Fragmentation and Decline in India's State Assemblies: A review 1967-2007*

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This is a pre-copyedited version of an article forthcoming in Asian Survey

Abstract

Tracing activity in 15 Indian state assemblies 1967–2007, we find that overall legislative activity declined, but there was also considerable variation across states. States with large electoral constituencies and politically fragmented assemblies showed the worst performance, which may suggest a link between political fragmentation and institutional performance.

1 Introduction

Federalism in India has a vibrant and distinguished history. India's experiment with democracy began with a series of legislative and electoral reforms that occurred simultaneously at the national and provincial levels under British rule, leading to a thriving federal democracy in the post-independence period.¹ In this article we explore the activity of the legislative assemblies

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¹The MorleyMinto reforms in 1909 and the MontagueChelmsford reforms a decade later instituted a limited franchise that enabled the development of provincial parties and councils along with a Central Imperial Council.

in 15 Indian states from 1967 to 2007, based on a unique dataset collected from state assembly archives. We study these legislative institutions because we believe they are the key to understanding provincial-level state-capacity development in India. State capacity refers to the institutional capability of the state to maintain law and order, to enact various developmental policies, and to deliver goods, benefits and services to households and firms.² Province-level governments in India have long determined legislation on a range of important policy issues such as land reforms, land taxes, as well as the administration of law and order, and the provision of local public goods. In the post-1991 period, deregulation and economic liberalization have only served to increase the importance of state politics. State governments now have greater autonomy in dictating local economic policies; they get a significant proportion of their budgets through state-level taxes; and they play an increasingly important role in implementing national policy agendas. Yet, states diverge considerably in their ability to perform these critical economic and developmental roles. Studying state legislative institutions may help to explain why states show such variation in performance. Descriptive analysis of the legislative activity in these assemblies over time reveals two interesting patterns: first, there is considerable variation in the activity of state assemblies across states; and second, despite this variation, there has been an overall decline in legislative activity in Indian state assemblies over time. Why do such differences arise?

In much of the political science literature, the expectation is that careeroriented politicians seeking re-election will try to make their mark by passing
legislation that is important for their constituents.³ From this perspective,
greater political fragmentation and competition should contribute to more
debate and dialogue as well as the enhancement of legislative professionalism
as the legislative body becomes a vehicle for political opportunism. In India, however, the converse holds true. Although politics in Indian states has
grown more competitive and fragmented in recent decades as the dominance
of the Indian National Congress (INC) party has gradually broken down,⁴
we find that overall activity in India's state assemblies has decreased. Correlating the activities of the assemblies with how fragmented they are, we find

²Timothy Besley and Torsten Persson, *Pillars of prosperity: The political economics of development clusters*, (Princeton University Press, 2011).

³See e.g. David Mayhew, *Congress: The Electoral Connection*, (Yale University Press, 1974).

⁴See R. Kothari, 'The 'Congress System' in India', Asian Survey, (1964).

that the legislative assemblies dominated by a single party have tended to have far more legislative debate than the more fragmented assemblies.

Moreover, we find that states with smaller electoral constituencies tend to have more active assemblies. Politicians in India are expected to help their voters in practical matters by negotiating with the local administrative bureaucracy, attending local social functions, and networking with influential people. Many argue that these activities are more important for being reelected than their actions in the legislatures. From our findings, it seems that when politicians have to cater to a large electorate at home, they may prioritize spending time in their constituencies rather than in meetings in the assemblies, which could be associated with less legislative activity. This suggests that the size of the units of political representation can help explain the variation in legislative activity in the Indian legislatures.

This article make several contributions. First, we present a unique dataset on the workings of state legislatures in India over time. Based on archival work, we have created annual measures of legislative activity of 140 assemblies in 15 states between 1967 and 2007. This dataset allows us to compare the legislative activities in different states as well as to examine patterns across the states over time. Second, in seeking to explain why and where there has been more legislative activity, we find a strong relationship between the competitiveness of elections and the activity of the assemblies. These findings are of interest not only for the workings of India's state assemblies: they can also shed light on why there has been an overall and steady decline in the meeting activity of the Indian Parliament over time. While some have argued that this is the result of a general deterioration in political culture, we propose that the explanation may lie in the growth in political fragmentation and increasing pressures on politicians in their home constituencies.

2 Assemblies in India

While India is often celebrated as a thriving and robust democracy, with its enormous electorate and heavily contested elections, there is growing concern that greater political participation has been accompanied by a decline in political institutions, including the national parliament and political parties. As can be seen in Figure 1, there has been a steady decline in the number of

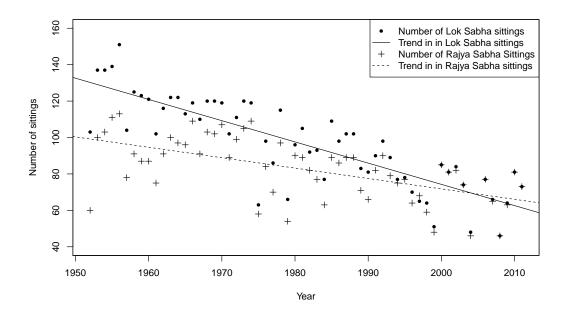


Figure 1: Sessions in the Lok Sabha and Rajya Sabha over time

sittings in both houses of the national parliament.⁵

Politicians and media alike have lamented the decline in the activities of parliament. In 2001, the All India Conference of Presiding Officers, Chief Ministers, Minister of Parliamentary Affairs, Leaders and Whips of Parties called for immediate steps to be taken to ensure that Parliament meets for at least 110 days every year.⁶ However, Figure 1 shows that this decision does not seem to have had much effect.⁷

The issue was raised again in May 2012, when the Indian Parliament celebrated its 60th anniversary. On this occasion, the Vice President of India and Chairman of the country's upper house, M. Hamid Ansari, addressed

 $^{^5}$ The source of the data presented in this graph is the Statistical Handbook of 2012 published by the Ministry of Parliamentary Affairs, available at ihttp://mpa.nic.in/Statbook12.pdf \dot{i} .

⁶Reported by PRS Legislative Research on the occasion of the 60th anniversary. Report available at http://www.prsindia.org¿.

⁷Address of M. Hamid Ansari at the Historic Commemoration Function of the 60th Anniversary of the first sitting of Parliament. Published by the Press Information Bureau of India on May 13, 2012. Available at http://pib.nic.in/newsite/PrintRelease.aspx? Relid=83690;.

the house and stated that while much had been achieved in the 60-year history of the Indian Parliament, there seemed to be "declining efficiency" in its oversight of the executive and in its deliberations and lawmaking: "The institutional mechanisms and procedural norms for ensuring accountability are being progressively underused. There is a perceptible drop in the working days of Parliament. Deliberation is less frequent; legislation is at times hasty."

Yet, despite the coverage of this decline in the national media, little is known about why it has happened. Examining the meeting activity of India's state assemblies might help show what factors have led to the decline in legislative activity in the national parliament as well.

The Indian states have come to serve an increasingly important role in Indian political life. In an evaluation of the Indian national elections in 2009, Yadav and Palshikar argue that state-level politics has emerged as the most important arena in Indian politics, and that the political dynamics in each state not only lead to drastically different political outcomes across the country but also shape national politics. In a seminal paper, Chhibber and Kollman argued that it was the growing levels of decentralization in the post-liberalization period—following 1991—that made Indian states such important arenas of political contestation, resulting in a fragmentation of the national party system. Together these studies suggest that politics at the state-level is instrumental in shaping the political landscape in India.

State governments in India have clearly delineated areas of public policy over which they are to legislate, including taxation on land and agriculture; taxation on goods, services and entertainment;, provision of public goods such as schools, the police and hospitals; and programs for developmental and non-developmental schemes. Of Given the growing importance of state-level taxation to state budgets and state-level economic strategies to industrial and trade development in the post-1991 period, the study of the legislative bodies responsible for these policies takes on greater importance.

Each Indian state has a state assembly that is responsible for meeting

 $^{^8\}mathrm{Y}.$ Yadav and S. Palshikar, 'Principal State Level Contests and Derivative National Choices: Electoral Trends in 2004-09', *Economic and Political Weekly*, (2009).

⁹P. Chhibber and K. Kollman, 'Party aggregation and the number of parties in India and the United States', *American Political Science Review*, (1998).

¹⁰State governments routinely institute a diverse range of programs, such as mid-day meal schemes for school children to encourage school attendance, vocational training programs, and aid to victims of natural disasters.

in order to pass state-related legislation. Assemblies vary in size according to the size of the state; while assemblies in the smallest states have only 30 members, the assembly of Uttar Pradesh currently has 403 members. ¹¹ The governor of each state is responsible for summoning the assembly no more than six months after the end of the previous session. Once in session, however, it is largely up to the house to decide how long discussions will continue and how many days they will meet.

The state assembly buildings are located in the state capitals, and are usually magnificent-looking structures. Visiting different state assemblies, between summer 2009 and spring 2011, the authors observed great variation in how well-kept the assemblies were, how open they were to the public, the quality of their staff, and how much effort was put into keeping good records of historical debates. In particular we noted how different they were in terms of access for the public. In some places, like Bangalore and Lucknow, the assembly areas were fenced in and heavily guarded as a security measure. Here we could not enter without an appointment, and the gates had long lines of people trying to get into the premises.¹² This gave a hostile impression that visitors were not welcome into the legislature. In other states, such as Himachal Pradesh and Andhra Pradesh, the assemblies were more accessible.

Another striking difference was the quality of archives and personnel. The archive in Punjab was an example of a very well organized assembly library. It had dark wooden furniture and nicely bound books that all seemed to be in order. Library records were kept in Hindi, Punjabi and English. The head librarian, at the time of our visit, had worked in the legislature for several years and had an excellent overview of the collection. She quickly supplied us with the volumes we needed for our research and let us work in an air-conditioned reading room normally reserved for politicians. We were told that politicians often came to consult old debates and other library resources in order to prepare for debates. According to the librarian, many politicians showed interest in doing proper research about proposed bills, including looking up historical discussions about policy issues.

¹¹According to the Constitution, part VI, chapter III on State Legislatures, each assembly is to have at least 60 members, but Sikkim, Goa and Mizoram have been allowed smaller assemblies through Acts of Parliament.

¹²In both these states, the authors tried to gain access to the assembly archives, carrying letters confirming that they were academics, but were shown away and were able to get in only after having established connections with someone working in the secretariat who then granted us access.

That was not the story we heard in other assemblies. In the Uttar Pradesh assembly, several of the staff lamented that the quality of debate had deteriorated over the years. They claimed that politicians used to be more educated and were more interested in doing research before legislative sessions. Staff members also felt that, with the state bureaucracy becoming increasingly corrupt, people place more demands on politicians for help with bureaucratic issues. Politicians have therefore become too busy attending to their constituents to spend time preparing for legislative debates.

Officially, the main task of Indian politicians is to represent their constituents in the state assembly. In reality, however, the work in the legislative assembly is a minor part of their work. For example, in an extensive survey of Indian state assembly politicians, Chopra reports that only 3% of surveyed politicians reported assembly work as the task on which they spent most time. A politician in Uttar Pradesh told one of the authors that, in his experience, constituents do not care about what politicians do in the assembly, but only about politicians being part of their daily happiness and sorrow [sukh aur dukh]. He went on to claim that he would be able to win an election simply by attending funerals and weddings. 14

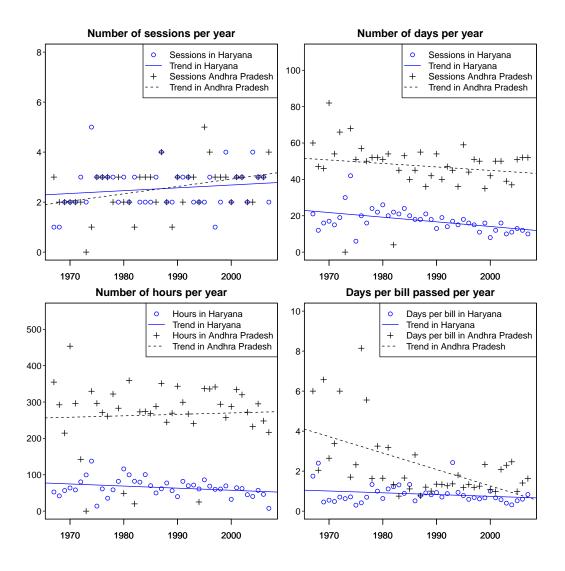
In each of the assemblies we visited, we examined some of the legislative debates and collected data about when the assembly met, how many days they met for, how many hours they sat, and how many bills were introduced and passed in each session between 1967 and 2007. Interestingly, the quality of the staff and the archives seemed to be an indication of the activities of the assembly in that state. In the assembly archives of Haryana, the materials were untidy and the debates for many years were either arranged haphazardly or were stacked in large piles. In addition to being the most chaotic library we visited, it was also clear from the records that the Haryana legislature was the assembly in India with the shortest meetings, fewest meeting hours and the least discussion about bills. In contrast, in a state like Andhra Pradesh, the archival materials of the assembly were kept in perfect order in a beautiful building adjacent to the assembly meeting room, and the library had plenty of study desks available for politicians and researchers to consult the library materials.

As can be seen in Figure 2, the activities of the legislative assemblies in

 $^{^{13}}$ V.K. Chopra, Marginal players in marginal assemblies: The Indian MLA, (Orient Longman, 1996), p. 151.

¹⁴Interview with Jensenius in Lucknow, November 24, 2010.

Figure 2: Comparing the legislative activity in Haryana and Andhra Pradesh $1967\hbox{--}2007$



Haryana and Andhra Pradesh show some dramatic differences. Because of the constitutional requirement of re-convening within six months of the last session, the official number of sessions per year is very similar in the two states. However, closer examination of those sessions revealed some clear differences. While both states have an average of 2.5 sessions per year, the Haryana assembly met for an average of only 17.4 days per year between 1967 and 2007, whereas the Andhra Pradesh assembly met for 47.4 days on average. In many cases, assemblies also cut their working days short, meeting for just a few hours. In Haryana, the assembly met for an average of only 65 hours per year, whereas that in Andhra Pradesh met for an average of 265 hours per year.

This is not to say that the assembly in Haryana did not pass legislation—but that legislation was passed quickly and often without any actual debate. That in turn means that the state government in power institute policies without much opposition or public discussion.

While the average number of days spent discussing and passing bills was low in Haryana throughout the 40 years under investigation, there was a lot of change in Andhra Pradesh. Here bills were discussed at length during the first years in the sample, and there was a clear reduction in the time spent on each bill in later years. This is due to the fact that the assembly started dealing with more bills per session over time, and that there was also a decline in the number of days they met per year.

This comparison reveals two clear trends. First, that there is great variation in legislative activity across state assemblies in India; second that there has been a decline in the legislative activity over time. But is this a pattern in other states as well? And if so, what can explain the pattern?

3 Variation in legislative activity across the states

In order to measure legislative activity, we collected data from the assemblies in 15 of India's largest states about when the assembly met, how many days they met, how many hours they sat, and how many bills that were introduced and passed in each session between 1967 and 2007. This information is

¹⁵The authors personally collected data from the state assemblies in Andhra Pradesh, Haryana, Himachal Pradesh, Karnataka, Punjab, and Uttar Pradesh. In the case of Orissa

usually recorded in the publication of the debates of the state assemblies, but is also often summarized in separate publications called bulletins, journals or resumes. For most of the 15 states we were able to get a complete record of numbers of sessions (meetings) and sittings (days of the meeting), but we were not able to get complete data for the number of hours they met or bills that were dealt with. In this section we will therefore focus on a comparative analysis of the number of sessions and sittings. ¹⁷

Looking at data for all the 15 states over time, we note some clear overall patterns. First, take the number of sessions per year in each state, as shown in Figure 3. In the Figure, the gray shapes show the distribution of the number of sessions by state. For example, in 1967 there were three states that had held only one session, six states that had held two sessions, three states with three sessions, and one state that had held four sessions. Across the whole period, there have been states that have held no sessions or only one session in a year (this has often been because of emergency procedures, such as President's Rule, resulting in a disruption of legislative activity), and others that have held more. The horizontal black lines for each year indicate the average number of sessions across all the states that year. Across the whole period studied, these states held an average of 2.5 sessions per year

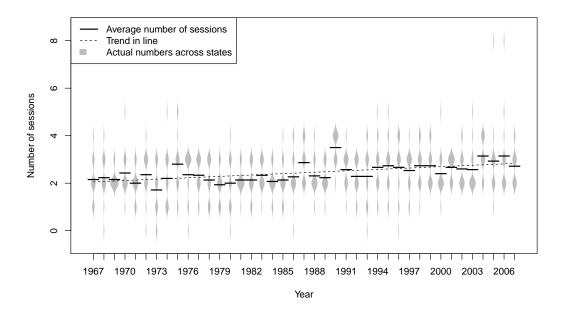
and Bihar we obtained data about the activities in the assemblies by sending research assistants to the State Assembly Archives. In Rajasthan we got data from researchers working with the Association for Democratic Reform (ADR), and we are very grateful to them for this help. In the case of Gujarat, Kerala, Tamil Nadu, and Maharashtra we got data through right to information requests. For West Bengal and Madhya Pradesh we did not get responses to our right to information requests. In this case we filled in as much information about the activities as we were able to from parliamentary summary reports of state legislative activity.

¹⁶In most states these publications were made both in the local language and in English for most of the period under study. The choice of language in the reports seems to have been a political issue. For example, in Himachal Pradesh the reports were only published in Hindi during the late 1970s, and the librarians suggested that this must be because Jana Sangh got to power for the first time in this time period.

¹⁷We also read some of the debates in each of the assemblies we visited, and while it would have been very interesting to compare the quality of the debates that took place during these sittings, that is beyond the scope of this article.

¹⁸Under Article 356 of the Indian Constitution, the central government can take direct control of a state if the government in that state is not able to function as per the Constitution. This has happened when legislatures have been unable to support a Chief Minister, when a government coalition has broken down, when elections in the state have had to be postponed, and sometimes when there has been political disagreement between the state government and the central government.

Figure 3: Number of sessions in 15 state legislative assemblies in India 1967 – 2007



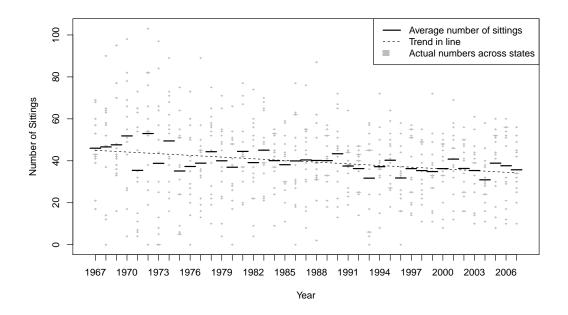
(with a median of 2), and, as can be seen from the trend line, there has been an overall weak increase in the number of sessions per year over time, with an overall average increase of 0.7 sessions per year across the states.¹⁹

Because of the constitutional requirement to meet, the number of sessions of the assembly says little about how much the assembly actually met during each year. Figure 4 shows the number of sittings of each of the assemblies each year. A sitting usually lasts for one day—although sometimes the assembly may meet for only a few hours that day—and this data therefore give a more accurate impression of the actual meeting activity. Again, the gray shapes show the distribution of the values for the states. In most cases the dots represent how many sittings one particular state had, since few states happened to have exactly the same number of sittings in a year.

Figure 4 shows the considerable variation in the number of sittings in different states, ranging from 0 to 103 sittings in a year (these states were Andhra Pradesh under President's Rule in 1973 and Uttar Pradesh in 1972,

¹⁹The trend line is a bivariate regression line of number of sessions across the states over time. The coefficient is 0.02, suggesting an average increase of 0.02 sessions every year.

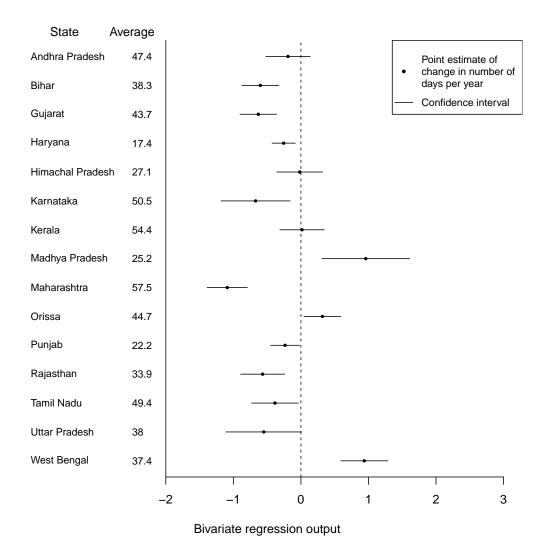
Figure 4: Number of sittings in 15 state legislative assemblies in India 1967 -2007



respectively). It is perhaps not surprising that there are differences between states. As mentioned, assemblies vary greatly in size, and the number of members may in itself affect the length of meetings (the size of each assembly and number of sittings in a year are positively correlated with a Pearson's r of 0.22). States also have different political traditions and cultures. But while such differences across states have remained fairly constant there has been an overall pattern of decline in the number of sittings over time. The trend line through the data shows an average drop of about 11 sittings over the whole period studied: i.e. from an average of 45 sittings per year to 34 sittings per year, or a 24% drop in the number of sittings.

Figure 5 shows the average number of sittings and the average yearly change in the number of sittings over time for each of the 15 states in our sample, 1967–2007. The point estimates for the changes are the coefficients from state-wise bivariate regressions, regressing the yearly number of sittings on time. The confidence intervals are also from these bivariate regression models. As is apparent in the figure, Madhya Pradesh, Orissa and West Bengal have seen an increase in the number of sittings per year, whereas

Figure 5: Average number of sittings and the average yearly change in the number of sittings 1967-2007



the number of sittings has remained fairly constant over time in Kerala and Himachal Pradesh, and there has been a decrease in all the other states studied. Maharashtra had the highest average number of days, with an average of 57.5 sittings per year, but it has also experienced the largest average decline, with a drop of about one day per year between 1967 and 2007 (a decline of about 40 days during the whole period). What can explain these different patterns?

4 Explaining the variation in meeting activity

In order to try to explain these differences in legislative activity, we focus on the attributes of the individual legislative assemblies that came to power in the states over the forty-year period. When the annual legislative data were collapsed into unique assemblies, it comprised 140 individual assemblies in the 15 states, with between 8 and 10 different assemblies coming to power in each state in the sample. This dataset is therefore an unbalanced panel, spanning 140 observations from 15 cases. To estimate patterns in this data, we ran several regression models with fixed effects for states and election years, and with standard errors clustered at the state level.²⁰ Running these types of models does not allow us to look for patterns that might explain the differences in the average meeting activity of states, but does allow us to see which characteristics of specific assemblies are correlated with a higher or lower meeting activity than what is common in that state. Table 1 shows the output from these regression models. The main variable used for measuring legislative activity in the assemblies was Average yearly number of sittings, computed as an average value of the number of days the assemblies met each

²⁰This was done to account for state and time effects as well as time trends in the data. We first tested for the possibility that units might be correlated across time periods, and found no evidence that this was the case. This gave us confidence that the data did not exhibit serial correlation. We next tested for whether a fixed effects model or a random effects model would be more appropriate for the regressions. With a large test statistic in the Hausman test we rejected the null hypothesis that the random effects estimates were consistent and more efficient. While state fixed effects allow us to account for heterogeneity across states, we still need to account for the possibility that errors within states might be correlated. For this we used standard errors clustered at the state level.

year while in power.²¹ The models include different explanatory variables in order to show how meeting activity correlated with a number of factors. The continuous explanatory variables were standardized by subtracting their mean and dividing by two standard deviations,²²so that the coefficients tell us the average change in the number of days an assembly met that is associated with a two standard deviations increase in the explanatory variable.

The first explanatory variable examined in Model 1, presented in Table 1, is the political fragmentation of the assembly. As mentioned in the introduction, one set of theories in political science suggest that greater party competition in the legislature should lead to more intense debates and challenges, thus resulting in better accountability. Others, however, have argued that higher levels of fragmentation might instead lead to chaos and inability to legislate on key policies, leading to long and inefficient legislative meetings and greater delegation to party leaders instead. However, in India there has been an overall decline in legislative activity during a time when the party system became increasingly fragmented. Is there a negative correlation between fragmentation and meeting activity at the state level as well?

The measure we use for fragmentation is the *Effective Number of Parties* (ENOP), as calculated by Laakso and Tagepera and shown in Equation 1.²³ In the equation, p_i is the proportion of seats of party i in the legislative assembly.

$$ENOP = \frac{1}{\sum_{i=1}^{n} p_i^2} \tag{1}$$

Across the 140 assemblies ENOP ranges from 1.4 to 7.4, with an average of 2.8, and standard deviation of 1.2. In Model 1 we find a strong negative correlation between ENOP and meeting activity in the assemblies. Since the ENOP variable is standardized, the coefficient means that a change of two standard deviations in ENOP (for example from ENOP 2.8 to 5.2) is associated with an average drop of 7.5 sittings in a year. This is a substantively large drop, considering that assemblies on average meet 39 days per year. The model includes fixed effects for states and election years, so this relationship

²¹In a few cases an assembly met for the last time during the same year as the next assembly met for the first time. In those cases we excluded those sessions from the averages, so that the averages were based solely on years with only one assembly in power.

²²Using the Rescale function in the package 'arm' in R.

²³M. Laakso and R. Taagepera, 'Effective number of parties: A measure with application to West Europe', *Comparative political studies*, 12 (1979):1.

is not confounded by state-wise differences in fragmentation and activity, or by potential shocks to meeting activity caused by national events. It may, however, be confounded by other characteristics of the assembly. In the other models we explore some of these other potential explanatory factors.

In Model 2 we add in characteristics of the state governments associated with each assembly. Once an assembly has been elected, the Governor appoints a Chief Minister (CM) from the largest party in the assembly. The CM and his or her cabinet must have the confidence of the assembly in order to remain in power. In cases where no party holds a majority of the seats in the assembly, it is common for a coalition government to be formed with members from several parties. But such coalitions sometimes break down, necessitating the formation of a new coalition. At other times, the central party leadership may intervene and change the Chief Minister in mid-term. Such political instability may affect the meeting activity of the legislature, and may confound the association between fragmentation and the activity of the assemblies.

In addition, political instability may lead to implementation of President's Rule, preventing the legislature from meeting. In order to control for such factors, we first include a binary variable indicating whether the state was ruled by a coalition or a single-party government, a binary variable for whether there was more than one CM in power during the term of the assembly, and an indicator for whether the assembly experienced President's Rule. The coalition variable is based on a dataset collected by Asher and Novosad,²⁴ the CM variable is based on state-wise lists of CMs collected from the state archives and compared to the date of the election of each assembly; and the indicator for President's Rule is based on the Wikipedia entry on President's Rule, listing the dates for when each state experienced it.²⁵

Model 2 shows that neither having a coalition government in power nor experiencing President's rule is strongly correlated with the number of sittings in the assemblies. This suggests that even when a legislature is prevented from meeting because of President's Rule, the members compensate by meeting more, later on. For example, when the assembly in Andhra Pradesh was prevented from meeting in 1973, its members ended up being in session from January 19 to August 17, 1974 (uncommonly long), meeting for a total of 68

 $^{^{24}\}mathrm{Sam}$ Asher and Paul Novosad, Politics and Local Economic Growth: Politics and Local Economic Growth: Evidence from India, June 2013.

²⁵Accessed June 15, 2013. [URL] ;en.m.wikipedia.org/wiki/President's_rule;.

Table 1: Output from regression models

	Dependent variable: Average yearly number of sittings			
	(1)	(2)	(3)	(4)
Effective number of parties	-7.455***	-6.161***	-10.927***	-4.951^*
	(2.680)	(2.281)	(2.994)	(2.667)
Coalition gov.		-0.098	2.936	-0.036
		(1.980)	(2.418)	(2.113)
More than one CM		-5.160***	-3.878*	-4.742**
		(1.716)	(2.283)	(1.822)
President's rule		-1.057	-2.865	-1.830
		(2.856)	(3.006)	(2.892)
Caste fractionalization			-4.309	
			(6.901)	
Mean margin of victory				-1.797
				(1.911)
Electoral turnout				6.974
				(4.792)
Mean number of electors				-11.662^*
				(6.299)
Observations	140	140	98	140
Adjusted R^2	0.045	0.082	0.093	0.123
State and year fixed effects	Yes	Yes	Yes	Yes

Note: *p<0.1; **p<0.05; ***p<0.01. The continues explanatory variables have been standardized by subtracting their mean and dividing by 2 standard deviations.

days during those months.

On the other hand, there is a strong negative relationship between multiple CMs being in power and the meeting activities of their legislatures. This form of political instability might serve to absorb the attention of political parties, preventing them from focusing on actual legislative work. Interestingly, however, even when these other factors are controlled for, the negative relationship between ENOP and number of sittings remains substantively large and highly statistically significant.

Another important factor to take into consideration is the personal characteristics of the members of the assembly. Here we have limited data, since few systematic efforts have been made to examine the personal attributes of Indian politicians over time. The main data collected have concerned the caste profiles of politicians. ²⁶ Building on this information, Lee²⁷ has collated information about the proportion of legislators in various assemblies who came from the Upper Castes, Intermediate Castes, Other Backward Castes, Scheduled Castes, Schedules Tribes, and minority groups (mainly Muslims and Christians). The data span 98 assemblies across 11 states. ²⁸ Using these proportions, we then calculated the caste fractionalization score of each assembly as shown in Equation 2, where s_i is the proportion of politicians from caste group s in the assembly. ²⁹

$$FRAC = 1 - \sum_{i=1}^{n} s_i^2 \tag{2}$$

The fractionalization score runs from 0 to 1, where 0 would mean that all legislators were from the same caste category and 1 would mean that all came from different caste categories. In the case of the 98 assemblies in the data, the caste fractionalization score ranges from 0.52 to 0.83, with an average score of 0.7. As we can see in Model 3, high caste fractionalization in an assembly is associated with lower meeting activity, but this pattern is not statistically significant. However, both ENOP and the variable for multiple CMs remain statistically significant at the 1% and 10% levels, respectively.

Finally, we explore how the pressures on individual legislatures might affect activity in the assemblies. After all, assemblies are a collection of individual politicians who are often interested in re-election. If parties and candidates fear losing the next election they might be less willing to spend time debating bills, and more interested in returning to their home constituen-

²⁶C. Jaffrelot and S. Kumar, Rise of the Plebeians? The Changing Face of Indian Legislative Assemblies, (Routledge, 2009).

²⁷Alexander Lee, *Diversity and Power: Caste in Indian Politics*, Ph. D thesis, (Stanford, 2013).

²⁸Of the large states of India, Haryana, Himachal Pradesh, Punjab and Orissa are not included in this dataset.

²⁹Alberto Alesina et al., 'Fractionalization', Journal of Economic growth, 8 (2003):2.

cies. As noted, politicians in India spend much of their time on constituency service, and both large electorates and hard political competition may affect their willingness to give priority to legislative work.

In order to measure electoral competitiveness at the constituency level, we took constituency-level election data collated by Jensenius³⁰ for each assembly over time and calculated the Mean margin of victory for the members in each assembly. We also included two other political variables that might incentivize politicians to engage in legislative activity. The first of these variables was the *Electoral turnout* in the election that brought the assembly to power. We expect to see better-performing legislative institutions when turnout was high, since a more participatory electorate might be more demanding of its elected officials, making them feel pressured to focus on legislative work. The second political variable was the average size of the electorate in each constituency (Mean number of electors), calculated as the average number of eligible voters in each assembly constituency in each state election. Due to the "freezing" of political boundaries in India in 1976, state electoral boundaries remained the same from 1974 until 2007. During that time, however, the population of the states and different parts of states continued to grow at differential rates. Over time, the electorate in constituencies across India has therefore diverged in size. It might be that larger electorates make it difficult for politicians to have time to respond to requests from all their constituents, making them more focused on constituency service than legislative work. It is also possible that less contact with politicians makes it difficult for constituents to hold their representatives accountable for their legislative performance. Either way we would expect to find less legislative activity in states with more populous constituencies. Model 4 in Table 1 shows the output from this model. Here we see that the Margin of Victory is negatively correlated with the meeting activity of the assemblies, but this correlation is not statistically significant. We also see that higher turnout is associated with more legislative activity, giving credence to the idea that legislators may be responding to pressures from an active electorate. However, although the coefficient is large it is also statistically insignificant at conventional levels. On the other hand, the number of Electors per Constituency emerges as strongly negatively related to the number of days the assemblies

³⁰Francesca Refsum Jensenius, *Power, Performance and Bias: Evaluating the Electoral Quotas for Scheduled Castes in India*, Ph. D thesis, (University of California Berkeley, 2013).

met, and this variable is significant at the 10% level. An increase of two standard deviations in the average number of electors in the constituencies is associated with 11 fewer sittings in a year. The results show that as the electoral constituencies to state assemblies grow in size, elected officials spend less time on legislative duties. Once again, though, we see that both *ENOP* and having multiple governments in power remain statistically significant.

As to what these patterns may mean in terms of real-life politics, what we see is that, in non-competitive states with one party dominating the assembly, politicians are willing to spend time deliberating issues in the legislative assembly. An example is Madhya Pradesh, where the Indian National Congress (INC) has dominated the assembly throughout most of the period studied. Here the level of fragmentation of the assembly has remained fairly constant over time, the size of the constituencies has grown moderately (from about 62,000 to about 140,000 electors in each constituency between 1967 and 1998), and governments have been fairly stable. And in this case there has been a gradual increase in legislative activity over time.

On the other hand there is the assembly in Maharashtra, which used to be dominated by INC, but became increasingly fragmented over time. After 1970, every assembly had multiple CMs and most of the governments were coalitions. This occurred at the same time as a rapid growth in the size of the electorate (from an average of 82,000 to 230,000 electors per constituency between 1967 and 2004). Cutting debates short may be one way of avoiding lengthy disagreements, and politicians have clearly faced greater pressure from their home constituencies. And indeed, in Maharashtra we find a dramatic decline in the yearly sittings of the assembly.

Thus we see that although party systems have become more fragmented across India over time, this is not the case in every state; further, although all constituencies have grown in size, this growth has been far from even. What our findings suggest is that both the incentives of the individual legislators and party concerns may affect the activities of state legislative assemblies. It is clear that instability in the government and fragmentation of the assembly will make parties and politicians more interested in spending their time elsewhere.

5 Conclusions

Recent decades in Indian politics have witnessed a decline in the dominance of the Indian National Congress (INC), the rise of regional political parties, and an increase in the political participation of marginalized caste groups across the country. Political scientists and commentators alike have suggested that this rapid mobilization of voters and the fragmentation of parties have acted to hollow out political institutions, while also diminishing the actual policy choices available to voters. On the other hand, according to political science theory, a more fragmented party system could lead to more healthy debate in the legislative assemblies, thereby strengthening the deliberative aspect of Indian democracy.

The findings of our study of the patterns of legislative activity in Indian states indicate that fragmentation has led to less activity in the assemblies. From data on the meeting activities of the legislative assemblies in 15 Indian states between 1967 and 2007, we see that in states with dominant parties and low political competition, legislative activity is fairly high. Facing a low-competition environment, both in the assembly and in the constituencies, legislators seem willing to invest time in legislative institutions. This was the situation when the INC dominated Indian politics. With the state assemblies becoming more fragmented, much of the debate seems to have moved out of the assemblies, and legislative meetings become fewer and shorter. Our findings also suggest that legislative institutions suffer when candidates and parties find themselves torn between legislative service and constituency demands. Further exploring how candidates and parties choose to prioritize different types of activities presents a promising agenda of future research.