

Party organization and party proliferation in India

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Abstract

Theories that explain variations in party systems typically emphasize the role of political institutions and social cleavages. Using a panel dataset of election returns from 15 Indian states from 1967 to 2004, this article establishes considerable variation in the effective number of parties across states and over time, despite the same political institutions and relatively stable social cleavages. We argue that a hitherto ignored dimension, the level of party organization, has a significant impact on the nature of the party system. The level of party organization incentivizes politicians differently in terms of their decision to stay, join another party or float a new party, when their ambitions are thwarted within a party. To test this theory, a unique indicator of party organization is developed on the basis of extensive qualitative research. We find that in Indian states where parties are more organized, both the effective number of parties and electoral volatility are lower.

Keywords

India, party factionalism, party organization, selecting leaders, South Asia

Introduction

Since the publication of *Making Votes Count* (Cox, 1997) it is widely accepted that social cleavages, political institutions or the interaction of cleavages and institutions jointly influence the nature of a party system (usually understood as the effective number of parties). An analysis of the party systems across Indian states reveals that there is considerable variation in the effective number of parties, both across states and within states over time, and that this variation cannot be accounted for by social cleavages or political institutions alone.

In this article, we claim that an oft overlooked factor in the study of party systems – the level of party organization – has a significant impact on the effective number of parties in Indian states. In Indian states where the parties that compete are more organized, not only is the effective number of parties lower, but so is the volatility of the party system.¹ We attribute this variation to career incentives faced by politicians in a political party.

In bringing together claims about the level of party organization and the party system, this article addresses a theoretical concern raised by Ware (2007), namely that a neglected subject in the field of party politics is how a

party's internal structure affects how it relates to other parties in the system, and how it competes, cooperates or merges with its opponents. The arguments proposed also build on the insights from organizational theory about the career incentives for politicians, and suggest that career paths of politicians affect party systems.

In order to substantiate the theoretical claims in the article, we develop a unique indicator of party organization. This measure is created on the basis of extensive qualitative research as well as survey data. We also control for social cleavages based on multiple theoretical conceptualizations, political institutions and socio-economic factors.

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Replication data and code can be found at www.francesca.no

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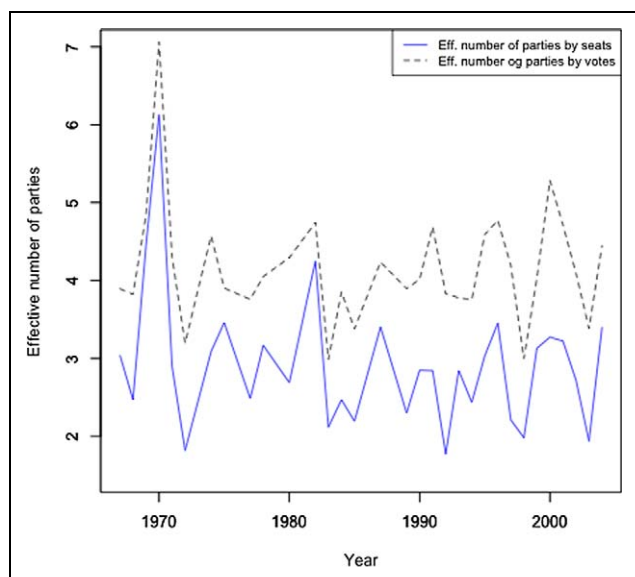


Figure 1. Average effective number of parties in 15 Indian states 1967–2004.

The article proceeds as follows: We first present aggregate election data from 15 Indian states to establish that there is significant variation in the effective number of parties both across states and over time. The subsequent section discusses institutional and cleavage theories of party systems and how they have been studied in the Indian case. The next section lays out the link between the organization of parties and the effective number of parties. Part five presents the operationalization of our organizational variable and contains the estimates of different statistical models using state assembly election data for the 15 largest Indian states between 1967 and 2004.² The results demonstrate that the organizational nature of political parties has a significant influence on the party system.

Party proliferation in India 1967–2004

After decades of stable one-party rule by what has been characterized as the ‘Congress System’ (Kothari, 1964), the Indian party system has fragmented considerably. While numerous scholars have focused on the reasons for party fragmentation at the national level, attributing it to increased voter mobilization (Yadav, 2000), shifting dynamics of the fiscal prowess of the centre versus the states (Chhibber and Kollman, 2004), the rise of a second competitive party in Indian states (Chhibber and Nooruddin, 2000) and anti-incumbency sentiments of the electorate (Linden, 2004; Uppal, 2009), only recently have scholars started to focus on state-level politics.

Data provided by the Election Commission of India between 1967 and 2004 show that the nature and volatility of the party systems vary both over time and across states.³

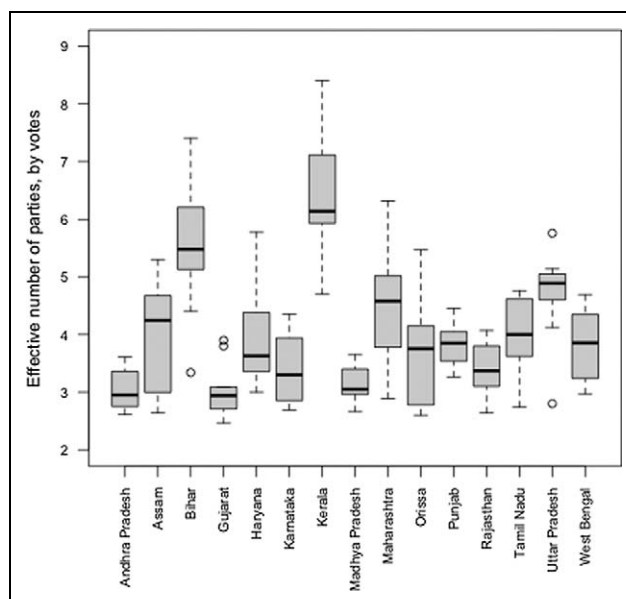


Figure 2. Variation in effective number of parties in 15 Indian States 1967–2004.

The effective number of parties (N) for the 15 largest states in India is calculated using the measure in equation given below, developed by Laakso and Taagepera (1979), where p^i represents the proportion of votes received by party i in a state level election.⁴

$$N = \frac{1}{\sum p_i^2}$$

The average effective number of parties across 15 states in India has remained around 4 (when computed by votes) and around 3 (when computed by seats) over 9 elections between 1967 and 2000 (Figure 1). The use of the average effective number of parties in Figure 1 conceals great variation in the number of parties across states. The box plots in Figure 2 illustrate the median and variance of the effective number of parties in each state over time. For instance, both Assam and Punjab have a median of about 4 effective number of parties from 1967 to 2004, but while this number has been stable in Punjab it has fluctuated in Assam (as reflected in the higher variance in the box plot for Assam). These figures suggest that at the state level there is no clear trend in the effective number of parties.⁵ How can we explain this variation – both within and across states?

Political institutions, social cleavages and the effective number of parties

An important approach to party systems, of which Duverger (1959) and Cox (1997) are two major bookends, focuses attention on the influence of electoral laws on party systems (Lijphart, 1994; Rae, 1967; Riker, 1982; Taagepera and

Shugart, 1989). The institutional approach is prominent in cross-national comparative studies of party systems, whereas the more sociological version of it tends to be used in single-country studies (though seminal works such as by Lipset and Rokkan and by Inglehart are cross-national). For this institutional approach, the main aspect of party systems to be explained is the effective number of political parties that contest either for seats in the national parliament, for executive power in presidential systems, or for both. The many ways in which votes are counted and seats are allocated affects the number of parties, and different methods for choosing presidents affects the number of serious presidential contestants (Lijphart, 1994; Taagepera and Shugart, 1989).

Elections to state assemblies in India are held according to the same electoral rules: single-member, simple plurality voting systems for the lower houses of the state legislatures. Yet, despite the same rules, party systems vary not only across these states, but also over time within each state. Put simply, although the institutions have not changed, the party systems have.⁶

The variation in the number of parties has been analysed largely in terms of the role played by well-established social divisions of language, religion and caste. Despite some notable exceptions (e.g. Kothari, 1964), analysts have focused on the impact of caste on the party system and support for particular political parties (Brass, 1965, 1981; Rudolph and Rudolph, 1985; Yadav, 1996). In addition to caste, religion – especially the Hindu–Muslim divide – has been seen as a major social cleavage in contemporary Indian politics (e.g. see Jaffrelot, 2005).

Heath (2005) provides survey evidence that electoral volatility in India can be explained by the extent to which social cleavages are politicized and polarized by the party system. His cleavage polarization index attempts to measure the extent to which different political parties represent social cleavages. States in which parties can generate cross-cleavage support are therefore less polarized. To construct this index, Heath (2005: 189) examines ‘the relationship between caste-community and the cluster voted for, and use[s] an index of dissimilarity to measure the degree to which political competition is polarized along caste-community lines’. Chandra and Wilkinson (2008) construct a related measure for whether or not a party claimed to be running on an ethnic platform. Heath’s data are limited insofar as they are constructed from a single national survey, while the interest here is in the changing nature of the party system in different states over a time period of 40 years. Chandra’s measure gets at the intentions of the party, but not at the actual voting behaviour of the electorate. We try to remedy this through a new social base measure that attempts to capture the dependence of a party on a social base as well as the dependence of that social group on the party over successive elections in different states. This measure is based on public opinion data from the National Election Studies by the Center for the Study of Developing

Societies, New Delhi, and will be further explicated in the Data Analysis section below.

Party organization and political entrepreneurs

The analysis of state-level election returns in 1967–2004 shows considerable variation in the effective number of parties in different Indian states over time. In addition, the literature reviewed suggests that theories of political institutions and social cleavages may be insufficient in explaining this variance. What then accounts for this phenomenon?

Aldrich (1995), Cox and McCubbins (2007), Kitschelt (1994) and Jackson and Moselle (2002) have pointed to the incentives faced by individual politicians as key to holding parties together. The argument presented here is similar to the insight of Kitschelt (1999), namely that new parties arise from a combination of the demands made by citizens dissatisfied with existing parties, and from the ambitions of politicians who have been shut out or demoted by those parties. The approach in this article, however, is different from that of Kitschelt in that it uses an organizational rather than electoral perspective to understand whether a politician decides to stay with or exit a party. It also links the effects of the level of party organization to the party system as a whole rather than to the electoral prospects of a particular party.

The literature on party organization has tended to emphasize candidate selection within a party by studying the distribution of power, formal rules and institutional arrangements governing the selection process (Katz, 1992; Ware, 1996). Katz (2001: 278) goes so far as to suggest that candidate selection is ‘one of the central defining functions of a political party in a democracy’. Still others, such as Norris (1993), have focused on the degree of institutionalization of the selection process, i.e. whether it is formal, through the use of standardized rules that are observable by all, or informal, through less explicit forms of decision-making that are personalized and non-bureaucratic.

Authors have attempted to understand the variations that arise in candidate selection processes by examining incentives created by political institutions such as electoral systems (Epstein, 1980; Matthews, 1985) and federalism (Epstein, 1980; Gallagher and March, 1988). These studies argue that single-member district systems and federal systems tend to be decentralized. Lundell (2004) examines the degree of centralization of candidate selection within parties. Using a dataset of 21 developed countries, he finds that large parties tend to apply more centralized selection methods than smaller ones, but he finds no effects of country-level institutional variables such as electoral systems and federalism on centralization.

Here we attempt to build on the organizational and institutional framework suggested by Norris (1993), but expand it to a range of party activities beyond just candidate

selection. In addition, instead of focusing on the origins of variations in party organization, we focus on how party organization matters to the party system as a whole.

Organizational theory has long suggested that the structural factors underlying career development and advancement in an organization have a bearing on an individual's decision to stay within or quit an organization (Thompson et al., 1968). Career advancement in any organization brings with it both intrinsic and extrinsic rewards, such as pay, access to power, autonomy, prestige and the opportunity to do more interesting work (Kanter, 1977). Greater opportunities to access these rewards are likely to discourage members of an organization from quitting (Lefkowitz, 1971). The level of party organization, which determines the distribution of these career advancement incentives, therefore becomes critical to the retention of members of a political party. Party members are more likely to remain loyal to a party in which career advancement is more predictable.

Party organization is conceptualized in this article as a collection of organizational characteristics that provide clarity to politicians about their role in the organization, such as the qualifications required to fill certain positions, the process for upward mobility in the party, the rules of succession planning, the organization's tolerance for intra-party factionalism and, finally, the extent to which party decisions are taken based on clearly understood institutional norms as opposed to the whims of leaders. Consequently, similar to the works of Wright (1971) and Panebianco (1988), a less organized party is conceptualized as one with an *ad hoc*, personalistic, leader-centric organizational structure. In such organizations, activists often find their career advancement prospects blocked by arbitrary decision-making, nepotistic practices or the whims of a few leaders at the top. These blocked career paths offer an incentive to a politician to exit.

There are numerous examples in India of politicians leaving their party because of blocked career paths. Franda (1969: 799) notes that those who broke away from the Communist Party of India (CPI) in 1964 to form the Communist Party of India (Marxist) (CPI(M)), did so because of the 'frustration experienced by this lower level of Indian communist leadership in its attempts to rise within the movement'. Another example is how the senior Congress politician N. D. Tiwari left the Congress in 1995 after he felt that he was being sidelined by the party. He then formed the All India Indira Congress (Tiwari), which was named after him. The party contested only one election in 1996, winning four seats in the Lok Sabha. In 2010, Amar Singh, the ostensible number two in the Samajwadi Party, left the party once it became clear that the scions of Mulayam Singh Yadav, the party leader, were next in the succession line.

There is no reason, however, why blocked career paths by themselves should lead to the proliferation of political

parties. Whether party activists decide to exit a party or not, and what they decide to do once they exit, depends on the alternatives that are available to them. The influence of less organized parties is therefore not to be found solely in the blocked career paths of particular politicians, but in the options these politicians have once they exit a party. In a less organized party, a member of another party is more likely to gain lateral entry than in a more organized party. Why? If a party is less organized, the decision about who gets access to positions within a party or holds executive office on behalf of the party is often arbitrary and is frequently made by a leader. In a more organized party, however, this decision is made by the organization. Lateral entry to powerful positions is much harder since other party activists who have been associated with the party for a long time would resist it, as such a move would have a large impact on their own career paths.

These incentive structures lead to the expectation that there will be greater movement by politicians from one party to another to enhance their career prospects in a party system where all parties are less organized. This should lead to changes in the party system, in terms of the effective number of parties. Exit to another party is likely if lateral entry is possible. If lateral entry is ruled out, then an individual politician who thinks that she has some independent political standing has an incentive to form her own party. Given this incentive structure, states where all parties are less organized are expected to experience a moderate proliferation of parties as politicians move from one party to the other *or* start new parties. In states where parties are more organized and less personalistic, with somewhat transparent standards and rules for the career advancement of party activists, there should be greater party loyalty, as exit would be a less attractive option. At the same time, lateral entry to another party is harder, so in cases where some parties are organized and some are not, there might actually be a greater proliferation of parties since defectors have incentives to form their own parties. In states where all political parties are more organized, it is expected that politicians – finding more institutionalized career paths – stay within their party resulting in a lower effective number of parties.

Given this logic, we should expect to also find a negative relationship between electoral volatility and the degree to which parties are organized, i.e. that we should expect to see higher volatility where parties are less organized. The reasons are straightforward. When parties are more organized, politicians are less likely to switch between parties. In contrast, in states where none of the parties are organized, politicians are more likely to move between parties to further their careers. Why should the movement of politicians between parties lead to an increase in electoral volatility? In the NES 2004 data, the respondents were asked: 'While voting, what is the most important consideration for you?' Of the people who responded to the

question, 38 percent responded that the candidate was the most important. Thus, since many voters in India follow individual politicians, electoral volatility can serve as a proxy for the movement of politicians between parties, something that is otherwise hard to measure given the paucity of data.

The argument outlined above predicts a negative relationship between electoral volatility and party organization. It also predicts an inverted U-shaped relationship between the effective number of parties and the degree to which parties are organized. There is *prima facie* evidence for this:

- A typical case of a state with less organized parties is the state of Haryana in the 1990s. In this case the effective number of parties ranges between four and six and electoral volatility ranges from 39 to 45 percent by seats and by 70 to 87 percent by votes.
- West Bengal is a good example of a state with some organized parties. In the 1990s, West Bengal had a fairly stable party system with an effective number of parties around three. The major parties were CPI(M), BJP and Congress, of which the two former were more organized parties. When Mamata Banerjee was excluded from Congress in 1997 she formed her own new party, the Trinamool Congress, which has been very successful since. The effective number of parties since then increased to about four in the 2000 elections, and electoral volatility went up from 6.4 percent in 1996 to 34.5 percent in 2001.
- The best example of a state where all parties are organized is Rajasthan in the late 1990s and early 2000s. All major parties in the state are organized and the effective number of parties by votes is low, at three, and electoral volatility is also low, varying between 10 and 15 percent, compared to a national average of more than 20 percent. The national average of respondents who said that a ‘candidate’ was the most important consideration while voting was 38 percent. This number is 10 percentage points lower in Rajasthan (28 percent). This could indicate either a greater coordination of voters around parties rather than candidates, or that candidates tend to stay within parties rather than move between parties, both of which are a consequence of parties being more organized.

Operationalizing party organization

While in general attempts to code party organization have been limited, we follow in the footsteps of recent works by scholars such as Fabre (2010) and Thorlakson (2009) and create a coding scheme for categorizing parties as less or more organized. Unlike those who examine the allocation of power across central and regional party organization in countries with two levels of political representation, we

focus on only the state-level organization of parties. Similar to these authors, however, we create a multidimensional measure of organization as described below.

A party was categorized as less organized when there was no clear succession plan within the party, where party functionaries’ roles were fluid and election-focused, and where opportunities for upward mobility were either limited or prone to the whims of a few leaders. In addition, a less organized party depended on the charisma of a single leader and decision-making within the party was referred to as *ad hoc* by commentators. In a more organized party, career decisions for party activists and succession issues were more transparent and routinized and the party did not depend only on the personalities of individuals. In addition, the parties showed organizational continuity that lasted beyond elections.

To categorize state parties, data were gathered to determine the organizational structure of all parties in the 15 largest Indian states that gained more than 5 percent of the vote-share at the state level during the state assembly elections held between 1967 and 2004, as reported by the Election Commission of India. Parties were coded by state and election year as more, moderately and less organized. More organized parties were coded as 3, less organized parties as 1 and parties falling in between these two categories as 2. The coding was based on extensive reading of secondary sources about Indian party politics from the 1950s to 2004.

While most Indian parties are assumed to have an unclear organizational structure, we found that party organization varies substantially across states and over time. There are some states where parties have a highly routinized party organization. The (CPI(M)) in West Bengal is one such party. Bhattacharya (2002: 180) describes CPI(M) as a party with a wide organizational network and stringent control over party representatives, and in full control of the selection of candidates. Survey responses from party activists suggest that the party made efforts to ‘provide promotional opportunities according to certain well-laid principles and procedures’ (Bhaumik, 1987: 162). The Telugu Desam Party (TDP) is an example of a less organized party. The party was founded by a popular actor in the Telugu film industry, N. T. Rama Rao (NTR), who built the TDP through his direct appeal to the masses and his themes of Telugu nationalism. Innaiah (1982: 87) notes that:

Telugu Desam [...] was created by Mr Rama Rao and everything rallies around him. He is the beginning and the end of it. Even during the elections, the party set up some candidates who were political light-weights but the people voted for them just because of Mr Rama Rao [...] The selection of candidates was made by Mr Rama Rao in consultation with few others. The central office of the party was located at Ramakrishna Studios [NTR’s movie studio] till recently [...] Membership was enrolled in all villages but elections were not conducted within the party.

The quotes about CPI(M) and TDP above illustrate the type of information that served as the basis for our coding of parties being more and less organized. To give a few more examples, the Congress in Bihar in 1967 was coded as a less organized party, since Pandey (1982: 147) described it as having a ‘continuously declining organizational coherence and intensified internal factional strife’. Similarly, Rudolph (1971: 1125) noted that in Madhya Pradesh and Rajasthan the Jan Sangh increased its share of the vote because of princely and feudal influence rather than a ‘modern’ organization or ideology. Instances of more organized parties include the Communist party of India in West Bengal (described above), but also the BJP in Karnataka, described by Malik and Singh (1992) as possessing ‘an exceptionally efficient organization’.

The data described above are a first-cut at coding the level of internal organization of Indian parties at the state level. The coding relies on the evaluations of political parties by various authors and hence the quality of the coding depends on the quality of those evaluations. In some cases, we were unable to find specific references to the organization of parties in a particular state in a particular election year and had to interpolate from the years before and after. While we would have liked to have had a more specific and disaggregated coding scheme by each of the factors we have identified as driving organization, the quality of the sources did not allow it. Despite these issues, we believe that the coding is contributing valuable information about the Indian party system. In order to alleviate some of the issues we cross-checked the coding with several state experts in India and with the responses to questions in various political surveys. We have also provided the coding for the four largest parties in each state election from 1967 to 2004 in Appendix B, and have placed the full dataset online in order to allow replication with alternative coding. The data will be available at www.francesca.no/data.

Our coding scheme allows for the same party label to be coded as more organized in one state and less organized in another state at the same time. This corresponds well with the secondary literature on party organization in Indian states which indicates that the level of party organization can vary with individual leaders in power at the state level and their relationship to other political leaders at the state and national level. For example, the party organization could easily deteriorate from one election to the next if the central leadership decided to weaken an ambitious state level leader. Similarly, the organization of a party might get weaker if it was boycotted by another factional leader aspiring to oust the current leadership. In short, the organization of a party at the state level depends on the political aspirations of the local, state level and national leadership and the interactions between them.

We have also made efforts to ensure the reliability and replicability of the coding by having each state coded by two different authors who referred to the same source

materials. In the few cases where there were disagreements in the coding of a state in an election year, all three authors discussed and agreed on how to code the specific case. Of the 138 state-years between 1967 and 2004, 56 percent of the cases had no organized party, while 27.5 percent had one organized party and 16 percent had two. The parties coded as moderately and less organized were pooled together as less organized, but the results presented in later sections of the article were robust to the inclusion of the moderately organized as more organized.

It is not the number of more organized parties but rather the proportion of such parties in a party system that is the variable of interest for this study.⁷ This is because the dependent variable (effective number of parties) is so highly correlated with the absolute number of more organized parties (0.76). The reason for this is fairly obvious: where there is a low absolute number of parties, we would expect to see a low absolute number of more organized parties. The absolute number of more organized parties therefore might simply reflect the number of parties in a party system. The proportion of more organized parties comes closer to capturing our argument: whether the party system is characterized by more or less organized parties and to what extent this affects the incentives politicians and voters face in the party system. Figure 3 presents the frequency distribution of the absolute number of parties gaining more than 5 percent of the vote in the states in the study, the distribution of the effective number of parties, the frequency distribution of the number of organized parties and the distribution of the proportion of more organized parties.⁸

Data analysis

In order to analyze the relationship between the proportion of organized parties in a polity and the two outcome variables of interests – namely the effective number of parties and party volatility – we merged our data about party organization with electoral data from the Election Commission of India. The data covers state level elections in the 15 largest states in India from 1967 to 2004. The raw data showing the relationships between the proportion organized parties and the two outcome variables is plotted in Figure 4. As expected, both the mean and the variance for the effective number of parties were the lowest when the proportion of more organized parties in the state was high, higher when the proportion was low and the highest in a mixed system. This trend supports the claims laid out earlier in the article, namely that defecting politicians are more likely to form new parties rather than just join an existing party when lateral entry into other existing parties is difficult.

Closely linked to the stability of a party system is its electoral volatility. While the measure for effective number of parties captures whether or not new parties are formed, the measure for electoral volatility captures how

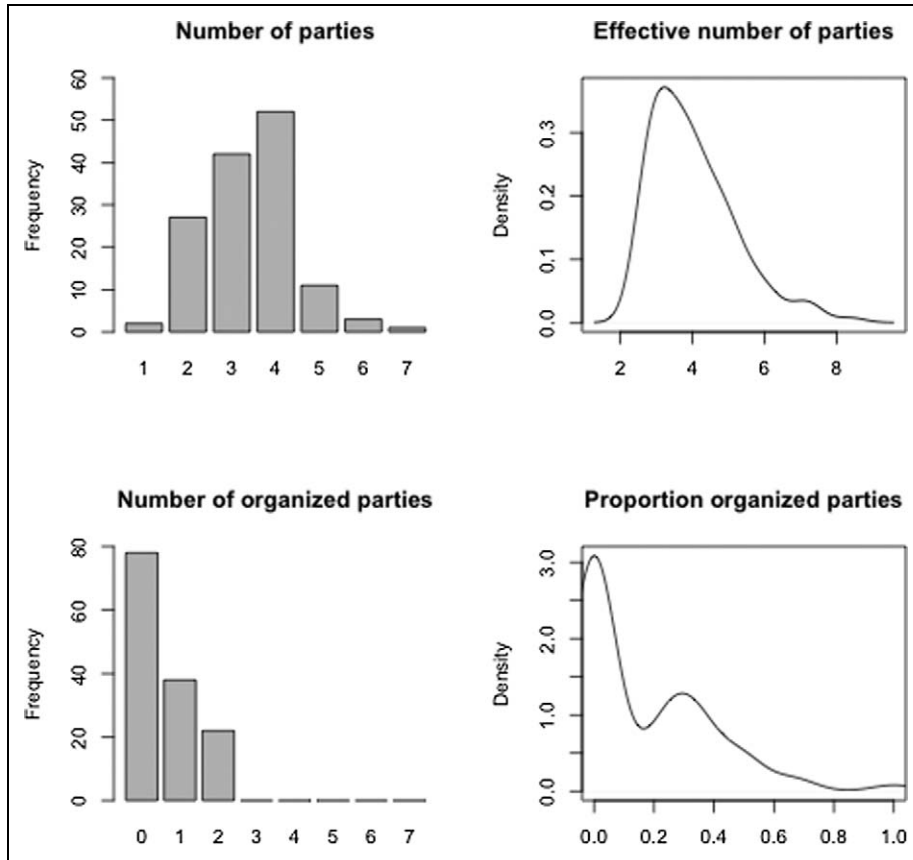


Figure 3. Number of parties, effective number of parties, number of organized parties and proportion of organized parties.

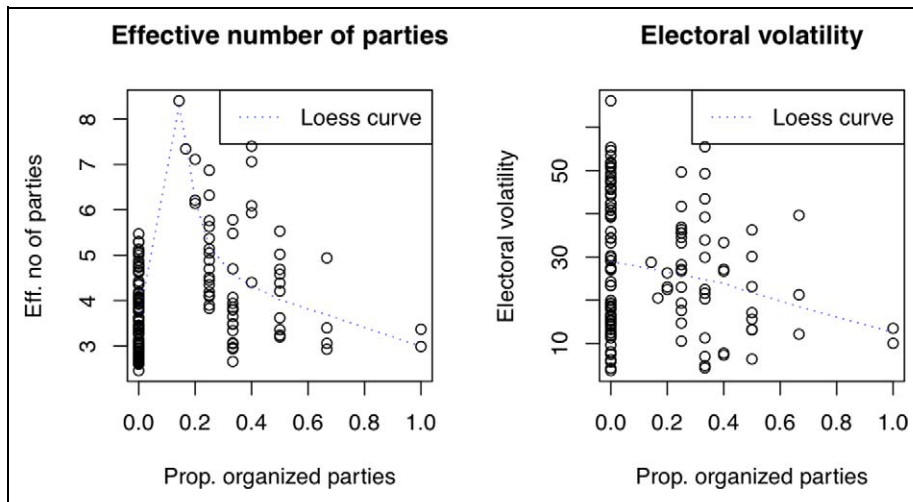


Figure 4. Party organization and proposed dependent variables in 15 Indian states 1967–2004.

much voters move around in the party system from one election to the next. This captures how stable the party system is, and it serves as a proxy for how much politicians move between parties, since about 38 percent of the respondents in the NES 2004 survey reported that the candidate was the most important consideration in casting

their vote. In the right-hand side plot in Figure 4 the proportion of more organized parties in a polity is shown to be negatively correlated with the electoral volatility in states, supporting the theoretical claim that less organized parties make politicians (and voters) less likely to stay loyal to a party.

Table 1. OLS models of the proportion more organized parties on the effective number of parties.

	Model 1	Model 2	Model 3	Model 4
Intercept	0.86 [†] (0.48)	3.16 (3.01)	2.20 (3.04)	3.34 (2.86)
Lagged effective no. of parties	0.69*** (0.11)	0.66*** (0.10)	0.66*** (0.10)	0.65*** (0.10)
Proportion organized parties	2.78*** (0.83)	2.73*** (0.73)	2.69*** (0.73)	2.97*** (0.75)
Proportion organized parties squared	-3.33*** (1.20)	-3.35*** (1.19)	-3.35*** (1.20)	-3.60*** (1.19)
Electoral volatility	0.01 (0.01)	0.01 (0.01)	0.01 [†] (0.01)	0.01 [†] (0.01)
Effective no. of groups 2004		-0.10 (0.15)		
Dummy for social base		-0.10 (0.11)	-0.11 (0.11)	-0.08 (0.11)
Log (real income)		-0.29 (0.29)	-0.21 (0.28)	-0.22 (0.29)
Log (fiscal spending)		0.01 (0.10)	0.01 (0.10)	0.01 (0.09)
Electoral turnout		0.00 (0.01)	0.01 (0.01)	-0.00 (0.01)
Dummy for post 1991		0.40 (0.33)	0.38 (0.34)	0.39 (0.32)
Cleavages			0.00 (0.01)	
Effective no. of clusters				-0.37* (0.18)
N	123	122	122	122
adj. R ²	0.56	0.55	0.55	0.56

Panel corrected standard errors in parentheses.

[†]Significant at $p < 0.10$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Do the relationships shown in Figure 4 still holdup after controlling for other variables? Several models were estimated to check the robustness of the findings using the proportion of more organized parties as the explanatory variable and the effective number of parties as well as the electoral volatility as dependent variables. The section below explains the choices of models, control variables and main findings.

Model choices and control variables

As the data used in this paper are time-series cross-section data (TSCS), they raise issues relating to the correlation between units in space and time. In line with recommendations in several methodological papers (Achen, 2002; Beck and Katz, 1995) etc., Ordinary Least Squares (OLS) models with various standard errors as well as four different Generalized Estimating Equations (GEE) models were estimated.⁹ The main body of the article presents OLS models with panel-corrected standard errors.¹⁰ Since panel-corrected standard errors are biased when a lagged dependent variable is included in the model, models were estimated with and without the lagged dependent variable. The proportion of more organized parties is statistically significant in all specifications. The output from the GEE models is consistent with the OLS models and is presented in Appendix A.

The first estimated models had the effective number of parties as the dependent variable. The earlier discussion suggests that there should be an inverted U-shaped relationship between the proportion of organized parties and the dependent variable. To model this accurately, a square term for the proportion of more organized parties was included in the model with the expectation of a positive sign on the proportion variable and a negative and

significant sign on the square term. In the first model, the dependent variable is the effective number of parties and the explanatory variables are the measures for the proportion of more organized parties in a state-year, the lagged effective number of parties and the electoral volatility. Second, models were repeated with more control variables. The output from the models is reported in Table 1 and discussed below. In each of the models 2, 3 and 4 a different variable was used as an estimate for the number of social cleavages in society.

In Table 2 we report the output of OLS models where the outcome variable is electoral volatility. Based on the theoretical discussion above, we expected to see a linear, negative relationship. In this case too, different specifications were estimated by including different control variables, and we report the output from using a GEE model in Appendix A. Before discussing the findings, however, we will briefly present and discuss each of the control variables used in the models.

Turnout. Turnout was included as a control since it is often used to account for the changing nature of party coalitions (Petrocik, 1980). For India, Vanderbok (1990) argues that the apparent 'waves' in support of the Congress party are actually the result of differential levels of mobilization by the opposition party. Losses in vote-share by the Congress, he argues, are the result of additional voters for the opposition rather than the movement of previous Congress voters away from the party. Likewise, Yadav (2000) argues that a second democratic upsurge that has led to the emergence of new political parties occurred in the 1990s with the mobilization of hitherto relatively inactive voters, especially among the poor and the disadvantaged.¹¹ Higher turnout rates could be positively correlated with the effective number of parties.

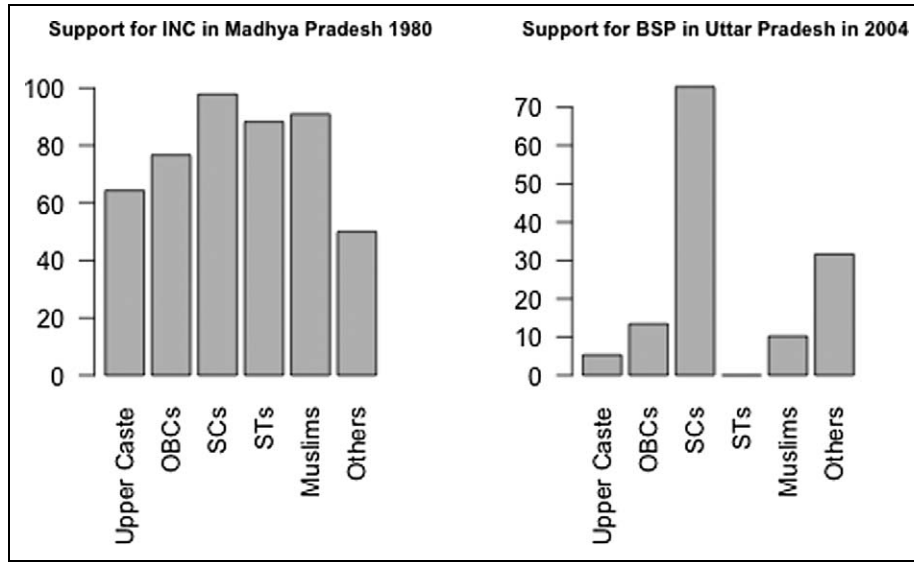


Figure 5. Examples of the social base of parties in India.

Social base. We developed an algorithm to measure the extent to which a party has a clear social base and applied it to survey data from six national elections: 1967, 1971, 1979, 1996, 1999 and 2004. The first three were surveys conducted by the Centre for the Study of Developing Societies and the latter three part of the National Election Studies that were pioneered by Lokniti in 1996. For each election, the party for which a respondent voted in each of the 15 states was cross-tabulated with their demographic characteristics. The key groups considered were: Hindu upper castes; Scheduled Castes; Hindu Other Backward Castes; Muslims; other religious denominations; Scheduled Tribes.¹²

Parties were coded according to the following two indicators of having a clear social base: (1) A party gets more than 50 percent of votes from a specific group without any other party getting more than 25 percent of votes from the same group. This criterion ensures that the party under consideration is clearly preferred by a particular social group. (2) A party has a maximum of two support groups, as defined in (1). This criterion ensures that the party is indeed preferred by a few caste groups and is not the preference of many groups in society (which would make it a catch-all party)

If a party fulfilled both of these criteria, it was classified as a cleavage-based party; otherwise it was categorized as a catch-all party. The social base data for the missing years were supplemented by extended readings on Indian politics, as described earlier in the article. Where data points were missing, values were interpolated in cases where the coding seemed to be the same before and after the time of the missing value.

Some examples can illustrate how a party was determined as receiving support from a specific caste. The Congress in the national election in Madhya Pradesh in

1980 was coded a catch-all party, since it got more than 50 percent of the vote from all groups. On the other hand, in Uttar Pradesh in 2004 the BSP had a very clear social base, since 75.3 percent of the surveyed Scheduled Caste (SC) population claimed to have voted for BSP, and no other party received more than 11 percent of the SC vote. Also, in accordance with the second criteria, no other group gave more than 50 percent of its votes to the BSP. The BJP had an unclear social base in Karnataka in 1999, since it did not get 50 percent of the votes from any group, but did get some support from the high castes, Dalits, Scheduled Tribes, Other Backward Classes and Muslims.

In almost 60 per cent of the 138 state-years in the dataset, no party in the party system had a social base; in 30 per cent of the cases, one party had a clearly defined social base; and in 10 percent of the cases two parties had a clear social base. The correlation of the social base variable and the effective number of parties was indistinguishable from zero (-0.007).¹³

Cleavages. While the social base variable captures the extent to which groups vote for specific parties and parties rely on particular groups, it was important to include variables that capture how many groups exist in each state. Three different measures were used: (a) A measure of effective number of salient groups was calculated from the NES 2004 data (using the same groups as for the social base variable explained above) and was used as a time invariant variable in each state; (b) the cleavage polarization index developed by Heath (2005); and (c) we also calculated another effective number of clusters measure using the proportions of religious groups (Hindu/Muslim/Other) as well as the proportion of Scheduled castes and Scheduled tribes. This

Table 2. OLS models of the proportion of more organized parties on electoral volatility.

	Model 1	Model 2	Model 3	Model 4
Intercept	25.53*** (6.11)	113.50* (51.60)	123.99** (45.46)	111.59* (46.04)
Lagged electoral volatility	0.15 (0.19)	0.06 (0.17)	0.06 (0.18)	0.06 (0.17)
Proportion organized parties	-13.12* (6.33)	-11.50* (5.03)	-10.70† (5.78)	-11.94* (5.54)
Effective no. of parties		1.19 (1.39)		
Effective no. of groups 2004		-0.34 (4.72)		
Dummy for social base		-0.92 (2.10)	-1.11 (2.03)	-1.47 (1.98)
Log (real income)		-5.38 (5.31)	-6.34 (4.84)	-6.22 (4.50)
Log (fiscal spending)		-2.53 (1.97)	-2.58 (1.83)	-2.59 (1.90)
Electoral turnout		-0.21 (0.15)	-0.19 (0.14)	-0.13 (0.17)
Dummy for post 1991		0.67 (5.01)	1.68 (4.94)	1.61 (5.02)
Cleavages			-0.01 (0.17)	
Effective no. of clusters				4.11 (4.02)
N	108	108	108	108
adj. R ²	0.05	0.13	0.13	0.14

Panel corrected standard errors in parentheses.

†Significant at $p < 0.10$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

measure was based on data collected by Steven Wilkinson and Yogendra Yadav.¹⁴

Economic variables. The study of economic voting has a rich pedigree, and there is robust evidence for the claim that economic factors shape voters' decisions. The economic performance of the state can particularly affect the number of parties if a bad economic situation makes voters switch loyalty and support another party. Research on questions about how income affects voting behaviour has primarily focused on the impact of economic crisis on political stability. Zimmermann and Saalfeld (1988) find that the economic crisis of the 1930s had powerful political effects in Europe, but that the extent to which it undermined the political stability of the state was conditioned by the success of national consensus formation at the elite level. Bohrer and Tan (2000) argues that 'austerity' plans enacted by European states to bring their economies into compliance with the European Monetary Union (EMU) requirements caused voters to support parties of the Left in greater numbers than before. In the Latin American context, Remmer (1991: 781) finds that 'elections held under conditions of economic crisis [...] consistently produced losses for governing parties' and 'in the overwhelming majority of cases, [these] elections resulted in the defeat of the governing party or coalition'. As an indicator of the incumbent government's performance, the average annual growth rate of per capita state income since the previous election was included as a control.¹⁵ Such growth is expected to reduce party proliferation.¹⁶

Time. In India, the post-1990 period differs systematically from the earlier time period for three reasons. First, Yadav (1996) argues that mobilization of lower-caste voters has

increased substantially in the 1990s, which should lead to higher party proliferation according to the mobilization hypothesis. Second, as noted earlier, the voting age was lowered from 21 to 18 in 1989. If this change had an effect on party proliferation independently of the effect it had via changes in turnout, then it should show up in this time trend. Third, India's economy was liberalized in 1991 and has been growing rapidly since. To account for these potential differences, a dummy variable for the post-1991 period was included.

Findings

As can be seen in Table 1, the coefficient for the proportion of organized parties is a statistically significant predictor of the effective number of parties across 15 Indian states 1967-2004 and this holds across all the model specifications. There is a negative and statistically significant relationship between effective number of clusters in a state and the effective number of parties, while none of the other control variables are statistically significant.

Other studies of the effective number of parties at the state level in India sometimes get significant findings using similar data, and so do we when calculating naïve or robust standard errors. However, when calculating naïve standard errors, observations are assumed to be independent of each other. This is not the case in these data, since the observations in the same year and from the same state are highly correlated with each other. Using panel-corrected standard errors, which take into account the dependence of the observations and therefore are much larger than both naïve and robust standard errors, show fewer variables are statistically significant in the models.

The proportion of more organized parties has a positive coefficient, while there is a negative coefficient for the square term. This suggests that there indeed is an inverted

Table 3. GEE models of the proportion of organized parties on electoral volatility, allowing for dependence among the observations in the same state.

	Model 1	Model 2	Model 3	Model 4
Intercept	25.65*** (3.62)	116.29** (52.93)	127.13** (46.71)	114.34** (42.52)
Lagged electoral volatility	0.15* (0.10)	0.04 (0.10)	0.03 (0.10)	0.04 (0.10)
Proportion organized parties	-13.21* (6.73)	-11.44* (7.16)	-10.79* (7.02)	-11.85* (7.08)
Effective no. of parties		1.12 (1.31)		
Effective no. of groups 2004		-0.34 (4.09)		
Dummy for social base		-1.16 (2.10)	-1.52 (2.14)	-1.74 (2.09)
Log (real income)		-5.39 (5.48)	-6.18 (4.97)	-6.07 [†] (4.65)
Log (fiscal spending)		-2.68* (1.64)	-2.82* (1.66)	-2.77* (1.63)
Electoral turnout		-0.22* (0.15)	-0.20 [†] (0.16)	-0.15 (0.16)
Dummy for post 1991		0.98 (4.81)	2.07 (4.81)	1.90 (4.63)
Cleavages			-0.01 (0.18)	
Effective no. of clusters				4.06 (5.05)

Standard errors in parentheses; these are naive standard errors assuming an exchangeable correlation structure among observations on the same state.

[†]Significant at $p < 0.10$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

U-shaped relationship between the proportion of more organized parties and the effective number of parties in a party system. Table 1 provides evidence that where all parties are more organized there is a lower effective number of parties than where all parties are less organized, but that in mixed systems the effective number of parties can go even higher.

Table 2 presents the output from models where electoral volatility is the outcome variable. There is a strong negative relationship between the proportion of more organized parties and electoral volatility in a state. Once again none of the other variables in the models are statistically significant, while the relationship between the proportion of more organized parties and electoral volatility is statistically significant at the 0.05 level in models 1, 2 and 4 and at the 0.1 level in model 3. These findings are also robust to other specifications, such as the GEE models presented in Appendix A.

Conclusion

The main claim presented in this article is that the organizational structure of parties can have a large and independent impact on the effective number of parties, since it alters the incentive structure for politicians to stay within a party, to defect to another party, or to form a new party. Assuming that politicians wish to climb the career ladder to get access to power and resources associated with holding office, the career opportunities of politicians in a party determine whether or not they stay loyal to a party. When parties are less organized, politicians are more likely to defect. This will lead to increased electoral volatility, as voters often follow politicians to other parties. However, politicians being more likely to leave their party does not necessarily lead to a higher effective number of parties. If the other parties in the party system are less organized, a politician with a following often has the opportunity to enter other parties laterally. When other parties are more organized this becomes harder. Thus, we expected to

find that the most fragmented party systems are mixed systems.

Using state level election data from 1967 to 2004 in India, we find a statistically significant inverted U-shaped relationship between the proportion of more organized parties in a state and the effective number of parties in the state. There is also a statistically significant negative relationship between electoral volatility and the proportion of more organized parties. Both of these findings support the argument developed in the article.

There are, of course, many limitations to the analysis presented here. First, the proposed model is based on a candidate-centric rather than a voter-centric view of party systems. The predictions, that effective number of parties and electoral volatility drop when all parties are more organized, arise from the assumption that voters vote on the basis of candidate characteristics. When candidates are loyal to more organized parties there is a commensurate drop in the effective number of parties and volatility. The article has not pursued how party organization affects voter behaviour. It is likely that the presence of more organized parties also increases voter coordination around parties rather than candidates, but the authors are unable to offer any evidence of that phenomenon. Research in this article is a combination of secondary qualitative research on party organization in Indian states and primary data on Indian state elections. Future primary qualitative work on party organization in Indian states should shed more light on the core arguments of this article.

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Notes

1. See Nooruddin and Chhibber (2008) for a discussion of electoral volatility in India.
2. The data were created in 2000 and therefore do not include Jharkhand, Uttarakhand or Chhattisgarh in the sample.
3. Why the focus on state level politics? Contemporary Indian elections have seen the emergence of the 'state as the principal arena of political choice' (Yadav and Palshikar, 2009: 401). Furthermore, it is argued that even the substance of national elections 'is defined through the filters of state-level issues' and 'political preferences at the national level derive from primary loyalties in the arena of state politics' (p. 402).
4. We choose to focus on the effective number of parties because we believe this is the measure that best captures competition in Indian politics. An alternative would be to look at the number of parties. Since there are many candidates in India who run for election even though they have no chance of getting a large vote-share, this gives a faulty perception of party competition. Another common measure is the margin of victory. However, since the realistic competition usually takes place between three or four parties at both the constituency and state level, this does not capture dynamics in the party systems.
5. There is also important regional variation within states, as argued by, among others, Kumar (2011). Looking at variations in the regions within states is beyond the scope of this paper, although we believe that our argument would apply to the sub-state level and hope that this can be explored in future work.
6. Could the variance be explained by the uneven nature of the application of institutional rules, as has been argued in several Latin American countries (Greene, 2007; Levitsky and Murillo, 2005; Magaloni, 2006). In India, the Election Commission and the government put enormous effort into ensuring that elections are held as freely and fairly as possible across the entire country. There were indeed election irregularities in the past but they have become less frequent as the Election Commission has become more forceful in ensuring compliance with election laws (Kapur and Mehta, 2006).
7. The proportion of organized parties is calculated as the number of organized parties in our dataset divided by the number of parties with more than 5 percent of the vote-share in the state in each state election.
8. Something interesting to note is that several new parties, which are created by politicians defecting from existing, weak parties, end up relying on similarly weak organizational structures. We believe this has to do with the defecting politicians wanting to keep power in their own hands since they failed to get power in the party they left behind.

9. GEE models were used to try to correct for the fact that observations on the same state are correlated. The GEE package in R with an exchangeable correlations structure was used (Liang and Zeger, 1986: 13–22).
10. In order to calculate the panel-corrected standard errors, we used the R-package *pcse*, written by Delia Bailey and Jonathan N. Katz.
11. The voting age in India was lowered from 21 to 18 in 1989. While this change did add to the electoral rolls, there is no evidence that it changed the rates of turnout or the composition of the electorate in any systematic manner. Indeed, to the extent that existing theories argue that younger voters are more fluid, a plausible expectation would be that the change in voting age should have led to increased volatility post-1989. However, our data suggest that the opposite is true.
12. The data were also coded separately using rural–urban as well as class categories, but no clear patterns were found.
13. We hope this algorithm seems convincing to those who have argued that different proportions of jatis could lead to different measures of effective number of groups than when using caste categories.
14. We thank Oliver Heath, Steven Wilkinson and Yogendra Yadav for making their data and measures available to us.
15. Data on income refer to per capita net state domestic product (NSDP) at current prices, which we convert to real figures using national-level inflation data. The source for these data is the Indian Budget, available online at: <http://indiabudget.nic.in>.
16. A possible concern arises in controlling for these economic variables since they are likely to be correlated with a state's fiscal space. In our sample, a state's growth rate is correlated with fiscal space as a percentage of total revenue at a level of 0.25. When the measure of fiscal space is not normalized, the correlation increases to 0.38. Likewise, the correlation of per capita income with the two measures of fiscal space is 0.44 and 0.57, respectively. There is therefore little risk of multicollinearity being a problem, and this is borne out by the variance inflation factors.

References

- Achen C (2002) Toward a new political methodology: Microfoundations and ART. *Annual Review of Political Science* 5(1): 423–450.
- Aldrich J (1995) *Why Parties?: The Origin and Transformation of Political Parties in America*. Chicago, IL: University of Chicago Press.
- Beck N and Katz J (1995) What to do (and not to do) with time-series cross-section data. *American Political Science Review*, pp. 634–647.
- Bhattacharya M (2002) *Panchayati Raj in West Bengal: Democratic De-centralisation Or Democratic Centralism*. New Delhi: Manak Publications.
- Bhaumik DJ (1987) *Political Movements in India: A Study of the United Front Experiment in West Bengal*. New Delhi: Anmol Publications.

- Bohrer R and Tan A (2000) Left turn in Europe? Reactions to austerity and the EMU. *Political Research Quarterly* 53(3): 575.
- Brass P (1981) Class ethnic group and party in Indian politics. *World Politics: A Quarterly Journal of International Relations* 33(3): 449–467.
- Brass PR (1965) *Factional Politics in an Indian State: The Congress Party in Uttar Pradesh*. Berkeley, CA: University of California Press.
- Chandra K and Wilkinson S (2008) Measuring the effect of ‘ethnicity’. *Comparative Political Studies* 41(4/5): 515.
- Chhibber P and Kollman K (2004) *The Formation of National Party Systems; Federalism and Party Competition in Canada Great Britain India and the United States*. Princeton, NJ: Princeton University Press.
- Chhibber P and Nooruddin I (2000) Party competition and fragmentation in Indian national elections: 1957–1998. In: Wallace P and Ray R (eds) *Indian Politics and the 1998 Elections: Regionalism Hindutva and State Politics*. New Delhi: Sage, pp. 36–54.
- Cox GW (1997) *Making Votes Count: Strategic Coordination in the World’s Electoral Systems. Political Economy of Institutions and Decisions*. Cambridge and New York: Cambridge University Press.
- Cox GW and McCubbins MD (2007) *Legislative Leviathan: Party Government in the House*. Cambridge: Cambridge University Press.
- Duverger M (1959) *Political Parties. Their Organization and Activity in the Modern State*. Chichester: Wiley.
- Epstein L (1980) *Political Parties in Western Democracies*. New Brunswick, NJ: Transaction Books.
- Fabre E (2010) Measuring party organization: The vertical dimension of the multi-level organization of state-wide parties in Spain and the UK. *Party Politics* 17(3): 343–363.
- Franda MF (1969) India’s third communist party. *Asian Survey* 9(11): 797–817.
- Gallagher M and March M (1988) *Candidate Selection in Comparative Perspective: The Secret Garden of Politics*. London: Sage.
- Greene K (2007) *Why Dominant Parties Lose: Mexico’s Democratization in Comparative Perspective*. Cambridge: Cambridge University Press.
- Heath O (2005) Party systems, political cleavages and electoral volatility in India: A state-wise analysis 1998–1999. *Electoral Studies* 24(2): 177–199.
- Innaiah N (1982) *The Birth and Death of Political Parties in India*. Innaiah: Sole distributor Booklinks Corp Hyderabad.
- Jackson M and Moselle B (2002) Coalition and party formation in a legislative voting game. *Journal of Economic Theory* 103(1): 49–87.
- Jaffrelot C (2005) *The Sangh Parivar: A Reader*. Oxford: Oxford University Press.
- Kanter RM (1977) *Men and women of the organization*. New York: Basic Books.
- Kapur D and Mehta P (2006) *The Indian Parliament as an Institution of Accountability*. UNRISD.
- Katz R (1992) *Party Organizations: A Data Handbook on Party Organizations in Western Democracies 1960–90*. London: Sage.
- Katz RS (2001) The problem of candidate selection and models of party democracy. *Party* 7: 277–296.
- Kitschelt H (1994) *The Transformation of European Social Democracy*. Cambridge: Cambridge University Press.
- Kitschelt H (1999) *Continuity and Change in Contemporary Capitalism*. Cambridge: Cambridge University Press.
- Kothari R (1964) The Congress ‘System’ in India. *Asian Survey* 4(12): 1161–1173.
- Kumar A (ed.) (2011) *Rethinking State Politics in India. Regions within Regions*. London: Routledge.
- Laakso M and Taagepera R (1979) Effective number of parties: A measure with application to West Europe. *Comparative Political Studies* 12(1): 3–27.
- Lefkowitz J (1971) Personnel turnover. *Progress in Clinical Psychology*, pp. 69–90.
- Levitsky S and Murillo M (2005) *Argentine Democracy: The Politics of Institutional Weakness*. Philadelphia, PA: Pennsylvania State University Press.
- Liang K and Zeger S (1986) Longitudinal data analysis using generalized linear models. *Biometrika* 73(1): 13.
- Lijphart A (1994) *Electoral Systems and Party Systems: A Study of Twenty-seven Democracies 1945–1990*. Oxford: Oxford University Press.
- Linden L (2004) Are incumbents really advantaged? The preferences for non-incumbents in Indian national elections. Unpublished manuscript. Columbia University.
- Lundell K (2004) Determinants of candidate selection. *Party Politics* 10(1): 25–47.
- Magaloni B (2006) *Voting for Autocracy: Hegemonic Party Survival and its Demise in Mexico*. Cambridge: Cambridge University Press.
- Malik YK and Singh VB (1992) Bharatiya janata party: An alternative to the congress (i)? *Asian Survey* 32(4): 318–336.
- Matthews DR (1985) Legislative recruitment and legislative careers. In: Patterson SC and Jewell M (eds) *Handbook of Legislative Research*. Cambridge, MA: Harvard University Press.
- Nooruddin I and Chhibber P (2008) Unstable politics: Electoral volatility in the Indian states. *Comparative Political Studies* 41(8 August): 1069–1081.
- Norris P (1993) Conclusions: Comparing legislative recruitment. In: Lovenduski J and Norris P (eds) *Gender and Party Politics*. London: Sage.
- Pandey J (1982) *State Politics in India: A Study in Coalition Politics in an Indian State*. New Delhi: Uppal Publishing House.
- Panbianco A (1988) *Political Parties: Organization and Power*. Cambridge: Cambridge University Press.
- Petrocik J (1980) *Contextual Sources of Voting Behavior. The Electorate Reconsidered*. Beverly Hills, CA: Sage.
- Rae D (1967) *The Political Consequences of Electoral Laws*. New Haven, CT: Yale University Press.

- Remmer K (1991) The political impact of economic crisis in Latin America in the 1980s. *American Political Science Review* 85(3): 777–800.
- Riker W (1982) The two-party system and Duverger's Law: An essay on the history of political science. *American Political Science Review* 76(4): 753–766.
- Rudolph L and Rudolph S (1985) The subcontinental empire and the regional kingdom in Indian state formation. In: Wallace P and Park RL (eds) *Region and Nation in India*. Oxford: Oxford University Press and IBH Publishing, pp. 40–59.
- Rudolph LI (1971) Continuities and change in electoral behavior: The 1971 parliamentary election in India. *Asian Survey* 11(12): 1119–1132.
- Taagepera R and Shugart M (1989) *Seats and Votes: The Effects and Determinants of Electoral Systems*. New Haven, CT: Yale University Press.
- Thompson JD, Avery RW and Carlson RO (1968) Occupations, personnel and careers. *Educational Administration Quarterly* 4(1): 6.
- Thorlakson L (2009) Patterns of party integration influence and autonomy in seven federations. *Party Politics* 15: 157–177.
- Uppal Y (2009) The disadvantaged incumbents: Estimating incumbency effects in Indian state legislatures. *Public Choice* 138(1): 9–27.
- Vanderbok W (1990) The tiger triumphant: The mobilization and alignment of the Indian electorate. *British Journal of Political Science* 20(2): 237–261.
- Ware A (1996) *Political Parties and Party Systems*. Oxford: Oxford University Press.
- Ware A (2007) Examining party structure change: The Americanist as a comparativist. Paper presented at 'Politics through the Lens of Parties' (a conference in honour of Leon Epstein held at the University of Wisconsin, Madison).
- Wright W (1971) Comparative party models: Rational-efficient and party democracy. *A Comparative Study of Party Organization*. Princeton, NC: Merrill Publishing Co., pp. 17–54.
- Yadav Y (1996) Reconfiguration in Indian politics: State assembly elections 1993–95. *Economic and Political Weekly* 31(2): 95–104.
- Yadav Y (2000) Understanding the second democratic upsurge: Trends of Bahujan participation in electoral politics in the 1990s. In: Frankel FR, et al. (eds) *Transforming India: Social and Political Dynamics of Democracy*. Oxford: Oxford University Press, pp. 120–145.
- Yadav Y and Palshikar S (2009) Between fortuna and virtus: Explaining the congress' ambiguous victory in 2009. *Economic and Political Weekly* 44(39).
- Zimmermann E and Saalfeld T (1988) Economic and political reactions to the world economic crisis of the 1930s in six European countries. *International Studies Quarterly* 32(3): 305–334.

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Appendix A. GEE models of the proportion of organized parties on the effective number of parties, allowing for dependence among the observations in the same state.

	Model 1	Model 2	Model 3	Model 4
Intercept	1.17*** (0.34)	0.90 (1.73)	-0.19 (1.14)	0.20 (1.27)
Lagged effective no. of parties	0.62*** (0.07)	0.90*** (0.05)	0.97*** (0.04)	0.91*** (0.04)
Proportion organized parties	2.93*** (0.84)	1.36** (0.59)	0.84* (0.48)	1.79*** (0.63)
Prop. organized parties squared	-3.45*** (1.16)	-1.80** (0.89)	-1.30* (0.81)	-2.31** (0.91)
Electoral volatility	0.01* (0.01)	0.01*** (0.00)	0.01*** (0.00)	0.02*** (0.00)
Effective no. of groups 2004			-0.11* (0.11)	
Dummy for social base		-0.10 (0.09)	-0.09† (0.09)	-0.09 (0.09)
Log (real income)		-0.21† (0.18)	-0.09† (0.14)	-0.07 (0.14)
Log (fiscal spending)		0.06† (0.05)	0.07* (0.04)	0.07* (0.04)
Electoral turnout		0.01* (0.00)	0.00 (0.01)	-0.00 (0.01)
Dummy for post 1991		0.23† (0.24)	0.20* (0.23)	0.20† (0.23)
Cleavages			-0.01* (0.00)	
Effective no. of clusters				-0.26*** (0.10)

Standard errors in parentheses; these are naive standard errors assuming an exchangeable correlation structure among observations on the same state.

† Significant at $p < 0.10$; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

Appendix B. Party organization coding.

State	Year	Party 1	Org 1	Party 2	Org 2	Party 3	Org 3	Party 4	Org 4
Andhra Pradesh	1967	INC	2	SWA	1	CPI	3	CPM	3
Andhra Pradesh	1972	INC	2	CPI	1				
Andhra Pradesh	1978	INC(I)	2	JNP	1				
Andhra Pradesh	1983	INC	1						
Andhra Pradesh	1985	TDP	1	INC	1				
Andhra Pradesh	1989	INC	1	TDP	1				
Andhra Pradesh	1994	TDP	1	INC	1				
Andhra Pradesh	1999	TDP	1	INC	1				
Andhra Pradesh	2004	INC	2	TDP	1				
Assam	1967	INC	1	PSP	1				
Assam	1972	INC	1	SOP	1	CPI	1		
Assam	1978	JNP	1	INC	1	INC(I)	1	CPM	2
Assam	1983	INC	1	ICS	1	CPM	2		
Assam	1985	INC	1						
Assam	1991	INC	1	AGP	1	BJP	2	NAGP	1
Assam	1996	INC	1	AGP	1	BJP	2		
Assam	2001	INC	1	AGP	1	BJP	2		
Bihar	1967	INC	1	SSP	1	BJS	1	PSP	1
Bihar	1969	INC	1	BJS	2	SSP	1	CPI	3
Bihar	1972	INC	1	SOP	1	NCO	1	BJS	2
Bihar	1977	JNP	1	INC	1	CPI	3		
Bihar	1980	INC(I)	1	JNP(SC)	1	CPI	3	BJP	3
Bihar	1985	INC	1	LKD	1	CPI	3	BJP	3
Bihar	1990	JD	1	INC	1	BJP	3	CPI	3
Bihar	1995	JD	1	INC	1	BJP	3	SAP	1
Bihar	2000	RJD	3	BJP	3	INC	1	SAP	1
Gujarat	1967	INC	1	SWA	1				
Gujarat	1972	INC	1	NCO	1	BJS	2		
Gujarat	1975	INC	1	NCO	1	KLP	1	BJS	3
Gujarat	1980	INC(I)	1	JNP(JP)	3	BJP	3		
Gujarat	1985	INC	1	JNP	1	BJP	3		
Gujarat	1990	INC	1	JD	1	BJP	3		
Gujarat	1995	BJP	2	INC	2				
Gujarat	1998	BJP	2	INC	2	AIRJP	1		
Gujarat	2002	BJP	2	INC	2				
Haryana	1967	INC	2	BJS	2				
Haryana	1968	INC	2	VHP	1	BJS	1	SWA	1
Haryana	1972	INC	2	NCO	1	VHP	1	BJS	1
Haryana	1977	JNP	1	INC	1	VHP	1		
Haryana	1982	INC	1	LKD	1	BJP	2		
Haryana	1987	LKD	1	INC	1	BJP	2		
Haryana	1991	INC	1	JP	1	HVP	1	BJP	2
Haryana	1996	INC	1	BJP	3	BSP	1		
Haryana	2000	INC	1	INLD	1	BJP	1	BSP	1
Karnataka	1967	INC	2	PSP	1	SWA	1		
Karnataka	1972	INC	2	NCO	1				
Karnataka	1978	INC(I)	2	JNP	1	INC	1		
Karnataka	1983	INC	1	JNP	1	BJP	1		
Karnataka	1985	JNP	1	INC	1				
Karnataka	1989	INC	2	JD	1	JNP(JP)	1		
Karnataka	1994	JD	1	INC	1	BJP	1	KCP	1
Karnataka	1999	INC	1	BJP	2	JD(U)	1	JD(S)	1
Karnataka	2004	INC	2	BJP	3	JD(S)	1		
Kerala	1967	INC	3	CPM	3	CPI	1	SSP	1
Kerala	1970	CPM	3	INC	3	CPI	1	MUL	1
Kerala	1977	CPM	3	INC	2	CPI	1	KEC	1
Kerala	1980	CPM	3	INC(I)	1	INC(U)	1	CPI	1

(continued)

Appendix B. (continued)

State	Year	Party 1	Org 1	Party 2	Org 2	Party 3	Org 3	Party 4	Org 4
Kerala	1982	CPM	3	INC	1	CPI	1	MUL	1
Kerala	1987	INC	2	CPM	3	CPI	1	MUL	1
Kerala	1991	INC	2	CPM	3	CPI	1	MUL	1
Kerala	1996	INC	2	CPM	3	CPI	1	MUL	1
Kerala	2001	INC	2	CPM	3	MUL	1	CPI	1
Madhya Pradesh	1967	INC	3	BJS	1	SSP	1		
Madhya Pradesh	1972	INC	2	BJS	1	SOP	1		
Madhya Pradesh	1977	JNP	1	INC	1				
Madhya Pradesh	1980	INC	1	BJP	1				
Madhya Pradesh	1985	INC	1	BJP	1				
Madhya Pradesh	1990	BJP	3	INC	1	JD	1		
Madhya Pradesh	1993	INC	1	BJP	3	BSP	1		
Madhya Pradesh	1998	INC	1	BJP	3	BSP	1		
Madhya Pradesh	2003	BJP	3	INC	3	BSP	1		
Maharashtra	1967	INC	1	BJS	1	PWP	1	RPI	
Maharashtra	1972	INC	2	BJS	1	PWP	1		
Maharashtra	1978	JNP	1	INC	2	INC(I)	2	PWP	1
Maharashtra	1980	INC(I)	1	INC(U)	1	BJP	2	JNP(JP)	1
Maharashtra	1985	INC	1	ICS	1	JNP	1	BJP	2
Maharashtra	1990	INC	1	SHS	3	JD	1	BJP	3
Maharashtra	1995	INC	1	SHS	3	BJP	3	JD	1
Maharashtra	1999	INC	2	NCP	1	SHS	2	BJP	3
Maharashtra	2004	INC	2	SHS	2	NCP	1	BJP	3
Orissa	1967	INC	1	SWA	1	JAC	1	PSP	
Orissa	1971	INC	1	UTC	1	SWA	1	PSP	
Orissa	1974	INC	1	UTC	1	SWA	1		
Orissa	1977	JNP	1	INC	1				
Orissa	1980	INC(I)	1	JNP(SC)	1	INC(U)	1	CPI	1
Orissa	1985	INC	1	JNP	1				
Orissa	1990	JD	1	INC	1				
Orissa	1995	INC	1	JD	1	BJP	1		
Orissa	2000	INC	1	BJD	1	BJP	1		
Orissa	2004	INC	1	BJD	1	BJP	1		
Punjab	1967	INC	3	ADS	1	BJS	1	CPI	1
Punjab	1969	INC	3	SAD	1	BJS	1		
Punjab	1972	INC	1	SAD	1	CPI	1		
Punjab	1977	INC	1	SAD	1	JNP	1	CPI	1
Punjab	1980	INC(I)	1	SAD	1	BJP	1	CPI	1
Punjab	1985	SAD	1	INC	1				
Punjab	1992	INC	1	BJP	3	BSP	1	SAD	1
Punjab	1997	SAD	1	INC	2	BJP	3	BSP	1
Punjab	2002	INC	2	SAD	1	BSP	1	BJP	1
Rajasthan	1967	INC	3	SWA	1	BJS	1		
Rajasthan	1972	INC	2	SWA	1	BJS	1		
Rajasthan	1977	JNP	1	INC	1				
Rajasthan	1980	INC(I)	1	BJP	1	JNP(SC)	1	JNP(JP)	1
Rajasthan	1985	INC	1	BJP	2	LKD	1	JNP	1
Rajasthan	1990	INC	1	BJP	3	JD	1		
Rajasthan	1993	BJP	3	INC	2				
Rajasthan	1998	INC	3	BJP	3				
Rajasthan	2003	BJP	3	INC	3				
Tamil Nadu	1967	INC	3	DMK	2	SWA	1		
Tamil Nadu	1971	DMK	2	NCO					
Tamil Nadu	1977	ADK	1	DMK		INC	1	JNP	1
Tamil Nadu	1980	ADK	1	DMK	2	INC(I)	1		
Tamil Nadu	1984	ADK	1	DMK	2	INC	1		
Tamil Nadu	1989	DMK	2	ADK(JL)	1	INC	1	ADK(JR)	

(continued)

Appendix B. (continued)

State	Year	Party 1	Org 1	Party 2	Org 2	Party 3	Org 3	Party 4	Org 4
Tamil Nadu	1991	ADK	1	DMK	1	INC	1	PMK	1
Tamil Nadu	1996	DMK	1	ADMK	1	TMC(M)	1	MDMK	1
Tamil Nadu	2001	ADMK	1	DMK	1	TMC(M)	1	PMK	1
Uttar Pradesh	1967	INC	3	BJS	3	SSP	1		
Uttar Pradesh	1969	INC	2	BKD	1	BJS	2	SSP	
Uttar Pradesh	1974	INC	1	BKD	1	BJS	2	NCO	
Uttar Pradesh	1977	JNP	1	INC	1				
Uttar Pradesh	1980	INC(I)	1	JNP(SC)	1	BJP	3	INC(U)	1
Uttar Pradesh	1985	INC	1	LKD	1	BJP	3	JNP	1
Uttar Pradesh	1989	JD	1	INC	1	BJP	3	BSP	1
Uttar Pradesh	1991	BJP	3	JD	1	INC	1	JP	1
Uttar Pradesh	1993	BJP	3	INC	1	JD	1	BSP	1
Uttar Pradesh	1996	BJP	3	SP	1	BSP	1	INC	1
Uttar Pradesh	2002	SP	1	BSP	1	BJP	3	INC	1
West Bengal	1967	INC	3	CPM	3	BAC	1	CPI	2
West Bengal	1969	INC	3	CPM	3	BAC	1	CPI	2
West Bengal	1971	CPM	3	INC	2	CPI	3	NCO	1
West Bengal	1972	INC	1	CPM	3	CPI	3		
West Bengal	1977	CPM	3	INC	1	JNP	1	FBL	1
West Bengal	1982	CPM	3	INC	1	FBL	1		
West Bengal	1987	INC	1	CPM	3	FBL	1		
West Bengal	1991	CPM	3	INC	1	BJP	3	FBL	1
West Bengal	1996	INC	1	CPM	3	BJP	3	FBL	1
West Bengal	2001	CPM	3	AITC	1	INC	1	BJP	2