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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



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

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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

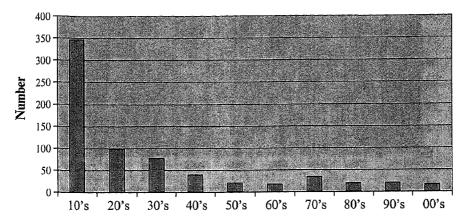
legislative organization of Congress, they may have little else in common and may vote on other matters in ways at variance with the national position of their party. Not only were southern Democrats always much more conservative than northern Democrats until quite recently, but they were also more conservative 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.<sup>1</sup>

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.<sup>2</sup>

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

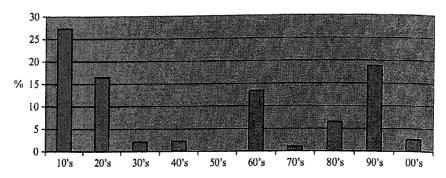


Fig. 9.2 Minor party vote share for president - 1910-2000 (source: Election returns)

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.<sup>3</sup> 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.<sup>4</sup>

#### 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) Number of minor parties on ballot	(2) Number of minor parties on ballot
Difficulty of remaining on Ballot (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		-0.644* (2.08)
Constant	1.356** (5.62)	1.745** (4.18)
N	50	50
Pseudo R <sup>2</sup>	0.08	0.12
Change in predicted numbers (min→max)		
Rank order	-2.6	-3.5
Runoff		-0.8

Absolute value of z statistics in parentheses

<sup>+</sup> 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)

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Party	Vote 496,965	
Libertarian		
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.<sup>5</sup>

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.

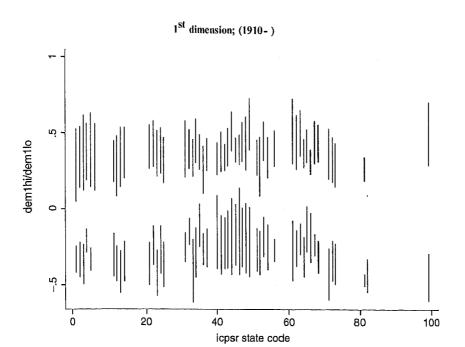


Fig. 9.3 DW nominate scores for Democrats (blue) and Republicans (red) by state (source: American National Election Study)

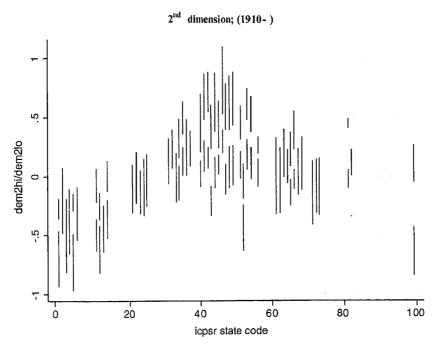


Fig. 9.4 DW nominate scores for Democrats (blue) and Republicans (red) by state (sources: Poole-Rosenthal DW nominate scores)

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.<sup>7</sup> 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 I	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.
- A focus on legislative elections also has the advantage that it removes from consideration concerns about the impact of the electoral college.
- 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.