STUDIES IN PUBLIC CHOICE

Bernard Grofman André Blais Shaun Bowler Editors

## Duverger's Law of

 Plurality VotingThe Logic of Party Competition in Canada, India, the United Kingdom and the United States

(2) Springer

# STUDIES IN PUBLIC CHOICE 

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# Duverger's Law of Plurality Voting 

The Logic of Party Competition in Canada, India, the United Kingdom and the United States

Springer

Editors

Bernard Grofman<br>School of Social Sciences<br>University of California, Irvine<br>Irvine, CA 92697, USA<br>bgrofman@uci.edu

André Blais<br>Department of Political Science<br>University of Montréal<br>Montréal QC H3T 1N8<br>Canada<br>blaisa@pal.umontreal.ca

Shaun Bowler<br>Department of Political Science<br>University of California, Riverside<br>Riverside, CA 92521, USA<br>shaun.bowler@ucr.edu

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# Chapter 1 <br> Introduction: Evidence for Duverger's Law from Four Countries 

Bernard Grofman, Shaun Bowler, and André Blais

[T]he simple majority single ballot system favours the two party system

Maurice Duverger (1954: 217)
This seemingly straightforward statement, made over 50 years ago, has become perhaps the most famous theoretical generalization in political science. It is a statement that ties the electoral system to the party system in a way that has been used to explain important features of the democratic process in the world's largest, longest lived, and most successful democracies of Britain, Canada, India, and the USA. Over the years since then the relationship between seats and votes has been expanded and elaborated upon in much greater detail and sophistication, but the central insight remains: electoral systems shape party systems. It is an insight that forms a central foundation upon which our understanding of electoral systems and their consequences has been built. But it is also an insight that has limitations even in those cases in which it should apply most clearly. In this volume we examine those limitations in some detail in this, the first in-depth comparative analysis of Duverger's law in practice, focusing on it's "home turf" of Britain, Canada, India, and the USA.

## Duverger's Law

Duverger was not the first to note the relationship between electoral system and number of parties in a political system. Riker doubted that Duverger was the originator of the law: "It is customary," Riker writes, "to call the law by Duverger's name, not because he had much to do with developing it but rather because he was the first to dare to claim it was a law" (Riker 1982: 754). Since the 1950s, the statement of Duverger has been developed and extended by a number of authors - most notably in the work of Taagepera and Shugart (1989) and more recently by Gary Cox (Cox 1997) but still, the effect is known as Duverger's law (Benoit 2006).

Duverger's law, as we will call it also, remains the canonical statement of why electoral systems matter. It is also a "law" that seems to be more notable for its exceptions than its application. As we show in this volume the validity of the law can be all too readily overstated. Indeed, there seems to exist only one example of a truly two-party Duvergian equilibrium - that of the USA. The other major democracies we discuss- Britain, Canada, and India - all have persistent third or fourth parties that call into question the predicted equilibrium of two parties. The persistence of these parties - Britain's Liberal Democrats, the Canadian NDP, and the Communist Party of India - cannot be regarded as temporary, since they have all lasted for decades and - hence - have been squeezed through the mangle of incentives in multiple electoral cycles.

To be sure, even though Duverger himself saw it as a "brazen law" (1954: 228) he did also advance a somewhat more moderate version of the law:

> ...the brutal application of the single-ballot system in a country in which multi-partism has taken deep root, as in France, would not produce the same results, except after a very long delay. The electoral system works in the direction of bipartism; it does not necessarily and absolutely lead to it in spite of all obstacles. The basic tendency combines with many others which attenuate it, check it, or arrest it.
(Duverger 1954: 228)
Subsequent, received, versions of electoral system studies have been less nuanced and have provided a more forceful and law-like interpretation of the original insight. The law has been formalized, too. Cox (1997) represents the most sophisticated formal treatment of the law to date, but we can state the law more formally here.

Let us denote by $m$ the number of seats in a constituency that are to be filled (district magnitude) and let $n_{\mathrm{v}}$ be the number of political parties whose representatives contest election in the constituency. Duverger (1954) hypothesized that, "in a plurality election system involving partisan elections, if $m=1$, then we expect that $n_{\mathrm{v}}=2$." Or, to put this result in more familiar terms, single member district plurality elections should favor two-party competition. ${ }^{1}$

The theoretical motors of Duverger's law can be broken down into "mechanical effects," and "psychological effects." The mechanical effect is the effect of the electoral system converting votes into seats. In single member district elections, small parties will tend to be squeezed out of existence "mechanically," simply because the operation of the electoral system denies them seats. In particular, if there are single member districts, then only one party (the largest in that district) can win seats in the district. ${ }^{2}$ Larger parties will receive a larger share of seats than votes and so be overrepresented while smaller parties will receive a smaller share of seats than votes and so be underrepresented (Benoit 2006: 73-74). ${ }^{3}$ Psychological effects are centered in the reaction of instrumentally minded voters and elites to the expected working of the electoral system (Benoit 2006: 74-76; Blais and Carty 1991). Realizing that third or minor parties have little chance of success, supporters - both elites and voters - who would otherwise back minor parties will move away to the more viable and successful two larger parties. Potential new entrants will be deterred from actually entering the race while the ambitious will hitch their career prospects to a party with a surer chance of power.

Although the mechanical and psychological effects are analytically distinct in actual practice they tend to overlap: if the workings of the electoral system were not bad enough news for small parties in terms of its direct effects, such parties will tend to be further squeezed out due to the expectations that the system generates among voters and elites. Under Duverger's law the (vote) rich get (seat) richer. Deviation from this rule, that is the presence of more than two parties, is termed an example of a non-Duvergian equilibrium (Palfrey 1984; Benoit 2006).

## Non-Duvergerian Equilibria

The logic of Duverger's law is compelling but it, and the resulting equilibrium of two parties, rests on a series of assumptions. These assumptions, if violated, should lead us to expect a series of non-Duvergian equilibria or, more simply, we should see more than two parties. The enterprise of looking for these unexpected equilibria is more than a matter of simply noting that some exceptions to the "law" or some conditions under which it does not work with a wave of the hand to "local conditions" or "exceptions." ${ }^{4}$ Because Duverger's law represents a fundamental intellectual building block in our understanding of elections it speaks to the way in which we understand what electoral systems do, and how they achieve their effects.

As Cox (1997) reminds us, the model of expectations underlying Duverger's Law can be unsettled in a number of ways. Voters and parties are assumed to be able to reliably predict losers in advance, and when they cannot then we may see nonDuvergerian equilibria. For example, as Cox notes, if the difference in vote share between second and third (or even fourth) parties is small, then we can get persistence of three-or-more party competition. In general, if the distribution of party vote shares from the largest to the smallest party is relatively flat, then many rather small parties may have a reasonable chance of winning given random movements in electoral tides, since all parties are competing with each other. Taagepera (2007) suggests that the more parties there are, the flatter will be the distribution of party vote shares. Thus, non-Duvergerian equilibria may, in part, be self-sustaining.

Expectations may be unsettled in other ways, too, if actors do not behave as the model assumes. By Duvergerian logic, it might seem that no party should ever run that had not run successfully before. Yet hope springs eternal and so we might end up with multiple parties regularly contesting a given seat even but with some of those parties having short-lived existences. Alternatively, we might find some new parties entering who build up support over time as their perceived viability increases, and who maintain support because of expectations not because of what they have done in any single election, but because of expectations that they will do better in the future based on a multielection trajectory. If reliable expectations about winners and losers are not available because party systems are in flux (e.g., party systems in new democracies that have not jelled, or party systems in more established democracies that are in the process of realigning) then we can have nonDuvergerian outcomes. In general, these disruptions due to upsets in expectations
provide one class of examples of the kinds of coordination failure Cox discusses. In this class of failures of Duvergerian expectations voters - as a group - fail to coordinate expectations.

There are other ways in which coordination may fail, too, including failure to coordinate across party elites. As the example of Canada attests and as a number of authors have pointed out (see Chhibber and Kollman 1998) it is quite possible to have every district competition involve only two parties and yet have a multiplicity of parties represented in the national parliament. All that it takes are regionally based parties and/or substantial variations in the ethno/linguistic/religious or socioeconomic composition of districts that foster different patterns of competition across districts. This may be especially important if those differences are part of a federal framework, which provides incentives of its own to support regional party systems (Chhibber and Kollman 1998). Thus, as both Cox (1997) and Taagepera $(2001,2007)$ emphasize theories that link electoral system type to party competition at the district level the theories are not sufficient; we also need to have theories that can take us from district level effects to national level outcomes. ${ }^{5}$

Effects may not simply run from district to national level but national level effects may also affect what happens in the district. The logic underlying Duverger's law assumes away what Grofman (1999) refers to as embeddedness effects: constituencies, districts, and ridings are embedded within a wider political system that provides its own set of incentives. To make credible the claim that it is a truly national party, and not simply a regional one, a party may contest seats nationwide, even if it has little chance of winning. There may also be more instrumental motivations for a party to contest a seat even if it has little chance of winning it. Access to TV time or public subsidy may depend on the number of seats contested or votes obtained. Or, more narrowly still, party managers may see an apprenticeship system at work watching how well candidates do in seats that are safe for a rival party.

Models grounded in a Downsian approach are often quite consistent with Duverger's expectations. Where political competition is along a single dimension, Downs (1957) (Black 1958) showed that movement of a right-of-center party and a left-of-center party toward the location of the median voter can squeeze out any centrist party, thus reinforcing incentives for two-party competition. But there are exceptions. If the movement to the center is too far then this may leave space open for a far right and/or far left party to begin a new process of squeezing out the party/ parties now in the center. But Brams (1975) and others (Palfrey 1984) have looked at this issue in sequential game terms and shown that there are equilibrium locations of the right-of-center and left-of-center parties that will both deny the possibility of a successful rival forming in the center and deny the possibility of successful rivals on their flanks. ${ }^{6}$

Once we move away from a pure unidimensional spatial model and introduce ideology or noninstrumental motivations then the Duvergerian model may also be disrupted. Ideology may impact the number of political parties in much the same way that cloud seeding can impact the onset of rain. Taagepera and Grofman (1985), drawing on the work of Arend Lijphart, have suggested that ideology can
have an independent effect on the creation of party constellations under the regularity that $N=I+1$, where $N$ is the Laakso and Taagepera (1979) index of the effective number of parties, defined as the inverse of the sum of the squared party seat shares, and $I$ is the number of distinct issue dimensions. Here, the idea is that when new parties enter the system they tend to be organized to foster a particular issue, and often take a relatively centrist position on existing issue dimensions. If we begin with two parties taking opposite stands on a single issue, then as new issues arise and persist, we will, on average, add one new party for each new issue, and thus might expect that the (effective) number of parties is one more than the number of issue dimensions.

Opportunities for minor parties to exist and possibly flourish even absent the creation of new ideologies if the distribution of voter preferences varies across districts. Imagine that there are two major parties competing nationally and that each adopts a platform designed to maximize its seat share. If constituencies differ in their ideological distributions of voters, and each party is constrained to offer the same positions in each district that it offers nationally, then we may get a situation where the party policy locations that are optimal in the aggregate still leave open the possibility that, in particular districts, a third party can find a position that defeats both major parties (Shvetsova 1997). ${ }^{7}$ Under these circumstances we can get persistent three-party competition in at least some districts if the (two) major parties compete everywhere. So, for example, the distinct community of Quebec may well produce a party system that is also distinct from that of the rest of Canada. A similar nationalism is the engine that drives differences between Scotland, Wales, and the rest of Britain.

A somewhat different variant of this argument is found in India. Viewing its politics as one-dimensional Riker $(1976,1982)$ asserts that the Congress party is both the median party and a dominant party, and that parties to its right and left can both persist in competition with it because, even if their combined supporters outnumbered those of Congress in some district, an alliance to defeat Congress is all but impossible because of the ideological divide that separates the ideological extremes. Such parties, while recognizing that they have little hope of winning national majorities in the short run, may retain hope that they will eventually be able to replace Congress, and they retain their viability due to their strength in particular regions of the country. ${ }^{8}$ The inability of the extremes to combine against the middle is another example of what Cox refers to as a "coordination failure" (see Cox 1997:Chap. 13).

A similar argument can apply if we superimpose a system of racial/ethnic/religious cleavages on other dimensions of conflict. One possibility is that cleavages have a multiplicative effect in which, say, if there is a left party and a right party, then each of these parties will split into distinct parties based on the cleavage structure, with one party of each type for each politically salient cleavage (Neto and Cox 1997). This seems to match recent patterns in Belgium after the linguistic cleavage in that country rose in importance. Another possibility, however, is simply to have one party for each politically salient cleavage. Here, it is the cleavage structure that would determine party proliferation, not the electoral system. ${ }^{9}$

## Duverger's Law at Work?

The circumstances identified earlier are not all mutually exclusive and so there may be a multiplicity of factors operating to produce non-Duvergerian equilibria. Indeed, given the long list of assumptions and conditions under which Duverger's law can be violated it is surprising that it is one of the more robust findings in all of political science. Nonetheless, the empirical regularity of fewer parties being associated with the simple plurality electoral system as used in the major democracies is one that is repeatedly found in the large body of work on electoral systems since that time (e.g., Lakeman and Lambert 1955; Rae 1971; Taagepera and Shugart 1989).

There is, however, an important issue of measurement that needs to be mentioned. In Duverger's original formulation the "number" of political parties is simply $n_{\mathrm{s}}$, the number of parties whose representatives are elected. But virtually all of the tests of Duverger's law (and Duverger's hypothesis) use not $n_{\mathrm{s}}$, but rather the Laakso-Taagepera index of the effective electoral number of parties (Laakso and Taagepera 1979), defined as the inverse of the sum of the squared party seat shares. Even if the effective number of parties is "close" to 2 on average, for first-past-thepost systems, or the number in some particular country is "near" 2, say 2.4 or 2.5 in a particular country, this allows for a lot of potential variation in the number of parties that are seat gaining. For example, we might have nearly half the seats won without opposition and the rest characterized by competition among a very large number of parties all of about the same size. Even more importantly, an effective number of parties near 2 need not tell us that the fundamental mechanical and psychological logic underpinning Duverger's law is working well over time, since we might find a small party (say one with $10 \%$ of the vote) continuing to contest even in situations where votes for the second- and third-place parties exceed votes for the winning party and a substantial number of third party supporters prefer the secondplace party to the winning party.

When we take a more direct look at number of seat gaining parties in first-past-the-post systems or at the persistence of third and, especially, fourth parties in these systems, the prediction of two parties is not really so robust. In fact the major example of Duverger existing in practice at the national level is that of the USA. The other major democracies - Britain, Canada, and India - all have persistent third (or fourth) parties that call into question the predicted equilibrium of two parties. The persistence of these parties - such as Britain's Liberal Democrats or the Canadian NDP or the Communist Party of India - cannot be regarded as temporary since they have all lasted for decades and - hence - however, squeezed through the mangle of Duvergerian incentives provided by multiple electoral cycles they still survive. Looked at this way it is the Duvergian equilibrium of the USA that is the oddity not these other cases. ${ }^{10}$

But we must be careful not to reject Duverger's law if sometimes we find other than two-party competition, since we should take the law to express a probabilistic tendency rather than a certainty. ${ }^{11}$ As we noted earlier we must also be careful to distinguish results at the district level from national level results. The presence of a multiparty system nationally does not in any way preclude Duverger's law working
well at the district level. Furthermore, even when Duverger's law can be said to fail it is not entirely clear whether we understand which of the reasons for its failure hold.

In the chapters that follow the authors take up the major cases of Duverger's law - Canada, India, Britain, and the USA - and examine arguments relating to the limitations of Duverger beyond the usual suspects of coordination and regional effects. Overall, the lesson from these studies is that even the canonical case of electoral system effects in plurality voting - the simplest electoral system and the one that provides the strongest incentives - is not yet fully understood.

## Canada

Johnston and Cutler consider the longest running "deviant case" of Canada. But in looking at district by district results Johnston and Cutler argue that the failure of Duverger in Canada cannot be attributed simply to regional discrepancies or to failures to coordinate across districts. Rather the failure of the effect is much more thoroughgoing and may well lie at the level of the voters, rather than the parties. While one explanation for multipartism at the national level lies in the aggregation of a collection of different two-party contests in each district there is, in Canada, a district by district persistence of multipartyness.

Blais, Bodet, and Dostie-Goulet, in their chapter on Canada, examine another feature of voter behavior that is Duvergerian in nature: the strategic voter. One of the properties of Duverger's argument is that it involves a "dance" between two strategic partners - the voters and the parties. Strategic voters will, goes the argument, desert smaller parties in the interests of making their vote "count" and should do so in response to the local competitive context. As they show, however, the level of strategic voting that occurs seems not to vary very much, even though at some times both media and political parties pay a great deal of attention to it while at other times they do not. The relative invariance of the amount of strategic voting -i.e., the seeming unresponsiveness of voters to strategic context - poses (in principle at least) a challenge to a fundamental assumption of how voters respond to the incentives of the electoral system.

## India

Despite being the world's largest democracy and, also, being a case of democracy in very difficult circumstances India is one of the relatively understudied examples of democratic practice. It is the regional diversity that is often held to explain India's exception to the Duvergian rule of two partyism. Csaba Nikolenyi shows, however, that it is also a society where the number of parties at the national level has, in sharp contrast to Duverger, grown not shrunk. He argues that Duverger's original expectation that a local party system would be automatically projected onto
the national level happens only in the special case when the center is empty. When the center, as in India with the Congress party, is occupied the dynamics of the party system differ markedly.

## Britain

An important dimension to Duverger's law is the normative one of how we should construct representative democracy. Constraining the choice of voters to two parties may seem arbitrary and unfair. On the other hand, there are important advantages to having fewer parties in terms of wider concerns of accountability and representation. One argument in support of the effect of squeezing the number of parties is that it helps to provide representative and accountable governments. That is, the consequences of Duverger's law in practice are normatively good.

Curtice takes up the normative issue of the contribution that first-past-the-post to representative democracy. In examining Britain's governments, he shows that the system provides neither representative nor accountable government, in part because of local variations in vote share. Curtice's findings echo those of Johnston and Cutler in identifying the importance of local conditions.

Gaines shows that electoral effects need to be considered against a broader canvass, in this instance, against the other kinds of elections that take place (a theme addressed in the Canadian case by Johnston and Cutler). The effects of a single institutional arrangement - the electoral system for the national legislature - can be muted and shaped by differences in other arrangements - the electoral system for other legislative institutions. He also notes that a focus on the relationship between seats and votes assumes away nonvoters. Yet each of the democracies we consider has millions of nonvoters within them. As Gaines concludes, claims about party competition rely, at some point, on theories about individuals' voting decisions, and it seems perverse to omit the first important such decision of whether or not to vote. The "party" of abstention automatically wins no seats, exhibits no discipline, and has no ideological unity. But a thorough understanding of how institutions shape electoral outcomes requires a broader understanding of outcomes that encompass turnout, or at least explores the extent to which turnout and concentration of vote are related.

## USA

Gaines's theme is taken up and expanding in the US case by McDonald who shows the impact of districting and district safety as further factors shaping the outcomes of the election. To some extent, the results of Duverger in the USA may not be produced by incentives of the electoral system per se but by the operations of the electoral system taken in conjunction with the workings of electoral districts.

Burden and Jones adopt a slightly different tack in their study of strategic voting in the USA. They note the many different opportunities for various kinds of strategic voting that the USA affords to voters. They also note that US conformity to

Duverger is more apparent than real given how common multicandidate contests are in both primary and general elections. In the final chapter Bowler Grofman and Blais consider several of the leading explanations for the persistence of two parties within the USA. They argue that while a range of legal and practical barriers do help reinforce Duverger there is an underlying ideological structure to US politics that has a powerful effect on reducing the number of parties.

Taken together, these chapters underscore both the value and limitations of Duverger's argument. While Duverger's argument provides the theoretical lynchpin for making sense of a disparate body of national experiences, the empirical patterns show considerable deviation from that theory. This leads us to urge a note of caution for those who would engage in institutional engineering. "Duverger's law" has become a widely used short hand both for a specific effect and, also, as the seminal statement of the consequences and importance of electoral system design: if one wishes to change the electoral politics of a country all one has to do is change the electoral system. Many present day advisors and experts are emphatic when they discuss the importance of electoral system design:

The choice of electoral system is one of the most important institutional decisions for any democracy. Electoral systems define and structure the rules of the political game; they help determine who is elected, how a campaign is fought, the role of political parties, and most importantly, who governs. Furthermore, the choice of an electoral system can help to "engineer" specific outcomes, such as to encourage cooperation and accommodation in a divided society. ${ }^{12}$

Different electoral systems have different effects but, in principle, Duverger's law represents the clearest, simplest, and most definite statement of the potential for these kinds of "political engineering" effects. The plurality electoral system provides a combination of incentives to both voters and politicians that systematically favor the larger parties and disadvantage smaller parties: over time, these incentives should squeeze the seat share of smaller parties while rewarding the larger parties further reinforcing the effect in subsequent elections. In practice, as the chapters in this volume show, for many of the important long-term democracies, these effects are not so certain. The exact electoral system-related effects differ from one nation to another, largely for reasons that differ across our cases. Thus, while we do know quite a bit about the effects of electoral systems, and electoral systems can be altered so as to impact outcomes, relationships are more probabilistic than mechanistic in character. The findings of this volume should give pause to those who believe that changing institutions can be guaranteed to engineer specific outcomes.

## Notes

1. Duverger also hypothesized that: "In a PR election system where $m>1$, we expect that $n_{v}>2$," i.e., that multimember district elections under PR rules favor multiparty competition. Riker (1982) refers to Duverger's first claim as Duverger's "law" and to this second claim as Duverger's "hypothesis," and we will follow that usage, although arguably, the empirical evidence is stronger for the hypothesis than for the so-called law (see e.g., Lijphart 1994; Taagepera and Shugart 1989). There is also a third component of Duverger's electoral theory
having to do with runoff elections, in which he suggests that runoff systems (such as the French double ballot method) used in conjunction with single seat districts will generate more multipartyism than would simple plurality elections in the same setting. In this book we focus exclusively on Duverger's "law."
2. In elections under plurality voting, if $m=1$, then $\max n_{\mathrm{s}}=1$.
3. There is also evidence to see it work when the system is changed. According to the electoral law that was in place for the 2006 Italian election, superposed to the regional PR system there was a bonus for the plurality winner with respect to coalitions. The coalition with the most votes was to obtain at least 340 seats out of 660 and to form the government. As Duverger would have predicted, only two coalitions were formed and the parties forming the two coalitions obtained $99.5 \%$ of the total vote.
4. Duverger, himself asserted that "The exceptions [to the law]," noted Duverger, "are very rare and can generally be explained as the result of special conditions" (Duverger 1954: 217). As we will see, this is too strong a statement.
5. For example, Cox (1997) asserts that local bipartism is more likely to give rise to national bipartism if (a) there is a single president/executive with considerable powers and patronage who is (customarily) elected in a separate single round of balloting (e.g., by plurality), and whose election is concurrent with (or at least somehow strongly linked to) the legislative elections, (b) national bipartism is a "prominent" outcome, as in a parliamentary system with a history of single-party governments and a strong executive where only two parties are seen as having a realistic chance to win a national majority, (c) tiering procedures/thresholds provide incentives for the same party names to be used in different parts of the country in order to maximize efficiency of translating votes into seats, (d) efficiencies of scale operate to favor centralized parties, and (e) election rules for campaign finance/media access are written to foster a two-party system, with the major party candidates identified in terms of previous national party vote (or seat) shares. Confirmatory empirical test of the first of these hypotheses is found in Chap. 11 of Cox (1997) and in Shugart and Carey (1992).
6 . For example, for a uniform distribution of voters on a $(0,1)$ left-right continuum, such equilibria occur at $1 / 4$ and $3 / 4$.
6. Shvetsova's insight has led Grofman (2004) to insist that we cannot understand party competition at the district level unless we understand the nature of the "tether" that constrains how close the position offered by a party's candidates in the districts needs to be to the national party platform.
7. As Riker observes (1982): "Congress has been clearly defeated only when the opposition has been so consumed with intense popular hatred of Mrs. Gandhi or with intense elite lust for ministerial office that politicians and voters alike could put aside their ideological tastes and act as if they ordered their preferences with Congress at the bottom of the list. When they have done so, they have defeated Congress in both state and national elections. Then typically, coalitions of each end against the middle (like Janata in 1977-1979) have dissolved, and Congress has won again, presumably as the Condorcet choice."
8. It remains an open question of how such nonideological cleavages are affected by Duvergerian mechanical and psychological effects that create pressures for coalitions involving party formation across ethnic lines.
9. There are a few very small island nations where Duverger's law also seems to hold, e.g., Trinidad and Tobago, Barbados, and Antigua and Barbuda (Singer and Stephenson 2005:1, p. 39). On the other hand, Duverger's law is a complete failure in Papua and New Guinea (Singer and Stephenson 2005:Table 1, p. 39). Also, there are a number of eastern bloc countries where Duverger's law does not seem to work at all (Singer and Stephenson 2005; cf. Moser 1999). However, like Taagepera (2007) we do not place great weight on electoral system results from countries where the party system has not yet "jelled."
10. That our expectations about electoral system effects are ones that should always be thought of in probabilistic terms is one of the key points long emphasized by Rein Taagepera (see Taagepera and Shugart 1989; Taagepera 2007).
11. IDEA: 2006: http://www.idea.int/esd/index.cfm. Of course, elsewhere in the same volume, we can find more cautionary passages. Many electoral system specialists, such as Rein Taagepera, have been clear that electoral system effects are only expectational in character in terms of "on average" kinds of results (Taagepera 1997, 2007), while others have emphasized the linkage between choice of electoral system and outcomes, suggesting that great care must be taken in assigning causality (Colomer 2004).

# Chapter 2 <br> Voting Strategically in Canada and Britain 

André Blais, Eugénie Dostie-Goulet, and Marc André Bodet

The objective of this paper is to ascertain the level of strategic voting in Canada and Britain through a simple "direct" approach. We wish to show that the level of strategic voting is remarkably constant over time and across space; it varies little from one election to the next in Canada and the level of strategic voting is about the same in Britain and Canada. We show that though the overall degree of strategic voting is low in each of the elections examined, it represents a substantial fraction of those for whom strategic voting is a meaningful option.

We define strategic voting as a vote for a party or candidate that is not the preferred one, motivated by the intention to affect the outcome of the election (Blais et al. 2001). This entails that in order to determine whether a vote is strategic or not, we need to know the person's vote choice, her preferences, and her perceptions of the likely outcome of the election (Blais and Bodet 2007).

There are two basic approaches to the measurement of strategic voting: direct and indirect (Blais et al. 2005). The direct method consists in specifying the conditions that need to be satisfied in order for us to conclude that a vote is strategic. The indirect (or parametric) method consists in constructing a model of vote choice and in estimating, on the basis of simulations, how many individuals would have voted differently if perceptions of the likely outcome of the election had had no effect on their decision. In this paper, we make use of the direct approach.

We first apply this method to Canadian elections. Since 1988, Canadian Election Studies have included questions about voters' perceptions of the various parties' chances of winning in their constituency, questions that are required to ascertain strategic voting in single-member plurality systems. We then turn to the 2005 British Election Study, which incorporated questions about perceived chances of winning.

## Clarifying What a Strategic Vote Does and Does Not Entail

The concept of strategic voting is often left undefined and/or unspecified. We identify concretely in the next paragraphs the conditions that have to be met for us to conclude that a vote is strategic.

We start with the simplest case, where there are only three candidates, and each voter rank orders the three candidates from the most liked to the most disliked and from the most likely to win to the least likely. Our definition of strategic voting explicitly refers to one condition: the person must vote for the candidate who is not the most preferred one. The second part of the definition states that the vote choice must be based on the motivation to make one's vote "count" (Cox 1997). The implication is that the voter takes into account the candidates' perceived chances of winning. How the voter factors in those considerations needs to be specified. As we show later, this condition amounts to stating that the person must vote for the preferred candidate among the top two contenders.

Figure 2.1 illustrates six possible scenarios when there are three candidates and no ties in preferences and perceived chances. The number indicates whether the candidate is the first, second, or third most preferred, and the rank order refers to perceived chances. In scenario A, the best-liked candidate is perceived to have the best chance, followed by the second and third preferences. In scenario F, the preferred candidate is perceived to be last in the race and the most disliked candidate is viewed as leading.

The first and most obvious observation to be made is that there is no reason not to vote for one's preferred candidate when that candidate is perceived to be the top contender. So strategic voting is not an option when one's first choice is perceived to be leading. Strategic voting is impossible under scenarios A and B.

Strategic voting is a real option when one's preferred candidate is perceived to be third, as in scenarios D and F. Under both scenarios, the voter may decide to vote for her second choice candidate, who is perceived to have better chances of winning than her first choice candidate. The person would prefer her first choice to win but she reasons that this is very unlikely and that she would be better off with her second choice than with the third (most disliked) candidate. We should add that if the person votes for her third choice, this should not be construed as strategic voting. Such a person is apparently not attempting to maximize her utility (at least in the conventional sense of utility). The most plausible interpretation would be that this person enjoys being on the winning side; this is more aptly characterized as "bandwagon" voting (Bartels 1988). The strategic voter never votes for the candidate she dislikes the most.

Then there are the two scenarios, C and E , where the preferred candidate is perceived to be second in the race. We can quickly dispose of scenario E. The voter

| A | B | C | D | E | F |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1 | 2 | 2 | 3 | 3 |
| 2 | 3 | 1 | 3 | 1 | 2 |
| 3 | 2 | 3 | 1 | 2 | 1 |

Fig. 2.1 Strategic voting: three candidates (source: authors' calculations)
has no reason to vote for her most disliked candidate nor for her second choice, who is trailing behind her first choice. Finally, there is scenario C. According to most accounts, and we subscribe to that view, no strategic voting is possible here. It is not clear why a voter would vote for her second choice in such a context. There are two possibilities. The first is that the voter simply likes to be on the winning side, and this is bandwagon voting, not strategic voting. The second is that the voter wants to make sure that her most disliked candidate does not win and so she supports the candidate who is most certain to defeat the disliked option. Such voters could be construed as casting a strategic vote on the basis of our definition, but we believe there are unlikely to be many of them. They would have to have very strong negative views about the disliked candidate, and they would have to believe that the disliked candidate's chances are not that small (even though the candidate is perceived to be trailing), and they would have to be strongly risk-averse, which would make them anxious about the distant possibility that the candidate with the weakest chance of winning could, against all odds, get elected. The most prudent approach is to assume that a voter who under scenario C votes for her second choice does not cast a strategic vote.

In short, in a three-way race, a vote is strategic when a person finds herself under scenarios D or F, and she votes for her second choice. This corresponds to the following two conditions: (a) the person finds herself in a situation where her preferred candidate is not one of the top two contenders, and (b) she votes for the candidate she likes the most among the top two contenders. ${ }^{1}$

Our approach is exactly the same with four candidates. Figure 2.2 lists the 24 possible scenarios. The simplest situation concerns all cases where the preferred candidate is one of the top two contenders (scenarios A-F, G and H, M and N, and S and T ). In all these cases there is no reason for a voter to strategically desert her first choice.

Whenever the preferred candidate is perceived to be third or fourth in the race, that is, in all the other scenarios, strategic voting becomes a real option. In such contexts, a strategic vote is simply a vote to support the candidate that the voter likes the most among the top two contenders. In some cases (scenarios Q and R), this entails voting for the third rather than the second choice. In no case does a strategic vote go to the most disliked candidate. Usually, but not always, the person votes for her second choice.

The approach proposed here has many advantages. It clearly specifies two simple conditions that must be met for a vote to be construed as strategic. The conditions can be applied to any context, whether there are three, four, five, or more candidates.

These conditions are consistent with standard interpretations of strategic voting. They are consistent with the standard interpretation that in a single-member constituency, the equilibrium should be to have two "viable" candidates, and that supporters of the nonviable candidates will be inclined to strategically support whoever they prefer among the two viable candidates (Duverger 1954; Cox 1997). The two-step approach allows us to first screen out those for whom strategic voting is a relevant option and then to determine who actually decides to cast a strategic vote.


Fig. 2.2 Strategic voting: four candidates (source: authors' calculations)

All the scenarios shown in Figs. 2.1 and 2.2 involve no tie. Allowing for ties increases exponentially the number of possibilities (see Blais and Nadeau 1996). We assume that observed ties in preferences reflect measurement imperfections that voters have a "true" order of preferences among the candidates running in their constituency, but that slight differences cannot always be captured by a single question, even with a $0-100$ scale. So tied preferences are untied by using predicted feelings toward the parties - these predicted scores being obtained though regressions linking feelings toward the parties to party identification, leader evaluations, and sociodemographic characteristics.

Perceived tied chances are dealt with differently because our procedure requires us only to identify the top two contenders. When two parties are tied for first place, these two are obviously the top two contenders. When two parties are tied for second place, then the three top parties are considered "viable" parties. ${ }^{2}$ The same logic applies to three- or four-way ties.

## Voting Strategically in the 1988 Canadian Election

We start with the 1988 Canadian election, contested by three major parties: the Progressive Conservatives, the Liberals, and the NDP. ${ }^{3}$ We use the 1988 Canadian Election Study (CES). The campaign survey consists of 3,609 completed interviews, with a response rate of $57 \%$ (Johnston et al. 1992). The survey contains questions about vote choice, preferences, and expectations about the outcome of the election. Vote choice is measured by the typical vote intention questions. The analysis is confined to those who indicate a vote intention for one of the three major parties. Preferences are measured by $0-100$ feeling thermometer questions about each of the parties. Expectations are tapped by questions about the perceived chances, on a 0-100 scale, of each party winning in the respondent's local constituency. ${ }^{4}$

The first stage of our analysis leads us to sort out those for whom strategic voting is a meaningful option, that is, those whose first choice is perceived to have the weakest chances of winning (scenarios D and F in Fig. 2.1). All in all, 10\% of voters find themselves in such a situation (Table 2.1). This is a relatively small percentage. This stems from the fact that only about $20 \%$ of voters prefer the candidate who actually finishes third in their constituency and that among them many believe that their first choice is one of the top two contenders (Blais 2002; Blais and Turgeon 2004).

Among this pool of voters who had to decide whether to vote sincerely or strategically, about a third did vote strategically. This gives us $3 \%$ strategic votes in the whole electorate. This is relatively little.

We assume that the propensity to vote strategically depends on the intensity of preferences and on the perceived weakness of the preferred party. More specifically, we predict that the inclination to vote strategically is weaker when one very much likes her first choice and when one thinks that her preferred party still has some chance of winning, even if that party is not one of the top two contenders (Blais 2002).

Preferences are measured by an index combining party identification, party ratings, and leader ratings. Expectations are measured by a CHANCE variable, which indicates the perceived (standardized) chances of the preferred party (see the Appendix for a description of the variables). Note that the analysis is confined to the pool of voters for whom strategic voting was a real option, that is, those whose preferred party was perceived not to be one of the top two contenders.

Table 2.1 The amount of strategic voting in Canada and Britain

| Canada | Potential strategic vote (\%) | Strategic vote (\%) |
| :--- | :--- | :--- |
| 1988 | 10.0 | 3.0 |
| 1993 | 11.2 | 2.2 |
| 1997 | 15.0 | 2.5 |
| 2000 | 11.3 | 3.8 |
| Britain |  |  |
| 2005 | 15.1 | 5.0 |

Sources: Canadian Election Study (CES), various years; British Election Study 2005

Table 2.2 confirms those predictions. The more lukewarm one is about her preferred party and the worst its perceived chances, the greater the propensity to vote strategically. Many voters like their first choice quite a bit (the average is 0.56 on PREFERENCE) and many think that their first choice, even if it is third in the race, still has some chance of winning (the average on CHANCE is 0.15 ). As a consequence, a majority stick to their first choice and vote sincerely.

It could be argued that a person will cast a strategic vote only if she has both a weak preference for her first choice and thinks that her first choice has no chance of winning. According to that perspective, there should be an interaction effect between preferences and expectations. Table 2.2 tests for the presence of such an interaction effect. We find none. This is consistent with the absence of interaction effects between B and P in models of voter turnout (Blais 2000).

In the Canadian 1988 election we thus observe a relatively small amount of strategic voting. This may be surprising. This was the "free trade" election, and those opposed to free trade (FTA) had to consider which of the two parties against the free trade agreement, the Liberals and the NDP, was more likely to defeat the pro-FTA Conservatives in their own constituency (Johnston et al. 1992). The issue of strategic voting was hotly discussed during the campaign, and yet there appears to have been relatively little.

## Voting Strategically i.n the 1993, 1997, and 2000 Canadian Elections

Perhaps the 1988 election was an exception. So let us look at the following three elections. The 1990s saw the explosion of the Canadian party system, with the advent of the Reform party outside Quebec and of the Bloc Québécois in Quebec. We now had a four-party system, and this theoretically increases the possibilities of

Table 2.2 Strategic voting, expectations, and intensity of preferences

|  | Can. 1988 | Can. 1993 | Can. 1997 | Can. 2000 | Brit. 2005 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| CHANCE | $-1.95(0.86)^{*}$ | $-0.69(0.90)$ | $-2.21(1.06)^{*}$ | $-1.51(1.04)$ | $-2.33(0.58)^{* *}$ |
| PREFERENCE | $-2.07(0.49)^{* *}$ | $-1.34(0.43)^{* *}$ | $-1.71(0.37)^{* *}$ | $-1.26(0.37)^{* *}$ | $-1.14(0.25)^{* *}$ |
| INTERCEPT | $0.76(0.31)$ | $0.01(0.26)$ | $0.26(0.24)$ | $0.46(0.26)$ | $0.46(0.18)^{* *}$ |
| $N$ | 229 | 319 | 334 | 236 | 595 |
| Pseudo R2 | 0.09 | 0.04 | 0.07 | 0.04 | 0.04 |
|  | Can. 1988 | Can. 1993 | Can. 1997 | Can. 2000 | Brit. 2005 |
| CHANCE | $-0.15(2.61)$ | $-2.35(2.62)$ | $-4.99(2.84)$ | $-0.91(2.85)$ | $-2.19(1.69)$ |
| PREFERENCE | $-1.62(0.79)^{*}$ | $-1.84(0.80)^{*}$ | $-2.21(0.58)^{* *}$ | $-1.16(0.56)^{*}$ | $-1.12(0.35)^{* *}$ |
| CH * PREF | $-3.45(4.64)$ | $3.28(4.78)$ | $5.27(4.59)$ | $-1.05(4.68)$ | $-0.24(2.63)$ |
| INTERCEPT | $0.52(0.46)$ | $0.25(0.43)$ | $0.52(0.35)$ | $0.40(.36)$ | $0.45(0.23)$ |
| N | 229 | 319 | 334 | 236 | 595 |
| Pseudo R2 | 0.09 | 0.04 | 0.08 | 0.04 | 0.04 |

[^0]strategic voting. As can be seen in Figs. 2.1 and 2.2, a strategic vote is a meaningful option in half of the potential scenarios in a four-party system, compared with a third in a three-party system.

Our approach is the same as for the 1988 election. We use vote intention, preferences are measured by $0-100$ feeling thermometer questions and expectations by questions about the parties' perceived chances of winning in the respondent's local constituency, on a $0-100$ scale. As previously, missing observations are imputed and ties in preferences are untied by using predicted party feeling scores.

The only difference is that we now have four parties, the fourth party being the Bloc Québécois in Quebec and the Reform party elsewhere for the 1993 and 1997 elections. In the 2000 election, the Reform party had become the Alliance and was present in Quebec as well, obtaining $6 \%$ of the vote in that province, more than the Conservatives and the NDP. For that last election, we keep the four "main" parties in Quebec (the Liberals, the Bloc Québécois, the Alliance, and the Conservatives), which all had more than $5 \%$ of the vote, and we drop the NDP, which had only $2 \%$.

The first stage of the analysis consists in sorting out those who found themselves in a situation where a strategic vote was a real option, that is, those whose first choice was not one of the top two contenders. There were slightly more of them: $11 \%$ in 1993 and 2000 and $15 \%$ in 1997 (Table 2.1), but the numbers are not substantially higher than in 1988. In Canadian elections, it would seem that the pool of potential strategic vote is a small fraction of the electorate.

Within that pool of potential strategic voters, about one out of five in 1993 and 1997, and one in three in 2000, voted for the preferred party among the top two contenders, thus casting a strategic vote. All in all, this amounts to $2 \%$ of the vote being construed as strategic in 1993, $2-3 \%$ in 1997, and $4 \%$ in 2000.

In Canadian elections, it would seem that there is relatively little strategic voting. Most voters have no reason (sic) to even think about casting a strategic vote because they perceive their preferred candidate to be among the top two contenders in their constituency.

As we have done in the case of the 1988 election, we can test whether the propensity to cast a strategic vote hinges on the strength of one's preferences and on assessments of the viability of the preferred party in the constituency. Table 2.2 reports the findings for 1993, 1997, and 2000. These results confirm that those who very much like their first choice and/or think that it has some chance of winning (even if the party is trailing in the constituency) are less inclined to vote strategically. All the coefficients have the expected (negative) sign. Note, however, that the coefficient of CHANCE is not statistically significant in 1993 and 2000. Finally, as in 1988, there is no evidence of an interaction effect, and thus no support for the hypothesis that it is only those who have weak preferences and who think that their preferred party is not viable are willing to cast a strategic vote.

Like in 1988, then, the majority of those whose first choice is perceived to be last in the local constituency stick to their party either because they feel some loyalty to that party or because they have not given up hope that, despite all the odds, that party could win.

## Voting Strategically in the 2005 British Election

Perhaps things are different in Britain. Indeed the literature on strategic voting in Britain suggests that between 5 and $10 \%$ of the vote can be construed as strategic (see the review by Alvarez and Nagler 2000). We use the 2005 British Internet campaign survey. For the first time, the British Election Study included questions about respondents' perceptions of the various parties' chances of winning in their local constituency, and for the first time we are able to apply the same methodology to British data.

As in Canada, vote choice is measured by vote intention questions, preferences are tapped by party rating questions, and expectations by questions about the parties' chances of winning in the respondent's constituency. In the British case, party ratings and perceived chance questions use $0-10$ scales, not $0-100$ scales as in Canada. Like in Canada, tied preferences are untied on the basis of predicted party ratings. We confine ourselves to England and to the three major parties: Labour, Conservatives, and Liberal Democrats.

All in all, as indicated in Table 2.1, 15\% of British voters perceived their first choice to not to be one of the top two contenders. Within this pool of potential strategic votes, about one-third, corresponding to $5 \%$ of the total sample, intended to cast a strategic vote.

Strategic voting appears to be slightly higher in Britain than in Canada, about $5 \%$ against typically around $3 \%$. This is a combination of two factors. First the pool of potential strategic voters is slightly larger in Britain; the pool appears to be closer to $10 \%$ in Canada and closer to $15 \%$ in Britain. And the probability of deserting one's first choice was about one-third in Britain while it ranged from one-sixth to one-third in Canada.

Our estimated amount of strategic voting in Britain is substantially lower than that suggested by previous analyses, the typical estimate being around $10 \%$. British Election Studies (BES) usually relied on a question in which respondents are invited to indicate the main reason for their vote, one of these options being "I really prefer another party but it stands no chance of winning in this constituency." The 2005 BES added another category: "I vote tactically."

All in all, $8 \%$ of the respondents indicated that they preferred another party that had no chance of winning and another $7 \%$ said that they were voting tactically, for a total of $15 \%$ referring to strategic motivations. This is slightly more than the percentage reported in previous elections, ${ }^{5}$ and a lot more than our estimate of $5 \%$.

There are problems with the "British" question. First, as shown by Fisher (2004) (see also Fisher and Curtice 2006), quite a few respondents who report a strategic motivation appear to vote for the party to which they give the highest rating, which leaves one wonder whether they really prefer another party. Second, our own analyses show that the majority ( $71 \%$ ) of those who said they preferred another party that had no chance placed that "no chance" party among the top two contenders, $36 \%$ even putting that party as having the best chance of winning. ${ }^{6}$

We would contend that our methodology, which directly flows from our conceptualization of what a strategic vote does and does not entail, is more adequate than the British Election Study approach, which consists in asking voters to tell us whether their motivation is strategic. The BES approach assumes that voters are able to identify the reasons why they vote the way they do, and that all the major reasons have been properly identified in the other response categories. Some respondents may opt for the strategic vote "reason" only because none of the proposed "nonstrategic" reasons looks appropriate.

According to our estimations, then, strategic voting is limited in Britain, as in Canada, and for the same basic reason: relatively few voters find themselves in a situation where thinking strategically makes sense since their preferred party is perceived to be one of the top two contenders.

Still the potential pool of strategic votes is slightly larger in Britain and within that pool the propensity to desert one's preferred party is slightly higher than in Canada. Why? The simplest response is that British voters who find themselves in the pool of potential strategic votes tend to be slightly more pessimistic about their preferred party's chances (the overall mean for CHANCE is 0.14 in the four Canadian elections and it is 0.10 in Britain) and this perception seems to have a slightly larger impact on their vote choice than in Canada (the strongest CHANCE coefficient in Table 2.2 is observed for the 2005 British election).

There are some small differences between Canada and Britain, and between elections in Canada, but the basic story is the same. The potential for strategic voting is between 10 and $15 \%$ and the actual amount between 2 and $5 \%$.

All our analyses are based on campaign survey data. Strategic considerations may get primed by media emphasis on the horse race and the publication of polls, and so the propensity to vote strategically may increase as the campaign progresses. We have tested that possibility, and we have estimated the amount of strategic voting in the first and second halves of each campaign. Table 2.3 shows no support for the hypothesis that the inclination to vote strategically strengthens over the course of the campaign.

Table 2.3 Strategic voting over the course of the campaign

|  | $\begin{aligned} & \text { Can. } \\ & 1988 \text { (\%) } \end{aligned}$ | $\begin{aligned} & \text { Can. } \\ & 1993 \text { (\%) } \end{aligned}$ | $\begin{aligned} & \text { Can. } \\ & 1997 \text { (\%) } \end{aligned}$ | $\begin{aligned} & \text { Can. } \\ & 2000(\%) \end{aligned}$ | $\begin{aligned} & \text { Brit. } \\ & 2005 \text { (\%) } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Pool of strategic vote |  |  |  |  |  |
| First half | 11.3 | 11.3 | 15.5 | 10.5 | 15.0 |
| Second half | $8.8$ | $11.1$ | $14.5$ | $11.9$ | $15.3$ |
|  | (0.07) | (0.11) | (0.45) | (0.78) | (0.30) |
| Strategic vote |  |  |  |  |  |
| First half | 3.6 | 2.3 | 2.9 | 3.9 | 4.9 |
| Second half | 2.2 | 2.2 | 2.2 | 3.7 | 5.1 |
| ( $p$-value) | (0.13) | (0.19) | (0.09) | (0.17) | (0.51) |

Sources: Canadian Election Study (CES), various years; British Election Study 2005

## Conclusion

We have proposed a strict definition of strategic voting, a vote for a party or candidate other than the preferred one, motivated by the intention to affect the outcome of the election, and we have outlined two specific conditions that must be met for a vote to be construed as strategic: the person perceives her preferred candidate/ party not to be one of the top two contenders, and she votes for the candidate/party she likes more among the top two contenders.

We have proceeded to estimating the amount of strategic voting on the basis of these two criteria in four Canadian elections (1988, 1993, 1997, 2000) and one British election (2005). We have shown that the pool of potential strategic votes is between 10 and $15 \%$ and the overall amount between 2 and $5 \%$. Strategic voting is limited, and the main reason is simply that most voters perceive their first choice to be one of the top two contenders and they have no incentive to think strategically. Among those who find themselves in a situation where a strategic choice is a meaningful option, a substantial minority do vote strategically.

We have found some small differences between the five elections examined here, and there appears to be slightly more strategic voting in Britain than in Canada, but we are struck by the similarities. There were some elections where strategic considerations were widely discussed by the parties and the media and others where they were not part of the agenda, yet the final amount of strategic voting did not vary that much from one election to the next.

Does this mean that Duverger was wrong? Yes and no. There is clear evidence that among those who see their first choice to be third or fourth in the local horse race a substantial fraction is willing to support one of the top two contenders. But relatively few people are faced with the dilemma of choosing between a "weak" first choice and a "strong" second choice, and so strategic voting is limited.

We should acknowledge that we have confined ourselves to the choice between the main three or four parties. In each constituency, there are many more "very weak" parties or candidates, whose chances of winning must be tiny or nil. We have no way of estimating how many voters strategically desert these parties, because respondents are not invited to rate them or to evaluate their chances of winning. It is fair to assume that the propensity to vote for a more viable alternative must be even stronger among supporters of these very weak candidates.

Our estimates are based on a rather strict definition of strategic voting. Different definitions would yield different estimates. In our view the mere observation of a hiatus between preference and vote choice, in particular, is not sufficient to conclude that a vote is strategic. We assume, like Cox (1997), that a strategic vote is motivated by the concern to make one's vote count, and that it must be distinguished from other motivations such as the mere pleasure of being on the winning side, which we associate with the bandwagon effect.

Our analyses, contrary to almost all previous studies, are based on data coming from campaign surveys, rather than postelection surveys. Postelection surveys have one advantage over campaign surveys; they provide information about actual vote
choice rather than vote intention. They have, however, one major shortcoming; they cannot tell us about voters' expectations about the outcome of the election. These expectations, it seems to us, are central in the standard conception of strategic voting; the voter does not vote for her preferred party because she thinks that the preferred party has no (little) chance of winning. We would thus contend that campaign surveys are more appropriate than postelection surveys when it comes to ascertaining strategic voting.

Finally, our findings should not be construed as indicating that very few voters are motivated by strategic considerations. They rather suggest that strategic considerations are rarely decisive, in the sense that they lead voters to vote for a party other than the one they would have supported otherwise. Many more voters may well vote for their preferred party partly because they perceive that party to be viable, that is, they might have voted differently if they had thought that the party had no chance of winning. A "strategic" voter does not always cast a strategic vote (Blais 2004).

## Appendix: Survey Questions

## Party Evaluation*

## 1988-2000 (Canada):

"How would you rate (name of the party)? The thermometer runs from 0 to $100^{\circ}$, where 0 represents a very negative feeling and 100 a very positive feeling."

## 2005 (Great Britain):

"Now, some questions about the political parties. On a scale that runs from 0 to 10 , where 0 means strongly dislike and 10 means strongly like, how do you feel about (name of the party)?"

## Leader Evaluation

## 1988-2000 (Canada):

"How would you rate (name of the leader)? The thermometer runs from 0 to 100 degrees, where 0 represents a very negative feeling and 100 a very positive feeling."

[^1]
## 2005 (Great Britain):

"Now, thinking about party leaders for a moment. Using a scale that runs from 0 to 10 , where 0 means strongly dislike and 10 means strongly like, how do you feel about (name of the leader)?"

## Vote Intention

## 1988-2000 (Canada):

"If you do vote, which party do you think you will vote for?"

## 2005 (Great Britain):

"If you do vote in the general election, have you decided which party you will vote for, or haven't you decided yet? Which party is that?"

## Local Chance (Standardized)

## 1988-2000 (Canada):

"We will be using a scale, which runs from 0 to 100 , where 0 represents no chance for the party, 50 represents an even chance, and 100 represents certain victory. Using the $0-100$ scale, what do you think the (name of the party) chances are of winning in your riding?"

## 2005 (Great Britain):

"On a scale that runs from 0 to 10 , where 0 means very unlikely and 10 means very likely, how likely is it that (name of the party) will win the election in your local constituency?"

## PREFERENCE (Average Score)

(a) The evaluation given to the preferred party, from 0 to 1
(b) The evaluation given to the leader of the preferred party, from 0 to 1
(c) A dummy that equals 1 if the respondent's party ID is the preferred party, and 0 otherwise

## CHANCE

Local chance (standardized) given to the preferred party, from 0 to 1 .

## Notes

1. The attentive reader will have noticed that the criterion used in the definition of strategic voting, that the person votes for a candidate who is not the most preferred, does not appear as an explicit condition. This is because if a person' preferred candidate is not one of the top two contenders and if that person votes for the candidate that she likes most among the top two contenders, it necessarily follows that she votes for someone who is not the preferred candidate.
2. This corresponds to what Cox (1997) calls a non-Duvergerian equilibrium.
3. All other parties received only $5 \%$ of the vote. Only one party, the Reform party, got more than $1 \%$. No minor party candidate was elected.
4. Missing values on preferences and expectations were imputed using Stata command "IMPUTE."
5. The increase is most likely due to the presence of two «strategic» response categories in 2005 (previous BES surveys did not have the «I vote tactically» response).
6. The proportion who placed their preferred party among the top two contenders is slightly higher among «I vote tactically» respondents ( $78 \%$ ) than among «I really prefer another party that has no chance» respondents ( $65 \%$ ).

# Chapter 3 <br> Neither Representative Nor Accountable: First-Past-the-Post in Britain 

John Curtice

At first glance Duverger's law is simply an empirical proposition. Use of the single member plurality electoral system results in political representation being dominated by just two parties. Regarded in this way, we can assess the validity of the law simply by considering whether representation in the legislature is usually dominated by - or even exclusively reserved to - two parties in countries where the single member plurality system is in place.

But Duverger's law is more than an empirical proposition. For if it is true, it also helps to provide a foundation for a normative justification of single member plurality. At first glance it would seem difficult to defend an electoral system that discourages voters from voting for anyone other than one of two parties and then fails to represent those who do decide to support someone else. It would certainly appear unlikely that the legislature produced by such a system would be a reasonable reflection - and thus representative - of the pattern of public opinion. However, producing a representative assembly is not the only function that a democratic election can be expected to fulfill (Schumpeter 1976; Plant 1991; Powell 2000). Such elections can also be regarded as occasions when those in power should be held accountable for their performance in office.

According to the system's advocates it is this accountability that single member plurality helps to deliver. Because it ensures that representation is dominated by just two parties, it is thought more or less to guarantee that just one of those parties will have a majority in the legislature at any one point in time. This makes it possible to form a single-party majority government. With such a government - and in contrast to the position under a coalition government - there is no doubt about who is responsible for the conduct of public affairs and consequently voters are able to form a judgment about their performance (Powell and Whitten 1993; Whitten and Palmer 1999). Moreover, if the government is deemed to have performed unsatisfactorily voters can vote instead for its principal opponents and in so doing ensure that it is removed from office.

This argument has featured prominently in both popular and academic debate about electoral reform in the UK, where single member plurality is used in elections to the House of Commons. ${ }^{1}$ For example, in a speech to the Centre for Policy Studies in February 1998 shortly after his party's heavy defeat and ejection from office in 1997 (Hague 1998), William Hague, the then leader of the Conservative party, argued:

The first-past-the-post system ensures that voters vest in one party the political authority it needs to govern by giving it a working majority in Parliament.
and went on to add that the system also gave voters the corollary of this power - the ability "to kick out the Government - as the Conservatives found out on May 1st [1997]." Equally, similar arguments have been put forward by one of the leading British academic defenders of the system, Norton (1997), who has argued of single member plurality that, "It facilitates though does not guarantee the return of a single party to govern" and as a result ensures that voters also have the facility to dismiss a government.

In effect the vision conjured up by this argument is a "system" of two parties regularly alternating in office. And indeed we might note that in stating his law, Duverger did not simply suggest that single member plurality resulted in representation being dominated by two large parties, but rather that it "favors the two party system" (emphasis added). Thus, arguably even an assessment of the empirical validity of Duverger's law, let alone its value as part of a normative justification for single member plurality, requires us to do more than count the number of political parties represented in the legislature where single member plurality is in use. We have to establish whether it facilitates alternating single-party majority government.

In light of this discussion, this chapter considers how reliable and effective an instrument single member plurality is in providing the UK with a "two-party system" and thereby helps ensure that governments can be held to account. It does so by considering two aspects of the mechanical relationship between seats and votes. The first is much more familiar in discussions of Duverger's law, that is, the degree to which the system denies representation to third parties. This property matters because, other things being equal, the greater the number of seats won by third parties, the less likely it is that one party will have an overall majority in the legislature and that a single-party majority government can be formed. The second relationship we examine features less commonly in discussions of Duverger's law but is equally important; this is the relative treatment meted out by the system to the two largest parties themselves. Single-party majority governments are more likely to be formed if the electoral system treats the largest party substantially more favorably than the second largest. And accountability is more likely to be enforced if any subsequent movement of votes from the government to the opposition is exaggerated by the system in terms of representation in the legislature.

At first glance the evidence in Table 3.1 seems to suggest that the UK has fully enjoyed the attributes of an alternating "two-party system." ${ }^{2}$ Out of 16 elections held since 1950, the Conservatives have secured an overall majority in 8, Labour in 7 , and only once has an overall majority not been obtained by anyone. It thus perhaps should not come as much surprise that, for example, Norris and Crewe (1994) have claimed that:

The British electoral system continues to work according to the standards of its defenders. It produces single-party governments with overall majorities capable of sustaining the government for a full parliament. The party elected to government can plan a legislative programme with confidence that it will be passed by parliament. The government knows

Table 3.1 Summary of UK election results since 1950

| Year | Votes (\%) |  |  |  | Seats |  |  |  | Majority |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Con | Lab | Lib/LD | Other | Con | Lab | Lib/LD | Other |  |
| 1950 | 43.4 | 46.1 | 9.1 | 1.4 | 298 | 315 | 9 | 3 | Lab 5 |
| 1951 | 48.0 | 48.8 | 2.6 | 0.6 | 321 | 295 | 6 | 3 | Con 17 |
| 1955 | 49.7 | 46.4 | 2.7 | 1.2 | 345 | 277 | 6 | 2 | Con 60 |
| 1959 | 49.4 | 43.8 | 5.9 | 0.9 | 365 | 258 | 6 | 1 | Con 100 |
| 1964 | 43.4 | 44.1 | 11.2 | 1.3 | 304 | 317 | 9 | 0 | Lab 4 |
| 1966 | 41.9 | 48.0 | 8.5 | 1.2 | 253 | 364 | 12 | 1 | Lab 98 |
| 1970 | 46.4 | 43.1 | 7.5 | 3.0 | 330 | 288 | 6 | 6 | Con 30 |
| 1974(F) | 37.9 | 37.2 | 19.3 | 5.6 | 297 | 301 | 14 | 23 | None |
| 1974(O) | 35.8 | 39.3 | 18.3 | 6.7 | 277 | 319 | 13 | 26 | Lab 3 |
| 1979 | 43.9 | 36.9 | 13.8 | 5.4 | 339 | 269 | 11 | 16 | Con 43 |
| 1983 | 42.4 | 27.6 | 25.4 | 4.6 | 397 | 209 | 23 | 21 | Con 144 |
| 1987 | 42.3 | 30.8 | 22.6 | 4.4 | 376 | 229 | 22 | 23 | Con 102 |
| 1992 | 41.9 | 34.4 | 17.8 | 5.8 | 336 | 271 | 20 | 24 | Con 21 |
| 1997 | 30.7 | 43.2 | 16.8 | 9.3 | 165 | 419 | 46 | 29 | Lab 179 |
| 2001 | 31.7 | 40.7 | 18.3 | 9.4 | 166 | 413 | 52 | 28 | Lab 167 |
| 2005 | 32.4 | 35.2 | 22.0 | 10.4 | 198 | 356 | 62 | 30 | Lab 66 |

Source: Rallings and Thrasher (2007a)
that it will be accountable to the electorate at the next election and might be replaced by the main opposition party. Voters can continue to assume that collectively they have the power 'to kick the rascals out.'

But a closer look at the table casts some doubt on this conclusion. First, on no less than three occasions, 1950, 1964, and October 1974, Labour only secured a very small majority. In the first two cases the party felt compelled to return to the electorate within 18 months, while in the third case (itself the second election in a year following an inconclusive result in February 1974) the party lost its majority during the lifetime of the ensuing parliament and was forced to make deals with the Liberals and other smaller parties in order to remain in office. Moreover, thanks to by-election defeats and defections, the Conservative government that was elected in 1992 with a majority of 21 also lost its majority during the course of the parliament. Indeed, more generally, Curtice and Steed $(1982,1986)$ have argued that the ability of the system to generate safe overall majorities for one party has been systematically undermined. They wrote:
[Single member plurality's] tendency to exaggerate the lead of the Conservatives over Labour or vice versa at Westminster elections has all but disappeared. The continued use of the single member plurality system now seems likely to produce hung parliaments... The traditional defence of that system has been rendered unconvincing.

We might also observe two further points. Twice, in 1951 and in February 1974, the party that secured most seats was not the party that secured most votes, an outcome that would appear to compromise claims that single member plurality ensures that voters have the power to make and unmake governments. Meanwhile, although
parliamentary representation was once almost the exclusive preserve of the Conservative and Labour parties, since 1970 this has increasingly failed to be the case. Although once as few as $3 \%$ voted for anyone other than the Conservative and Labour parties, in recent elections around one in four have regularly done so. Equally, where once there were never more than a dozen or so MPs from smaller parties, now there are nearly a 100. In short, neither the psychological nor the mechanical effects that are commonly thought to underpin Duverger's law (Benoit 2006) seem to operate with much effect any more. There is evidently a need to look more closely at the British case.

## Third Parties

We begin by focusing on the rise in third-party representation. It is useful to divide this phenomenon into two parts - the ability of candidates standing for the Liberal Democrats and their predecessor parties ${ }^{3}$ to secure election, and the success of candidates standing under a variety of other labels. We will consider these in reverse order.

Most of the increased representation of "other" MPs has been occasioned by developments in Scotland, Wales, and Northern Ireland. Until the 1970s most MPs from Northern Ireland were elected as Unionists who took the Conservative whip. Their votes and seats were thus part of the Conservative tally. But the relationship between Conservatives and Unionists broke down in the wake of the outbreak of civil strife in the province in the late 1960s, and thereafter the province developed its own separate party system based on the religious cleavage between Protestants and Catholics that had always dominated politics in Northern Ireland and distinguished it from the rest of the UK. ${ }^{4}$ Meanwhile the 1970s also saw the emergence for the first time of significant support for nationalist parties in Scotland and Wales. In both countries an additional party became competitive in the wake of the emergence of a new cleavage. Between them these developments in the more peripheral parts of the UK illustrate how the emergence and existence of multiple cleavages can disrupt the operation of Duverger's law.

But while the existence and emergence of alternative cleavages may explain why candidates were willing to stand for "other" parties and voters to support them, it does not explain why the mechanical effects of Duverger's law failed to deny these parties' representation. Individually, these parties' share of the UK-wide vote was still pitifully small; even the most successful, the Scottish National Party, has never won more than $3 \%$ of the total vote. But crucially in each case the vote of these smaller parties was geographically concentrated in their particular part of the UK. In such circumstances even the smallest of parties can secure as much as their proportionate share of seats (Curtice and Steed 1982, 1986). The mechanical effects behind Duverger's law are clearly contingent on the geography of party support (Gudgin and Taylor 1979).

The Liberal Democrats, in contrast, have long since ceased to comprise a small party. Interestingly, in the early 1950s their fate appeared to be the ultimate testament to the power of Duverger's law. The party was reduced to less than $3 \%$ of the
vote in both 1951 and 1955 and only contested around one in six constituencies. Its ability to maintain any parliamentary representation at all depended in part on local electoral alliances with the Conservatives. Yet subsequently it arose from near oblivion and in so doing has dramatically demonstrated the limitations of Duverger's law. Since 1974 the party has typically fought most constituencies and secured around a fifth of the vote. Although it particularly appeals to a niche market of relatively well-educated people with liberal views (Heath et al. 1985; Curtice 1996), much of its success comes from its ability to attract protest votes from across the political spectrum (Lemieux 1977). Its success is thus less easily accounted for by the emergence of a new cleavage. But in any event once it has made a breakthrough locally it has demonstrated an ability actually to benefit from the psychological effects of Duverger's law by securing the strategic votes of locally third placed Conservative or (especially) Labour supporters (Steed 1974; Heath et al. 1991; Curtice and Fisher 2006).

Even so, until recently the mechanical operation of single member plurality meant that the Liberal breakthrough in votes was hardly reflected at all in its parliamentary representation. Even in 1983, when the then Liberal-SDP Alliance won a quarter of the vote, it still won less than $4 \%$ of the seats. In contrast the then opposition Labour party won nearly ten times as many seats despite winning just $2 \%$ more of the vote. But in the three elections since and including 1997 the Liberal Democrats have won 46,52 , and 62 seats, respectively, totals that the party had not previously reached since the 1920s, even though its share of the vote was still much the same as it has been at most previous elections since 1974.

Again, electoral geography is the key. This can be seen in Table 3.2, which shows the standard deviation of support for the three main parties at each election since February 1974, the first postwar election in which the Liberals fought most constituencies. The lower the standard deviation, the more evenly a party's vote is

Table 3.2 Standard deviation of party vote shares, 1974-2005

|  | Conservative | Labour | Liberal/Lib Dem |
| :--- | :---: | :---: | :---: |
| 1974 (Feb) | 10.5 | 15.7 | 7.8 |
| 1974 (Oct) | 12.1 | 15.2 | 8.3 |
| 1979 | 12.4 | 16.0 | 8.2 |
| 1979 (NT) | 12.3 | 15.5 | 7.7 |
| 1983 | 13.2 | 15.7 | 7.3 |
| 1987 | 14.5 | 17.8 | 8.9 |
| 1992 | 14.0 | 17.8 | 10.1 |
| 1992 (NT) | 13.9 | 17.7 | 9.8 |
| 1997 | 12.2 | 17.9 | 10.9 |
| 2001 | 13.1 | 16.6 | 11.0 |
| 2001 (NT) | 13.0 | 16.6 | 11.0 |
| 2005 | 14.0 | 15.1 | 10.4 |
| 2005 (NT) | 14.0 | 15.1 | 10.4 |

[^2]distributed from constituency to constituency. The vote of the Liberal Democrats and their predecessor parties has always been more evenly distributed than that of either the Conservatives or Labour, making it highly unlikely that the party would come first in many constituencies. Moreover, this was particularly true in 1983, thereby ensuring that the Liberal-SDP Alliance's success in votes was not translated into seats. But while it continues to be more geographically evenly spread than either the Conservative or the Labour vote, since 1992 the Liberal Democrat vote has been more geographically concentrated than it ever was in the 1970s or 1980s. This is in part thanks to the strategic support for the party from third-placed Conservative and Labour supporters alluded to above and in part the result of targeted local campaigning in potentially winnable constituencies (Russell and Fieldhouse 2005). The result has been greater - if still far from proportionate - success in turning votes into seats. ${ }^{5}$

So recent experience of single member plurality in the UK has demonstrated that the system cannot necessarily be relied upon to ensure that parliamentary representation is dominated by two parties. The psychological effects of Duverger's law have proved insufficient to stop the emergence of parties that reflect new or different cleavages - or even one that seems to rely heavily on a broadly based protest vote. Meanwhile, the mechanical effects are clearly heavily contingent on the geography of party support. And recent changes in that geography have helped undermine the ability of single member plurality to maintain a duopoly of political representation.

## Seats and Votes: The Cube Law

But what of the way in which single member plurality has treated the two largest parties? Here, the argument of advocates of the system relies heavily on the claim that there is a regular and predictable relationship between the division of the vote cast for the two largest parties across the country and their share of the seats. As the first report of the Plant Commission (an internal Labour party body whose deliberations eventually led the party in 1997 to promise a referendum on electoral reform, a pledge that remains unfulfilled) put it:

> There has to be some rational and predictable relation between votes and seats if there is to be a defence of first-past-the-post as a legitimate system even on its own assumptions, never mind those who hold to a more proportional point of view. For a very long period it was thought that there was indeed a predictable relationship between votes and seats - the relationship known as the 'Cube Law'.

Plant 1991
The "cube law" to which the Plant Report referred is a statement of the relationship between seats and votes for the top two parties under the single member plurality system. It states that if the top two parties divide their votes between them in the ratio $\mathrm{A}: \mathrm{B}$, the seats that they win will be divided in the ratio $\mathrm{A}^{3}: \mathrm{B}^{3}$ (Butler 1951; Gudgin and Taylor 1979; Taagepera and Shugart 1989). In practice this means that, at results close to an even distribution of the vote, a party that gains $1 \%$ of the vote
should secure an extra $3 \%$ of the seats. Thus, it can be seen how according to the law the lead of the largest party is exaggerated in the allocation of seats. So long as the system also minimizes the representation of third parties this feature should ensure that a single-party government has a safe overall majority and is thus clearly accountable to the electorate.

Kendall and Stuart (1951) demonstrated, however, that the cube law only operated so long as the geographical distribution of the vote cast for the top two parties conformed to certain conditions. In particular they showed that the distribution of that vote across constituencies should be approximately normal with a standard deviation of 13.7. It can also be shown that in the event that the two parties have identical shares of the vote across the country as a whole this condition means that the Conservative share of the vote for Conservative and Labour combined should lie within the range $45-55 \%$ in around $30 \%$ of the constituencies (Curtice and Steed 1982). Such seats can be defined as "marginal seats."

The analysis that lead Curtice and Steed to question whether single member plurality retained the exaggerative quality promised by the cube law focused on whether those preconditions are still in place. One advantage of this approach is that it enables us to examine not simply whether the particular outcome of any election did or did not conform to the cube law, but rather whether, given the geographical distribution of the vote at that election, the cube law would have operated for any overall division of the vote between Conservative and Labour, not just the particular division that actually obtained. In short it establishes not just whether the actual election results conformed to the cube law (which they might have done by accident) but rather whether there was a predictable general relationship between votes and seats that conformed to the stipulations of the law.

Table 3.3 presents some descriptive statistics on the geographical distribution of the Conservative and Labour vote (the "two-party vote") at each election between 1955 and 2005. We show the standard deviation of the distribution and, in order to assess how far the two-party vote is normally distributed, the kurtosis. A negative kurtosis indicates that the distribution contains fewer cases in its middle than would be true of a normal distribution. We also show the number and proportion of seats that can be defined as "marginal" according to the definition given earlier. Note that in the case of five elections, 1970, 1979, 1992, 2001, and 2005, two sets of figures are given. This is because new constituency boundaries were introduced after these elections. ${ }^{6}$ The second set of figures for these five elections (labelled "NT" for "notional") are estimates of what the distribution of the two-party vote would have been if the new constituency boundaries had been in place. ${ }^{7}$ By comparing the actual and notional statistics for these elections we can check whether boundary redrawing has had any significant impact on the distribution of the two-party vote; it is clear that it has not.

In the 1950s and 1960s the geographical distribution of the two-party vote did indeed more or less meet the requirements that have to be satisfied for the cube law to operate. The standard deviation was close to 13.7 , the kurtosis was only slightly negative, and nearly $30 \%$ of seats were marginal. But by February 1974 there were one-third fewer marginal seats, while by 1983 the proportion had halved.

Table 3.3 Changing distribution of two-party vote 1955-2005

|  | Marginals |  |  | Two-party vote |  |
| :--- | ---: | :---: | :---: | :---: | :---: |
|  | No. | $\%$ |  | Standard deviation | Kurtosis |
| 1955 | 166 | 27.2 |  | 13.5 | -0.25 |
| 1959 | 157 | 25.7 |  | 13.8 | -0.29 |
| 1964 | 166 | 27.3 |  | 14.1 | -0.45 |
| 1966 | 155 | 25.6 |  | 13.8 | -0.46 |
| 1970 | 149 | 24.5 |  | 14.3 | -0.27 |
| 1970 (NT) | 149 | 24.3 |  | 14.3 | -0.30 |
| 1974 (Feb) | 119 | 19.9 |  | 16.1 | -0.68 |
| 1974 (Oct) | 98 | 16.4 |  | 16.8 | -0.82 |
| 1979 | 108 | 17.8 |  | 16.9 | -0.87 |
| 1979 (NT) | 108 | 17.8 |  | 16.6 | -0.91 |
| 1983 | 80 | 13.2 |  | 20.0 | -1.05 |
| 1987 | 87 | 14.4 |  | 21.4 | -1.03 |
| 1992 | 98 | 16.1 |  | 20.2 | -1.03 |
| 1992 (NT) | 97 | 15.7 |  | 20.2 | -1.04 |
| 1997 | 114 | 19.6 |  | 18.1 | -0.85 |
| 2001 | 114 | 19.7 |  | 18.3 | -0.82 |
| 2001 (NT) | 115 | 20.2 |  | 18.1 | -0.78 |
| 2005 | 104 | 18.8 |  | 19.7 | -0.96 |
| 2005 (NT) | 105 | 18.8 |  | 20.1 | -1.07 |

[^3]Indeed as Curtice and Steed (1986) pointed out, by 1983 the number of marginal seats had fallen to such a level that the electoral system was coming close to being proportional in its relative treatment of the two largest parties. ${ }^{8}$ At the same time the standard deviation of party support was much higher than before and the kurtosis substantially negative.

The reason for this fall in the number of marginal seats was quite simple. Between 1955 and 1983, Labour's vote became increasingly concentrated in northern Britain, while Conservative support acquired an increasingly southern flavor. This is illustrated in the first row of Table 3.4, which shows for three time periods the degree to which the swing in each part of the country varied from the trend across the country as a whole. In addition to this north/south pattern, urban seats also became relatively more Labour and rural ones more Conservative (Curtice and Steed 1986). As a result of both these patterns the country gradually divided into

Table 3.4 Long-term variation in swing

|  | South of England | Midlands | North of England | Scotland | Wales |
| :--- | :---: | :---: | :---: | :---: | :---: |
| $1955-1987$ | +8.9 | +5.9 | -8.6 | -19.1 | +0.6 |
| $1987-1997$ | -2.6 | -2.3 | +1.9 | +7.4 | +2.0 |
| $1997-2005$ | +1.1 | +1.1 | -0.9 | -4.7 | +1.5 |

This table shows difference between the mean two-party swing (defined as the change in the Conservative share of the vote cast for the Conservatives and Labour) in each region as defined in Curtice and Steed (1982) and the mean swing across Great Britain as a whole Source: Author's calculations
two politically sharply contrasting halves, leaving fewer and fewer constituencies to be competitive between the two largest parties.

Still, Table 3.3 also indicates that the decline in the number of marginal seats was stemmed and indeed somewhat reversed after 1983. Nevertheless, the number still remains well short of the proportion that obtained in the 1950s and 1960s. Since 1992 it has hovered at a little under two-thirds of the proportion required to sustain a cube law, meaning in fact that at least so far as any result close to an even division of the Conservative and Labour vote is concerned something like a "square law" now applies.

The explanation for this partial reversal of the decline in marginal seats is reasonably straightforward. As can be seen in the second row of Table 3.4, the swing back to Labour between 1987 and 1997 was generally much higher in the southern half of the country, where the party was previously weak, than it was in the northern half, where it was previously strong. ${ }^{9}$ Even so, only around a third of the gap that had opened up between the North of England and the South over the previous 30 years was reversed. Meanwhile, since 1997 there has been a tendency, if anything, for the gap to open up again somewhat. ${ }^{10}$ The geography of the two-party vote, and thus the way its electoral system can be expected to operate, is still very different from what it was in the 1950s.

## Seats and Votes: The Seats-Votes Ratio

How then are Norris and Crewe able to argue that little or nothing has changed? They use three different ways of looking at the relationship between seats and votes. First, they examine the extent to which the actual outcome at each election deviated from the expectations of the cube law. Second, they undertake a regression analysis across elections of the relationship between seats and votes for the government party (Tufte 1973). Third, they calculate the ratio between seats and votes for all parties. In fact their analysis using the first two of these approaches largely supports the claim that the exaggerative quality of the electoral system has declined. ${ }^{11}$ Only the third raises some doubt, so it is on that approach that we will concentrate here.

Table 3.5 Seats-votes ratio, 1945-2005

|  | Government ratio | Opposition ratio | Liberal/LD ratio | Other ratio |
| :--- | :---: | :---: | :---: | :---: |
| 1945 | 1.28 | 0.83 | 0.21 | 1.15 |
| 1950 | 1.09 | 1.10 | 0.15 | 0.36 |
| 1951 | 1.07 | 0.97 | 0.38 | 0.83 |
| 1955 | 1.10 | 0.95 | 0.33 | 0.25 |
| 1959 | 1.17 | 0.94 | 0.15 | 0.22 |
| 1964 | 1.14 | 1.11 | 0.13 | 0.00 |
| 1966 | 1.20 | 0.96 | 0.22 | 0.13 |
| 1970 | 1.13 | 1.06 | 0.13 | 0.33 |
| Mean 45-70 | 1.15 | 0.99 | 0.21 | 0.41 |
| 1974 (Feb) | 1.27 | 1.23 | 0.11 | 0.64 |
| 1974 (Oct) | 1.28 | 1.22 | 0.11 | 0.37 |
| 1979 | 1.22 | 1.15 | 0.12 | 0.59 |
| 1983 | 1.44 | 1.17 | 0.14 | 0.76 |
| 1987 | 1.37 | 1.14 | 0.15 | 0.84 |
| 1992 | 1.23 | 1.22 | 0.17 | 0.64 |
| Mean 74-92 | 1.30 | 0.82 | 0.14 | 0.75 |
| 1997 | 1.47 | 0.79 | 0.43 | 0.42 |
| 2001 | 1.54 | 0.95 | 0.43 | 0.46 |
| 2005 | 1.56 | 0.85 | 0.44 | 0.45 |
| Mean 97-05 | 1.52 |  | 0.43 | 0.44 |

Source: Norris and Crewe (1994) - updated and corrected by the author

The reason why Table 3.5 appears to question our claim that the system has lost its exaggerative quality is clear. Between 1945 and 1970 the ratio of seats to votes won by the winning party was on average just 1.15. Between 1974 and 1992 in contrast this average rose to 1.30 . And to cap it all across the last three elections, all of which occurred since Norris and Crewe wrote, it has been even higher at 1.52. On this evidence the system appears to be even more able to produce a winner's bonus now than it was in the early 1950s when the cube law was first brought forward in defense of first-past-the-post.

Why might we prefer the seats-votes ratio as a means of understanding and analyzing the operation of the single member plurality electoral system? Norris and Crewe offer two reasons. The first is that the measure has "the advantages [sic] of simplicity and comprehensiveness." Neither simplicity nor comprehensiveness is, however, of much use if it is achieved at the expense of appropriateness. Their second reason though is more telling. They argue that "since the government requires a working majority of seats in Parliament over all other parties," it is the advantage that the system gives to the government over all other parties that matters most, not just that which it gives to the government over the opposition party.

But this second reason is not, of course, a justification for all of the various ratios in Table 3.5. Rather it is a justification for the government seats-votes ratio alone. Indeed, we should note that other of the ratios in the table do suggest that the exaggerative quality of the system declined after 1970. Between February 1974 and 1992 the seats-votes ratio for the opposition party was also consistently higher than
it had been previously. Indeed, the rise in the seats-votes ratio for the opposition party was rather greater than it had been for the government, indicating that there was during this period a decline in the ability of the system to exaggerate the lead of the government over the main opposition party. On the other hand, since 1997 at least, the opposition seats-votes ratio has fallen back once more. ${ }^{12}$

How might we account for the apparent long-run increase in the government seats-votes ratio and the rises and falls in the equivalent opposition statistic? One possibility suggested by the table is that part of the answer at least lies in how the electoral system treats third parties. We might note in particular that the system appears to have discriminated against the main third party, the Liberals, to a greater extent between 1974 and 1992 than it did previously. So perhaps the reason why both the government and the opposition ratios increased during that period is that the electoral system became more effective at discriminating against third parties, thereby compensating for its reduced ability to exaggerate the lead of the largest party over the second party.

Alas there are two flaws in this argument. The first is that prior to 1974 the seats-votes ratio for the Liberals is significantly affected by the fact that the party commonly failed in this period to fight half or more of the constituencies. In so doing they reduced their share of the national vote without reducing their number of seats. As a result Norris and Crewe's seats-votes ratio seriously underestimates the extent to which the system was capable of mechanically discriminating against the Liberals prior to $1974 .{ }^{13}$ On the basis of Steed's (1979) estimates of what share of the vote would have been won by the Liberals at each election between 1945 and 1970 if they had fought all the constituencies, the average seats-votes ratio for the Liberals averaged 0.11 in this period, not 0.21 . Thus, even when writing about the February 1974 to 1992 period Norris and Crewe were wrong to conclude that "the centre parties have been increasingly penalised by the system." Rather what distinguished the period from 1974 onward was a decline in the degree to which the system psychologically dissuaded Liberal candidates from standing.

In any event whatever was true of the 1974-1992 period, as we discussed earlier the electoral system has been markedly less effective since 1997 in discriminating against the Liberal Democrats. Here, we but note that while the increase in the Liberal Democrat ratio since 1997 might plausibly account for the decline in the opposition ratio, it renders the further increase in the government ratio yet more perplexing.

So how can we explain the increase in the government ratio? In part it can be accounted for by another problem with the seats-votes ratio. We can show that the seats-votes ratio for the government party will automatically rise simply as a result of an increase in the size of the Liberal vote (which was generally higher after 1974 than it had been beforehand) even if there were not any change in the Liberal seats-votes ratio. We can see this by comparing the outcomes of two simple simulations.

First, we assume that each party wins the shares of the vote they actually obtained in 1955. We then also assume that (a) the distribution of seats between Conservative and Labour is in line with the expectations of the cube law and (b) the Liberals win the number of seats they actually did in 1955 (and thus that their seats-votes ratio is also as it actually was on that occasion). ${ }^{14}$ On these assumptions, the winning party, the Conservatives, with $49.3 \%$ of the vote, would have won 324
seats, or $52.9 \%$ of the total, thereby producing a seats/votes ratio of 1.07 , close to the 1.10 that actually occurred.

We now change the scenario in just one simple respect. We assume that the Liberals secure the $26 \%$ of the vote they actually obtained in 1983, the highest share obtained by Britain's main third party in any general election since 1945. But at the same time we assume that the Conservatives' share of the vote cast for Conservative and Labour combined is exactly the same as it was in 1955. This means that the Conservatives are assumed to win $37.4 \%$ of the total vote. And crucially we also assume that the cube law still operates and that the Liberal seats/votes ratio is unchanged from the 0.33 figure that pertained in 1955. In short we assume that the relative strength of the Conservative and Labour parties is unchanged, together with both the exaggerative quality of the electoral system and the degree to which it discriminates against third parties. Yet despite the fact that the way in which the electoral system operates is exactly as it was in our first scenario, we now find that the Conservative seats-votes ratio would be no less than 1.29. ${ }^{15}$

The explanation is of course quite simple. The absolute number of seats that are "denied" to a party with a seats-votes ratio of 0.33 is far greater if that party's vote is $26 \%$ than if it is $3 \%$. The resulting spoils are shared between the remaining parties, including the government, whose seats-votes ratio rises as a result. Yet nothing has changed in the way in which the electoral system operates. In short changes in the seatsvotes ratio can simply be the product of fluctuations in the popularity of the parties rather than representing changes in the way in which the electoral system is working.

Indeed, this point holds true even if the third-party vote is unchanged. Using the seats-votes ratio to evaluate the operation of the first-past-the-post electoral system implies an expectation that the degree to which the system favors or discriminates against a party will be a linear function of its popularity. Thus, for example, irrespective of whether the government wins $45 \%$ of the vote or $55 \%$ the measure anticipates that its share of seats will be the same multiple of its vote share. Yet if the cube law (or indeed any other power law) is in operation this will not be the case.

We can see this by again comparing two scenarios based on the 1955 and 1983 outcomes. Remember that if the cube law had been in operation in 1955 while everything else was as it was, the seats-votes ratio for the government would have been 1.07. Now we assume that the Conservatives' share of the vote cast for Conservative and Labour was as it was in 1983, while everything else (including the cube law and the seats and votes won by the Liberals) is unchanged. Under these conditions the Conservative vote share of $58.5 \%$ would have garnered them $77.7 \%$ of the seats, thereby producing a seats-votes ratio of 1.33 .

Again the way the electoral system operates has not changed, but the seats-votes ratio has, simply because it is influenced by changes in the popularity of the parties. And given that since 1979 the share of the two-party vote won by the government has averaged $56.3 \%$, compared with only $51.8 \%$ in the period between 1945 and 1974, this helps explain why the government seats-votes ratio has been much higher at recent elections. It also incidentally helps explain why hung parliaments in which no party has an overall majority have not been so common over the last two decades as Curtice and Steed $(1982,1986)$ had anticipated.

## Distinguishing Exaggeration and Bias

There is, however, one further important difficulty with the government seats-votes ratio, an appreciation of which helps explain why that ratio has been so high since 1997. Its value is influenced by two very different aspects of the way in which single member plurality treats the top two parties. One aspect is the degree to which the system exaggerates the lead of the largest party over the second party, irrespective of who that winning party is. This is the feature that the cube law attempts to model and lies at the heart of the case made in favor of the electoral system. The other is electoral bias. By bias we do not mean (as Norris and Crewe misleadingly use the term) that the system gives a party a higher share of seats than it won votes. Rather we mean that it gives one winning party a higher share of the seats for any given share of the two-party vote than it would have given the other party if it had won that same vote share.

The distinction is crucial in any assessment of the ability of single member plurality system to enable the electorate to hold the government to account. On the one hand, the greater the exaggerative quality of the electoral system, the more it helps to hold governments accountable. A high exaggerative quality implies that even if the government currently has a large majority, the opposition can anticipate being similarly swept into majority power on the basis of a relatively small shift of votes. In contrast, the greater the degree of electoral bias, the less the system helps to hold governments accountable. If the current government is treated more favorably by the electoral system than the principal opposition party would be in similar circumstances, the opposition faces an important obstacle in its task of trying to unseat the government. Most seriously of all, it might find that it secures fewer seats that its main rival even if it manages to win more votes.

Recent elections in the UK have in fact demonstrated that not only is the exaggerative quality of the electoral system contingent upon the geographical distribution of party support but also so is the absence of electoral bias. As a result of changes in that distribution the presence of such bias has become a significant feature of how single member plurality has operated at recent UK elections. It is a development that has made it even less credible to argue that the system "continues to work to the standards of its defenders."

## The History of Bias

Electoral bias was in fact recognized as an issue even at the time that the cube law was first being invoked in defense of single member plurality. Thus, although David Butler argued in an influential work of his in the early 1950s that the system largely conformed to the cube law, he also identified a clear bias against Labour, a bias that appeared to be crucial in 1951 when, as we have already seen, the Conservatives won a majority of seats despite winning fewer votes than Labour (Butler 1951, 1952, 1963). ${ }^{16}$ But thereafter interest in electoral bias in the academic literature
declined, despite the fact that in February 1974 the tables were turned when Labour won more seats than the Conservatives despite securing fewer votes. Only recently have any comprehensive studies of electoral bias in the postwar period appeared (see Curtice and Steed 1992; Mortimore 1992; Rossiter et al. 1998; Blau 2001; Johnston et al. 2002, 2006).

Electoral bias can arise from two main sources (Johnston 1979). The first of these is that a party's vote might be concentrated in relatively small constituencies. One obvious reason why this might be the case is because the electorate in the seats won by one of the two largest parties is on average smaller than the electorate in the seats won by the other. But this is not the only possibility. Electoral bias will also appear if the turnout in the seats won by one party is systematically smaller than the turnout in the seats won by the other. It will also occur if third parties win more votes in the seats won by one of the larger parties than in those won by the other, as this also effectively reduces the size of the constituency so far as the top two parties are concerned. ${ }^{17}$

The second main potential source of bias that can arise is if one party's vote is more efficiently distributed than that of its main opponent. The only votes that help contribute toward the election of a candidate are those that enable him or her to secure one more vote than whoever comes second. Any votes secured above that number are surplus to requirements and would be better employed in a different constituency enabling another of the party's candidates to come first. And of course any votes that go to candidates who do not come first are wasted (Johnston 1979). So if one party uses more votes winning seats by a narrow majority than does its principal opponents while at the same time wasting fewer votes building up large majorities or in coming a good second, it can expect to secure a larger number of seats for any given share of the vote.

The actual incidence of these two main sources of bias can be measured using a couple of simple summary statistics whose value for this purpose was first identified by Soper and Rydon (1958). ${ }^{18}$ To measure the first source of bias we compare the overall share of the combined Conservative and Labour vote that went to the Conservatives with the average (mean) of the same statistic in all constituencies. If a party has a higher proportion of its votes concentrated in "smaller" constituencies, then its average constituency vote will be higher than its overall vote. Meanwhile to measure the second source of bias we compare the mean constituency vote with the median. If a party's vote is more efficiently distributed than that of its opponents, its vote in the median constituency will be higher than its mean vote. After all, if a party gets more than $50 \%$ of the vote in half the seats it has almost secured an overall majority, even if across the country as a whole its share of the vote is less than $50 \%$.

Table 3.6 gives details of these two measures for each election since 1955, together with notional estimates for those elections that occurred immediately before a boundary change. As can be seen from the far right-hand column, which shows their combined effect, between 1955 and 1992 the electoral system only occasionally exhibited anything other than mild bias. But at the last three elections it has demonstrated substantial bias toward the winner of those elections, Labour.

Table 3.6 Measures of bias 1955-2005

|  | Conservative \% two-party vote |  |  |
| :--- | :---: | :---: | :---: |
|  | Mean - overall | Median - mean | Median - overall |
| 1955 | +0.3 | +0.6 | +0.9 |
| 1959 | +0.4 | +0.8 | +1.2 |
| 1964 | +0.1 | +0.4 | +0.5 |
| 1966 | -0.3 | +0.2 | -0.1 |
| 1970 | -0.9 | +0.8 | -0.1 |
| 1970 (NT) | -0.1 | +0.5 | +0.4 |
| 1974 (Feb) | -0.1 | -0.5 | -0.5 |
| 1974 (Oct) | -0.3 | +1.4 | +1.1 |
| 1979 | -0.7 | -0.5 | -1.2 |
| 1979 (NT) | -0.1 | +0.9 | +0.9 |
| 1983 | -0.5 | +1.7 | +1.2 |
| 1987 | -0.8 | +1.4 | +0.6 |
| 1992 | -1.2 | -0.0 | -1.2 |
| 1992 (NT) | -0.2 | -0.7 | -0.9 |
| 1997 | -0.4 | -1.6 | -2.0 |
| 2001 | -1.4 | -1.5 | -2.9 |
| 2001 (NT) | -1.1 | -1.4 | -2.5 |
| 2005 | -2.1 | -1.1 | -3.2 |
| 2005 (NT) | -1.5 | -1.0 | -2.5 |

NT: Notional results based on estimates of what the outcome would have been if that election had been fought on the new constituency boundaries that were introduced at the subsequent election Two-party vote: Votes cast for Conservative and Labour combined
Figures are based on all seats in Great Britain. Northern Ireland excluded
Source: Author's calculations

Here, we begin to get some inkling of how it has been possible for the government seats-votes ratio to be so high since 1997 despite the decline in the exaggerative power of the system.

Both sources of bias have in fact gradually shifted in Labour's favor. In the first three elections examined here the Conservative vote was slightly more likely to be concentrated in smaller constituencies. At this time (but not later) the party was relatively successful in Scotland (where constituencies are smaller than in England; see McLean 1995) while in its 1954 review (but not in any thereafter) the English Boundary Commission systematically favored the creation of smaller constituencies in rural areas where the Conservatives were relatively strong. But during the postwar period Britain's population has gradually been moving out of the country's (increasingly) Labour voting cities and into rural areas, with the result that Labour constituencies have gradually become smaller than their Conservative counterparts. While, as the table shows, each boundary review (including the one implemented in 2005 that reduced the number of now predominantly Labour constituencies in Scotland ${ }^{19}$ ) has served to correct this factor, Labour has been at least marginally advantaged from differences in constituency size at every election since 1966. This is in part because each boundary review has been out of date by the time it has been
implemented and in part because turnout has tended to be lower in inner-city Labour seats than in rural Conservative ones, a gap that is unaffected by any boundary review. Indeed this difference in turnout has become increasingly wide since 1992 (Curtice and Steed 1992, 1997, 2001; Curtice et al. 2005). ${ }^{20}$

Meanwhile, changes in the relative efficiency of the two parties' votes have been even more dramatic. Until the February 1974 election, Labour's vote was always less effectively distributed than that of the Conservatives. This was because the party wasted more votes than the Conservatives piling up large majorities in some of its safest seats (Butler 1963). But in the February 1974 election Labour did relatively badly in places where it was already weak - thanks to a strategic squeeze on their vote in such places by the Liberals, with the result that the party wasted fewer votes coming second or third (Steed 1974). Although the previous pattern subsequently tended to reassert itself, further elections confirmed that it was by no means immutable. In both 1979 and in 1992, Labour performed distinctly better in marginal constituencies than elsewhere. Meanwhile in 1997 it consistently performed better in any kind of seat being defended by the Conservatives than in seats it already held (Curtice and Steed 1997). This last development in particular decisively transformed the relative efficiency of the two parties' votes to Labour's advantage, an advantage that was only partially reversed in 2005.

In short, recent experience in the UK has demonstrated that the presence or absence of electoral bias under single member plurality, and the partisan direction of any such bias, is neither guaranteed nor immutable. Rather, just as we argued in respect of the exaggerative quality of the system, the absence of electoral bias is clearly contingent on the geographical distribution of party support (see also Curtice 1992, 2001; Curtice and Steed 1992, 1997, 2001; Curtice et al. 2005; Rossiter et al. 1998; Johnston et al. 2002, 2006). Moreover, given that the exaggerative quality of the system continues to be relatively weak the impact of the electoral bias that has emerged at recent elections has proven to be politically significant.

Consider first of all the experience of 1992-1997 parliament. As we noted earlier, far from producing a single-party government with an overall majority "capable of sustaining the executive for a full parliament" and able to "plan a legislative programme with confidence that it will be passed by parliament" (Norris and Crewe 1994), the pro-Labour bias that began to emerge at that election helped ensure that the Conservative government had an overall majority of just $21,{ }^{21}$ a figure that proved insufficient to withstand subsequent losses occasioned by both by-election defeats and defections. The government eventually formally lost its majority in November 1996, 6 months before the end of the parliament (Butler and Kavanagh 1997). But thanks to divisions within its own ranks, the government's control of the Commons had weakened well before then. On more than one occasion its ability to secure the passage of legislation depended on its ability to strike a deal or understanding with one or more of the minority parties. ${ }^{22}$ And the government decided not to introduce some legislation, such as the privatization of the Post Office, at all because it could not be sure of securing its passage. In short, Norris and Crewe's claims that the electoral system still delivered what its defenders claim of it were being undermined at just the very moment they were writing.

The potential importance of electoral bias was further underlined by the outcome of the 2005 election. Here, the effect of bias was to ensure that the government had a majority when otherwise it might well not have had one. Indeed given the large representation secured by third parties at that election together with the fact that Labour won only $52.1 \%$ of the two-party vote, Labour would not have secured an overall majority at all even if those seats won by Conservative and Labour had been divided between them in accordance with the cube law - Labour would have been left with just 312 seats. Meanwhile, there appears to be a distinct possibility that electoral bias could deny the Conservatives a majority in future even if they should secure a lead in votes. Even though new boundaries will be introduced in England and Wales at the next election, thereby reducing the pro-Labour bias, if the existing electoral geography were to remain in force, the Conservatives would still need a lead of no less than 10.8 points simply in order to secure an overall majority of one. Labour in contrast could be slightly behind the Conservatives and still win an overall majority, while Labour could be up to 5.6 points behind the Conservatives and still win more seats than them. There is evidently a distinct possibility that the existing Labour government might be able to retain power even though it no longer had a lead in terms of popular support. Any such outcome would clearly undermine claims that the system helps deliver accountability.

## Conclusion

This chapter has demonstrated that there have been important and profound changes in the way in which the single member plurality electoral system has operated in the postwar period in the UK. In the early 1950s Duverger's law seemed to operate and, as a result, the system could be defended on the grounds that it ensured that governments were accountable to the electorate. The exaggerative quality of the system largely conformed to the expectations of the cube law, while the system clearly discriminated against third parties. The only mild problem was that it appeared to treat the Conservatives a little more favorably than Labour.

This picture has now been eroded in virtually all respects (see also Blau 2004). First, not only have small nationalist parties been regularly represented in the House of Commons since the 1970s, but more recently the system has also become less effective at discriminating against the Liberal Democrats - albeit still giving them less than half their proportionate share of seats. Second, the exaggerative quality of the system has declined significantly. True, the decline has been stemmed and reversed somewhat at recent elections, but the exaggerative quality of the system is still well below that which pertained in the 1950s. Third, the system now exhibits a major bias in favor of Labour such that there is no guarantee that the party with most votes will secure most seats.

Each of these developments reduced the degree to which single member plurality in the UK can be relied upon to provide a system of alternating government as promised by Duverger's law. Collectively they serve to demonstrate that the way
single member plurality operates is contingent on the electoral geography of party support, making it a far less reliable mechanism for helping to hold governments to account than its advocates presume. It certainly fails Plant's test that it should exhibit a "predictable relationship between votes and seats." In short, while the system still clearly fails to produce anything like a representative legislature, it also cannot be relied upon to help make governments accountable to their voters. A system that fails to fulfill either of the major functions of democratic elections would seem difficult to defend indeed.

## Notes

1. Although not in a wide variety of other elections, including those to the European Parliament, the Scottish Parliament, and the Assemblies in Northern Ireland, Wales and London, together with local elections in both Scotland and Northern Ireland.
2. Prior to that date a small number of MPs were elected in double member plurality constituencies while a further handful were elected in "university seats" in which an electorate of university graduates elected MPs using the single transferable vote.
3. In 1983 and 1987 the Liberal Party fought the election in an electoral alliance with the newly formed Social Democrat Party; the two parties merged in 1988 to form the Liberal Democrats.
4. Moreover the number of MPs from Northern Ireland was increased from 12 to 17 in 1983 (and subsequently to 18 in 1997).
5. We should note that the party has also benefited from the relative weakness of the Conservative party at the last three elections. The Liberal Democrats are more often in competition locally with the Conservatives than with Labour, and thus are more likely to win seats when Conservative support is low.
6. The most revision of boundaries has been introduced in two stages. New constituencies were introduced in Scotland only after the 2001 election, following a decision to cut the number of seats in that part of the UK from 72 to 59. Since the 2005 election the necessary legislation has been passed to introduce new constituencies in the rest of the UK. In England and Wales new constituencies will be implemented at the next election.
7. The estimates for 1979 can be found in BBC/ITN (1983), those for 1992 in Rallings and Thrasher (1995), those for 2001 in Denver et al. (2004), and those for 2005 in Rallings and Thrasher (2007b).
8. This position would be reached if there were only 60 marginal seats.
9. In contrast, there has not been any variation in the swing between urban and rural seats between 1987 and 1997. Note that between 1992 and 1997 the difference in swing between the North and the South appears for the most part to have been a by-product of a general tendency for Conservative support to fall generally where its support was previously strongest irrespective of geographical location, and not a genuinely regional movement. The implications for the operation of the electoral system are, however, exactly the same. For further details see Curtice and Steed (1997).
10. The Conservatives also performed relatively well in rural seats between 1997 and 2001. See Curtice and Steed (2001): 314-315.
11. We would note, however, that both measures are unable to distinguish between the impact of the exaggerative quality of the electoral system and that of electoral bias as defined later. Even so, it is worth noting that even in 1997, when it benefited from significant electoral bias, Labour still fell 11 seats short of the expectations of the cube law. The Tufte regression method also falls foul of the other criticisms of the seats/votes ratio that we make here, viz., that it assumes
a linear relationship between votes and seats. Meanwhile, neither method can tell us whether the cube law is a general law that would pertain for all divisions of the national vote.
12. Indeed, we might note that one incidental advantage that Norris and Crewe's approach has is that it illustrates that it is wrong to presume that single member plurality mechanically benefits both the largest parties at any one point in time (Benoit 2006). Rather, the combined effect of the exaggerative quality of the system, and its impact on third parties can be to benefit the largest party alone over smaller parties. Indeed, it is this characteristic that helps it produce single-party majority governments.
13. As opposed to its psychological effect in limiting the number of Liberal candidatures.
14. To simplify matters we also exclude Northern Ireland.
15. The Conservatives would win 299 seats, $48.4 \%$ of the total. Note therefore that despite the rise in the government seats-votes ratio the system would not have given the Conservatives an overall majority. The government seats-votes ratio is not therefore a reliable guide to the ability of the system to deliver the majority over all other parties, the characteristic on which Norris and Crewe themselves place such importance in advocating the use of their statistic.
16. The picture is though somewhat clouded by the fact that four Unionist candidates were returned unopposed in Northern Ireland, thereby depressing the Conservative total, while the party also failed to fight eight seats on the mainland. These might have been sufficient to account for the Conservative deficit of just over 130,000 votes.
17. Of course, this only remains true for so long as the third party does not win the seat. Then votes cast for any other party are wasted. This factor is not considered in detail here. Rossiter et al. (1998) demonstrate that this came increasingly to disadvantage the Conservative party as not only has the number of seats won by third parties increased, but so also has their concentration in seats that would otherwise be won by the Conservatives. There was though some reversal of this pattern in 2005 (Johnston et al. 2006).
18. For a more elaborate analysis using the method developed by Brookes (1960) and distinguishing between the various contributions toward the first source of bias, see Rossiter et al. (1998) and Johnston et al. (1999, 2002, 2006). Their substantive conclusions do not differ from ours.
19. This is shown by the difference between the figures for 2001 and 2001 (NT).
20. Labour's advantage would be even greater but for the fact that the third-party vote has (until 2005 at least increasingly) been concentrated in seats won by the Conservatives.
21. If the geography of party support had been the same as it was in 1987, the Conservatives would have had a majority of 59 . Meanwhile, if the cube law had still been in operation their majority would have been no less than 129.
22. And note that these deals and understandings usually involved not only the Liberal Democrats, but also the Ulster Unionists. As Curtice and Steed (1982) argued, the existing system makes it more likely that very small parties will have the opportunity to exert leverage over the government than would be the case under any system of proportional representation.

# Chapter 4 <br> Strategic Voting in the USA* 

Barry C. Burden and Philip Edward Jones

Because of its dominant two-party system, America is often seen as a prime example of a Duvergerian equilibrium. Indeed, as the editors of this volume note in their Introduction, it may be the only example available without significant caveats or qualifications. To researchers seeking to understand the "psychological effects" behind Duverger's law (1954) that link electoral systems to party systems through the strategic behavior of voters, the USA seems to provide little data to analyze (Benoit 2006; Cox 1997). Faced with only two parties to choose from, the act of voting appears simpler and more sincere than in other democracies. Since the effects underlying Duverger's law have already unfolded and led to two-party dominance, surely the USA can tell us little about the psychological effects of electoral systems and their accompanying behavior, strategic voting. We contend that this conventional wisdom is in need of modification.

We agree with existing scholarship that views the USA as the paradigmatic Duvergerian equilibrium. The enduring dominance of two parties in the USA is evidence for the success of Duverger's law. We agree that two-party competition is more common in the USA than just about any other democratic nation. And we concede that sincere voting is always the dominant strategy in an election with just two alternatives. But this does not mean that researchers can learn nothing of the psychological effects that led to these outcomes.

We find it helpful to enumerate the specific forces that encourage strategic voting. They are (1) opportunity, (2) ability, and (3) motivation. As Blais et al. (Chap. 2, this volume) show, a potential "strategic" voter does not always cast a strategic vote; only under certain scenarios does it make sense for a voter to consider abandoning their most preferred candidate (see also Alvarez et al. 2006). Whereas ability and motivation are determined largely by the individual, opportunities are determined by the electoral system. Although we have little to say about cross-national differences in ability and motivation, we argue that Americans in fact have many more opportunities for strategic behavior than voters in other nations.

[^4]We conceive of the number of strategic voting opportunities as a function of various institutional and electoral factors. The opportunity to vote strategically increases with the number of elections held, the number of parties and candidates contesting each election, the sequencing of elections, and the number of separately elected officials who must work together to make policy. Once we consider each of the factors affecting strategic opportunities, it becomes apparent that the US system offers voters more chances to act strategically than in most other countries - and thus many chances for researchers to investigate the psychological underpinnings of Duverger's law.

The sheer frequency with which Americans are called upon to vote has already been noted (Boyd 1981), but few have pointed out that this also multiplies the opportunities for strategic voting. Consider a voter living in Jacksonville, Florida in 2004. This voter was given the opportunity to select candidates for 10 offices and one referendum in the August primary election. In the general election 3 months later, the same voter would have faced 19 candidate elections and a dozen constitutional amendments. Offices ranged from president to county commissioner and judges at various levels, many of which featured multiple candidates. Simply by virtue of the large number of elections held, voters have more opportunities to act strategically. In this chapter we investigate three additional features more or less unique to the American electoral system that increase the opportunity for strategic voting.

First, strategic considerations are operative whenever a third-party candidate appears in a general election. Scholars must be careful not to assume that two-party dominance is the same as the absence of other parties. Although minor parties seldom win in the USA, they run much more often than is commonly recognized. The presence of the Electoral College and threshold requirements for receiving public funding only heighten these considerations.

Second, primary elections, an almost uniquely American device for nominating party candidates, frequently feature multiple candidates. Because candidates for nearly every office must first win primaries to be nominated for the general election, this effectively doubles the number of elections in which strategic voting could occur. This is especially true in presidential primaries where often a large field of strong candidates seeks a party's nomination. The sequential nature of presidential primaries also increases the opportunity to vote strategically, as voters' first-choice candidates are shown to be less viable or electable as the contest unfolds.

Third, presidentialism and federalism create opportunities for strategic decisions across offices. Voters must anticipate the dizzying number of combinations of parties in the presidency, Congress, governorship, state legislature, mayor's office, and other positions that could operate in concert to produce policy outcomes. It is possible that policy-oriented voters would balance these competing offices by voting strategically for different parties in each office.

Finally, we also note that there are frequently other types of elections in which strategic voting is encouraged. These include runoff primaries used in the American South, the wide open "jungle" primary used in Louisiana, the blanket primary experiment in California, and the 2003 California gubernatorial recall election.

Other chapters in this volume display the power of Duverger's law to account for the number of viable parties in a political system. Yet the authors also point out practical limitations such as regional parties, multiple dimensions of partisan conflict, or even the measurement of what counts as an effective party. Rather than evaluate the applicability of Duverger's law to the American case, we show that much can be learned about the psychological mechanisms behind the law, even in cases where the effects appear to have already taken place. Following the four points mentioned earlier, we illuminate the many opportunities for strategic voting in general elections due to third parties, in primaries due to multicandidate competition, across offices due to balancing considerations, and in several other types of elections.

## General Elections

The winner-take-all system used in most US elections renders strategic voting useless when only two candidates are running. But the calculus changes as soon as a third-party candidate enters. If the expected vote shares of the Democratic and Republican nominees are close, then even a third-party candidate with a small amount of support has the potential to change the outcome. ${ }^{1}$ State ballot access rules are critical in shaping the likelihood that minor party candidates will emerge (Burden 2008; Rosenstone et al. 1996). Take the 2004 presidential election as an example. In Oklahoma, where over 35,000 signatures must be collected by midsummer to earn access, there were no minor party candidates on the presidential ballot. But in Colorado, where just a small fee or 1,000 signatures are adequate, ten presidential candidates appeared alongside Bush and Kerry. Nationwide no fewer than 16 parties appeared on at least one state ballot in 2004.

The variability across states is also true at the subpresidential level. Table 4.1 reports the number of elections over three recent electoral cycles for the House of Representatives, Senate, and governorships in which at least three candidates were on the ballot. It is striking that for all three offices a majority of races provided opportunities for strategic action. More than $80 \%$ of Senate and gubernatorial races featured multicandidate competition. While many of these minor party and independent candidates were unlikely to win, a close election makes even the smallest of competitors relevant.

Table 4.1 General elections featuring three or more candidates (1998-2002)

| Office | Number | Percentage |
| :--- | :--- | :--- |
| House | 752 out of 1305 | $57.6 \%$ |
| Senate | 83 out of 102 | $81.4 \%$ |
| Governor | 69 out of 80 | $86.3 \%$ |
| Total | 904 out of 1487 | $60.8 \%$ |

Note: Data include even year elections only
Some odd year gubernatorial elections omitted
Source: Congressional Quarterly

At the presidential level, third-party candidates have frequently challenged the Democrats and Republicans. Strom Thurmond (1948), George Wallace (1968), John Anderson (1980), Ross Perot (1992 and 1996), and Ralph Nader (2000 and 2004) all received sustained media attention and votes, even if they ultimately lost. The Electoral College adds another wrinkle to Duverger's logic. American presidents are formally chosen by electors, who are largely chosen by winner-take-all rules within each state. ${ }^{2}$ The nationwide popular vote has no direct bearing on who wins. The twist added by the Electoral College is thus that voters must consider both the closeness of the major-party vote in their states and the likely electoral vote nationwide, a combination that makes strategic voting even more salient.

It is surprising, then, that the most comprehensive academic treatment of thirdparty voting in America devotes not more than a few sentences in a 300-page book to strategic voting (Rosenstone et al. 1996). As Burden (2005b, 604) puts it, "Despite its importance, political scientists know relatively little about the prevalence or causes of strategic voting in the U.S." Let us consider to what extent voters take advantage of the strategic opportunities available to them.

As a preliminary exploration, Table 4.2 shows the degree to which voters in the 1992 presidential election considered voting for other candidates using data from the National Election Study (NES). This is determined by first asking respondents for whom they voted. For a respondent who chose independent H. Ross Perot, the follow-up question asks, "Was there ever a time when you thought you were going to vote for Clinton or Bush? Which one?" The table shows that while many voters considered other candidates, this was much more likely among Perot voters. The strategic considerations that surround a vote for Perot should cause many of his supporters to waver over the course of the campaign as the expected outcome changes. Indeed, only a quarter of Perot voters failed to consider other candidates while more than half of George H.W. Bush and Bill Clinton's voters did.

Extending Alvarez and Nagler's analysis of the 1992 presidential election, Lacy and Burden (1999) argue that third-party candidates are often able to increase voter turnout by mobilizing citizens who would otherwise abstain (see also Magee 2003; Southwell 2004). Burden (2003) extends these ideas by distinguishing between "direct" turnout effects caused by supporters of the third-party candidate turning out and "indirect" turnout effects whereby the third party candidate's presence

Table 4.2 Consideration of other presidential candidates by vote choice (1992)

|  | Final vote choice |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  | Bush | Clinton | Perot |
| Other | Bush | - | $10 \%$ | $37 \%$ |
|  | Clinton | $10 \%$ | - | $34 \%$ |
|  | Perot | $28 \%$ | $31 \%$ | - |
|  | Both Others | $3 \%$ | $3 \%$ | $6 \%$ |
|  | No Others | $59 \%$ | $55 \%$ | $23 \%$ |
|  | $N$ | 560 | 786 | 312 |

Source: 1992 National Election Study
mobilizes supporters of the major party candidates to vote. In the 2000 election these authors find that without Nader on the ballot, perhaps a third of his supporters would have abstained. The remainder would have gone to Gore by a two to one margin. This is what Lacy and Burden (1999) refer to as a "vote-stealing effect." This effect in 2000 would have been enough to put Florida in the Democratic column and change the outcome of the election (Burden 2003; Magee 2003). In their study of the 1968 election, Converse et al. (1969) estimate that more of George Wallace's voters would have gone to Richard Nixon than to Hubert Humphrey. Wallace's presence made the election closer than it otherwise would have been. These are of course difficult counterfactual questions to answer, and assessing the degree of strategic voting should be easier.

The ideal survey-based measure of strategic voting requires both evaluations of the candidates (often through "feeling thermometers") and assessments of each candidate's chances of victory (Abramson et al. 1995; Blais and Nadeau 1996). The latter are frequently absent, but "candidate thermometer scores provide important indirect evidence about problems facing third-party and independent candidates" (Abramson et al. 1995, 360). As example of this approach, we compute rankings among those who evaluated three presidential candidates in the 2000 election. To be included, a respondent in the postelection wave of the NES must have ranked all three candidates and without ties for first place.

Table 4.3 reports the results. Using candidate-feeling thermometers to create preference rankings, we observe that well over $90 \%$ of those who preferred Democrat Al Gore and Republican George W. Bush report voting for those candidates. But only about one in five of those who preferred Nader voted for him (see also Burden 2003; Hillygus 2007). The remainder split between the other two candidates, with somewhat more going to Gore. ${ }^{3}$

We also see that 133 out of 834 voters ranked Nader first, suggesting that $16 \%$ of the active electorate favored Nader. But only $19 \%$ of those supporters actually voted for him. Thus, the strategic voting rate among Nader supporters was $81 \%$, which represents a surprising $13 \%$ of the total electorate ( $81 \% \times 16 \%$ ). In Table 4.4 we repeat this calculation for each of the presidential elections in the NES time series in which there was a substantial minor party candidate. These data mirror what researchers using the same technique have found elsewhere (Abramson et al. 1995; Burden 2003).

Table 4.3 Ranking and vote choice in 2000

|  | Preferred Candidate |  |  |  |
| :--- | :--- | :---: | :---: | :---: |
|  |  | Bush | Gore | Nader |
| Actual | Bush | $95 \%$ | $7 \%$ | $23 \%$ |
| Vote | Gore | $5 \%$ | $93 \%$ | $59 \%$ |
|  | Nader | $1 \%$ | $0 \%$ | $19 \%$ |
|  | $N$ | 357 | 344 | 133 |

Source: 2000 National Election Study. Ties omitted. Totals may not add to $100 \%$ due to rounding

Table 4.4 Strategic voting among minor party supporters

| Candidate (party) | Year | Among <br> supporters | In full <br> electorate |
| :--- | :--- | :--- | :--- |
| George Wallace (American independent) | 1968 | $16 \%$ | $2 \%$ |
| John Anderson (independent) | 1980 | $43 \%$ | $6 \%$ |
| H. Ross Perot (independent) | 1992 | $21 \%$ | $4 \%$ |
| H. Ross Perot (Reform) | 1996 | $55 \%$ | $7 \%$ |
| Ralph Nader (Green) | 2000 | $81 \%$ | $13 \%$ |

Source: Various national election studies

There are two lessons to take from these results. First, the overall levels of strategic voting are comparable to those found in other nonpresidential SMD systems such as Canada and the UK (Blais et al. 2001; Gschwend 2005). The range among the full electorate is from $2 \%$ in 1968 to $13 \%$ in 2000. Second, across these five cases it appears that strategic voting increased almost monotonically (aside from Perot's second run in 1996). This upward trend transcends a great deal of variety among candidates in terms of votes earned, ideological positions, and potential impact on the election outcome. Some might go so far as to call this learning on the part of voters based on experience with multiple third-party campaigns over the years.

In an apparent contradiction of Duverger's law, it is also possible that strategic voting can help rather than harm a minor party candidate. If the major party race is lopsided enough, this effectively frees up voters who are sympathetic to the third party to do as they please without fear of affecting the election result. This has been called "expressive" or "inverse tactical" voting (Tsebelis 1986). Burden (2005b) shows that Nader benefited from expressive strategic voting in 2000 in states where the outcome was clearly expected to favor one party. Ironically, insincere voting can sometimes boost a third-party candidate's vote share. ${ }^{4}$

The other factor that may improve a third party's support is a threshold. In proportional electoral systems, a threshold determines the minimum share of the vote required for representation in the legislature. Sympathetic voters might vote more for a small party if it is jeopardy of falling just below the minimum. Looking primarily at the German case, Cox (1997) refers to this form of strategic voting as "threshold insurance." A heretofore unappreciated threshold in the USA concerns standards set by the Federal Elections Commission (FEC) for earning federal matching funds. Specifically, a minor party must earn 5\% of the popular vote to be eligible for public funding in the next presidential election. In 2000, Nader pursued a " $5 \%$ strategy" so that his Green Party could benefit from the rule (Burden 2005a). Although eventually shut down by authorities, online "Nader trader" sites emerged to allow Nader supporters in "safe" states to trade their votes with others in battleground states. This might have allowed Nader to reach the 5\% threshold without jeopardizing the election. In short, electoral institutions such as the Electoral College and thresholds can work against Duverger's law to some degree by encouraging votes for third parties.

## Primary Elections

General elections are by no means the only opportunity for Americans to cast a vote, whether strategic or not. Primary elections, which select party nominees, are a crucial feature of the American electoral landscape. Indeed, in many districts there is little competition between the parties in the general election, so the real choice occurs in the primary (Key 1949). Much of the research that has been conducted in this area concerns presidential nominations (Norrander 1996) and we focus on this when summarizing previous findings. At the same time, we acknowledge that primary elections are held at almost every level, not just for presidential nominations. In at least three respects primaries multiply the opportunities for strategic voting.

First, primaries regularly feature multiple candidates. Table 4.5 shows the number of primary contests that featured three or more candidates in 1998, 2000, and 2002, disaggregated by the office on the ballot. Across the three election cycles studied, around one in ten House primaries, three in ten Senate primaries, and four in ten gubernatorial primaries featured more than two candidates.

Second, primaries are intraparty contests, rendering heuristics like party affiliation of little use to voters. Since candidates must differentiate themselves other than with their party labels, voters may be encouraged to evaluate them in ideological terms (Kenney and Rice 1992; Monardi 1994; Norrander 1986; Wattier 1983). ${ }^{5}$ When these sorts of instrumental concerns are made salient, strategic voting is more likely to occur.

Finally, the characteristics of those who participate in primaries also increase the probability that they will cast a strategic vote. Primary voters tend to be older, more politically sophisticated, more informed about the campaign, and more interested in politics (Bartels 1988; Ranney and Epstein 1966; Norrander 1986, 1991; Geer 1988; Nownes 1992). The greater awareness of primary voters relative to general election voters makes strategic voting a stronger possibility at the primary stage. ${ }^{6}$

In the USA direct primaries thus offer the potential for widespread strategic voting: multiple candidates, no simple cues to differentiate them, and an electorate more capable of casting a sophisticated vote. As with multicandidate general elections, primary voters may use evaluations of candidates and perceptions of their ability to

Table 4.5 Major party primaries featuring three or more candidates

|  | 1998 | 2000 | 2002 |
| :--- | :--- | :--- | :--- |
| US House | $96(870)$ | $87(870)$ | $97(870)$ |
|  | $11 \%$ | $10 \%$ | $11 \%$ |
| US Senate | $21(68)$ | $21(68)$ | $16(68)$ |
|  | $31 \%$ | $31 \%$ | $24 \%$ |
| Governor | $30(72)$ | $6(22)$ | $38(66)$ |
|  | $42 \%$ | $27 \%$ | $58 \%$ |

Note: Total number of primaries shown in parentheses Source: Data from Elisabeth Gerber and Rebecca Morton
win the nomination when casting their vote (Abramson et al. 1992). Following Duverger's psychological effect, primary voters avoid "wasting" their vote in the same way that voters in other multicandidate races do.

As in the case of third-party voting, differentiating voters' evaluations of candidates and perceptions of their ability to win the nomination is difficult; however, a voter's most-preferred candidate is often also viewed as the most likely to win (Bartels 1985). Abramowitz (1987), Bartels (1988), and Brady and Johnston (1987) all find similar effects in the 1984 Democratic primaries: assessments of Walter Mondale and Gary Hart's relative chances of winning the nomination affected voters’ evaluations of those candidates.

The primary system allows for further strategic considerations to enter the vote decision. Voters may also take into account each candidate's "electability" - the probability that they will win the general election. In addition, voters may act in an even more strategic manner by choosing which party's primary to vote in, as well as which candidate to support.

## Electability

A primary vote can be "wasted" in two ways: by choosing a candidate who cannot win the nomination, or by choosing a candidate who cannot win the general election. Although party activists are often characterized as ideologically motivated "purists" who pull candidates away from the center of politics (Polsby and Wildavsky 1980; Aldrich 1995; Fiorina 2005), primary voters also care about the probability that a candidate has of winning the election if nominated. Stone and Abramowitz (1983), for example, find that delegates to the party conventions in 1980 actually weighed perceptions of electability more heavily than ideology in choosing a presidential candidate. Even activists solely seeking policy benefits know that their candidate must win both the primary and general elections in order to distribute these benefits. Voters thus follow an expected utility model, discounting ideological preferences by the perceived chances each candidate has of gaining office (Aldrich 1980; Stone 1982; Stone et al. 1992).

Estimates of the numbers of voters who act strategically (by choosing a more viable or more electable candidate than their first choice) in any given primary vary somewhat: $18 \%$ in the 1984 Democratic presidential primaries (Southwell 1989), $13 \%$ in the 1988 presidential primaries (Abramson et al. 1992), and $18 \%$ in the 1988 Super Tuesday primaries (Southwell 1991).

Although not a majority, these voters may still have an important impact on the nomination process. Presidential primaries consist of a series of sequential elections over several months - and earlier contests may affect the voting calculus that later participants use. The outcomes of previous primaries can affect perceptions of candidates' electability and viability (Abramowitz 1987, 1989). Voters faced with limited information about who is most likely to win often rely on cues from previous primary elections (Bartels 1988; Fey 1997; Morton and Williams 2001).

These cues are not simply who won the largest percentage of the vote: media interpretations of primary outcomes (Keeter and Zukin 1983) and the volume of news coverage (Patterson 1980) can affect voters' perceptions. Small amounts of strategic voting in early primaries can therefore affect the calculus of a strategic voter's decision in later primaries (Gurian 1990). Aside from presidential runoff elections in some countries, this dynamic of sequential elections on strategic voting is unique to the US system.

## Crossover Voting

Some primary elections also allow voters to act in an even more strategic manner. Wisconsin's primary laws, for example, allow any registered voter to participate in any party's primary just by showing up on election day. ${ }^{7}$ Republicans may choose to participate in Democratic primaries, and Democrats may choose to vote in Republican primaries. Having a sincere preference for one party's candidate in the general election, "raiders" may enter the opposing party's primary to vote for a weaker candidate to face their preferred choice in the fall (Chen and Yang 2002; Cherry and Kroll 2003). Strategic voting in this sense has two steps: the decision to vote in the primary of the party opposing their preferred general election candidate (here, "crossover voting"), and then the decision to vote for the least electable candidate in this primary.

The rules determining who may participate in a party's primary differ by state. To first show how much crossover voting is possible, we use data that codes each primary according to how "open" it is to voters from another party. Purely closed primaries allow only registered party members to participate while semiclosed primaries allow registered party members and independents to vote. Purely open primaries allow voters with any party registration to choose privately which party's contest they wish to vote in, while semiopen primaries act in the same way, but require some public declaration by the voter as to which primary they will vote in. ${ }^{8}$

Some states have participation rules that do not fit this typology; we discuss these in more detail later in the chapter. As Table 4.6 shows, a substantial proportion

Table 4.6 Laws governing primary participation, 2002

|  | US House | US Senate | Governor |
| :--- | :--- | :--- | :--- |
| Purely closed | 124 | 7 | 12 |
|  | $29 \%$ | $21 \%$ | $36 \%$ |
| Semiclosed | 53 | 9 | 4 |
|  | $12 \%$ | $26 \%$ | $12 \%$ |
| Semiopen | 151 | 13 | 4 |
|  | $35 \%$ | $38 \%$ | $12 \%$ |
| Purely open | 38 | 4 | 6 |
|  | $9 \%$ | $12 \%$ | $18 \%$ |
| Others | 69 | 1 | 1 |
|  | $16 \%$ | $3 \%$ | $3 \%$ |

Source: Data from Elisabeth Gerber and Rebecca Morton
of primary voters in 2002 were given the opportunity to crossover and vote for the nominee of a party they were not registered with.

In Table 4.7, we present previous researchers' estimates of how many primary voters take these opportunities to participate and vote strategically. Our metaanalysis shows estimates of the proportion of primary voters who are crossovers in two senses: first, only those who identify with a party other than the one whose primary they participate in ("crossover partisans"), and second, all those who do not identify with the party of the primary they voted in ("all crossover voters," which includes independents).

Where possible, we also show the number of potential "negative strategic voters" (Southwell 1989, 1991). These are crossover voters who do not expect to vote for the party's candidate in the general election. In particular, fears of crossover voters "raiding" primaries assume that these voters choose the weakest (least electable) candidate for their party's nominee to face in the general election.

Crossover voters make up a substantial proportion of primary voters, ranging from $18 \%$ in the Super Tuesday presidential primaries of 1988 to $49 \%$ in one study of the 1980 presidential primary in Wisconsin. However, there is little evidence that these "crossover" voters deliberately choose the weakest candidate in the other party's

Table 4.7 Percentage of primary voters who vote strategically

|  | Year | Primary | Crossover partisans | All crossover voters | Negative strategic voters |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Ranney and Epstein 1966 | 1964 | Wisconsin governor | 6.2\% |  |  |
| Adamany 1976 | 1964 | Wisconsin president | 15.6\% | 24.6\% |  |
|  | 1968 | Wisconsin president | 12.4\% | 23.2\% |  |
|  | 1972 | Wisconsin president | 16.7\% | 27.1\% |  |
| Hedlund et al. 1982 | 1976 | California president | 5.0\% | 29.0\% |  |
|  | 1976 | Florida president | 6.0\% | 31.0\% |  |
|  | 1976 | Pennsylvania president | 3.0\% | 29.0\% |  |
| Abramowitz et al. 1981 | 1976 | Virginia governor | 20.0\% |  | 10.0\% |
| Hedlund 1977-1978 | 1976 | Wisconsin president | 6.0\% | 44.0\% |  |
| Hedlund et al. 1982 | 1976 | Wisconsin president | 9.0\% | 43.0\% |  |
|  | 1980 | Florida president | 4.0\% | 29.0\% |  |
|  | 1980 | Pennsylvania president | 3.0\% | 25.0\% |  |
|  | 1980 | Wisconsin president | 11.0\% | 49.0\% |  |
| Wekkin 1988 | 1980 | Wisconsin president | 10.0\% | 34.7\% |  |
| Southwell 1989 | 1984 | Presidential primaries | 3.6\% | 26.9\% | 8.5\% |
| Hedlund and Watts 1986 | 1984 | Wisconsin president | 8.0\% | 43.0\% | 2.0\% |
| Norrander 1991 | 1988 | Super Tuesday | 14.0\% | 18.0\% |  |
| Southwell 1991 | 1988 | Super Tuesday |  |  | 4.3\% |

[^5]primary to benefit their own party's candidate in the general election. Instead of "raiding" the primary, crossover voters choose the candidate closest to their own ideological positions. This dynamic provided Senator John McCain with additional votes in the 2000 New Hampshire presidential primary as moderate Democrats and Independents crossed over to support him. Once they have decided to vote in the opposing party's primary, these potentially strategic participators cast a sincere vote (Abramowitz et al. 1981; Adamany 1976; Hedlund 1977-1978; Hedlund et al. 1982; Norrander 1991; Southwell 1989). Indeed, if a strong party nominee is one who can appeal to independent and opposing partisans in the general election, then widespread crossover voting may strengthen - not weaken - the party's chances in November. ${ }^{9}$

The direct primary thus offers voters a large number of opportunities and ways to act strategically. Although we stress how widespread these opportunities are, we return later in the paper to some more unique rules that allow for strategic voting. First we turn to the effects the institutional context of US policymaking has on strategic behavior.

## Strategic Balancing

Federalism and the separation of powers in the USA multiply the settings in which strategic voting can take place. Policy outcomes are the result of the actions of multiple politicians holding different offices. A truly instrumental voter ought to think not only about who her representative is but about the overall configuration of preferences represented in government. A policy-oriented voter should thus consider the outcome of presidential and congressional elections simultaneously.

All that is required for this opportunity is that at least one of the elections is contested. In the postwar era roughly $90 \%$ of House elections were contested (Wrighton and Squire 1997). As a consequence, in contrast to the other settings we have considered, the opportunities for strategic behavior are most plentiful when it comes to cross-office balancing. At the same time, the sophistication required is greater because of the counterintuitive role played by ideology in balancing. This steep learning curve works against the other two factors driving strategic voting ability and motivation - and might therefore dampen the effects of opportunity.

Fiorina's (1996) "policy balancing" approach hypothesizes that moderate voters would prefer to have the legislative and executive branches under the control of different parties rather than have single party control of government. With divided government, parties with opposing ideologies are forced to compromise, resulting in policy outcomes closer to the median voter's ideal point. That moderate voters are more likely to split their tickets is thus consistent with the theory but not proof of it since many theories, such as those emphasizing the importance of party identification, make the same prediction (Burden and Kimball 2002; Jacobson 1990; Wattenberg 1998).

An important prediction, which Fiorina calls the "most important point" of balancing theory, is that party polarization will increase strategic ticket splitting. This helps to
separate balancing from models that allow for sincere rather than strategic split-ticket voting (Frymer et al. 1997; Grofman et al. 2000). The balancing model thus has two predictions: the necessary but insufficient condition that moderates split their tickets more than extremists, and the critical corollary that polarization heightens ticket splitting.

Tests of the balancing model have yielded mixed results. Simply measuring the degree of split-ticket voting, which ranges from 12 to $30 \%$ in modern presidential elections and may run as high as $40 \%$ when multiple levels of government are considered (Campbell and Miller 1957), does not provide evidence one way or the other. Several articles find support for the polarization corollary, but each does so only after modifying Fiorina's original conceptualization in some fundamental way such as introducing nonseparable preferences or voter coordination (Lacy and Paolino 1998; Lewis-Beck and Nadeau 2004; Mebane 2000; Smith et al. 1999).

While some studies find no relationship between polarization and split-ticket voting (Alvarez and Schousen 1993), most analyses find just the opposite of the polarization corollary: split-ticket voting actually decreases as the parties polarize (Born 1994; Brunell and Grofman in press; Burden and Kimball 2002; Kimball 2004; Garand and Licthl 2000; Geer at al. 2004; Mattei and Howes 2000; Soss and Canon 1995). Such a negative finding is not especially surprising since balancing requires much more of voters than other forms of strategic voting. They must understand either federalism or separation of powers, be able to locate themselves and candidates on the same ideological continuum, and reason from election outcomes to policy outcomes.

Here, we briefly update and expand this literature to further test the polarization corollary. Table 4.8 begins by simply correlating split-ticket voting with perceived distances between the parties using individual level data from the 2000 National Election Study. Ticket splitting is considered in three ways: RD splitting, DR splitting, or both directions at once. ${ }^{10}$ To be as generous as possible to balancing theory, we measure party polarization in five different ways using the seven-point ideological placement questions: general distance between the parties, distance between presidential candidates George Bush and Al Gore, distance between House candidates running in a district, distance between Bush and the Democratic House candidate, and

Table 4.8 Perceived polarization and strategic ticket splitting in 2000

|  | Distance between parties | Distance between presidential candidates | Distance between House candidates | Distance between Bush and Dem. House candidate | Distance between Gore and Rep. House candidate |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Split vote | -0.04 | -0.08* | -0.13* | -0.19** | -0.21 ** |
| RD vote | -0.02 | -0.01 | -0.03 | -0.16 | -0.06 |
| DR vote | -0.03 | -0.09* | -0.14* | -0.09* | -0.20 ** |

[^6]distance between Gore and the Republican House candidate. Regardless of the measure, the results provide no support for strategic balancing. All 15 of the correlations are negative and 8 of them are statistically significant at conventional levels. To the degree that voters are considering ideology at all, it appears to be in relation to the House candidate from one party relative to the presidential candidate from the other party. But ticket splitting decreases, not increases, as these distances grow.

To consider these relationships in a more descriptive form, Table 4.9 shows the mean RD and DR distances (again, as perceived by the respondent) for each of the four voting patterns. If strategic balancing occurs, distances should be greater among those who cast split tickets. Instead, the data again show exactly the opposite pattern. Straight ticket (RR and DD) voters perceive larger distances between presidential and House candidates, a finding that undermines widespread balancing. Whether this is a function of ability and motivation we cannot be sure, but it does suggest that factors beyond opportunity alone contribute to ticket splitting.

As a final take on this question, we move from the individual to the aggregate level. In Table 4.10 we regress several measures of polarization on indicators of split-ticket voting. The two dependent variables are total major-party split-ticket voting as reported in the NES and the percentage of House districts that were "split" between 1972 and 2004. The three independent variables measuring polarization are the percentage of respondents who see "important differences" between the parties, party polarization in the House measured with differences in mean NOMINATE scores, and differences between parties' ideological placements in the NES. We cycle through all combinations of independent and dependent variables. In each model we control for the percentage of NES respondents who report being "independents" to be certain that split-ticket outcomes are not merely a reflection of changing party loyalties. The models show no support for strategic balancing in any case. Although the effect of independents is generally positive, as would be expected, polarization is significantly and negatively related to ticket splitting in all but one combination.

Split-ticket voting occurs and is predictable at both the individual and aggregate levels, but this variation is not consistent with strategic balancing. Although we have not exactly estimated how much strategic voting occurs via balancing, the Campbell and Miller (1957) conclusion that issue motivation encourages straight not split ticket voting is well supported. In their words, "the more highly motivated [the voter] is toward this political objective, the less willing he is to dilute his vote by crossing party lines" (p. 303).

Table 4.9 Perceived polarization and voting patterns in 2000

| Presidential vote | House vote | RD distance | DR distance |
| :--- | :--- | :--- | :--- |
| R | R | 2.56 | 3.23 |
| R | D | 1.88 | 2.38 |
| D | R | 1.96 | 2.03 |
| D | D | 2.62 | 2.46 |

Source: 2000 National Election Study
Table 4.10 Aggregate relationship between polarization and strategic ticket splitting

|  | Split-ticket voting (NES) |  |  | Split House districts |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Important differences between parties (NES) | $-0.35 * *(0.16)$ |  |  | -0.54 (0.35) |  |  |
| House party polarization (NOMINATE) |  | $-43.49^{* *}$ (8.84) |  |  | -70.11** (24.21) |  |
| Party polarization <br> (NES party placements) |  |  | $-22.32 *$ (11 |  |  | $-54.35 * *(15.95)$ |
| Independents (NES) | 0.79** (0.21) | 1.09** (0.16) | 0.79 (1.13) | 0.29 (0.48) | 0.79* (0.43) | 1.18 (1.59) |
| Constant | 14.55 (8.51) | 12.47** (4.26) | 36.33 (26.44) | 50.55** (18.97) | 48.05** (11.68) | 88.69* (37.24) |
| Adjusted $R^{2}$ | 0.58 | 0.79 | 0.38 | 0.034 | 0.33 | 0.75 |
| Number of cases | 13 | 14 | 9 | 13 | 14 | 9 |
| Source: National Election S Note: Cell entries are OLS *p<0.10, ${ }^{* *} p<0.05$, two-ta | y cumulative file ession coefficien test | Keith Poole ith standard error | parentheses |  |  |  |

## Other Cases

We have shown that primaries, third parties, and presidentialism provide the American voter with many more opportunities to vote strategically than previously recognized. Other arenas also exist that allow for strategic voting, even if they are less widespread. Here, we discuss several of these briefly: jungle and blanket primaries that exist in a few states (and in particular California's short-lived blanket primary in the late 1990s), runoff elections that operate mainly in the South, and the 2003 California recall. Although most voters regularly face a wide range of opportunities to cast a strategic vote, some electorates are also faced with unique voting situations that extend the possibilities of strategic voting.

We start by examining California's experiment with the "blanket" primary. Blanket primaries allow all voters to participate, regardless of party registration. Once in the booth, voters are faced with one ballot, which lists all of the party nominees for each office. Voters may switch between party primaries by office: voting in the Republican primary for Governor, the Democratic primary for the US House, and so on. The top vote-getter from each party then proceeds to the general election.

The California "experiment" dramatically changed the rules on who could participate in primaries, and did so for only a short period of time. In 1996 Proposition 198 was approved by voters, instituting the blanket primary in time for the 1998 elections. By June 2000, however, that system had been swept away by a Supreme Court ruling and California returned to the closed system.

The experiment with the blanket primary allows us see the effects that different rules have on voters' strategic calculations (Cain and Gerber 2002). Theoretically, it should facilitate more crossover voting: voters are free to vote in a different party's nominee on an office-by-office basis without having to pay the costs of changing registration status or missing out on voting for candidates for other offices. Indeed, a majority of participants in the 1998 elections voted for candidates from more than one party. Salvanto and Wattenberg (2002) show that $44.1 \%$ of participants voted for nominees of just one party, while the rest divided their votes amongst Democratic, Republican, and minor party candidates. These numbers are similar to the amount of straight-ticket voting in general elections, which was $37.5 \%$ in the 1994 California elections.

However, most voters still cast sincere ballots (Sides et al. 2002). Few voters appear to have "raided" the other party's nominations: indeed, in the general election, most supported the candidate they had voted for in the primary (Kousser 2002; Salvanto and Wattenberg 2002; Sides et al. 2002). Crossover voters were not motivated by negative strategic considerations, but rather by their desire to take part in an exciting race. In particular, voters tended to crossover to the other party to vote for an incumbent, who they are presumably more likely to know and like (Alvarez and Nagler 2002; Salvanto and Wattenberg 2002).

Although often also referred to as a "blanket" primary, Louisiana's primary system is unique (Kuzenski 1997). Like the blanket, all candidates - regardless of party - are placed on the same ballot. Louisiana's "jungle" primary differs from the blanket in two key ways. First, if one candidate wins a majority of votes in the
primary, the candidate is automatically elected to office with no need for a second election. Second, if no one wins more than $50 \%$, the top two candidates proceed to a runoff election - regardless of their party affiliations.

Various strategic possibilities emerge. Voters who have a sincere preference in the primary may be faced with competing considerations: will my preferred candidate receive more than half of the primary votes? Who would be the weakest candidate to face them in the event of the runoff? Given that the answers to these depend on beliefs about the preferences and strategic choices made by others, the Bayou State's primary system offers a rich area for studies of strategic voting. However, few researchers have looked specifically at the choices these voters make, an omission that should be rectified in the future.

Several other - mostly Southern - states also use runoff elections. If no candidate receives a given percentage of the vote in the primary election, the two highest placed candidates proceed to a subsequent election to determine the party's nominee for the general election. In the Democrat-dominated "solid South" of the past, runoff primaries were adopted to ensure that whoever won the Democratic nomination adequately represented the views of a majority of the party (Bullock and Johnson 1985). As of 2005, nine states in addition to Louisiana used some form of a runoff primary. However, some impose less stringent requirements for avoiding a runoff than others. Candidates in South Dakota need to win at least $35 \%$ of the primary vote to win the nomination, while those in North Carolina need $40 \%$. These runoffs provide yet another dimension of calculation for strategic voters: they may assess a candidate's chance of winning the first primary outright, the possibility of a runoff occurring, their chance of advancing to a possible runoff, their chance of winning the runoff, and their chance of winning the general election when deciding who to vote for. Raising the threshold obviously alters the opportunities for strategic behavior.

Finally, one other rare electoral contest allows for various voting strategies, this one also in California. In October 2003, Californian voters were faced with two electoral choices on the same ballot. First, should Democratic Governor Gray Davis be "recalled" (removed) from office? And second, if the recall measure was to be passed, who should replace him as governor? The first choice was a simple yes or no vote - but voters were faced with 135 candidates vying to replace him, including only one major Democrat (Lt. Gov. Cruz Bustamante) but several well-known Republicans including Arnold Schwarzenegger and Tom McClintock.

The recall election allowed for two types of strategic voting (Shaw et al. 2005). First, some Democrats may have been faced with a strategic choice because of the question on the first ballot. Those voters who would prefer to see Cruz Bustamante as Governor over any other candidate (including Gray Davis) but nonetheless voted against the recall (i.e., to keep Davis in office) to ensure that no Republican took office are assumed to be strategic voters. Second, some Republicans may have been faced with a strategic choice simply because of the number of Republican candidates running on the ballot against Bustamante.

Shaw et al. 2005 find a relatively high rate of strategic voting, especially given the uniqueness of the recall election and the fact that no voters had previously faced this strategic environment. Overall, $8 \%$ of the electorate cited Bustamante as their first choice but still voted for Davis (i.e., against the recall), while $11 \%$ of the voters said they preferred McClintock but still voted for Schwarzenegger. Large numbers of those who preferred Bustamante over all other alternatives nonetheless voted against the recall. Alvarez et al. (2005) similarly estimate that $84 \%$ of his supporters acted strategically in this way.

## Conclusions

The American political system is often viewed as a paradigmatic case of two-party domination that offers few opportunities for strategic behavior by voters. As such, the one country that offers the most compelling example of Duverger's law also seems to offer little evidence for how the "psychological effects" underpinning it actually work. This is, in fact, not the case. Elections for public office frequently feature three or more candidates. And the primary nominations that precede all of these elections often feature multiple candidates who are unable to differentiate themselves using simple heuristics like party labels. The opportunities for strategic voting - and thus for researchers to understand the mechanisms that have led to two-party dominance - are rife.

However, strategic voting is possible in a number of additional contexts. Voters do not always have to be faced with more than three candidates in a discrete election to cast a strategic vote. Even with sincere preferences in a two-candidate race, primary voters may choose the most electable candidate to beat the opposition in the general election, or crossover to the other party's primary to choose the least electable candidate to face their preferred candidate. In general elections, voters may choose a candidate they do not prefer to try to balance the policy outputs that government produces.

That Americans are faced with more opportunities to vote than citizens of most other countries is old news. What cuts against much conventional wisdom, however, is the notion that these votes can be cast strategically. We have shown here that the opportunity to vote strategically is widespread, even in the nation that exemplifies the Duvergian equilibrium of two-party dominance. The reason that this is no contradiction is simple: strategic voting can occur in contexts other than just general elections that feature more than two parties. Indeed, it seems right that in the one nation where researchers most believe that Duverger's psychological effects have worked, we observe widespread strategic behavior when voters are given the opportunity. Future research should move on from assuming that these opportunities do not exist, and investigate when, why, and how many voters take advantage of them. Doing so will further reveal the dynamics of mass behavior that ultimately underlie Duverger's law.

## Notes

1. Although we use the terms "third party" and "minor party" interchangeably, the latter is a more accurate label since often more than three parties are involved. In the 2004 presidential election, for example, Libertarian, Constitution, Green, and other party candidates appeared on many ballots and earned nearly as many votes as "third" party candidate Nader did.
2. The only exceptions are Maine and Nebraska, which distribute electors by congressional district and the remaining two electors proportionately statewide.
3. Many Nader supporters also abstained (Burden 2003).
4. An extreme version of this behavior is "protest voting" in which voters vote against their most preferred parties, but in the opposite way predicted by Duverger's law (Bowler and Lanoue 1992).
5. These research findings are contested: Geer (1989), Marshall (1981), and Stone et al. (1992) argue that few primary voters can place themselves or candidates on an ideological scale, and many who can perceive few differences between candidates' ideologies.
6. While our chapter focuses on "opportunity," these are examples of "ability" and "motivation."
7. Since 1976, election day registration at the polls has also been possible.
8. For additional discussion, see several of the chapters in Galderisi et al. (2001).
9. Crossover voting can also affect other races down the ballot (Hedlund and Watts 1986; Norrander 1991).
10. Following convention, we use "RD splitting" to indicate voting for a Republican presidential candidate and Democratic House candidate. Votes for third parties are ignored here.

# Chapter 5 <br> Mechanical Effects of Duverger's Law in the USA 

Michael P. McDonald

Among the most enduring features of American politics is its two-party system. Since the emergence of contestation between the modern Democratic and Republican parties following the American Civil War in the mid-nineteenth century, these two major political parties have dominated elections to federal offices. The effective number of parties (Laakso and Taagepera 1979) in the US House rarely fluctuates far from a value of 2 (see Fig. 5.1). The exceptions are brief interludes where a handful of unaffiliated or minor party candidates win seats to the United States House of Representatives, such as immediately following the Civil War or during the heyday of Populist and Progressive parties near the beginning of the twentieth century. Indeed, deviations from two-party rule more often tend toward one-party dominance such as the overwhelming Democratic majority in 1890 followed by a stunning reversal by the Republicans in 1894, or the ascendancy of the Democratic Party during the Great Depression of the 1930s.

The two major United States political parties' electoral duopoly appears ironclad and is thus often cited as an exemplary case of Duverger's law that a "simplemajority single-ballot system favours the two party system" (Duverger 1954). Duverger posits two causal mechanisms that produce this tendency: mechanical and psychological. The mechanical involves the translation of votes into seats in such a way that inhibits minor party candidates from winning elected office. When candidates need a vote majority or plurality within a single-seat legislative district, minor party candidates with fewer supporters than their major party competitors are severely disadvantaged from reaching the winning threshold. The psychological involves voters' behavior within the mechanical framework of the electoral system. As Burden and Jones explore in nuanced depth in this volume, voters who favor a minor party candidate may vote strategically against their preferred candidate so that they may exert more influence over the most likely winner selected among the two major party candidates. This behavior can induce a self-fulfilling prophesy whereby minor party candidates rarely achieve an aura of viability that permits them to effectively compete alongside their major party opposition.

The purpose of this chapter is to explore the mechanical effect of Duverger's law within the United States context. There are many possible mechanical or institutional effects to discuss in the American context: the single-member plurality-win


Fig. 5.1 The postcivil war US House of Representatives: Effective number of legislative parties and the ideological cohesiveness of the Democratic and Republican Parties (as measured by standard deviation of DW-Nominate scores) (sources: author's calculations, election returns, DW-Nominate scores)
district system itself, ballot access laws that effectively limit minor-party candidates' names from appearing on the ballot in many states (see Burden and Jones, Chap. 4), a campaign finance system that advantages Democrats and Republicans by way of qualifications favoring the major political parties in such activities as providing public funding for their party conventions and presidential candidates, and a winner-take-all presidential system that overlays the legislative system and further encourages parties to form broad electoral coalitions (Shugart and Carey 1992). The focus here is on the single-member district system itself. Of course, the other unexplored institutional effects may be important determinants supporting America's two-party system, but they are not as central to Duverger's conceptualization of mechanical effects.

The two major American political parties use the electoral system to their favor in such a way to further minimize the potential success of other political parties and to find advantage for themselves. American candidates are strikingly ideologically independent and their electoral performance is loosely tied to the fate of their parties. Weak parties are a surprising source of strength for America's two-party system since they permit major party candidates to crowd out the ideological space that might otherwise be occupied by other geographically based political parties. Political parties and incumbent members further directly manipulate the electoral system to their favor through an overtly political process known as redistricting (Campagna 1991; Cox and Katz 2002), whereby politicians draw district boundaries they run in. The cards are stacked highly against a sustainable third-party movement
in the USA. Even if a new party was able to break through to win legislative seats, the party would likely find their seats at the legislative table pulled out beneath them by clever redrawing of their incumbents' districts.

## Incumbency Advantage

In many democracies around the world, particularly those that employ proportional representation, voters vote first for parties, not for candidates. In the USA, voters vote for candidates who have wide latitude from their parties to run their own electoral campaigns and develop their own legislative agendas apart from their parties. Incumbents' careful cultivation of their district constituencies enables them to enjoy a sizable electoral advantage over challengers to their office (Mayhew 1974; Fiorina 1977; Cain et al. 1987; Jacobson 1987). An incumbent can expect a vote of as much as eight (Cox and Katz 2002: 132) to ten percentage points (Gelman and King 1990: 1158) over comparable candidates running in open seats in recent elections, though there is suggestive evidence that their advantage may have declined slightly in the most recent elections (Levitt and Wolfram 1997: 49). Strategic decisions by quality candidates - those who have previously been elected to a lower office - to contest powerful incumbents only when they perceive an incumbent is vulnerable or likely to retire may inflate these incumbency advantage estimates (Jacobson 1987; Cox and Katz 1996).

The posited modern sources of incumbency advantage are numerous. Mayhew (1974) argues that Congress is an institution well-suited to aid incumbents' singleminded reelection goal: they claim credit for redistributing the government's budget into their districts, they use the perks of their office to advertise themselves to their constituents, and the decentralized federal government allows legislators to take stands on issues without having to deliver the policies they advocate. Others have noted that congressional offices are geared toward providing issueless casework constituency service, such as aiding the delivery of a missing social security check, rather than creating government policies that might divide and anger constituents (Fiorina 1977; Cain et al. 1987). Winners tend to be quality candidates; by winning a previous election, incumbents demonstrate and hone the campaigning skills necessary to be a successful candidate. They maintain an effective campaign organization by hiring campaign staffers as legislative office staff and they tap into donors and community activists involved in previous campaigns. Through their continued personal advertising while in office, they develop name recognition among their constituents, which is among the primary determinants of an individual's vote choice. So, too, is the possibility that through advertising, voters have the ability to use incumbency as a retrospective evaluation voting cue (Ferejohn 1977).

This was not always the case. In the heyday of political machines in the nineteenth century, candidates' electoral success was more closely tied to their political party. Political party leaders determined who would appear on the ballots that they printed and distributed at the voting booth (Rusk 1970; Kernell 1977).

Progressive Era reforms around the turn of the twentieth century, most notably the introduction of the secret ballot, initiated a change in the relationship between voters and their representatives. While this electoral-structural explanation for the rise of the incumbency advantage is compelling, it cannot be the entire explanation since the rise in electoral advantage from one or two percentage points to modern levels occurred during the 1950s (Gelman and King 1990: 1158), well after the Progressive Era reforms.

The common thread of the modern arguments of the source of incumbency advantage posits that incumbents are capable of developing personal campaign organizations and presenting a personalized "home style" to their constituency (Fenno 1978). The ability of members of Congress to ideologically disassociate themselves from their political parties and to craft an image consonant with their district can be measured through an analysis of their legislative voting records. Poole and Rosenthal (1997) produce a widely used ideological scoring of members of Congress, known as the DW-Nominate score. ${ }^{1}$ The scores range from $[-1,1]$ and measure the ideology of representatives along several dimensions, with an economic liberal/conservative dimension accounting for slightly more than threequarters of all congressional roll call votes. The standard deviations of Democratic and Republicans members' DW-Nominate scores on this primary ideological dimension following the ascension of the two major parties succeeding the American Civil War are plotted in Fig. 5.1 (the axis label for the DW-Nominate scores runs along right side of Fig. 5.1).

Figure 5.1 demonstrates that members may ideologically position themselves away from other members of their political party and that the overall cohesiveness of the political parties has varied over time. Party discipline in the US Congress ebbs and flows with the tools that legislative leaders are granted by their caucuses to enforce party voting (Rohde 1991), but even this "conditional party government" model of party discipline is predicated on the proposition that the parties' caucuses will be at times more and less ideologically consistent and willing to grant more or less power - respectively - to their leaders.

Of interest here is that the rise in incumbency advantage in the 1950s coincided with the ideological fragmentation of the political parties, most notably the formation (and later dissolution) of the New Deal coalition of the 1930s when conservative Southern Democrats entered into an electoral coalition with more liberally minded Northerners and minorities (similar, though less dramatic fragmentation of the Republican party also occurred during this time). One might thus reasonably infer that ideological positioning of incumbents to their districts is a component of Fenno's (1978) home style. Furthermore, incumbents' ability to shift their ideological positions to their geographical constituency means that geographically concentrated minor parties, say in large cities or the rural countryside, can be effectively squeezed out of the center of a district's ideological space by the two major party candidates. This is consistent with Downs's (1957) theorization that when two candidates contest elections at a district level, the winning strategy in a singlemember plurality-win district is to stake a position at the ideological median of the district's constituency. A district-by-district individual analysis may shed further
light on this relationship, but note that the brief and modest success of minor party candidates (when the effective number of parties was greater than 2) was at times prior to the 1930s when the two major political parties were more ideologically cohesive. The increasing ideological cohesiveness of the major political parties in the 1990s and indications that incumbency advantage may be waning suggest that minor parties may yet again find electoral success in the near future.

## Manipulation of the Seats to Votes Relationship Through Redistricting

Duverger's mechanical effect arises from how vote shares are disproportionately translated into seat shares within single-member plurality-win legislative districts. Minor party candidates rarely win seats because their votes are not sufficiently concentrated into a district to win an election. The major parties are keenly aware of how vote aggregation further relates to the seats awarded to their respective parties. The United States' exceptional character manifests itself in that political parties and their incumbents often play central roles in determining how district boundaries are drawn through a process known as redistricting (Handley 2008). Voters are not distributed randomly throughout the country: Democrats tend to be located in urban areas while Republicans are distributed in rural areas (there are, of course, exceptions to this characterization). Thus, a party can effectively waste its opposition's votes by drawing districts that concentrate their opponent's supporters into districts where they overwhelmingly win or are spread across districts where they have a sizable presence but no realistic chance of winning (see McDonald 2006). Strategic behavior during redistricting can thus further distort the seats to votes relationship.

There has been a long history of political mischief played through redistricting. James Madison, an architect of the national constitution, feared that state legislatures would manipulate election laws to achieve political ends, "Whenever the State Legislature had a favorite measure to carry, they would take care so to mould their regulations as to favor the candidates they wished to succeed" (quoted in Farrand 1966). Although "rotten boroughs" were a colonial import from Great Britain, the American experience was enshrined into the political lexicon by Gov. Elbridge Gerry of Massachusetts. In 1812, he proposed a state legislative district to favor his party's candidate that a political cartoonist likened to the shape of a salamander; thereafter known as a Gerry-mander, or more commonly gerrymander.

Political actors play a central role in redistricting. Most states use the legislative process to draw district boundaries, though some use commissions and some do not even use the same process for congressional and state legislative redistricting (McDonald 2004). ${ }^{2}$ Prior to the 1960s, state governments redistricted at their discretion. Representatives are loath to change the electoral circumstances by which they are elected and in many cases had not redistricted for decades. Even when a state gained a congressional district through apportionment - the decennial allocation of
congressional seats to the states - a statewide at-large district would sometimes be created instead of drawing new districts. Urban populations continued increasing, causing "creeping malapportionment" whereby less populous rural areas were afforded more representation than urban areas by virtue of the relatively smaller populations within their districts.

The US Supreme Court addressed malapportionment in a series of court cases in the early to mid-1960s, sparking the so-called reapportionment revolution where states scrambled to draw equipopulous districts. Thereafter, redistricting would occur at the start of a decade following the new census of the population (Levitt and McDonald 2007). Recognizing the inherent conflict of interest of vesting redistricting authority in the state legislators representing the recently malapportioned districts, some states convened constitutional conventions or put forth constitutional amendments to voters that reformed the redistricting process to the quilted patchwork of institutions used today.

Three interests often play a formal redistricting role: political parties, incumbent legislators, and racial groups. When a political party controls the redistricting process, a partisan gerrymander is often the result. Constructing a plan with partisan bias (i.e., the percentage of votes needed for a party to win $50 \%$ of the seats) favoring the gerrymandering party is a component of partisan gerrymandering but manipulating responsiveness (i.e., the change in seats resulting from a change in vote) can also be an effective tool (Tufte 1973: 544; Kousser 1996; Cox and Katz 2002: 33). This is accomplished by strategically wasting opposition votes, as described earlier. A set of district boundaries may ostensibly be fair by producing zero partisan bias, but if a party always wins more than $60 \%$ of the vote, then what happens around the hypothetical $50 \%$ vote where bias is calculated is not important. In these circumstances, a party may wish to produce a highly responsive plan, for example, to translate $50 \%+10 \%$ of the vote into an even greater than $50 \%+10 \%$ of seats.

When control of the redistricting process is divided between political parties, either a bipartisan compromise is struck or redistricting goes to the courts, as a plan must be adopted to rectify malapportionment, as required by the US Supreme Court. For congressional redistricting, a bipartisan compromise is one that protects incumbents of both political parties, essentially creating a highly unresponsive plan by overpacking partisan supporters to the core reelection constituency of all incumbents' districts.

The electoral fates of racial minority candidates are often determined by a district's concentration of minority population and the degree of racially polarized voting, whereby racial groups tend to vote only for candidates of their same race. A technique to deny minority racial groups' effective representation in the USA is to split their communities among two or more districts, thereby diluting their voting strength. The Voting Rights Act of 1965 ushered in federal regulation of such practices and mandated in certain circumstances the creation of special "majorityminority" districts, so called because their population is composed of a majority of a racial minority group. ${ }^{3}$ These districts tend to be extremely safe because majorityminority districts tend to be overwhelmingly stacked with minority population and because racial politics tends to align with partisan politics. Some such districts,
such as majority-African-American districts, are so reliably Democratic that Republicans do not field candidates. Majority-minority districts further constrain partisan and incumbent protection gerrymandering by forcing the creation of safe Democratic seats, except for Republican majority Cuban-American districts in Florida.

The seats to vote ratio within a given jurisdiction thus depends on who controls redistricting, the levels of partisan support in the electorate, and the number of majority-minority districts that must be drawn (if the minority population is sufficiently large and concentrated to draw any such districts). Because each state is responsible for drawing their districts, no state or single political party controls entirely the congressional redistricting process. The decentralized nature of congressional redistricting has led some to speculate that mischief in one state will cancel out the mischief in another (Butler and Cain 1992: 8-9). However, bias and responsiveness in national congressional elections can be accomplished by controlling the redistricting process in key states with large, heterogeneous populations while redistricting can only affect bias and responsiveness at the margin in states with a small number of (even one) congressional districts (Cain and Campagna 1987).

Following the mandate that districts be of equal population size, an electoral system favoring the Democrats due to malapportionment whereby Democrats represented districts with less population was replaced with a pro-Democratic bias attributed to gerrymandering (Tufte 1973: 548). The emergence of the pro-Democratic bias among the new, equal populous districts did not arise from the Southern states where Democrats enjoyed an effective political monopoly and where there was little short-term partisan consequence to new district boundaries. The change was located primarily in the erasure of a pro-Republican bias in states outside the South (Erikson 1972; Jacobson 1990; Brady and Grofman 1991; King and Gelman 1991). Cox and Katz (2002) argue that litigation and other political actions in the 1960s were vehicles that forced pro-Republican gerrymanders outside the South to be substituted with pro-Democratic (or at least neutral) gerrymanders.

Following reapportionment revolution in the 1960s, redistricting became a mostly decennial event following the release of new census data, though litigationrelated and other extraordinary mid-decade redistricting has occurred. The political parties adapted to the new political environment. Leading into the 1980 round of redistricting, the Republican Party embarked upon a strategy to gain control of the redistricting process in key states by winning control of state legislatures (Born 1985). In the 1990s, the Republican controlled Justice Department, through its oversight powers of the Voting Rights Act, effectively required maximizing the number of minority districts, to which some attribute some Republican successes in the 1994 congressional elections (Grofman and Handley 1998). The evidence presented by others and addressed in the analysis that follows suggests that redistricting following the 2000 census favors the Republican Party, due to effective Republican gerrymanders in the larger states of Florida, Michigan, Ohio, and Pennsylvania (Hirsch 2003; Jacobson 2003). The unusually large national vote swing toward the Democratic Party in the 2006 midterm election was just large enough to overcome this Republican structural advantage (Kastellec et al. 2008).

## The Political Parties and National and State Swings

In considering how vote shares translate into seat shares, it is constructive to note that there are patterns to party voting in the electorate over time and when a presidential candidate may or may not appear on the ballot. Burnham (1970) noted that approximately every 32 years a critical election occurs around an important issue that reconfigures the existing party coalitions and ushers in a new period of stable party coalitions. During these stable periods, the "normal" baseline vote tends to favor one of the two political parties, manifesting itself in one party's dominance of presidential and congressional elections. The level of party voting fluctuates (or "swings") around the normal vote and the lesser party can enjoy temporary electoral success in what is known as a deviating election.

State and local factors affect election results in addition to the national component. State or regional swings may result from issues or election conditions that uniquely affect an area and thereby frame local elections, such as the presence of an initiative on a state's ballot that bans marriage of homosexuals or increases the minimum wage. Thus, the overall national swing has a seemingly stochastic component when applied to districts: some districts may experience more or less of the average national swing due to state and regional swings and the character of the campaigns within districts (Tufte 1973: 574).

Structural factors peculiar to the United States electoral system also affect the normal partisan vote. Elections to the House of Representatives are held every 2 years, one-third of the Senate is elected every 2 years (providing 6-year terms for Senators), and presidential elections are held every 4 years, concurrent with congressional elections. Voters pay more attention to presidential elections, as is evident in the higher participation rates in presidential election years and a ratings-seeking national media that rationally follows the presidential election more closely than congressional or state races. Thus, the presidential election frames concurrently held congressional elections. If a party's presidential candidate scores a decisive win, that party's congressional candidates also tend to do better. Whether or not the winning presidential candidate is responsible for this outcome, the phenomenon is described as a "coattail effect" whereby otherwise marginal congressional candidates are able to ride on the allegorical coattail of their party's popular presidential candidate to victory (Calvert and Ferejohn 1983). In the following congressional election the president is not on the ballot and unpopular presidential actions may energize the opposition party. In these elections, candidates of the president's party in marginal seats - particularly freshmen incumbents who were swept into office and have not firmly established their home style - will suffer defeat in what is known as midterm loss.

In the American history, the coattail effect was strong leading into the 1960s, and has weakened since (Calvert and Ferejohn 1983; Aldrich and Neimi 2001), which curiously coincides with the rise of the electoral advantage enjoyed by incumbents starting in the 1950s. Indeed, there were negative coattails in 2000 and again in 2004 (if the 2004 Texas elections are removed due to the confounding effect of a 2003 politically charged redistricting in that state). Related is a decrease
in the magnitude of midterm loss, and midterm gains for the president's party were actually realized in 1998 and 2002. Part of the reason for these trends may be that fewer incumbents are at risk in districts that they are mismatched into districts leaning toward the other party (Stanley and Neimi 1991; Jacobson 2003).

## Measuring Seats to Votes Ratios

The seats to votes ratio can be analyzed to determine the current state of the US electoral system and to assess the impact of redistricting on bias and responsiveness. The ratio can be described for an electoral system by plotting the percentage of votes against the percentage of seats that a party won. It is common practice in such analyses to calculate vote and seat shares as a percentage of the major party vote or seats, removing minor party and write-in candidates from the calculation. Ignoring minor parties allows the construction of seats to votes curves that do not need to take into account how a change in the votes or seats might be distributed to minor party candidates and thus provides a clean view of how the electoral system performs for the two major political parties.

The resulting curves tend to follow the shape of an $S$-curve, which early investigators asserted followed a "law" of cubic proportions (Kendall and Stuart 1951). (It is perhaps not without irony that laws concerning electoral systems seem to proliferate.) Further analysis (see Tufte 1973 for an early review) noted that this was not an ironclad law as the curve did not necessarily pass through the $50 \%$ vote $/ 50 \%$ seat point and that the slope was variable among electoral systems. Tufte proposes a generalized relationship of the seats $(S)$ to votes $(V)$ as follows ${ }^{4}$ :

$$
\frac{S}{1-S}=\alpha\left(\frac{V}{1-V}\right)^{\beta}
$$

This can be transformed for linear regression analysis to the form:

$$
\log \left(\frac{\mathrm{S}}{1-\mathrm{S}}\right)=\log \alpha+\beta \log \left(\frac{\mathrm{V}}{1-\mathrm{V}}\right)
$$

Grofman (1983) defines bias as a shift in the $S$-curve at $V=0.5$ ( $50 \%$ of the vote) as follows:

$$
\text { Bias }=\frac{\alpha}{1+\alpha}-0.5 .
$$

Campagna (1991) notes that because equation (5.1) is nonlinear, the slope of the seats to votes curve, defined in this manner, is dependent on $\beta$ and $\alpha$, and can only be calculated directly from $\beta$ when there is no bias, or when $\alpha=1$. Her differencebased measure of the swing ratio for any vote share $V$ along the seats to votes curve
is the rewritten equation (5.4) such that $S$ appears alone on the left-hand side, taken as the first derivative with respect to $V$ (in the analysis that follows, I calculate dif-ference-based measures, which I will refer to as responsiveness, for $V=0.5$ ):

$$
\frac{\mathrm{d} S}{\mathrm{~d} V}=\frac{\alpha \beta\left(\frac{V}{1-V}\right)^{\beta}}{V(1-V)\left[1+\alpha\left(\frac{V}{1-V}\right)^{\beta}\right]^{2}}
$$

Related to the calculation of bias and responsiveness is the notion of symmetry (King and Browning 1987), which is conceptualized that if either party wins X\% of the vote, then the party wins $Y \%$ of the seats. In other words, both parties receive the same number of seats for the same vote total. A necessary condition for symmetry is that bias equals zero. However, missing from the line-fitting math is the possibility that responsiveness might not be uniform along the entirety of (5.1). For example, suppose there were many districts with a normal vote in the range $45-50 \%$ and none in the range $50-55 \%$. It would still be theoretically possible that this arrangement of districts would have a bias of zero, but the seats to votes S-curve would have a flattened kink above $50 \%$. Symmetry, in King and Browning's sense, also requires full symmetry along the entire seats to votes curve, or a constant $\beta$.

In practice, the full seats to votes curve is not observed because we do not have the luxury of observing all possible elections. Adding and subtracting vote percentages from election results and observing the hypothetical outcomes are techniques to observe the unobservable (Tufte 1973; Grofman 1983; Campagna and Grofman 1991). However, this technique requires the strong assumption that partisan votes swing in the same direction in every district, which may not be true given districts' partisanship, candidates' skills, and other district-specific effects discussed earlier (Tufte 1973; King and Browning 1987). Some districts will be more responsive to vote swings than others, but we have no way of knowing which districts would behave in this manner because we do not directly observe such hypothetical vote arrangements.

Election results measurement issues go deeper in the United States context: in some districts a party may not run a candidate because a popular incumbent is perceived to be unbeatable or because the district is stacked with partisans who overwhelmingly favor the election of the stacked party's candidate. Lopsided election results of a 100 to $0 \%$ naturally distort the aggregate vote that a party wins. In some states the uncontested general election candidate is simply declared the winner without an election. ${ }^{5}$ Furthermore, where a weak challenger is present, some voters - particularly those of the party of the weak candidate - may abstain from voting for that office on the ballot; they are drawn to the polls to vote for other candidates or ballot issues. In other instances, a particularly strong minor party candidate may disproportionately siphon votes away from one of the two major party candidates.

Other elected offices provide a measure of the "normal" partisan vote, or the underlying partisan leaning of a district. Those in charge of redistricting often evaluate the partisan ramifications of a map by analyzing in isolation or averaging election results to statewide offices within potential districts, such as President, US Senator, Governor, or other statewide offices such as Lt. Governor or Attorney General. Indeed, the best measures are often obtained for lower ballot statewide offices where voters have little information about candidates other than their party identification, such as an Insurance Commissioner. Some states maintain records of partisan voter registration, which can also be used to measure the partisan leaning of a district (Kousser 1996). ${ }^{6}$ More sophisticated analyses equate these measures with legislative election results, which provides a measure of the partisanship of a district and an accompanying measure of estimation uncertainty (Gelman and King 1994). This approach is used in courtrooms and by scholars (e.g., Gronke and Wilson 1999; Swain et al. 1998; Cox and Katz 2002; McDonald 2006) to evaluate the electoral impact of redistricting plans.

## Seats to Votes Ratios in Recent United States Elections

I examine seats to votes curves for the US House of Representatives and the Senate through two of the techniques discussed earlier: plotting actual and "normal" seats and vote shares. For actual vote, I examine all elections post-1960 as this marks an apportionment decade and the beginning of the reapportionment revolution. Congressional votes and seats are drawn from the Clerk of the House of Representatives. ${ }^{7}$ For normal vote, I examine districts before and after the round of redistricting following the 2000 census. Presidential vote for the 2000 election within congressional districts, used as a proxy for the normal partisan vote within a district, is drawn from the Almanac of American Politics.

In Fig. 5.2, the Republican percentage of the two-party vote is plotted against the percentage of two-party seats won by Republicans from 1972 to 2006. 1972 is chosen as the starting point for analysis since it is the first post-apportionment election following the flurry of redistricting activity in the 1960s to rectify malapportionment. The points are further identified within each redistricting decade (i.e., years ending in 2 through years ending in 0 ).

A simple bivariate regression reveals what should be evident from an intraocular examination of Fig. 5.2 - a slight pro-Democratic bias of 1.6 percentage points and responsiveness of 2.0. As posited by Butler and Cain (1991), in the aggregate there is little overt evidence of national partisan gerrymandering as the mischief conducted in one state is apparently offset by the mischief in another. Furthermore, responsiveness greater than 1 is expected in electoral systems with single-member districts, as the majority vote-winning party is generally awarded more seats than their vote share (Rae 1967; Lijphart 1999). The lack of overt partisan gerrymandering in aggregate election outcomes comports with previous scholarly analysis of seats to votes curves (King and Browning 1987; Campagna and Grofman 1991).


Fig. 5.2 Republican seats to votes for the US House of Representatives, 1972-2006 (source: Election returns)

What is perhaps most striking in Fig. 5.2 is the upward shift along the curve between 1992 and 1994 when Republicans took control of the House from the Democrats. In exchange for winning 6.3 percentage points more of the national vote, Republicans were awarded 12.4 percentage points more seats (this vote and seat swing is in line with the estimated responsiveness in the preceding paragraph). Until 2006, Republicans controlled the House by slim electoral margins; indeed, the Republicans enjoyed one manufactured majority in 1996, where the Republicans received $49.8 \%$ of the vote and won $52.2 \%$ of the seats. The 2006 midterm election is also striking in that it appears as an outlier on the curve, in a pro-Republican direction. If not apparent, the 2006 residual in the bias and responsiveness estimation is nearly twice that of any other election year. And similar to the 1996 election, Democrats won a smaller percentage of the two-party seats (53.6\%) than percentage of their votes (54.1\%).

The analysis of Fig. 5.2 reveals no overt indications of partisan gerrymandering from 1972 to 2004, but there are only five elections within a redistricting decade so these data cannot fully capture redistricting effects. An alternative technique to plot out the full seats to votes curve is accomplished by calculating the normal partisan vote within districts and applying a uniform national vote swing and calculating how many seats would hypothetically have been awarded. Figure 5.3 plots the hypothetical normal partisan vote before and after the round of redistricting following the 2000 census. The normal vote is operationalized for 2000 and 2002 districts as the Republican percentage of the two-party presidential vote in the 2000 election minus the national average, what is sometimes referred to as the "normalized" presidential vote. Since the 2000 election was a highly partisan and close election,


Fig. 5.3 Hypothetical Republican seats to votes curves for the House of Representatives, pre and post 2000 redistricting (sources: author's calculations, election returns)
this measure is a reasonable proxy for the normal vote within House of Representative districts (Jacobson 2003).

Analysis of these data presented in Fig. 5.3 reveals that in 2000, Republicans enjoyed a favorable electoral system with a slight 0.2 pro-Republican bias and a responsiveness of 1.9. After the post-2000 census apportionment and redistricting, Republicans added to their advantage by instituting pro-Republican redistricting plans in the key swing states of Florida, Michigan, Ohio, and Pennsylvania while the Democrats did not realize similar gains in the Democratic stronghold states of California and New York (McDonald 2004). In the 2002 districts, the pro-Republican bias is 4.1 and responsiveness is 2.8 . The bias is substantial in the light that from 1972 to 2004, only in the 1986 election outcome did a party win more than $54.1 \%$ of the vote. Democrats are severely disadvantaged under the House electoral system created in the wake of the 2000 round of redistricting (Hirsch 2003), and needed "help of a sizable national tide in their favor" (Jacobson 2003: 21) in the 2006 election to overcome the Republican's structural advantage garnered from redistricting (see also McDonald 2006; Kastellec et al. 2008). The outlier 2006 election in Fig. 5.2, where Republicans performed better than expected, is understood in this light and suggests that Democrats will continue to need sizable help to retain their majority, at least until 2010 ushers in a new redistricting.

Senate election outcomes from 1962 to 2006 are presented in Fig. 5.4. Senate election results are averaged over 6 years to correct for the staggered elections, for which one-third of the seats are up for election every 2 years. Similar to Fig. 5.2, the midpoint of the 3 -year moving average is identified by redistricting decade,


Fig. 5.4 Three-year average seats to votes for the US Senate, 1972-2004 (sources: author's calculations, election returns)
even though the Senate is not redistricted. Averaging is not a perfect solution since large national swings can occur over 3 years. For example, Republicans took control of the Senate in 1980 by a 53 to 47 margin, but the 3 -year moving average of Republican Senate seats was $49.6 \%$. In 2006, Democrats won $56.0 \%$ yet only controlled 49 seats. (The numbers plotted in Fig. 5.4 do not include two independent members who affiliate with the Democrats: Socialist Bernie Sanders from Vermont whom the Democrats do not run candidates against and former Democratic vicepresidential candidate Joe Lieberman from Connecticut who won a truly exceptional three-way election in 2006.) Furthermore, Senate elections are conducted in the most immediate election following a vacancy and subsequent elections are held as regularly scheduled. Elections to fill vacancies are for open seats, though they often are filled by an interim member appointed by a state's governor, so they provide information without confounding effects of incumbency, but they also can confound the analysis when a large and heavily partisan state like California holds an additional election. Similar to House elections, Senate elections are also confounded by when one candidate is uncontested by a major party opponent.

Analysis of the data in Fig. 5.4 shows a slight pro-Republican bias of 0.2 and responsiveness equal to 1.9. There are five instances of Republican manufactured majorities in 1982, 1984, 1994, 1996, and 2000. Figure 5.4 also shows a general increasing trend in Republican vote shares and, as a consequence, seat shares over time, primarily as a consequence of Republican gains in the previously Democratically dominated South. Typically, Senate vote shares have occurred within a tighter range than the House of Representatives. Two factors are likely responsible: Senate districts are not gerrymandered (though they are malapportioned) and Senate elections are more likely to attract quality challengers to incumbents of both parties, which narrows incumbents' victory margins, particularly


Fig. 5.5 Hypothetical seats to votes curves for the Senate, 2000 election (sources: author's calculations, election returns)

Democratic incumbents during the era of Democratic dominance in House elections prior to 1994.

A hypothetical seats to "normal" vote curve for the Senate, similar to Fig. 5.3 for the House, is presented in Fig. 5.5. Thirty six of the fifty states realized presidential election outcomes between 40 and $60 \%$ of the vote, and as a consequence, as vote shares increase from 40 to $60 \%$, the number of seats awarded to the Republicans increases from 22 to $94 \%$. The extreme responsiveness confounds bias estimation from (5.2), which finds a pro-Republican bias of 13.0 percentage points and a responsiveness of 4.6. In the actual data plotted in Fig. 5.5, the Republicans win $50 \%$ of the seats at little over $47 \%$ of the vote, so perhaps the true bias value computed by this technique is closer to 3 rather than 13 .

The hypothetical plotting of Senate vote swings in Fig. 5.5 assumes a uniform swing in every state. However, the Senate is malapportioned; every state receives two seats which means that the smallest state, Wyoming, with a population of 0.5 million according to the 2000 census has the same representation as the largest state, California, with a population of 33.9 million. Eleven of the fourteen states outside the range of $40-60 \%$ of the 2000 presidential two-party vote shares were won by the Republicans, and these are in predominantly smaller states which together (excluding Texas), accounted for only $5.4 \%$ of the total presidential vote. Republican votes are doubly distributed efficiently, once through the partisan distribution in the states and a second time through malapportionment. It is through this second mechanism that the Republicans have won control of the Senate by manufactured majorities.

## Discussion

In 2003, Rep. John Eder, the only Green Party state legislative incumbent from Maine, found his old district split into two newly redistricted districts (Bell 2003). Duverger's (1957) postulation that single-member plurality-win district electoral systems support two major parties aptly describes the aggregation effect as "mechanical" as it relies solely upon a mechanical aggregation of votes into seats that makes it difficult for minor parties with small support bases to win a sufficient percentage of votes within a district to win a seat. What Duverger did not contemplate is how these two major political parties can dynamically manipulate and maneuver within the electoral system to further cement their duopolistic control of elections. The ability of major party candidates to position themselves in toward the ideological center of their district notwithstanding the policy platforms of their national party and powerful tools such a redistricting further thwart the electoral ambitions of minor political parties in the USA.

Rep. Eder's experience is instructive in this regard. Despite the best efforts to draw him out of his district, he managed to win a narrow reelection victory in 2004, but was unable to defeat a liberal Democratic opponent in 2006, an environmental lawyer named John Hinck, who effectively crowded Rep. Eder out of the ideological middle of the liberally minded district on an issue central to the Green Party, the environment (Maxwell 2008). Rep. Eder would have likely easily defeated a different sort of Democratic candidate, such as one winning elections in a rural area of a conservative Southern state. And he would have likely survived longer if redistricting had not interrupted the home style he had been carefully cultivating with his constituents.

A surprising source of the strong two-party system in the USA is that weak party discipline enforced upon their candidates and elected officials. Like willows in the wind, the Democrats and Republicans are able to bend to the local forces at play in their districts, when a more rigid ideological stance would otherwise blow them over. The few successes for minor parties at the national level have come when the major parties were more ideologically rigid. Those successes occurred nearly a century ago, and it is possible that two-party system has become so enshrined into the American political culture that most citizens cannot now contemplate voting for minor party candidates. Yet, within the last decade the parties are again moving toward ideological rigidity, champions of minor party movements such as presidential candidates Ralph Nader and Ross Perot have offered alternatives to the major party candidates, and activists newly connected through the tools available in the new information age are pressing for reform of the electoral system.

An electoral reform effort perhaps offers to most promise for the emergence of viable alternative political parties in the USA. The Center for Voting and Democracy is spearheading a national reform effort to adopt a single-transferable vote in lieu of plurality-win elections. The reform is cleverly packaged on three accounts. First, it works within the existing single-member district framework that Americans are familiar with. Second, advocates invoke a familiar analogy to party primary and general election runoff elections by referring to the electoral reform as "instant
runoff voting." Third, some localities have adopted the method as a way for absentee voters - particularly American citizens abroad - to participate fully in elections where law may require quickly held runoff elections when a candidate receives a plurality, but not a required majority, of the vote. Bottom-up reform agitation is tried and true in America's federal system, as it has been a successful strategy for such important issues as women's suffrage. To date, the highest profile locality to adopt instant runoff voting is the city of San Francisco, though adoption at the state or national levels remains for time being elusive. Until then, the USA will likely continue as an exemplary case of Duverger's law.

## Notes

1. The DW-Nominate data analyzed here are drawn from Keith Poole's web site: http://www. voteview.com/, accessed July 24, 2008.
2. Currently, the regular legislative process is used in 38 states for congressional and 26 for state legislative redistricting. Appointed commissions have sole authority in seven states for congressional twelve for state legislative redistricting. Appointed commissions are used if the legislative process fails in two states for congressional and seven for state legislative redistricting. Then there are the odds and ends: in one state the state legislature has sole authority, in two states the legislature forwards maps to the state Supreme Court for review, and in one state the governor proposes to the legislature. One state, Iowa, has a process most similar to systems used in other countries: nonpartisan legislative support staff draw the lines, which are approved through the legislative process.
3. Racial gerrymandering to promote or retard racial representation is among the most litigated and debated aspects of federal election law and only a brief overview is possible here. There are two important sections of the Voting Rights Act. Section 5 requires "covered" jurisdictions, predominantly those with a history of racial discrimination, to submit changes in any election law including a redistricting plan to the Department of Justice or the District Court of DC for approval before taking effect. The Department of Justice has interpreted the Voting Rights Act to require no degradation of representation for minorities as forecast through various statistical measures, essentially requiring the drawing of a minimum number of minority-majority districts. Section 2 of the Voting Rights Act applies to all jurisdictions and, through Supreme Court interpretation in Thornburg v Gingles, requires minority-majority districts to be drawn when there is a large enough minority population to draw a district around and there is racially polarized voting. The Supreme Court has further articulated that neither racial proportional representation nor maximization of minority-majority districts is a goal, and that a jurisdiction must demonstrate a compelling interest when race predominates the intent behind drawing a district.
4. King and Browning (1987) offer another specification of equation (5.1), which they term the bilogit function (where $D$ is the number of districts):

$$
S=D\left\{1+\exp \left[-\log \beta-\alpha \log \left(\frac{V}{1-V}\right)\right]\right\}^{-1} .
$$

5. Louisiana's second ballot system, stylized after the French system, also distorts party vote shares. All candidates run together in one open primary. A candidate who receives a majority is declared the winner; otherwise, a runoff election is held for the top two candidates. Candidates of the same party sometimes face each other in the runoff.
6. A complication to aggregating votes into hypothetical districts is that current voting precinct boundaries do not always match with hypothetical district boundaries. Equal population and
other redistricting mandates often force those in control of redistricting to split existing precinct boundaries. In these cases, heuristics are used to apportion votes to census blocks, which are the smallest geography that the Bureau of the Census reports population data. Thus, this measurement of previous election results is accurate only in instances where district boundaries respect existing precinct boundaries.
7. Data are drawn from http://clerk.house.gov/members/electionInfo/elections.html.

# Chapter 6 <br> Canada: The Puzzle of Local Three-Party Competition* 

Richard Johnston and Fred Cutler

Canada was the first single-member plurality electoral system to exhibit chronic multipartism, and it continues to be among the most fractionalized. At first the Canadian facts seemed to challenge the emerging orthodoxy about electoral systems, based on Duverger's (1954/1963) seminal work. Duverger's "law" states that plurality electoral systems kept competition within two-party bounds. If Canada was a challenge, it was also a goad. The Canadian case was taken to indicate that pressures toward bipartism operate locally rather than in the system as a whole. Provided that support for some third party is sufficiently localized, a national system can register multipartism, even as local pressure produces district-level bipartism with different party pairs in different places.

The theory may have outrun the case. This chapter documents that sectional differences in party strength are no more than half the Canadian multipartism story. Equally important has been the secular propagation of a national pattern of local three-party competition. The number of districts in which the third-place party's share covers the gap between the share of the first- and second-place parties is not trivial. No amount of Duverger-motivated theorizing can make the reality go away.

We canvass a range of considerations that might help explain the pattern: possible interaction between across-district and within-district failure, the federal nature of the party system, incentives in the party finance system, voters' access to adequate strategic information, their time orientation, and the nationalization of campaigns. Most important, we submit, is the fact that the historically dominant party controls the center of a left-right policy space. But this just provokes a whole new set of questions.

[^7]
## The Scope of Multipartism

Canada has not had continuous two-party outcomes since 1921. Figure 6.1 shows this by tracking the "effective number" of parties, or ENP, in the electorate (Laakso and Taagepera 1979). ENP seems to be the standard indicator for comparative work in this domain, and our usage aligns us with the most important recent contribution (Chhibber and Kollman 2004). ${ }^{1}$ The top line tracks ENP for the national electorate, the middle line gives the mean ENP at the riding level, and the bottom line the national-local gap (the arithmetic difference between the first two). The gap represents the contribution of cross-district variance to total fractionalization. We start with 1878 , the first year with the secret ballot and near simultaneity of district-bydistrict elections, the year that initiates the modern period of Canadian electoral competition (Reid 1932). ${ }^{2}$

Before 1921, the system conformed to type, with an ENP of almost exactly 2. The system was dominated by the Liberal and Conservative Parties. ${ }^{3}$ The 1921 election brought a sudden incursion of third parties, notably a loosely coordinated collection of agrarian candidates who called themselves Progressives. This insurgency spanned three elections and exhausted itself by 1930. The 1930 election was only a stay of execution, however, as 1935 brought a net ENP gain of one "party." This gain was a compound of several insurgencies, of which two, the Cooperative Commonwealth Federation (CCF) and Social Credit, had staying power.


Fig. 6.1 The effective number of parties in the electorate, local vs. national (sources: Canada. Chief Electoral Officer. Reports on General Elections, various years)

The ENP gain would have been greater but for the fact that almost all the damage to old parties was visited on the Conservatives. Although from 1935 to 1993 the system was basically stuck at an ENP of 3, the underlying distribution shifted. The third-party vote eventually consolidated around the CCF and its successor, the New Democratic Party (NDP). Social Credit's first incarnation, in Alberta and British Columbia, lasted only until 1965. ${ }^{4}$ In 1962 Social Credit broke through in Quebec, but between 1968 and 1980 most of the Quebec Social Credit was absorbed by the Liberal Party. Meanwhile, the NDP share of the national popular vote gradually ascended to about $20 \%$. Also critical was a modest redistribution of support from the Liberal to the Conservative Party. ${ }^{5}$ The next shift occurred in 1993, which took the ENP up from 3 "parties" to roughly 4. As in 1935, 1993 registered several insurgencies but only two with staying power. One was the Bloc Québécois, which persists to this day; as the name suggests, this is solely a Quebec phenomenon. The other was Reform, with a predominantly Western base and strong echoes of Social Credit. The Conservatives and NDP each lost two-thirds of their 1988 shares and remained stuck at that low level until 2004. The Liberals were prime beneficiaries of the 1993 shift, in that their vote share went up relative to 1984 and 1988 and they were able to govern for 13 years. But their popular vote was relatively small - around $40 \%$ in their 11 years with parliamentary majorities and $36 \%$ in the 2004 election, which returned them as a weak minority government. In 2003, Reform, now called the Alliance, and the Conservative Party coalesced under the latter name. ${ }^{6}$ And in 2004, the NDP climbed back to a vote share in the mid-teens. The plausible governing parties - the Liberals and the Conservatives -now command about two-thirds of the popular vote. The Bloc and the NDP control another $25 \%$, and nearly $10 \%$ accrues to other actors, including a Green Party.

This fractionalization occurred notwithstanding powerful strategic pressure to the contrary. Canada's plurality system exerts as powerful a "mechanical" effect (Duverger 1954/1963) as any among its obvious comparators. Averaged across all elections since 1878 , ENP has been about 0.5 smaller for seats than for votes. This masks considerable variation, however. In the period of near-perfect two-party competition, 1878-1917, the average defractionalization (the difference between vote and seat ENP) was only 0.17. In contrast, between 1935 and 1957, the gap was about one whole party. From 1993 to 2000, the gap was 1.2. Most of this overtime variation reflects nothing more than movement of party shares up and down a quite stable curvilinear seat-vote relation. Seat-vote gaps are greatest when the Liberal Party commands $40 \%$ or more of the popular vote and the rest of the vote is split among several weak alternatives. Gaps are smaller when the Liberals are weak and the alternatives, the Conservatives especially, are strong but not stronger than the Liberals. In these situations, the seat-vote gap tends to be around 0.6 . The basic point is clear: when at least one major party remains strong the system is unforgiving, especially for small parties. ${ }^{7}$

Why then is there so much third-party activity? And why are there so many third parties with long histories? The classic answer to these questions was central, it turns out, to the reformulation of Duverger's law. Rae (1969/1971) presented the first systematic account of Canada as a deviant case among plurality systems. His intuition
pointed to sectionalist third parties, parties that were sufficiently competitive locally to benefit from, rather than be punished by, Duverger's law. This intuition then took on a formal patina. Riker (1976) recapitulated Rae's assertion that Canada conformed to Duverger's law at the district level. Riker (1982) argued further that the local level was the one to which the law truly applies. Cox $(1994,1997)$ formalized this claim, and argued that local coordination and extralocal coordination were separate processes. Local coordination tending toward bipartism is pretty much a given:
... Duverger's Law, which was once an empirical assertion and a loose theoretical argu-
ment, holds up under rigorous theoretical scrutiny if the realm of analysis is the single
electoral district, and if one adopts a game-theoretic mode of analysis
Chhibber and Kollman 2004, p. 38.
Extralocal coordination, the combining of initially separately labeled but potentially compatible district candidates into nationwide electoral combinations follows another, more contingent logic. The key, according to Cox (1987), is the pressure of a national policy agenda: as national-level policy making shifts from essentially club goods - incorporation of companies, pensions for deserving widows, and the like - toward true public goods, so does the pressure increase to form nationwide political combinations. But the trend of such centralizing pressures is not always upward. It can ebb and flow, and in the Canadian case, according to Chhibber and Kollman 2004, ebb is at least as dramatic as flow. As provincial policy making has grown in importance relative to that in Ottawa, the pressure to consolidate the national system into two viable parties has diminished.

It is easy to see from Fig. 6.1 why so much is made of cross-district breakdown. In 1921, the first year of multipartism, the national/local gap jumped to about 0.5. It retreated over the following decade, as did the national ENP. From 1935 on, however, the gap averaged 0.52 , and in 1993 it doubled in size. Geographic variance now contributes the equivalent of one whole party to Canadian multipartism.

But between 1917 and 1993, the national ENP grew by the equivalent of two parties. The other half of this fractionalization came about as the local vote fractionalized. Before 1921 the local effective number of parties was 1.9, on average, with a minimum value of 1.7. Local ENP moved up slightly in 1921 and then receded. In 1935, however, the number moved up to 2.6 and from 1935 to 1988 it averaged 2.5. Over 1935-1988, local ENP exhibited a slight upward trend. ${ }^{8}$ The trend is clearer when the scan extends to 2006. By 1988, the local value was 2.69 and every subsequent value was as high or higher. ${ }^{9}$ Roughly speaking, local ENP grew over the twentieth century as much as the national/local gap did, by the equivalent of one party.

This growth reflected the regional diffusion of three-party competition, as shown by Fig. 6.2. As in Fig. 6.1, the underlying data are constituency-level means for ENP. ${ }^{10}$ In this case, means are calculated within each of four regions. For visual clarity, the time plots are smoothed. ${ }^{11}$ They reveal what is already widely known, that multipartism started in the West. From 1935 to 1958, local ENP was 0.5 higher


Fig. 6.2 The diffusion of local multipartism (sources: Canada. Chief Electoral Officer. Reports on General Elections, various years)
in the West than in Ontario and 0.8 higher than in Quebec and Atlantic Canada. After 1960, however, Western party shares consolidated modestly even as other regional electorates fragmented. ${ }^{12}$ The West/Ontario gap shrank to 0.3 after 1960 and slightly reversed after 1980. In Atlantic Canada, local ENP began to creep up after 1960, and by the 1990s this region too had reached multiparty parity with the West. Quebec also exhibited a general upward trend in local ENP, although with considerable episodic variation. Hardly any trend is visible in the province before 1960. Then in 1962, Quebec surged to second place in the regional league tables, only to fall back. This surge and decline tracked the fate of the Quebec version of Social Credit. Quebec local ENP surged again in the 1990s with the emergence of the Bloc. By 2006, local multipartism was the norm in every region, with mean ENPs varying from 2.6 to 3.0 .

We are not the first to notice district-level fractionalization. Gaines (1999), for instance, comments acerbically on the insistence that on cross-district breakdown is the whole story. Chhibber and Kollman 2004 acknowledge the fractionalization within Canadian constituencies; they just choose not to dwell on it. But its sheer scale and ubiquity begs detailed further examination.

## The Nationalization of Contestation

First of all, local multipartism forces our attention to what Duverger calls the electoral system's follow-on "psychological" effect. The very power of the mechanical effect, the quasi-automatic defractionalization of preferences as votes are translated into seats, should create pressure for its own minimization. Pressure should be most acute when fractionalization of party preferences within a broad affinity of voters threatens to hand seats over to some other, less fractionalized affinity, as when division on the right hands the election over to the left. The surest way to avert this is to consolidate local voting blocs. Voters may struggle to achieve this level of coordination themselves, but elite actors should be able to do the coordinating for them. In particular, the entry of well-financed candidates should be controlled (Cox 1997).

Far from retreating from areas of weakness, however, the Canadian parties most committed to Westminster politics have spread their candidacies as widely as possible. According to Fig. 6.3, the Liberal Party reached universal contestation by 1935 and the Conservative Party, by 1958. ${ }^{13}$ In itself, it would seem unremarkable that the potential governing parties contest all seats. ${ }^{14}$ The pattern is consistent with the one Caramani (2004) observed for European elections. But Canadian parties did so even as a third force arrived on the scene. The CCF, later NDP, is no less committed to Westminster politics than the Liberals and Conservatives are. Evidently, this includes reaching for office through universal contestation.


Fig. 6.3 Uncontested seats by "pro-system" parties (sources: Canada. Chief Electoral Officer. Reports on General Elections, various years)

Initially, CCF contestation reflected anticipation of success, as the party was a major contributor to the early fragmentation of the Western Provinces electorate even as it declined to contest over $30 \%$ of all seats. ${ }^{15}$ The turning point was 1962, the first election contested by the CCF's successor, the NDP. The number of uncontested seats was cut in half and by 1968 the party was matching the other pro-system parties in running candidates everywhere. Taking all three parties together, the trends flatly contradict the dominant prediction in the literature.

## Local Strategic Implications

None of this matters if relatively weak candidates are irrelevant to the choice between frontrunners. In Canada, however, third parties commonly impinge on that choice. At least they do in the basic arithmetic sense of capturing shares that exceed the winner's margin. A first indication is the time path of first-, second-, and thirdplace party shares, in Fig. 6.4. The mean winner's share has dropped from about $60 \%$ to around $50 \%$, with the drop essentially accomplished by 1962 . The mean runner-up's share also dropped about 10 points, with the trend continuing past 1962. The third-place party by itself now typically captures about three-quarters of the total first- and second-place drop. That is, its typical share is about $15 \%$, and has been so since 1962.


Fig. 6.4 Local vote shares for the first three parties (sources: Canada. Chief Electoral Officer. Reports on General Elections, various years)

An implication is that the typical second runner-up has about $50 \%$ of the share of the first runner-up. If the second runner-up's mean value is also the modal share, or close to it, then the situation is potentially dire, strategically speaking. From the point of view of winning the current election, the third-party votes would be truly wasted. It is possible, however, that the mean values in Fig. 6.4 mask a bimodal reality. Many third-place shares may be close to zero. Such a small third-place share would exemplify "Duvergerian" equilibrium, that is, a local ENP close to 2, the theoretically predicted situation. Such outcomes are troublesome neither for Duverger's law - indeed, they exemplify it - nor for the coherence of the outcome - the winner is likely to have won an essentially straight fight. But many third-place parties may be close enough, numerically speaking, to the second-place party that distinguishing between their chances of success is difficult. Such an outcome would exemplify Cox's (1994) "non-Duvergerian" equilibrium. This may square with a reasonable emendation of Duverger's original conception, but the implications for the coherence of the seat-vote relation could still be serious.

In fact, the Canadian situation may be the worst of both worlds: inconsistent with theory and incoherent in the seat-vote relation. Figure 6.5 shows that Fig. 6.4 was not deeply misleading, that mean-value plots do capture the effective center of each distribution. Figure 6.5 plots kernel density functions for all ridings in 2004 and 2006. The kernel density is like a smoothed histogram, so the horizontal axis displays the range of possible vote shares while the vertical axis gives the density at each share. (Observed densities seem small because they are assigned to very narrow ranges of shares.) The modal first-place share is $45 \%$, with a long tail stretching toward $85 \%$. The second-place mode is just over $30 \%$ with skew toward small values. The first- and second-place modes are actually rather closer to each


All Canada, 2004-6 combined.

Fig. 6.5 Distribution of shares for the first three parties, 2004-2006 (sources: Canada. Chief Electoral Officer. Reports on General Elections, various years)
other than their respective means, with a gap of just over 10 points. The mode for the third-place share is in the low teens with a tail stretched toward $30 \% .^{16}$

So far, we have not linked the fates of the first-, second-, and third-place candidates to each other. For that we need a triangular plot, as in Fig. 6.6. The figure concentrates on the three-way contests of greatest interest, among Liberals, Conservatives, and New Democrats. It also concentrates on ridings outside Quebec, where this three-cornered pattern is the prevailing one. Each point is a three-dimensional coordinate in a space where the three parties' shares sum to 1.0 . This just means that all votes for any party other than these three are excluded from the denominator. Points are separately labeled by the identity of the third-place party, but this is not of interest here (but see later). Instead, our focus is on the distribution of all points. And the critical fact about this distribution is its tendency to agglomerate toward the center of the equilateral triangle: the closer to the center, the more equally divided the total. As a visual aid, the region in which each party gets at least $15 \%$ of the three-party vote is demarcated. That region is densely populated: $52 \%$ of all non-Quebec ridings lie inside it. Over $30 \%$ of ridings lie inside the more tightly defined region where each party gets at least $20 \%$ of the vote. For all that, points tend to lie toward the boundaries of the region; dead center is quite empty. The typical third-place party in the 15 -point region gets just over $20 \%$ of the vote, where the first runner-up typically gets $30 \%$ and the winner, $44 \%$. The picture is not very different for the 20 -point region: third place typically means a $22 \%$ share, second place $30 \%$ (again), and first place $42 \%$. What is more, there is no evidence of strategic adjustment between 2004 and 2006. The 2004 election initiated a new


Fig. 6.6 Three-way vote divisions, 2004-2006 (sources: Canada. Chief Electoral Officer. Reports on General Elections, various years)
electoral era, whose basic structures could not be fully anticipated. By 2006, the foundations should have been clear and strategic adjustment, thus, possible. But strategy was even less in evidence in 2006 than in 2004, as there was a net shift toward the equal-shares center of the joint distribution. In sum, many third-place shares are more than large enough to cover the typical margin even as they are not large enough to be plausible candidates for the non-Duvergerian pattern.

## Discussion and Implications

The fit between the facts of the Canadian case and the expectations generated by Duverger (1954/1963) is, if anything, only getting worse. Not only does the Canadian system continue to be vulnerable to sectionalist insurgency, but also such insurgency accounts for no more than half the system's "excess" fractionalization. The other half stems from the steady diffusion of local three-party competition. The particular form that three-party competition has taken cannot be squared with any type of equilibrium - Duvergerian or non-Duvergerian - predicted from game-theoretic models. What might account for the local pattern?

One starting point is with the classic cause of national multipartism, sectional insurgency. Local and national fractionalization move together, at least in short run, as Fig. 6.1 incidentally showed. When a sectional insurgent appears, old parties do not simply surrender. Even in 1921, the Progressive insurgency boosted the local ENP, if not as much as it did the national value. After 1935, the association between local and sectional breakdown may even have strengthened. This is not much of an explanation, however. In truth, all we have done is notice an association. The fact that the insurgent does not completely eliminate at least one older rival is just another statement of the difficulty anatomized at length in the preceding section.

Competing institutional imperatives may explain some of this awkward local coexistence of sectional insurgents and multiple, resilient pro-system players. It may be critical that Canada is a federal state. The appearance of a new party in provincial politics may create an imperative, at least on a trial basis, for entry in the federal arena. The older federal competitors may resist, such that more than one survives. There certainly are instances of this, for example, when the Social Credit breakthrough to provincial power in British Columbia was followed by a modest federal breakthrough. ${ }^{17}$ The appearance of the Bloc Québécois, if we accept it as the de facto federal wing of the provincial Parti Québécois, also might fit. This pattern does not seem to be that common, however. For one thing, induction seems to be at least as frequent in the other direction, from federal to provincial. Most common of all seems to be outright compartmentalization between arenas. The British Columbia Social Credit example is pertinent here as well: the party never had much federal strength even at the peak and then disappeared federally more than 20 years earlier than its provincial counterpart did. Quebec also exemplifies compartmentalization: the Union Nationale was a power in provincial politics with no federal counterpart; the same was true for over 20 years of the Parti Québécois. ${ }^{18}$

There are elements of provincial induction, arguably, in the history of the federal CCF/NDP. Such induction was more important in the early years, however, and concentrations of early CCF/NDP support within certain provinces cannot account for its eventual diffusion to other provinces.

One thing that might help account for third-party proliferation is the evolving pattern of federal campaign finance. The finance system may have come to underwrite both the nationalization of the party system and its fractionalization. Starting with the 1968 election, candidates have been eligible for subsidy. Although candidates must clear vote thresholds to be eligible for compensation, the thresholds have dropped. Now the national organizations are also subsidized, reflecting their nationwide vote totals. Small parties advertise to sympathizers that votes are dollars, and the sympathizers seem to respond. The finance system may thus have created at least a partial counterbalance to the electoral formula. The finance system is best thought of something that helps keep existing players in the game, however, although it may also promote further fractionalization. But the breakdown of local electorates began long before the finance system changed. Indeed, the finance system itself is, to a great extent, endogenous, the consequence not the cause of that fractionalization. The key legislative breakthroughs came under minority Liberal governments. Not only did the minorities exist because of electoral fractionalization, Liberal ones were pushed toward finance reform by the NDP, itself the chief manifestation of that same fractionalization.

Although Duverger's psychological effect is now thought to operate mainly through elite intervention, there still remains the question of voter response to the candidates who do enter. For the Duvergerian predictions to operate through voters, voters must have access to adequate information and must care only about the current result. It is difficult for voters to have current information on their own riding as commercial polling costs are prohibitive for such small populations. To the extent that geographic patterns are stable and riding boundaries change only a little, voters might be able to deduce the present situation by combining history with swings indicated by national or regional polls. This seems cognitively demanding. Even if they have this information, strategic voters find themselves in a collective action situation, akin to the turnout decision in the first place. Once she has decided to vote, for whatever reason, the voter's strategic behavior will only affect the outcome if she is the last vote necessary for her second-choice party to overtake her least-preferred alternative. This requires the voter to believe that enough voters with similar preferences will behave strategically. If she thinks it unlikely that they will have the information or the capability, she may as well not bother to do so, satisfying her duty to vote with an expressive choice for her preferred party. Even with good information, those who prefer a third party may reject short-term strategic behavior to preserve the party's presence in the district. So the problem may be in the assumption of a short time horizon (Cox 1999, p. 154).

Another stumbling block for Duvergerian voters is the nationalization of campaigns, notwithstanding the regionalization of results. One manifestation, already described here, is the expectation that serious parties will offer candidates in all ridings. At another level, the twentieth century saw campaigns increasingly focused on leaders’
tours and increasingly reported on by consolidated national media. Parties responded with a more standardized national platform, so local candidates can not stray as in the past from the party's ideological position. Where once the Duvergerian psychological effect might have operated separately in each district, with candidates aligning themselves with district distributions of voters' preferences, local races now seem to be a sideshow. ${ }^{19}$ To the extent that the local contest seems irrelevant to voters, their judgments of a party's viability may hinge on its ability to win seats (Johnston et al. 1992). Voting for the NDP even in a seat where that party gets only $10 \%$ of the vote will seem less like a lost cause if the party wins 30 seats, remains an official party, garners significant continuing media coverage, and sometimes holds the balance of power. Since the effect of locally oriented strategic behavior on national results is remote (Gaines 1999), voters are unlikely to be rewarded for strategic behavior, so they can take heart that their local loser is part of something larger. If the psychological effect has to operate on losers, both voters and parties, these third parties can hardly be called losers.

There remains the question of potentially perverse results. In all other Westminster systems, early twentieth-century realignments eliminated at least one party of the center-right, the better to block access to power by a party of the left. The governing logic was always to avoid splitting the vote and allowing a minority to rule. In Great Britain this came about after some years of jockeying for electoral advantage. In Australia, center-right strategists short-circuited the process by adopting the Alternative Vote (AV), thereby reducing the penalty for coordination failure. Sequences like this describe twentieth-century elections in some Canadian provinces, notably British Columbia. ${ }^{20}$ Why then did the center and the right not coordinate in this way in the rest of Canada? Or why did the center and left not merge? The answer, of course, is that the center-left stratagem has never been necessary in federal politics and the center-left strategem, only rarely so. Most of the time, the system is dominated not by either extreme but by the party of the center, the Liberals. Figure 6.6 indicates that Liberal candidates were rarely in third place, and Conservative candidates only modestly more likely to turn up there. Even in 2004 and 2006, a period of relative Liberal weakness, the party placed first or second in $81 \%$ of all ridings ( $71 \%$ in 2006 and $91 \%$ in 2004). But this leaves the principal opponents to the Liberals in a quandary: from a contentless, strategic point of view, the Conservatives and the NDP are each other's obvious partners. Substantively, however, the primary runners-up are even less acceptable to each other than the Liberals are. When Riker (1976) claimed that the key to Canadian multipartism was the presence of localized third-party support, he presented Canada as the easy case. The hard case was India. Riker argued that the Indian peculiarity was the domination of the system by Congress, a party of the center. This enabled parties on each flank to be both visible and weak. Defeat of Congress required the improbable: a coalition of the ends against the middle. It turns out that the diagnosis Riker made for India also applies to Canada.

This only begs the question, why are the Liberals so successful? That they cover the median on economic policy hardly seems like an answer. The dominant pattern in plurality systems is an empty center. To be sure, parties are drawn to the center
by exigencies of campaigning but they rarely start there (Strom 1990). We conjecture that the Liberals' strategically useful central position on the left-right dimension is made possible by the distribution of preferences on an non-economic dimension. On this dimension, the Liberals control a pole within each of the country's two great electoral segments, Quebec and the rest. On the great question of Quebec/Canada relations, the Liberals have historically been the chief champion outside Quebec of Quebec and francophone interests and inside Quebec the chief champion of a united Canada. For the party itself, this is not an inconsistency, and on this dimension too the Liberals are centrist. But the electorate is bifurcated, and between the segments the Liberals control opposite poles. Since 1993, the bifurcation is dramatized by the existence of the Bloc Quebecois, which contests elections only in Quebec and is unabashedly separatist. Even before 1993, however, a pattern like this recurred: Conservative gains in Quebec always involved recruiting nationalists, notwithstanding the anti-Quebec cast of the rest of the Conservative base (Johnston et al. 1992). This, of course, is an ends-against-the middle move, just at the level of the country rather within regions or locales. These ends-against-themiddle moves are critical to understanding the ebb and flow in the extralocal component of overall fractionalization. But that is another story.

## Notes

1. The measure has its flaws, notably the fact that several qualitatively different underlying distributions can produce the same ENP (Dunleavy and Boucek 2003). Our narrative of the Canadian case will note this as appropriate.
2. Before 1878 , writs of election were issued to serve the strategic interests of the parties or factions in government. The earliest writs were issued for ridings believed to favor the government, in the hope that a bandwagon could be induced. Votes were cast by voice in a small number of favorably situated locales, to facilitate bribery, treating, and intimidation. Although 1878 markedly regularized the casting and counting of ballots, the franchise remained prop-erty-based in most provinces for several more decades.
3. Our rendering of the partisan makeup of pre-1900 elections arguably understates the complexity of early patterns. Chhibber and Kollman (2004), using data furnished by Brian Gaines, may be truer to the messy electoral reality of the period. For example, the Conservative side was split between "Conservatives" and "Liberal-Conservatives." These two kinds of Conservatives did not run against each other, however, and their behavior in parliament was indistinguishable, hence our decision to treat them as a single party. Our estimates and the Chhibber-Kollman ones coincide from 1900 on, in any case, and this is the critical period for both their analyses and ours.

Note further that the 1917 election does not stand out among the pre-1921 outcomes. What we mark as the Conservative share in the underlying distribution for 1917 is in fact the share for the Unionist coalition, which included a significant number of non-Quebec Liberals. Because of coalition and because of the polarization between Quebec and the rest of the country, many ridings were won by acclamation. In the aftermath, the party named itself Liberal-Conservative even though most of the Liberals left it. This name held until 1945, when the party adopted the name "Progressive Conservative" at the behest of its newly elected leader and former Progressive Premier of Manitoba, John Bracken.
4. In fact, Social Credit was all but erased in those provinces in 1958 and only a handful of Social Credit MPs hung on through the 1965 election.
5. Modest, that is, on average for the whole period. In 1958 and 1984, the Conservative party won lopsided majorities.
6. The adjective "Progressive" was jettisoned at this point.
7. The Canadian system has essentially the same parameters as the British and pre-1996 New Zealand ones. The seat-vote relation can be characterized as follows:

$$
S_{\mathrm{it}}=0.01+0.42 V_{\mathrm{it}}+1.45 V_{\mathrm{it}}^{2},
$$

or as:

$$
S_{\mathrm{it}}=1.14 \mathrm{e}^{3.41}
$$

calculated for all elections since 1878 and for all parties with at least $1 \%$ of the national popular vote. The vote curve lies below the line of proportionality for all vote shares below $38 \%$. The maximum vertical gap between the lines sits close to a popular vote share of $20 \%$.
8. The gain was 0.004 units per year, with a standard error of 0.25 . Local ENP certainly fluctuated, dropping occasionally. In 1940, for instance, it was only 2.1 , reflecting intense polarization (reminiscent of 1917) between Quebec and the rest of Canada. From 1962 to 1980, local ENP exhibited a quite consistent downtrend ( 0.0130 per year, standard error of 0.0026 ). This reflected the evaporation of Social Credit.
9. The 1935-2006 annual gain was 0.0058 with a standard error of 0.0015 .
10. The series in Fig. 6.2 begins in 1908, the first election with a fully transcontinental, nineprovince system (Newfoundland enters the calculations in 1949).
11. Without smoothing, patterns are essentially the same as those presented in Fig. 6.2, but the amount of vertical election-specific "noise" obscures the long-term patterns.
12. Consolidation in the West mostly reflected the disappearance of federal Social Credit. The Reform breakthrough in 1993 was so successful that the Western electorate became only slightly more fractionalized than it had been in 1988.
13. The Conservatives contested every seat as early as 1935 , but their abject weakness over the next two decades (especially the 1940s) led them to concede 10-20\% of seats.
14. That said, there is evidence before 1930 for strategic withdrawal in the face of local threats. Although noncontestation dropped from 1878 to 1911, it surged again in 1917, with the 1921, 1925 , 1926, and 1930 elections being especially to the point: the Liberal Party declined to contest over $10 \%$ of House seats in those years, peaking at $18 \%$ in 1926, and did so where Progressive candidates enjoyed the strategic advantage. See, for instance, Morton (1950), pp. 122-123, 243 and Saywell (1991), pp. 82-83, 96. Mutual withdrawal seems to have been possible mainly in Ontario. The 1917 surge reflected noncontestation inside the Unionist coalition.
15. The exception was 1945 , in which the party anticipated a breakthrough. Expectations were frustrated, and the rate of noncontestation went back up in 1949.
16. The complementary skewness of the first- and second-place distributions is pretty much an arithmetic necessity, as is the progressive compression of the distributions from first to third place.
17. The 1935 Social Credit breakthrough in Alberta was similar, and nearly simultaneous across arenas.
18. Gaines (1999) speculates that some of the induction could reflect electoral system experimentation in certain of the Western provinces, but this seems like a stretch.
19. But see Carty and Eagles (2005).
20. Indeed, BC exemplified both paths: jockeying on a stable institutional landscape, leading to eventual elimination or fusion of alternatives, and adoption of AV in 1952 and 1953.

# Chapter 7 <br> Party Inflation in India: Why Has a Multiparty Format Prevailed in the National Party System? 

Csaba Nikolenyi

According to Duverger's (1954) famous dictum regarding the relationship between electoral and party systems, the first-past-the-post electoral rule should lead to a two-party system. Strictly speaking, the logic of this prediction applies only to party competition at the district level but Duverger (1954: 288) himself expected that local two-party equilibria would be automatically carried upward to the level of national party politics to produce a national two-party system. However, Gaines (1999) and Johnston and Cutler in the previous chapter of this volume have shown that a Duvergerian two-party equilibrium may emerge only under special circumstances at the district level. Furthermore, beyond the districts the number of parties is governed by the process of party aggregation, which itself is driven by factors other than the electoral system alone (Cox 1997; Chhibber and Kollman 1998, 2004). Indeed, both Gaines and Johnston and Cutler remind us in this volume of the importance of the full canvas of institutional arrangements into which the electoral system is embedded, such as multiple elections to fill offices at different levels of governments in Canada's parliamentary federation or regional and European Parliamentary elections in the United Kingdom, in affecting the mechanical effect of converting votes to seats.

Ever since its inception, the Indian party system has consistently deviated from the Duvergerian two-party expectation as there have almost always been more than two parties at all levels of party competition (the district, the state, and the national) even though the electoral system, first-past-the-post, has remained unchanged. Moreover, the number of parties has been inflated at each successively higher level of aggregation. Thus, the number of state parties has always exceeded the number of district parties and the number of national parties has always exceeded the number of state parties. Also, while the number of national parties has changed considerably over time, the number of parties at the state and the district level has remained much more stable.

The central concern of this chapter pertains to party inflation at the national level. More specifically, the chapter will attempt to explain why the number of parties has been inflated at the national level relative to the number of parties in the states at varying rates throughout the post-Independence period. It challenges current explanations of party inflation that abstract away from a very important feature
of the Indian party system, namely that it did not start out with a perfectly competitive format but was, instead, dominated by an ideologically centrist party, the Indian National Congress, that brought Independence from British rule to the subcontinent (Kothari 1964; Riker 1976, 1982; Rudolph and Rudolph 1987). The central argument of the chapter is that national party inflation has varied inversely with the presence and the size of the center party. Specifically, the national party inflation rate has decreased when the center party has been strong but has increased as the size of the center party has declined. When the center party is absent, party aggregation increases and the inflation rate declines.

The importance that this chapter attaches to the center party closely resonates with an argument that Johnston and Cutler put forward in the preceding chapter regarding the effect of Liberal dominance on local fractionalization in the Canada party system. In both countries, we see pivotal parties, the Congress in India and the Liberals in Canada, increasing the costs of the formation of "ends-against-thecenter" electoral coalitions among the pivot's opponents. Yet, in contrast to India, where the Congress party has been in the center of the party space most of the time, Johnston and Cutler argue that the center of the Canadian party space tends to be empty more often than not.

## Theoretical Perspectives

According to Duverger's law, "the simple-majority single ballot system favors the two-party system" due to mechanical and the psychological factors (Blais and Carty 1991; Cox 1997; Duverger 1954). The mechanical effect of an electoral system consists of the ways in which votes cast for political parties are converted into seats that parties win, while the psychological factor refers to parties' and voters' behavior in anticipation of these mechanical effects (Benoit 2006: 72). In the case of the first-past-the-post electoral system, the mechanical factor alludes to the winner-take-all character of converting votes into seats, which automatically eliminates all but the winning candidate from legislative representation of the electoral district. The psychological factor that is induced by this electoral system is conventionally called tactical or strategic voting, because voters are encouraged to avoid wasting their votes on losing candidates even when they might be their ideologically most preferred choice. Similarly, the first-past-the-post system also encourages parties to weigh the strategic consequences of their candidate nomination processes: "elites and party leaders will also recognize the futility of competing under certain arrangements, and will hence be deterred from entry, or motivated to form coalitions with more viable prospects" (Benoit 2006: 74). Duverger expected that the joint effect of such mechanical and psychological effects would be a polarization of the party system to two candidates locally and to two parties nationally. Cox (1997) generalized this finding in his well-known $M+1$ rule, where the equilibrium number of parties under a given electoral system equals the district magnitude $(M)$ plus 1. Although Duverger recognized that the logic of this prediction works at
the level of the electoral district, he also posited that national bipartism would automatically follow the evolution of district-level bipartism because "increased centralization of organization within the parties and consequent tendency to see political problems from the wider, national standpoint tend of themselves to project on to the entire country the localized two-party system brought about by the ballot procedure" (Duverger 1954: 228). The concept of party inflation captures precisely this idea, i.e., that the number of parties at some level of aggregation may be higher than the number of parties at another level of aggregation. At the national level, the rate of party inflation measures the difference by which the number of national parties may exceed, or fall below, the number of parties at some lower level of aggregation, such as the state or the district. In this chapter, the national party inflation rate is understood to mean the difference between the number of parties at the national and that at the state level, rather than comparing the number of national parties to party proliferation at district level. Thus, the number of parties is calculated by using the effective number of parties (ENP) index (Laakso and Taagepera 1979) at two levels of aggregation: the state and the national. The number of national parties is defined as follows:

$$
\begin{equation*}
\mathrm{ENP}_{\text {national }}=1 / \sum^{t=1} P_{n}^{2}, \tag{7.1}
\end{equation*}
$$

where $P$ is the percentage of the total national vote polled by party $n$ in a given election, and $t=1$. Likewise, the number of state parties is defined as follows:

$$
\begin{equation*}
\mathrm{ENP}_{\text {state }}=\sum\left(1 / \sum^{t=1} p_{n, s}^{2}\right) / \mathrm{s} \tag{7.2}
\end{equation*}
$$

where $p$ is the percentage of the vote polled by party $n$ in state $s$ in a given election, $t=1$, and $s$ denotes the number of states considered.

Based on these measurements, various inflation indices have been proposed in the literature. For instance, Chhiber and Kollmann (1998) take the difference between the ENP at the national level and the average of the ENP in the electoral districts. In spite of its appealing simplicity, the Chhibber-Kollmann measure underestimates the severity of national party inflation in party systems with a small number of parties. For instance, a country with a national three-party system and a n-number of two-party districts will have a party inflation rate of 1 at the national level, according to this measure. However, so would a national seven-party system with a $n$-number of six-party districts. Yet, the degree to which the national party system inflates the number of parties in the districts is clearly much more severe in the former than in the later case. ${ }^{1}$

To remedy these issues, two other inflation indices have been proposed by Cox (1999) and Moenius and Kasuya (2004), respectively. The Cox inflation index divides the Chhiber-Kollmann measure by the effective number of national parties and multiples it by 100 . That is, the Cox inflation index is defined as follows:

$$
\begin{equation*}
\text { Cox inflation }=\left[\left(\mathrm{ENP}_{\text {national }}-\mathrm{ENP}_{\text {state }}\right) / \mathrm{ENP}_{\text {national }}\right] \times 100 \tag{7.3}
\end{equation*}
$$

As such, it certainly provides a more nuanced measure of party inflation and linkage; however, it neither follows the conventional definition of "inflation" nor can it differentiate among subnational units in terms of their contribution to the overall party inflation rate (Moenius and Kasuya 2004: 547-548). The party inflation index put forth by Moenius and Kasuya (2004) remedies these concerns by expressing the difference between the number of national and local parties as a percentage of the number of local, e.g., district, parties. Moreover, rather than using the average of the ENP across all subnational units, this index calculates the average of the difference between the effective number of national parties and the ENP in each given district. Formally, the Moenius-Kasuya inflation measure puts the ENP state in denominator of the formula. Thus,

$$
\begin{equation*}
\text { Moenius - Kasuya inflation }=\left[\left(\mathrm{ENP}_{\text {national }}-\mathrm{ENP}_{\text {state }}\right) / \mathrm{ENP}_{\text {state }}\right] \times 100 \tag{7.4}
\end{equation*}
$$

Figure 7.1 charts the changes that have taken place over time in the rate of national party inflation in the Indian party system by using both the Cox and the Moenius-Kasuya indices. Although both measures tell essentially the same story about the history of party inflation in India, the Cox index underestimates the degree of national party inflation relative to the Moeniuse-Kasuya formula. For its aforementioned advantages, the Moenius-Kasuya measure of party inflation will be used in the remainder of this chapter.


Fig. 7.1 Party inflation in India, 1952-1999 (source: author's calculation based on official electoral returns by the Election Commission of India. http://www.eci.gov.in/StatisticalReports/ ElectionStatistics.asp)

What explains cross-sectional and intertemporal variation in party inflation? In his seminal work on electoral coordination under alternative electoral systems, Cox (1997) argues that party aggregation, the inverse of inflation, is the result of incentives that may plausibly motivate "[s]ome pre-existing group... to accomplish a task that requires the help of a large number of legislators or legislative candidates; this group... seeks to induce would-be legislators from many different districts to participate in a larger organization (Cox 1997: 186)." These incentives may be defined by institutional and policy-related factors. For example, a strong presidential office elected concurrently with the legislature both by strong plurality-like electoral rules would "lead to the organisation of legislators from each district into two nation-wide electoral alliances, or parties." In parliamentary systems, the strength of the Prime ministerial office and a plurality-like process of selecting the head of government may lead to similar consequences. Specifically, Cox notes that

> If the leader of the largest party always has the first opportunity to from a government ... and he usually succeeds, then the system looks ... like a plurality election. If the leader of a smaller party sometime gets the first crack at forming a government, or if the politics of government formation are such that the first chance often fails, then the system is less like a plurality election, and provides weaker incentives to be the largest party. If the prime minister is weak and the system is really more like a plural executive, then the selection procedure will typically be proportional (hence even weaker) one." (p. 191)

With regard to the importance of policy, Cox (1997) notes that parties may want to aggregate and form larger national entities when they pursue some nationally relevant and important policy, which can be attained and implemented by a strong national party in government. Chhibber and Kollman $(1998,2004)$ have developed this line of argument further and showed that in four states where the first-past-thepost electoral rule is used (United States, Great Britain, Canada, and India) parties have indeed aggregated in response to growing centralization of fiscal authority in the national government. Their central argument is that
> [u]nder decentralized political or economic systems, candidates will have fewer pressures to join broad, national parties because voters will know that local or regional governments make the important decision anyway. ... if national governments make most decisions that affect voters, then it becomes important for candidates to communicate to voters the policy position of the candidate relative to national government policies, and also the possibility that the candidate, once elected, could become part of the government. For both functions, national-party labels, especially labels of parties that may be expected to become part of the government will be valuable. (p. 20)

Both of these perspectives highlight important sources of party aggregation in India; however, they also leave the overall picture incomplete. As for the institutional explanation, it is important to note that presidential ambition could not have been the source of party aggregation by virtue of India being a parliamentary federation. Although the Indian constitution does provide for a President, it is a largely ceremonial office. In addition, the President is elected for a 5-year term by an electoral college, rather than by popular vote, consisting of the two houses of the national parliament and the subnational legislatures using the single transferable vote formula. The national and subnational legislatures are elected nonconcurrently,
and the upper chamber of the national parliament, the Rayja Sabha, is filled by delegates of the subnational legislatures.

At the same time, there have been important changes in both the selection process and the powers of the Prime Ministerial office, which provides some support for the institutional perspective. According to convention, the President appoints the leader of the party that wins the most seats in a general election as the new head of government. At times of solid parliamentary majorities, which almost all Indian elections had produced prior to 1989 , this selection process is easy and noncontroversial. However, when the largest party enjoys only a wafer-thin majority or if the general election returns a hung parliament, the government formation process may become more complicated. At such times, it may be possible that either the President, who formally enjoys discretionary authority in deciding whom to invite to attempt to form a government, appoints the leader of a smaller party as head of government or that the first attempt at government formation fails. Under such conditions, prime ministerial ambition will not be a source of party aggregation.

Since 1989, no Indian national election has resulted in a single-party parliamentary majority, although the poll of 1999 did bring about a majority for the electoral alliance headed by the Bharatiya Janata Party. Of the four elections that returned hung parliaments (1989, 1991, 1996, and 1998) only two were followed by the appointment of the leader of the plurality party as Prime Minister (these being 1991 and 1998) and only one of these proved to be durable in office (1991) lasting for a full 5-year mandate. Moreover, only one of these elections (1991) was followed by the formation of a single-party government, while all other elections were followed by the formation of minority coalitions. These developments are very interesting because the formation of coalition governments normally characterizes Consensus rather than Westminster-style majoritarian democracies, the institutions of which India had inherited (Lijphart 1999). As the balance of powers between the executive and the legislature changes to the advantage of the latter (Manor 1994), the incentives for pursing prime ministerial ambition decline. Thus, there are strong reasons to expect that party aggregation will also decline, and inflation will rise, at times of hung parliaments and coalition governments compared with those when elections returned single-party majorities.

Figure 7.1 clearly shows that the exceptionally high rates of party inflation have been registered by the post-1989 parliamentary elections, in the era of minority parliaments. Clearly, when parties anticipate the government formation game to be uncertain, they scale down their efforts at building larger organizations compared with the pre-1989 period. As the data show, no parliamentary election post-1989 produced a national party inflation rate that fell below the inflation rate in any of eight elections that had been held before 1989! The importance of this explanation is further demonstrated by Fig. 7.2, which shows the regression of the national rate of party inflation in every election on the percentage share of the parliamentary seats that the largest party received in the given election. Clearly, one would expect to find a strong negative relationship between the two variables: when parties expect that the largest player will be very strong in terms of its expected parliamentary seat share, they will also expect that the government formation game will


Fig. 7.2 The impact of the size of the largest party on party inflation in India, 1952-1999 (source: author's calculations)
proceed according to the established convention of favoring the largest party first. Conversely, as the expected seat share of the largest party decreases, parties should be less likely to seek linkages across the states because the advantage of being the largest party will no longer be as obvious. As expected, the relationship between the two variables is indeed negative and $R^{2}=0.76$.

An important limitation of this explanation is that it cannot adequately account for the apparently anomalous election of 1977. In that election, the largest party, the Janata, won almost precisely the same percentage of parliamentary seats (54\%) as the largest party, the Congress, had in the 1967 election. Where the national party inflation rate in the 1967 election was about as high as we would expect on the basis of the overall trend (at 30.1\%), the inflation rate was astonishingly low in 1977 (at $13.3 \%$ )! Why parties would aggregate almost three times as aggressively in one election than in the other even though the largest party's seat share was almost exactly the same remains unexplained. Similarly, one may note that although the largest party commanded almost exactly the same share of parliamentary seats in both the 1971 and the 1980 elections, $68 \%$ and $65 \%$ respectively, the relative national party inflation rates in these elections did not point in the expected direction all: in 1971, the inflation rate was $20 \%$ higher than in 1980 even though the first party was actually somewhat weaker in this latter election! These limitations apart, there is strong evidence to suggest that the incentives for party aggregation in India have been weakened significantly since the country has entered a period of recurring hung parliaments and minority governments.

## The Number of Parties and Party Inflation in India

## The Electoral and the Party System

For the most part, India' general elections have been held according to the first-past-the-post electoral system. However, in the first two elections after Independence (held in 1952 and 1957, respectively), a number of states had electoral districts with two or three seats due to the special electoral consideration that was accorded to members of Scheduled Castes (SC) and Scheduled Tribes (ST) as prescribed in Article 330 of the Constitution. Constituencies where SCs or STs accounted for at least $50 \%$ of the population were automatically designated and classified as SC or ST seats, as applicable. In these districts, the winning candidate had to be a member of either a SC or ST, which clearly provided political parties with a strong incentive to recruit and nominate candidate from the ranks of these communities. In other cases, multimember districts were created, allowing voters to cast as many votes as there were seats, and the SC or ST candidate with the most votes received a seat regardless of his/her overall ranking in the contest. In the election of 1952, there was one three-member district and 39 two-member districts; in 1957 the number of double-member districts increased to 91 and the single three-member district was divided into single-member constituencies. In 1961, all remaining two-member districts were converted into single-member ones according to the Two-Member Constituencies Abolition Act of 1961.

Despite the continuity of the electoral system, the number of parties has shown considerable variation over time. Figure 7.3 documents these changes since the first post-Independence election in 1952 to the 1999 parliamentary elections. The figure shows that the effective number of national parties has been consistently above the average number of state parties throughout the period examined. The average number of state parties has fluctuated within a narrow band between 3 and 4, rising above 4 only in the founding election of 1952, while the effective number of national parties has moved between a low of 3.4 (in 1977) and 7.09 (in 1996).

Based on Fig. 7.3, three main periods can be distinguished in terms of the number of national parties in India:

1. 1952-1971: During this period, the number of national parties moved between 4 and 5 (only slightly falling out of this range in 1957 and 1967 when the number of national parties was 3.97 and 5.19 , respectively). The average number of national parties over these five elections was 4.5 compared with 3.7 at the state level.
2. 1977-1984: This is the period of high national party aggregation as shown by the small number of national parties. In none of the three elections that took place these years did the number of national parties rise above 3 . Similar to these changes at the national level, the average number of state parties also dropped from an average of 3.7 in the previous period to an average of 3.1 in this one. It is worth noting, however, that the number of national parties started steadily increasing immediately after the 1977 election.


Fig. 7.3 The number of national and state parties in India, 1952-1999 (source: author's calculations)
3. 1989-1999: In this period the number of national parties has shown an unprecedented increase; its lowest value was registered in the 1989 election at 4.8, which is only barely less than the highest number reached in all previous elections! Similarly, there has also been an increase in the number of state parties in this period.

## Party Inflation

The first five elections, the period of relatively moderate party fragmentation in the national system, are characterized by a steady increase in the party inflation rate in every election, as shown in Fig. 7.1. However, it is important to stress that the 1967 election stands out from the other four elections in this period because the rate of party inflation increased very sharply that year. While the rate at which the number of national parties exceeded the average number of state parties (in terms of the Moenius-Kasuya index) increased by $4.54 \%$ between 1952 and 1957 and by $4.79 \%$ between 1957 and 1962, it went up by $8.87 \%$ between 1962 and 1967, an almost twofold jump. While the 1971 elections also continued to register an increase in
national party inflation, it was at a much more modest level of $2.58 \%$ compared with that in 1967.

The elections of 1977 and 1980 broke the pattern of recurring increases in the party inflation rate. In 1977, the rate went down by a startling $19 \%$ compared with its levels in 1971 and it continued to decline slightly in the 1980 election also. Besides the founding election of 1952, the rate of national party inflation was at its all time low levels in these two elections. Beginning with the 1984 parliamentary election, however, the national party inflation rate has been trending upward once again with every national election although at a much steeper slope than before. The 1989 and the 1996 elections produced especially sharp jumps in the inflation rate, registering increases of $29.54 \%$ and $23.07 \%$ compared with the elections that preceded them, respectively. By 1999, the number of national parties has become $93 \%$ greater than the average the number of state parties!

## An Alternative Perspective

The different explanations that we have surveyed earlier abstract away from a very important feature that characterized the Indian national party system since the time of its inception, namely, that it did not start out as a perfectly competitive system. The partitioning of Pakistan and India at the end of British Rule on the subcontinent left the two major pro-Independence parties, the Muslim League and the Indian National Congress, in a dominant position in the party systems of each of the new successor states, Pakistan and India, respectively. For the following two decades, the Congress Party not only remained firmly located in the ideological center between the Socialist and Communist parties to its left, and the conservative and Hindu nationalist forces to its right, but it also maintained a large and stable electoral following throughout the states of the country never receiving less than $40 \%$ of the votes cast nationwide.

The important impact that the dominant size and the centrist ideological location of the Congress has had on the development of the party system has been well established in the literature, most notably by Kothari (1968) and Riker (1976, 1982). According to Kothari's class depiction of what he called the "Congress" system, the dominant party represented a broad national consensus forged during the nation's struggle for Independence from Britain's colonial rule. As the Congress was the main protagonist of the Independence movement it managed to appeal to and forge political capital from the patriotic sentiment of the electorate. According to Kothari's analysis, the role of the opposition parties in this system was not to constitute and offer a real alternative to the Congress government but rather to
...constantly pressurize, criticize, censure and influence it by influencing opinion and interests inside the margin and, above all, exert a latent threat that if the ruling group strays away too far from the balance of effective public opinion, and if the factional system within it is not mobilized to restore the balance, it will be displaced from power by the opposition groups (3).

In turn, what allowed the Congress to respond to these pressures and remain in power for so long without interruption was its internal plurality, flexibility, internal competitiveness, and its capacity to absorb rival movements, thus preventing the opposition parties from growing.

In a different theoretical vein, Riker also recognized the importance of the centrist position of the Congress Party (1976, 1982). According to him, the party's centrist ideological location allowed it to remain a Condorcet, but not a majority, winner of the electoral contest in most states and districts of the country. While this ensured the continuity of the party's dominant position in the national legislature, the centrist position of the Congress also perpetuated a multiparty equilibrium in the districts as supporters of hopeless candidates and voters, who could not support Congress for nonideological reasons, could not support the main non-Congress rival either!

The fact that the Indian party system started out with having a dominant party in the center of the party space imposed an inherent limitation on party aggregation at the national level. While the Congress would occupy a centrist position consistently across the states, its major contenders would vary across the regions: in some states the main non-Congress rival would be to the left; in other cases to the right of the Congress. The ability, as well as the willingness, of these anti-Congress parties to link into a national party was limited by their inherent ideological division: antiCongress parties that were located to the left of the Congress were ideologically closer to the position of the Congress itself than to the position of other antiCongress parties that were located to the right of the Congress in other states! Therefore, the ideological divisions within the non-Congress parties prevented the aggregation of the local party systems, a pattern best described as a system of multiple bipolarities between Congress and some other major rival, into a national two-party format (Chhibber and Petrocik 1989; Sridharan and Varhsney 2001; Yadav 1996).

However, pursuant to the previous discussion about the importance of Prime Ministerial ambition as a source of party aggregation, we would anticipate that these limits on national party aggregation would get particularly pronounced as the dominant position of the Congress starts to weaken. Since the centrist position of the Congress has effectively preempted the possibility of the formation of an alternative major national, the decline of the electoral dominance of the Congress Party could only produce a hung parliament with increased uncertainty about the outcome of the government formation process. As discussed earlier, the expectation of hung parliaments, minority government and cabinet instability lead to weaker incentives for parties to aggregate (Cox 1997: 191-192).

The Congress-dominant party system could also change as a result of the dominant party vacating the center of the party space. Such a change might come about either because some exogenous event alters the constellation of parties in the space or because political entrepreneurs change the dimensionality of the party space through heresthetical maneuvers (Riker 1986). In either event, when the center gets vacated and remains empty, parties will no longer be prevented by the center party in their efforts to aggregate. Therefore, so long as parties can anticipate that elections will produce majority parliaments with predictable consequences for government formation and stability, they will have an incentive to form large national
organizations by linking across the districts and the states, which reduces the national party inflation rate. In the context of India, this would mean that when Congress leaves the center then a number of anti-Congress rival parties, which are previously divided on ideological grounds, might actually find themselves on the same side of the Congress, which would allow them to engage in cross-district aggregation and the formation of a national anti-Congress party.

These considerations lead to the following expectations with respect to changes in the level of party aggregation and inflation in India:

Hypothesis 1: When the center of the party space is empty, the national party system moves toward a two-party format; party aggregation will be high and party inflation will be low so long as the election is expected to produce a majority parliament.

Hypothesis 2: As long as there is a center party in the system, i.e., the center is nonempty, the rate of national party inflation will vary inversely with this party's electoral strength: the weaker the center party, the stronger the likelihood of a hung parliament leading to weaker incentives for party aggregation. In turn, this will be reflected in higher rates of national party inflation.

## Evaluating the Hypotheses

Hypothesis 1: If the center is empty, party aggregation increases and inflation declines.

It is well known from the literature on the Indian party system that the Congress Party vacated its central position in the party space when the Congress government of Prime Minister Indira Gandhi imposed a state of Emergency on the country in 1975 (Rudolph and Rudolph 1987). The Emergency regime allowed the Congress government to secure safe passage of a number of laws and constitutional amendments (the 39th, the 40th, and the 41st Constitutional Amendments) that increased the autonomy of the executive from both the legislature and the judiciary. With the exception of the two communist parties, all opposition parties rejected the Emergency regime. While the Communist Party of India actually hailed the imposition of Emergency, the CPI (M) was more moderate; while it claimed to oppose the Emergency, it did not join the non-Communist opposition parties including the BLD, the Socialist Party, the BJS, and the Congress( O ) in forming a joint parliamentary bloc, called the Janata Front, to coordinate legislative efforts against the Congress(Ruling) in both houses of parliament. Two months later, the four member parties of the Janata Front met in New Delhi and resolved to form a united party whose primary objective should be "the restoration of democracy, democratic values and civil liberties" through peaceful means (Limaye 1994: 125-126).

Clearly, the introduction of Emergency Rule fundamentally redrew the space of party competition in India and saw the Congress moving toward the Left. This was clearly marked both by the ability of the non-Communist opposition parties to find a common ground against the Congress, as well as by the fact that the communist
parties did not actively oppose the Congress government's apparent abuse of democratic procedures. Indeed, the 1977 election was a contest that introduced a new dimension of competition, pro- versus anti-Emergency, intersecting the conventional left-right scale. The introduction of this new dimension of conflict allowed the noncommunist opposition parties, which had been previously located on opposite ideological sides of the Congress, to find themselves connected in what was now a two-dimensional space of party competition.

According to the Hypothesis 1, the emptying out of the ideological center should result in an increase in party aggregation and a concomitant decline in party inflation at the national level. Figure 7.1 has showed that the effective number of national parties reached its lowest level in this election and the national party inflation rate also subsided to its second lowest level ever since Independence.

Hypothesis 2: With a nonempty center, the party inflation varies inversely with the size of the center party.

Apart from the Emergency episode of 1975-1976, the Congress remained quite firmly rooted in the center of the party space. As a result, national party aggregation was much more limited both before and after than it was in the landmark 1977 elections. Figure 7.4 evaluates the second hypothesis, according to which party inflation rates should vary inversely with the size of the center party. The size of the center party is measured by the seat share of the Congress party in the national parliament, while the inflation rate is measured by the Moenius-Kasuya index. The result of the regression is quite convincing: there is not only a negative relationship


Fig. 7.4 The impact of the size of the center party on party inflation in India, 1952-1999 (source: author's calculations)
between the two variables, as expected, but there is also a strong $R^{2}=0.90$ ! Thus, a very strong case can be made by claiming that the declining electoral position of the center party, when the center is nonempty, provides weakening incentives for parties in the system to aggregate.

## The History of Indian Party Inflation Reconsidered

At this point, it may be worth reexamining the history of party inflation in India in terms of changes in the size and the electoral position of the Congress Party. Figure 7.5 shows how the electoral performance of the Congress has changed over time, in terms of the party's share of parliamentary seats.

## The Period of Moderate Party Inflation (1952-1971)

The period of moderate party inflation (1952-1971) was the classic period of Congress dominance. On the one hand, the regular election of majority parliaments generated strong incentives for party aggregation (Cox 1997); however, due to the


Fig. 7.5 The parliamentary seat share of the Congress Party, 1952-1999 (source: official electoral returns by the Election Commission of India. http://www.eci.gov.in/StatisticalReports/ ElectionStatistics.asp)
monopolization of the center by the Congress party, such aggregation had to remain asymmetrical, which limited aggregation on the Left and the Right of the Congress. The overall effect was that party inflation rates remained at moderate levels during this period.

In the 1952 election, the Congress faced off against a united Right, represented by the Hindu nationalist Bharatiya Jana Sangh, and a Left that was severely divided between the Communist Party and competing socialist groups (specifically the Socialist Party and the Kisan Mazdoor Praja Party). Although the non-Communist left managed to unite by the 1957 election, its earlier division resurfaced by 1962. In addition, there was further division on the Right marked by the rise of the conservative Swatantra Party on the national party scene. The next two elections that took place in this period saw the splintering of the Communist Left, occasioned by the split between the Communist Party of India and the Communist Party of India (Marxist), and finally the splintering away of the conservative faction from the Congress Party itself.

The splintering of the national non-Congress parties was simultaneous with the localization of these opposition groups. While the Congress remained the largest party, in terms of its vote share in every state of the country in this period, its largest competitor varied considerably from state to state. In the 1952 and 1957 elections, the Congress faced the Socialist Party (renamed as Praja Socialist for the 1957 election) as its largest competitor in nine and seven states of the country, respectively. In 1962, the Congress faced three different parties as its largest rival in four states, respectively. Although the number of states with the same largest non-Congress rival slightly increased in 1967 (the Hindu nationalist BJS being the runner-up to Congress in six states), there was a marked increase in the number of parties that opposed the Congress in only one state (there were seven such single-state Congress rivals in 1967 compared with three in the previous polls). The 1971 election provided the first instance of a state where the National Congress was not one of the two largest parties.

## The Period of Low Party Inflation (1977-1984)

The 1977 election was unique because Congress, for the only time, vacated the center of the party space, which allowed its opposition to regroup and defeat it at the polls. The emptying out of the center led precisely to the expected decline in party inflation, an increase in party aggregation, as explained earlier. However, as soon as the objective of displacing the Congress Party from government was achieved and the key provisions of Emergency rule had been reversed, the party space quickly regained its one-dimensional format that had characterized it before 1977. Once the immediate goals of restoring democratic rule were met, the constituents of the Janata coalition could no longer be kept united on account of the same ideological divisions that had kept them apart before the Emergency.

The disintegration of the Janata, however, did not happen overnight. At first, the Party broke up into two fragments, the Janata Party and the Janata Party (Secular), along the left-right cleavage each of which went through further disintegration by the time of the 1984 election. With the Congress regaining both the center of the party system and its electoral dominance, the national party inflation rate also returned to its earlier pre-1977 levels. As before, while the expectation of a solid majority parliament pushed party aggregation up, the presence of large centrist party placed a limit on the extent of this aggregation.

In 1977, almost half of all states saw the Congress and the Janata as the top two parties dominating the electoral scene. In 1980, the pattern was exactly the same if we count together the two factions into which the Janata had broken off the year before. In 11 states the Janata Party remained the main Congress rival, while in three other states the Janata Party (Secular) came to play that role. The 1984 election clearly marked a return to the earlier pre-1977 pattern of party fragmentation and inflation at the national level. The Congress remained one of the two largest parties in every state of the country; however, its opposition became highly localized. As in 1971, there were only six states with the same major Congress rival, again the Hindu nationalist party, this time called the BJP. It is also worth noting that the largest opposition party, in terms of seats, in the national parliament was the Telugu Desam, a single-state party competing against Congress in the southern state of Andhra Pradesh.

## The Period of High Party Inflation (1989-1999)

The third period is characterized by the electoral weakening of the centrist party, which thus no longer dominates the electoral scene. In this scenario, the center party still divides the ideological "ends," which limits party aggregation. In contrast to earlier periods, however, the center party is no longer strong enough to guarantee a majority parliament. So long as the center party remains a viable player in the party system, it can divide the off-center parties on ideological grounds. However, as the center party becomes weaker, there is no other party, either on the left or on the right, which would be capable of providing a parliamentary majority. Therefore, the incentives to aggregate, which are already only moderate, are further weakened producing high rates of national party inflation.

Figure 7.5 shows that the Congress Party entered a period of steady electoral decline beginning with the general election of 1989; since then the party has failed to win a parliamentary majority in any of the successive elections. The electoral slippage that the former dominant party has suffered in the 1990s is particularly pronounced in the two largest states of the country, Bihar and Uttar Pradesh, where the Congress could not even capture a third of the popular vote after 1989. In fact, as of 1991 the Congress ceased being one of the top two parties in Uttar Pradesh, the largest state of the country, which also accounts for most parliamentary seats, and it has met the same fate in Bihar, the second largest state, with the 1996
election. That same year the Congress also lost its top-two position in the large southern state of Tamil Nadu.

The electoral weakening of the Congress Party had exactly the kind of effect on party inflation that we would expect. As the Party no longer has the extent of nationwide electoral base that used to guarantee it a national electoral victory, a number of state Congress units started defecting from the party and delinking from the national organization. Some of the more prominent examples of the formation of new state Congress parties took place in the Northern states of Uttar Pradesh and Bihar (Tiwari Congress), Madhya Pradesh (MPVC), Karnataka (KC), and Tamil Nadu in 1996 (Tamil Maanila Congress) followed by West Bengal and Maharashtra in 1998 and 1999. The growth in the actual number of new non-Congress parties has also been extraordinary: the average number of parties entering the national elections increased from 34.5 before 1989 to 173.6 since 1989. On average, more than $3 / 4$ of these parties competed in fewer than three states of the country bearing testimony to the on-going disaggregation of the national party system.

Although much weakened in terms of its nationwide electoral support and parliamentary representation, the Congress has remained in the center of the ideological space of the Indian party system in the 1990s (see e.g., Huber and Ingelhart 1995). As expected, the continued centrism of the Congress prevents the formation of an alternative national party that might be capable of providing an alternative majority government. Although the Hindu nationalist BJP has emerged as the major rival to the Congress on the national scene it has not been able to win a single-party majority. The BJP became the plurality party in three consecutive parliaments (1996, 1998, and 1999) and was able to form coalition government in two of them (1998 and 1999); however, its success was dependent on the formation of effective and broadly based electoral alliances with smaller regionally based parties (Sridharan 2005). The very fact that electoral alliances have become the main players of national elections in India throughout the 1990s bears testimony to the weakness of the prevailing incentives for party aggregation: small parties do not feel the pressure of having to aggregate into a larger organization when they expect the election to produce a hung parliament leading to the prospective formation of a coalition government, where even very small parties can gain significant office- and policy benefits.

## Conclusion

This chapter sought to provide an explanation for the historical rates of national party inflation in India by stressing the importance of the size and ideological position of the party that dominated the party system at its inception, the Indian National Congress. It has been argued that party inflation has varied inversely with the strength of the center party but reached very low levels when the Congress left the center. This argument implies that Duverger's original expectation that a local party system would be automatically projected onto the national level, implying
low national party inflation, happens only in the special case when the center is empty. At least this is what the evidence from India suggests. The argument presented in this paper is consistent with earlier accounts of the Indian party system that have also stressed the important consequences of the centrist positioning of the Congress Party for strategic voting and the number of parties (Riker 1976, 1982). Moreover, it also points to a new area where the role of the center party should be appreciated in the party politics literature: while coalition theories have demonstrated the pivotal role of the center party in the politics of government formation and stability (Grofman and van Roozendaal 1997), the Indian story suggests that the center party can also shape the politics of national party inflation in first-past-the-post systems.

## Note

1. In the first case, the national party system increases the number of parties by $50 \%$, from 2 to 3 . In the second case, the national party system increases the number of district parties only by $16.7 \%$, from 6 to 7 .

# Chapter 8 <br> Does the United Kingdom Obey Duverger's Law? 

Brian J. Gaines

Textbooks on British politics differ in how they characterize the party system. Some emphasize that the UK has traditionally had a two-party system, but that the last few decades have seen movement toward multipartism in the electoral arena, and, to a lesser extent, in Parliament (e.g., Jones and Kavanagh 1998, 45-55; Norton 1994, 110; Freedman 1996). ${ }^{1}$ Others place more emphasis on the proliferation of parties, highlighting multiparty politics as an essential aspect of modern Britain (e.g., Peele 1995, 182-183). Amongst electoral-system specialists, this same difference in shadings can be found insofar as some scholars characterize Britain as a slight or minor exception to the Duvergerian prediction of plurality electoral-systems having two-party politics (e.g., Taagepera and Grofman 1985; Sartori 1997, 38-39), while others seem to take more seriously the puzzle of extra British parties (e.g., Duverger in Grofman and Lijphart 1986, 76-80). Summarizing the results of the 2005 general election, Curtice et al. declared, "[t]he mould of Britain's two-party system appeared decidedly cracked" (in Kavanagh and Butler 2005, 235). Nuance aside, there is little doubt that Britain today does not have a pure two-party system, and few would disagree that the trend over the past few decades has been increasing dispersion in support of parties.

How puzzling is this current state of the British party system? Obviously, the answer depends in part on how well founded is the law usually attributed to Duverger that plurality electoral rule should result in two-party politics. As is now well appreciated, the dependent variable in this formulation is complicated: one can measure party competition nationally or in districts, with or without weighting of party performances, in seats or in votes, statically or dynamically, and so on. This chapter will endeavor to clarify whether or not Britain's electoral and party system pose a serious challenge to Duverger's law, by simply dwelling on the dependent variable, and examining in detail how much dispersion in support for parties exists in the countries and constituencies of the United Kingdom. Along the way, I briefly revisit some key qualifications to Duverger's law concerning why the fit between electoral systems and their most natural party systems should not necessarily be exact.

## Party Systems and Duvergerian Equilibria

The two most fundamental aspects of a party system are how many parties exist and where the parties lie in ideological space. Although these two traits are undoubtedly related, it is not uncommon to treat them in isolation, probably because both issues are more complex than they first appear. Counting parties usually entails weighting them in some manner to reflect their importance, and there is no obviously optimal weighting scheme. When one's focus is the preferences of the electorate, votes are probably the most natural metric for party size, raising further complications such as whether or not all parties field equal numbers of candidates, what to do with independent or unaffiliated candidates, which vote total to consider in systems that involve multiple votes or counts, whether local or national electorates are more relevant, and so on. An institutional focus, by contrast, suggests emphasizing seats, not votes, and perhaps moving on to consider legislative activity, extent of discipline in each party's ranks, etc. Placing parties in ideological space, meanwhile, requires identifying the number and nature of relevant dimensions, and then somehow fixing parties in terms of both central tendency and dispersion, perhaps distinguishing between the party in the mass electorate and the party's officeholders.

Moreover, the chronological stages of behavior that result in each democracy having an array of parties of various ideological stripes and sizes are tightly interlinked by expectations about the future, learning from the past, and beliefs about others. It is common, and often helpful, to discuss twin mechanisms beyond Duverger's law, a "mechanical" effect that shrinks the number of serious competitors in the votes-to-seats translation, and various "psychological" effects, on voters and candidates, of expecting or observing these mechanics. Neither mechanism is simple. Candidates, parties, and voters are all engaged in (potentially) strategic behavior, all under the shadow of a set of electoral institutions and a set of legislative and constitutional features. Candidacies are generated by the interplay of decisions made by ambitious individuals and decisions by party leaders acting on some variety of collective interest, in expectation of likely electoral outcomes and, in turn, how votes are translated into seats, and how seat shares are translated into policy. Meanwhile, election returns, as an aggregate of individual voting behavior, are strictly conditional on candidate entry and are very probably influenced by expectations shaped by past outcomes, polls, and so on. Insofar as the most important or interesting outcome of an election is not vote share or even seat shares, but policies, the complexity of the process is further multiplied by the seats-votes curve, party discipline, styles of prospective leaders, and on and on.

Despite all of this complexity, the strict formulation of Duverger's law posits a simple relationship between electoral rule and number of parties, without qualification involving ideological location, and without any sharp qualifications about timing or dynamics. Moreover, if the law is understood as a claim about district competition, it does not address national party numeracy without some auxiliary lemmas dealing with the aggregation of district competition into a national party system. This latter point has often been ignored or downplayed, as the preferred method of assessing how well states conform to the law has been analysis of national aggregate data.

However, both of the main posited psychological mechanisms generating the law can operate at the district and national level. An allegedly near-universal psychological proclivity not to waste one's vote by supporting any candidate who seems to have a very low probability of winning clearly operates at the district level, though expectations about national relevance of parties or candidates might also shape voters' decisions. The elite-level concomitant of withdrawal or nonentry in the face of an electoral system that fails to reward candidates not in first place should operate at the district level, but could, through the party system, also exert its force nationally.

The section title above invokes "equilibria," another term that deserves some elaboration. In game-theoretic work, the term is underdescriptive, since there are a great many different concepts of equilibrium. In general, all of them apply to outcomes that have the potential to be stable in the sense that rational individuals (or coalitions of individuals) lack any incentive unilaterally to alter their behavior from that which led to the equilibrium (given the outcome and perhaps their beliefs about others). Evolutionary models take the dynamics of the process more seriously, and define equilibria as asymptotically stable fixed points of evolutionary dynamics, that is, processes of change wherein an ecology of actors generates and regenerates in a systematic fashion according to interactions. Here, I will eschew all of the technical details and invoke equilibria in a loose fashion to suggest outcomes that reflect some amount of stability. So the central idea is that Duvergerian equilibria are repeated instances of electoral competition featuring only two serious contenders. I will not aim to distinguish carefully between non-Duvergerian equilibria, stable multicandidate competition, and the absence of any apparent equilibria (or convergence) in the number of serious candidates per seat.

## Party Competition in the United Kingdom

Figure 8.1 shows, in five panels, how much party competition has occurred in each British general election since 1922, the first election after the south of Ireland was carved out of the UK. Panel a reveals an unmistakable growth in candidacies over the last three decades: whereas 1922-1970 saw between two and three office seekers per constituency, that figure is now about twice as high, following steady increases over the last nine elections. ${ }^{2}$ By contrast, the "effective" number of parties, when computed with seat shares for the whole House of Commons has risen only slightly over this period, with the 2005 election having produced the highest value since 1931, 2.46. ${ }^{3}$ The gap represents the direct mechanical effect. Lying in between these two extremes, the effective number of parties in terms of vote share increased from about 2.5 to just over 3 in the 1974-1992 period, and has continued to climb over the past three elections so that the 2005 value of 3.6 ties the 1922 value and is exceeded only by 1983 (and only if one treats the partnered Liberal and SDP parties of 1983 as distinct).

Panels b-e show how much the distinct nations united as the kingdom differ in this respect. Not surprisingly, the picture for England strongly resembles panel a - since England has had about $80 \%$ of the seats in the House over these years, b
a The United Kingdom


Jan. 1921 Jan. 1931 Jan. 1941 Jan. 1951 Jan. 1961 Jan. 1971 Jan. 1981 Jan. 1991 Jan. 2001
b England


Fig. 8.1 Party competition in House of Commons Elections, 1922-2005 (source: author's calculations from data reported in Craig (1989), Rawlings and Thrasher (1993), and at BBC websites for 2001 and 2005 elections). Notes: All series reflect national totals. Dashed lines in panel a show alternative categorizations for periods where multiple parties acted as cartels, and could be treated as one "party" or several (i.e., the National Coalition of Conservative, National, National Liberal, National Liberal and Conservative, and National Labour candidates from 1931 to 1966 and the Alliance of Liberal and Social Democratic Party candidates in 1983 and 1987). Other panels count coalitional parties separately. Panel e does not combine rival loyalist or republican parties. Members from University seats are included in panel a but not in panels b-e

## C Scotland



## d Wales



Fig. 8.1 (continued)


Fig. 8.1 (continued)
could hardly differ dramatically from a . There are, nonetheless, subtle variations. Both of the effective parties series for England are shifted downward as against the whole of the UK, and the seats line clings to the 2.0 gridline from 1935 to 2001, reaching 2.35 only in 2005, when Labour's huge majority gave way to substantial gains for both the Tories and the Liberal Democrats. England's Parliamentary representation has almost always been true to the Duvergerian proposition, it seems, but the voting public has, in recent decades, spread its support over more than two parties even while the electoral rule usually dealt with losing parties mercilessly.

Panels b and c reveal somewhat more complex stories in Scotland and Wales. Like England, both have seen increasing numbers of candidates per seat nearly every election since 1950, with period averages of about 2.5 for 1922-1945, 4 for 1974-1992, and 6 for 1997-2005. In both countries - but in Scotland most dramatically - the gap between number of parties measured by seats and number measured by votes has grown in recent decades, as Labour has dominated elections and other parties have felt the plurality loser's curse rather badly. In Scotland, the Alliance reaped little gain from a vote surge in 1983 and 1987, the Conservatives have been severely penalized by the seats-votes function since 1987, and the SNP has seen its House of Commons vote shares deflated into meager seat shares every year since 1970. In Wales, Plaid Cymru's more concentrated vote base means that it does reasonably well at winning seats in proportion to its vote share, and fewer minor parties win any substantial share of the vote, so the gap is smaller and the votebased count of parties is usually lower than its Scottish counterpart.

Northern Ireland is typically set aside as too exceptional to merit inclusion in discussion of parties in the UK. After 1970, sectarian parties have dominated, so the labels of the competitors are, indeed, completely different. There are few enough seats that this anomaly plays only a small part in increasing the overall party-counting indices for the whole of the UK. But the Northern Irish races do provide interesting additional evidence of how first-past-the-post logic exerts itself on voting. Panel e reveals that the broad trends in level of competition in Ulster are not different in kind from those in the rest of the UK. Again, candidacies have risen steadily, and the last 30 years have seen more parties in vote terms. Atypically, the proliferation of parties shows up in seat shares too, by virtue of splits within the loyalist and republican camps.

## Party Competition in the Countries and Constituencies of the UK

All of these figures, of course, are aggregates that do not directly represent districtlevel competition. Hence, variance in how uniform is the proliferation of candidacies and serious candidacies is suppressed in these figures. Table 8.1 shows for total candidacies how much variance underlies those country averages. In all four countries, of late, 5 or 6 is the modal number of candidates per district, and two-way battles are nonexistent. Indeed, three-cornered fights are nonexistent except in England, where they are very scarce. One component of the drift to the right (that is, the multiplication of candidacies) in the table has been the decision by the three major parties in England and the four major parties in Scotland and Wales to field complete slates of candidates, and thus to compete in all constituencies (outside of Northern Ireland) regardless of how poorly they have done there historically. The nationalists in fact beat the Liberals (in their various guises) to pursuing this fullslate approach, as they were running virtually everywhere in the 1970s, whereas it was the formation of the Alliance that marked the beginning of a genuine blanket-Great-Britain strategy for the Liberals, who had skipped nearly 100 races in February 1974, a handful in October 1974, and about 50 in 1979.

Of course, to get from 3 to 5 candidates in England, or from 4 to 5 or 6 candidates in Wales and Scotland requires additional parties, and these have varied from year to year. Fringe right-wing parties with nationalist, anti-European integration, and sometimes racist appeals have provided the most candidates, between the BNP, National Front, Referendum, and UKIP. Hundreds of Green candidates have stood since 1979, none of them ever coming within shouting distance of winning a seat. New Age believers in transcendental meditation stood under the Natural Law banner in about 300 constituencies in 1992 and about 200 in 1997, before withdrawing from politics back to serenity. The votes won by Natural Law candidates were always very few, and the most interesting aspect of the movement might have been that it was a rare international party that made similar tiny inroads into the electoral scene in other advanced democracies. A trickle of Communist candidates in the early period has been replaced, of late, by a smattering of leftists unhappy with

Table 8.1 Number-of-candidates distributions for constituencies, 1950-2005

| England | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10+ | $N$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1950 | 75 | 349 | 79 | 3 | 0 | 0 | 0 | 0 | 0 | 506 |
| 1951 | 409 | 94 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 506 |
| 1955 | 403 | 104 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 511 |
| 1959 | 310 | 191 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 511 |
| 1964 | 156 | 324 | 30 | 1 | 0 | 0 | 0 | 0 | 0 | 511 |
| 1966 | 196 | 294 | 18 | 2 | 1 | 0 | 0 | 0 | 0 | 511 |
| 1970 | 180 | 288 | 37 | 5 | 1 | 0 | 0 | 0 | 0 | 511 |
| Feb. 1974 | 37 | 341 | 115 | 21 | 1 | 1 | 0 | 0 | 0 | 516 |
| Oct. 1974 | 0 | 338 | 144 | 28 | 6 | 0 | 0 | 0 | 0 | 516 |
| 1979 | 3 | 152 | 236 | 96 | 19 | 9 | 0 | 1 | 0 | 516 |
| 1983 | 0 | 251 | 176 | 59 | 21 | 10 | 4 | 1 | 1 | 523 |
| 1987 | 0 | 348 | 145 | 22 | 8 | 0 | 0 | 0 | 0 | 523 |
| 1992 | 0 | 103 | 201 | 136 | 60 | 19 | 4 | 0 | 1 | 524 |
| 1997 | 0 | 18 | 127 | 127 | 131 | 76 | 24 | 21 | 4 | 528 |
| 2001 | 0 | 44 | 187 | 156 | 86 | 36 | 15 | 4 | 0 | 528 |
| 2005 | 0 | 21 | 131 | 190 | 94 | 58 | 21 | 12 | 2 | 528 |
| Scotland | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10+ | $N$ |
| 1950 | 18 | 38 | 13 | 2 | 0 | 0 | 0 | 0 | 0 | 71 |
| 1951 | 54 | 16 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 71 |
| 1955 | 57 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 71 |
| 1959 | 42 | 28 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 71 |
| 1964 | 27 | 35 | 7 | 2 | 0 | 0 | 0 | 0 | 0 | 71 |
| 1966 | 19 | 40 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 71 |
| 1970 | 1 | 29 | 38 | 3 | 0 | 0 | 0 | 0 | 0 | 71 |
| Feb. 1974 | 0 | 24 | 42 | 4 | 1 | 0 | 0 | 0 | 0 | 71 |
| Oct. 1974 | 0 | 1 | 61 | 8 | 1 | 0 | 0 | 0 | 0 | 71 |
| 1979 | 0 | 17 | 42 | 8 | 3 | 1 | 0 | 0 | 0 | 71 |
| 1983 | 0 | 0 | 48 | 23 | 0 | 1 | 0 | 0 | 0 | 72 |
| 1987 | 0 | 0 | 55 | 15 | 1 | 1 | 0 | 0 | 0 | 72 |
| 1992 | 0 | 0 | 33 | 27 | 10 | 2 | 0 | 0 | 0 | 72 |
| 1997 | 0 | 0 | 3 | 28 | 17 | 19 | 2 | 2 | 1 | 72 |
| 2001 | 0 | 0 | 0 | 33 | 33 | 4 | 2 | 0 | 0 | 72 |
| 2005 | 0 | 0 | 0 | 18 | 12 | 18 | 8 | 2 | 1 | 59 |
| Wales | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10+ | $N$ |
| 1950 | 11 | 17 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 36 |
| 1951 | 24 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 36 |
| 1955 | 21 | 11 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 36 |
| 1959 | 14 | 15 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 36 |
| 1964 | 9 | 15 | 11 | 1 | 0 | 0 | 0 | 0 | 0 | 36 |
| 1966 | 11 | 11 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 36 |
| 1970 | 0 | 8 | 26 | 2 | 0 | 0 | 0 | 0 | 0 | 36 |
| Feb. 1974 | 0 | 3 | 28 | 4 | 1 | 0 | 0 | 0 | 0 | 36 |
| Oct. 1974 | 0 | 1 | 29 | 6 | 0 | 0 | 0 | 0 | 0 | 36 |
| 1979 | 0 | 3 | 24 | 6 | 3 | 0 | 0 | 0 | 0 | 36 |
| 1983 | 0 | 1 | 22 | 13 | 2 | 0 | 0 | 0 | 0 | 38 |
| 1987 | 0 | 1 | 31 | 6 | 0 | 0 | 0 | 0 | 0 | 38 |
| 1992 | 0 | 0 | 18 | 13 | 6 | 1 | 0 | 0 | 0 | 38 |
| 1997 | 0 | 0 | 3 | 18 | 15 | 1 | 3 | 0 | 0 | 40 |
| 2001 | 0 | 0 | 7 | 13 | 11 | 6 | 3 | 0 | 0 | 40 |
| 2005 | 0 | 0 | 4 | 7 | 13 | 10 | 3 | 3 | 0 | 40 |

(continued)

Table 8.1 (continued)

| N. Ireland | $1-2$ | 3 | 4 | 5 | 6 | 7 | 8 | 9 | $10+$ | $N$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1950 | $\mathbf{1 1}$ | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 |
| 1951 | $\mathbf{1 2}$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 |
| 1955 | $\mathbf{8}$ | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 |
| 1959 | $\mathbf{8}$ | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 12 |
| 1964 | 2 | $\mathbf{5}$ | $\mathbf{5}$ | 0 | 0 | 0 | 0 | 0 | 0 | 12 |
| 1966 | $\mathbf{9}$ | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 |
| 1970 | $\mathbf{4}$ | 3 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 12 |
| Feb. 1974 | 0 | 3 | $\mathbf{6}$ | 3 | 0 | 0 | 0 | 0 | 0 | 12 |
| Oct. 1974 | 0 | $\mathbf{7}$ | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 12 |
| 1979 | 0 | 1 | 0 | $\mathbf{7}$ | 2 | 2 | 0 | 0 | 0 | 12 |
| 1983 | 0 | 0 | 3 | 4 | $\mathbf{8}$ | 1 | 1 | 0 | 0 | 17 |
| $1986^{*}$ | $\mathbf{8}$ | 3 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 15 |
| 1987 | 0 | 3 | 4 | $\mathbf{8}$ | 2 | 0 | 0 | 0 | 0 | 17 |
| 1992 | 0 | 0 | 1 | $\mathbf{7}$ | 5 | 1 | 3 | 0 | 0 | 17 |
| 1997 | 0 | 0 | 0 | $\mathbf{4}$ | $\mathbf{4}$ | 3 | $\mathbf{4}$ | 2 | 1 | 18 |
| 2001 | 0 | 1 | 3 | $\mathbf{6}$ | 4 | 2 | 1 | 1 | 0 | 18 |
| 2005 | 0 | 0 | 1 | $\mathbf{7}$ | 5 | 4 | 1 | 0 | 0 | 18 |

Source: author's computations. See data sources in references
Notes: Bold designates the frequency for the modal category for each country in each year. In 1986, all 15 of Northern Ireland's Unionist MPs resigned in protest of the 1985 Anglo-Irish agreement, in order to force an unofficial referendum via simultaneous by-elections in which they sought reelection to their seats.

Labour's moderation and, in 2005, by the Iraq war in particular. Amongst the horde of other minor candidates are many small and short-lived parties plus unaffiliated independents, only a handful of whom have ever won. Speakers running for reelection are sometimes treated as independent candidates, since the norm is for major parties not to oppose them, but the Speakers are included with their original parties in these calculations. The most recent "other" winners include a physician whose original campaign was meant to protest closure of a local medical unit (Richard Taylor in Wyre Forest in 2001, reelected in 2005), a show-boating "anticorruption" BBC journalist (Martin Bell, successful in 1997 and unsuccessful in his quest to remain in power in 2001), a Welsh exile from Labour running as an independent in protest of his former party having forced an all-women list on the local constituency (Peter Law in Blaenau Gwent in 2005), and the pugnacious ex-Labour, ex-Scotland maverick George Galloway - who did recruit a small number of like-minded others into his "RESPECT party" - parlaying a mix of anti-Americanism and antiSemitism into victory in Bethnal Green in 2005.

Northern Ireland exhibits the same evolution from a norm of two-candidate races (and even some uncontested races in the 1950s) to a norm of five or more competitors per seat at present. The proliferation reflects divisions within the loyalist/ unionist and the republican/nationalist camps. As unionist domination has faded, intramural splits on their side have settled, for now, into division between the more moderate Ulster Unionists and less conciliatory Democratic Unionists, at least temporarily ascendant after 2005. Sinn Fein reemerged on the electoral scene in the

1980s, and has taken an increasing share of the separatist vote away from the moderate alternative, the SDLP, in each successive election. Beyond the sectarian split, a few parties have fought in multiple elections with a cross-community pitch, the most long-lived being the (fading) Alliance Party of Northern Ireland (APNI).

A very strong form of Duverger's law would predict two candidacies, and the evidence in Table 8.1 would thus constitute a clear refutation of the alleged tendency to bipartism under first-past-the-post rules. But the very large literature on electoral rule and party systems has already thrown up a catalogue of reasons why there might be some noise in the relationship, and, in particular, why candidates who garner little support should perhaps not count very strongly as evidence of multipartism. Quite apart from the obvious point that hopeless-cause candidates who win only a handful of votes do not really alter outcomes the vast majority of the time, there is the question of what motivates the supporters of distant losers. Most backers of fringe parties, for example, seem to be aware that their preferred candidates stand no chance of winning, but derive some pleasure from expressing support for these individuals or their movement just the same. These voters are probably not impervious to pressures to be strategic by voting for the best candidate who might win, but their preferences are frequently extreme in the sense that none of the ostensibly viable candidates appeals to them enough to induce them to forego the expressive benefit of voting on the fringe.

A related or rival account emphasizes farsightedness. Some Green supporters, for instance, know perfectly well that their votes today will go to a loser, but believe that increasing vote shares in plurality races will help the party gain legitimacy or prominence, improving their prospects tomorrow. The fact that the UK now features important elections held under a variety of electoral rules may also play a part in expanding some voters' understanding of reasons to support likely losers. Positive spillovers from campaigns might be accrued not only in the distant future, but in the short term, in other electoral venues. The Green party elected 1, then 7, and then 2 members to the Scottish Parliament in the elections of 1999, 2003, and 2007, respectively - all courtesy of the party-list component of a mixed system. Recruitment of candidates to stand for House of Commons elections (and typically to forfeit their $£ 500$ deposit for having failed to secure $5 \%$ of the local vote) may be facilitated by the sense of success the party generates by electing individuals to regional assemblies, local government, or the European Parliament. The same logic could apply to UKIP, the Scottish Socialist Party, and other small parties that have repeatedly fielded large slates for national British elections without ever winning - or even coming at all close to winning - a House of Commons seat. For all of these parties, running candidates at every opportunity is worthwhile if it helps them to build loyalty, and to inculcate in friendly voters a habit of voting for their candidates.

The most popular avenue for addressing these sorts of concerns about how to deal with relatively weak parties is to shift from counting candidates to counting weighted candidates, with the weights reflecting vote shares. A variety of entropy-based indices convert a vector of vote shares into a scalar index of effective candidacies (or "parties" for short, notwithstanding the presence of some independent candidates in the sums). The Laakso-Taagepera index, which inverts the sum of the squares of
all vote proportions, remains the workhorse index in electoral studies, and Taagepera's suggested slight variant on that index was used in Fig. 8.1. Reducing dimensions has many attractions, and the index captures an essential aspect of dispersion by smoothly rising from $k$, when $k$ parties exactly tie, to 1 as a single party captures the entire vote. ${ }^{4}$

Notwithstanding the popularity of counting effective parties, information is unavoidably discarded in collapsing the vote-share vector, and it remains unclear exactly what "two-party competition" should mean once one makes the move to weighting candidates. Consider that a three-way contest producing a 49\%-38\%$13 \%$ outcome and a five-way race ending $60 \%-10 \%-10 \%-10 \%-10 \%$ get scored as nearly identical with effective parties counts of 2.49 and 2.5 , respectively. The former race, however, has the feature that the combined vote of the two losers exceeds the vote of the winner, and thus the case seems more problematic in terms of foregone strategic voting opportunities (depending perhaps on the ideological character of these competitors). At an informal level, most commentators regard the failure of the various parties losing to the $60 \%$ winner to consolidate as less surprising or contrary to the prediction of bipolarity, given the apparent (after-the-fact) invulnerability of the winner. Again, then, the effective-parties index is designed to deal with smallness, but not to take any account of inferred motivations of voters as revealed by closeness per se. Johnston and Cutler, in their chapter, demonstrate that Canada's poor fit with Duverger's predictions cannot be well understood without taking into account how often winners were out of reach for all challengers.

Figure 8.2 momentarily sets aside these concerns about what is lost in transforming vote shares into effective-number-of-parties indices, and displays distributions of this index for the constituencies of Scotland, Wales, and four different regions of England over three elections held on a (virtually) constant electoral map, 1983, 1987, and 1992. The rationale for dividing England is not that different parties make explicitly regional appeals across the green and pleasant land - apart from the curiosity of the very small Cornwall separatist party Mebyon Kernow, England has not bred separatist parties. The UKIP and BNP are not, moreover, EIP and ENP, and there is relatively little England-wide nationalism. But the sheer size of England relative to the other countries of the UK makes it a natural candidate for some exploration of possible heterogeneity.

Of course, the three elections covered by Fig. 8.2 vary in a number of manners. It is probably fair to say that they are ordered inversely to the level of suspense concerning the national outcome (i.e., which party would form the next government). The 1983 election was a runaway for Mrs. Thatcher, in the wake of the successful Falklands war. In 1987, most informed commentators predicted that the Conservatives would be returned to power, but the size of the victory on election night came as a surprise, and may exaggerate our retrospective since of how close that election was expected to be in the run-up. Finally, 1992 is now remembered for its faulty preelection polls forecasting a Labour win. Accordingly, insofar as the incentives for voters strategically to abandon favored weak parties are augmented when the national picture is cloudy, one might expect increasing fit with Duverger's law as one moves down the panels. Likewise, redistricting between 1979 and 1983


Fig. 8.2 Effective-number-of-parties distributions for regions of Great Britain, 1983-1992 (source: author's computations. See data sources in references)
potentially complicated estimates about the nature of the constituencies in the first of these elections. In that sense, ceteris paribus, voters, candidates, and parties should have had an increasingly easy time bringing normal vote patterns to bear on their decisions as time passed.

In keeping with these arguments, the 1992 election does seem to fit Duverger's law best of this trio, with the notable exception of Scotland. The English constitu-
encies, in particular, shift to the left over the apportionment period, until the modal seat has a little less than 2.5 effective parties by 1992. 2.4 is not, of course, 2, but there does appear to be a distinct diminishing of party competition with movement from multi- toward bipartisan competition, within England in any case. The Welsh data increase in variance dramatically without shifting mean, while the Scottish data are exactly contrary to the English trend, and appear to represent the clearest instance of "non-Duvergerian" trends, if not equilibria.

Figure 8.3 presents the most recent counterparts to the bottom two panels of Fig. 8.2, effective-parties distributions for the 2001 and 2005 elections. For simplicity, England is no longer subdivided by region, and I again omit the Northern Irish constituencies mainly because they are so few in number. Whereas the 1983-1992 trend showed England looking increasingly bipolar, the distribution of parties weighted by size corresponds to the earlier evidence at the national level that the British party system is breaking with its the Duvergerian past, even in England. Without trying to draw a sharp line at, say, 2.5, it is clear that most contests for the House of Commons now feature more than 2 effective parties (candidacies). Indeed, only a handful fall at 2 or lower, even though skewed bipolar races get scored fairly close to 1 . This point says nothing direct about closeness, and there are still many safe seats whose winners enjoy huge margins. The losers who trail beyond these safe MPs, however, are almost always numerous.

An important, incidental point about Figs. 8.2 and 8.3 is that comparison to Fig. 8.1 reveals that the vote-based effective-parties values for national aggregates are generally on the high end of the actual constituency distribution for the given year. This is not a logical necessity, though it seems to be a common phenomenon


Fig. 8.3 Effective-number-of-parties distributions for British countries, 2001-2005 (source: author's computations. See data sources in references)
empirically. At one extreme, $k$ districts each having the minimum possible effective-parties value of 1 can aggregate to vote totals that map into an index of $k$, if each district is won uncontested by a different party. A set of districts that are identical in size and party splits, meanwhile, produce a national-aggregate party score matching the district scores. The national score can also be smaller than most of the scores for its component districts, if, for example, there are two kinds of districts, even splits and uncontested races all won by the same party.

Figure 8.4 shows the values for constituencies and the national total for Northern Ireland, where the contrast is especially stark. The country-level totals always map into a higher value than nearly all the constituencies, mainly because of variation in the identity of unionist and republican contenders from seat to seat. The 1986 simultaneous by-elections in 15 of the 17 Northern Irish seats, for instance, were centered around a mean of 2. Atypically for by-elections, they drew relatively few candidates (see Table 8.1), perhaps because they were also atypical by-elections insofar as incumbent MPs were standing in each case. Nonetheless, the showdowns varied across seats, from Ulster Unionist versus The Worker's Party to UDUP versus Sinn Fein versus SDLP versus The Worker's Party to UPUP versus APNI, and so on. In sum, then, the races generated votes spread across eight parties that translate to a countrywide figure of about 4.7 effective parties. The general lesson is that the convenience of using easily obtained national totals to characterize party systems comes at a cost. Insofar as Duverger's law operates most directly in the units in which seats are won, characterizations of party competition based on national totals are inappropriate and potentially misleading.


Fig. 8.4 Effective number of parties (by votes), Northern Ireland, 1970-2005. Notes: Hollow squares show the values for the whole of Northern Ireland, while dots mark individual constituencies (source: author's computations. See data sources in references)

## Conclusions

This chapter had somewhat limited ambitions. I have endeavored to present clear evidence about the extent of party competition in recent elections to the British House of Commons with an eye to confirming the general sense that the UK increasingly poses a challenge to Duverger's law. Indeed, district competition in the last few elections has been multifaceted, belying the alleged tendency toward bipolar competition wherever the electoral formula is a simple plurality rule. The data raise a host of interesting questions touched on only briefly or tangentially here. Three particular issues stand out.

First, to what extent can one account for the multiplication of British parties by the multiplication of British electoral rules? As Curtice also notes, in Chap. 10, the UK is thought of as the mother of single-member plurality, but has held many elections under other electoral rules in its long history. At present, the UK holds proportional-representation elections to the European parliament, and devolution has produced not just additional levels of salient government in parts of Britain, but also variety in the electoral rule. A mostly ignored point about studying how electoral law affects party systems is that countries with federal or quasi-federal arrangements probably experience interactions between the multiple electoral systems, given that they are linked by a common electorate. There is not yet much work on how multivenue "mixed" electoral rules affect voters' attachments to parties, their proclivities for strategic voting, and so on, but it would appear to be a fruitful research area.

To that end, Fig. 8.5 revisits Scotland, but compares House of Commons data since 1979 to data on the numbers of parties in the European Parliament and Scottish Parliament elections. The figure shows candidacies per seat and effective party counts for votes and seats. Panel a displays the expected gap between the PR races (for the European Parliament seats in 1999 and 2004 and for the regional Scottish Parliament seats) and all of the other elections, wherein all seats were won in single-member-district plurality (SMP) races. There is neither a steady rise in total candidacies, nor much sign that the effect of the PR races has been to pull up the totals for the others. Panels b and c, showing effective parties in votes and seats, respectively, are similar in terms of the PR-SMP contrast. However, the highest values for the SMP races do, indeed, occur late in the House of Commons series and in the Scottish Parliament series, under the shadow of PR. Hence, there is some evidence of spillover in this very preliminary check.

A second major point about these kinds of calculations is that a great many British House of Commons seats remain quite safe for one party, calling into question whether the simplicity of the effective-number-of-parties index is ill-suited to understanding how and why voters support seemingly hopeless losers. Notwithstanding the considerable work that has gone into formalizing Duverger's law in terms of probabilities of casting decisive votes, it seems unlikely that one can understand the dispersion of support across losing parties without reference to the plausibility of formal or informal cooperation or merger in terms of ideological bases and district normal vote. Figure 8.6 shows the 1950 and 2005 election outcomes for English constituencies in terms of Labour and Conservative vote shares,
with the distance from the hypotenuse thus representing residual vote (mostly, but not entirely, won by Liberal Democrats). Superimposed over the scatter plots of constituency results is an oval mapping out the outcomes that would correspond to an effective number of parties of 2 if the whole residual votes were won by a single

## a Candidates Per Seat


b Number of Effective Parties (votes)


Fig. 8.5 Candidacies in Scottish elections since 1979, House of Commons (HoC), European Parliament (Euro), and Scottish Parliament (SP) (source: author's calculations from data reported at BBC and Scottish Parliament websites)


Fig. 8.5 (continued)
candidate (e.g., a Liberal Democrat). In the bottom right triangle are seats where the Tory candidate won a majority of the vote; the top triangle contains Labour's equally safe seats. The remaining square spanning the $0-0.5$ intervals holds the most closely contested seats.

In brief, the contrast between the first postwar election and its counterpart 55 years later clarifies that many more votes are being won by parties other than the only two that have formed governments. It is also clear that seats won easily by either the Tories or Labour are slightly rarer, but far from extinct. In 2005, there are concentrations of observations in two areas, which correspond to relatively large effective-seat values by virtue of the fact that all three major parties are winning substantial numbers of votes. The densest region, for example, is the segment where the Conservative candidates won $30-40 \%$, the Labour candidates won $40-50 \%$, and the Liberal Democrats won most of the remaining 10-20\%. Students of tactical voting make much of the variance in interelection swings of vote shares for each party according to which parties finished in first and second place in the prior election. Whether dispersion of vote across losers in these races is different in kind or in degree from dispersion in the safer regions seems an open question, dependent on how one understands the behavioral pillars on which Duverger's law rests.

Finally, Fig. 8.6 - indeed, all of the data discussed thus far - obscure an important point about recent elections in the UK, namely that rather large blocs of potential voters have been staying at home. Calculations about the number of parties and extent of fractionalization within partisan support are almost always conditional on turnout level. One can instantly inflate all such numbers by recomputing them as
shares of the eligible electorate, including abstainers as a category. That is not a common strategy because conflating turnout and voting patterns by those who do turn out appears to mix apples and oranges. However, strong claims about electoral law and party competition rely, at some point, on theories about individuals' voting decisions, and it seems perverse to omit the first important such decision, or whether or not to vote. The "party" of abstention automatically wins no seats, exhibits no discipline, and has no ideological unity. But a thorough understanding

## a 1950 Election



Fig. 8.6 Vote-share distributions for England. Notes: Each marker represents a constituency. Crosses designate seats won by Liberal Democrats while triangles mark seats won by others (Wyre Forest and Bethnal Green). A few seats in the $(0.1,0.4)$ region in panel $\mathbf{b}$ might appear to be Liberal Democrat wins, but are, instead, anomalies where other parties did exceptionally well. For instance, Birmingham Sparkbrook and Smallheath was won by Labour ( $36.1 \%$ ), while the RESPECT candidate finished second ( $27.5 \%$ ), ahead of a Liberal Democrat ( $20.2 \%$ ), a Tory ( $9.1 \%$ ), and candidates for the UKIP ( $3.5 \%$ ) and the Greens $(2.2 \%)$ plus an independent ( $1.3 \%$ ). Burnley had an effective $N$ of just over 4, from vote shares of $38.5 \%$ (Labour), $23.7 \%$ (Liberal Democrat), $14.8 \%$ (independent), $10.8 \%$ (Conservative), $10.3 \%$ (BNP), $1.0 \%$ (independent), and $1.0 \%$ (UKIP) (source: author's calculations)
b 2005 Election


Fig. 8.6 (continued)
of how institutions shape electoral outcomes probably requires a slightly broader understanding of outcomes, one that encompasses turnout or at least explores the extent to which turnout and concentration of vote are related.

## Notes

1. To be clear, I will use "British" and "Britain" to refer to the whole of the UK, not excluding Northern Ireland except where explicitly noted.
2. There is occasionally a slight discrepancy between "candidates" and individuals seeking office, since there are a few instances in these data of individuals standing for office in multiple constituencies simultaneously (as many as five), and there are a few jointly sponsored candidates (e.g., Plaid Cymru and Green) who get double-counted.
3. Hereafter, the "effective number of parties" will refer to the Laakso-Taagepera index, $N_{\mathrm{e}}=\Sigma_{i}$ $v_{i}^{2}+v_{\mathrm{r}}$ where $v_{i}$ is the vote or seat share won by party $i$ and $v_{\mathrm{r}}$ is the residual, the aggregate of
votes (or seats) won by independents and assorted tiny parties. The slight modification of not squaring the residual share follows Taagepera (1997). Few candidates are combined into this other category in most cases examined here, since the data include totals for most small parties to have competed in the UK in this period.
4. Alternative statistics are also common, including the ratio of the second- to the first-loser's vote share (due to Cox), the winner's margin, and alternative entropy-like indices that increase or decrease the weight attached to the winner's share. None seems to improve on LaaksoTaagepera under all circumstances.

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# Chapter 9 <br> The United States: A Case of Duvergerian Equilibrium 

Shaun Bowler, Bernard Grofman, and André Blais

Although Duverger's law seems to apply but only with limitations and qualifications in the other major democracies, it appears to work perfectly in the USA. There are four main reasons why this should be so.

First, the political system is oriented toward national politics and toward the contest for the presidency, a trend that has been especially noticeable from the New Deal era onward. Chhibber and Kollman (1998) have argued that the more centralized a federal system is the more likely it is to exhibit comparable levels of competition at the national as at the state level. This work would suggest that we ought to expect competition at the state level under the same party labels as the national party as the USA has grown more centralized. Last, but far from least, the peculiar nature of the US Electoral College, with its 50 separate winner-take-all elections for the presidency, may make a substantial impact in reinforcing incentives for two-party competition at the national level (Neto and Cox 1997).

Second, in the USA, the legal barriers to entry of new parties are especially strong (Rosenstone et al. 1996), so that it can be argued that the two parties collude in a managed duopoly. We can distinguish between electoral systems and electoral laws, i.e., between the algorithm of translating votes into seats and laws on campaign finance, ballot access, suffrage, and, as the chapter by McDonald notes, the districting process, etc. In the USA the electoral laws are very supportive of the existing two-party duopoly.

Third, the conformity to Duverger's law is more apparent than real. There are two versions of this claim. One version of this argument is seen in the chapter by Burden and Jones: many electoral contests actually do have more than two contenders, a phenomenon even more common in the first 100 years of the Republic. A second variant involves the observation that the two major parties we now have might, for much of their history, actually be better described as coalitions of disparate parts, divided along regional lines. Walter Burns characterized US political competition in the first part of the twentieth century as a "four party system," by which he meant there were northern Democrats and southern Democrats and northern Republicans and southern Republicans, and party members from the same region often had more in common with each other than they did with their fellow party members from the other side of the Mason-Dixon line. While representatives and senators who share a party label will probably vote together in the
legislative organization of Congress, they may have little else in common and may vote on other matters in ways at variance with the national position of their party. Not only were southern Democrats always much more conservative than northern Democrats until quite recently, but they were also more conservative than Republicans from the northeast. When, in his seminal comparative study of the politics of 36 long-term democracies, Lijphart (1999) assigned a value to the effective number of parties in the USA, he chose 2.4 , not 2 . As explained in the text, Lijphart made adjustments for parties that are highly factionalized or noncohesive. He viewed the US Democratic Party in most of the post-WWII period as falling into that category, counting it as one-and-a-half parties instead of as a single party. ${ }^{1}$

Fourth, the two major US parties have demonstrated themselves especially good at adapting to the claims of minor parties (Rosenstone et al. 1996) and also at incorporating new issue concerns. For example, in the 1930s onward, the Democrats moved to the left and in so doing took the wind out of the sails of the - predominantly leftist - minor parties (Hirano and Snyder 2007). And, as noted earlier, the caucus, and more recently, primary structure within the parties have facilitated such adapatabilty. For example, it was possible for "New Democrats" to capture control of the presidential nominating process of their party in 1972, and for religious social conservatives to exert heavy influence on the Republican party in recent decades.

These four arguments are not mutually exclusive. For example, a national presidential system can help orient politics toward the national level while regional variations may well help facilitate shifts in party platform. But the difficulty is that they do not seem to provide a sufficient explanation for why Duverger s "law" works with such force in the USA. We can see this by evaluating each argument in turn.

## A Historical Development of a National Orientation Toward Politics

The first of these arguments is to the effect that a national orientation toward politics has developed post-New Deal in particular. It is difficult to test that interpretation because many things have changed over the course of the twentieth century - not just the balance of federal and state expenditures and the role of the federal government. For example, the development of mass media could also be seen to help underpin a focus on national politics, especially during the key interwar period. To take a small example, Marquis (1984) notes that by 1928 the Republicans allocated $20 \%$ of their campaign expenditures to radio broadcasts (Marquis 1984: 396). Perhaps as many as 40 million people heard Hoover and Smith on election eve in that year (Marquis 1984: 396), an election in which 36 million votes were cast. Campaigns, then, seemed to be national affairs quite early on. One would think, too, that despite the pressing concerns at the state level the period bracketed by the Civil War through Reconstruction and ending with World War I had a series of events that focused attention nationally.


Fig. 9.1 Minor party seats in state legislatures - 1910-2000 (source: Michael J. Dubin, Party Affiliations in the State Legislatures: A Year by Year Summary, 1796-2006. McFarland, Jefferson, NC, 2007)

Other evidence of the development of the two-party system may be seen in Fig. 9.1, which shows the number of minority party and independent members of state legislatures from 1910 onward by decade. This figure displays a count of the maximum number of minority party members in a given state legislature. That is, if for only one election during the decade of the 1920s a legislature had five minority legislators and zero for the rest of the decade we count the high tide of 5 . Figure 9.1 thus represents a systematic overcount of minority party strength.

As can be seen, after the high tide of the Progressives and Populists around the time of WWI, two-party duopoly quickly asserted itself and has remained there. Roughly speaking, about half the state legislatures may have one independent member but - with the possible exception of Vermont - none have significant third parties. More to the point many did not even experience the Progressives. These historical accounts of elections and the patterns of state legislatures do not imply that Chhibber and Kollman are wrong, but they do suggest that the nationalization of American politics occurred perhaps as much as a decade or more earlier than the New Deal period.

Perhaps a little more disconcerting to a "top-down" view of Duvergerian effects is that Fig. 9.1 also suggests that Democrats and Republicans were the two focal parties from the "bottom-up" as it were. That is, the impetus to two parties did not come from the top-down in the wake of the New Deal but was built from the states up, or at least on the foundations provided there. In a sense this may not be too surprising: given the demographic importance of a small number of Eastern states and the sparse populations of the West it may be that the USA as a whole inherited its party system from a handful of leading states. ${ }^{2}$

More disconcerting for a view of Duvergerian predictive power, perhaps, is Fig. 9.2, which shows the vote share for the most successful minor party candidates for President during the same period. While seat share for minor parties did collapse after the Progressive/Populist period, minor party candidates do run with some success


Fig. 9.2 Minor party vote share for president - 1910-2000 (source: Election returns)
in the Presidential races. While the mechanical effect of Duverger is plainly seen - these candidates did not make serious inroads into the electoral college - the psychological effect is not present. Furthermore, relatively popular third-party candidates appeared well after the establishment of any "national" level political system due to the New Deal. ${ }^{3}$ That is, it is hard to explain the vote success of third-party candidates given the centralization of the US national political economy in the late twentieth century. ${ }^{4}$

## Do Additional Rules Reinforce Duverger?

The second set of possible explanations is grounded in supporting legal barriers and institutional features such as the Presidency that help prop up or reinforce the mechanical effects of Duverger. While also plausible, these arguments also are not quite entirely persuasive.

It is the case that ballot access laws do discriminate against minor parties. The main parties can be said to have acted as oligopolists and put in place a large array of legal barriers that confront minor and new parties, especially relating to signature requirements. Moreover, these barriers differ by office and by state. That is, it is entirely possible for a party to have to face a threshold to appear on the ballot for a state office and another to appear on the Presidential ballot and yet another to remain on the ballot.

For example, Alabama - the toughest state for minor parties - requires 41,000 valid signatures on a petition before a party can run for office. To remain on the ballot the party must gain $20 \%$ of the vote. Alabama has, not surprisingly perhaps, no minor parties running for office. Other states are less severe: Georgia has a petition requirement of 42,676 signatures but, once on a ballot, a party needs only $1.6 \%$ of the vote to remain there. Mississippi, the easiest of states for minor parties, requires that minor parties "be organized" to get on and remain on the ballot. The remaining states have their own combinations of requirements.

It is clear that these barriers delay the entry of new parties. For example, we can rank order the states according to how hard it is to stay on the ballot - with Alabama being the hardest state. A simple model can be estimated predicting the number of minor parties on the ballot from the rank order of how tough it is for a party to stay on the ballot: states that rank higher on barriers to entry should have fewer minor parties on the ballot. As the results of column 1 of Table 9.1 show, this is indeed the case, and is consistent with the kind of argument advanced by McDonald above. Not only are districts drawn in a way to ensure incumbent safety - and the incumbents are from the major parties - but on top of that challengers who wish to come from a minor party face the additional hurdle of getting on the ballot in the first place simply to be able to tilt at a windmill and try and unseat a safe incumbent.

Nevertheless, 41 states have at least one minor party on the ballot. Furthermore, when new and minor parties do enter the race at the state level voters simply do not support them. That is, while the barriers are there and do have an effect, when the barriers are removed third parties do not prosper. Table 9.2 lists the vote totals of minor parties and independent candidates in 2006 state house elections. These patterns are similar to results for Congress. Put simply, voters in state and legislative races tend not to support minor parties, even while they do so for Presidential elections (Fig. 9.2).

While the argument is plausible and intuitively appealing, the mixed evidence for the impact of presidentialism can be shown in other ways. To win a presidency the incentive among candidates and voters is to build a large coalition; both mechanical and psychological effects should be seen.

Table 9.1 Poisson regression: number of minor parties on ballot

|  | (1) <br> Number of minor parties <br> on ballot | Number of minor parties <br> on ballot |
| :--- | :--- | :--- |
| Difficulty of remaining on Ballot <br> $\quad$ (rank order) | $-0.080^{* *}(3.78)$ | $-0.102^{* *}(4.09)$ |
| Population (millions) | $-0.003(0.15)$ | $0.006(0.35)$ |
| Blanket primary state |  | $0.164(0.25)$ |
| Closed primary state | $-0.103(0.29)$ |  |
| Open primary state | $-0.140(0.42)$ |  |
| Runoff election | $1.356^{* *}(5.62)$ | $-0.644^{*}(2.08)$ |
| Constant | 50 | $1.745^{* *}(4.18)$ |
| $N$ | 0.08 | 50 |
| Pseudo $R^{2}$ |  | 0.12 |
| Change in predicted numbers | -2.6 | -3.5 |
| $\quad($ min $\rightarrow$ max) |  | -0.8 |
| Rank order <br> Runoff |  |  |

Absolute value of $z$ statistics in parentheses

+ significant at $10 \%$; * significant at 5\%; ** significant at $1 \%$
Sources: Ballot Access News September 2006: http://www.ballot-access.org/2006/090106.html\#9; on primary systems Gerber and Morton 2005; on runoff systems Morton and Rietz 2004: http:// www.yale.edu/leitner/MortonRietz.pdf

Table 9.2 Vote for minor parties and independents in State House elections in 2006 (48 states)

| Party | Vote |
| :--- | :--- |
| Libertarian | 496,965 |
| Working families | 144,020 |
| Green | 103,126 |
| Constitution | 75,653 |
| Reform | 5,437 |
| Independence | 148,709 |
| Other (1) | 208,398 |
| Other (2) | 2,066 |
| Independent | 182,623 |
| Total | $1,336,997$ |

Source: Ballot Access News September 2006: http://www.ballot-access.org/ 2006/ 090106.html\#9

Table 9.3 Consequences of presidentialism on effective number of parties

|  | Effective number of parties (votes) |
| :--- | :--- |
| Electoral system (legislature) $=$ fptp | $0.110(0.11)$ |
| Presidential election $=$ fptp | $0.242(0.39)$ |
| Presidential election = 2-round system | $4.615^{* *}(14.00)$ |
| Constant | 47 |
|  | 0.07 |
| Observations | 0.110 |
| $R^{2}$ | $(0.11)$ |

Absolute value of $t$ statistics in parentheses

+ significant at $10 \%$; * significant at $5 \%$; ** significant at $1 \%$
Sources: Electoral Systems from IDEA/ACE; effective number of parties columns 1-2 from more recent election reported in Gallagher and Mitchell; for column 3 additional material from Latin America (Morgenstern and D'Elia 2007)

A quick look at the correlation between the effective number of parties at the level of vote share and seat share for a sample of countries $(N=37)$ shows little relationship (Table 9.3). True, the sample only includes one Latin-American country. Including others does suggest that presidentialism may reduce the number of parties, provided the President is elected via first-past-the-post: a two round or runoff election does not. The result, however, seems strongest when we just consider the US case as the one example of first-past-the-post presidentialism (column 2: in column 3, Mexico and Venezuela were the other cases).

While rules in place in the USA do help buttress the two main parties they do not seem to be the only factor that can help explain the two-party dominance, since even when minor parties appear they attract little support. The exception would seem to be in Presidential contests, where minor parties and independent candidates can sometimes attract large numbers of voters.

## Is Multipartyism More Real than Apparent?

A third explanation that multipartyism is more real than apparent: Burden and Jones outlined one version of this when they identified multiple candidates at election time. Another way to illustrate this point is to examine whether the party labels actually hide a great deal of diversity within the parties.

There are large differences across parties inside the USA, the question is - how big are such intraparty differences compared with interparty differences? That is, are there just two parties in name only?

Again, the argument is a plausible one. The rubber band tying candidates at the local level to the positions of the national party had, at least until recently, a lot of stretch (Grofman 2006). For example, the rise of "candidate centred" politics (Wattenberg 1998) and the generally decentralized conduct of elections would suggest that US parties are internally highly fragmented and undisciplined. The stretching of party ideologies by local forces has another driver in the use of primaries. In effect, the primary system means that the USA has a two-round runoff system of elections. This is more evident in some states - notably Louisiana - than in others, but in all states the general election is preceded by a primary.

For Duverger, two-round systems are associated with multipartyism - at least in the first round. In the second round - provided the various parties can agree - we should see the emergence of two coalitions. At the risk of some simplification this is what we see in France (Blais and Indridason 2007). In the US case, barriers to new party entry are high, but barriers to candidate entry within the major parties are (relatively) lower. While primary elections are often interpreted as an antiparty shift they have also been interpreted as a way for the major parties to keep (Ware 2002). Ware's argument has echoes elsewhere. Cox, for example, notes the arguments of a series of scholars, including V.O. Key, who pointed to the primary as a means of party control (Cox 1997: 166). Founding a third party is costly, especially in the face of the established "brands" and "brand names." The permeability of the primary system allows candidates easy entrance into the internal party competition - even as it denies entrance to the general election competition. Protestors along with the merely ambitious will find it easier and cheaper to enter into the primary and effectively - capture the party from within. As Key noted, and as seems just as true today given safe districts, the primary election is often the real election in US politics. There is, as Burden and Jones underscore, a distinction to be made between multiparty contests and multicandidate ones (see also Cox 1997: Chap. 8).

If the argument about primaries is correct we may be able to see differences according to the type of primary employed: some primary systems are more accommodating of a wider range of voices than others. In particular, a more open primary system should allow different factions to participate while a more closed one might push factions to form new parties (see Gerber and Morton 2005). If primary rules can help increase or decrease the number of parties then so, too, may similar rules such as runoff rules. As Morton and Rietz (2004) argue, runoff rules should be another way in which minor parties are handicapped.

One way of assessing these arguments is to include measures of the type of primary and existence of runoff requirements into the model of Table 9.1. that looks at the number of minor parties listed on state ballots. This we do in column 2 of Table 9.1. As can be seen, the form of primary elections has no statistically significant impact, but the presence of runoff elections does operate to reduce the number of parties, as Morton and Rietz argue. ${ }^{5}$

Without wanting to read too much into the simple model presented in Table 9.1 we can say that it offers relatively little support for the argument that the primary system is a main buttress of a two-party system over and above the impact of barriers to ballot access. More anecdotally, we could point out that the primary system has not prevented the repeated running - and even success - of minor party candidates in Presidential contests (see Fig. 9.2 earlier). But these minor party candidates seem to do well in their first (or only) run and then are not heard from again. From a developmental perspective on the centralization of the US polity the fact that minor parties run at all presents something of a problem, but the fact that they are then squeezed out of the process seems entirely understandable as an example of Duverger s mechanical and psychological processes at work. Even at the Presidential level the USA does not see persistent third parties. Moreover, the dominance of the two parties in legislative elections seems much more thoroughgoing. ${ }^{6}$ Leaving aside the Presidential contests, then, we should expect America s two parties at the legislative level to be many different parties folded within two "big tents." What we might reasonably expect to see, then, are sizeable ideological differences within each party.

One way to compare across parties is to look at DW-nominate scores of the ideological position of Democrats and Republicans in Congress (see Poole and Rosenthal 1997). An important comparison is a regional one: depending on the region, we should see examples of right wing Democratic parties and left wing Republican parties.

But, as Fig. 9.3 shows, this is not the case. This Figure shows the first dimension DW-nominate scores aggregated across each US state for the period 1910 onward. The shorter vertical lines link the values of one standard deviation and one below the mean, i.e., they show the range of values for each state. We can plainly see that Democrats are always to the left of Republicans. True, this is a highly aggregated representation of the data since it does aggregate state values over the whole period. But, the range of the data gives some sense of how unlikely it is that the two parties "overlap" - as we would expect to be the case if the party labels masked regional differences of the kind seen in Canada or India.

A different picture is seen when we examine the second dimension from the nominate data. Figure 9.4 aggregates over the same states (Congressmen) over the same period of time but for the second dimension in Poole-Rosenthal s DW nominate data. Here, we see more support for the thesis that there are - essentially - different ideological fights within different regions. The range of possible values overlaps between the parties and some state Republican delegations are to the left of some state Democrat delegations (or, some Democrats are to the right of some Republicans). This kind of blurring is exactly what we would anticipate if, indeed, the two-party labels did not carry much meaning.


Fig. 9.3 DW nominate scores for Democrats (blue) and Republicans (red) by state (source: American National Election Study)


Fig. 9.4 DW nominate scores for Democrats (blue) and Republicans (red) by state (sources: Poole-Rosenthal DW nominate scores)

The problem is that this second dimension is not a terribly important one: US politics at the level of elites seems largely unidimensional.

One question, however, is whether or not US politics is unidimensional for voters, too? That is, do the voters as well as Representatives array themselves along one dimension or is it just the Members of Congress?

Some preliminary evidence suggests that voters may see politics in one-dimensional terms. Using 2006 NES data we can assess the issue positions of US voters across a range of issues - nine in all. These issues ask voters their preferred issues position on interventionism, spending and services, defence spending, the role of government in maintaining standards of living, attitudes toward abortion, toward an environment versus jobs tradeoff, gun control, women's rights, and government assistance to African Americans. ${ }^{7}$ An unrotated factor analysis of attitudes suggests that they can be captured by one underlying dimension (Table 9.4 ).

Whatever the causal relationship between voters and elites, it does seem as if there is some reason for believing US politics to be one-dimensional. This unidimensionality helps to undergird a two-party system by not allowing the space for minor parties to carve out electoral niches (cf. Taagepera and Grofman 1985). ${ }^{8}$

## Discussion: Moving Parties?

Generally speaking the incentives of the US system do help reinforce the effects seen in Duverger: a focus on national level politics and an array of legal and other barriers erected to minor party challenges all help buttress the effects of Duverger's law. Furthermore, there are some ways - at least when the second dimension of American politics applies - in which parties do exhibit sharp regional differences internally and - hence - can adapt to regional differences. But these arguments do not seem to hold all the time: minor parties do get on the ballot, and the move toward two-partyism seems to involve several trends that are not entirely consistent with arguments to date. It seems, for example, to happen in the states possibly earlier than at the federal level. If anything it seems that minor party candidates have been seen to do quite well in some presidential contests - even after the shift toward a more national political system.

A feature of US politics, however, would seem to be that it is predominantly unidimensional. One of the consequences of that unidimensionality may be that parties find it easier to move left and right without opening up too many opportunities for minor parties. That is, the dimensionality of US politics is consistent - or at least does not undercut arguments by Rosenstone et al. and Hideo and Snyder to the effect that the major parties have been skilled at moving to be able to head off minor party challenges and ensure that they are short-lived.

Thus, one reason that Duverger works so well in the US is that, despite apparent diversity, the underlying structure of political cleavages does not present a sustained challenge to the mechanical and psychological effects. Hence, if the lesson of this volume is that electoral system effects - even those as strong as the ones associated

Table 9.4 Dimensional structure to popular policy attitudes across nine issue areas

| Factor | Eigen value | Difference | Proportion | Cumulative |
| :--- | :---: | :--- | :---: | :--- |
| Factor 1 | 2.30862 | 2.05881 | 1.1240 | 1.1240 |
| Factor 2 | 0.24981 | 0.11703 | 0.1216 | 1.2457 |
| Factor 3 | 0.13278 | 0.08204 | 0.0646 | 1.3103 |
| Factor 4 | 0.05075 | 0.08142 | 0.0247 | 1.3350 |
| Factor 5 | -0.03068 | 0.06260 | -0.0149 | 1.3201 |
| Factor 6 | -0.09327 | 0.07170 | -0.0454 | 1.2747 |
| Factor 7 | -0.16498 | 0.01151 | -0.0803 | 1.1943 |
| Factor 8 | -0.17649 | 0.04618 | -0.0859 | 1.1084 |
| Factor 9 | -0.22267 |  | -0.1084 | 1.0000 |

Factor analysis/correlation
Number of obs $=694$
Method: principal factors
Retained factors $=4$
Rotation: (unrotated)
Number of params $=30$
LR test: independent vs. saturated: $\Psi^{2}(36)=1039.95$, Prob $>\Psi^{2}=0.0000$ Source: American National Election Study
with first-past-the-post - are probabilistic rather than automatic - then the USA seems to have a set of political conditions that helps make that probability very high.

## Notes

1. The question of why US parties have sometimes been not very cohesive is a complex one beyond the scope of this essay. There are historical reasons linked to the role of the predecessor parties to the modern-day Democrats and Republicans in the period before the US Civil War - entirely instrumental reasons relating to the value of brand names and the usefulness of competing under a single banner in presidential elections, and also effects linked to the structure of party primaries and party caucuses that allow for competition to be played out within a given party rather than between parties. Grofman (2006) has argued for a "rubber-band" theory of political competition, in which, under certain circumstances/particular institutional arrangements, candidates are allowed flexibility to deviate from national party positions to better attract the votes of local majorities. Relatedly, the Electoral College, in addition to encouraging two-party competition, may also may encourage ideological diversity within each of the two parties by creating incentives for parties to form that bear the same label across states primarily for purposes of presidential competition - parties whose candidates may look very different from one another as we compare across states. Moreover, it is very important to recognize that, despite the great continuity of electoral rules for general elections in the USA (other than that for the election of the US Senate) the degree of ideological cohesion within parties has varied dramatically over the post-Civil War period. Unpublished work by Grofman, jointly with Samuel Merrill and Thomas Brunell, has argued for a roughly 50-year half cycle of increasing and then diminishing ideological polarization between the two major parties.
2. In 1910 for example, New York accounted for roughly $10 \%$ of the population, New Jersey $3 \%$, Massachusetts 4\%, and Pennsylvania 8\%. With so much of the population concentrated in that area it may be that national politics was defined in part by the politics of these states.
3. While Fig. 9.2 again reflects an overstatement of popular support - since it displays the vote share of the most popular candidates during each decade - it also undercounts the amount of minor party voting taking place because it counts the vote of only one candidate in one race.
4. Similarly, while Britain has gone through a centralization of its national political economy the two-party system did not grow stronger as Chhibber and Kollman might have led us to expect. See, for example, the discussion of third parties by Curtice in this volume. Curtice argues that the SMP system cannot be "relied upon to discriminate heavily against third parties." Moreover, many of these patterns refer to the "pre-devolution" UK, or the period of centralization prior to the setting up of Scottish and Welsh Assemblies. Gaines' chapter, too, underscores the way in which parties other than Labour and Conservative are winning many more votes.
5. These results for primaries are somewhat at odds with the admittedly much more sophisticated analysis found in Gerber and Morton (2005) who find more effects in the predicted direction. However, first, these results are based on a different dependent variable - theirs concerns numbers of minor party candidates running rather than the count of number of parties on the ballot. Second, they do find a far from simple linear relationship. In preliminary results they find that the more open primaries often encourage minor parties because very open processes - such as the blanket primary - reduce the value of party label.
6. A focus on legislative elections also has the advantage that it removes from consideration concerns about the impact of the electoral college.
7. Variables V043107 V043136 V043142 V043152 V043181 V043182 V043189 V043196 V043158.
8. Preliminary analysis of UK data from 2005 suggests that the situation there is a little more complex, either requiring two dimensions or - if the number of variables included is reduced - one not dimension that does not perform as well as in the US case.

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## About the Editors and Contributors

## Editors

Bernard Grofman is Director of the Center for the Study of Democracy at the University of California, Irvine and is Jack W. Peltason Bren Foundation Endowed Chair, University of California, Irvine. His research has dealt with mathematical models of group decision making, legislative representation, electoral rules, and redistricting. Currently, he is working on comparative politics and political economy, with an emphasis on viewing the USA in comparative perspective. He is coauthor of four books, all published by Cambridge University Press, and coeditor of 16 other books; he has published over 200 research articles and book chapters, including work in the American Political Science Review, the American Journal of Political Science, the Journal of Politics, the British Journal of Political Science, and Electoral Studies. Professor Grofman is a past president of the Public Choice Society. In 2001 he became a Fellow of the American Academy of Arts and Sciences. His most recent book is Behavioral Social Choice, with Michael Regenwetter, Anthony Marley, and Ilia Tsetlin (Cambridge, 2006).

André Blais is Professor in the Department of Political Science at the Université de Montréal. He holds a Canada Research Chair in Electoral Studies and he is a Fellow of the Royal Society of Canada. He is a past president of the Canadian Political Science Association and is Chair of the APSA section on Representation and Electoral Systems. He also serves on the executive of the Elections, Public Opinion and Voting Behavior section. A scholar of comparative electoral behavior, turnout, and electoral systems, Professor Blais has (co)authored and (co)edited 17 books, among which are the following: Losers' Consent (2005), Establishing the Rules of the Game (2003), Anatomy of a Liberal Victory (2002), and To Vote or Not to Vote? (2000). He has published over 100 scholarly articles on a wide range of topics.

Shaun Bowler is Professor in the Department of Political Science, UC Riverside. A student of electoral systems and comparative electoral behavior, he is a (co) author and (co)editor of a number of books including Losers' Consent (2005), Demanding Choices (1998), and Beyond Representation: Local Experimentation with Alternative Electoral Systems (2003).

## Contributors

Marc André Bodet obtained an M.Sc. in Economics at the Université de Montréal and is an associate researcher at the Canada Research Chair in Electoral Studies. His research focuses on strategic voting in different electoral systems, as well as on the effect of polls on voters' perceptions. He is also interested in the impact of cognitive mechanism on individual behavior and on individual and institutional factors affecting the level of social trust in democracies.

Barry C. Burden is Professor of political science at the University of Wisconsin. He is the author of Personal Roots of Representation, coauthor of Why Americans Split Their Tickets, and editor of Uncertainty in American Politics. Burden has also published articles on American politics in journals including the American Political Science Review, American Journal of Political Science, and British Journal of Political Science.

John Curtice is Professor in the Department of Government University of Strathclyde. He has been the codirector of the Scottish Social Attitudes surveys since its inauguration in 1999. He is Deputy Director of the Centre for Research into Elections and Social Trends (CREST), a collaborative research center between the National Centre, Strathclyde and Oxford. Between 1983 and 1997 he codirected the British General Election Study. His research examines social and political attitudes (widely defined), electoral behavior, electoral systems, and survey research methods in Scotland, Britain and comparatively.

Fred Cutler earned a Ph.D. from the University of Michigan and is Assistant Professor of political science at the University of British Columbia, Canada. He does research in public opinion, elections, federalism, and political psychology. His current research focuses on the effect of federalism on political behavior and on the effect of polls on election outcomes.

Eugénie Dostie-Goulet is a Ph.D. candidate in political science at Université de Montréal. Her research interests include political socialization, voting behavior, and public opinion. Her dissertation topic is the development of political interest among teenagers.

Brian J. Gaines is an Associate Professor with appointments in the Department of Political Science and the Institute of Government and Public Affairs at the University of Illinois at Urbana-Champaign. Most of his research deals with elections, voting, and public opinion. He has supervised a program of summer internships in the British Parliament since 1997.

Richard Johnston is Professor of political science and Research Director of the National Annenberg Election Study, both at the University of Pennsylvania. He is author or coauthor of five books, coeditor of three books, and the author of over 60 articles and chapters. In 1988 and 1992-1993 he was Principal Investigator of the Canadian Election Study.

Philip Edward Jones is a Ph.D. candidate in the Department of Government at Harvard University. His research interests center on the role ordinary citizens play in American politics, in particular how constituents hold their representatives accountable.

Michael P. McDonald is Associate Professor of government and politics at George Mason University and a Nonresident Senior Fellow at the Brookings Institution. He has consulted on redistricting matters in five US states, researched and written extensively on the subject, and been involved with related reform efforts in several states. Beyond redistricting, his current research projects investigate improving election administration, particularly with regard to voter registration procedures.

Csaba Nikolenyi is Associate Professor at Concordia University. He works on a wide range of topics including cabinet stability in new democracies in East-Central Europe. He is particularly interested in exploring the relationship between political institutions, such as the electoral system and the structure of executive-legislative relations, and the party system.


[^0]:    Sources: Canadian Election Study (CES), various years; British Election Study 2005

[^1]:    *Questions vary slightly in Canada between 1988 and 2000. For example, in the 2000 election survey, respondents were asked "how do you feel..." instead of "how would you rate (name of the party)?" The question number in parenthesis is for 1988.

[^2]:    Source: Author's calculations

[^3]:    Marginal seat: Seat where Conservative share of two-party vote - (overall Conservative share of two-party vote $-50 \%$ ) lies within the range 45-55\%
    NT: Notional results based on estimates of what the outcome would have been if that election had been fought on the new constituency boundaries that were introduced at the subsequent election.
    Two-party vote: Votes cast for Conservative and Labour combined
    Table is based on seats won by Conservative and Labour at that election
    Source: Curtice and Steed (1986) and author's calculations

[^4]:    * An earlier version of this paper was presented at the Plurality and Multiround Elections Conference at the Université de Montréal. We thank Shaun Bowler, Jack Vowles, and other participants for helpful comments.

[^5]:    Source: Studies shown in first column

[^6]:    Source: 2000 National Election Study
    Note: Cell entries are correlation coefficients
    *p<0.05, ** $p<0.01$

[^7]:    * Originally presented at the Conference on Plurality and Multi-Round Elections at the Center for the Study of Democracy, University of California, Irvine, February 18-19, 2006. We thank the Social Sciences and Humanities Research Council of Canada and UBC for financial support, J. Scott Matthews for invaluable help in preparing the data set, and the conferees, especially Matt Shugart, for comments and advice. All responsibility for errors and omissions lies solely with the coauthors.

