MINOR PARTIES IN PLURALITY ELECTORAL SYSTEMS

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ABSTRACT

Present research on minor party performance consists largely of single-country studies or pooled studies including a raft of widely varying electoral systems. This study examines the topic from a cross-national perspective, but is limited to democratic polities with single-member districts and first-past-the-post rules. An original dataset is compiled including 217 elections drawn from 37 countries and several historical eras. Five political-institutional factors are explored: (1) federalism, (2) presidentialism, (3) electoral system institutionalization, (4) party organization, and (5) electoral volatility. The evidence suggests that major party hegemony is more complete in polities with unitary constitutions, parliamentary executives, long-enduring electoral systems, strong party organization and low electoral volatility.

To what extent do electoral systems determine party systems? Are plurality electoral systems invariably dominated by two parties? Under what conditions is Duverger's law true? These are central questions in the study of electoral politics, and of critical concern to countries currently employing plurality rules as well as to others who may be contemplating a switch to a more majoritarian system.

Heretofore, these issues have been addressed by country-specific work and by cross-national work that mixes a variety of electoral system types (plurality and proportional) in the same research design. This study is limited to cross-national evidence within a single electoral system type – where district magnitude is equal to one (the single-member district) and winners are awarded on the basis of first-past-the-post rules (plurality). I shall refer to this conjunction of electoral rules as constituting a *plurality* electoral system when such rules apply to elections to the lower house of a two-chamber parliament or to the single chamber of a unicameral parliament.

The present survey covers all plurality electoral systems with a modicum of democratic competition for which adequate data on election results is available. This includes 37 countries at various historical periods in the late-nineteenth and twentieth centuries and a total of 217 elections. Minor party performance is tracked by examining the percentage of lower house seats controlled by non-major parties. My primary concern is with the role of political institutions in structuring party system results. The analysis indicates that the success of minor parties within plurality electoral systems is higher in federal systems, in parliamentary (non-presidential) systems, in highly institutionalized electoral systems, in systems where party organization is strong and where electoral volatility is low. These are the political-institutional causes of minor party performance in plurality electoral systems.

I begin with a brief discussion of past approaches to the subject and proceed to the analysis itself: (a) the criteria of case-selection, (b) the dependent variables employed to test minor party performance, (c) the hypotheses to be explored, and their operationalizations, and finally, (d) results and interpretations.

Approaches to the Subject

The literature on minor parties is dominated by the consideration of a single country, the United States. How is it, historians and political scientists have wondered, that two American parties have managed to maintain a near-monopoly over elective office over the course of a century and a half?

Historical work generally focuses on particular parties and particular eras of American history. Unfortunately, this detailed spadework is difficult to piece together in a meaningful way. We know a great deal about the various groups that have tried to wrest power from the major parties, and about their usual tribulations and very occasional triumphs. We do not know very much about how these stories fit together, or whether they fit together at all.[1] Even book-length studies of the subject often merely review the evidence gathered by historical case studies, avoiding general propositions.[2] To be sure, every textbook on party politics since Bryce (1888/1891) has included some treatment of the why-no-third-parties question.[3] But textbook coverage is necessarily brief, and rarely marshals empirical evidence in a concerted fashion. In common with the historical literature, political science work has reiterated a smorgasbord of possible causes for American two-partyism – the plurality electoral system, the presidential election, the unique structure of the American parties, the prosperity of American society, the absence of radical ideologies, the consensual political culture, the successful containment of dissent by canny American politicians, and the heavy weight of tradition – without much attempt to discriminate among them.

Another genre of work focuses on voting patterns for non-major party candidates in the US, Britain and Canada.[4] While useful in elucidating the motivating factors behind third party challenges, as well as in tracking historical changes, this genre of work sheds very little light on the enduring *system-wide* features of these party systems. For this, we must compare systems cross-nationally.

The standard approach to cross-national analysis is to measure party system size (variously operationalized) as a function of electoral system features.[5] A variety of electoral systems are thus pooled within a single sample. This is appropriate if one's interest is in contrasting the influence of different electoral rules (e.g. district magnitudes). However, the pooling of diverse electoral systems may be problematic if one's primary theoretical interest is in sociological or political factors that are non-electoral in character. These non-electoral factors may work differently in different electoral systems. For example, federalism may have different effects on party system size in PR and plurality electoral systems. Granted, these differences can sometimes be handled through dummy controls and interaction variables. However, these are rather crude instruments when one is attempting to probe causal relationships that are perhaps incommensurable across electoral systems. The more desirable research design is one that holds constant those features of a political system that (one suspects) may have confounding effects on the variable of interest. A smaller sample comprised of cases with similar electoral systems seems worthwhile. We should keep in mind that while plurality systems around the world are virtually identical to one another, 'PR' systems are infinite in their variety. Moreover, many of these features such as statutory thresholds, ballot structure, preferential voting options, and vote-allocation procedures are difficult to operationalize in ways that are valid cross-nationally (Reynolds and Reilly, 1997; Taagepera and Shugart, 1989). This renders pooled approaches to electoral studies problematic; the problem of 'contextual effects' (Goertz, 1994) is severe.

Thus, for theoretical as well as practical reasons it seems wise to investigate plurality polities as a discrete electoral system type. It could be that they are different from non-plurality systems, and different in ways that cannot be captured with control variables.[6] The approach taken here, while not resolving this question, requires fewer assumptions about case-comparability.

The Sample

Cases employed in this study were selected according to three criteria: (1) plurality electoral system design for lower-house elections, (2) the use of similar electoral rules in upper-house elections (if bicameral), and (3) democratic rules of engagement.

First-past-the-post (aka 'relative majority' or 'winner-take-all') refers to

the fact that the winner of the most votes is awarded the seat in question. Other single-member district systems, for example the two-round system of balloting (France and many former French colonies) or the alternative vote system (post-1917 Australia), are quite different in their effects on electoral strategy and electoral outcomes. Thus, I restrict my canvas to single-ballot first-past-the-post electoral systems. (Minor deviations, such as run-off provisions used in several southern states in the US, are accepted.)

The study focuses exclusively on the *lower house* of national legislatures, if bicameral. In most cases covered in this study the upper house is subservient to the lower house. In such cases it seems redundant to track the electoral record of parties in more than one chamber. However, countries using some form of proportional representation ('PR') to elect members to one house and plurality rules for the other are excluded, since these sorts of mixed electoral systems raise the problem of contagion. (If minor parties can get a foothold in the PR assembly they will presumably have more viability than they would in a pure plurality system.)

Not *all* members of a lower house need be elected in order to justify inclusion in this study. Included are polities where fewer than 5 percent of the legislators are appointed (by the executive or by the legislature itself) or serve on an *ex officio* basis. These members are usually not counted in election returns and so do not affect the results of the study. (The dependent variable thus measures the percentage of seats in the lower house won by all minor parties as a share of all seats filled by election.)

The democracy criterion deserves extended comment. Elections were selected for analysis if a modicum of party competition was present in that electoral contest, as judged by various indices of democracy (e.g. the Freedom House Political Rights index and the Polity IV index) and secondary accounts. I also include countries where competitive multiparty elections occurred, but where suffrage rights were severely restricted. Thus, Rhodesia, South Africa prior to 1980, Norway prior to 1903, and Australia prior to 1917 are all included in the analysis, despite their exclusion of racial groups, non-propertied males, and/or women. A higher threshold of democracy is employed as a cross-check on results (see Table 2).

Thirty-seven countries qualified for inclusion according to these criteria (plurality rules, upper house symmetry and democracy), as enumerated in Table 1. (The Gambia is listed twice in Table 1 because its political system underwent an important change in one of the variables of interest, moving from parliamentarianism to presidentialism.) A few of these country cases are considered during periods when they were protectorates (e.g. Dominica, St. Kitts/Nevis, St. Lucia and St. Vincent). However, these states were essentially self-governing while under British rule. More important, there is no reason to think that their liminal status during the pre-independence years affected minor party performance. (One finds no significant changes between pre- and post-independence eras.)

Fortuitously, the resulting sample is extraordinarily diverse, including

countries that are rich and poor, large and small, heterogeneous and homo-
geneous, old and new, western and non-western. About the only thing these
countries have in common is that most were once part of the British Empire.
(Many remain within the Commonwealth.) A relatively large N is achieved,
along with substantial variance on the matters of primary interest.

Outcomes

There are two basic ways of tracking a party's performance in electoral
politics – according to votes cast and seats won. Unfortunately, information
on the former is scanty for many of the countries in this sample. Moreover,
even where vote totals may exist (either from government sources or private
polls), they are considerably less reliable than seat totals. Thus, seat totals
provide the dependent variable of this study.[7]
   Major parties are defined as the two parties gaining the most seats in the
lower house in a given election.[8] All other parties are considered *minor*. The
term minor party or third party thus includes formally 'independent' candi-
dacies.[9] Minor party *performance* refers to all seats gained by non-major
party candidates as a percentage of total seats in the lower (or unicameral)
house.
   Elections are treated as the primary unit of analysis. However, it will be
noticed that some countries have had more elections that satisfy these
criteria of inclusion (plurality rules, upper-house electoral system symmetry
and democracy) than others. Evidently, to collect *all* eligible elections would
unduly weight the dataset towards a few countries – Britain, Canada, New
Zealand and the US. This is problematic, since the variables of primary
theoretical interest are static through time. One could of course develop a
weighting system to overcome these difficulties. It seemed simpler, however,
to limit the number of elections chosen for study from each country to 10.
I choose the *last* 10 elections (in a democratic period) since these are most
likely to exhibit equilibrium outcomes.[10] A total of 217 elections comprises
the complete sample. (A secondary analysis, not reported here, replicates
the analysis with countries, rather than elections, as the primary unit of
analysis – N = 38, counting Gambia I and Gambia II separately. Results are
consistent in both settings.)

Hypotheses

The study of minor parties in plurality electoral systems rightly begins with
the observation that in many polities they are not so minor at all. In
Bangladesh, India and the Philippines, for example, minor parties routinely
obtain a fifth to a third of the seats in the lower house. In Papua New
Guinea, minor parties gained a *majority* of legislative seats from 1977 to

Table 1. Countries and key variables

Countries	Sample		Key variables					Seats won by minor parties (%)	
	Period	Elections (N)	Federal	Pres.	Institutionaliz.	Party org.	Volatility	Last election	All elections
Antigua	1956–94	10	1	0	10	1	0.6	6.0	3.0
Australia	1901–17	7	2	0	7	1	7.4	0.0	12.3
Bahamas	1972–97	6	0	0	6	1	3.8	0.0	1.5
Bangladesh	1991–96	2	0	0	2	0	11.0	13.0	18.5
Barbados	1966–94	7	0	0	7	1	2.9	4.0	1.7
Belize	1965–93	7	0	0	7	1	0.0	0.0	0.0
Botswana	1969–94	6	0	0	6	1	2.8	0.0	4.6
Canada	1965–97	10	2	0	31	1	4.2	41.7	16.9
Dominica	1957–95	9	0	0	9	1	5.4	2.0	9.6
Fiji	1977–94	5	0	0	6	0	7.4	27.0	7.4
Gambia1	1972–77	2	0	0	2	1	3.0	3.0	4.5
Gambia2	1982–92	3	0	2	3	1	14.0	14.0	9.3
Ghana	1979–96	3	0	2	3	0	12.8	4.0	8.3
Grenada	1954–95	10	0	0	11	0	14.1	13.0	11.5
India	1962–96	9	2	0	10	0	13.1	35.0	29.5
Jamaica	1959–93	10	0	0	13	1	0.0	0.0	0.0
Lesotho	1993	1	0	0	1	1	0.0	0.0	0.0
Malawi	1994	1	0	2	1	0	20.3	20.3	20.3
Mongolia	1997	1	0	1	1	0	1.2	1.6	2.3
New Zealand	1969–96	10	0	0	35	1	1.2	0.3	1.0
Nigeria	1979–83	2	2	2	2	0	18.0	2.0	29.0
Norway	1882–1903	8	0	0	8	1	5.6	12.8	9.5

Table 1. Continued

Countries	Sample			Key variables					Seats won by minor parties (%)	
	Period	Elections (N)	Federal	Pres.	Institutionaliz.	Party org.	Volatility	Last election	All elections
Pakistan	1970–97	6	2	0	6	0	10.4	27.0	21.2
Papua New Guinea	1977–97	5	1	0	5	0	17.9	24.0	54.2
Philippines	1992–95	2	1	2	3	0	15.0	2.0	27.5
Rhodesia	1970–74	2	0	0	2	1	7.0	5.0	8.5
Seychelles	1993	1	0	2	1	0	6.1	27.0	3.0
Solomon Islands	1980–93	4	2	0	4	0	8.4	0.0	35.8
South Africa	1961–77	7	0	0	7	1	3.2	0.0	15.0
Sri Lanka	1977	1	0	0	2	1	3.0	3.0	6.0
St Kitts/Nevis	1957–95	10	2	0	11	1	4.8	4.0	22.3
St Lucia	1961–97	10	0	0	13	1	3.2	8.0	4.2
St Vincent	1961–94	10	0	0	13	1	0.0	6.0	2.4
Trinidad/Tobago	1976–95	6	0	0	6	1	2.2	5.0	3.8
United Kingdom	1959–92	10	0	0	21	1	1.0	7.0	4.3
United States	1978–96	10	2	2	82	1	0.0	0.2	0.1
Western Samoa	1991	1	1	0	1	0	11.0	11.0	11.0
Zambia	1991–95	2	0	2	2	0	22.0	22.0	11.0
Mean		5.7			9.6		6.9	9.2	11.3

Federalism: 0 = unitary, 1 = strong territorial assemblies, 2 = constitutional federalism. *Presidentialism:* 0 = parliamentary, 1 = semi-presidential, 2 = presidential. *Institutionalization:* the number of lower-house elections carried out under the same (reasonably democratic) electoral rules. (Reflects the value for that variable in the last election during the period under observation.) *Volatility:* the change in percent seats won by all minor parties from one election to the next. Reflects the mean over the entire period. *Party organization:* 0 = weak, 1 = strong. Non-integer variables are rounded to the nearest decile.
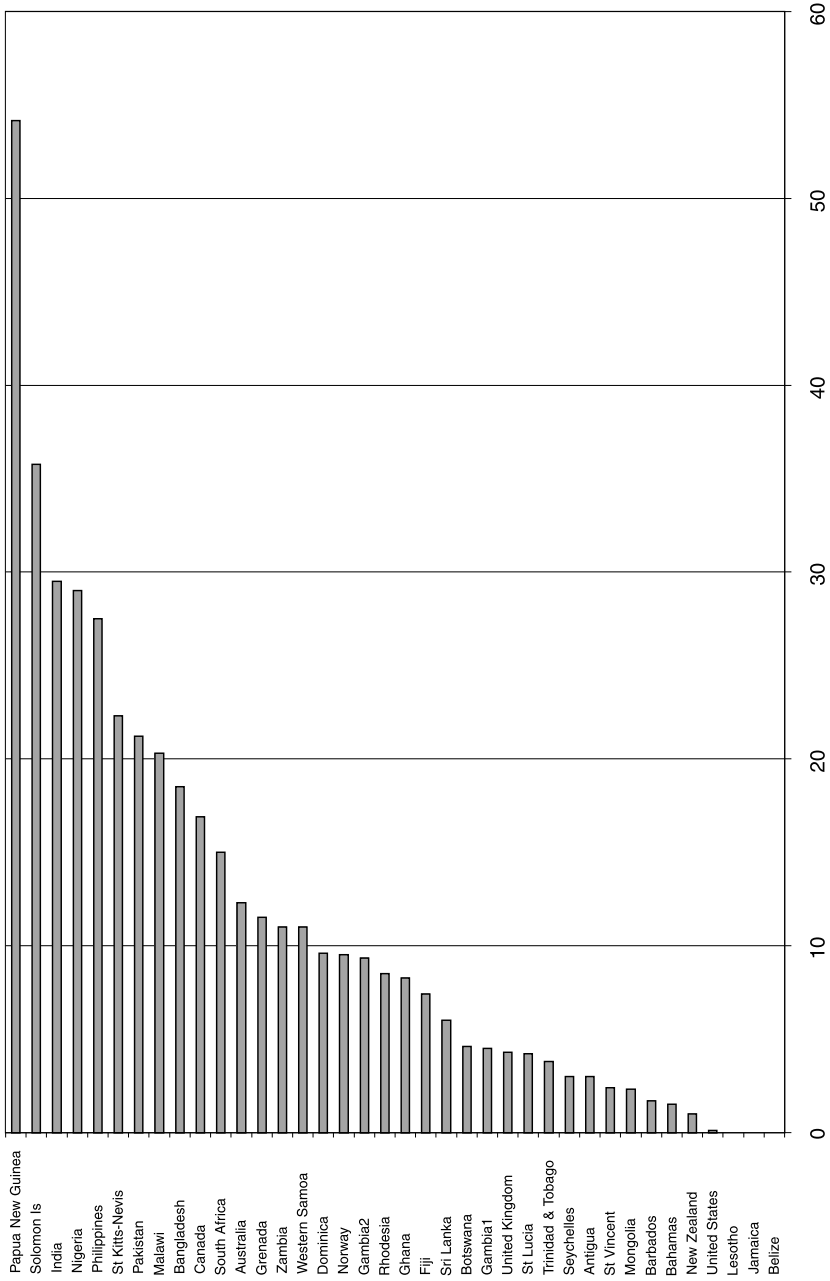
Figure 1. Minor party performance. Mean value for period under study

1997. Among all elections under study (N = 217), minor parties received an average of about 10 percent of the legislative seats in the lower house (or unicameral legislature). When countries are considered as the unit of analysis, the mean across 37 cases rises to just over 11 percent. Only seven of these plurality systems demonstrated a mean minor party performance of less than 2 percent. Only four – Belize, Jamaica, Lesotho and the US – were close to zero. Evidently, single-member district electoral systems and plurality rules of seat allocation do not produce pure two-party results except in rather exceptional cases, as illustrated in Figure 1.

Since I have deliberately limited the sample to a single electoral system design, it follows that the considerable variation demonstrated in Figure 1 is accountable to *non*-electoral system factors. How is it, then, that major parties in Belize, Jamaica, Lesotho and the US manage to contain minor party challenges while major parties in other polities are notably unsuccessful in doing so? My theoretical interest in this article focuses on five political-institutional factors: (1) federalism, (2) presidentialism, (3) institutionalization (electoral system endurance), (4) party organization, and (5) electoral volatility. While by no means comprehensive, this set of factors encompasses most of the general arguments that have been proposed by scholars, or might be intuited, to explain the variable performance of minor parties within plurality polities. (I leave aside those explanations whose scope is limited to a single country, such as the virtually unique system of candidate selection employed in the United States.)

Federalism

Where sovereignty is divided between national and regional authorities, this division may have the effect of encouraging locally rooted political movements. By the same token, if a party can institutionalize itself in a state or province it has a much better chance of mustering the organization, resources and popular profile necessary to win seats nationally. This hypothesis has drawn little attention from American scholars, no doubt because the US is a federal system and one evidently inhospitable to minor parties (at least in the twentieth century). However, Valelly (1989) notes that the demise of successful third parties in the upper Midwest may have been linked to the rise in status of the federal government relative to state governments; the increasingly 'unitary' nature of the regime sapped the vitality of parties whose appeal was limited to a particular region or state. Much the same argument has been applied to third party performance in more recent epochs in India and the US (Chhibber and Kollman, 1998). Canadian scholars are particularly conscious of the interplay between constitutional structure and party system behavior (Aucoin, 1985a, b; Bakvis and Chandler, 1987; Blais, 1973; Chandler, 1987; Lipset, 1968; McHenry, 1950; Pinard, 1971). Indeed, William Riker's text on federalism (1964) identifies regional autonomy as one of the principal effects of a federal constitution.

Thus, there is ample reason to suppose that federal systems, *ceteris paribus*, might have larger party systems (see also Jones, 1997).

Yet, there is room for dispute. Weaver (2002: 115) argues, based on an informal survey of extant democracies, 'there is little evidence that federalism has an *independent* effect on the degree of fragmentation in a legislature'. His conclusions may be biased by his consideration of both single-member and multi-member district electoral systems.

I employ the term federalism in its old-fashioned, *constitutional* sense. This is quite different, it should be noted, from the concept of 'fiscal federalism', which may refer to a wide variety of policy arrangements between national and sub-national units (Ter-Minassian, 1997). As a constitutional concept, federalism refers to a highly institutionalized division or sharing of responsibilities between a national authority and semi-autonomous regional units. Since this sharing of responsibilities takes a variety of forms and is not always formally prescribed (or is ambiguous in formal-constitutional terms), I utilize three coding categories: 0 = unitary, 1 = semi-federal (where there are elective legislatures at the regional level but in which constitutional sovereignty is reserved to the national government), and 2 = federal (elective regional legislatures plus constitutional recognition of sub-national authority).[11] Fully federal cases in the dataset include Australia, Canada, India, Nigeria, Pakistan, the Solomon Islands, St-Kitts/Nevis and the United States. Semi-federal cases include Antigua, Papua New Guinea, the Philippines and Western Samoa in a suitable fashion. All others are unitary (see Table 1).

Presidentialism

The existence of a directly elected president is often said to depress minor party performance in parliamentary elections (Herrnson, 1997; Jones, 1995, 1997: 539; Lipset, 1960: 63; Shugart and Carey, 1992; Sorauf and Beck, 1988: 44). This is so because voters generally wish to support a party that has a shot at capturing the nation's highest elective office. Since in a presidential system this office is winner-take-all, minor parties may have difficulty convincing would-be supporters that they are viable. In a parliamentary system, by contrast, minor parties need only win a single district in order to participate on a more or less equal footing with other parties. Indeed, such parties often play a key role in government coalitions in multi-party legislatures. Thus, third party candidates need only clear the winner-take-all hurdle at the district level rather than at the national level.

Perhaps the strongest case-study evidence for this proposition is provided by contemporary France, where the founding of the Fifth Republic inaugurated a political system centered on a strong executive that (after 1962) was directly elected. By the end of the 1960s the French party system underwent a dramatic consolidation into two more or less monolithic blocs. Observing this fact, most writers assume that the introduction of a directly elected executive discouraged third party efforts.

The definition and classification of 'presidential' and 'parliamentary' regimes has attracted a good deal of attention from scholars in recent years (Foweraker, 1998; Haggard and McCubbins, 2001; Mainwaring and Shugart, 1997). *Parliamentarianism* is understood here to refer to a system of government in which the executive (the prime minister and cabinet: collectively, 'the government') is chosen by, and responsible to, an elective body (the legislature), thus creating a single locus of sovereignty at the national level.[12] *Presidentialism*, its contrary, is understood as a system where policy-making power is divided between two separately elected bodies, the legislature and the president. The president's selection is usually by direct popular election, though it may be filtered through an electoral college (as in the US), and the rules pertaining to victory (i.e. by relative or absolute majority) vary from country to country. His (or her) tenure cannot be foreshortened by parliament except in cases of gross malfeasance. S/he is actively engaged in the making of public policy, and in this sense plays a 'political' (i.e. partisan) role.

In practice, one finds many admixtures between these two polar types – known generically as 'semi-presidential' systems. Thus, it is necessary to conceptualize the parliamentary–presidential distinction as a continuum with two dimensions: (a) the *degree of separation* (independence) between president and parliament (unity = parliamentary, separation = presidential), and – if there is any separation at all – (b) the *relative power* of the two players (the more power the president possesses the more presidential is the resulting system). I capture this complex reality with a three-part coding scheme: 0 = parliamentary, 1 = semi-presidential, 2 = presidential.[13]

Let us consider some eventualities. If a directly elected president exists but has no effective policy-making power, as in Iceland and Ireland, I consider the regime to be parliamentary. If a president is chosen by the legislature but enjoys a fixed term of office (cannot be removed by the legislature except in cases of gross malfeasance) and significant policy-making powers, as in Bolivia, I consider the regime to be semi-presidential. If a president is chosen by popular election, enjoys significant policy-making power, but must share power with a prime minister chosen by the legislature, then I also code the system as semi-presidential. This is the most common form of semi-presidentialism, and is currently found in France, Lithuania, Poland, Russia and the Ukraine.

Presidential cases in the sample include Gambia2 (1982–), Ghana, Malawi, Nigeria, the Philippines, the Seychelles, the United States and Zambia. Mongolia is classified as semi-presidential. All others are parliamentary.

Institutionalization

What is true for institutions generally is also presumably true for electoral system laws: equilibrium results are not immediately attained. In particular,

it may take some time for electors and party elites to adjust their strategies to conform to the exigencies of multiparty elections and plurality electoral rules (Gunther, 1989; Shamir, 1985). The longer an electoral system is in place the more time is available for two major parties to establish themselves and for voter loyalties to these parties to develop. Minor parties, by contrast, are likely to be more transient, and hence less likely to benefit from secular patterns in party identification. All of this is to say that one might plausibly expect lower levels of minor party performance in regimes that have maintained consistent (plurality) electoral laws for some time. Duration and minor party dominance may vary inversely. It seems clear that it is the number of elections held under similar rules, not the mere passage of time, that is likely to affect party system size. Each election is an iterated event that may call forth a 'learning' process. Thus, the measure of duration is provided by the total number of lower-house elections carried out under plurality conditions, without authoritarian interruption and without major changes in other features of the political system. This figure thus ranges from 1 (the first election under study) to N (the last election under study). I employ a logged transformation of this statistic in order to represent the presumed decay of this effect over time. (This election's electoral system should have a stronger effect on behavior in this election cycle than electoral systems employed in previous years.)

Party Organization

Plausibly, the level of party organization found in a polity also affects the viability of minor party challenges. Minor parties are typically newer than major parties; thus, the environment they face is largely a product of the existing strength and structure of the two-party system. If this structure is strong – if, for example, these parties have large memberships, impressive resources and a well-trained cadre of activists and leaders – one can anticipate that minor parties will face greater difficulties in establishing themselves.

Granted, it may also be the case that strong parties are headstrong; they do not play effectively to the middle but rather veer to the extremes, where their activist base lies. Ideological goals may trump the usual goal of winning elections. It could also be that strong parties are less capable of offering flexible leadership and new (or perceptibly new) ideas (Levitsky, 2001). If so, then these weaknesses may lead polities with strong party organization to experience greater, and more successful, third party challenges.

Regrettably, political science has not yet developed valid, reliable and easily measurable indices of party organization that might be applied across the universe of democracies (for suggestive work in this vein, see Kuenzi and Lambright, 2001; Mainwaring and Scully, 1995). Thus, I fall back upon a dichotomous classification of party organization – 0 = weak, 1 = strong – that relies on the secondary literature available for each country under

study.[14] Strong parties are judged to exist where elite-level party defections are rare – i.e. where MPs do not routinely switch party affiliations within parliament (Carey, 2000) – and where grassroots organization is more than rudimentary.

Ambiguous cases like the US present difficulties in this typology. One should remember, however, that this coding scheme is not restricted to parties in the advanced-industrial world, where the US is undoubtedly quite weak. It is intended, rather, to make sense of the range of party organization/disorganization across all democracies – including cases like Fiji and Papua New Guinea, where party organization is, by all accounts, merely suggestive. In this rubric, a dichotomous classification of party organization is workable and informative, for most of the cases under study occupy extreme positions along this dimension and are, by virtue of this fact, easy to code.

One might also criticize this variable for being too close to the subject under investigation. However, it correlates imperfectly with the dependent variable (Pearson's r = 0.501). In Canada, for example, one finds fairly strong parties but also extremely successful minor parties. It should be pointed out that this variable tests not the size of the major parties (which of course *would* be circular), but rather their organizational characteristics.

Volatility

If plurality electoral systems tend naturally toward two-party competition (because of the wasted vote problem induced by minor party competitors), it seems plausible that more 'settled' party systems will also be closer to the two-party ideal. One can expect that minor parties will do best in circumstances of high uncertainty, where there are no well-established parties and where the winner of an election – or at least the seat in question – is in doubt. Under these circumstances, voters cannot easily calculate which choices offer the surest returns, and which are destined to be 'wasted'. Electoral volatility should predict third party performance.

Volatility can be measured in a variety of ways (Pedersen, 1983; Roberts and Wibbels, 1999). Here, a simple measure is employed – the change in percent seats won by all minor parties from one election to the next.[15] This has the appearance of circularity, since the dependent variable is employed as a means to calculate the independent variable. However, aggregate minor party performance need not change from election to election. High and low equilibria are possible, at least in principle. Indeed, the bivariate correlation is far from perfect (Pearson's r = 0.444).

Primary Hypotheses

Although arguments could be made on either side of each question there are some strong theoretical priors with respect to each of the foregoing

hypotheses, as suggested by the foregoing discussion. I shall treat these as primary hypotheses:

H1: Federalism fosters higher minor party success.
H2: Presidentialism fosters lower minor party success.
H3: Electoral institutionalization fosters lower minor party success.
H4: Strong party organization fosters lower minor party success.
H5: Electoral volatility fosters higher minor party success.

Analysis

Quite a number of approaches have been developed in recent years to deal with the analysis of time-series cross-section data (Arrelano, 2003; Beck, 2001; Beck and Katz, 1995; Wooldridge, 2001). The approach taken here employs a Prais-Winsten estimator with panel correct standard errors and an AR(1) correction for serial autocorrelation. Various control variables and split-sample tests are employed as further tests for unit and time effects.[16]

A large set of control variables was tested in order to arrive at a plausible 'benchmark' model. These include demography (population, urbanization), education (literacy), economics (GNP per capita, GNP per capita growth rates, value added in agriculture, agricultural labor as percent of labor force), income inequality (gini coefficient), social conflict and ethnic heterogeneity. Social conflict is tested with two variables. The first is drawn from the Banks (1994) dataset and consists of a composite index with the following components (equally weighted): assassinations, general strikes, guerrilla warfare, government crises, purges, riots, revolutions and anti-government demonstrations. The second is also a composite indicator. This one is drawn from the State Failure Task Force dataset and includes the following components (equally weighted): civil violence, civil war, ethnic violence and ethnic war. Since there are myriad ways of operationalizing ethnic heterogeneity, each with a plausible theoretical justification, I tested all those which are readily available for a large number of cases. These include: (a) ethnolinguistic fractionalization (Mauro, 1995; data drawn from *Atlas Narodov Mira*), (b) percent of total population belonging to the largest ethnic group (Vanhanen, 1990), (c) percent of population not speaking the official language, (d) percent of population not speaking the most widely used language, (e) probability of two randomly selected individuals speaking different languages, (f) average value of different indices of ethnolinguistic fractionalization (Easterly and Levine, 1997), and (g) a variety of different measures of the foregoing (Alesina et al., 2002). I also tested a standard set of regional/cultural dummy variables, including English legal origin, Africa, Asia, East Asia, South Asia, Latin America, Caribbean, Anglo-America, Middle East and West Europe.

Variables were retained in the benchmark equation only if they were theoretically plausible *and* they demonstrated a statistically significant effect on minor party performance. As will be seen from Table 2, only two control variables passed this test: ethnolinguistic fractionalization and per capita GNP. Of the various ethnic/linguistic/religious fractionalization measures tested, the most successful (in statistical terms) was an index developed by Easterly and Levine (1997 – 'AVELF'), which averages the value of five independent indices. Data are drawn mostly from the 1960s. Per capita GNP poses problems of measurement across different historical eras. If we conceptualize minor party success as a protest against poor economic management, then the relevant standard of comparison is not whether Norway in 1900 is wealthier than Papua New Guinea in 2000, but rather whether it was wealthier than other countries *in 1900*. To achieve this period-specific standardization I consider a country's per capita GNP (drawn from World Development Indicators and other historical sources) as a ratio of US per capita GNP in that year. This figure is transformed by the natural logarithm.

Table 2 presents the results of a series of models, beginning with those deemed most exogenous and moving seriatim toward those with greatest endogeneity. Plausibly, the degree of party organization and electoral volatility found in a polity is to some extent a product of structural features of the political system, such as federalism, presidentialism and institutionalization. Thus, it is important that these factors be tested last.

The final two models in Table 2 offer a set of robustness checks. Model 7 imposes a higher threshold of democracy – where the Polity index (combining two variables, Democracy and Autocracy, drawn from the Polity IV dataset) is greater than 5 on a scale ranging from –10 to +10. This threshold has the effect of dropping 23 cases, leaving a total of 194 cases that can be regarded as 'high quality' democratic elections.

Model 8 presents the results of a series of specification tests in which countries are removed from the sample seriatim in order to test the effect of their removal on the principal variables of interest. Recall that although we cannot employ a fixed-effect regression format here (since the theoretical variables are static through time), we do anticipate significant unit effects. As it happens, only one country – the US – seems to have significant leverage on the results of theoretical interest. Thus, I reproduce the results of the full model in Model 8 *without* the American case.

Findings

The findings from this analysis can be briefly summarized. Let us begin with the control variables, which are of peripheral concern to this study but nonetheless worthy of comment. The performance of the GNP per capita variable in Model 4 suggests that greater societal wealth leads to lower

Table 2. Regression results

	1	2	3	4	5	6	7	8
Federalism	7.220***	7.051***	7.925***	7.927***	6.721***	6.583***	6.077***	7.138***
	(0.887)	(0.758)	(0.812)	(0.791)	(0.772)	(0.807)	(0.958)	(0.859)
	[0.501]	[0.489]	[0.550]	[0.550]	[0.518]	[0.508]	[0.478]	[0.523]
Presidentialism	−1.936	−3.921***	−3.471***	−3.509***	−3.089***	−3.360***	−3.813***	−1.197
	(1.274)	(1.096)	(0.873)	(0.876)	(0.780)	(0.676)	(0.800)	(0.973)
	[−0.104]	[−0.210]	[−0.186]	[−0.188]	[−0.184]	[−0.201]	[−0.233]	[−0.060]
Ethnolinguistic fractionalization		15.535***	11.975***	8.959***	4.574*	3.463	6.100**	2.657
		(3.452)	(3.276)	(3.275)	(2.480)	(2.158)	(2.468)	(2.113)
		[0.368]	[0.283]	[0.212]	[0.117]	[0.089]	[0.141]	[0.069]
Institutionalization (ln)			−3.046***	−2.101***	−1.796***	−1.256**	−1.332	−0.400
			(0.564)	(0.636)	(0.609)	(0.603)	(0.832)	(0.655)
			[−0.264]	[−0.182]	[−0.173]	[−0.121]	[−0.131]	[−0.033]
GNP pc (ln)				−1.731***	−0.438	−0.587	0.075	−0.371
				(0.623)	(0.567)	(0.527)	(0.612)	(0.545)
				[−0.182]	[−0.051]	[−0.068]	[0.010]	[−0.041]
Party organization					−8.467***	−5.690***	−6.448***	−5.559***
					(2.088)	(1.967)	(2.091)	(1.919)
					[−0.312]	[−0.210]	[−0.233]	[−0.207]
Volatility						0.397***	0.519***	0.365***
						(0.131)	(0.136)	(0.132)
						[0.260]	[0.286]	[0.239]
Constant	6.029***	1.836	7.516***	3.434*	13.385***	8.377***	10.043***	7.234**
	(0.834)	(1.131)	(1.548)	(1.986)	(3.215)	(2.988)	(3.024)	(3.026)
	[0.478]	[0.145]	[0.596]	[0.272]	[1.170]	[0.732]	[0.840]	[0.627]
Elections	217	217	217	217	213	213	146	203
Countries	37	37	37	37	37	37	34	36
R-sq	0.25	0.37	0.43	0.44	0.50	0.56	0.66	0.57

Dependent variable: percent legislative seats (lower house) won by non-major parties. Prais-Winsten regression with panel correct standard errors (in parentheses) and an AR(1) correction for serial autocorrelation. Normalized coefficients in brackets. *p = <0.10 **p <0.05 ***p <0.01 (2-tailed tests). Model 7 restricted to cases where Polity > 5 (on a scale from −10 to +10). Model 8 excludes the United States.

minor party success, all other things being equal. Presumably, citizens in a 'rich' society (relative to other countries in that historical era) are more likely to be content with the management of the economy under the purview of the major parties, and less likely to vote for new and untested challengers. Even so, it is not a particularly robust effect (it disappears once the level of party organization is taken into account).

Greater ethnic heterogeneity would appear to lead to greater minor party success, presumably because major parties have a more difficult time incorporating dissent in a more heterogeneous society. Before we take a great deal of stock in this finding we should be cognizant of the fact that none of the other measures of ethnic fractionalization demonstrated a statistically significant effect in the benchmark equation. (Indeed, the correlation was sometimes *negative*.) Thus, it is quite possible that the results reported here are artifacts of a somewhat peculiar fractionalization index (see discussion in Posner, 2000).

Against the backdrop of various sociological and economic variables, the performance of political-institutional variables is quite robust. Table 2 offers empirical support for all five of the initial hypotheses, in varying degrees.

The strongest result, by far, is that registered by the federalism variable. The existence of constitutional federalism enhances minor party performance in all specifications and is virtually undisturbed by the exclusion of any particular country case. Indeed, the coefficient hardly varies from equation to equation. The coefficient indicates that a change from unitarism to federalism, holding all other factors constant, would result in a 15 point gain in the total seats won by minor parties. (Recall that the index is a scale from 0 to 2, with semi-federalism as an intermediate point. Additional tests using separate dummy variables for semi-federalism and federalism confirm these results.)

Confidence in this finding is reinforced when it is recalled that a large number of additional controls were tested in the benchmark equation, including other measures of ethnic heterogeneity, population and social conflict (see variable descriptions above). None had an appreciable effect on the coefficient for federalism. Thus, it appears that federalism is not simply a proxy for underlying sociological factors that might enhance the attractiveness of small parties.

Presidentialism has a weaker effect on minor party performance and is somewhat less robust. Indeed, when the US case is removed from the equation (Model 8) this variable loses statistical significance (at the 0.10 level). Even so, the evidence of this study suggests that the existence of a directly elected president (with significant policy-making powers) dampens prospects for minor party success. Thus, our consideration of this variable hinges on one's consideration of the American case. If one is convinced that the existence of a directly elected president has dampened the prospects for minor parties in the US, then one may be inclined to consider the general

result reported here robust. If one is convinced that other factors, perhaps peculiar to the American context, were critical in containing minor party challenges in the US, then the presidentialism variable looks rather weak.

Electoral system institutionalization (the number of democratic elections conducted under plurality rules) appears to have a strong and fairly persistent effect on minor party performance. More institutionalized electoral systems have more entrenched major parties. It is difficult to get a precise reading of this effect, since the coefficient changes from model to model. (The most plausible equation is probably Model 4, since party organization and volatility are presumably – at least to some extent – endogenous relative to the level of institutionalization in a polity.)

The effects of party organization in depressing minor party success are strong and robust in all specifications and in both models. Based on the results presented in Model 4, a movement from weak to strong party organization should decrease minor party success by eight percentage points. No other variable except federalism exhibits such a strong and consistent relationship. Coding difficulties aside (see previous discussion), there is no reason to doubt the causal effect of this organizational factor in determining party system size.

Volatility, finally, has strong and consistent effects on minor party performance in all models tested. 'Settled' polities are somewhat more apt to be two-party monopolies. Apparently, it is difficult for minor parties to sustain themselves in a stable fashion over long periods of time within a plurality electoral system.

Discussion

To recapitulate, the analysis conducted here suggests that minor party performance in plurality electoral systems is enhanced by ethnic heterogeneity, a low level of economic achievement (relative to other polities), federalism, parliamentarianism, the newness of an electoral system (or a country's experience of democracy), a low level of party organization and a high rate of electoral volatility. It should be stressed that many of these factors, while statistically robust, have only a small effect on aggregate minor party performance. They matter, but – by themselves – only a little.

Even so, the results are impressive. Certainly, it is possible that these findings are biased by missing variables – that apparently significant results are merely proxies for some other underlying causal relationships. Yet, I cannot think of any obvious candidates for further specification testing. More to the point, dummy variables have been introduced for each of the countries under study. Thus, if the missing variable affected one or two countries only (or disproportionately), we have had an opportunity to test it in the foregoing analysis. Unit effects, if limited to a single country, are accounted for by this procedure. Spatial heterogeneity that lies across a

group of countries should be picked up by the series of spatial controls described in the testing procedure (e.g. dummy variables for regions).

The most conclusive finding is that federalism enhances minor party performance. No combination of intervening variables dims the luster of this causal factor. The existence of provincial legislative systems – particularly if enhanced by constitutional protections – evidently provides a power base for minor parties that can then be used as a platform for national office. Federalism thus probably has a fragmenting effect on most party systems.

This finding is puzzling in one respect. It does not square with the status of minor parties in the most-studied country. In the US, minor parties have been stuck at a point close to the lower bound. Minor parties (a grouping that includes independents) have rarely managed to capture more than one or two seats in the lower house. The US is thus both quintessentially federalist (in the sense of having inspired most of the academic work on this subject as well as many of the actually existing federal systems) and quintessentially a two-party system (one of the world's purest, as witnessed in Figure 1). In short, the US shows every sign of being an anomaly.

However, it should be pointed out that we are observing the US at one point in a very long history of democracy with (predominantly) plurality electoral rules. At an earlier stage of US history it seems quite likely that federalism did enhance minor party performance. Indeed, the traditional parochialism of American politics, anchored by national–state constitutional divisions, served minor party leaders well. The Republican Party's triumph over the Whigs in the 1850s may be viewed as a triumph of regionalism. Republican leaders, unlike most Whigs, were willing to take a stance on the slavery issue that pleased only one section of the country. Whig leaders held out – too long, as it turned out – for a platform the whole country could unite behind (Gienapp, 1987; Holt, 1999). Other minor party efforts in the nineteenth and early twentieth centuries (e.g. the Liberty Party, the Free Soil Party, the American Party, the Southern Democrat and Constitutional Union parties [1860], the Greenback Party, the Prohibition Party, the Union Labor Party, the Populist Party, the Socialist Party, the Progressive Party [1912], the Union Party, the States' Rights Party, and various Farmer–Labor parties) were also regionally rooted and hence, plausibly, encouraged by the federal organization of government. Of course, such matters cannot be pegged entirely on the influence of federalism. But it does seem to illustrate that the US has been subject to the same political-institutional factors noted in other countries around the world. Even today, Gimpel (1996) argues, federalism sustains state party systems with a high degree of autonomy from national party concerns.

A glance at secular time-trends in American history substantiates this claim. The decline of minor parties in American politics was coincident with a decline of sub-national power. As Chhibber and Kollman (1996) have argued in a comparative study of the US and India, minor parties (within plurality polities) face increasing difficulty in mobilizing their base when

politics is nationalized – a process driven primarily by the relative scope of taxing and spending at national and sub-national levels. The same phenomenon has been observed in the example of the Farmer–Labor Party, which was squeezed out by the increasing irrelevance of state and local politics as the twentieth century progressed (Valelly, 1989).

American federalism has probably affected contemporary American life less than in other countries because of the *proliferation* of state units as the nineteenth century progressed. In the early nineteenth century, each state could be considered a major player in national politics because it was one of only a handful of regional governmental units. A substantial majority of the country lived in four states and these states – Massachusetts, New York, Pennsylvania and Virginia – controlled most aspects of national politics. In other words, the US stood in the 1830s approximately where Australia, Canada and India stand now – with a relatively small number of sub-federal governments, several of which play especially prominent roles (Esman, 1984). In such circumstances, it is hardly surprising that citizens would identify first as members of a state, and second as Americans.

In closing, it may be helpful to highlight some of the more general features of this analysis. First, and most notable, is the signal importance of political institutions in structuring minor party performance. Collectively, political-institutional variables account for much more of the variation than can be attributed to sociological or economic factors. Minor party performance is politically conditioned, at least insofar as we can tell. Of course, it may also be that the economic and sociological factors relevant to this process happen to be less amenable to cross-national testing and, for this reason, are poorly represented in models depicted in Table 2. Further research is warranted on this point.

A second general conclusion concerns the role of parties and party institutionalization in minor party performance. The measure of party organization employed here demonstrates robust results. Strong party organization within the major parties of a plurality electoral system appears to raise entry-costs for new participants. Although we do not have at our disposal direct measures of party identification among the mass publics of these 37 polities, it seems likely that electoral volatility is a good proxy for this elusive concept. Where citizens identify strongly with a particular party, they are less likely to bolt when the opportunity presents itself (i.e. when a third party challenge materializes). It is no surprise that electoral volatility and minor party performance co-vary; the highest hurdle to minor party success may be the existence of pre-existing loyalties to the major parties (as is so often said with reference to the US). Conversely, where party organization is weak we surmise that minor parties benefit from splits among party elites. A primary process whose results are not accepted as legitimate by losing candidates presents an opening for third party challenges – either on the part of the sore losers themselves or as a result of their public refusal to endorse the winning nominee. The question of party strength (or institutionalization) is open to

a variety of interpretations and an even greater variety of operationalizations. However, all the evidence gathered here supports the general proposition that highly institutionalized polities (within plurality electoral systems) are more resistant to challenge. Indeed, I cannot think of a single case of a polity characterized by minor party success that is also highly institutionalized. (Recent developments in Canada remove the one possible exception to this dictum.)

Without deprecating the role of minor party leaders and activists (at the margins, leadership certainly matters) it may be put forth as a general hypothesis that minor party performance is endogenous to major party performance. Minor parties owe their successes or failures more to cracks in the armor of the major parties than to their own efforts (Schattschneider, 1942, 1960). Indeed, over the long haul (ignoring the results of particular elections and electoral periods), minor parties are best considered as a characteristic of a polity, rather than of a particular group or grievance. The level of success that these protest groups achieve over time – the equilibrium result of a party system – is a *system-wide* phenomenon. Where the major parties are doing their job, rumblings of discontent should be co-opted (or if you prefer, represented) by one or both of these established institutions. It is only when they fail to perform this representative function, or when their performance is purely rhetorical (and hence not credible), that minor parties have a good opportunity to win seats in a plurality electoral system.

Appendix

Descriptive statistics

	min.	*max.*	*mean*	*SD*
Ethnolinguistic fractionalization	0	0.86	0.31	0.30
Institutionalization (ln)	0	4.41	1.73	1.09
GNP pc (ln)	−4.83	0.12	−1.98	1.33
Volatility	0	50	5.63	7.86

Frequencies

	0	*1*	*2*
Federalism	142	18	57
Presidentialism	180	10	27
Party organization	49	164	–

Correlation matrix

	1	2	3	4	5	6	7
1. Federalism	1.0000						
2. Presidentialism	0.1800	1.0000					
3. Ethnolinguistic fractionalization	0.0919	0.2990	1.0000				
4. Institutionalization (ln)	0.2200	0.0292	–0.2643	1.0000			
5. GNP pc (ln)	0.0692	–0.1242	–0.5075	0.5461	1.0000		
6. Party organization	–0.1844	–0.2011	–0.3928	0.3228	0.5620	1.0000	
7. Volatility	0.0980	0.1433	0.3250	–0.2895	–0.3438	–0.4911	1.0000

Notes

1 See Kruschke (1991) for an overview of the immense case-study literature on minor parties in American politics.

2 See, e.g., Gillespie (1993), Herrnson and Green (1997), Hesseltine (1948, 1962), Mazmanian (1974), Nash (1959) and Rockwood (1985).

3 See, e.g., Merriam (1922), Holcombe (1924), Herring (1940), Schattschneider (1942), Key (1958), Epstein (1986) and Sorauf (1964).

4 See Abramson et al. (1995), Chressanthis et al. (1993), Gold (1995), Miller and Shanks (1996: Ch. 16) and Rosenstone et al. (1984).

5 See, e.g., Duverger (1951/1959, 1986), Fisher (1973), Gabel (1995), Gunther (1989), Janda and King (1985), Jones (1993, 1994, 1995a, b), Katz (1980), Lijphart (1990, 1994), Ordeshook and Shvetsova (1994), Rae (1967), Reed (1990), Riker (1976, 1982), Shamir (1985), Shugart and Carey (1992), Spafford (1972), Taagepera and Grofman (1985), Taagepera and Shugart (1989, 1993). For a discussion of various formulas measuring party system size, see Lijphart (1994). Party *formation*, the topic of work by Harmel (1985) and Harmel and Robertson (1985), is evidently a distinct topic.

6 For further reflections on the single-member–multi-member distinction, see Ordeshook and Shvetsova (1994: 118–9).

7 It is comforting to note that the correlation between votes and seats is fairly strong. In a somewhat larger database containing vote and seat data for all countries in this study, the correlation between seats and votes is 0.79. Certainly, minor parties will almost always receive more votes than seats. However, this disproportionality is not likely to systematically bias the effect of explanatory variables over a broad range of cases. In other words, if federalism impacts the seat performance of minor parties it is likely also to affect the vote performance

of those parties. Let us note, finally, that seats, not votes, are the ultimate objective of any party interested in controlling public office and public policy. In this sense, seats offer a more appropriate measure of electoral success.

8 Displacements of a major party by a minor party, as occurred in the US during the 1850s and in the UK in the interwar era, are not explicitly taken into account by this analysis. Such moments of eclipse within national legislatures are rare. (They are, of course, less rare in presidential elections.) They are also likely to be reflected in high 'minor party' seat totals in elections prior to, and following, the election in which the displacement occurred. In this sense, such displacements *are* successfully reflected by this study's dependent variable.

9 I lump these two categories together because it is often difficult to tell the truly independent from the party-sponsored candidate. All candidates have some degree of organization – some poster-hangers and envelope-stuffers who might be called activists, some persons in charge of managing the campaign, and some 'rank-and-file' supporters. Thus, even the most candidate-centered campaign can lay some claim to 'partyness'. At the same time, many organizations calling themselves parties are in fact dominated by a single candidate. Among minor parties it is common to find many of the functions normally associated with a political party (fundraising, platform-writing, nominating, campaigning, etc.) centralized in the hands of a single individual. Such parties seem to appear and disappear at the sufferance of a single individual. Nominations procedures barely exist, and if so are not scrupulously followed.

10 For further commentary on the problem of judging system equilibrium, see Ordeshook and Shvetsova (1994: 102–3).

11 Principal sources employed in coding: Alvarez (1999), Derbyshire and Derbyshire (1996), Elazar (1991), Hicken and Kasuya (2001), McHenry (1997), Watts (1997), *The Database of Political Institutions* (Beck et al., 2000).

12 The precise terms used to refer to these institutions vary from country to country. Sometimes, the prime minister is a 'chancellor' or even a 'president'. The important point is that s/he is chosen by, and responsible to, the legislature.

13 Principal sources employed in coding: Alvarez (1999), Delury (1999), Derbyshire and Derbyshire (1996), Diamond (1999), Golder (2003), Hicken and Kasuya (2001), Jones (1995), *The Database of Political Institutions* (Beck et al., 2000), Nohlen et al. (1993, 1999, 2002).

14 Principal sources: Banks (1992) and Derbyshire and Derbyshire (1996).

15 Evidently, we are unable to calculate the volatility of the first election for each country (since there is no previous election under study). In order not to lose cases, I simply repeat for this first election the value obtained for the second election. I do not anticipate that a different operationalization of volatility would have a substantial effect on the findings reported here.

16 Note that a fixed-effects approach is not possible, since the variables of theoretical interest do not change over time. A lagged dependent variable (suggested by Beck and Katz, 1995) is also problematic, since this would create collinearity with one of our central theoretical variables, electoral institutionalization (a count variable beginning with the first election under similar electoral rules and conditions of democratic competition).

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