas few people would move to certain places because of the zoning regulations, such regulations affect the affordability and the value of dwellings as well as the atmosphere of the neighborhood, which would, in turn, affect housing choice. Local policies may not determine whether or not people move, but it can profoundly shape the destination selection.

As for the profile of those who sort, people without a job concern would have greater freedom to choose their lodging, as they do not have to live nearby offices or schools. As those people have fewer constraints in choosing the destination when they move, the relative importance of policy-related aspects, such as tax and home value, may become more pronounced. Indeed, one of the vital assumptions in the Tiebout model was consumers having dividend income and no need to commute. Those who just retired may be a primary example. Increased numbers of retired people migrate (Eurostat 2017), and given their relative size and higher tendency to vote or devote time to political activities, their choice of destination may affect the political balance in the recipient area. It is particularly common to migrate just after retirement.

Background of the 2014 municipal elections in France

Its institutional and political characteristics make France a great place to test the hypotheses. France is divided into more than 30,000 municipalities (*communes*), and this study uses 7,404 municipalities with a population larger than 1,000, where the municipal election results are available via the Ministry of Interior. Municipal elections are held simultaneously across France and contested in a party-list plurality system in two rounds. The party-list led by the winning mayor is guaranteed to have the majority in the city council, so the mayor's party has full control over local policies. The mayoral term in France is six years without formal term limits. The mandates of municipal councils and mayors are uniform regardless of the size of communes.

France has a relatively centralized political system, and municipalities would be the appropriate units of analysis for this test. In the international standard, French municipal authorities have important roles in providing local services, both in terms of mandate and budget allocation (World Bank and United Cities and Local Governments 2008). Municipal governments oversee infrastructure, social housing, education, security, and development, among others. The French system grants local governments important freedom regarding public employment, public procurement, setting fees for public properties, and adding top-ups to various nationally funded welfare payments. Before 2018, French municipalities charge various taxes including local income tax (*taxe d'habitation*), and local property tax (*taxe foncière*), as well as business tax (*taxe d'entreprises*). Municipal councils can set the rate of various local taxes freely within the bundle set by the national government (Djaïz and Martin 2016). Compared to the municipal authorities, mid-tier regional and departmental governments in France played minor roles, at least until the reform of regional governments in 2016. [2]

Before the 2017 presidential election, local politics in France were characterized by a two-party system. The Right block consisted of the *Union pour un Mouvement Populaire* (UMP), the *Union des Démocrates et Indépendants* (UDI) and various small center-right

2. Inter-municipal bodies called *établissement public de coopération intercommunale* (EPCI) plays a meaningful role in urban issues such as planning, infrastructure, and public housing. Nevertheless, most EPCI councilors concurrently hold the seat in municipal councils as well.

parties and candidates. The Left block included the *Parti Socialiste* (PS), the *Europe Ecologie Les Verts* (EELV), *Parti Radical de Gauche* (PRG) and their allies. These two blocks contested in most of the second round. The National Front, a far-right party, did not ally with any major party and gained only a handful of municipalities in 2014. Several small far-left parties gained municipalities with electoral pacts with the Left Block, but the number was limited. The winner-takes-it-all and two-round first-past-the-post system lead to the dominance of the Left Block and the Right Block in the second rounds, either by eliminating fringe parties or by incorporating smaller parties into the joint list. The 2014 municipal elections were salient with a respectable turnout of 63.55%, and both camps ran large-scale nationwide campaigns.

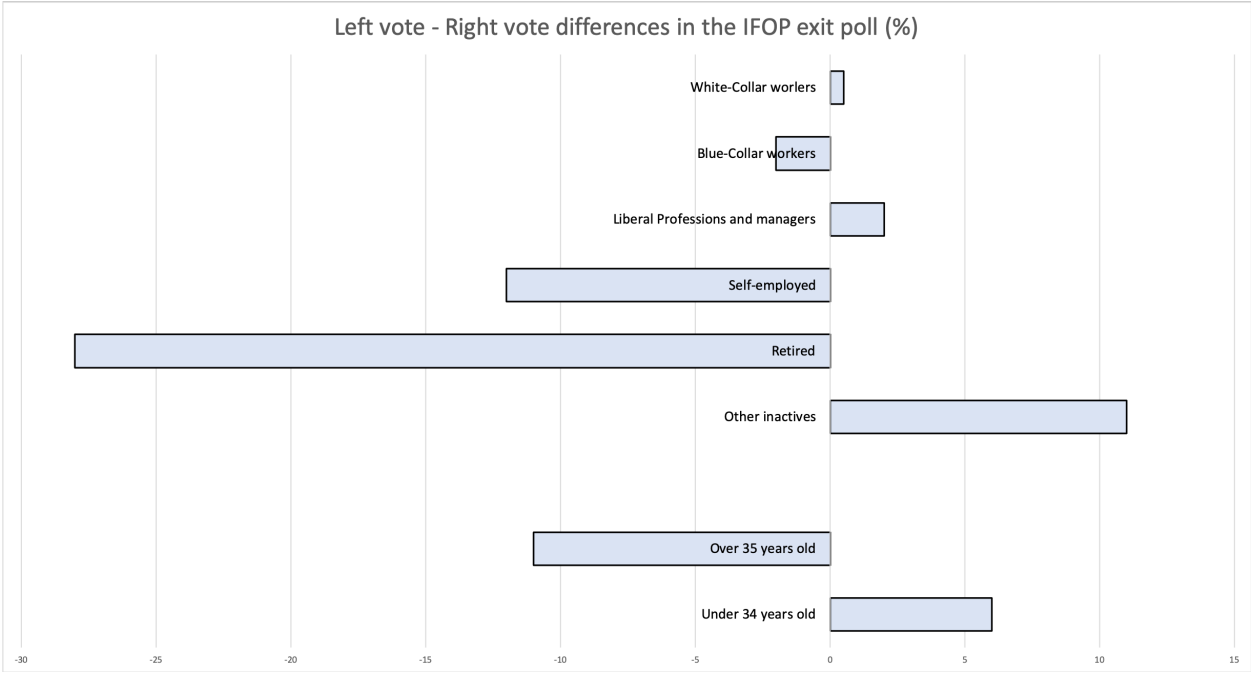


FIGURE 1: Left-Right voting gap (%) in the 2014 municipal elections : IFOP exit poll

For the analysis of residential sorting, it is crucial to figure out who is supporting which party. However, fine-grained opinion data on French local elections are not available. It is difficult to use the opinion data from presidential elections, as less organized extreme and centrist parties are more competitive in the nationwide contests, and the issues are radically different. Instead of calculating each individual's propensity of supporting the Right or the Left in a local ballot, I use an approximation by demographic groups' political inclinations. On the day of the first round of the 2014 municipal elections,

the French Institute of Public Opinion (IFOP : *Institut francais d'opinion publique*) conducted a detailed exit poll. It was a nationwide survey and not disaggregated by municipalities but enables us to discern which demographic groups supported which party in these particular municipal elections. Socioeconomic categories included the retired, self-employed, blue-collar and white-collar workers, and other inactive groups. Figure 1 demonstrates that the retired people show particularly high support for the Right, the gap with the Left being nearly 30%. To a lesser extent, self-employed people also mildly support the Right, whereas the "other inactives" - including homemakers - tended to support the Left modestly. Among the voters in other categories, the Left and the Right closely matched. In the figure in the appendix, 50% of the retired answered in the exit poll that local tax was the vote-deciding issue, compared to 26% among the other inactive people. Education, public housing, and culture were not crucial for the retired, as each category only got 4%.

Given the IFOP opinion poll and the argument, the hypothesis is that retired people are significantly more likely to move to the Right-controlled municipalities than the others. To a lesser extent, the same should be the case for self-employed. There should not be a substantial effect on other demographic groups, such as blue-collar workers and white-collar workers. Tax rates could be the best policy tools to attract the retired, and I expect the Right mayors to set lower tax rates and see a higher inflow of the retired.

Data

In the summer of 2018, the National Institute of Statistics and Economic Studies (*Institut national de la statistique et des études économiques*), abbreviated INSEE, made available the detailed data of residential mobility from the population census in 2015. The dataset contains individual-level data about whether they relocated in the past year, the municipality (*commune*) of their current residence, the municipality they lived a year before[3], as well as their socioeconomic characteristics including age, sex, occupation, labor market status, homeownership, and household structure. The dataset, containing

3. Some of those who moved did not report the municipality they lived before. Consequently, compared to the analysis of moving-in, the analysis of moving-out has fewer units.

more than 19 million people who were subject to the census, enables us to identify what kind of people moved from which commune to which one. [4]

The raw data of municipal elections in 2001, 2008, and 2014 are retrieved from the Ministry of Interior. I categorized each mayoral list by party affiliations and created the data set of the vote share and election victory of the Left block, the Right block, and others. [5] Besides, from each department in France, I collected municipal and departmental tax rates in 2008, 2014, and 2018, and housing occupancy data from the 2016 housing census. All the other municipality level data are drawn from INSEE.

With the micro-data of domestic migrants, I match the migration destinations and origins of each individual with the local election results in 2014. I subsetted the sample to different socioeconomic groups, such as the retired and white-collar workers, then analyzed the migration pattern with the political orientations of the groups they belong to, referring to the IFOP exit poll.

It is important to note that, unlike the United States and other countries, the same set of coalitions are competing for mayoral offices across the country simultaneously ; they are internally coherent and externally contrasting. At least regarding retired people, there was a relatively good correspondence between their socioeconomic status and which party they are likely to support at the local level.

Regression Discontinuity Design

In this paper, the municipalities with the Left mayors are in the treatment group, and those with the Right mayors are in the control group. I analyze how people moved from or into the municipal area within one year following the 2014 municipal elections. To test my hypotheses, however, it is imperative to detach the effects of local politics and policies from those of local socio-political characteristics. Since the Left mayors are not randomly assigned, simple correlational analyses would result in a significant selection bias. As argued by Mummolo and Nall (2017), people may want to live with likeminded people,

4. I excluded non-French citizens and children in compulsory education from the sample. I also removed units in the French overseas departments.

5. All the party-lists are required by law to declare their affiliations to any of the national level party or coalition. Most independent candidates need to declare whether they belong to the Left or the Right.

irrespective of the government partisanship. Unobserved variables may simultaneously affect people's decision to move in or out, as well as to the election of mayors with particular political affiliations. For example, religiously conservative municipalities may elect the Right mayor and attract religious people, who happen to support the Right.

The regression discontinuity design (RDD) exploits the discontinuity in the treatment assignment to solve such omitted variable problems. I use the electoral margin of the Left candidate against the Right candidate as a forcing variable. It is assumed that other relevant variables that affect the movement of people are at least continuous around the cut-off line on the Left-Right vote share. However, the marginal differences in vote share would result in contrasting sets of governments and policies, as the winning party-list obtains mayorship and the majority in the municipal council. The winner-takes-all system of the French municipal elections ensures that the discontinuity is sharp around the cut-point. In the municipalities where the Right narrowly defeated the Left, the Right-leaning people are unlikely to move in because of like-minded people or conservative local culture, but they may still favor the Right government's policy, which will last for at least six years. Admittedly, the estimate is a Local Average Treatment Effect rather than average treatment effect.

Therefore, treatment is having a Left mayor and Left-controlled councils, despite a similar level of support for the Right parties. I only used the subset of municipalities where they effectively had a two-way race between the Right and the Left. I omitted the municipalities in which centrist, ecologist, regionalist, far-left, and far-right candidates won or came to the second place. As each of those small fringe parties gained only a handful of municipalities, they could not be incorporated into the RDD analysis for the lack of statistical power. The 2014 Election data was available for 10,034 municipalities with a population over 1,000, and this condition leaves 7,404 municipalities. However, fringe parties tend to win in a very small municipalities, and the remaining sample still covers 84% of the original sample in terms of population. Therefore, most municipalities, especially relatively large ones, do not drop in the omission process.

The framework of RDD is simple. Local linear regressions combine choosing a suitable

bandwidth with a linear control function and are the primary method in this paper. The bandwidths for the main results are drawn from the *CCT bandwidth* (Calonico, Cattaneo, and Titiunik 2014) and reports robust nonparametric confidence intervals. In the online appendix, I present the results with conventional *IK bandwidth* (Imbens and Kalyanaraman 2009), as well as arbitrary bandwidth of 2.5, 5, 10, 25, 50, and 100%.

The unit of analysis is individual, and the primary dependent variable is the propensity of a person to move in or out. For example, for the case of moving out, the value for each individual takes one if he or she moved to a different municipality this year, zero if they stayed. For moving in, the value takes one if he or she was in a different municipality in the previous year, zero otherwise [6]. Essentially, this corresponds to the probability that any random person in the commune in 2015 is a newcomer, or any random person in the commune in 2014 are a leaver. Standard errors are clustered at the commune (municipality) level, as it is the unit of treatment assignment. I subsetted the sample into various demographic groups and analyzed them separately. Within a bandwidth, a triangular kernel is applied to give more weight to the units that are close to the cutoff point. For each subsample, I apply the following local linear regression to both sides of the cutoff line within the bandwidth.

$$P[Move]_{i,m} = \alpha + \beta I(\text{Left\_Mayor}_m) + f(\text{Left-Right\_Margin}_m) + \epsilon_i$$

$$s.t. \quad \text{Left-Right\_Margin} \in (-\hat{h}, \hat{h})$$

where $P[Move]_{i,m}$ is the propensity of an individual i in a certain demographic group to move into or out from municipality m. $\hat{h}$ is a neighborhood around the cut-point ; Having a Left Mayor after 2014 in the municipality of origin or destination is the treatment, Left-Right electoral margin in the 2014 municipal elections is the forcing variable, and f() is some continuous function for covariates and unobservables.

France had municipal elections in March 2014, while the mobility census was conducted in 2015. The INSEE conducted the 2015 mobility census throughout the calendar year 2015, and the surveyors asked the respondents if they lived in a different municipality a

6. Movers are not double-counted ; i.e., those who left the municipality is not in the sample for the analysis of moved in, and those who moved into the municipality is not in the sample for the analysis moving out.

year before. Among those who are surveyed before March 2015, some may have moved before the municipal elections in March 2014, but it should not concern the overwhelming majority of the cases. The date of the survey for each unit is not available in the dataset. [7]

As placebo tests and robustness checks, I applied the same regression discontinuity design to the housing census data in 2013 and 2016. The housing census data have only a limited number of demographic variables of the head of households, but they contain the year they moved into their current dwellings. Thus, I exploit the 2013 housing census data for the primary placebo test with the 2014 municipal election data, as the 2014 elections cannot affect the residents' migration decisions in 2013. The placebo can eliminate the effect of unobserved variables in the municipalities that had close elections in 2014. The analysis of the migration data in the 2016 housing census should work as robustness checks of the main results.

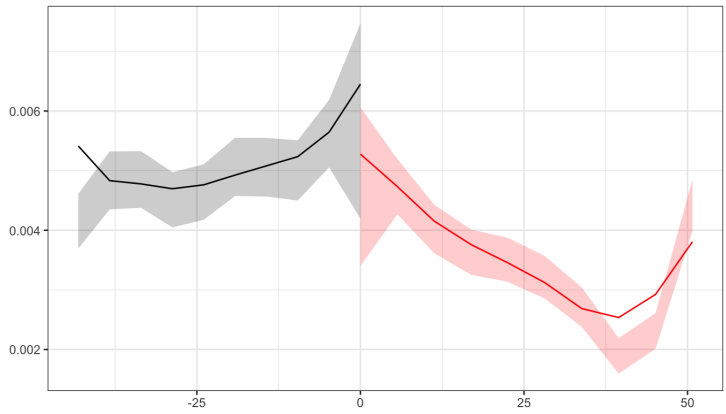


FIGURE 2: McCrary density test (following Cattaneo et al 2019) for the 2014 municipal elections

Before the RD analysis, I conducted a McCrary test to check if there is any irregularity at the cut-point regarding the number of municipalities with close elections. Figure 2 shows no statistically significant discontinuity around the cut point. The upward slope toward the center suggests that numerous municipalities had close elections. While the Right did perform better than the Left in the 2014 municipal elections, neither of the two major camps had any systematic advantage in close elections.

7. The 2017 mobility data is also available. However, the presidential election in 2017 completely changed the French party system and there are some political realignment of the incumbent mayors in the run-up to the event. 2015 was largely unaffected.

Main Results

Table 1 presents the RD results of the propensity of different socio-economic groups to move into the municipality. Column 1 shows that a retired person, who is likely to support the Right, has a lower propensity to move into the Left-controlled municipalities. This result means that the retired prefer the cities ruled by the Right as their migration destination. The observed partisan effect of 0.225 percentage points is non-negligible, as only 2.79 percent of retired people move each year. Columns 2 and 3 contrasts the results for the two groups of self-employed people, who tend to support the Right. Whereas the employers do not appear to sort into the Right-controlled municipalities, the independent workers without employees do show a higher likelihood of moving into the Right-controlled cities, by 0.333 percentage points. White-collar workers or blue-collar workers, who were more or less evenly split into the Left and Right supporters in the IFOP exit poll, do not show the partisan sorting. Column 6 reports the result for homemakers, who are weakly inclined to support the Left, and they do not appear to sort either.

The results for the retired people and independent workers are perfectly in line with the expectations. They tend to support the Right and are more likely to move into the cities governed by the Right. The null effect for white-collar workers and blue-collar workers are also according to the hypothesis. On the other hand, employers and homemakers did not show the expected partisan effect. Whereas there is no ground to assume that independent workers are more likely to support the Right than employers do, those with employees may face more constraints in choosing the destinations. Homemakers would also face similar constraints depending on the preferences of other members of the household. Coupled with the fact that the partisan bias of the retired in the IFOP exit poll was far more sizable compared to the other groups, the findings in Table 1 are broadly consistent with the hypotheses.

Table 2 reports the RD estimates of the propensity of an individual to move out. No demographic groups show statistically significant partisan bias, and the results appear random. Unlike the findings for moving in, the partisanship of mayors does not appear to affect who is likely to leave the cities. It suggests that pull factors could be more

prominent than push factors.

Table 3 outlines the RD results for retired people, subsetted by age groups. In Columns 1 and 2, retired people aged between 65 and 79, as well as early retirees younger than 64, show a higher propensity to move into the Right municipality compared to the generic results for the retired. The early retirees recorded an unusually large effect of 0.627 percentage points. On the other hand, Column 3 shows that the retired people over 80 do not show partisan sorting. Similar to the case of self-employed workers with employees, the low mobility of the people over 80 can be driving the lack of partisan impact.

Table 4 describes the RD results for independent workers without employees, divided by age groups. Contrary to the retired, older independent workers over 55 show very high propensity to move into the Right-controlled municipalities in Column 3, while their younger counterparts below 39 do not show any sorting in Column 2. This gap could be due to generational partisan differences observed in the IFOP poll. In any age group of retired people and independent workers, the partisanship of the mayors did not affect the propensity to move out.

The graphs in Figure 3 confirm the results in Tables 3 and 4, with different cut-off points of the age. Early retirees and older self-employed workers are particularly likely to move into the Right-controlled municipalities. Interestingly, Figures 3A and 3G suggest that the sorting effect among these groups is evident only when the election results are close. If narrowly elected mayors are observing more inflows of likely supporters, it is in line with the hypothesis of this paper. The graphs for politically neutral groups are presented in the Appendix.

The findings indicate the presence of partisan sorting when mayors narrowly won the city. If early retirees and independent workers who are likely to retire soon migrate to the Right-controlled municipalities, they may constitute lasting supporting blocks for those marginally elected Right mayors.

Table 1: Main RD Results : Move-in

Dependent variable :	Moved into the Municipality in 2015					
Treatment variable :	Left mayor 2014-2020					
	(1)	(2)	(3)	(4)	(5)	(6)
Retired person	-0.00225					
	(0.00077)					
Self-employed with employees		-0.00023				
		(0.00120)				
Self-employed without employees			-0.00333			
			(0.00108)			
Employee : White-collar workers				0.00023		
				(0.00093)		
Employee : Blue-collar workers					-0.00095	
					(0.00121)	
Homemaker						0.00063
						(0.00086)
Robust Clustered CI (95%) : lower bound	-0.00432	-0.00241	-0.00741	-0.00163	-0.00461	-0.00302
Robust Clustered CI (95%) : upper bound	-0.00096	0.00313	-0.00261	0.00231	0.00054	0.00134
CCT Bandwidth (For Estimate : Unit : %)	7.151	14.376	19.111	6.714	8.946	17.107
CCT Bandwidth (For Bias Correction : Unit :%)	13.664	26.276	36.352	18.651	21.554	27.756
Effective Number of Control	228931	31909	59314	137625	107181	57764
Effective Number of Treatment	182003	24572	45413	107551	77492	37824
Total number of Observation	2742022	217157	307335	1522239	964228	300175

Table 2: Main RD Results : Move-out

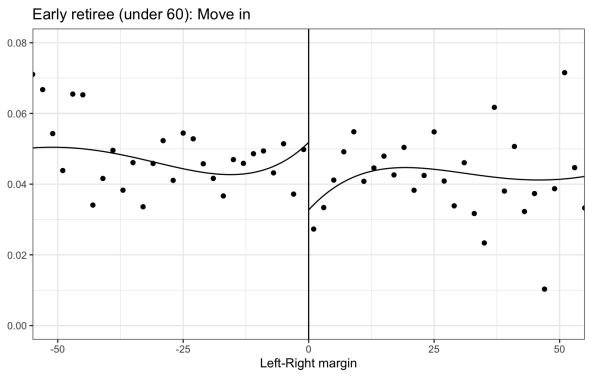
Dependent variable :	Moved out from Municipality in 2015					
Treatment variable :	Left mayor 2014-2020					
	(1)	(2)	(3)	(4)	(5)	(6)
Retired person	-0.00019					
	(0.00406)					
Self-employed with employees		-0.00115				
		(0.01081)				
Self-employed without employees			-0.00507			
			(0.01525)			
Employee : White-collar workers				0.00177		
				(0.01507)		
Employee : Blue-collar workers					-0.00319	
					(0.01211)	
Homemaker						0.00337
						(0.00944)
Robust Clustered CI (95%) : lower bound	-0.01005	-0.02859	-0.03117	-0.03548	-0.02723	-0.01935
Robust Clustered CI (95%) : upper bound	0.00863	0.02219	0.03995	0.03562	0.02974	0.02361
CCT Bandwidth (Estimate)	29.968	25.232	25.098	23.792	26.476	38.397
CCT Bandwidth (Bias Correction)	48.335	37.811	41.641	37.623	41.620	63.752
Effective Number of Control	782542	50019	71012	364186	246944	169820
Effective Number of Treatment	537492	34959	54006	280745	179262	112391
Total number of Observation	2720169	213867	300987	1489533	943585	430225

TABLE 3: RD Results : Propensity of a retired person to move in / out

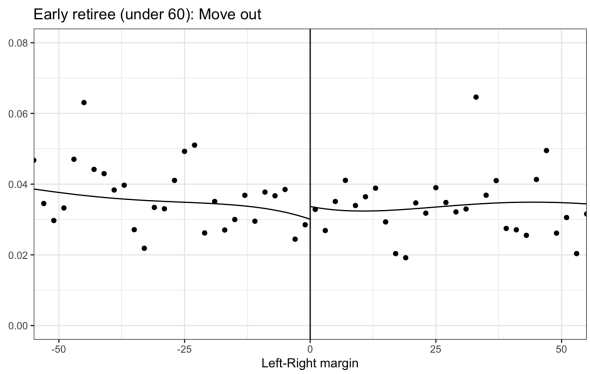
Treatment variable :	Left mayor 2014-2020					
Dependent variable :	Moved into the Municipality in 2015			Moved out from the Municipality in 2015		
	(1)	(2)	(3)	(4)	(5)	(6)
Retired : Aged 65 - 79	-0.00462			0.00005		
	(0.00078)			(0.00333)		
Retired : under 64		-0.00627			-0.00159	
		(0.00103)			(0.00598)	
Retired : over 80			-0.00009			-0.00160
			(0.00103)			(0.00557)
Robust Clustered CI (95%) : lower bound	-0.00710	-0.00885	-0.00279	-0.00781	-0.01634	-0.01577
Robust Clustered CI (95%) : upper bound	-0.00355	-0.00468	0.00218	0.00768	0.01127	0.00984
CCT Bandwidth (Estimate)	9.106	4.776	15.113	28.926	25.153	22.059
CCT Bandwidth (Bias Correction)	14.571	15.300	23.582	45.561	41.421	35.437
Effective Number of Control	165161	34479	124320	402249	134229	128963
Effective Number of Treatment	111695	24579	88416	274280	96799	84116
Total Number of Observation	1459923	557674	724435	1450025	552434	521359

TABLE 4: RD Results : Propensity of a self-employed person without employees to move in / out

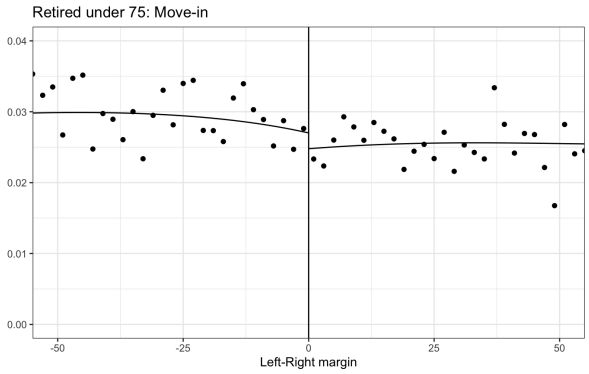
Treatment variable :	Left mayor 2014-2020					
Dependent variable :	Moved into the Municipality in 2015			Moved out from the Municipality in 2015		
	(1)	(2)	(3)	(4)	(5)	(6)
Independent : Aged 40-54	-0.00326			0.00130		
	(0.00148)			(0.00333)		
Independent : under 39		0.00158			0.00956	
		(0.00151)			(0.02896)	
Independent : over 55			-0.00760			0.00658
			(0.00144)			(0.00641)
Robust Clustered CI (95%) : lower bound	-0.00825	-0.00575	-0.01169	-0.02038	-0.05465	-0.00931
Robust Clustered CI (95%) : upper bound	-0.00097	0.00172	-0.00529	0.01984	0.07730	0.02265
Bandwidth (Estimate)	20.000	22.050	17.342	28.180	22.500	27.598
Bandwidth (Bias Correction)	30.180	31.853	31.318	43.389	41.262	36.774
Effective Number of Control	24059	25799	12980	30759	25240	18578
Effective Number of Treatment	17070	20860	8680	21681	21346	12605
Total Number of Observation	121979	112276	73080	120261	108269	72457



A. Early Retiree : Move-in

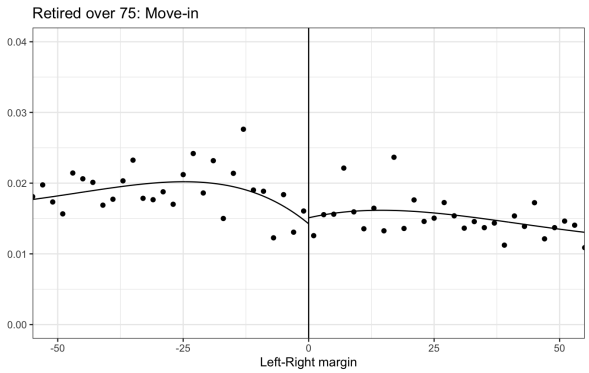


B. Early Retiree : Move-out

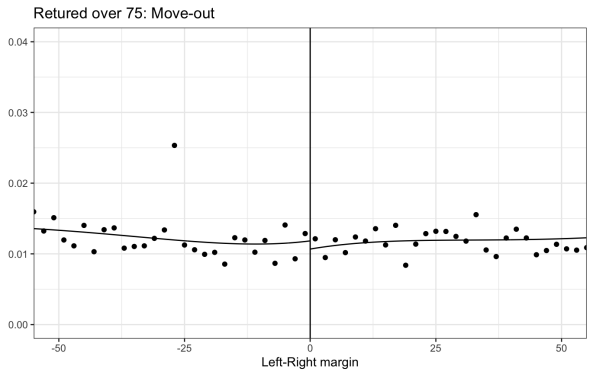


C. Retiree under 75 : Move-in

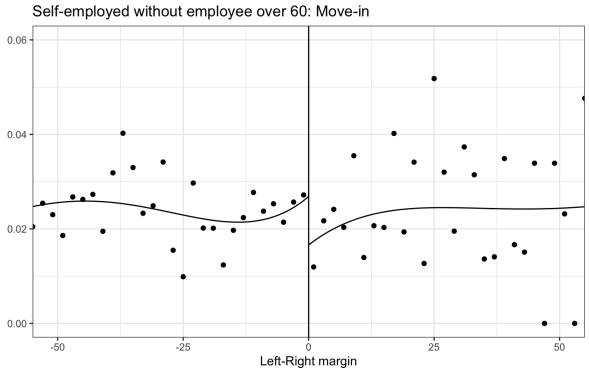
D. Retiree under 75 : Move-out



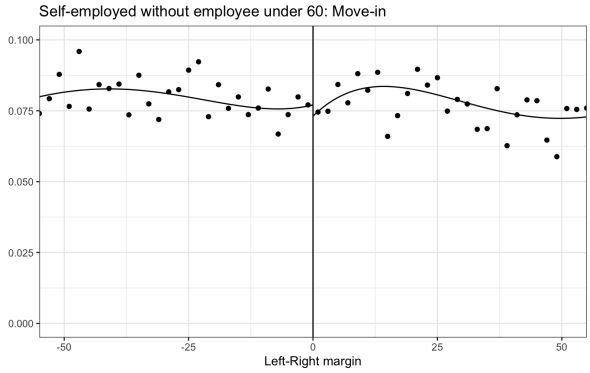
E. Late Retiree : Move-in



F. Late Retiree : Move-out



G. Self-Employed Over 60 : Move-in



H. Self-Employed Under 60 : Move-in

FIGURE 3: RD graphs for the propensity of a person to move in or out in 2015

Pre-post tests with housing census and Robustness Checks

With the relationship between partisanship and location decisions of retired voters established, I seek to explore a range of issues related to robustness. I check whether the municipal election results in year t are correlated with the migration decisions of retired people in the year before the election ; t-1. I applied the same regression discontinuity to housing census data in 2016 and 2016. This time, the dependent variable takes 1 if a retired head of household moved into a new dwelling in the municipality, 0 otherwise. Due to the nature of the data, I do not observe the socioeconomic groups of household members, and which commune the household previously resided.

Columns 1 to 3 in Table 5 present the robustness checks using the 2016 housing survey. While the magnitude of the effects is smaller than that of the main results, it follows the established pattern that the younger retirees tend to move into new dwellings in the Right controlled municipalities. Columns 4 to 6 show the placebo tests with the 2013 housing survey. They show no significant partisan effects, among the retired in general or early retirees in particular. Coupled together, they support that the observed partisan effect was due to the changes after the 2014 municipal elections. Thus, the findings strongly suggest that the mayors elected narrowly in the 2014 municipal elections attract the likely supporters in 2015.

All the main results in the previous section use CCT bandwidth with nonparametric local linear regressions. Every model reports robust nonparametric confidence intervals, and the standard errors are clustered at the municipality level. The different RD estimates with IK bandwidth and arbitrary bandwidths of 2.5, 5, 10, 25, 50, and 100% are presented in the online appendix. The results with IK bandwidth are consistent with the main results in that the partisan effects are observed for retirees' propensity to move in, but not to move out. No significant results for late retirees are observed either. The partisan impact was consistently negative with different arbitrary bandwidth as well. Balance tests of the municipal level statistics are presented in the Appendix, and there are no meaningful differences in municipal covariates among the cites with small electoral margins, including the share of different socioeconomic groups, or the share of newcomers.

TABLE 5: Robustness Checks and Placebo tests ; RD results with Housing census data

Treatment variable :	Left mayor 2014-2020					
Dependent variable :	Moved into a new dwelling in 2015			Moved into a new dwelling in 2013		
Data :	2016 Housing census			2013 Housing census		
	(1)	(2)	(3)	(4)	(5)	(6)
Head of household :						
Retired	-0.00135			0.00085		
	(0.00064)			(0.00063)		
Retired : Aged 65-79		-0.00177			-0.00074	
		(0.00062)			(0.0050)	
Retired : Under 64			-0.00593			0.00125
			(0.00097)			(0.00118)
Robust Clustered CI (95%) : lower bound	-0.00293	-0.00306	-0.00907	-0.00026	-0.00182	-0.00073
Robust Clustered CI (95%) : upper bound	0.00012	-0.00025	-0.00471	0.00251	0.00049	0.00439
Bandwidth (Estimate)	14.911	16.550	13.986	17.786	30.475	14.059
Bandwidth (Bias Correction)	24.114	24.384	29.011	34.476	46.182	29.892
Effective Number of Control	466979	286695	60875	607360	471642	104400
Effective Number of Treatment	358144	210673	48215	429447	339616	85017
Total Number of Observation	3675034	2064717	509280	3959637	2008569	916457

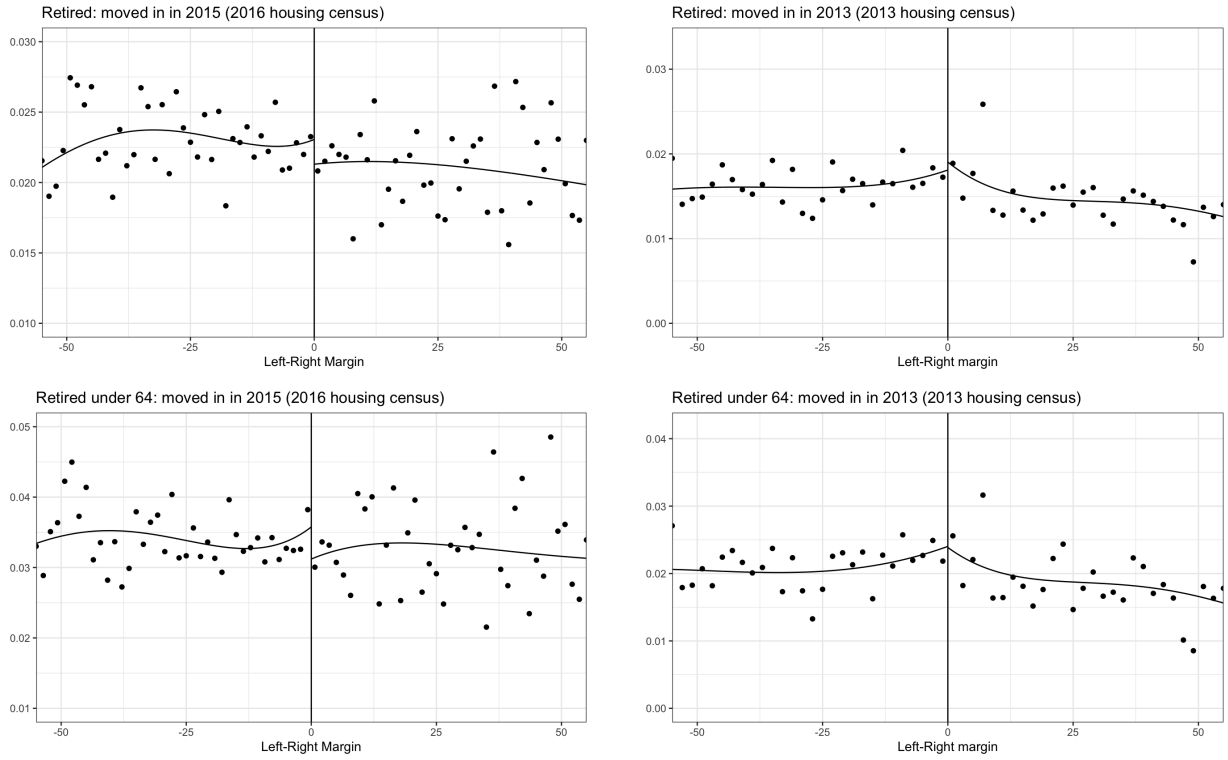


FIGURE 4: Robustness Checks and Placebo Tests ; with the 2016 and 2013 Housing Census Data

Analyses of local policies

The main results demonstrate that retired people and independent workers, who tend to support the Right, are moving to municipalities with narrowly elected Right mayors. It is imperative to find the corresponding differences in local policies if the actions of mayors are generating the observed sorting. Using the same RD design, I analyze the two local policy areas that could directly affect residential sorting : property tax, and social housing construction.

According to the IFOP exit poll, 50 percent of the retired people based their voting decision on local tax issues, so the tax rate could be one of the key factors if local policies are driving the sorting process. [8] From each department in mainland France, I gathered the data of various municipal tax rates in 2008, 2014, and 2018.

French municipalities have two major sources of tax revenue ; residential income tax (*Taxe d'habitation*), and property tax (*Taxe foncière*). [9] Each municipality can decide the rate for these taxes, but various exemptions are uniformly applicable across France. The residential income tax is a flat-rate tax on residents' income, and those households whose income is smaller than a certain level enjoy a 65% deduction. [10] Those taxes have communal tax rates and inter-communal tax rates, and the municipal authorities have an important say in setting inter-communal rates.

I expect that lowering property tax may be more effective than reducing income tax if the mayor wishes to attract retired people. Before 2016, people over 60 in France benefited from generous income-based exemption schemes for the residential income tax. None of these nationwide age-based exemptions applied to the property tax before October

8. I do not claim that tax policy is the main driving force, but tax policy is may reflect the broad policy stance of the municipal government.

9. There are two different rates : property tax on land (*Taxe foncière sur les propriétés bâties*) and property tax on building (*Taxe foncière sur les propriétés non bâties*). The property tax on buildings is applied to houses, apartments, industrial and commercial buildings, and other immobile constructions. The property tax on land applies to yards, parking spaces, and other unbuilt spaces dependent on buildings, as well as unused land in general. I used the linear average of the two rates, but the use of different aggregation methods did not substantially change the results.

10. The threshold depends on the size of the household, but it is only slightly smaller than the median income. In 2019, the threshold for a household of a married couple without children was 43,688 Euros. The latest available figure for the median income for two-person households is 45,700 Euros in 2016.

2016 (Djaïz and Martin 2016). [11] Though the subsequent reforms curtailed some of these exemptions, retired people with substantial savings and relatively modest income level may find lower property tax more appealing than lower income tax. For those retired people who are thinking of buying a house, the cumulative cost of the property taxes could be non-negligible. [12]

I apply the same regression discontinuity design as in the main analysis, using the changes in tax rates from 2014 to 2018 as outcome variables. The running variable is the Left-Right margin in the 2014 municipal elections. Unlike the main analysis, however, the unit of analysis for this section is a municipality, not an individual. The standard errors are clustered at the department level in all the models.

Table 6 provides the results. Column 1 reports that the Left mayors are weakly associated with an increase in the property tax, by 0.4 percentage points. The result that includes the inter-communal rate in Column 2 is greater both in magnitude and robustness. The effect on the residential income tax looks random in Columns 3 and 4. Placebo tests, using the property tax rate increase in the term prior to the election, do not show any significant results in Column 5 and 6. Column 7 shows no discernible differences in the tax rate at the beginning of the mayor's term in 2014.

The results imply that the Left mayors are likely to increase the property tax more, which is consistent with the expectation. Interestingly, the property tax rate graphs show that the increase or decrease in property tax is more pronounced when the outcome of the preceding election was close. This is consistent with the pattern observed in the main analysis of residential sorting.

I ran a similar RD analysis on the social housing construction data and observed that the Left mayors build more social housing units, and the Right mayors tend to do less. It is consistent with the partisan interpretation of the findings on tax. The results are presented in the online appendix.

11. If the resident is receiving a state benefit for the disabled, handicapped, or old age, he or she is exempted from the property tax on buildings as well as the residential tax. However, the applicants were less than 0.3 percent of the population in 2016.

12. The tax rate is imposed upon the 50% of the annual rent-equivalent value of the property, and the rates range from 12 % to 84% for buildings, and from 43% to 260% for yards and rural housing.

TABLE 6: RDD : Local tax rate changes

Dependent variable :	Change in tax rates						
Treatment variable :	Left mayor 2014-2020						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Change in communal property tax 2014-18	0.402						
	(0.206)						
(Including Inter-communal rate)		0.538					
		(0.250)					
Change in communal income tax 2014-18			0.015				
			(0.217)				
(Including Inter-communal rate)				0.964			
				(0.678)			
Placebo :							
Change in communal property tax 2008-14					-0.056		
					(0.492)		
(Including Inter-communal rate)						-1.470	
						(1.521)	
Communal property tax rate in 2014							2.023
							(2.331)
Robust Clustered CI (95%) : lower bound	0.003	0.064	-0.490	-0.614	-1.251	-4.451	-2.002
Robust Clustered CI (95%) : upper bound	0.901	1.168	0.515	2.376	0.947	1.511	7.665
Bandwidth (Estimate)	40.684	29.376	32.509	36.942	27.300	33.872	28.076
Bandwidth (Bias Correction)	65.306	46.958	46.731	51.888	35.098	47.085	35.082
Effective Number of Control	1534	1119	1232	1385	1055	1278	1079
Effective Number of Treatment	1090	866	952	1026	811	976	837
Total number of Observation	7466	7466	7466	7466	7460	7466	7466

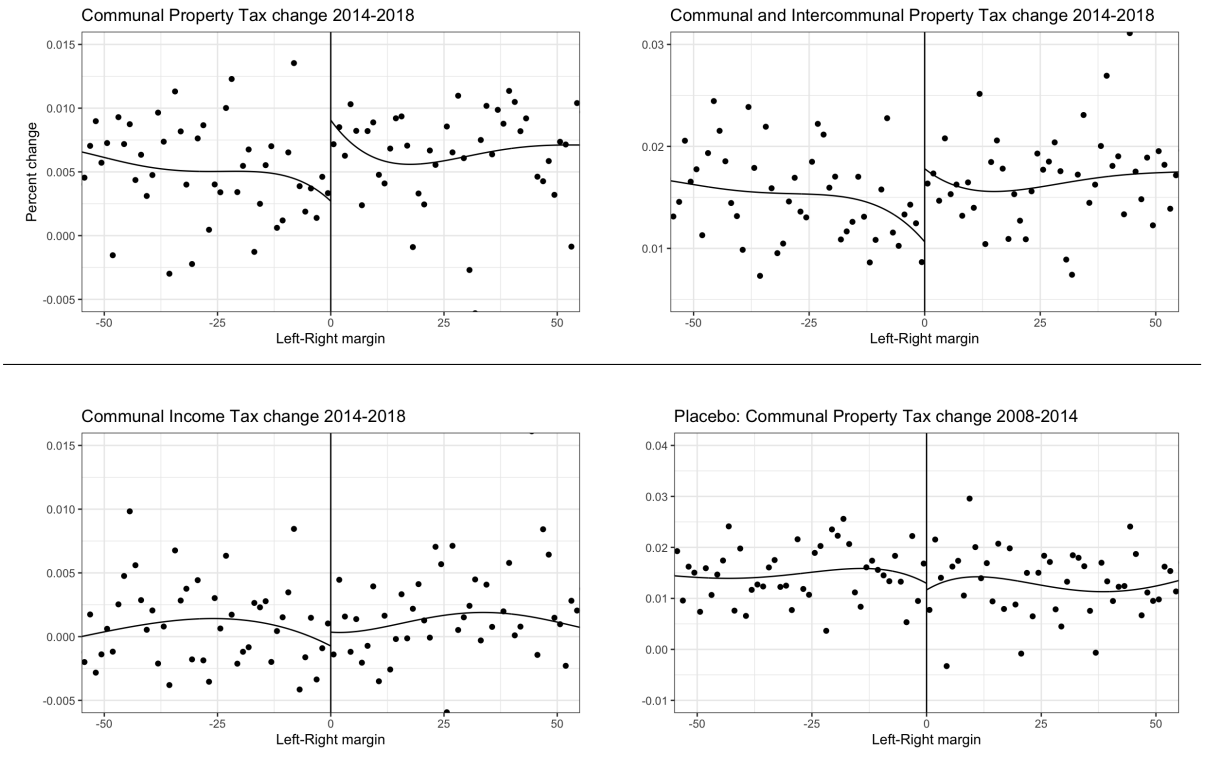


FIGURE 5: RD graphs for tax rate changes

If lower local property taxes and other related policies are instrumental in residential migration of the retired, then those who with higher tax burden will be more likely to respond. Owners of large homes are most likely to pay property taxes, and I expect them to be sensitive to local policy changes. At the same time, social housing occupants are unlikely to pay substantial property tax (Djaïz and Martin 2016). If the tax policies are one of the significant factors, I expect the former group to show a higher tendency to move into the Right-controlled municipalities than the latter does. The running variable of the RD analysis is the Left-Right margin in the 2014 municipal elections. The dependent variable is the propensity of a retired head of households to move into a new dwelling in the municipality. I used the 2016 housing census for this analysis.

Columns 1 to 3 in Table 7 show the results depending on homeownership characteristics. The partisan effect is significant for the retired who owned a house or rent a private apartment. However, those retired people who live in social housing do not seem to be migrating to the Right-controlled municipalities. Columns 4 to 6 break down the sample according to the size of the dwelling. The partisan effect is robust only for those who live in large dwellings with more than 5 rooms, shown in Column 6. Column 7 reports significantly large effects among those retired people who live in newly constructed dwellings. Albeit a tiny sample, the partisan gap of 3.8 percentage points is unusually large. The findings clearly support the hypotheses in that those retired people who would live in newly-built, larger homes are more responsive to the partisanship of the government.

The RD results in this section confirmed that the Right mayors tend to decrease property taxes or increase them with a smaller amount, while the Left mayors tend to build more social housing. Retired people who live in recently-built larger dwellings are likely to move into the Right-controlled municipalities, while those who live in smaller units and social housing do not. This strongly supports the partisan presence of partisan sorting, which is the direct result of mayors' policy choices. OLS analysis on the mobility census data also shows that lower property tax is associated with higher in-migration of the retired. While the analysis cannot have a causal interpretation, it is consistent with

the findings of this paper. The results of the OLS analysis are presented in the online appendix.

While my analysis in this section does not establish a causal effect of policies on the movement of voters, it strongly suggests that observable policy differences exist between the Right municipal governments and the Left governments after close municipal elections. The fact that both voter sorting and tax rate differences are observed for the partisan mayors in politically mixed places suggests that an essential part of the sorting is driven by local policy choices or anticipation of them.

TABLE 7: RD results for the retired : housing characteristics in the 2016 housing census

Dependent variable :	Moved into a new dwelling in the municipality in 2016						
Treatment variable :	Left mayor 2014-2020						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Head of Household - House characteristics :							
Retired - Owned House	-0.00097						
	(0.00039)						
Retired - Private Apartment		-0.00439					
		(0.00161)					
Retired - Social Housing			0.00102				
			(0.00121)				
Retired - Less than 2 rooms				0.00020			
				(0.00158)			
Retired - 3 to 4 rooms					-0.00088		
					(0.00059)		
Retired - More than 5 rooms						0.00108	
						(0.00410)	
Retired - House completed after 2014							-0.03803
							(0.00597)
Robust Clustered CI (95%) : lower bound	-0.00193	-0.00884	-0.00257	-0.00444	-0.00242	-0.00209	-0.05754
Robust Clustered CI (95%) : upper bound	-0.00016	0.00180	0.00299	0.00323	0.00015	-0.00032	-0.03135
Bandwidth (Estimate)	15.227	16.551	12.252	15.142	17.888	14.506	18.711
Bandwidth (Bias Correction)	24.185	33.297	23.126	21.557	38.025	29.610	37.748
Effective Number of Control	337595	72417	51662	64913	285975	163125	6412
Effective Number of Treatment	260294	49202	39880	48085	199661	127328	4565
Total number of Observation	2785765	444677	373713	435608	1784714	1454712	38595

Conclusion

From Downs (1957), social scientists have thought of voters as static units, and politicians are supposed to gain the majority by various means, ranging from partisanship, ideology, and redistribution to scare tactics and machine politics. However, subnational politicians could affect the composition of voters, which may lead to different electoral implications. The findings in this paper encourage political scientists to reconsider the present understanding of district-based politics.

This paper demonstrates that voters are responding to local politics and policies when they relocate. Retired people, who overwhelmingly support the Right, are attracted to the municipalities governed by the Right. The Right municipal governments, in turn, are likely to set lower property tax rates.

Policy-driven sorting poses several questions concerning local politics and democracy. The sorting process may compromise electoral accountability if people congregate in the municipality governed by their favorite mayor and are departing from the places that are ruled by their opponents. Unlike in the Tiebout model and its variations, underperformance and inefficiency may be sanctioned less frequently if the core supporters are gathered or bought off. Politicians may become less susceptive to the demand and the pressure from their opponents and more inclined to deviate from what the Median voter wants. It may add a new explanation for the extraordinarily high incumbency advantage of local elected leaders. Thus, the findings can make a significant contribution to the literature on political accountability.

Moreover, extending this mechanism may render some radical or divisive policies more viable for reelection, as the subnational mayors and governors face the voters more supportive of the incumbents' programs through the sorting process. Many policy options that are deemed economically inefficient, such as machine politics, clientelism, and corruption, could be a politically efficient way to secure reelection chances if the scale of sorting is significant. Voters who cannot easily move may suffer from this effect. Such a process could worsen the potential political polarization according to the geographic cleavage. As such, it is imperative to take political sorting into account for future research

on polarization and accountability. Similar studies in the different electoral and federal arrangements and different partisan compositions may further advance the understanding of the cause and consequences.

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Appendix

Appendix A : Vote deciders in the 2014 municipal elections, according to the IFOP exit poll

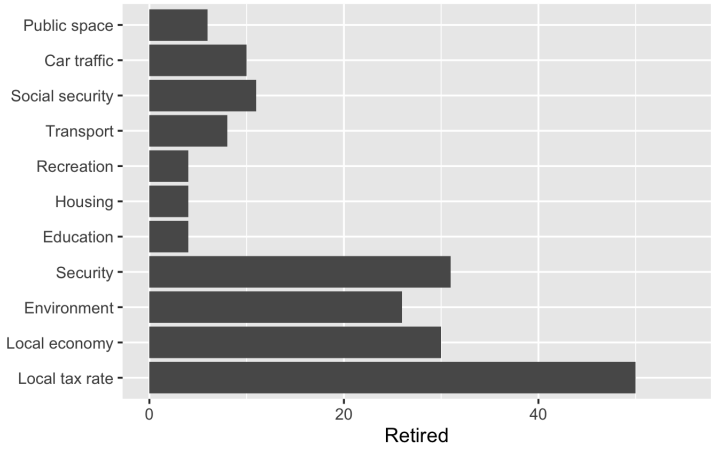


FIGURE 6: Retired : Vote deciding issues (%)

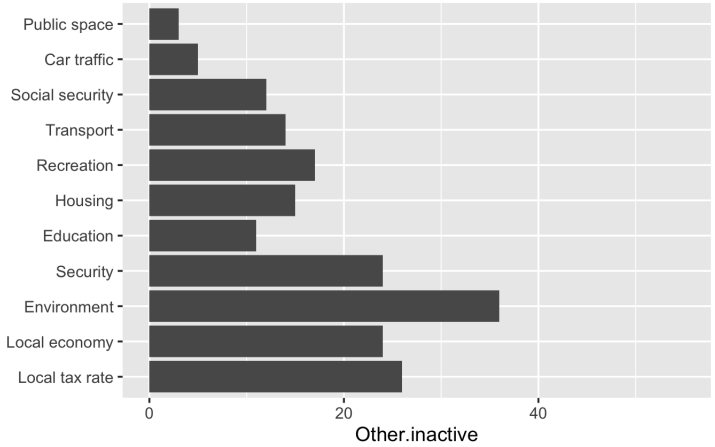


FIGURE 7: Other Inactive : Vote deciding issues (%)

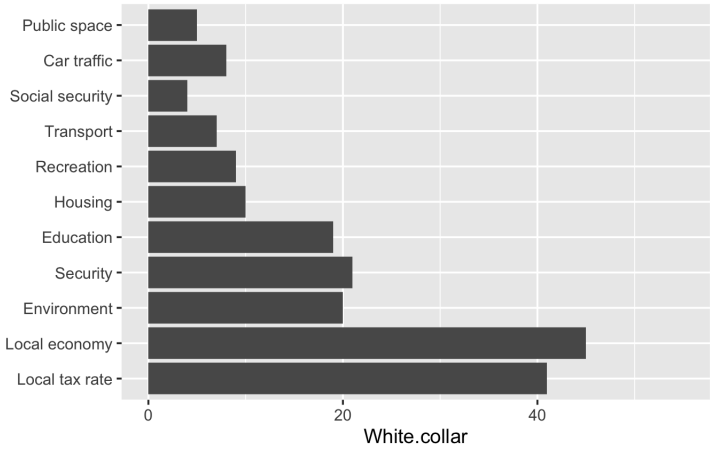


FIGURE 8: White-collar : Vote deciding issues (%)

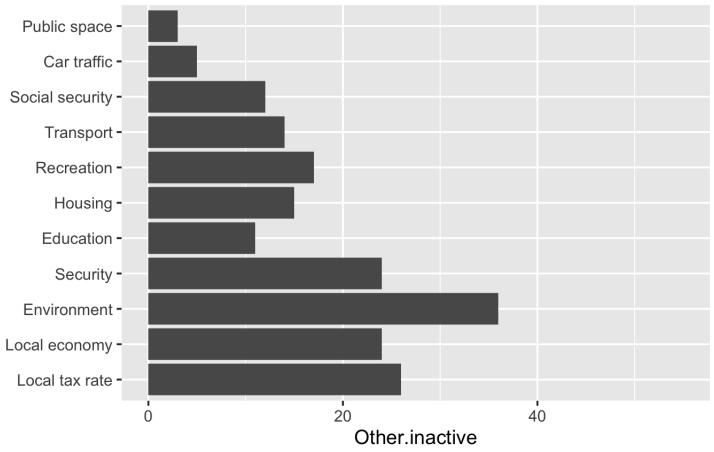
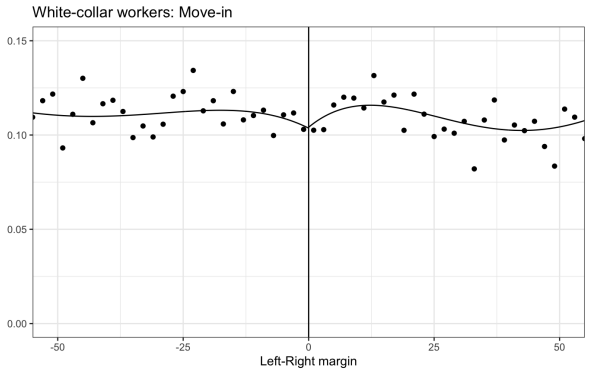
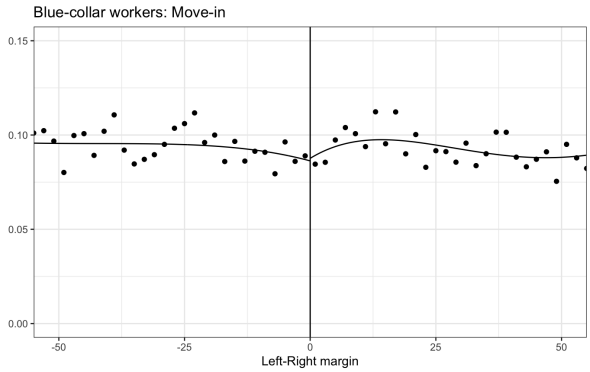


FIGURE 9: General average : Vote deciding issues (%)

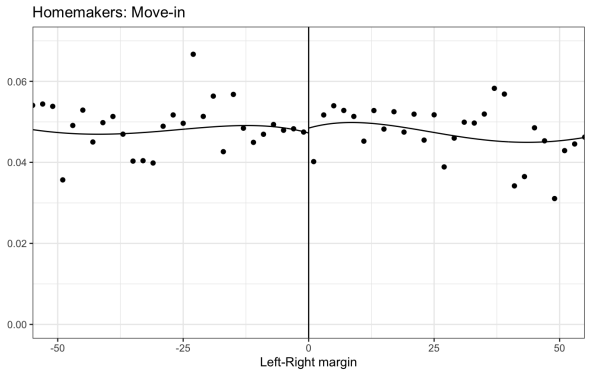
Appendix B : RD graphs for non-retired groups



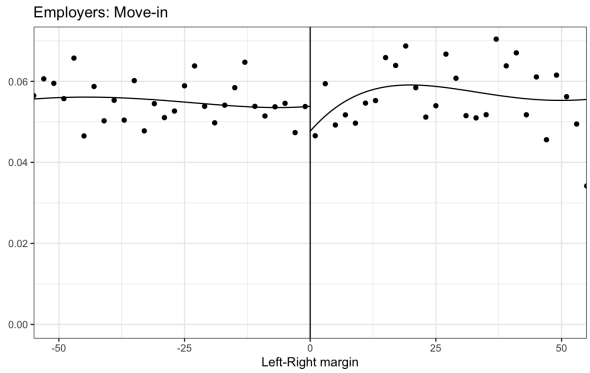
A. White-collar workers : Move-in



B. Blue-collar workers : Move-in



C. Homemakers : Move-in



D. Employers : Move-in

FIGURE 10: RD graphs for the propensity of an non-retired individual to move in in 2015

Appendix C : RD results with IK bandwidth

TABLE 8: RD Results with IK bandwidth : Propensity of a retired person to move in / out

Dependent variable :	Moved into the Municipality in 2015				Moved out from the Municipality in 2015			
Treatment variable :	Left mayor 2014-2020							
Move-in :								
Retired	-0.03906							
	(0.007533)							
Retired : Aged 65 - 79		-0.04120						
		(0.008751)						
Retired : under 64			-0.03110					
			(0.008978)					
Retired : over 80				-0.006536				
				(0.008411)				
Move-out :								
Retired					0.007811			
					(0.009148)			
Retired : Aged 65 - 79						0.004218		
						(0.004974)		
Retired : under 64							0.007811	
							(0.009148)	
Retired : over 80								0.001128
								(0.008476)
Bandwidth	0.4276	0.3999	1.144	1.0635	0.9734	0.7695	0.9734	0.9066
Effective Number of Observation	22692	11528	10974	11850	9008	19118	9008	10254

Appendix D : RD results with arbitrary bandwidths

TABLE 9: RD Results with arbitrary bandwidth : Propensity of a retired person to move in

Dependent variable :	Moved into the Municipality in 2015					
Treatment variable :	Left mayor 2014-2020					
Retired	-0.007576	-0.002490	-0.004034	-0.001397	-0.002435	-0.002969
	(0.0021653)	(0.0014841)	(0.0009768)	(0.0005984)	(0.0004525)	(0.0003780)
Bandwidth	2.5	5	10	25	50	100
Effective Number of Observation	143187	300007	549746	1156271	2006789	2495283

Appendix E : Analysis on the government turnover and migration pattern

To supplement the regression discontinuity analysis, here I present the corroborating evidence focusing on the change of the governments, with standard OLS analyses with departmental fixed effects. I checked if the Left gain from the Right and the Right gain from the Left in 2014 affected the migration pattern of retired people in 2015. I controlled for various factors, including logged population, unemployment rate, the share of agriculture employment, industry employment, commuters, migrants, as well as per capita figures of childbirth, housing vacancy, number of health centers, care homes, daycare facilities, tennis courts, and business establishments. The results reported in Table 11 indicate that the retired are more likely to move to the newly Right-controlled municipalities and less likely to move to the newly Left-controlled ones. The effect is particularly significant when the Right gained the municipality from the Left. As observed in the main results, the effects of the new government are greater when I use the subsample of the municipalities with relatively close elections.

TABLE 10: OLS with Departmental Fixed Effects : Government Turnover and Propensity of retired people to move in

Dependent variable :	Propensity of retired people to move in							
Sample :	Whole sample				Cities with electoral margin smaller than 10%			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Election result 2014 :								
Left gain	−0.002*		−0.003*		−0.012*		−0.008	
	(0.001)		(0.001)		(0.005)		(0.005)	
Right hold	0.005**		0.003*		0.003**		0.002*	
	(0.0003)		(0.001)		(0.0003)		(0.001)	
Right gain		0.006**		0.007**		0.017**		0.022**
		(0.001)		(0.001)		(0.003)		(0.003)
Left hold		−0.006**		−0.004**		−0.003**		−0.002**
		(0.0003)		(0.0003)		(0.001)		(0.001)
Covariates	NO	NO	YES	YES	NO	NO	YES	YES
Department FE	YES	YES	YES	YES	YES	YES	YES	YES
Observations	2,194,070	2,194,070	2,194,070	2,194,070	499,275	499,275	499,275	499,275
R^2	0.002	0.002	0.003	0.003	0.003	0.003	0.003	0.004
Adjusted R^2	0.002	0.002	0.003	0.003	0.003	0.003	0.003	0.003
Residual Std. Error	0.162	0.162	0.162	0.162	0.158	0.158	0.158	0.158
Degree of freedom	2193975	2193975	2193968	2193968	499188	499188	499181	499181

Note : *p<0.05 ; **p<0.01 ; ***p<0.001

Appendix F : RDD balance test of municipal covariates : CCT bandwidth

TABLE 11: Balance test of municipality level covariates : CCT bandwidth

Treatment variable :	Left mayor 2014-2020							
Agriculture Share	-0.00530							
	(0.00929)							
Share of Population under 15		0.00035						
		(0.00370)						
Share of Migrants			-0.00296					
			(0.00797)					
Share of Commuters				0.01107				
				(0.01836)				
Unemployment					-0.00695			
					(0.00618)			
Median Salary (Euro)						-0.14657		
						(0.32180)		
Log Population							-0.07829	
							(0.15992)	
Share of those who moved in in 2015								0.00140
								(0.00202)
Robust Clustered CI (95%) : lower bound	-0.02824	-0.00683	-0.02046	-0.03250	-0.02153	-0.96254	-0.43297	-0.00334
Robust Clustered CI (95%) : upper bound	0.01486	0.00761	0.01688	0.05295	0.00771	0.58731	0.32938	0.00592
Bandwidth (Estimate)	20.647	26.588	23.523	28.398	21.320	21.142	18.202	28.391
Bandwidth (Bias Correction)	27.581	39.816	29.974	42.229	30.748	30.827	25.901	39.284
Effective Number of Control	834	1044	929	1101	861	665	732	1101
Effective Number of Treatment	670	813	751	864	686	489	586	860
Total number of Observation	7584	7584	7584	7584	7530	4362	7584	7584

Note : All the data is from the 2015 census

Appendix G : RDD balance test of municipal covariates : IK bandwidth

TABLE 12: Balance test of municipality level covariates : IK bandwidth

Treatment variable :	Left mayor 2014-2020							
Agriculture Employment Share	-0.00657							
	(0.01507)							
Share of Population under 15		0.01471						
		(0.01350)						
Share of Migrants			-0.00425					
			(0.01851)					
Share of Commuters				0.00702				
				(0.04677)				
Unemployment					-0.02331			
					(0.01575)			
Median Salary (Euro)						0.3636		
						(0.5106)		
Log Population							-0.2357	
							(0.2143)	
Share of those who moved in in 2015								0.001460
								(0.009270)
Bandwidth	1.9811	1.598	1.7630	2.544	1.5165	5.477	4.342	1.0189
Effective Number of Observation	144	121	132	195	112	341	356	87

Note : All the data is from the 2015 census
Note : *p<0.05 ; **p<0.01 ; ***p<0.001

Appendix H : Summary statistics : Election results

TABLE 13: Summary statistics : Election results

Statistic	N	Mean	St. Dev.	N	Mean	St. Dev.
	2014 Election vote share (First round) |			2008 Election vote share (First round)		
Left	9,854	29.458	32.805	2,966	42.514	23.723
Right	9,854	40.824	35.425	2,966	41.595	22.481
2008-2014 govenment change :						
Left gain		0.016	0.126	Right gain	0.068	0.253

Appendix I : Summary statistics : Demographic variables in the 2015 Mobility census

TABLE 14: Summary statistics : individual-level demographic data for the 2015 mobility census

	Mean		Mean
Retired	0.255	Age	44.560
Blue-Collar Workers	0.114	Female	0.529
White-Collar Worlers	0.149	Homeowner	0.544
Independent worker	0.029	Social Housing Occupants	0.177
Employer	0.020	Foreign-born	0.092
Homemaker	0.028	Single	0.219
Apprentice	0.011	Couple	0.267
Limited-contract workers	0.041	No household member working	0.173
Unemployed	0.080	Moved in a year	0.078