Making Candidates Count: The Logic of Electoral Alliances in Two-Round Legislative Elections

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Electoral systems have been shown to influence strategic voting and the development of party systems but the focus has rarely been on the strategies that parties adopt to take advantage of the electoral system under which they compete. Electoral pacts form one such strategy. We present a theory about the formation of electoral pacts in majority run-off elections and pay special attention to the consequences of the presence of extremist parties. Analyzing the 2002 French legislative elections we find that the Socialists and the Greens were more likely to form an alliance (and to agree on a common candidate) in closely contested constituencies and where there was a potential of coordination failure on the right. Finally, we show that the agreement primarily benefited the larger party.

The literature on the relationship between electoral systems and party systems has generally emphasized the role of strategic voting in determining the number of parties. There are, however, a number of reasons to believe that strategic voting is not the sole culprit. Studies have shown that strategic voting is far less extensive than models of strategic voting imply.[1] Politicians, on the other hand, are too often absent in the literature on the link between electoral and party systems.[2] This is curious, because politicians presumably have a far greater stake in the electoral outcome than voters. Consequently, their incentives to acquire the requisite understanding of the electoral institutions, and the strategic opportunities they afford, are far greater than the voters' incentives. Politicians, rather than voters, should therefore be instrumental in shaping party systems.

In this article we examine how politicians respond to the incentives and constraints of electoral systems. These responses can take several forms. Politicians may respond through party mergers, the formation of new parties, by encouraging voters to act strategically, and by limiting the number of candidates they offer.[3] Here we focus on the decision to form electoral alliances. Forming electoral alliances may be an attractive option as it avoids some difficult decisions that accompany party mergers (like agreeing on a label, statutes, and a leader). Unlike making appeals to voters, electoral alliances do not rely on voters' receptiveness to the party's message because they effectively limit voter's choice. By forming electoral pacts, the politicians reduce the number of alternatives available to the voter and thereby avoid some of the punishing aspects of the electoral system.

Our objective is to demonstrate how politicians take account of their political and institutional environment in forming electoral pacts. Our empirical focus is on majority run-off elections because majority run-off systems tend to create both a highly disproportional outcome and a multiparty system (Duverger 1954). It is under these conditions that the incentives to form electoral pacts are the strongest. Indeed, according to Duverger, "in all countries where the second ballot has been working there are more or less

[1]See, e.g., Blais (2002).

[2]See, e.g., Besley and Coate (1997) and Osborne and Slivinski (1996) for notable exceptions.

[3]See, e.g., Kaminski (1999) and Benoit (2001) on mergers and formation of new parties; Farrell, Mackerras, and McAllister (1996) and Sharman, Sayers, and Miragliotta (2002) on parties' instructing voters how to cast their votes; and Cohan and McKinlay (1978), Reed (1990), and Marsh (2000) on the decision about how many candidates to offer.

The Journal of Politics, Vol. 69, No. 1, February 2007, pp. 193–205

 ISSN 0022-3816

clear traces of electoral alliances" (1954, 328) Sartori (1994) saw this as one of the benefits of the run-off system as it allows voters a choice but, at the same time, it encourages a certain degree of cooperation between parties on the second ballot.

As a class of electoral systems, majority run-off systems have received limited attention despite being fairly popular. Birch (2003) identifies 29 countries that use majority run-off elections to elect their legislatures (some of these countries employ the run-off in conjunction with proportional representation). Furthermore, most presidential elections use a two-round system (Blais, Massicotte, and Dobrzynska 1997). However, the primary reason that majority run-off systems deserve greater scrutiny is that they provide data that are not available under alternative electoral systems. The presence of two ballots provides an opportunity to observe how candidates and voters respond to the information that becomes available to them after the first round.

We develop a theory about the formation of electoral pacts that considers how electoral institutions influence the terms of the agreement, its scope, and content (which constituencies are affected). Subsequently, we test several implications of our theory using data on the 2002 French legislative elections.

Bargaining over Seats

Under two-round systems the parties face a choice between two types of electoral pacts. The more common type is the second-round agreement in which two, or more, parties agree that the candidate receiving fewer votes on the first ballot will yield if more than one party advances onto the second ballot. As Sartori (1994) points out, such agreements are most likely to be effective among ideologically proximate parties. The second type, which Sartori considered "not very plausible" (1994, 66), is a more proactive form of electoral coordination where a common candidate is presented on the first ballot. The primary focus of this paper is on this latter type of electoral pacts.[4]

We start with the assumption that each party wants to maximize its number of seats. It is immediate that each party will only consider an agreement if it increases the number of seats it wins. While any deal satisfying this minimal condition represents a Pareto improvement, there are a number of agreements that satisfy the condition.

Parties face certain constraints in forming electoral pacts. Reaching an agreement is not costless. In this case, it requires that the two parties agree to present a *common candidate*, meaning that one party accepts that it will not run a candidate in a given constituency and that it endorses the other party's candidate.[5] Ceding any constituency to another party risks frustrating party militants and may make it more difficult for the party to carry that constituency in later elections. The parties' public funding is also tied to the number of votes received on the first ballot. The parties may be able to reach an agreement that compensates them for such losses by increasing the number of seats they can expect to win.

Although we acknowledge that public funding plays a role in the bargaining between the parties, we contend that the parties' primary concern is to maximize their share of seats in the legislature. While public funding imposes a cost on the parties when they cede a constituency to their bargaining partner, which places constraints on the bargaining outcome, it does not influence in which constituencies it is beneficial to strike a deal.

In theory, it is a simple matter for the parties to determine the *scope* of the agreement, i.e., in which constituencies to ally and present a common candidate. An alliance should be formed in constituencies where it (substantially) increases the likelihood of a victory. Things are, however, not that simple. The parties' preferences are not only for the electoral alliance to win as many seats as possible but also to come to an agreement that offers them favorable terms.

The parties' incentive to make a deal will depends on their chance of carrying the constituency. If the parties have no chance of carrying the constituency there is no reason to haggle over who represents the parties. The discussion below provides an intuitive explanation of how the electoral system influences the parties' bargaining and is followed by a formal statement of the conditions. A fuller analysis of the model can be found in the online appendix.

Suppose two ideologically similar parties, *A* and *B*, both present a candidate on the first ballot. Only one candidate can be expected to advance onto the second ballot when the parties' support is highly asymmetric but potential coordination problems on the second ballot can be solved by making an agreement requiring

[4]The conditions for a second-round agreement can be found in an onlie appendix at http://www.journalofpolitics.org/art69_1.html.

[5]Note that common candidates are only common in the sense that they are endorsed by both parties and not in the sense that both parties have a voice in selecting the candidate.

the candidate with fewer votes to concede.[6] Parties *A* and *B*'s incentive to form an electoral alliance also depends on the degree of electoral coordination achieved by the opposing bloc, as the results on the second ballot are determined by plurality rule. The possibility of coordination failure implies that parties *A* and *B* may win even when their support is low relative to the total support of the opposing bloc. Thus, the opposing bloc's failure to coordinate may turn a noncompetitive contest into a competitive one.[7]

The success of an electoral alliance depends on whether voters are willing to transfer their votes between parties belonging to the same bloc. In general, this appears to be the case in run-off elections. Lewis-Beck and Chlarson (2002) find that left–right ideology is more important on the second ballot than on the first ballot, which implies that most voters in each camp are willing to transfer their support to their camp's candidate.[8] In line with Tsebelis (1990), however, we assume that competition between the parties on the first ballot reduces voters' willingness to transfer their votes to the candidate that advances. That is, a greater fraction of party *A*'s supporters is willing to cast their votes for party *B*'s candidate on the second ballot if party *A*'s candidate was not present on the first ballot.

A first-round agreement, i.e., presenting a common candidate on the first ballot, increases the likelihood of a victory in two ways. First, by presenting a single candidate, the parties may succeed in getting a candidate on the second ballot when they otherwise wouldn't. That is, neither party may have sufficient support by itself but their combined support, less the share of voters not willing to transfer their votes, clears the threshold. This is not sufficient, however. To win, the common candidate must receive more votes on the second ballot than the (leading) candidate on the right. It is unlikely that the parties have the support of the majority if each of the parties' support falls short of the threshold on the first ballot. An agreement may nevertheless make a difference if support for the right is split on the second ballot. The left candidate only needs to secure a plurality in a three-candidate race.

Second, forming a pact also increases the likelihood of a left victory in closely fought second-ballot contests when one of the candidates clears the threshold safely. That is, following Tsebelis' (1990) argument, the left candidate only garners more votes than the right candidate if she was endorsed by both parties from the beginning. Thus, the incentive to form a pact is strongest when the expectation is that the second ballot will be a close contest. We refer to constituencies that satisfy either of the two conditions above as *pivotal* constituencies.

We can state these conditions formally. Let V^1_{mi} denote party i's ($i \in \{A, B\}$) support in constituency m on the first ballot. Let $V^2_{mi}(\cdot)$ denote the vote share of the left bloc candidate on the second round. $V^2_{mi}(\cdot)$ takes the arguments C and $\emptyset$ that denote whether the parties formed a pact (and presented a common candidate) on the first ballot or not. Tsebelis's (1990) claim that competition between the parties on the first ballot has adverse effects on the bloc's second ballot results implies that $V^2_{mi}(C) > V^2_{mi}(\emptyset)$. Support of right parties is denoted in a similar manner. Since more than one right party may advance onto the second ballot, let $V^2_{m\bar{R}}$ denote the support of the right party with greater support on the second ballot.[9] Let k denote the effective vote threshold for inclusion on the second ballot. Let θ be the share of party *B*'s supporters (supposing party *B* withdraws) that is willing to transfer their votes to party *A* on the first ballot. A first-round agreement helps the parties clear the threshold if $V^1_{mA} < k$ and $V^1_{mB} < k$, but $V^1_{mA} + \theta V^1_{mB} > k$.[10] Thus, as the voters' willingness to transfer their votes decreases, the number of constituencies satisfying this

[6]In the 2002 French legislative election candidates withdrew in five of the ten constituencies where two candidates belonging to the same bloc advanced onto the second ballot. In addition, there were two constituencies where only a Socialist and a Communist advanced to the second ballot and the candidate receiving the fewer votes on the first ballot withdrew his candidacy.

[7]Forming an electoral alliance is a strategic decision, i.e., the decision to form an alliance depends on the actions of the opposing bloc (and vice versa). While the analysis of multicandidate (>3) contests requires a more involved game-theoretic approach it is rendered unnecessary in run-off systems that winnow the number of candidates on the second ballot to two or three. It is not immediately obvious what the equilibrium of the multicandidate game would look like but it is clear, much as in our analysis below, that the incentive to ally will depend on the closeness of the two blocs.

[8]Grunberg (2000, 125; Table 5.4), studying the 1997 legislative elections, estimates that 84% of those who had voted for a Communist candidate in the first round and 62% of those of those who had supported a Green candidate went on to vote for a Socialist candidate in the second round when there was a two-way race between the Socialist party and the right; only 5% of Communist voters and 14% of Green voters supported the rightist candidate.

[9]$V^2_{m\bar{R}}$ refers to the qualifying party's support if only one right party qualifies.

[10]Note that k is endogenously defined in run-off elections where the two candidates advance onto the second ballot. In line with Cox (1997), the relevant threshold in those circumstances would equal the voteshare of the second largest party. Thus, the incentive of any group of parties to form an alliance can be measured in similar manner. If, on the other hand, our interest is in predicting *which* parties form alliances a more complex model, which is beyond the scope of this article, is needed.

condition decreases (weakly) as well. To win the second-ballot contest $V^2_{mi}(C) > V^2_{m\bar{R}}$ must hold. A first-round agreement helps the parties win the second-ballot contest if $V^2_{mi}(\varnothing) < V^2_{m\bar{R}}$ but $V^2_{mi}(C) > V^2_{m\bar{R}}$.

The second question we address concerns the terms of the agreement. Bargaining theory offers some insights into which factors influence the terms of the agreement.[11] The terms of the electoral pact depend on the parties' discount factors and the parties' costs of ceding a constituency.[12] A greater discount factor, which can be interpreted as the parties' patience in the current context, results in a greater share of the pivotal constituencies. The parties' patience may differ if the parties' support is (highly) uneven, leading the weaker party to place a premium on reaching an agreement quickly.

A higher cost of ceding a constituency increases a party's bargaining leverage. The benefits of forming an electoral pact may be less obvious to local candidates and party activists than to the party leadership. Forming an electoral pact means that some (potential) candidates do not get to run, invoking hostilities that may hurt the party leadership. Some party activists may see the goal of the party as not only to win representation but also to give voters a voice in support of a particular cause.

We end this section by summarizing the main implications of our theoretical framework. The first insight concerns the set of constituencies that are included in the electoral alliance. The electoral pact will include the *pivotal* constituencies. A *pivotal* constituency is a constituency that can only be won by the bloc on the decisive ballot by presenting a common candidate on the first ballot. The second insight concerns the terms of the electoral pact, i.e., how many constituencies each party gets. Our model suggests why a pact may depart from a division proportional to the parties' vote shares—the division of constituencies between the parties depends on their patience and their costs of ceding a constituency.

We now turn to testing the theory empirically in the context of the 2002 French legislative elections by considering the pact made between the Socialists and the Greens.

[11]We model the bargaining as a slight modification of the Rubinstein (1982) bargaining model. A formal statement of the model as well as proofs are in the online appendix.

[12]In addition, the parties' reservation values could influence the bargaining outcome. In the model presented here, reservation values do not influence the outcome. If the model were modified to allow for the possibility of breakdown of negotiations the reservation values could be shown to influence the outcome. See, e.g., Binmore, Rubinstein, and Wolinsky (1986) and Muthoo (1999).

The Scope of the Agreement

Prior to the 2002 election, the Socialists and the Greens made an agreement to present a common candidate in 121 of the 487 constituencies in our sample; a Socialist candidate represented the parties in 71 constituencies and a Green candidate in the remaining 50.[13] The terms of the pact appear fairly equal at first sight—especially considering the difference in parties' support. The apparent parity is deceptive, as we shall see.

The analysis above suggests several hypotheses about which constituencies should be included in the parties' agreement. First, the parties form a pact where a common candidate might surpass the 12.5% threshold while it would be unlikely that either candidate qualified if both candidates run. Second, a pact has greater appeal where the balance between the left and the right bloc is delicate. Thus, the following two hypotheses:

Hypothesis 1. The Socialists and the Greens are more likely to agree to present a common candidate in a constituency if neither party expects to have enough support to reach the second ballot but their combined support is close to the first-ballot threshold.

Hypothesis 2. The Socialists and the Greens are more likely to agree to present a common candidate in a constituency where the contest between the left bloc and the right bloc is close.

The presence of an extremist party offers another way in which a pact could be effective. The National Front won 14.9% of the first-round vote in 1997 and Le Pen won 16.9% of the vote in the first round of the 2002 presidential elections. While Le Pen's success was a tremendous blow to the left, it also represented an opportunity in the upcoming legislative election. The strength of the National Front meant that there was a good chance that both a mainstream right party and

[13]The analysis is limited to metropolitan France. For practical reasons we also exclude constituencies where neither a Socialist nor a Green candidate ran in 1997. Finally, we have excluded constituencies with a Green incumbent (7) because they are so few and in most cases (5) the parties presented a common Green candidate there in 2002. Including these observations does not influence our results but creates difficulties in the estimation of standard errors in our multinomial analysis. Data on the electoral pact: the Green party's website (http://www.elections.lesverts.fr), the Socialist party's website (http://www.partisocialiste.fr/texts/legiscandidats.html), and the Ministry of the Interior's official list of candidates (http://www.interieur.gouv.fr/~avotreservice/elections). Data on election results: the French National assembly's website (http://www.assemblee-nat.fr/) and the Ministry of the Interior's website.

the National Front would advance onto the second ballot in a number of constituencies. With the right vote split, a left candidate stands a chance at winning the seat with only a plurality of the vote—even if the left candidate is uncertain to advance onto the second ballot. Thus, there is an additional incentive to ally and present a common candidate where the National Front is strong but it is uncertain whether a left candidate will qualify for the second ballot.

Hypothesis 3. The Socialists and the Greens are more likely to agree to present a common candidate in a constituency in the presence of a strong National Front candidate.

Hypothesis 4. The Socialists and the Greens are more likely to agree to present a common candidate in a constituency when the two parties' support is close to the second-ballot threshold and National Front support is strong.

Results

We begin by examining which constituencies were included in the pact between the Socialists and the Greens. By Hypothesis 1, we expect the probability of observing a common candidate to be *decreasing* in Threshold Distance. Threshold Distance equals the absolute difference between the second ballot threshold, 12.5%, and the sum of the combined turnout-adjusted vote shares of the Greens and the Socialists in 1997. Turnout-adjusted vote shares are used because the threshold refers to the percentage of registered, rather than actual, voters. Formally, Threshold Distance = $|12.5\% - (V_S + V_G) * \text{Turnout}|$. When Threshold Distance is close to zero, presenting a common candidate has the greatest probability of influencing success, i.e., getting a common candidate on the second ballot, whereas separate candidates would be unsuccessful.

The second independent variable is Bloc Distance, which measures the expected closeness between the left and the right blocs. We begin by identifying each candidate that ran in 1997 as belonging to the left bloc, the right bloc, or having no affiliation.[14] As we are concerned with measuring the expected closeness of the contest on the second ballot we base our measure on the left bloc's share of the total first-ballot vote for the left and the right. Bloc Distance equals the absolute distance of the left bloc vote share (adjusted for candidates without affiliation) from 50%. Formally, Bloc Distance = $|50\% - V_{LB}/(V_{LB} + V_{RB})|$. Hypothesis 2 implies that the likelihood of a common candidate is *decreasing* in Bloc Distance. If the left and right blocs are closely matched, each vote is clearly valuable, and the Socialists and the Greens will be more concerned that running against each other on the first ballot may alienate some of their supporters. These lost votes are less crucial when the gap between the blocs is greater.

By Hypothesis 3, the likelihood of a common candidate is increasing in the National Front vote. The variable National Front Vote is the turnout-adjusted National Front vote share in 1997. National Front support is expected to have more complex strategic implications than those that are directly associated with its electoral strength because it may influence the chances of the moderate right on the second ballot. To capture this effect we create an interaction term, NF Vote*Threshold, of the National Front Vote and Threshold Distance. Since our expectation is that a constituency is most likely to be a part of the agreement when both the National Front Vote is high and Threshold Distance is low we "invert" Threshold Distance and calculate NF Vote*Threshold = National Front Vote * (42.02-Threshold Distance).[15] According to Hypothesis 4, the interaction term is expected to have a negative coefficient.

We include two types of controls. First, we control for the constituencies of Île-de-France, i.e., Paris and surrounding regions (hereafter simply referred to as Paris). The Socialists and the Greens successfully coordinated their actions in electing Bertrand Delanoë as the mayor of Paris in 2001. The parties' willingness to include the Paris constituencies in their agreement may have been amplified by concerns about preserving their alliance in order to keep a hold on Paris. On the other hand, the strength of the Green party in these regions may have made it more difficult for the party's leadership to win the approval of the local party organizations and candidates to cede these constituencies to the Socialists.

[14]The list of the parties and their respective bloc appears in the online appendix.

[15]One of the variables must be inverted in order to test our hypothesis. If neither variable is inverted the interaction term would take a high (low) value when both National Front Vote and Threshold Distance take high (low) values. Thus, neither of these cases corresponds with our theoretical expectation, i.e., that the incentive to present a common candidate is at is greatest when the National Front is strong, and there is uncertainty about whether the parties will clear the threshold. The value from which Threshold Distance is subtracted is the maximum value of Threshold Distance in our sample. It is simply chosen to ease interpretation by ensuring that the variable always takes a positive value.

Table 1 Deal or No Deal: Logistic Regression Dependent Variable: 1—Deal 0—No Deal

	(1)	(2)	(3)
Threshold Distance	−.210***	−.146***	−.215**
	(.036)	(.041)	(.105)
Block Distance	−.079***	−.078***	−.077***
	(.027)	(.029)	(.029)
National Front Vote		.195***	.420
		(.038)	(.321)
NF Vote*Threshold Distance			−.006
			(.009)
Socialist Incumbent	2.966***	2.867***	2.756***
	(.797)	(.82)	(.828)
Right Incumbent	3.470***	3.706***	3.617***
	(.776)	(.804)	(.806)
Île-de-France	−.947***	−.623*	−.647*
	(.348)	(.363)	(.363)
Constant	−1.743**	−4.595***	−4.013***
	(.765)	(.973)	(1.254)
Observations	487	486	486
Log Likelihood Ratio	−221.547	−205.269	−205.014

Standard errors in parentheses. Levels of significance: ***–99%, **–95% *–90%.

Second, we control for the party affiliation of the incumbent. Constituencies with a Socialist incumbent can be expected to be natural focal points in the bargaining. The party has proven itself capable of winning these constituencies and, furthermore, in terms of interparty politics, it is probably less contentious for the Greens to concede these constituencies to the Socialists. It would, however, be more costly for the Socialists to yield an incumbent seat. Hence, we expect constituencies with a Socialist incumbent to be more likely to be included in the pact. In constituencies with a right incumbent we expect the parties to be less constrained by intraparty politics. Consequently, since the reference category is other left incumbents, these constituencies are more likely to be included in the pact.

Table 1 presents the results of logistic regressions where the dependent variable takes the value 1 if the constituency was included in the pact and 0 otherwise. The results are consistent with our expectations. Both Threshold Distance and Bloc Distance have a significant effect on the likelihood of a common candidate. Likewise our measures of the opportunity afforded by strong National Front support are highly significant and consistent with our expectations.[16] In substantive terms an increase in Bloc Distance by one standard deviation decreases the likelihood of observing a common candidate by 9.1 percentage points.[17] The full model predicts 80.9% of the observations correctly.

The probability of a common candidate is higher for low values of Threshold Distance and high values of National Front Vote. The probability of observing a common candidate is quite high, around 64%, when Threshold Distance is close to zero (at average National Front Vote) and declines fairly sharply as Threshold Distance increases. The probability increases with the National Front Vote and reaches over 80% when the National Front obtains more than 20% of the vote.

The operationalization of Threshold Distance does not allow us to consider whether support for each party influences whether a common candidate is agreed upon. To investigate this possibility we repeated the analysis including threshold distance for the Socialists. The results are substantively similar, i.e., the parties' joint Threshold Distance remains

[16]The first model has one additional observation because no National Front candidate ran in one constituency in 1997. In column 3 National Front Vote and NF Vote*Threshold Distance are jointly significant at the 99% level. Different measures capturing the possibility that a National Front candidate might influence the chances of the right bloc on the second ballot, e.g., the closeness between the mainstream right and the left bloc and the National Front vote share conditional on reaching the second round, yielded very similar results.

[17]Unless otherwise noted, all effects are calculated with all continuous variables set at their mean for constituencies outside Paris with a right incumbent.

FIGURE 1 The Marginal Effect of Threshold Distance

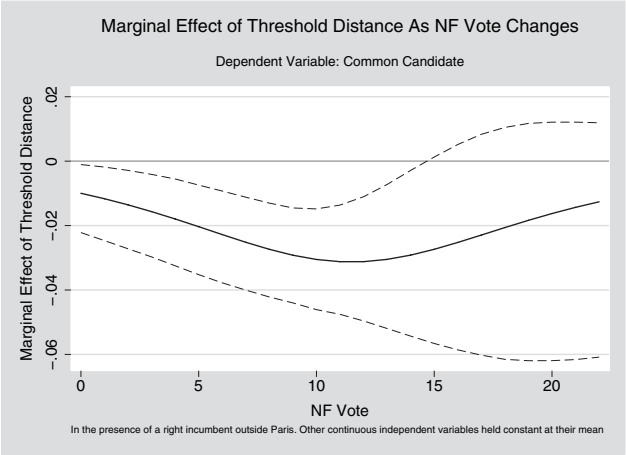
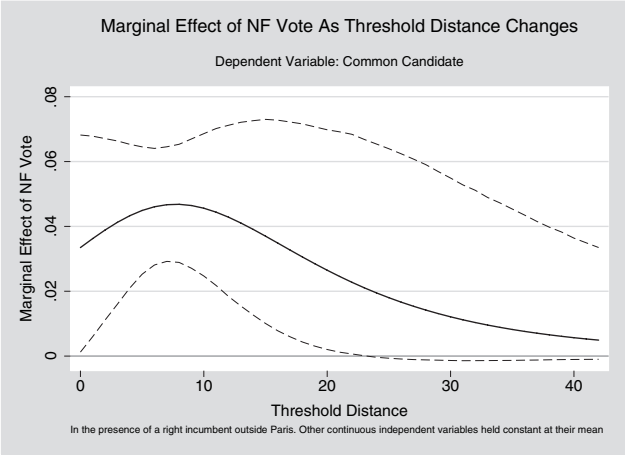


FIGURE 2 The Marginal Effect of National Front Vote



important, but indicates that a common candidate is more likely when the balance between the parties' vote shares is more equal. In other words, a common candidate becomes more likely when the Greens can contribute more votes.

Some caution must be exercised in interpreting the results of models that contain interaction terms and, more generally, nonlinear models.[18] In general, our interest is to draw inferences about the change in the dependent variable when the value of an independent variable increases or decreases, i.e., about the marginal effect of a change in the variable, which depends on the value that the modifying variable takes.

Figure 1 displays the marginal effect of THRESHOLD DISTANCE across a range of values of NATIONAL FRONT VOTE.[19] The estimated marginal effect of an increase in THRESHOLD DISTANCE is negative throughout, as hypothesized, and is increasing until NATIONAL FRONT VOTE reaches about 12% whereupon it begins to decline. Above 15% the marginal effect is no longer statistically significant at the 95% confidence level.

The marginal effect of NATIONAL FRONT VOTE is shown in Figure 2. As predicted, the marginal effect of NATIONAL FRONT VOTE is positive. Although the marginal effect of NATIONAL FRONT VOTE is initially increasing in THRESHOLD DISTANCE, it starts out at far higher levels than it subsequently declines to. According to Hypothesis 4, our expectation was that the marginal effect would be declining in THRESHOLD DISTANCE. While the estimated marginal impact does not adhere strictly to that pattern, the interaction effect is borne out by the data. The marginal effect of NATIONAL FRONT VOTE becomes insignificant at high levels of THRESHOLD DISTANCE.

The results indicate that the parties factor in both the chance of a common candidate advancing onto the second ballot and the chance of carrying the constituency. In addition, the parties act strategically by factoring in the possibility that the National Front may advance onto the second ballot and "steal" votes from the moderate right.

The incumbency indicators are significant and correctly signed. A common candidate is more probable in the presence of a right incumbent than in the presence of a Socialist incumbent ($X^2 = 7.14$, $p = .008$) or other left incumbents (the reference category). Where there are Socialist incumbents, the Socialists are likely to be sufficiently strong to win on their own, and there is little to be gained by forming a pact. As the parties on the left expected to do quite well in the election, challenging the right incumbents was a rational strategy. In addition, it is possible that some constituencies with strong right incumbents were used as playing chips in the parties' bargaining because the first round results determine state funding for the parties. We return to this point below.

Finally, the Paris constituencies are significantly less likely to be included in the pact. The conjecture that the strong and militant local organizations of the

[18]See Brambor, Clark, and Golder (2006) for a discussion of the interpretation of interaction terms.

[19]The marginal effects and confidence intervals are simulated in Stata 8.0 using (slightly modified) code written by Brambor, Clark, and Golder (2006). Strictly speaking, the figures approximate the marginal effects by considering a one-unit increase in the variable of interest, which is a reasonable approximation because of the scale of the variables.

Greens in Paris were more insistent that the party maintain its presence appears to find some support.

In sum, we find that the competitiveness of the constituency, whether defined as the parties' ability to advance onto the second ballot or to beat the right bloc on the second ballot, influences the likelihood of the Socialists and the Greens agreeing on a common candidate. Furthermore, the strength of the National Front influences the likelihood of a common candidate as it opens up the possibility of a coordination failure on the right.

The Content of the Agreement

The above results address which constituencies were included in the electoral pact. A second set of questions concerns the *content* of the bargain. The questions regarding content can be divided further into two sets of questions regarding the *terms* of the bargain, i.e., the number of seats allocated to each party, and the *nature* of the bargain, i.e., which specific constituencies will be represented by a Socialist candidate and which by a Green candidate. Our focus here is primarily on the *nature* of the bargain.[20]

The theoretical model offers some suggestions about the expected differences between the constituencies allocated to the Socialists and the Greens. It is plausible to assume that the Greens faced higher costs of ceding constituencies to their partner. Green parties emphasize the virtues of decentralized grassroots organizations and direct democracy. The national party may lack the resources to discipline its members, as well as the legitimacy to enforce its will on local organizations. In our bargaining model higher costs yield more constituencies.

On the other hand, the Greens entered the electoral campaign in a position of disadvantage, and they were unlikely to win any seats without the aid of an electoral pact. The Socialists, on the other hand, did not have to rely on other parties to win seats in the legislature though they could reap electoral benefits from forming a pact. We therefore assume that the Greens were less patient than the Socialists. While it is probably impossible to measure the parties' patience directly, we note that the Greens initiated the negotiations, which is consistent with our assumption.[21]

[20]Our theory offers predictions about the *terms* of the electoral pact but we are unable to test them here as it requires data on electoral pacts from multiple elections.

[21]Spoon (2004) considers the Greens' motives for entering an electoral alliance.

Given the parties' asymmetric position, we expect the Socialists to emerge as the prime beneficiary of the electoral pact, receiving a disproportionate number of *pivotal* constituencies. In contrast, we expect the Greens to be willing to accept constituencies in which a Green candidate has symbolic or financial, rather than electoral, significance. Consequently, we expect common Green candidates to represent constituencies that are not pivotal but have substantial Socialist support. These constituencies are of relatively little importance electorally, but they allow the Socialists to make side-payments, because vote shares determine public funding, to the Greens in exchange for the latter accepting to concede more pivotal constituencies.[22]

For these reasons we expect a tighter fit between electoral incentives and the presence of a common Socialist candidate. The Greens' weaker position implies that alternative concerns, e.g., regarding party funding, determine where common Green candidates run. This leads us to propose four additional hypotheses that take account of the interaction between party and constituency characteristics.

Hypothesis 5. The two parties are more likely to agree to present a common Socialist candidate when neither party expects to have enough support to reach the second ballot but their combined support is close to the electoral threshold.

Hypothesis 6. The two parties are more likely to agree to present a common Socialist candidate when the contest between the left bloc and the right bloc is close.

Hypothesis 7. The two parties are more likely to agree to present a common Socialist candidate in the presence of a strong National Front candidate.

Hypothesis 8. The two parties are more likely to agree to present a common Socialist candidate when the parties' combined support is close to the second ballot threshold and the National Front support is strong.

Results

We test the above hypotheses using multinomial logistic analysis. Multinomial logit models extend the (binomial) logit model to situations where the actors

[22]The importance of the financial aspect of the electoral alliance was corroborated by interviews conducted by Christophe Chowanietz with French academics and politicians who were at the forefront of the negotiations between the parties. The parties receive about 1.5 Euros per vote. In view of its financial difficulties, the Green party had, thus, every reason to maximize the number of constituencies—pivotal or not—where it ran with the support of the Socialist party.

Table 2 Multinomial Logit Analysis of Common Candidacies Categories of Dependent Variable: Joint Socialist Candidate, Joint Green Candidate, Separate Candidates

	None/Socialist	None/Green	Socialist/Green
Threshold Distance	−.485***	.151	.636***
	(.148)	(.133)	(.187)
Block Distance	−.062*	−.090**	−.028
	(.035)	(.041)	(.047)
National Front Vote	1.164***	−.715	−1.879***
	(.431)	(.441)	(.569)
NF Vote*Threshold Distance	−.026**	.024*	.050***
	(.012)	(.012)	(.016)
Socialist Incumbent	3.491***	.816	−2.675
	(1.101)	(1.284)	(1.634)
Right Incumbent	3.452***	3.714***	.261
	(1.085)	(1.124)	(1.5)
Île-de-France	−.959**	−.291	.669
	(.489)	(.483)	(.642)
Constant	−3.488**	−6.377***	−2.888
	(1.575)	(1.726)	(2.164)

Standard errors in parentheses. Levels of significance: ***–99%, **–95% *–90%.
Log likelihood: –257.744, n – 486

face three or more alternatives—in our case: presenting a Socialist candidate, presenting a Green candidate, and not presenting a common candidate. In a manner similar to the binomial logit the probability of choosing a given alternative (j) is modelled as:

$$P(Y_i = j) = \frac{e^{\beta'_j x_i}}{\sum_{k=0}^{2} e^{\beta'_j x_i}} \qquad (1)$$

The coefficients of the model are estimated to maximize the likelihood of finding the observed pattern of common candidacies. The estimation yields two coefficients for each independent variable. Each coefficient indicates the effect on the likelihood of observing a particular choice *relative* to the reference alternative. In the first two columns of Table 2, the reference alternative is the absence of an agreement. The coefficients in the first column indicate the effect of a change in the independent variables on the likelihood of observing a common Socialist candidate while the coefficients in the second column show the effect on the likelihood of observing a common Green candidate. As some of our hypotheses concern the choice between a Green and a Socialist candidate, we display the effect on the likelihood of observing a Green candidate when a Socialist candidate is the reference category in the third column.[23] Note that the sign of the estimated coefficients in the multinomial logit model is not necessarily indicative of the sign of the marginal effect. A quick glance at (1) should suffice to make this clear—a change in the value of an independent variable affects both the numerator and the denominator.

By Hypotheses 5 and 6, higher values of Threshold Distance and Bloc Distance increase the likelihood of observing a Green, rather than a Socialist, candidate. The variables may influence the likelihood of observing a Green candidate, but Socialist candidacies are predicted to be more strongly affected by electoral incentives. Similarly, the strength of the National Front increases the likelihood of observing either a common Socialist or Green candidate, but the effect should be greater with respect to the former.

As Table 2 shows, the results are consistent with the above analysis. Overall, the lower the Threshold Distance and Bloc Distance, and the higher the National Front Vote, the higher the likelihood of observing a common candidate, whether Socialist or Green. However, the effect of Bloc Distance on the likelihood of observing a common Socialist candidate is only significant at the 90% significance level, and Threshold Distance is marginally insignificant at that level for a common Green candidate (the marginal effect is in line with expectations despite the sign of the coefficient as can be seen in Figure 4). The model predicts 79.3% of the observations correctly when we use the alternative with the highest probability as our prediction.

[23]These coefficients are simply the difference between the coefficients in columns 1 and 2.

FIGURE 3 The Marginal Effect of National Front Vote on Observing a Common Candidate

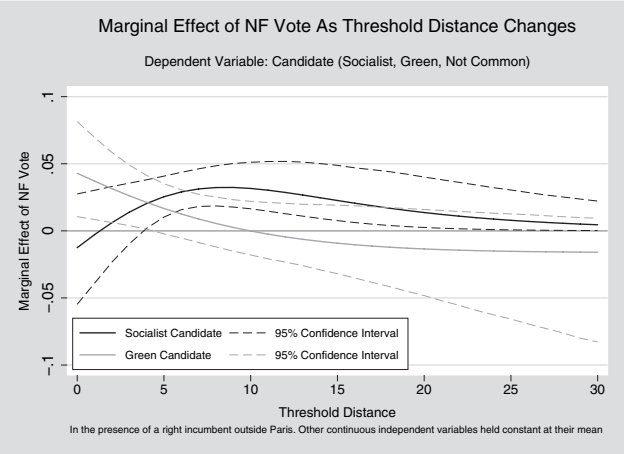
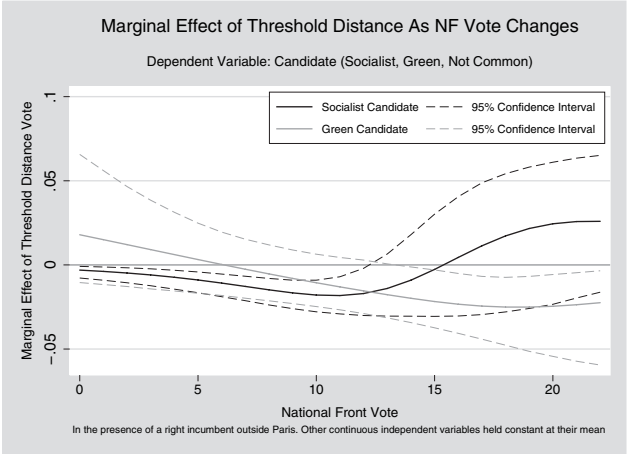


FIGURE 4 The Marginal Effect of Threshold Distance on Observing a Common Candidate



Following Hypotheses 5–8, our interest is in how the effects of the variables differ across common Socialist and Green candidates, which is shown in the third column. The coefficients for THRESHOLD DISTANCE and NATIONAL FRONT VOTE indicate that the variables have an effect on the identity of the common candidate.[24] The effect of BLOC DISTANCE, on the other hand, does not appear to have a significant effect on the identity of the common candidate although an increase in BLOC DISTANCE decreases the likelihood of a common candidate. The coefficient NF VOTE*THRESHOLD is highly significant, suggesting that the constituencies allocated to the two parties differ qualitatively.

The effects of the incumbency variables are in line with expectations. The likelihood of observing a Socialist candidate is higher where a Socialist incumbent was in place. Similarly, a common candidate, whether Socialist or Green, is more likely in constituencies with a right incumbent. The estimated coefficient for the Paris constituencies appears to support our conjecture regarding the strength of the Greens in these constituencies, i.e., while it does not influence the likelihood of observing a Green candidate, common Socialist candidates are less likely to be presented.

As with the logistic regressions above, the presence of an interaction term requires us to take a closer look at the marginal effects of the independent variables. Figures 3 and 4 graph the marginal effects of NATIONAL FRONT VOTE and THRESHOLD DISTANCE. Figure 3 indicates that the marginal effect of NATIONAL FRONT VOTE on the probability of a Green candidate is not statistically significant for most values of THRESHOLD DISTANCE. Interestingly enough, the marginal effect actually becomes negative as the National Front candidate becomes strong enough to advance onto the second ballot. In contrast, the probability of Socialist candidate depends significantly on the strength of the National Front candidate over a large range of values of THRESHOLD DISTANCE. While it is not significant for very low values, the marginal effect does decline, as expected, at higher levels of THRESHOLD DISTANCE. In sum, as NATIONAL FRONT VOTE increases, and it becomes increasingly likely that the National Front candidate will interfere with the right bloc's ability to carry the constituency, the probability of a common Green candidate begins to drop while the probability of a common Socialist candidate increases. That is, once the NATIONAL FRONT VOTE reaches levels that render the constituency winnable for the left bloc, a common Socialist candidate becomes far more likely than a Green candidate.

The marginal effect of THRESHOLD DISTANCE on the probability of a Green candidate, shown in Figure 4, is significant in the presence of a strong National Front candidate. Thus, the further away from the threshold the combined parties' support is, the less likely a Green candidate is. The marginal effect of THRESHOLD DISTANCE on the probability of observing a Socialist candidate is significant up to the level when

[24]The sign of a coefficient in the multinomial logit models is not a good indication of whether the marginal effect is positive or negative (see, e.g., Greene 2002). For example, in our results the probability of observing a common Green candidate increases as National Front Vote increases but subsequently it decreases.

one might expect the National Front candidate to qualify for the second ballot. As expected, the marginal effect of Threshold Distance decreases as support for the National Front increases.

There is thus evidence that different criteria dictated in which constituencies Socialist and Green candidates were placed. Other things equal, a common Socialist candidate was more likely to be placed in constituencies where it was uncertain whether a left candidate would be able to advance onto the second ballot without an electoral pact, or where the National Front had a sizable following. The placement of common Green candidates depended less on the constituency's winnability, as hypothesized.

Conclusions

Our objective has been to demonstrate that political parties play a crucial role in achieving electoral coordination and that their decisions take a careful account of the electoral institutions they compete under. We have presented a theory about how electoral rules shape the scope and content of electoral pacts, and we have tested the theory by examining the pact reached by the Socialists and the Greens before the first round of the 2002 French legislative elections.

We show that the parties were more likely to make a pact where striking a deal was critical. Hence, the parties were less prone to form an alliance in constituencies where one of the parties was likely to advance onto the second round or the parties' combined support was likely to fall short of the threshold. Where the two blocs were evenly balanced, common candidates were most probable. The level of support for the National Front also influenced the likelihood of an agreement to present a common candidate. The presence of a strong National Front candidate renders an otherwise uncompetitive constituency competitive because the right vote is split between two candidates.

We also argued that the terms of the bargain could be expected to favor the Socialists because of their stronger bargaining position. In particular, common Socialist candidates were more likely to be placed in winnable constituencies while common Green candidacies were more likely to be allocated on the basis of the party's need for public funding.

Our findings regarding the National Front deserve special attention. The parties placed great emphasis on presenting a united front where the National Front was strong during the bargaining—an argument that was couched in ideological terms. It appears, however, that electoral motives may help explain why common candidates were presented in National Front strongholds. If the motive was purely ideological, we would expect National Front support in the constituency to influence the decision whether to form a pact but *not* the party identity of the candidate, as our results indicate.[25]

Our findings show that political parties do indeed act in a calculated manner, responding rationally to the incentives created by the institutional framework they operate in. This is evidenced by the fact that the second ballot threshold, the expected left–right balance on the second ballot, and the possibility of two candidates on the right all had a significant effect on the likelihood that the parties would agree to present a common candidate.

There are reasons to believe that the practice of withdrawing candidates or forming electoral pacts is not confined to two-round elections, as no voting procedure satisfying minimal conditions is immune to the strategic entry or exit of candidates (Dutta, Jackson, and Le Breton 2001).[26] The French case, however, illustrates nicely that political parties behave strategically and take numerous factors into account. Certain features of the French majority run-off make it possible to examine the incentives to form electoral alliances in considerable detail. The majority run-off encourages multiparty competition while providing strong incentives for electoral coordination, and the 12.5% threshold allows for the possibility of coordination failure on the second ballot. These factors combine to produce more testable observations of our theory than under most other types of electoral systems.

That said, our basic model can be applied to study the formation of alliances in different types of electoral systems. Doing so naturally requires some modifications to our model, to take account of the different electoral institutions, as we have suggested throughout the article. In most instances this is simply achieved by reconstructing the definition of *pivotal* constituencies. However, when the structure of the political competi-

[25]The notion that the left bloc has sought to take advantage of the presence of the National Front is not unheard of. Tiersky (1994) argues that the adoption of proportional representation in 1985 (abandoned after the 1986 election) was motivated by the possibility of reducing the legislative strength of the moderate right. Meguid (2003) similarly argues that the Socialist party sought to increase the valence of the National Front's main issue, immigration, with the same goal in mind.

[26]Indeed, the same form of electoral coordination has been attempted under proportional representation systems with parties not contesting the same constituencies. Others examples of electoral systems abound. See, e.g., Golder (2006) for examples.

tion is not clearly bipolar, as in the French case, additional complications may arise as it may no longer be possible to identify "natural" allies. In these instances it will be necessary to bring more information, e.g., the parties' ideological positions, to bear on the question of which alliances form. Furthermore, the insights provided by coalition theory would be relevant as would the empirical strategies used to test coalition theories (i.e., conditional logit models). We hope to explore these issues in future work.

The results suggest that it is important to carefully analyze how electoral systems provide incentives for coordination and how these incentives interact with the political context. The presence of an extremist party and the asymmetry of the bargaining parties' support clearly influence the incentives to form an electoral pact. Thus, while cross-national studies of electoral alliances are useful for demonstrating the effects of institutions, detailed analyses of particular institutions bring additional insights into the behavior of political parties (e.g., Golder 2006). The two approaches are complementary and together they provide a coherent account of the formation of electoral alliances.

The study suggests that greater attention should be given to the role of politicians in structuring electoral competition. As Cox (1997, 89) notes, politicians have greater stakes than voters in the outcome of the election, and we should thus expect them to pay closer attention to the rules of the game and to act strategically. It is, after all, the politicians who decide how many parties or candidates the voters get to choose from.

Acknowledgments

The data and the code necessary to replicate the analysis will be made available upon publication at http://www.hi.is/~ihi. We thank Christophe Chowanietz and Peter Loewen for excellent research assistance. We thank Gary Cox, Sona Golder, Christopher Kam, and our anonymous referees for useful comments and suggestions.

Manuscript submitted 10 November 2005
Manuscript accepted for publication 12 May 2006

References

Benoit, Kenneth. 2001. "Two Steps Forward, One Step Back: Electoral Coordination in the Hungarian Elections of 1998." Typescript. Trinity College, Dublin.

Besley, Timothy, and Stephen Coate. 1997. "An Economic Model of Representative Democracy." *Quarterly Journal of Economics* 112 (1): 85–114.

Binmore, Ken, Ariel Rubinstein, and Asher Wolinsky. 1986. "The Nash Bargaining Solution in Economic Modelling." *The RAND Journal of Economics* 17 (2): 176–88.

Birch, Sarah. 2003. "Two-Round Electoral Systems and Democracy." *Comparative Political Studies* 36 (3): 319–44.

Blais, André. 2002. "Why Is there So Little Strategic Voting in Canadian Plurality Rule Elections?" *Political Studies* 50 (3): 445–54.

Blais, André, Louis Massicotte, and Agnieszka Dobrzynska. 1997. "Direct Presidential Elections: A World Summary." *Electoral Studies* 16: 441–55.

Brambor, Thomas, Willam R. Clark, and Matt Golder. 2006. "Understanding Interaction Models: Improving Empirical Analyses." *Political Analysis* 14: 63–82.

Cohan, A. S., and R. D. McKinlay. 1978. "The Used Vote and Electoral Outcomes: The Irish General Election of 1977." *British Journal of Political Science* 8: 492–98.

Cox, Gary W. 1997. *Making Votes Count: Strategic Coordination in the World's Electoral Systems*. Cambridge: Cambridge University Press.

Dutta, Bhaskar, Matthew O. Jackson, and Michel Le Breton. 2001. "Strategic Candidacy and Voting Procedures." *Econometrica* 69 (4): 1013–37.

Duverger, Maurice. 1954. *Political Parties: Their Organization and Activity in the Modern State*. London: Methuen.

Farrell, David, Malcolm Mackerras, and Ian McAllister. 1996. "Designing Electoral Institutions: STV Systems and their Consequences." *Political Studies* 44: 24–42.

Golder, Sona. 2006. *The Logic of Pre-Electoral Coalition Formation*. Columbus: The Ohio State University Press.

Greene, William H. 2002. *Econometric Analysis*. 5th ed. Upper Saddle River, NJ: Prentice Hall.

Grunberg, Gérard. 2000. "Why Did the Right Lose?" In *How France Votes*, ed. Michael Lewis-Beck. New York: Chatham.

Kaminski, Marek. 1999. "How Communism Could have been Saved: Formal Analysis of Electoral Bargaining in Poland in 1989." *Public Choice* 98 (1–2): 83–109.

Lewis-Beck, Michael, and Kevin Chlarson. 2002. "Party, Ideology, Institutions, and the 1995 French Presidential Election." *British Journal of Political Science* 32: 489–512.

Marsh, Michael. 2000. Candidate Centered but Party Wrapped: Campaigning in Ireland under STV. In *Elections in Australia, Ireland and Malta under the Single Transferable Vote*, eds. S. Bowler and B. Grofman. Ann Arbor: University of Michigan Press, pp. 114–30.

Meguid, Bonnie M. 2003. "The Critical Role of Non-Proximal Parties in Electoral Competition: Evidence from France." Typescript. University of Rochester.

Muthoo, Abhinay. 1999. *Bargaining Theory with Applications*. Cambridge: Cambridge University Press.

Osborne, Martin, and Al Slivinski. 1996. "A Model of Political Competition with Citizen-Candidates." *Quarterly Journal of Economics* 111: 65–96.

Reed, Steven R. 1990. "Structure and Behaviour: Extending Duverger's Law to the Japanese Case." *British Journal of Political Science* 20: 335–56.

Rubinstein, Ariel. 1982. "Perfect Equilibrium in a Bargaining Model." *Econometrica* 50 (1): 99–109.

Sartori, Giovanni. 1994. *Comparative Constitutional Engineering*. New York: New York University Press.

Sharman, C., A. M. Sayers, and N. Miragliotta. 2002. "Trading Party Preferences: The Australian Experience of Preferential Voting." *Electoral Studies* 21: 553–60.

Spoon, Jae-Jae. 2004. "Competing in the Big Leagues: How Differing Institutional Environments Influence New Party Strategy—Evidence from the French Greens." Typescript. University of Iowa.

Tiersky, Ronald. 1994. *France in the New Europe: Changing yet Steadfast*. Belmont, CA: Wadsworth.

Tsebelis, George. 1990. *Nested Games: Rational Choice in Comparative Politics*. Berkeley and Los Angeles: University of California Press.

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