

OPPOSITION REPRESENTATION AND POLICY MODERATION: EVIDENCE FROM FRENCH MUNICIPALITIES

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The role of the opposition is an important feature of a variety of political institutions, but this role is generally difficult to assess due to the usual problems with observational studies. In French municipalities, an unusual electoral rule creates a rare natural experiment that I exploit to measure the impact of the opposition's presence on several areas of policy. I find that the opposition tends to moderate personnel spending, a major budget component; the opposition also appears to make decision-making slower, based on an analysis of municipal confederation decisions. The findings suggest that even a relatively powerless opposition can have an impact on policies adopted in a deliberative body.

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I. INTRODUCTION

The role of the loyal opposition is a cherished component of the modern conception of liberal democracy. Democracy works better, in the conventional view, when leaders face scrutiny and criticism from their political adversaries, whose desire to win the next election motivates them to uncover and highlight perceived weak points in the incumbent’s program – to the benefit of citizens. The value placed on opposition scrutiny is reflected in a variety of political institutions, including the regular clash of government and opposition during Prime Minister’s Questions in the British House of Commons, the mandated bipartisan composition of Congressional committees and regulatory agencies in the U.S., and even the inclusion of labor representatives on corporate boards in Europe.

Although respect for opposition scrutiny as a principle runs deep in democratic thought, the salutary impact of institutionalized dissent is not a foregone conclusion. In a deliberative body where the majority coalition votes cohesively, the opposition by definition lacks the votes to implement its proposals or block the majority’s program; in such a setting it is not clear that the opposition’s presence amounts to more than remonstrations and posturing. Furthermore, a long line of thinkers and ideologues have criticized the tendency of factions (and particularly political parties) to foment counterproductive conflict within political institutions (see Rosenblum (2008)); more recent research in social psychology and political science confirms that individuals in some circumstances adopt more polarized positions when confronted with opposing viewpoints (Sunstein 2009, Nyhan & Reifler 2010). The ambiguous impact of the opposition is suggested by Alexander Hamilton in *The Federalist* 70: although that essay provides perhaps the best-known celebration of institutionalized dissent in the observation that “the jarring of parties” tends to “promote deliberation and circumspection” in legislatures, its main thesis is in fact that the clash of opposing factions should be *avoided* in the design of the executive branch, where it is likely to lead to “habitual feebleness and dilatoriness.”

In this paper, I examine the impact of opposition representation in one particular political institution: municipal councils in France. In many French municipalities, all members of the municipal council are drawn from a single party and council meetings pass without substantial conflict; in others, the council includes representation of multiple parties and

meetings feature a political face-off between members of the majority party and opposition representatives. My objective is to assess the impact of the opposition's presence on policies implemented by these councils. What difference does it make whether a municipality is governed by a council in which the opposition party is represented or one in which it is not?

My focus on French municipal councils is motivated by an unusual natural experiment taking place in small French cities. In general, it is extremely difficult to estimate the impact of opposition representation (or other institutional factors) on policy outcomes because political institutions tend to vary along with socioeconomic factors. Ideally, we would run an experiment where randomization determines which political units have opposition representation and which do not, making it trivial to measure the effect of opposition representation on policies adopted. Instead, we typically find ourselves comparing sets of political units in which hard-to-measure factors determine the nature of political representation – factors that also impact the policies adopted, making it difficult to disentangle the effects of representation from its causes.¹ In French cities, however, something like our ideal experiment has been taking place since the early 1980's due to a quirk in the municipal electoral system. French electoral law requires that cities below 3,500 in population elect their municipal councils using a plurality-rule electoral system that leads, in a majority of cases, to a single party winning all seats on the council; cities with 3,500 or more people use a proportional representation electoral system in which the second-place party is nearly certain to win seats. My approach is therefore to compare policies implemented in cities just above and below the 3,500 population threshold – cities that are essentially identical in other respects, including the underlying nature of political competition – using a fuzzy regression discontinuity design that provides a quasi-experimental estimate of the effect of opposition representation on policy-making.

The effects I find confirm the widespread view that even a relatively powerless opposition can influence policy outcomes. My principal finding is that opposition representation

¹For example, suppose that cities in which the citizens have more heterogeneous preferences are more likely to have opposition representation; unless we have excellent measures of preferences and know exactly how to model the relationship between preferences and policy outcomes, it will be impossible to disentangle the effect of opposition representation on policy from the effect of preference heterogeneity on policy.

on French municipal councils tends to moderate personnel spending (which is generally the largest single component of the municipal budget), in the sense that mayors of the Right and Left spend more similarly on personnel when they face opposition on the council. At the same time, opposition representation appears to have made municipal councils move more slowly: introducing opposition representation appears to have delayed by about 3 years on average the decision to join a municipal confederation, a major choice facing all municipalities in the period I examine. Because cities narrowly on either side of the 3,500 population threshold differ markedly in the degree of opposition representation but are nearly identical in other important respects (such as the structure of government, degree of political competition, and nature of political culture), I can be confident that the policy differences I detect between these two groups of cities are the result of opposition representation rather than simply correlated with it.

Given that the opposition has weak formal powers in this setting, I argue that opposition representation affects policy here mainly by increasing the scrutiny applied to the majority's program. The findings therefore relate to the sizable literature on the effects of transparency and media attention on policy (Alt & Lassen 2006, Stiglitz 1999, Besley & Burgess 2002, Fung et al. 2007, Snyder & Strömberg 2008). My findings also relate to the large normative and empirical literature on deliberative democracy. Many advocates of deliberative democracy argue that requiring decision-makers to explain the reasons for their positions improves the quality of decisions by making it less likely that difficult-to-justify measures will be proposed or adopted (see, e.g., Gutmann & Thompson (1996) and Elster (1998)). While French municipal council meetings fall short of the deliberative ideal in some respects, meetings in which opposition takes part come closer to that ideal: as revealed in council minutes and interviews with local politicians, the opposition's presence requires the majority to more fully and publicly justify its decisions. In that sense my study can be seen as a field test of the deliberative democrats' hypothesis that reason-giving affects the outcomes of group decision-making.

While much of the available evidence on deliberation and group decision-making comes from laboratory-like settings, my study has the advantage that its subjects are making decisions with actual consequences. In that sense it is perhaps closest to Sunstein et al.

(2006), which examines voting decisions of judges assigned to three-member panels on the US federal courts of appeals. That study's conclusion, compatible with my own, is that judges vote more moderately when they share a panel with judges of opposing political views: a justice appointed by a Republican president will vote more like a justice appointed by a Democrat if the other judges on the panel were appointed by Democrats than if the panel consists only of fellow Republican appointees. Crucially, the panels Sunstein et al. (2006) examines were formed by a random draw, making the inferences robust to many concerns about omitted variables.

The paper is organized as follows. In Section II I sketch out mechanisms by which the opposition could affect policy even when it lacks the votes or agenda-setting power to change legislative outcomes directly. In Section III I introduce the setting and show that opposition representation (but not political competition) changes at the 3,500 threshold. In Section IV I describe what the opposition on French municipal councils actually does, with reference to anecdotes from mayors and councilors currently serving in municipalities of around 3,500 inhabitants. In Section V I measure the effect of opposition representation on key municipal policies. In Section VI I show that other factors that change at 3,500 are unlikely to be responsible for the policy changes I observe. Section VII concludes.

II. HOW MIGHT OPPOSITION REPRESENTATION AFFECT POLICY OUTCOMES?

Consider a simple model of representative democracy in which two parties, A and B , contest an election for a representative council that operates by majority rule. Suppose that party A wins a majority of seats, that A 's representatives vote as a bloc, and that A 's leader on the council is the sole agenda-setter. Citizens observe the policy implemented and decide whether to vote for party A or B in the next election. In such a model, the policy implemented by A does not depend at all on the presence of B on the council: party A can implement its utility-maximizing policy without cooperation from B . And yet in democratic bodies fitting this description (including the French municipal councils I examine, many national legislatures, and countless other deliberative assemblies), the opposition *is* represented, and it is widely believed that the opposition affects policy by being represented (Powell 2000). What then is missing from the model?

The main omission is information – what citizens and council members know – and in this section I sketch mechanisms by which a minority might influence policy in a model that considers information. The first mechanism involves the effect of the opposition’s scrutiny on the policies the majority chooses to propose, and the second involves the effect of the opposition’s arguments on what the majority believes.

A. PUBLIC SCRUTINY AND CHANGING THE MAJORITY’S STRATEGY

One way in which a minority could affect policy in a majority-rule legislature is by increasing public scrutiny in a way that causes the majority to strategically modify its agenda. The stylized model of democracy above does not consider the informational asymmetries between incumbents and citizens in politics. In reality, citizens are affected by the policies politicians implement, but they do not perfectly understand what those policies are, whether they are appropriate given the circumstances, and to what extent politicians’ goals are aligned with their own. By observing the political process firsthand, including aspects of the process that the public does not observe, an opposition contingent may serve to increase the amount of information available to the public about each of these unknowns.² The majority will anticipate that the opposition will be scrutinizing and reporting on its actions, and, in anticipation of voters’ electoral strategies, may implement a different set of policies from what they would have implemented if the opposition were not present. In this regard, opposition representation may be thought of as a transparency mechanism, and a political agency model such as that in Besley (2006, Section 3.4.2) could be used to formalize the way the majority reacts to opposition scrutiny.

Deliberative democrats may have a similar idea in mind when they argue that good deliberation, in which participants publicly explain the reasons for their political positions, can affect the outcomes of group decision-making. Some proposals cannot be justified satisfactorily in open and careful deliberation. In the absence of the opposition, these proposals may never need to be justified, and may therefore be implemented; when the opposition is present and prepared to provoke public justification of the majority’s program,

²One could think of the opposition as improving the information available to the public, but there is in general nothing to prevent the opposition from spreading misunderstandings or outright lies about the majority’s program. In a full model the citizens may discount information provided by the opposition about the majority.

the majority agenda-setter may choose not to put forward those unjustifiable proposals.³ As in the transparency model in Besley (2006), ideas that are unlikely to withstand scrutiny are less likely to see the light of day.

B. PERSUASION AND CHANGING THE MAJORITY'S BELIEFS

Minorities may also be able to affect the majority's beliefs about the best policy. The stylized model of democracy above fails to consider that the politicians themselves may have imperfect information about the world, such that they may be influenced by information the opposition can provide. If interests between the majority and opposition are sufficiently aligned, the majority may be able to elicit information from the opposition that shapes majority proposals and is not merely "cheap talk" (Farrell & Rabin 1996): for example, the majority may find it optimal to give policy discretion to the opposition in areas that primarily affect the opposition's constituents.

More generally, extensive research on group decision-making (mostly in social psychology) demonstrates that people's stated preferences are affected by the composition of the group and the arguments they hear. In many cases, being confronted with opposing viewpoints has been shown to moderate individuals' opinions; in some cases, however, deliberating groups have been shown to agree on relatively extreme positions (Sunstein 2009) and individuals whose erroneous beliefs are challenged have been shown to strengthen their convictions (Nyhan & Reifler 2010).

In sum, one can conceive of two information-based channels through which a minority can influence policy in cases where it lacks the votes or agenda-setting power to block the majority. The opposition can either affect what the majority *proposes*, by providing information about the majority's program to citizens, or it can affect what the majority *believes*, by providing information (perhaps about the state of the world) to the majority. Whether the opposition is successful (or ultimately induces backlash on some issues) is an empirical question that is ordinarily quite difficult to assess. I now turn to laying out my approach to that problem.

³A weak version of the deliberative democrats' view would be that deliberation (or the prospect of deliberation) would cause the majority to table unjustifiable programs; a stronger view holds that the majority would come to genuinely prefer justifiable programs; if we observe only proposals or policy and not preferences, of course, these are observationally equivalent.

III. GOVERNMENT, ELECTIONS, AND OPPOSITION REPRESENTATION IN FRENCH MUNICIPALITIES

The focus of this paper is the effect of opposition representation on policy in French municipalities. As briefly explained in the introduction, I choose to focus on French municipal councils because France's two-tiered municipal electoral law produces a natural experiment that helps me to sidestep potential confounding between opposition representation and other municipal characteristics. In this section I briefly introduce the setting before describing the municipal electoral system and its effect on opposition representation.

A. FRENCH MUNICIPAL GOVERNMENT

The *commune*, or municipality, is the lowest level of French government. Municipalities in France maintain roads and schools, manage local development, and administer cultural programs and some social welfare functions (Loughlin 2007, pp. 90-91). Although France is known for being a centralized state, municipal finances constitute a considerable component of public accounts: municipalities are responsible for about 122 billion euros in spending a year, which amounts to a quarter of all public expenditures and about 6% of GDP (Loughlin 2007, pp. 184-185).

Municipalities are governed by councils that are reminiscent of Westminster parliaments in miniature. Elections pit lists of candidates, who may or may not all identify with a political party, against each other; after the election the council chooses a mayor, who is almost always the person who formed and led the most successful list of candidates. Like the prime minister in a Westminster system, the mayor in a French municipality runs the government along with an executive staff and a team of ministers (called *adjoints* or deputy-mayors), but must receive the approval of the parliament (i.e. the municipal council) for the budget and most other sizable decisions. In public council meetings (which are held roughly every month and a half), the mayor presents an agenda of municipal actions for council approval. Since the majority of the council consists of the mayor's political allies, it is extremely rare for agenda items to be voted down by the council, just as government proposals in a Westminster system rarely are defeated in parliament. There is however discussion and sometimes public criticism of the mayor's proposals, particularly when the

opposition is represented on the council (as will be discussed further below).

B. FRANCE'S TWO-TIERED MUNICIPAL ELECTORAL RULE

Municipal electoral law in France specifies two systems for electing the municipal council, one for cities below 3,500 in population and another for those at or above 3,500. This rule provides the variation in opposition representation that is the basis of my identification strategy.

In the electoral system used in cities with at least 3,500 inhabitants, the winning list is guaranteed a majority of seats on the council, but all lists finishing with more than 5% of the vote win seats. In specific, half of the seats on the council are awarded to the winning list, and the remaining half are distributed among all lists winning more than 5% of the vote (including the winner). If two lists split the electorate equally, for example, the winning list wins about 75% of the seats. This system thus combines proportional representation with a large majoritarian bonus; for simplicity I will refer to it as PR.

Cities below the 3,500 population threshold use a form of multi-member plurality election. Candidates appear on lists and voters submit their preferred list, as in the PR system, but voters can cross names off of lists or add names from one list to another in order to signal candidate-level preferences. Votes are then tallied for each candidate and the highest M vote-getters win seats, where M is the size of the council. I will refer to this system as the MMP system.⁴

France has long had a two-tiered municipal electoral system, but the current configuration dates from a 1982 reform introduced by the Socialist government under President François Mitterand. The system replaced a previous two-tiered system that was criticized for denying representation to political minorities.⁵ The Mitterand reform was designed to maintain the dominant position of the mayor while encouraging the participation of the local opposition in larger cities. As explained by Socialist deputy Robert de Caumont during debate before the National Assembly in 1982,

⁴This MMP should not be confused with the mixed-member proportional system employed in Germany, Japan, and many other countries.

⁵The previous system, introduced by Charles de Gaulle in 1964, specified MMP for cities up to 30,000 in population and a list-majoritarian system for larger cities that guaranteed no opposition representation.

The local opposition will henceforth be present without fail [in cities above the population threshold]. . . . Not only will they have access to all the information before every decision, but it will also be possible for them to work in committee, and they will be able to make their point of view known in public meetings and to present, in particular, alternative solutions, which the local press will be able to publicize. On the other hand, it won't be possible for the opposition to paralyze the work of the team chosen by the majority of the electoral body.⁶

Debate in the Assembly focused on the proper population threshold above which the PR cities would be applied, with possibilities as low as 2,500 and as high as 9,000 being discussed; in the end, over conservative deputies' protests that the law would paralyze and politicize the councils of middle-sized municipalities, a threshold of 3,500 was adopted.

C. THE EFFECT OF THE ELECTORAL RULE ON OPPOSITION REPRESENTATION

The effect of the 1982 electoral law on opposition representation was felt immediately in the 1983 municipal elections, when formerly monolithic municipal councils in France's larger municipalities were required to accommodate the local opposition (Martin 2001). In principle, one could attempt to gauge the effect of the electoral rule on opposition representation, and of opposition representation on policy, by comparing cities to which the PR reform was applied before and after the 1983 elections. I do not take that approach, for two reasons. First, data on municipal policy, elections, and council composition in this period is only available for the largest cities in France, making even a modest-sized study quite difficult. Second, many other factors changed considerably over the same period, including the relative electoral success of the main parties and the national economic situation; these confounding factors would make a before-and-after design unconvincing.

Instead, my approach is to take advantage of the fact that the 1982 reform applied only to cities with populations of 3,500 or greater. Using a regression discontinuity design (Thistlethwaite & Campbell 1960, Lee 2008), I compare cities just above and below that threshold to assess the effect of the electoral rule on opposition representation and, later, opposition representation on municipal policy.⁷ Intuitively, the key advantage of the regres-

⁶ *Journal officiel de la République française*; second meeting of Monday, July 26, 1982, pg. 4850.

⁷For other examples of studies in which population thresholds are exploited to assess the effects of

sion discontinuity design is that it creates groups that differ on the treatment (opposition representation) but are comparable in other factors. Among cities around the 3,500 threshold, opposition representation still varies for many reasons that are hard to observe and/or model, such as local preferences or the charisma of local political elites; between cities narrowly on either side of the threshold, however, these factors should be comparable. (Below I confirm that cities on either side of the threshold are comparable in several observable ways.)

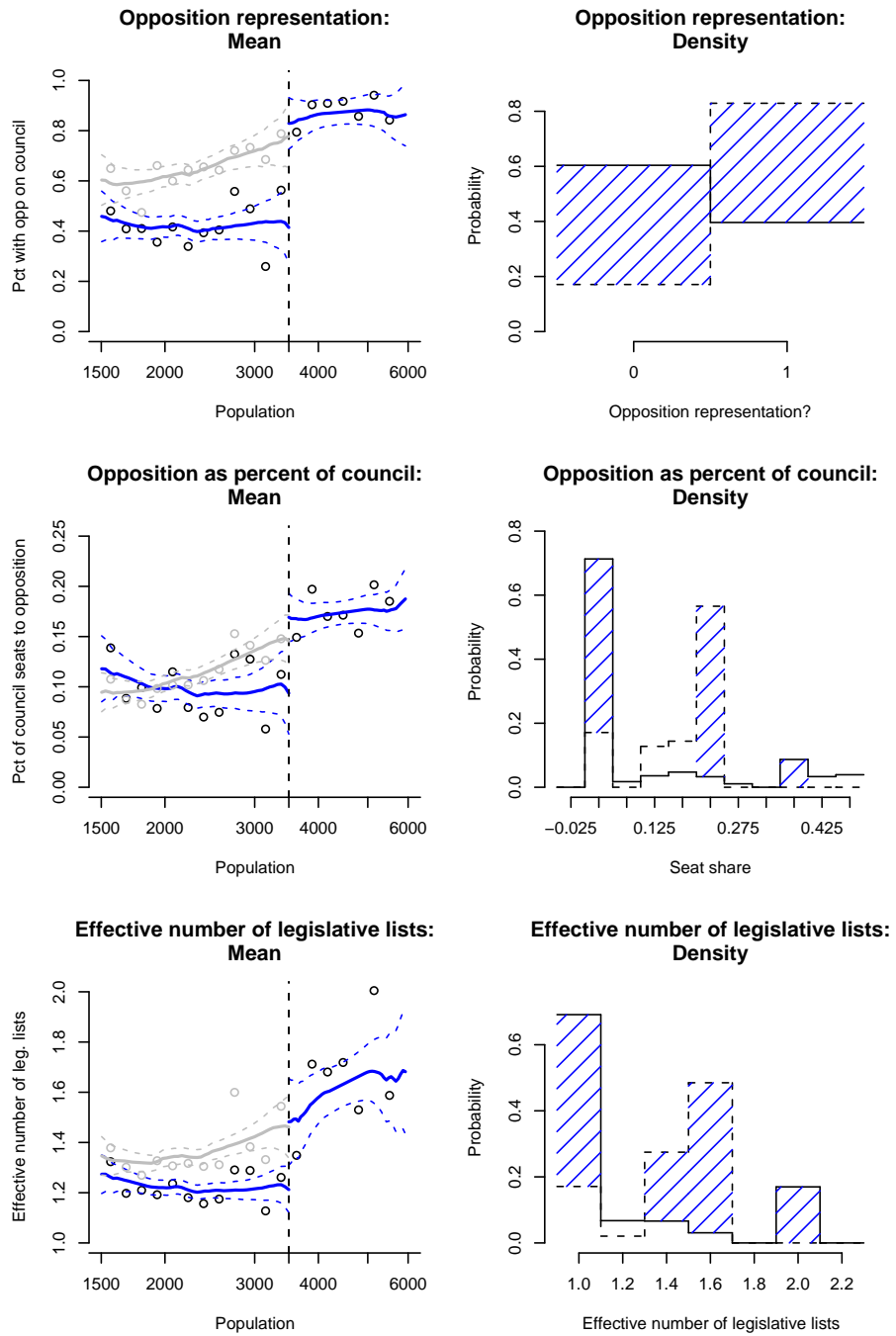
As a first step toward estimating the effect of opposition representation on municipal policy, I measure the effect of crossing the 3,500 threshold on the degree of opposition representation on municipal councils. I gathered detailed data on municipal election results for the northwest region of France (Brittany, Normandy, and Pays de la Loire) published by *Ouest-France*, a provincial daily newspaper, and in Figure 1 I document the effect of the electoral rule on the degree of opposition representation – defined as the representation of councilors who did not run on the mayor’s list.⁸ I employ three summaries of opposition representation: the existence of opposition representation on the council, the proportion of seats on the council held by members of the opposition, and the effective number of legislative lists.⁹ For each indicator, I plot in the left panel of Figure 1 the conditional expectation (blue line), estimated by local linear regression separately above and below the 3,500 threshold, with a scatterplot of the data (grey dots) and binned means (black circles). In each case, a substantial jump in opposition representation occurs at the 3,500 threshold, confirming that the electoral rule bolsters the place of opposition on councils. Most strikingly, the proportion of communes with some opposition on the council – meaning that not all of the successful candidates ran on the same list – more than doubles, jumping from just over 0.4 to around 0.85.

municipal institutions, see Petterson-Lidbom (2008), Gagliarducci & Nannicini (2008), Petterson-Lidbom & Tyrefors (2007), Bordignon & Tabellini (2009), and Fujiwara (2008).

⁸This and other data used in this paper are archived on the IQSS Dataverse Network: Andrew Eggers, 2010-05, “Replication data for ‘Opposition Representation and Policy Moderation: Evidence from French Municipalities,’ Chapter 1 of ‘Three Papers in Empirical Political Economy,’” http://hdl.handle.net/1902.1/14734_V2 [Version].

⁹The effective number of legislative lists is calculated as $ENL_1 = \frac{1}{\sum_i v_i^2}$ where v_i is list i ’s seat share. If one list wins all council seats the effective number of lists will always equal one; if two lists split the council in half it will equal two; and if one list wins 78% of seats and another wins the rest it will be about 1.5. The index is widely used in the electoral studies literature.

Figure 1: The effect of the electoral system on three measures of opposition representation



The right panel of Figure 1 shows the effect of the electoral rule on the distribution of each variable. I estimate the probability that the outcome variable falls in a given interval separately for communes on either side of the threshold, and plot the resulting pseudo-densities with a solid line (MMP communes) or dotted line (PR communes). In particular, for a given interval of a particular outcome variable (e.g. margin of winning between 0 and .1), I conduct a local linear regression that estimates the proportion of municipalities falling in that interval to the right and left of the threshold; the figure plots those probabilities, along with a blue shaded region if the difference in probability for MMP and PR cities for a given interval is significant at the .05 (solid lines) or .1 (dotted lines) level.¹⁰ The second density plot (for percent of opposition on the council) on Figure 1 shows that moving to PR makes it much less likely that the opposition will have no seats and much more likely that they will have between about 10% and 25% of seats; the third figure shows that a municipality is much more likely to have an effective number of legislative lists of 1 or around 2 under MMP, but much more likely to have an intermediate value of 1.3 to 1.7. These findings indicate that the PR system makes it almost certain that opposition will be represented, but the majoritarian “winner’s bonus” makes it nearly impossible for the opposition to win more than about 25% of council seats.

D. THE EFFECT OF ELECTORAL RULES ON POLITICAL COMPETITION

The foregoing analysis suggests that the electoral rule substantially affects the degree of opposition representation in municipalities of around 3,500 people. In order to use the 3,500 threshold as an instrument with which to estimate the effect of opposition representation on policy, however, it must be the case that other relevant factors do not change at the threshold. A substantial literature in political science building on Duverger (1954) emphasizes that electoral rules influence political competition in important ways; most famously, the number of parties in competition is thought to depend on the electoral system employed. If in fact the electoral system in this case has a variety of political effects, there may be no way to isolate the effect of opposition representation from that of these other political

¹⁰For both the RD plots and the density plots, I use a bandwidth of .35 in log population, meaning that to estimate the conditional expectation at a level of population I fit a linear regression using cities with populations roughly 35% above and below that level. This bandwidth is based on the cross-validation test described in Imbens & Lemieux (2008).

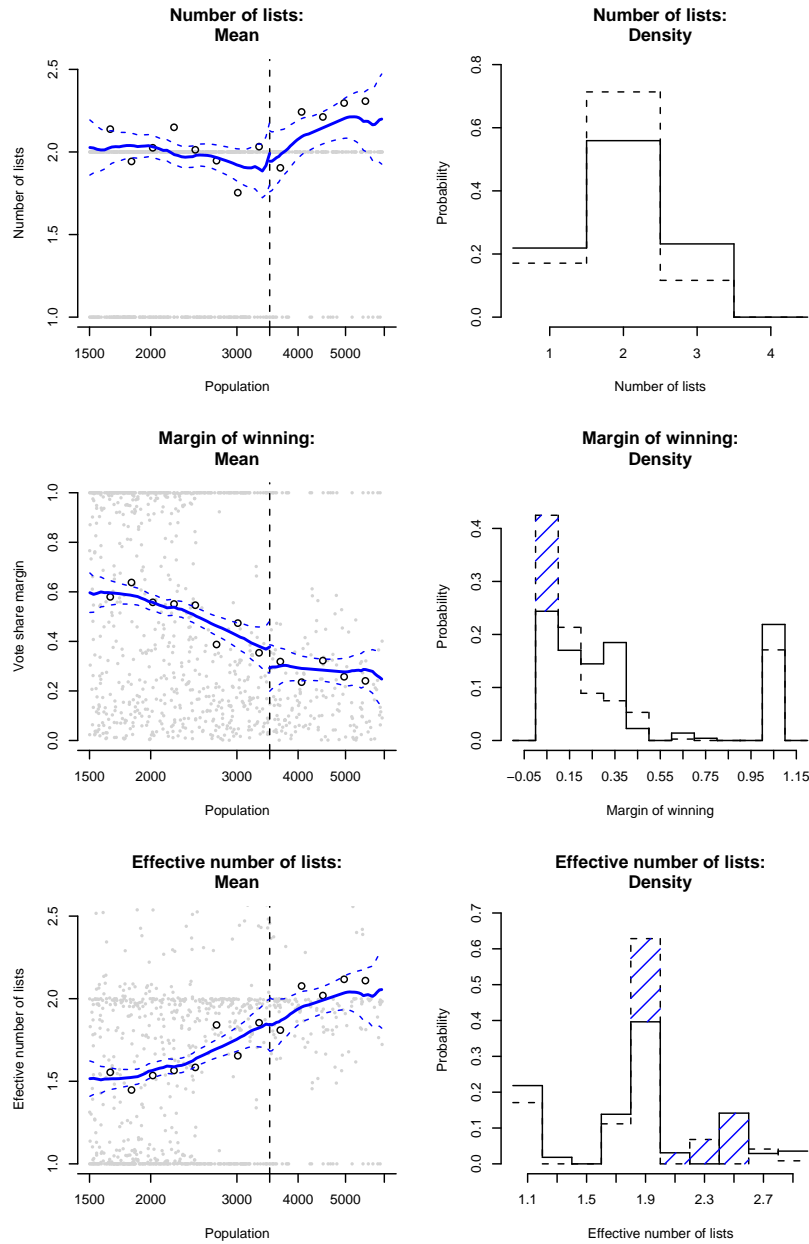
factors. As it turns out, the effect of the electoral system on political competition appears to be extremely modest in this setting, which suggests that the policy effects I later observe are in fact due to opposition representation.

Figure 2 compares the distribution of key indicators of political competition (the number of lists in competition, the margin between the first and second lists, and the effective number of elective lists (which summarizes vote distributions in the same way that the effective number of legislative lists summarizes seat distributions) at the threshold where the electoral system changes from MMP to PR. The left panels show RD plots for each indicator; in each case, the expected value of the variable appears to be about the same on the two sides of the threshold. To get a sense of how the distribution of these indicators is affected by the electoral system, the right panel plots the estimated density for each variable at the threshold from above (dotted line) and below (solid line). The density figures suggest a modest effect of the electoral system on the distribution of our indicators of political competition: under PR, there appear to be more elections with two lists and fewer with either one or three lists (although none of these effects are significant at the .1 level); more very close elections; and more elections with an effective number of lists of around two, but fewer with an effective number of lists as high as 2.5. Overall, these shifts provide some evidence that elections under PR are slightly more competitive, but the effect of the electoral rule on political competition is quite small - in no case large enough that the conditional expectation jumps at the 3,500 threshold.

As another indication that the electoral rule changes opposition representation at 3,500 without much affecting political competition, I calculated the seat allocation that would have occurred in MMP municipalities if they had applied PR rules, and plotted the results with the grey lines in the left panel of Figure 1. The figure confirms that essentially the entire jump in opposition representation at the 3,500 threshold comes from the mechanical application of the electoral rule, rather than from strategic adjustments made by local politicians and/or voters.¹¹

¹¹This exercise builds on two very disparate lines of research. Duverger (1954) distinguished between “mechanical” and “psychological” effects of electoral rules, the former being the mapping of vote distributions to seat distributions under a given rule and the latter being the strategic responses of voters and politicians to those mechanical stakes. The mechanical effect amounts to the change in opposition representation due to the application of the PR rule to MMP municipalities, shown in the RD plots in Figure 1 as the gap

Figure 2: The effect of the electoral system on three measures of political competition



between the grey and blue lines, whereas the psychological effect corresponds to the change in measures of political competition shown in Figure 2. The other literature on which this exercise builds is causal mediation analysis, as developed in Pearl (2001), Robins (2003), and Imai et al. (2008). The treatment here is crossing the 3,500 threshold, the mediator is the distribution of votes across lists, and the outcome is the distribution of seats. In formal estimation, I can show that $\delta(1)$, the indirect effect of crossing 3,500

The absence of substantial shifts in political competition may seem surprising given received ideas about the effect of institutions on political strategies, but on reflection it is reasonable to find small strategic effects in this setting. One explanation is that the system I am referring to as “PR” is in fact quite majoritarian (with the leading list enjoying a supermajority regardless of its margin of victory); even if winning a few seats as the second-place list does make a difference in policies adopted (as I later argue), the gains from being a e.g. third-place competitor under this PR system are likely to be minimal, especially compared to a more proportional system in which a small party can hope to be kingmaker, because under the French municipal PR system the winning list always obtains a supermajority of council seats and coalition governments are never necessary. Another explanation is that, in cities of this size, politics may not be sufficiently multidimensional (or even sufficiently differentiated along a single dimension) for more than two distinct political groups to emerge and attract support; with two lists in competition, voter strategy does not depend on which of the two electoral systems is in use. Finally, my approach of comparing cities very close to the threshold where the electoral rule changes requires that I focus on many cities that have recently been required to adopt a new electoral system due to population changes; if it takes time for voters and politicians to adapt to a new system, then strategic impacts may appear muted.

E. SECTION SUMMARY

Opposition representation in French municipalities depends heavily on the electoral system in use, which changes by law at the 3,500 population threshold. The much more favorable treatment of non-winning lists under the system in place for cities above 3,500 might be thought to affect strategies of politicians and voters, but it seems not to do so: either the reward of council seats is of little importance to voters and elites or the change in the system takes them somewhat by surprise. The fact that crossing the 3,500 threshold strongly affects opposition representation but not political competition suggests that we can exploit the 3,500 threshold as an instrument with which to study the impact of opposition

on seat allocation conditional on PR electoral rules, is small; graphically, this coincides to estimating the jump across the threshold between the grey line in Figure 1 and the blue line to the right of the threshold. Results available upon request.

representation on municipal policy.

IV. WHAT THE OPPOSITION DOES ON FRENCH MUNICIPAL COUNCILS

Before looking at whether the presence of the opposition has an impact on policy, it seems worth investigating what the opposition actually does on French municipal councils.

The main role of the opposition on French municipal councils is to observe critically and express dissenting views on municipal business. They are present at all public meetings of the municipal council and are permitted to ask questions and voice their opinion on agenda items under discussion (a privilege that is not extended to spectators). They vote on agenda items and have a chance to explain their votes. They receive the meeting agenda several days ahead of the meeting and may ask the mayor for more detail on items that will be discussed; they can also submit questions for the mayor's team that are posed at the end of the meeting. In cities above the 3,500 threshold members of the opposition also must be included on committees of the council, in which much of the important work is carried out in private meetings.

The account of Pascal Boheas, a municipal councilor in a city of just over 3,500 people, helps illuminate how opposition contingents serve to heighten scrutiny of the mayor and encourage deliberation on French municipal councils. Boheas chose to form a list to oppose the incumbent mayor in the 2008 elections "so that there would be a choice and further to permit more discussion and democracy within the municipal council." Boheas's list won 23% of the vote and under the PR rules was awarded 3 seats out of the 27 on the council. After a year and a half as leader of the opposition on the council, he reported that his team, although small, played an important role in encouraging the mayor to provide more detailed reports on their projects and deeper explanations for their actions:

In effect, it is not always easy for a municipal councilor of the same list as the mayor to ask annoying questions. We, the members of the opposition, have no problem doing so and we do it when it seems important to us. The mayor and his deputies make a lot of decisions without the council, so we provoke a lot of debate that would not take place without our presence.

Boheas made clear, however, that his group's position only prevailed if they were able to

convince the mayor; with such small numbers they could question but not overrule.¹²

On what sorts of issues do opposition representatives intervene? Pierre Chautard, a member of the municipal opposition in a city of around 5,000 inhabitants near Lyons, reported that his team (six members on a 29-person council) uses the platform of municipal council meetings to criticize the majority on issues ranging from specific local beautification projects to deeper questions of equality and representation. He had recently engaged in a withering critique of the mayor's installation of a costly topiary in the municipal square, but he and his team also speak out in favor of the principle of laïcité with respect to school policy and try to represent the interests of the sizable Turkish minority of the municipality on this and other issues.¹³ In the city of Clohars-Carnoët (population 3,867) in Brittany, the mayor faces two opposition groups, one led by the former mayor who was defeated in the 2008 election. The opposition relentlessly questions the mayor on almost every agenda item: after the mayor proposed that the commune approve an extraordinary subsidy request for cultural programming from a local school, one opposition leader asserted that the need was limited and argued that the commune should not be a “milk cow” for every demand that comes along; when the mayor sought approval of past municipal expenditures, the opposition responded with questions about expenses that either exceeded or fell short of the budget; when the mayor asked for the council's authorization to investigate sites for a proposed barracks for local police officers, both opposition groups objected to being asked to write “a blank check,” ultimately convincing the mayor to table the issue until the next meeting, when he would come back with more specifics.¹⁴

Not surprisingly, most mayors seem to view the scrutiny imposed by the opposition as unwelcome “politicization.” A mayor of a city of about 4,500 people recalled that the municipal council was instantly politicized in 1989, after the first elections held under PR. (The municipality's population had crossed the 3,500 mark in the previous census.) Previously, council meetings had been a site for collegial deliberation among allies; in the mayor's view, the opposition elected under the new system undermined discussion by using

¹²Personal communication with Pascal Boheas, October 2009.

¹³Personal communication with Pierre Chautard, September and October 2009.

¹⁴Minutes of municipal councils meetings in 2008 and 2009, available at <http://www.clohars-carnoet.fr>, accessed November 10, 2009.

any opportunity to score political points. Another mayor of a city just above the 3,500 threshold initially tried to include the opposition in his administration’s internal debates – to “exchange frankly on the contradictions and complexities of certain decisions” – but found that, instead of participating constructively in these discussions, the opposition used the information gleaned to prepare arguments and criticisms to deliver in front of the full council meetings. Both mayors responded by reducing the opportunity for the opposition to participate: the first mayor reported that he attempts to have everything substantial decided in advance of meetings, and provides very little occasion for open discussion in the meeting itself; the second mayor had decided to shut the opposition out of his administration’s internal debates.¹⁵ These anecdotes make clear that the opposition interventions do cause trouble for majorities, but they also indicate that mayors may have the means to minimize their opportunities for participation and influence.

V. EFFECTS OF OPPOSITION REPRESENTATION ON MUNICIPAL POLICY

In this section, I measure the effect of opposition representation on several indicators of municipal policy. Using RD methods, I first assess the effect of crossing the 3,500 threshold on each policy indicator. Under the assumption that crossing the 3,500 threshold could affect policy only through opposition representation (i.e. the “exclusion restriction”), I can then measure the effect of opposition representation on policy using a fuzzy regression discontinuity design, which is the instrumental variables analogue of the regression discontinuity design (Imbens & Lemieux 2008). Given the binary nature of the treatment, this takes the particularly simple form of dividing the effect of crossing 3,500 on policy by the effect of crossing 3,500 on opposition representation (Wald 1940, Angrist et al. 1996). In the next section I will assess the plausibility of the exclusion restriction.

A. LEVELS OF SPENDING

I first examine the level of municipal spending. One could imagine that the presence of opposition on the council might have a variety of effects on aggregate spending figures. Opposition scrutiny might serve to expose and/or discourage “wasteful” spending, such

¹⁵Confidential interviews with local politicians, May to October, 2009.

as municipal improvements or hiring decisions that primarily benefit friends of the mayor; a cut in spending may also be seen if the opposition is merely intent on obstructing the mayor's agenda. Alternatively, providing seats for the opposition may increase spending if the opposition makes new demands on the municipal purse.¹⁶ Unfortunately, the areas of spending in which scrutiny may be expected to most reduce waste (e.g. subsidies paid to local groups) are also the areas in which opposition representation may be expected to augment demands for particularistic spending, and disaggregated data that could allow us to determine whether spending went to majority or opposition constituents is not available.

I conduct RD analysis of the effect of crossing the 3,500 threshold on overall spending, its two subcategories (operating expenses and investment spending), and two subcategories of operating expenses in which we might expect particularistic spending to take place – personnel spending and subsidies paid to associations. To put the analysis in comprehensible units and allow for a somewhat more flexible relationship between population and the outcomes, I express each outcome in terms of spending per person.¹⁷ For each outcome, I conduct a local linear regression that estimates the effect of crossing the 3,500 threshold using a population bandwidth chosen by the cross-validation procedure outlined in Imbens & Lemieux (2008).

The results of my analysis are displayed in Table 1. The first column indicates the bandwidth chosen (in log population); for all outcomes but investment spending, 0.275 was the optimal choice (among a sequence with .025 increments). The second column shows the conditional expectation of per capita spending in a given category at 3500 (in thousands of euros) estimated from below; in graphical terms, this is the value at which the regression line for municipalities below 3,500 hits the threshold. Municipalities just below 3,500 in population spent about 9,350 euros per person in the period from 2001-2007; a little over 5,000 of that consisted of operating expenses (of which almost half went to personnel) and a little over 3,000 consisted of investment. The third column (*ITT*) indicates the estimated jump in the conditional expectation function at the threshold, and the fourth

¹⁶This hypothesis is consistent with the view of fiscal policy as a common pool problem; see e.g. Weingast et al. (1981), Bawn & Rosenbluth (2006) and Persson et al. (2007).

¹⁷Since we condition on the population in the RD analysis, this should not make much difference to the estimates; dividing by population does however change the interpretation of the coefficient on log population in the RD regressions, allowing it to capture the relationship between per-capita spending and log population.

Table 1: Fiscal spending, 2001-2007, at the 3,500 threshold (thousands of euros)

	BW	Baseline	<i>ITT</i>	<i>SE_{ITT}</i>	<i>IV</i>	<i>SE_{IV}</i>
All spending (per person)	0.275	9.3473	0.2260	0.4589	0.5337	1.1078
Operating expenses	0.275	5.1617	0.2353	0.2741	0.5558	0.6362
Personnel	0.275	2.3275	0.0445	0.1120	0.1051	0.2640
Subsidies paid	0.275	0.3287	0.0503	0.0362	0.1189	0.0853
Investment	0.300	3.2154	-0.0283	0.1855	-0.0669	0.4430

Each row presents results from a single RD regression with a bandwidth (shown in the first column) chosen by a cross-validation procedure. “Baseline” indicates the conditional expectation of the given variable at the 3,500 threshold, estimated from below. ITT indicates the jump at the 3,500 threshold; IV is produced by dividing that jump by the jump in the proportion of municipalities with opposition representation. Standard errors are estimated by bootstrapping.

column indicates the bootstrap standard error of that point estimate.

The results indicate that none of these spending categories underwent a statistically significant jump at 3,500. The only category for which the estimated effect is larger than the standard error is the amount of subsidies paid to local groups, which is estimated to jump from about 332 euros per inhabitant to about 377 euros per inhabitant, but with a two-sided p-value of over .2 (which should probably be even higher given the multiple tests being carried out) the hypothesis of no effect cannot be rejected.

If we believe that opposition representation is the only channel through which crossing the 3500 threshold could affect spending levels, we can generate IV estimates of the effect of opposition representation on spending by dividing the *ITT* for the outcome by the *ITT* for the treatment (opposition representation). Columns 5 and 6 of Table 1 present the IV estimates and standard errors from this exercise. Because we are dividing by about .42 in each case, the IV point estimates are over twice as high, with opposition representation being estimated to increase subsidies paid by as much as 119 euros per inhabitant, or about one-third. The standard errors also increase, of course, so none of the changes in spending are significant at conventional levels.¹⁸ Overall, the conclusion seems to be that opposition representation has little effect on aggregate spending levels, perhaps because the opposition simply does not much affect spending decisions or because the opposition affects the spending mix in ways that available data does not capture.

¹⁸Standard errors are calculated by the bootstrap, where in each bootstrapped subsample I calculate the IV estimate by calculating the two *ITT*'s and dividing them.

B. PARTISANSHIP OF SPENDING

Next, I consider the effect of opposition representation on the partisanship of policy outcomes, by which I mean the difference in policy implemented by mayors of the Right and mayors of the Left. The existence of opposition could moderate policy if, when subject to scrutiny and criticism from their political opponents, mayors compromise on areas of difference or are otherwise forced to abandon relatively partisan proposals. On the other hand, consistent with the concern of “politicization” raised at the time of the 1982 municipal electoral reform, as well as recent research showing a hardening of beliefs in partisan debate, opposition could instead increase partisanship. I assess which of these tendencies dominates by focusing on municipal personnel spending, a policy outcome on which mayors of the Left and Right implement distinct policies.

To measure the impact of opposition representation on partisanship in personnel spending, we want to compare the effect of the mayor’s party on policy with and without opposition represented on the council.¹⁹ The approach I pursue is to measure the total difference in personnel spending between municipalities of the Left and Right, conditional on population, and assess whether this difference changes at the 3,500 threshold. While the difference in spending between municipalities with Left mayors and municipalities with Right mayors is likely to be a biased measure of the effect of partisanship itself, changes in that difference that occur across the threshold probably do reflect the effect of opposition representation on partisanship, based on the reasonable assumption that crossing 3,500 does not affect the relationship between municipal characteristics and the partisanship of mayors.²⁰

¹⁹In principle, one could answer this question by conducting an RD in two dimensions: calculating the effect of the mayor’s party on personnel spending by exploiting close elections as in Lee et al. (2004), and then examining whether this effect appears to change at 3500. In this setting, however, such an approach would not make sense: in close elections, both PR and MMP municipalities typically end up with opposition representation, so it is impossible to have both quasirandom assignment of the mayor’s party and variation in the existence of opposition.

²⁰In other words, the difference between personnel spending in municipalities with Left mayors and municipalities with Right mayors reflects both the effect of partisanship itself (i.e. the effect of having a mayor of one party or the other) and background differences between municipalities that elect mayors of the Left and mayors of the Right. We can assume however that crossing the 3,500 threshold does not affect the relationship between municipality characteristics and the party of the triumphant mayor; based on my earlier evidence that entry and voting behavior do not substantially change at 3,500, this seems like a reasonable assumption. In that case, any change in the correlation of partisanship and policy that occurs at 3,500 should be attributable to factors that change at 3,500, i.e. opposition representation. Further reassuring evidence for the orthogonality of the electoral system and the assignment of partisanship is that the proportion of mayors of each party does not change at the 3,500 threshold.

To implement this strategy, I again conduct an RD analysis, but I interact the indicator for having a population above 3,500 with an indicator for having a mayor of the Right, allowing for a separate partisan “effect” to the right and left of the threshold. If opposition representation makes personnel spending less partisan, we expect the partisan shift to be smaller in cities above 3,500 than in those below.

The results of this analysis are shown graphically Figure 3. Figure 3 plots the conditional expectation of personnel spending (as a share of operating expenses) separately for four categories of cities, based on whether the city is above or below the 3,500 threshold and whether the mayor is of the Right or Left. Mayors of the Left spend more on personnel than mayors of the Right, as indicated by the fact that the red lines are above the blue lines. The effect of crossing the 3,500 threshold on partisanship is indicated by the fact that the lines are closer together to the right of the threshold; the difference in the gap between the lines is my measure of the ITT.

Figure 3: Effect of crossing the 3500 threshold on partisanship in personnel spending

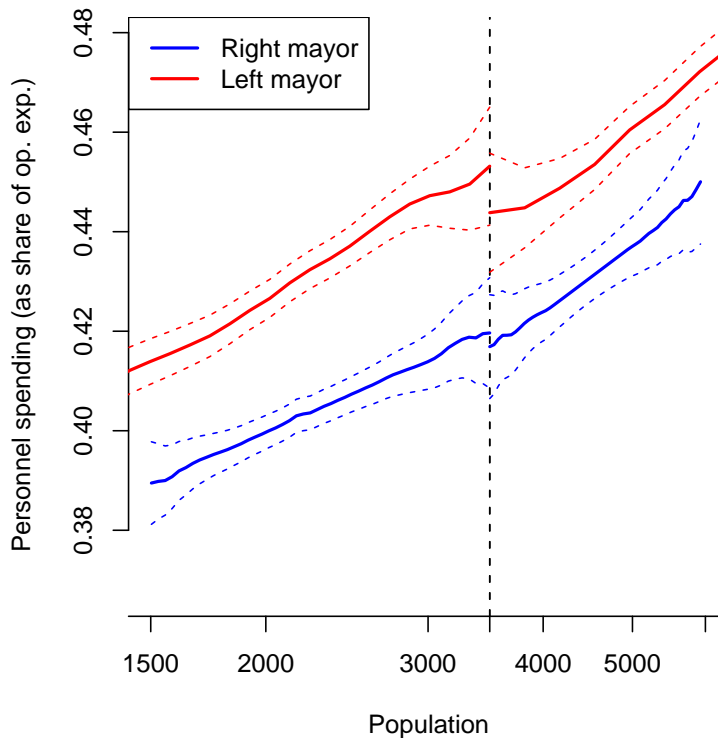


Table 2: Effect of crossing the 3500 threshold on partisanship in personnel spending

	Estimate	SE	Lower bound	Upper bound
R-L difference > 3500	-0.0218	0.0043	-0.0307	-0.0140
R-L difference < 3500	-0.0339	0.0037	-0.0414	-0.0258
Ratio of differences	0.6427	0.1554	0.3923	0.9552
ITT_y for Left	-0.0131	0.0060	-0.0257	-0.0017
ITT_y for Right	-0.0010	0.0056	-0.0110	0.0110

Estimates come from a single RD regression of personnel spending as a proportion of operational expenses in which the running variable is log population and the cut point is at a population of 3500. The regression interacts the indicator for being above 3,500 with an indicator for the mayor being from the Right. “R-L difference” indicates the difference between the predicted level of spending above or below the threshold; “Ratio of differences” indicates the ratio of those differences; “ ITT_y ” indicates the effect of crossing 3m500 for the specified party. Standard errors and confidence intervals are produced by bootstrapping.

Table 2 provides the estimates for the ITT and IV. The first row of the table shows the estimated difference in personnel spending between mayors of the Right and Left in cities just above 3,500 inhabitants; mayors of the Right in these cities spend about 2 percentage points less on personnel (as a proportion of all operating expenses) than do mayors of the Left. Personnel spending constitutes about 45% of the operational budget, so this implies a difference in personnel spending of over 4%. By contrast, mayors of the Right in cities just under 3,500 spend about 3.4% less than do mayors of the Left. In both cases the null hypothesis of no difference in spending between Left and Right mayors can be rejected at high levels of significance, but more importantly for our present purposes the *difference* between the two partisan effects is also both substantial and statistically significant. The ratio of the differences (i.e. the difference in cities above divided by the difference in cities below) is about .64, indicating that the partisan difference is cut by about a third, and the bootstrap confidence intervals for that ratio do not include 1 (which corresponds to the null hypothesis of no difference between the degree of partisanship above and below the threshold).

The last two lines of Table 2 divide the data by the mayor’s party and assess whether the conditional expectation jumps at 3,500. Intriguingly, a substantial drop in personnel spending is detectable in cities of the Left, but no rise is detectable in cities of the Right. (This asymmetry is also evident from Figure 3.) This suggests that it is mayors of the Left who are influenced by the presence of the opposition, while mayors of the Right are

unmoved.²¹ One possible explanation for this is that the opposition is better able to *block* actions proposed by the majority than it is to *induce* the majority to propose its favored actions: the Right in opposition presumably wants to block motions to expand the payroll favored by Left majorities (and can perhaps do so through criticism and delay), while the Left in opposition may be powerless to induce the Right to hire new employees or promote those already on the payroll. In other words, the disproportionate impact of the opposition may be due to the fact that the opposition can at best implement the status quo, and the status quo is typically closer to the Right's ideal point on this policy dimension.²²

C. DECISIONS TO JOIN MUNICIPAL CONFEDERATIONS

The most important single decision faced by municipal councils in recent decades has been whether or not to join a local municipal confederation. These confederations, known in French as *communautés de communes*, are designed to assume municipal responsibilities such as water provision, trash pickup, and tourism promotion that may be more economically performed at a scale larger than the typical municipality. The municipal confederation was created as a legal entity in 1992 by reformers seeking to reduce the cost of local public service provision. Municipalities had long participated in syndicates and associations of various kinds to handle service provision tasks, but the new confederations had greater financial resources and required a more complete transfer of powers from the component municipalities. In the view of many observers, the municipal confederation movement amounted to municipal agglomeration by other means: it having been found politically impossible to redraw municipality borders, reformers settled for undermining the municipal *raison d'être* by inducing municipalities to transfer their responsibilities upward to the new confederations (Loughlin 2007).

The decision to join a municipal confederation provoked discussion and debate in municipal councils across France. For mayors, joining a municipal confederation involves sacrificing some discretion and power: not only does the municipality give up authority over a

²¹Note however that a level shift may be occurring simultaneously with a drawing together of the two parties; perhaps opposition representation slightly cuts personnel spending in both sets of cities, and then mayors of the Right and Left move closer together, making it appear as if it is only mayors of the Left who move even though both in fact do.

²²I thank Keith Krehbiel for making this point.

key tax and some spending decisions, but it also would oversee a smaller municipal workforce.²³ On the other hand, for many mayors, joining a confederation provided a chance to show their own voters their dynamism and attention to controlling municipal expenses, as well as a way to increase their personal political network through cooperation with surrounding municipalities. For all decision-makers involved, a paramount fear was that the commune would lose its identity, forged over centuries of self-governance; an attraction was the promise of a reduced fiscal burden and various financial incentives. On balance, it seems that neither the majority nor the opposition would be more eager to join a confederation; the decision comes with costs and benefits that on net affect both parties about the same.

Since 1992, almost all municipalities have chosen to join a confederation; official data indicate that, of municipalities with populations between 2000 and 5000, over 93% belonged to a confederation by 2008. Municipalities varied greatly, however, in the timing of their decision to join a confederation. Timing depended on many factors, but typically mayors in an area would enter into discussions (often hosted by department-level authorities) about the scope and nature of the confederation, and then seek approval to join from each municipal council. If we assume that the *opportunity* to join a municipal confederation did not depend on the existence of local opposition, and further that the majority and opposition had roughly the same inclination to join on average, then I can assess the effect of opposition on the efficiency of decision-making by examining the effect of opposition representation on the time until joining a confederation.²⁴ I therefore fit a survival model estimating the time from 1992 until the municipality joins a confederation, using annual data on confederations in existence from 1995 to 1999.²⁵ To measure the effect of opposition representation on time to joining (i.e. the ITT_y), I include in the survival model an indicator for the population being above 3,500, interacted with log population; to soak up

²³According to the March, 2009, report of the Balladur Committee (charged with the reform of local collectivities), municipalities that joined confederations experienced lower growth in personnel spending than those that did not. <http://www.ladocumentationfrancaise.fr/rapports-publics/094000097/index.shtml>, pg. 44; accessed November 2, 2009.

²⁴A key assumption here is that all municipalities would eventually join confederations, and the delay before doing so was essentially unproductive. The findings should be interpreted differently if delay in many cases was useful to the municipality, perhaps to improve its bargaining position or gather information.

²⁵The data are provided by the Ministry of the Interior (DGCL). A longer time series would have been preferable, but data before 1995 is not available and data after 1999 uses a different coding scheme, making it difficult to compare.

Table 3: Opposition representation and years until joining confederation of municipalities

	Baseline	ITT_y	IV
Estimate	4.935	1.306	3.035
Bootstrap SE	0.378	0.579	1.401

Estimates indicate number of years from 1992 until the municipality joins a confederation. “Baseline” is the predicted value for municipalities with populations just under 3,500; ITT_y indicates the predicted difference (in years) between municipalities just above and just under 3,500; the IV estimate divides the ITT by the effect of crossing the 3500 threshold on opposition representation. All estimates come from a survival model with region dummies; the baseline estimate is for municipalities in the West region.

some of the variation in joining times I also include regional dummies. Based on the results of a bandwidth selection procedure, I use data within a .45 bandwidth in log population of 3,500 – an interval of approximately [2230, 5490].²⁶

The findings of my survival-RD analysis are provided in Table 3. The expected number of years until joining a confederation in municipalities just under 3,500 (the baseline time until joining) is estimated at 4.9, indicating that an average municipality would join around the beginning of 1997. In expectation, a municipality just over 3,500 in population is expected to take 1.3 years longer, indicating joining in the second quarter of 1998. That estimated difference is strongly statistically significant, with a p-value under .02.²⁷

Under the assumption that crossing 3,500 is a valid instrument for the existence of opposition representation (i.e. that no other factors that change at 3,500 affected the time until joining a confederation), we can estimate the effect of opposition representation on time until joining by IV. The estimated effect of opposition representation on the time to joining, shown in the last column of 3, is about 3 years, again statistically significant. This result indicates that opposition representation on the council quite substantially delayed the process of joining municipal confederations. Since it is reasonable to think that the

²⁶Given that the data indicate whether the municipality is in a confederation in each year from 1995 to 1999, we have both left-censoring (municipalities that had already joined a confederation when observation began in 1995) and right-censoring (municipalities that had not yet joined a confederation in 1999). Following standard procedure in survival analysis, I model the (log) time to joining as a linear combination of covariates and calculate MLE estimates; the time to joining for censored observations is expressed in the the likelihood as an inequality (e.g. $\Pr(T_i > c|\theta)$ for units censored to the right at c).

²⁷The same finding emerges from a simple RD analysis of the effect of the electoral rule on the probability of a municipality being in a confederation by a certain year. Crossing 3,500 decreases the probability of being in a confederation in 1995 from about .31 to about .21 (p-value < .013) and in 1998 by from about .4 to about .325 (p-value < .07).

municipal opposition was not on average more opposed to joining municipal confederations than the majority, and since municipalities with and without opposition representation probably faced roughly the same opportunities to join municipal councils, this suggests that opposition representation does indeed slow the decision-making process.

Why would opposition representation make the council operate more slowly? The answer is probably that disagreement takes time. While majorities and oppositions probably on average were equally disposed to join municipal confederations, in any given case there was likely to be some disagreement about the issue on the council – more than would occur if the opposition were not present, in which case members of the majority may delegate the decision to the mayor. With more diversity of opinions and the perceived obligation to at least discuss objections that are raised, decision-making takes longer.

VI. ROBUSTNESS CHECKS

I have documented an effect of opposition representation on partisanship in personnel spending and in the delay until joining a municipal confederation. In this section I perform a set of robustness checks that assess the credibility of those findings, including checks for the possibility that other factors that change at 3,500 might be responsible for the effects I find.

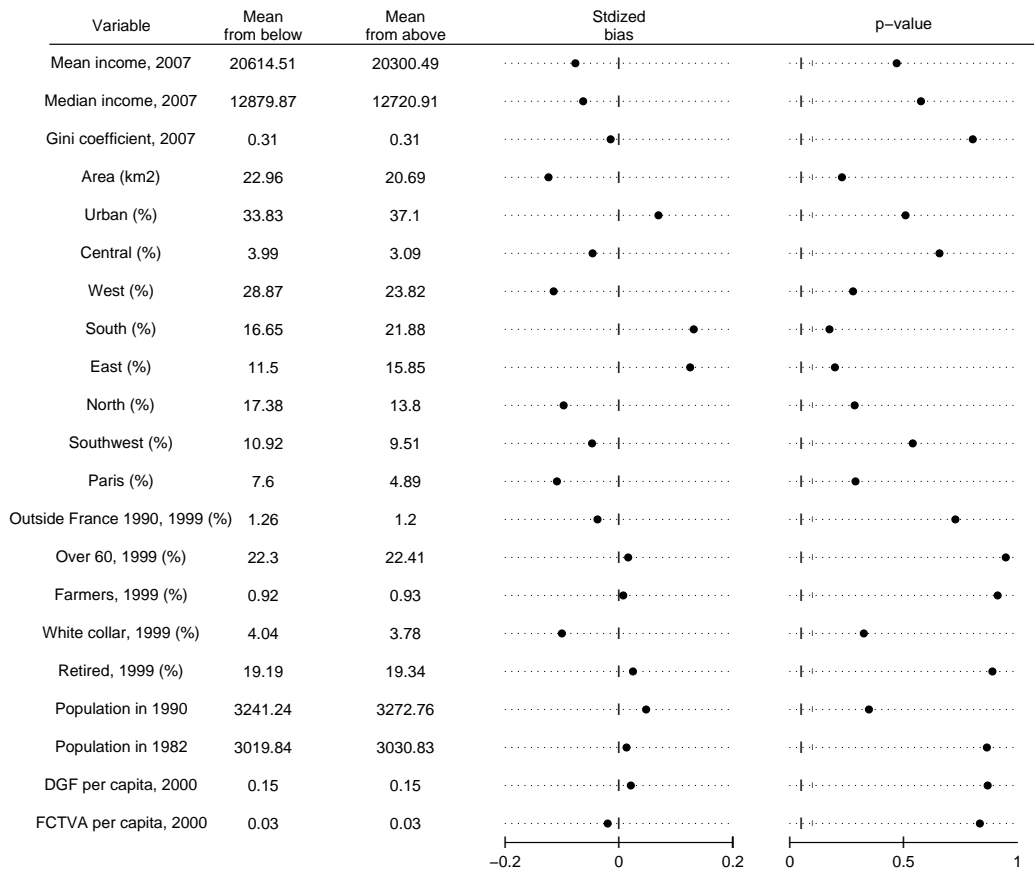
A. MUNICIPAL CHARACTERISTICS: A TEST OF BALANCE

One concern is that background municipal characteristics may not in fact be balanced across the threshold – i.e. that municipalities above and below the threshold differ in important ways. This might be true if some mayors are able to manipulate their municipality’s official population to end up with the electoral system they prefer; if municipality characteristics are correlated with either politicians’ preferences over electoral systems or their ability to manipulate their official population, then policy differences we detect could be due to these other differences. Even in the absence of this kind of sorting, municipal characteristics may not be balanced across the threshold purely as a result of chance.

Figure 4 assesses the balance of 21 covariates at the 3,500 threshold. For each covariate, I conduct an RD regression within a log population bandwidth of .3. Columns 2 and 3 of

Figure 4 report the conditional expectation at either side of the threshold. Column 4 shows the standardized bias of each variable (the estimated jump at 3,500 divided by the standard deviation within the estimation window); it shows that no jump is greater than about .15 standard deviations, which is similar to the balance one would obtain in a randomized experiment. Finally, the last column shows the p-value of the test of the null hypothesis of no jump at the threshold; in no case can the null be rejected at the .1 level.

Figure 4: Covariate balance at 3500



For each covariate, a local linear regression is conducted using data within $\pm 1/3$ in log population of the 3,500 threshold (roughly 1600 municipalities between roughly 2,590 and 4,725 in population). The difference between “mean from below” and “mean from above” is the estimated jump at the threshold. Standardized bias is that difference divided by the standard deviation of the variable within the estimation window. The p-value is from the test of the null hypothesis of no jump at the threshold.

B. TEST FOR EFFECTS AT OTHER THRESHOLDS

In applications of the regression discontinuity design, a standard robustness check involves testing for treatment effects at cut points along the forcing variable where the treatment does not change. In general, this check is motivated by the concern that the outcome may be “jumpy” (as a function of the forcing variable) in a way that makes it likely that spurious effects would be found. In the current application, there is an additional reason to test for effects at other thresholds: municipal council size and mayoral salary jump at the 3,500 threshold as well as at other thresholds. One way of ruling out the possibility that the effects we observe were caused by these other factors is to see if policy outcomes jump at other thresholds where those factors jump.

Table 4 indicates municipal population thresholds at which institutional factors are required to shift: the electoral rule, which we have discussed at length, changes at 3,500; council size incrementally rises from 9 in cities with fewer than 100 inhabitants to 43 in cities of 40,000 people; the mayor’s salary incrementally rises at a different set of thresholds from 633 euros a month in very small cities to over 3000 euros in cities of 20,000; and since 2001 a gender parity law has applied to the construction of lists in councils of cities with 3,500 or more inhabitants. I address the issue of the gender parity law in the next section, but here I examine whether the outcomes I have focused on (partisanship in personnel spending and delay in joining municipal confederations) appear to change at other thresholds where council size or mayor salary change. It seems reasonable to dismiss the possibility that these two institutional changes explain the effects we see at the 3,500 threshold if they do not produce similar effects at other thresholds where they change.

Figure 5 shows the results of this analysis for moderation in personnel spending; Figure 6 shows the results for delay in confederation decisions. For each outcome I calculate the estimated ITT at several thresholds including all thresholds where council size or mayor salary change (as indicated in Table 4). In both cases, it is encouraging that the effect found at 3,500 is the largest of the estimated effects. In the case of personnel spending there is one other jump that is statistically significant at the .05 level (at 2,250) and in the case of confederation decisions there are two (at 2,000 and 2,750), but considering that we are conducting 17 tests for each outcome it is not too surprising that we reject the null in 3 out

Table 4: Legislative thresholds for French municipalities

Population window	Electoral rule	Council size	Mayor salary	Gender parity	# of communes	% of communes
Below 100	MMP	9	633	No	3872	10.66
100 to 499	MMP	11	633	No	17157	47.24
500 to 999	MMP	15	1154	No	6671	18.37
1000 to 1499	MMP	15	1601	No	2671	7.35
1500 to 2499	MMP	19	1601	No	2247	6.19
2500 to 3499	MMP	23	1601	No	1041	2.87
3500 to 4999	PR	27	2047	Yes	804	2.21
5000 to 9999	PR	29	2047	Yes	965	2.66
10000 to 19999	PR	33	2420	Yes	469	1.29
20000 to 29999	PR	35	3350	Yes	181	0.50
30000 to 39999	PR	39	3350	Yes	80	0.22
40000 to 49999	PR	43	3350	Yes	53	0.15

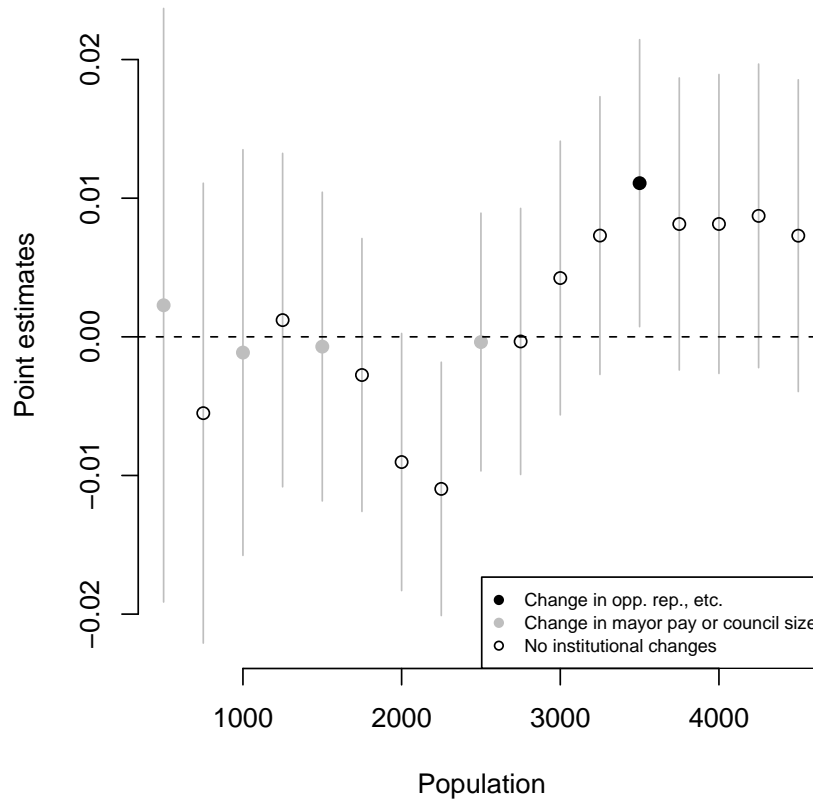
As shown in the table, several factors in municipal government depend on the population, including the electoral rule (multimember plurality vs. a hybrid proportional representation system), the number of seats on the council, the maximum allowable mayoral salary, and (since 2001) a requirement that electoral lists must have equal numbers of men and women.

of 34 cases (or 8.8%). The point estimates at thresholds where other institutional factors change are very close to zero, which assuages concern that these other factors changing at 3,500, and not the jump in opposition representation, explain the effects we see at that threshold.

C. GENDER PARITY

As indicated in Table 4, cities above 3,500 in populations have since 2001 faced an additional rule that might affect policymaking: candidate lists in PR municipalities are required to include an equal number of male and female candidates, alternating such that the resulting council has roughly the same number of men and women. Particularly given evidence that women and men implement different policies (Chattopadhyay & Duflo 2004) and survey evidence that female and male municipal councilors in France respond to political surveys somewhat differently (Bird 2003), the coincidence of the gender parity rule and opposition representation raises the concern that the moderation we observe might come from increased female representation instead.

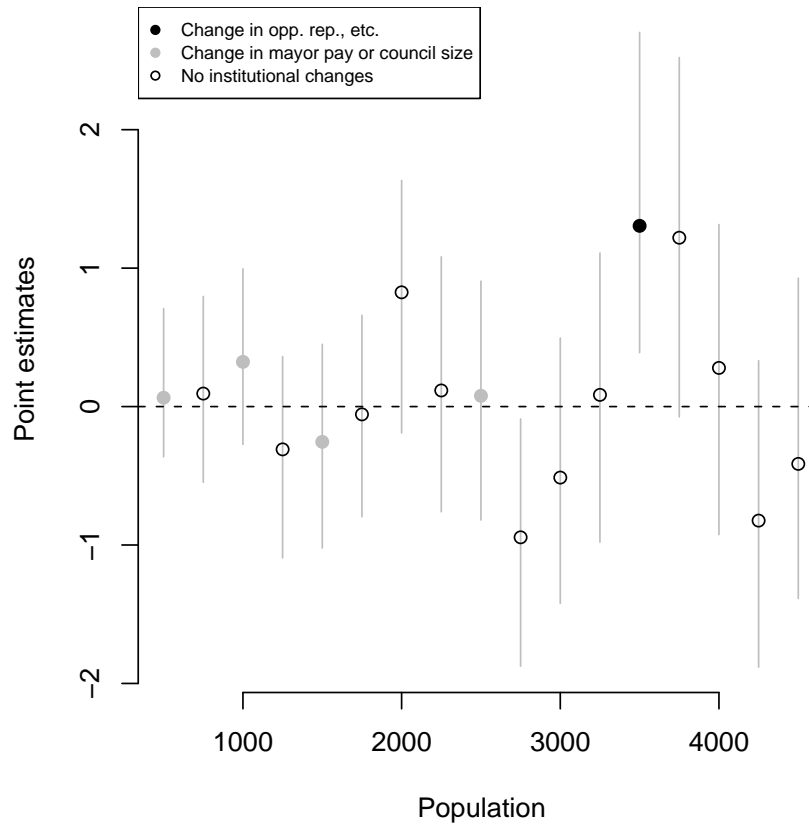
Figure 5: Jumps at thresholds other than 3,500: Moderation in personnel spending



The concern about the confounding of gender parity and the electoral rule fortunately does not apply to the analysis of municipal confederation decisions, because that analysis is based on elections that took place in 1995, before gender parity came into effect. For the analysis of personnel spending, which is based on the 2001 elections (because earlier data is not available), it is harder to reject the possibility that gender parity in fact explains what we see.

The main reason to think that the gender parity rule likely had at most a small effect on fiscal policy after 2001 is that it has had a relatively limited impact on council composition. Figure 7 shows the effect of the gender parity rule on the proportion of female mayors and council members, based on comparing councils elected in the 2008 election in cities near the 3,500 population threshold. The left panel shows that the parity rule appears to have had no effect on the gender of mayors elected; about 11% of mayors elected in cities barely

Figure 6: Jumps at thresholds other than 3,500: Delay in confederation decisions



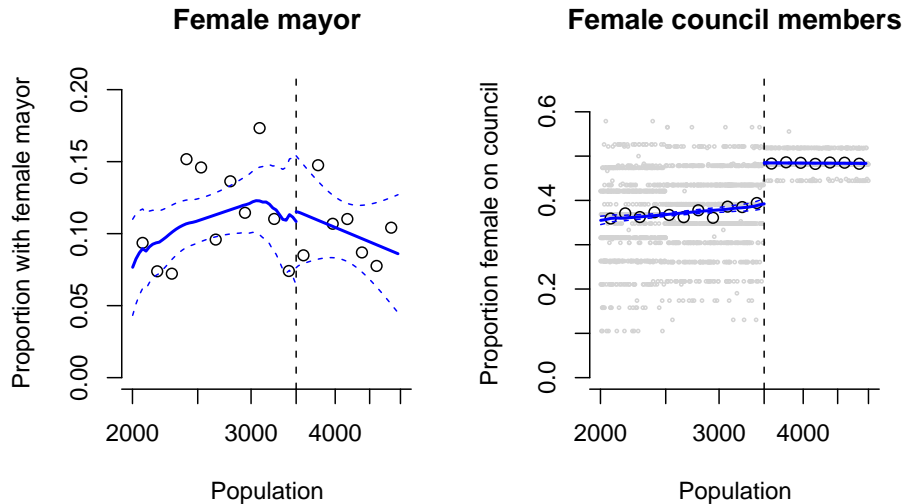
large enough to be subject to the parity rule are female, as are about 11% of mayors elected in cities just under the 3,500 threshold.²⁸ The right panel shows that the gender parity rule did have an effect on the proportion of female councilors; the proportion of female councils is about 40% just below the threshold (and, as would be expected, nearly 50% in cities subject to the rule).

Given that the jump in opposition representation we observe in the 2001 elections coincided with a jump in female representation,²⁹ there is no way to categorically rule out the possibility that gender parity caused the policy changes we observe in the 2001-2007 period. Still, the change in council composition was fairly modest compared to the change

²⁸I also find no effect if I use the population in 1999 (which determined the application of gender parity in 2001) as the running variable; there thus seems to be no effect of the female proportion on the council on whether a female mayor is subsequently elected.

²⁹The jump in female representation in 2001 was probably slightly larger, given that female representation on municipal councils is generally growing.

Figure 7: The effect of the gender parity rule on mayor and council gender composition



RD plots of the effect of crossing 3,500 (where the gender parity rule takes effect) on the proportion of mayors (left) and council members (right) who are female, after the 2008 elections. Population is based on the 1999 census, with subsequent adjustments published in the Journal Officiel.

in opposition representation – an increase from around 40% to 50% in the proportion of females on the council compared to an increase from about 40% to about 80% of the proportion of municipalities with opposition representation. Interviews and reading of municipal council minutes both suggest that the presence of opposition is much more important to the operation of the council: mayors and council members from municipalities that crossed the threshold between 2001 and 2008 and thus were simultaneously subjected to both regulations say that while the gender parity rule made the job of assembling a list somewhat difficult, the appearance of opposition on the council made a larger routine impact on how the council operated.³⁰ Together, these factors suggest that it is reasonable to attribute the changes in policy at the 3,500 threshold after 2001 mostly to the existence of opposition rather than to the gender parity law.

³⁰Personal communications with Pascal Boheas, Philippe Lengenieux-Villard, and Philippe Gourronc, October 2009.

VII. CONCLUSION

The representation of dissenting viewpoints is standard in legislatures³¹ and the exception in most executive political institutions.³² Intuition and experience has suggested to political observers since at least Hamilton that deliberation among people with opposing viewpoints tended to moderate (and perhaps delay) political outputs. Aside from a number of suggestive laboratory experiments, this observation has remained at the level of anecdote, however. This paper has exploited an unusual natural experiment in French municipalities to provide the first rigorous evidence of the effect of opposition representation (as well as the scrutiny and transparency it produces) on policy. The key feature of this setting that makes this possible is an electoral rule that gives seats to the opposition in one city and not in another based solely on whether the city is above or below a 3,500-person population cutoff. This allows us to disentangle the effects of opposition representation from its causes by comparing similar cities above and below the 3,500 threshold.

It should be clear that the effect I measure is not the effect of the *existence* of opposition in a municipality; in a plurality-rule city where there is no opposition representation on the council, there may still be an opposition group involved in local political life as citizens. What differs is the level of *access* this group has to the political process, i.e. whether they enjoy the right as municipal councilors to obtain information from the mayor in advance of meetings, to vote, speak, and question during public meetings, and to participate in non-public committee hearings. It should also be clear that the power of the opposition in this setting does not come primarily from the opposition's votes: the opposition is, by design, very small, and essentially never wins a vote or enters into a governing coalition. In that sense this is a study of opposition in its purest form – the effect of public criticism and institutionalized scrutiny on policy.

³¹In fact it is a byproduct of representative democracy.

³²Independent agencies in the US, which are statutorily required to have bipartisan representation, occupy an illustrative middle ground.

REFERENCES

- Alt, J. & Lassen, D. (2006), ‘Fiscal transparency, political parties, and debt in OECD countries’, *European Economic Review* **50**(6), 1403–1439.
- Angrist, J., Imbens, G. & Rubin, D. (1996), ‘Identification of causal effects using instrumental variables.’, *Journal of the American Statistical Association* **91**(434).
- Bawn, K. & Rosenbluth, F. (2006), ‘Short versus long coalitions: Electoral accountability and the size of the public sector’, *American Journal of Political Science* pp. 251–265.
- Besley, T. (2006), *Principled agents?: The political economy of good government*, Oxford University Press, USA.
- Besley, T. & Burgess, R. (2002), ‘The political economy of government responsiveness: Theory and evidence from India’, *Quarterly Journal of Economics* **117**(4), 1415–1451.
- Bird, K. (2003), ‘Who are the women? Where are the women? And what difference can they make? Effects of gender parity in French municipal elections’, *French Politics* **1**(1), 5–38.
- Bordignon, M. & Tabellini, G. (2009), ‘Moderating Political Extremism: Single Round vs. Runoff Elections under Plurality Rule’.
- Chattopadhyay, R. & Duflo, E. (2004), ‘Women as policy makers: Evidence from a randomized policy experiment in India’, *Econometrica* pp. 1409–1443.
- Duverger, M. (1954), *Political Parties: Their Organization and Activity in the Modern State*, Wiley.
- Elster, J. (1998), *Deliberative democracy*, Cambridge Univ Pr.
- Farrell, J. & Rabin, M. (1996), ‘Cheap talk’, *The Journal of Economic Perspectives* pp. 103–118.
- Fujiwara, T. (2008), ‘A Regression Discontinuity Test of Strategic Voting and Duvergers Law’.
- Fung, A., Graham, M. & Weil, D. (2007), *Full disclosure: The perils and promise of transparency*, Cambridge Univ Pr.
- Gagliarducci, S. & Nannicini, T. (2008), ‘Do Better Paid Politicians Perform Better? Disentangling Incentives from Selection’.
- Gutmann, A. & Thompson, D. (1996), *Democracy and disagreement*, Belknap Pr.
- Imai, K., Keele, L. & Yamamoto, T. (2008), Identification, inference, and sensitivity analysis for causal mediation effects, in ‘Applied Statistics Workshop, Harvard University, November’, Vol. 12.
- Imbens, G. & Lemieux, T. (2008), ‘Regression discontinuity designs: A guide to practice’, *Journal of Econometrics* **142**(2), 615–635.

- Lee, D. (2008), ‘Randomized experiments from non-random selection in US House elections’, *Journal of Econometrics* **142**(2), 675–697.
- Lee, D., Moretti, E. & Butler, M. (2004), ‘Do Voters Affect Or Elect Policies? Evidence From The US House*’, *Quarterly Journal of Economics* **119**(3), 807–859.
- Loughlin, J. (2007), *Subnational Government: The French Experience*, Palgrave MacMillan.
- Martin, P. (2001), *Les élections municipales en France depuis 1945*, La documentation française.
- Nyhan, B. & Reifler, J. (2010), ‘When Corrections Fail: The persistence of political misperceptions’, *Political Behavior* **32**(2), 303–330.
- Pearl, J. (2001), Direct and indirect effects, in ‘Proceedings of the seventeenth conference on uncertainty in artificial intelligence’, Citeseer, pp. 411–420.
- Persson, T., Roland, G. & Tabellini, G. (2007), ‘Electoral rules and government spending in parliamentary democracies’, *Quarterly Journal of Political Science* **2**(2), 155–188.
- Pettersson-Lidbom, P. (2008), ‘Does the size of the legislature affect the size of government? Evidence from two natural experiments’.
- Pettersson-Lidbom, P. & Tyrefors, B. (2007), The policy consequences of direct versus representative democracy: A regression-discontinuity approach, Technical report, mimeo, Stockholm School of Economics.
- Powell, G. (2000), *Elections as instruments of democracy: Majoritarian and proportional visions*, Yale Univ Pr.
- Robins, J. (2003), *Highly structured stochastic systems*, Oxford University Press, chapter Semantics of casual DAG models and the identification of direct and indirect effects, pp. 70–81.
- Rosenblum, N. (2008), *On the side of the angels: an appreciation of parties and partisanship*, Princeton University Press.
- Snyder, J. & Strömberg, D. (2008), ‘Press coverage and political accountability’, *NBER working paper* .
- Stiglitz, J. (1999), ‘On liberty, the right to know, and public discourse: the role of transparency in public life’, *Globalizing Rights: The Oxford Amnesty Lectures* **149**.
- Sunstein, C. (2009), *Going to extremes: how like minds unite and divide*, Oxford University Press, USA.
- Sunstein, C., Schkade, D., Ellman, L. & Sawicki, A. (2006), *Are judges political?: an empirical analysis of the federal judiciary*, Brookings Inst Pr.
- Thistlethwaite, D. & Campbell, D. (1960), ‘Regression-discontinuity analysis: An alternative to the ex post facto experiment’, *Journal of Educational Psychology* **51**, 309–317.

Wald, A. (1940), 'The fitting of straight lines if both variables are subject to error', *The Annals of Mathematical Statistics* pp. 284–300.

Weingast, B., Shepsle, K. & Johnsen, C. (1981), 'The political economy of benefits and costs: A neoclassical approach to distributive politics', *The Journal of Political Economy* **89**(4), 642.