ELECTORAL RULES AND ELECTORAL COORDINATION

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ABSTRACT

Electoral coordination occurs at two main levels: (*a*) within individual electoral districts, where competitors coordinate entry and citizens coordinate votes; and (*b*) across districts, as competitors from different districts ally to form regional or national parties. We know a fair amount about district-level electoral coordination for single-tier electoral systems. In particular, when political actors are primarily concerned with the current election and have good information about the relative chances of potential competitors, two different $M+1$ rules apply in an M-seat district. First, the number of competitors entering a given race tends to be no more than $M+1$; second, when more than $M+1$ competitors do enter a race, votes tend to concentrate on at most $M+1$ of them. We know much less about cross-district coordination, in which potentially separate local party systems merge to form a national party system. This essay focuses on the latter, relatively neglected topic.

INTRODUCTION

The laws and practices regulating electoral competition can affect the behavior of voters, contributors, candidates, factions, parties, and alliances in various and sometimes profound ways. In this essay, I consider how differing electoral rules affect electoral competitors' incentives to coordinate their efforts and resources.

Every electoral system stipulates, among other things, how votes are converted into elective offices. But any method of translating votes into seats will pose coordination problems, of varying difficulty, for electoral competitors. These coordination problems arise because there are fewer seats to be filled

145

than there are potential candidates wishing to fill them. Those who win the seats will be those who succeed in amassing a sufficient level of support in the electorate. One way of amassing support is by persuading voters that a particular candidate or party is better in some respect than the alternatives. But what if there are 15 possibly competent and more-or-less social democratic parties willing to enter the electoral fray? In this case, amassing sufficient votes in the left-of-center segment of the electorate will require either limiting the number of actual competitors (e.g. via joint lists or fusion candidacies), limiting the number of competitors for whom voters actually vote (strategic voting), or both. The process of limiting either entry or vote dispersion entails coordinating the actions of more than one person.

Once elections have been held, there may be further rounds of coordination, as seats in the assembly are translated into portfolios in government. ("Portfolio" here refers to any position that carries a substantially greater influence over governmental policies than a mere seat in the assembly. Committee chairs in the US Congress are portfolios, as are ministerial positions in parliamentary and some presidential systems.) The rules structuring how seats are converted into portfolios may be partly electoral (e.g. the new Israeli system directly elects the Prime Minister and puts significant restrictions on how governments are formed) and partly nonelectoral (e.g. some constitutions require a legislative vote of investiture).

Figure 1 provides a schematic picture of the coordination problems this essay considers. Within each district (*bottom row of boxes*), votes are converted into seats in accordance with the particular rules obtaining in the system under consideration. These rules set up what I call the local coordination problem. India's use of plurality rule in single-member districts, for example, provides strong incentives to coordinate entry and voting, whereas the Brazilian system (which uses proportional representation in large multi-member districts) provides weak incentives.

Figure 1 also depicts how the votes and seats from the various districts may be sorted (*lower arrows*) into a smaller number of categories corresponding to parties (*middle boxes*), before flowing into the national assembly (*upper arrows to top box*). The extent of the sorting depends both on how fragmented the votes are in each district and on whether the parties in one district are the same as those in another, or what I have elsewhere called linkage (Cox 1997). Linking some of the potentially separate local parties to form a national party poses a second coordination problem.

Once linked groups of legislators elected from various districts enter the assembly, a third process of coordination occurs, as the various parties jostle for positions in government. In this essay I ignore this problem of government formation and deal only with the first two coordination problems (local coordination and linkage).
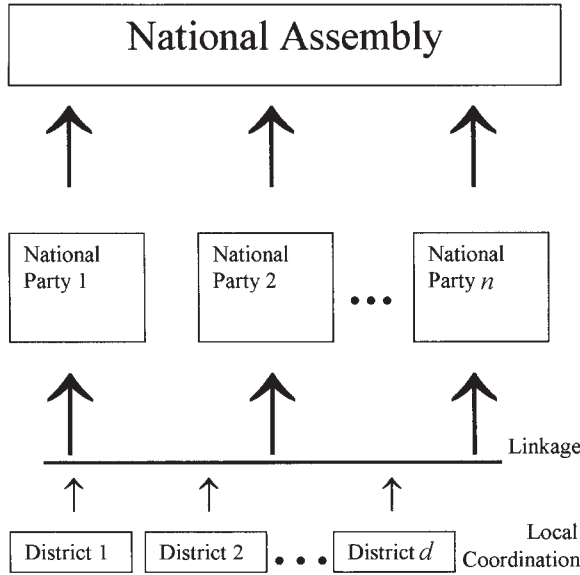
Figure 1   The structure of party systems.

The rest of the essay proceeds as follows. First, I define its main explanandum: the size of national and local party systems. Efforts at coordination can have various consequences; when they succeed, one prominent effect is that the number of electoral competitors shrinks. It is on this reductive effect that I concentrate here. Second, I review recent work concerning the local coordination problem, focusing in particular on the issue of strategic entry. Third, I sketch out elements of a research program on the understudied issue of linkage.

THE SIZE OF NATIONAL AND LOCAL PARTY SYSTEMS

Party systems are complex and can be categorized in many different ways (Mair 1996). Here, I focus on the criterion most widely used to classify party systems: the number of viable parties competing. After considering how to define and count parties, I discuss the processes that generate a given number of parties at different levels (local and national).

Defining and Counting

Although classifying party systems by the number of parties competing within them seems straightforward, it remains in some ways ambiguous. One point of

ambiguity concerns how to define parties and what to do with factions and alliances. The factions of Japan's Liberal Democratic Party (LDP) act for many purposes like parties. Should the LDP be counted as a single party or as five parties in alliance? The *Concertación* alliance in Chile acts for many purposes like a single party. Should it be considered a party or should its component members be counted separately? Having decided how to define parties, one still has to decide how to count them. Should small parties count as much as large parties, for example? Although these important issues deserve continued attention (see Morgenstern 1996 for a more extended consideration), here I adopt standard solutions to both.

The standard solution to the first problem is to define a party as any group competing for election under a common label (Epstein 1980). This definition still leaves some cases ambiguous, such as Uruguay, but is a manageable start in the right direction.

The standard solution to the second problem is to count big parties more than small ones. Just as an industry with 100 firms, one of which makes 95% of all sales, is essentially a monopoly despite its 100 firms, so one might say that an election with 100 candidates, one of whom garners 95% of the vote, has not much more than one "real" candidate. The notion of an "effective number of parties" (Laakso & Taagepera 1979), is one attempt to count "real" candidates and parties. If v_j is the vote share of the jth party, then the effective number of parties (ENP) is $1/\left(\sum v_j^2\right)$, the reciprocal of the Hirschman-Herfindahl index used in economics to measure industrial concentration. The Laakso-Taagepera index has the property that, if there are n equally sized parties, then ENP = n. As inequalities in vote share among the n parties grow, ENP shrinks. Ultimately, if one of the n parties secures all the votes, ENP = 1.

The Determinants of Local and National Party System Size

Having clarified what I mean by the size of a party system—simply the effective number of parties in that system—the next step is to consider the determinants of party system size. The almost universal approach in comparative electoral studies is to calculate the effective number of parties using national aggregate vote figures. The resulting number—call it ENP$_{nat}$—is then related to various electoral system features, such as the average district magnitude (i.e. the average number of seats per electoral district) or the electoral formula (used to translate votes into seats).

What is odd about this analytic procedure is that most features of an electoral system affect politics within, rather than across, districts. Different voting options, district magnitudes, and electoral formulas directly affect the translation of electoral support into seats within districts; they do not, at least not in the simplest systems, affect linkage. Thus, theoretically, electoral system features should be related to the average effective number of parties in the various

districts (ENP_{avg}), but they may be rather less closely related to ENP_{nat}. ENP_{avg} reflects the average size of the local party systems in a given country, an attribute that is directly conditioned by electoral rules. ENP_{nat} reflects both how large the local party systems are, on average, and how much they overlap. There is currently little or no explicit theory about how electoral system features affect the similarity of a country's local party systems. Thus, if we seek to measure the effects of differing electoral institutions, the relevant measure of party system size is ENP_{avg}, not ENP_{nat}.

Of course, some scholars may not be interested primarily in measuring the effects of differing electoral rules. Instead, they may be interested in explaining variations in the number of national parties competing in different systems (i.e. explaining ENP_{nat}). Even if explaining the number of national parties is the ultimate end, however, conceptually the best approach may be to divide ENP_{nat} into two components. The first component is the average size of the local party systems; the larger these are, the larger the national party system will be. The second component reflects the inflation of the national party system, above the baseline level expected from ENP_{avg}, due to poor linkage across districts. We might measure this inflation by the difference $D = ENP_{nat} - ENP_{avg}$ (Chhibber & Kollman 1998, Samuels 1998).

Thought of in this way, explaining variations in the size of national party systems breaks down into two separate analytical tasks: first, explaining variations in the average size of the local party systems in a country; second, explaining variations in the extent of linkage in a system. The first task pertains to coordination within districts, the second to coordination across districts.

LOCAL COORDINATION

The two main subheadings under the rubric of local coordination are strategic entry and strategic voting. In both terms, "strategic" refers to actions that are primarily instrumental as opposed to consummatory—that is, actions taken because of their perceived impact on the final outcome of the election, rather than because of any intrinsic value they may have.

Strategic Entry

If candidates and parties decide whether or not to enter a race partly on the basis of their chance of winning a seat (or seats), then expectations about who will win under various entry scenarios are crucial in determining who will actually enter. For example, if party *A* believes that it will surely lose if it enters when party *B* does too, then *A* will enter only if it expects that *B* will not.

SINGLE-MEMBER DISTRICTS   The simplest example of a strategic entry game can be constructed by imagining a single-member district with two parties. Suppose there is a single candidate for the Right party's nomination but two

candidates for the Left party's nomination (whether these nominations are awarded via primary elections or some internal party procedure is left unspecified). Suppose further that, if both Left candidates enter the race (i.e. whichever loses the battle for the Left nomination enters the race anyway as an independent), then the probability that the Right candidate will win the seat is p, whereas if only a single Left candidate enters then the probability that the Right will win is q.

Suppose $p = 1$ and $q = 0$, so that the Left wins the seat if and only if it manages to coordinate on a single candidate. This is the situation tacitly assumed by Duverger (1954) and most of the succeeding literature to characterize competitive single-member districts. The incentive for the Left to get its act together is clear. The literature has generally argued that one should expect parties in this sort of situation to react to this incentive and, one way or another, ensure that only a single candidate emerges from their side.

It is instructive to underscore some of the key assumptions that underlie this analysis. First, everyone must agree that there are really only two parties with realistic chances of winning. In some countries using single-member districts, such as Papua New Guinea, this assumption clearly does not hold. Expectations there appear chaotic, with no clear advantage for two or even a small number of parties or candidates, with the result that in 1987 (a typical year) the average number of candidates per district was almost 14 (Dorney 1990:59).

Second, it is important that the Left's two potential candidates have the expectations stipulated above, $p = 1$ and $q = 0$. If one of them thinks $p = 0$—the Right will lose even if both Left candidates enter—he or she may enter regardless of who wins the Left's nomination. If both of them think $p = 0$, then we have the situation commonly envisioned in studies of one-party regions, e.g. the Solid South in the United States. The practical result in this case seems not to be double entries in the general election but increased competition for the dominant party's nomination, hence increased factional activity (Key 1964).

Third, even with two parties and common expectations that $p = 1$ and $q = 0$, it is important that both Left candidates care mostly about the outcome of the current election. If these two candidates represent competing factions within the Left party, both vying for long-term dominance of the party, then each may view the coordination game not as a one-shot affair but as a repeated interaction. Optimal strategies in repeated coordination games, however, typically entail being "tough" in the early rounds. By sending forth a candidate to do battle, even though this will lead to a bad result in the current election (a Right victory), each faction demonstrates its patience and commitment. If the other faction backs down eventually, the victor will be left in possession of the spoils for an extended period (assuming that incumbents are easily renominated). This sort of early posturing might be especially likely in highly uncertain conditions, such as those in many new democracies.

Nomination control is of course only one aspect of electoral coordination. One can put different players into the game sketched above and generate coordination problems with a family resemblance. Instead of two contenders for the Left nomination, for example, suppose there are two leftist parties. Now the issue is whether they will agree on a joint nominee. Differing electoral rules can make agreement easier or harder. Fusion candidacies (whereby different parties nominate the same candidate, with the names of all nominating parties appearing on the ballot) make it easier. So do two-round systems (see Tsebelis 1990).

Now suppose there are not two parties but an established Left party and a group that might or might not form a new party on the left. Here again the issues are similar. The more permeable the nomination procedure of the established party, and the higher the electoral threshold, the more likely it is that the group will choose to enter the established party as a faction, rather than enter the party system as a new party (Epstein 1986, Cox 1997:ch. 8).

MULTI-MEMBER DISTRICTS   Somewhat more elaborate coordination problems arise in connection with the control of nominations in multi-member districts. There is a small literature on the strategy of nomination under cumulative voting, to which Goldburg (1994) is a convenient access. There has also been some consideration of nomination under the limited vote system (Lijphart et al 1986). A somewhat larger literature exists on the regulation of nominations in Japan.

From 1947 to 1993, Japan used mostly three-, four-, and five-seat districts, with each voter casting a single vote for a candidate and the top three, four, or five candidates winning seats. This system posed coordination problems similar to those arising in single-member plurality districts. If a party had enough supporters in a district to elect just one member, then the situation essentially reduced to the single-member case. More than one faction within the party would presumably have liked to secure the seat but if more than one candidate actually entered the general election, the party risked splitting its support too thin and winning no seats at all.

The situation was not much more complicated if a party had votes enough for two seats. If at least three politicians were seeking the party nomination, and all entered, the party might win fewer than two seats; but it would rarely be agreed which of the potential candidates should withdraw.

More generally, a party might have votes enough for c out of the M seats at stake in a particular district, but $d > c$ competitors for the nomination. When $M = 1$, $c = 1$, and $d = 2$, we have the Duvergerian single-member scenario discussed above. For larger values of M, c, and d, more complicated coordination problems arise.

The fundamental issue in studies of coordination in Japan has been the parties' success. Were they able to limit their nominations? Were they able to pre-

vent disappointed nomination seekers from entering the general election as independents? Most studies have focused on the long-ruling Liberal Democratic Party (LDP). The basic finding is that the LDP overnominated frequently in the first election (1958) held after its formation as an alliance of two preexisting parties (in 1955) but improved steadily thereafter (Reed 1991, Cox & Niou 1994). The party was less successful in preventing independent candidacies, which continued to be a common feature of LDP politics throughout the postwar era. But even here they did have some success, as overnominations in the "conservative camp" (LDP plus independents) also declined (Cox & Rosenbluth 1994, Christensen & Johnson 1995).

The LDP's increasingly successful coordination was an important factor pushing the Japanese system as a whole toward an equilibrium in which only $M + 1$ serious candidates entered the fray in an M-seat district (Reed 1991). The logic of this $M + 1$ result is a direct generalization of Duverger's argument regarding entry in single-member districts. If expectations about the candidates' order of finish in the poll are clear enough, then the top $M - 1$ seats may be "sewn up." The only uncertainty, hence competition, will concern the last-allocated, or Mth, seat. For this last-allocated seat, there are typically at most two viable competitors—the expected last winner and the expected first loser—just as there are typically at most two viable competitors for the last-allocated (and only) seat in a single-member district. Thus, one typically expects a total of $(M - 1) + 2 = M + 1$ viable candidates to enter. This result depends, of course, on assumptions similar to those underlying Duverger's original analysis: There must be precise expectations about prospective candidates' vote shares at the time entry decisions are made; and potential entrants must care mostly about the outcome of the current election (as opposed to the outcomes of future elections or non–outcome-related matters).

Beyond the basic issue of whether entry in Japanese districts has tended to equilibrate over time at $M + 1$ serious candidates, several other issues concerning the nature of electoral coordination in Japan have arisen. One question concerns whether the downward trend in LDP overnominations, and the concomitant downward trend in the average number of entrants per district, is evidence of learning or not. Reed (1991) has argued that Japanese candidates do not appear to have understood the implications of their electoral system as quickly as a standard rational choice account would have it. As an alternative, he proposes that candidates and parties were muddling through, slowly learning from painful experience, and adapting.

Certainly there are cases in which assuming that actors can correctly deduce the full consequences of a given set of rules is not warranted, and incremental adaptation rings true. However, I am not sure that Japan's experience with nomination under its former electoral system is one of those cases. The electoral system had been in use since 1925 (with a gap during and after the war).

The Japanese had borrowed a preexisting nonpolitical word, *tomodaore* ("falling down together"), specifically to denote the bad consequence of overnomination; this word expresses the problem quite pithily and came into political usage some time ago. Finally, a number of rounds of overnomination is what one would expect under a completely standard repeated coordination game, in which candidates fully understood the likely outcome of overnomination but in which expectations about candidates' viability had not crystallized. Given the uncertain conditions that prevailed in early postwar Japan, it is not surprising that coordination would take a long time. I thus prefer to view Japan's early postwar experience as a case similar to that of Eastern Europe now: There is no lack of deductive capacity, simply a lack of the clarity in expectations required to support equilibrium.

A second issue, related to the LDP's increasing success at controlling overnomination, has to do with scholarly assessments of the LDP's popularity. Standard accounts of postwar political history have routinely noted the LDP's declining share of the national vote during the 1960s and interpreted it as a loss of popularity. Kohno (1998, unpublished manuscript) has noted that this interpretation raises two questions. First, incumbent governments are generally thought to benefit from good economic times (e.g. Lewis-Beck 1988), and Japan was undergoing an economic miracle during the 1960s—so is Japan an exception to the general rule? Second, mass surveys from the 1960s show no decline in the LDP's popularity, so how does one reconcile stable polls with declining votes? Kohno proposes that the decline in the LDP's vote share was a simple consequence of the party running fewer candidates as the coordination battles in the districts sorted themselves out. His evidence is straightforward: Between 1960 and 1963, for example, the LDP vote declined little in districts in which the party continued to run the same number of candidates, but it declined substantially where the party ran fewer candidates. In most of the places where the party ran fewer candidates, it did so in response to overnomination experiences (or near misses) in the previous election. Thus, the decline in the party's vote resulted largely from strategic coordination rather than any decline in popularity.

MULTI-MEMBER DISTRICTS WITH LISTS   Thus far I have considered only multi-member districts in which seats are awarded only to candidates. Similar issues arise in multi-member districts in which intermediate seat allocations are made to lists. A good example is Chile, which currently uses two-member districts and awards seats to lists by the d'Hondt method of proportional representation. Given that there are only two seats per district, the d'Hondt method amounts to the following rules: The first seat in any district goes to the list with the highest vote total. If this list has more than double the vote total of the second-place list, then it also wins the second seat; otherwise the second-place list does.

These rules set up a clear coordination problem on the left and on the right. (Some other features of the Chilean system are secondary for present purposes—e.g. that voters vote for candidates, with each candidate's votes automatically counting for his or her list; and that any seats allocated to a list are then reallocated to the candidates on that list by plurality rule.) Suppose, for example, that the Right has about 40% of the vote in a particular district and faces a unified Left. If the Right fields one list, it will win a seat, but if it fields two lists that split the vote more or less evenly, then the Left will win both seats. The current Chilean solution to this coordination problem takes the form of two alliances of parties, the *Concertación* on the left and a variously named coalition on the right. These alliances ensure that there is only one serious list from the left and one from the right in most districts.

It is worth emphasizing that the impact of the electoral system in Chile, as in all electoral systems, falls on electoral competitors—i.e. candidates and lists—not on parties. When Chile's former dictator, Augusto Pinochet, introduced a new electoral system, the number of lists in Chile reacted quickly to the new electoral incentives when democratic elections were resumed, producing two-list competition in most districts. Because Chile's lists are joint (containing candidates from more than one party), however, the reductive impact of the electoral rules has not fallen directly on the party system.

Strategic Voting

If the prospective candidates in a district are all primarily interested in winning a seat in the election at hand, and they will not enter if their chances are not good enough, then electoral coordination may end at the elite level. For example, voters in a single-member district may be presented with only two choices on the ballot, obviating any need for strategic voting. If, on the other hand, some minor-party or independent candidates enter regardless of their chances at winning—or if the Right (or Left) fails to coordinate on an appropriate number of candidates or lists—then voters may be faced with incentives to vote strategically.

The voters who will in fact face such an incentive are those who care mostly about who wins seats in the current election. Voters who care about expressing their true preferences, or about affecting the outcome of future elections, may vote for a candidate even if they recognize that he or she has little chance of winning in the current contest.

We now know a fair amount about the equilibrium consequences of strategic voting in a world where all voters do care mostly about who wins seats in the current election, at least in simple electoral systems where all seat allocations are made at the district level. The general finding is embodied in the $M + 1$ rule, which says, loosely, that in an M-seat district there can be at most $M + 1$

viable candidates (in systems where citizens cast a single vote directly for a candidate) or lists (in systems where citizens cast a single vote for a list).

Because the logic behind and evidence for this generalization have recently been extensively reviewed (Cox 1997), here I make only two remarks. First, the $M + 1$ rule coincides, in the case $M = 1$, with Duverger's observation that multi-candidate elections in single-member districts tend to reduce to two-candidate affairs. Second, this $M + 1$ rule is logically distinct from, although related to, the tendency for there to be $M + 1$ candidates (noted in the previous subsection). When in fact only $M + 1$ candidates enter a race, then strategic voting is unnecessary. When entry coordination rule fails, however, and more than $M + 1$ candidates enter, then there is an opportunity for strategic voting. The $M + 1$ rule says that, under specified conditions, strategic voting will reduce contests with more than $M + 1$ candidates to contests in which at most $M + 1$ candidates are seriously in the running for seats. Thus, the $M + 1$ rule as it applies to strategic voting concerns the equilibrium degree of vote concentration in multi-candidate contests, not the number of candidates who enter. Of course, anticipation of strategic voting may be crucial in convincing some potential candidates to forego entering the race to begin with, so that the issues of vote concentration and entry are closely related.

LINKAGE

The coordinative activities discussed above all occur within individual electoral districts. The end result is a series of local party systems, each with a given effective number of parties.

The next step in the process of creating a national party system is linking the members of the various local party systems into national parties. At one extreme, each party in a country might field candidates in just one district, so that every local party system was sui generis. In this case, the national party system would be considerably larger than the average of the local party systems. At the opposite extreme, every party might run candidates in every district, so that every local party system was a microcosm of the national party system. In this case, the effective number of parties in the national system would more nearly equal the average number in the local systems.

Thus, as mentioned, the difference between the effective number of parties in the national party system and the average effective number of parties in the local party systems, $D = \text{ENP}_{nat} - \text{ENP}_{avg}$, can be used as an inverse measure of linkage. As D gets larger, linkage is poorer, and the consequent inflation of the national party system over the local baseline is larger. By dividing the gap between the national and mean local figures by ENP_{nat}, and multiplying by 100, we get $I = 100(\text{ENP}_{nat} - \text{ENP}_{avg})/\text{ENP}_{nat}$, a measure of party system inflation on a percentage basis. If I is 10, for example, about 10% of the overall

size of the national party system can be attributed to different parties obtaining votes in different parts of the country (poor linkage), with the other 90% due to the average size of the local party systems.[1]

Table 1 provides some examples of inverse linkage (or inflation) scores from a sample of seven countries. One feature of the data worth noting at the outset is that the correlation between the median district magnitude and the average effective number of parties in the districts (ENP_{avg}) is +0.86, whereas the correlation between median district magnitude and the effective number of parties calculated at the national level (ENP_{nat}) is only +0.66. The number of observations is insufficient to make this difference statistically significant, but it is in the direction expected from the discussion above: Electoral system features such as district magnitude are expected to affect the average size of the local party systems in a country (i.e. ENP_{avg}), but there is no clear theoretical reason to expect them to affect linkage, hence less reason to expect them to affect the size of the national party system (i.e. ENP_{nat}).

Now consider linkage. As Table 1 shows, there is considerable variation in the inflation scores of the national party systems displayed. At one end of the scale, Austria has just as large a national party system as one would expect were each local party system a microcosm of the whole (0% inflation). At the other end of the scale, Brazil and India have substantially larger national party systems than one would expect were their local party systems largely the same throughout the nation (38–48% inflation). Between these extremes is a middle group consisting of Finland, Japan, Spain, and the United Kingdom, with inflation rates in the 7–15% range.

Explaining Variation in Linkage: Institutional Factors

What explains variations in linkage? Some likely explanations pertain to economies of scale and have the following abstract form: Some group seeks to accomplish a task that requires the help of a large number of legislators or legislative candidates; this group therefore seeks to induce would-be legislators from many different districts to participate in a larger organization (Cox 1997). Different versions of the story emerge as the task is changed. Here I consider

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[1]One wrinkle to note here is that ENP_{avg} should be calculated as a weighted rather than a simple average, where each district is weighted by the share of assembly seats elected from within that district. If one defines perfect linkage as a situation in which each party obtains the same vote share in every district, then ENP_j will be the same for all districts j, and it will not matter whether a simple or weighted average is used. When linkage is perfect by this standard, ENP_{avg} will equal ENP_{nat} for either sort of average. If one thinks that the effective number of parties in a district will be a function of district magnitude, then a different standard for perfect linkage is suggested: If party A wins votes in a district of magnitude M, then it wins votes in all districts of higher magnitude. By this standard, there is no guarantee that ENP_{avg} will equal ENP_{nat} when linkage is perfect. But one comes closer to this condition with weighted averages.

Table 1   Some inverse linkage scores from seven countries

Country (years)	Median district magnitude	Avg. ENP_{nat}	Avg. ENP_{avg}	Avg. D	Avg. I
Austria (1994)	13	3.74	3.74	0.0	0%
Brazil (1945–1962, 1990–1994)	11	6.3	3.3	3.0	48%
Finland (1995)	13	5.78	4.94	0.84	15%
India (1957–1977)	1	4.2	2.6	1.6	38%
Japan (1958–1993)	4	2.9	2.7	0.2	7%
Spain (1986)	5	3.59	3.20	0.39	11%
United Kingdom (1955–1992)	1	2.70	2.39	0.31	11%

just two tasks: (*a*) securing more legislative seats or a better chance at winning the presidency, and (*b*) securing control of the central government.

One reason to form cross-district alliances of politicians has to do with the existence of upper tiers in legislative elections or vote distribution requirements in presidential elections. Upper tiers are secondary electoral districts, such as states, regions, or the whole nation, within which unused votes (and sometimes unallocated seats) from primary electoral districts are aggregated and distributed. From the perspective of electoral competitors, upper tiers offer an opportunity to pool votes that are wasted or excess in a given district, in a way that will fetch seats. Typically, laws implementing upper tiers require an explicit legal linkage of the lists or candidates wishing to pool their votes at the stipulated higher level. Thus, they provide an obvious incentive to politicians to ally across district boundaries. Vote distribution requirements in presidential elections, such as Algeria's requirement that the winning candidate must get specified support levels in the different regions of the country, provide similar incentives.

Another closely related reason to form cross-district alliances is to improve one's chances of controlling the central government. How much effort one is willing to exert to attain this goal depends on, among other things, how centralized power is in the polity and to what degree this power is at stake all at once electorally. Thus, one expects better linkage in states that are more unitary and worse linkage in states that are more federal, especially if state and federal elections are held at separate times. Similarly, one expects better linkage in states that are unicameral and worse linkage in states that are bicameral, especially if the two houses of the legislature are elected at separate times. The nature of the executive (presidential or parliamentary) has a more ambiguous affect. On the one hand, presidential elections may present a large and important prize that is awarded in an essentially winner-take-all fashion. On the other

hand, presidentialism divides and hence decentralizes power within the central government.

These two broad factors —whether there are upper tiers or vote distribution requirements, and the centralization of power/unification of elections—seem to make sense of Table 1. Austria is the only system in the table with upper tiers, and it has a zero inflation score; each of Austria's nine districts is more or less a microcosm of the national party system. Brazil and India are the most highly federalized states in the table, and they have very high inflation scores. Finland, Japan, Spain, and the United Kingdom are less federalized, and these four have lower scores.

These observations are suggestive but hardly sufficient to establish that upper tiers or federalism are generally important in explaining linkage. Some further evidence bearing on the importance of federalism can, however, be culled from two recent studies (the only such studies currently available) that explicitly address the issue of linkage.

INDIA AND THE UNITED STATES   Chhibber & Kollman (1998) present figures on ENP_{nat} and ENP_{avg} for India and the United States over a number of years. In India, the average effective number of parties in the districts (ENP_{avg}) has fluctuated from year to year between 2 and 3. In contrast, ENP_{nat} is always above 3 and sometimes above 5. There is thus typically a substantial gap in India between the size of the national party system and the average size of the local party system—i.e. between ENP_{nat} and ENP_{avg}.

In the United States, ENP_{avg} has always (since 1790) hovered around 2, but ENP_{nat} occasionally ranged above 5 in the nineteenth century and was above 3 as late as 1912. The gap between ENP_{nat} and ENP_{avg}, which Chhibber & Kollman use to measure linkage, does not fall permanently to low levels until the 1920s.

For both India and the United States, Chhibber & Kollman also present figures on nondefense spending by the federal government as a percentage of total nondefense spending by all levels of government. In the case of the United States, there was a substantial increase in the central government's share of total spending with the onset of the New Deal, which, Chhibber & Kollman argue, explains why regional parties disappeared permanently thereafter. Looking over the full range of US history, they show that the effective number of national parties (ENP_{nat}) is statistically related to fiscal centralization. The evidence for India is less clear but the argument is the same: Chhibber & Kollman view the ups and downs in ENP_{nat} as related to levels of centralization (especially high under Indira Gandhi, lower before and after). They conclude that "the degree of political and economic centralization can influence the number of national parties in single-member simple-plurality systems" (1998:329).

BRAZIL   Another study that looks explicitly at linkage is Samuels' (1998) study of Brazil. Brazil has an even larger problem of national integration of its

local party systems than does India, at least judging by the figure given in Table 1 (which is from Samuels). This is important to note, given that the previous literature has generally accounted for the large number of Brazilian parties in terms of its electoral system (large-magnitude proportional representation). But the average effective number of parties in Brazil's states (which act as districts) is only 3.3, not much more than the corresponding figure for India (2.6). Nearly half the 6.3 effective parties that appear on the national stage in Brazil arise because parties have state- or region-specific strongholds.

Although Samuels' main purpose is not to explain the gap between ENP_{nat} and ENP_{avg} in Brazil, the main theme of his work is the power of state governments (especially governors) in Brazil, the related state-centeredness of political careers, and the relative weakness of the national government and party system. He points out in particular that, during its democratic periods, Brazil has been one of the most fiscally decentralized countries in the world. His work thus fits well with the Chhibber-Kollman thesis and extends it beyond the single-member plurality case.

Explaining Variations in Linkage: Social Cleavages

If we should think of national party systems as being created in a two-step process, then we should also consider how social cleavages work through this two-step process. Ordeshook & Shvetsova (1994) and Amorim Neto & Cox (1997) have shown that ENP_{nat} is best modeled as an interactive function of social heterogeneity and the permissiveness of the electoral system. Neither study, however, empirically explores the stage at which the cleavage structure matters. Do more complex cleavage structures increase the size of the local party systems in a country, depress the level of linkage, or both?

Theoretically, there are reasons to expect both effects. At the local level, the story is simply that, as the number of distinct religious, ethnic, or linguistic groups in a district increases, the chances of malcoordination (hence of an increase in the number of entrants) also increase. Jones (1997) provides some support for this view in a study of Louisianan elections.

At the national level, the story is a bit more complex. Social diversity matters for linkage when Basques are concentrated in one region of Spain, Swedes are concentrated in one region of Finland, and Scots are concentrated in one region of Britain. But the relevant level of concentration depends on where district lines are drawn and on the relevant electoral thresholds.

To see this point, imagine a number of organized groups, each with its own political interests. Where a particular group is above the electoral threshold, it is more likely to enter as a separate party. Where it is below the electoral threshold, it is more likely to join an alliance. The groups' adjustment to local electoral realities may thus accentuate the differences between the parties contesting in different districts. Instead of parties 1 and 2 contesting in both dis-

tricts *a* and *b*, party 1 contests only in *a* and party 2 only in *b*, pursuant to some mutual withdrawal pact. This pact increases the diversity of local party systems as measured by received votes, hence increases ENP_{nat}. With more permissive electoral rules and a more homogeneous distribution of all groups, there is less need for this sort of adjustment to local electoral realities, and local party systems are more like microcosms of the national system.

CONCLUSION

Electoral systems affect the coordination of political forces at two main levels: (*a*) within individual electoral districts when candidates and lists enter the electoral fray and voters distribute their votes among them; and (*b*) across these districts (within the nation as a whole) as potentially autonomous candidates and lists from different districts ally with one another to form regional or national parties. A third and final stage of coordination is less directly affected by electoral rules, namely the forming and sustaining of governments.

We know a fair amount about district-level electoral coordination problems for the simplest electoral systems (in which all seats are awarded at the district level, without regional or national compensatory seats or other adjustments). In particular, when political actors are primarily concerned with the outcome of the current election, and good information about the relative chances of actual and potential competitors is publicly available, two different $M + 1$ rules apply. First, the number of candidates or lists entering a given race tends to be no more than $M + 1$; second, when more than $M + 1$ candidates or lists do enter a race, votes tend to concentrate on at most $M + 1$ of them. In cases where political actors take a longer-term view, or where information about relative chances is poor, the number of entrants and the dispersion of votes across them can both increase. More specific and detailed analyses—focusing on either entry or vote concentration in the context of a particular electoral system—support these general observations.

We also know a fair amount about the political coordination of forces in parliament necessary to form or sustain a government. This essay has not addressed such matters but a good introduction can be found in Laver & Schofield (1990).

We know much less about the intermediate stage of coordination, in which potentially separate local parties and party systems merge to some degree, forming a national party system. This essay has noted some issues involved in exploring this neglected topic further.

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CONTENTS