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More Political Parties, More Redistribution? Empirical Evidence from State Governments in India

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More Political Parties, More Redistribution?

Empirical Evidence from State Governments in India[1]

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Abstract

This paper uses panel data accumulated from 1972 to 1997 to investigate the effect of political systems on the public expenditure of state governments in India. We focus on the decline of the Indian National Congress, which was the dominant party until the mid 1960s, and the development of regional parties (RPs) that are based on specific religious or caste groups. The effects of changes in party systems are carefully distinguished from those in voter preference, which affect party systems and government policy. We find that the decline of a dominant party increases development expenditure, which suggests that little political competition is bad for development. By contrast, an increase in seats occupied by RPs decreases development expenditure and increases non-development expenditure. This suggests that, in a pluralistic society, the diversity of political parties does not contribute to an economic development and a reduction in poverty.

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1. Introduction

The political party, which lies at the core of democratic politics, primarily articulates and aggregates the interests of groups. Through political parties, supporters' views can be expressed as part of the governing process.[3] However, in many ethnic or religiously diverse societies, economically and socially backward groups often are unable to organize political parties, especially in the early stages of democracy. They are, therefore, underrepresented politically. Since in a representative democracy political parties play a significant role in giving diverse groups a voice in policy-making, the multiparty system may be quite useful in fragmented societies (Lipset and Rokkan, 1967). On the other hand, it is possible that multiparty systems may increase conflicts between political parties, making the government inefficient. For example, larger numbers of political parties supply the transfers to specific groups rather than diffusing public goods among everybody (Fernandez and Levy, 2008; Lizzeri and Persico, 2005). To consider what party systems are effective in reducing poverty, especially in developing countries with ethnically or religiously diverse populations, this paper investigates the effects on redistribution of the transformation of India's political system from a one-party to a multiparty system.[4]

3 Dalton and Wattenberg (2000) describe the functions of a political party in detail.
4 A considerable number of studies, especially in comparative politics, have been conducted on how

Recently, there has been a renewed interest among economists regarding the impact of political parties. According to the traditional theory, in which candidates only commit to moderate policies and care about winning elections, political decisions reflect the electorate's preferences (Downs, 1957). In this framework, the impact of partisanship on policy outcomes is limited since the median voter preference is decisive; therefore, political parties do not matter. However, if complete policy commitment is absent, the affiliation of legislators matters in policy outcomes (Besley and Coate, 1997; Osborne and Slivinski, 1996).[5] In this case, increasing a group's political representation will increase its influence on policy. Several studies empirically estimate the causal effect of identity and preference of politicians on policy decisions; most of these papers focus on the U.S. (Levit, 2006; Lee et al., 2004; Rehavi, 2007; Ferreira and Gyourko, 2009).[6] A few previous studies have been published with respect to politics in India. Notably, Bardhan and Mokerhjee (2010), who focused on West Bengal, showed that political party was not a decisive factor in land redistribution policy. In another study concerned with Indian politics, Clots-Figueras (2011) concluded that the gender of state legislators affects state policy. Few studies investigate the significance of the political party under

multiparty systems work. Although this paper does not examine the above two hypotheses directly, it contributes to an understanding of the functions of multiparty systems.

5 Munshi and Rosenzweig (2010) show that social groups can discipline their members to overcome policy commitment problems by investigating the role of castes in local elections in India.

6 Most of them showed that the legislator's affiliation influences outcomes. The exception is Ferreira and Gyourko (2009), who examined mayoral elections in the U.S.

multiparty systems, however.[7] This paper will thus use data from 16 major states in India to investigate the variety of party systems. Our focus on India will be useful in comparing the performance of the party systems since the situation of political party and government policy differs greatly among states.

The party systems of state government in India dramatically changed between the mid 1960s and the 1990s. From the first parliamentary election held in 1951 to the mid 1960s, the Indian National Congress (INC) enjoyed a prominent place in national and state legislatures. After the mid 1960s, however, the INC gradually lost its political power because of its failed policies on poverty and corruption. Non-INC parties formed following the electoral decline of the INC. While some of these parties, such as the Janata Party (JP) and the Bharatiya Janata Party (BJP), exert nationwide influence, most non-INC parties are founded on castes, religions, and regions, and so exercise limited political power. This paper examines how the decline of the INC and the development of regional parties (RPs) affect state government policy.

The variable used in this paper for government policy is public expenditure. Great attention has been focused on the variation in state or district performance on

7 Chhibber and Nooruddin (2004) investigated the effect of the increasing number of political parties on state government policy. It should be noted, however, that they were unable to estimate the causal effect of political parties on state government policy.

economic growth and poverty reduction in India.[8] Some studies highlight the significant roles of development expenditure. A prominent work by Banerjee and Iyer (2005) shows that variants in the legacy of different land tenure systems in India have led to sustained differences in economic performance in agricultural investment, productivity, and health and education investment. They also suggest that the landlord system intensified resentment between landlords and the masses, which leads to the inefficient governments since gaining independence. These authors used a simple exercise to suggest that their empirical results are partly explained by the differences in development expenditure. We investigate the part of the above mechanism by estimating the effect of political parties on public expenditure.

We empirically investigate the effects of party systems (i.e., number of seats occupied by non-INC parties). To eliminate state heterogeneities, we use the fixed effect (FE) model, which controls dummy variables for each state. Under the FE model, the coefficients of party systems are identified using changes of the party systems within each state. The main concern is the existence of omitted variable bias, which has correlated party systems and affects the policy. For example, when conflict among groups is increasing, each group has a strong incentive to organize a political party; the

8 See, for example, Datt and Ravallion (1998), Banerjee et al. (2005), and Iyer (2004).

preference of each group is also changed to restrain the distribution toward other groups. Therefore, to estimate the effect of party systems, we have to rule out the omitted variable bias. To do so, we will use the results of close elections to provide us with instrument variables. This strategy is based on Clots-Figueras (2011) and Rehavi (2007).[9] Since the results of close elections are considered almost random, we also will use the fraction of seats that are won by non-INC parties in close elections against the INC to provide instrumental variables to the fraction of seats won by non-INC parties.

We find that in states where the number of non-INC parties has been increasing, the share of development and educational expenditure is increasing under both the FE and the instrument variable (IV) model. This result suggests that a dominant-party system is inefficient for development due to a lack of political competition. On the other hand, an increase in seats occupied by RPs has decreased the development expenditure and increased the nondevelopment expenditure, which implies that multiparty systems are inefficient. This result echoes the view of previous studies that show the drawback to a large number of parties (Fernandez and Levy, 2008; Lizzeri and Persico, 2005).

The remainder of this paper is structured as follows: Section 2 explores the election system and summarizes the history of political parties in India. Section 3

9 Both Rehavi (2007) and Clots-Figueras (2011) show that the legislator's gender affects state policy. While Rehavi (2007) uses data from U.S. state governments, Clots-Figueras (2011) uses data from state governments in India.

discusses empirical strategies. Section 4 gives the results of this paper. Section 5 presents the conclusions.

2. Background

2.1. History

The INC, which was at the forefront of the struggle for Indian independence, enjoyed a prominent place from the country's first elections after independence until the mid 1960s. In the first national elections in 1957, the INC received 74.4% of votes and won most state elections.[10] However, after the national election in 1967, the INC lost its political power, owing mainly to its failed policies on poverty and corruption and a lack of strong leadership after the rule of Jawaharlal Nehru. Although the INC was restored to power in the 1971 national elections, a sluggish economy and serious poverty prompted the electorate to launch a movement against the government in the 1970s. As a result, the government imposed a nationwide state of emergency from 1975 to 1977. After the emergency rule was lifted, the INC lost a national election for the first time; it also lost political power in the state elections. This meant that Janata Dal (JD) party ruled the national legislators in 1977 elections. The JD party was, however, unable to

10 There are many studies on why the INC remained dominant over the years; for example, see Kothari (1964).

maintain its position as the ruling party since it includes various background groups. After the late of 1980s, the BJP which advocates Hindu Nationalism grew by representing by the upper castes. Since the INC and BJP continue to receive large share of seats in national elections, India is often classified as a two-party system. However, since 1989, no single party has won a majority of seats; therefore, some classify India as a multiparty system.

The reason that the INC could maintain strong political power for a long time is that it had been a comprehensive party that draws support from various social divisions (Kothari, 1964). However, it also has been mainly ruled by upper-caste voters. Since other voters, especially those from the Other Backward Castes (OBC) held a grievance against the INC, these voters gradually developed their own political organizations. Since the features of these parties are based on specific groups, they hold political power only in individual states. Some examples of state-based parties are the Telugu Desam Party (in Andhra Pradesh), Tamil Maanila Congress (in Tamil Nadu), and Dravida Munnetra Kazhagam (in Tamil Nadu). Together with these parties, caste-based parties have also emerged in parts of India. For instance, in Uttar Pradesh, because of the electoral competition among the upper castes supporting the BJP, the backward castes favor the Samaj Party and the scheduled castes (SCs) support the Bahujan Samaj

Party (BSP) (Brass 1965). Although some of these parties, such as BJP or BSP, have grown up to national parties, most of these parties have specific religions or castes as their foundations.

In the following section, we will use election data to provide an overview of the shift in party systems in India.

2.3. Overview

In this section, we will use election data to provide an overview of the shift in party systems in India. The states and union territories of India are divided into constituencies that elect a single representative in state elections for the lower-house legislative assembly, or the *Vidhan Sabha*. State elections are constitutionally scheduled to occur every 5 years. In some cases, elections are held sooner, primarily due to shifting political alignments. Since 1989, the minimum voting age in India has been 18 years; previously, it had been 21 years. While the borders of the various constituencies changed a few times prior to 1976, they were fixed from 1977 to 2007.

Figure 1 shows the number of political parties with seats in state legislatures from the 1960s to the 1990s. Although this number has grown steadily in most states, the level of growth varies among states. For example, while the number of parties in

Uttar Pradesh and Bihar has increased gradually, that in Andhra Pradesh and Rajasthan has remained stable. The shares of seats won by the INC in state legislatures are plotted in Figure 2. Although this share has fluctuated over time, it exhibits a downward trend that points to its demise. However, the imminent demise of the INC differs among states. For example, while the INC remains strong in the states of Madhya Pradesh and Rajasthan, it has been seriously challenged and almost collapsed in the states of West Bengal and Tamil Nadu.

Two main reasons explain the differences in the decline of the INC and party fragmentation among the states. The first is occasioned by economic development. For example, since organizing and sustaining political parties is costly, an improvement in the economic situation enables people to create political organizations where poverty had previously prevented this creation. Moreover, higher education levels also affect party development through an increased awareness of and interest in political affairs. The second reason arises from conflicts among ethnic, religious, or caste groups. As Banerjee and Iyer (2005) demonstrate, intensifying resentment between landlords and the masses promoted the formation of class-based political conflict.

Since economic development and conflict are related, not only are the electors' preferences shaped but government policy is also affected. Therefore, in this study, we

will carefully examine the effect of political parties. In the following sections, we will discuss the empirical strategy.

3. Empirical Strategy

3.1. Data

(a) Government Policy

We used state public expenditure to analyze government policy. For public expenditure, we used the share of development, non-development, educational, and health expenditures. [11] Total expenditure consists of development expenditure, non-development expenditure, and compensation and assignments to local bodies. Development expenditure has often been examined in previous studies. For example, according to Datt and Ravallion (1998), it significantly affects poverty reduction. Banerjee and Iyer (2005) found that the difference in performance between landlord areas and non-landlord areas is partly due to the difference in development expenditure. Non-development expenditure is also used for understanding how the composition of a budget is changed. In addition to above broad categories, we used educational and health expenditures. Educational and health expenditures are part of development

11 Data are from the Economic Organisation and Public Policy Indian States Data Base.

expenditure. Educational expenditure includes expenditures that promote education, art and culture, scientific services, and research. Health expenditures include medicine, family planning, public health, sanitation, and water supply. Both types of expenditure are believed to contribute to poverty reduction. Since the budget reclassification that took place in 1972, budget data from 1962 to 1972 cannot be confidently compared to the data for later periods for all expenditure categories. We therefore restricted the period of our study from 1972 to 1997.

(b) Political Parties

In this paper, we distinguish regime differences across states to examine the nature and extent of political organization. Since we are focusing on the fall of the INC and the development of other parties, we simplified our analysis by classifying parties as "INC" and "non-INC."[12] For the first exercise, it is useful to look at the decline of the INC and the development of the non-INC parties because the non-INC parties have the potential to change the political complexion in India. Second, we chose RPs from among the non-INC parties that in this paper are defined as non-national parties.[13] These parties

12 The INC includes the Indian National Congress and the Indian National Congress (I). If we include the Indian National Congress (U) in the INC, the results in this paper do not change.

13 National parties are defined as parties that are elected to seats in several states. The national parties include: INC, Indian Congress (Socialist), Indian National Congress (Organization), All India Indira Congress (Tiwari), BJP (Bahujan Samaj Party, Jan Sangh, and Bharatiya Jan Sangh),

represent most of the middle and lower classes, which roughly constitute all Indian citizens outside of the upper castes and those who played no role in the INC government (Harriss, 1995). These parties, not surprisingly, lean toward redistribution policies.

3.2. Empirical Model

This paper uses panel data for the main 16 states in India during the period 1972 to 1997 to investigate the effect of political parties on government policy. The difficulty in our empirical strategies lies in estimating the causal effects of political parties. For the first step, we use FE model to rule out the state specific characteristics which are correlated both government policies and party systems. Even though we are using the FE model, the omitted variables, which vary across year and states, also affect the party system and government policy. For example, as we discussed in the previous section, differences in economic development or conflicts among groups are related to the development of political parties; these differences can affect government policy by shifting voter preferences. Since the purpose of this paper is to investigate the significance of political parties, their causal effects need to be estimated.

To address this issue, we will use the change in political conditions resulting

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Communist Parties (Communist Party of India and Communist Party of India [Marxist]), Janata Party (JD, JP), Socialist Party, BSP, Swatantra, Republic Party of India, Sanghata Socialist Party, Lok Dal, Forward Bloc, Praja Socialist Party,and Samajwadi Party.

from close elections as exogenous variations. This empirical strategy is based on the work of Clots-Figueras (2011) and Rehavi (2007), who investigated the effects of the increase in the share of seats won by females in legislature on government policy.

We use the following estimated empirical model to examine the effect of the non-INC parties share on government policy. The same model can also be used to estimate the effects of RPs:

$$Y_{it} = \alpha_i + \beta_t + \gamma F_{it} + \mu TC_{it} + X_{it}\delta + \varepsilon_{it}, \quad (1)$$

where Y_{it} represents the government policy of state *i* in the year *t*; α_i and β_t are the state and year fixed effects. F_{it} represents the fraction of seats occupied by non-INC parties; TC_{it} represents the share of close elections, which is defined as the number of close elections between new parties and the INC divided by the number of all seats; and X_{it} represents other control variables, including real net state domestic product (NSDP) per capita, rural population share, and fraction of the SCs/STs reservation seats.[14] Standard errors are clustered at election-state levels. For election year, F_{it} is constructed using political conditions prior to the elections, since it takes time for newly elected legislators to affect policies.

The first-stage regression corresponding to equation (1) is defined as follows:

14 Since 1950, the Constitution of India has introduced an affirmative-action provision to improve the social and economic conditions of disadvantaged groups, SCs, and STs. This provision guarantees them political seats in the national legislature, state legislatures, and village councils.

$$F_{it} = \alpha_i + \beta_t + \kappa FC_{it} + \lambda TC_{it} + X_{it}\delta + \upsilon_{it}, \quad (2)$$

where FC_{it} is an instrument variable that represents the fraction of seats won by the non-INC parties in close elections against the INC. The numerator is, therefore, the number of seats won by the non-INC parties in close elections while the denominator is the number of close elections. The idea behind this identification is that election results in close elections are considered largely random.[15] This paper defines a close election as that in which the margins of victory are less than 4.5%. In the following sections, we will discuss the validity of this identification. Since the frequency of close elections is an endogenous variable, we control the fraction of close elections among all constituencies through TC_{it}.

The summary statistics are shown in Table 1. The mean of the share of seats won by all of the non-INC parties in all seats is around 57%. The share of seats of RPs is 16% on average. The fractions of close elections for the non-INC parties and RPs are 13% and 4.5%, respectively. Fractions of seats won by the non-INC parties and RPs are around 50%, which is consistent with the randomness of the results in close elections. It is important to note that since some observations for non-development, educational, and health expenditures are missing, the sample size of regression using non-development

and education/health expenditure differs from that using development expenditure.

4. Results

4.1. Identification Validity

In this section, we will discuss the identification validity. Although it is impossible to demonstrate randomness of results in a close election conclusively, we will show that the results in close elections cannot be predicted by any state characteristics. To this end, we will regress the fraction of seats won by the non-INC parties (or RPs) in close elections against the INC parties (or RPs) on real state domestic product per capita, rural population, proportion of seats reserved for disadvantaged castes and tribes, proportion of seats won by the non-INC parties (or RPs) in the past, proportion of seats that had close elections in the past, and turnout by percentage. To provide an additional robustness check, we are also using newspaper circulation per capita and head count index in rural and urban areas. We checked the validity of the instruments for the non-INC parties and RPs, the results of which are reported in Table 2. Columns (1) to (3) show the results for non-INC parties. All of the coefficients are insignificant. The results for RPs, as shown in columns (4) to (9), are also similar to those for non-INC parties. Since we cannot observe significant correlations between the fraction of seats won by each party group

and state characters, the randomness of election results in close elections is confirmed.

4.2. Results

The results of the first stage regression are shown in Table 3. Panels (a) to (c) display coefficients of the instrumental variable for non-INC and RP seats, respectively. The difference between the columns in each panel is due to the number of observations used in the second stages. The coefficients of fraction of seats won by non-INC parties in a close election are positive and similar, although, in columns (1) and (2), they are statistically significant only at 10%. Panel (b) demonstrates results for RPs that estimate that the fraction of seats won by RPs in a close election are positive and statistically significant around 5%.

The results of the second-stage regression are reported in Table 4. Panel (a) demonstrates the results for non-INC parties. As shown in columns (1) and (3), while the FE coefficient of non-INC parties for development expenditure is significantly positive, that for non-development expenditure is significantly negative. On the other hand, column (2) shows that the IV coefficient for development expenditure is positive but statistically insignificant. The difference in coefficients between FE and IV means that in states where the demand for development expenditure has been increasing, the

number of non-INC parties has also been increasing. Moreover, our finding that the IV coefficient is not significant suggests that the determinative factor for development expenditure is not reflective of party but of voter preference. With respect to other expenditures, the IV coefficient for educational expenditure, as shown in column (6), is positive and statistically significant. The reason for this may be that one of the large non-INC parties is the Communist Party, which heavily favors education, although it is difficult to check this explanation empirically if we use the geographical bias of this party.

Panel (b) shows the results for the RPs. Under the FE, only the coefficient of the RPs for health expenditure is positive and statistically insignificant, which suggests voter preference is important in promoting health expenditure. The coefficient for development expenditure, under IV estimate, is negative and statistically significant while that for non-development expenditure is positive and statistically significant. Non-development expenditure includes administrative expenditure and salaries for public officers who act to benefit specific people. The finding of this paper is consistent with the findings of Fernandez and Levy (2008) and Lizzeri and Persico (2005), who showed that a larger number of political parties increases the transfer for specific groups and decreases the public goods that are useful for development or poverty reduction. In the case of

educational and health expenditure—as shown in Table 4, panel (b), columns (6) and (8)—we also do not find significant effects of RPs share. This confirms that RPs do not undertake a role in poverty reduction.

5. Conclusion

This paper focused on the decline of the INC and the development of non-INC parties in its investigation of the importance of political parties in state government performance. Accordingly, we first found that increasing the number of non-INC parties promotes development expenditure, which implies that dominant-party systems work inefficiently. This result suggests that a lack of political competition through political parties is bad for economic development and poverty reduction. By contrast, we found statistically negative effects when we examined the share of non-INC parties on development and positive effects on non-development expenditure. This implies that fragmented political parties make governments work inefficiently.

Although this paper contributes to our understanding of the function of political parties, our study has limitations. First, the policy variables that we used do not contain detailed information. Future studies should examine the effects of political parties on the allocation of public goods using more detailed policy information, even for a limited

region or period. Second, our classification of political parties is somewhat simplistic. Given the numerous political parties extant in India, it is difficult to examine political systems in light of the detailed characteristics of each party. Future studies may focus on specific states to enable collecting the more detailed data necessary to understand the effect of political systems. Third, this paper did not investigate the development of the political parties. This is important to our understanding of how the mechanism of policy has changed in the democratic institutions. More analysis on the progressive mechanisms of multiparty systems is thus required.

Despite these limitations, this paper contributes to a better understanding of the function of political parties in developing countries. In particular, it helps us to understand the implications for those political parties based on ethnic or religious diversity where the development of political organizations would not promote development policies.

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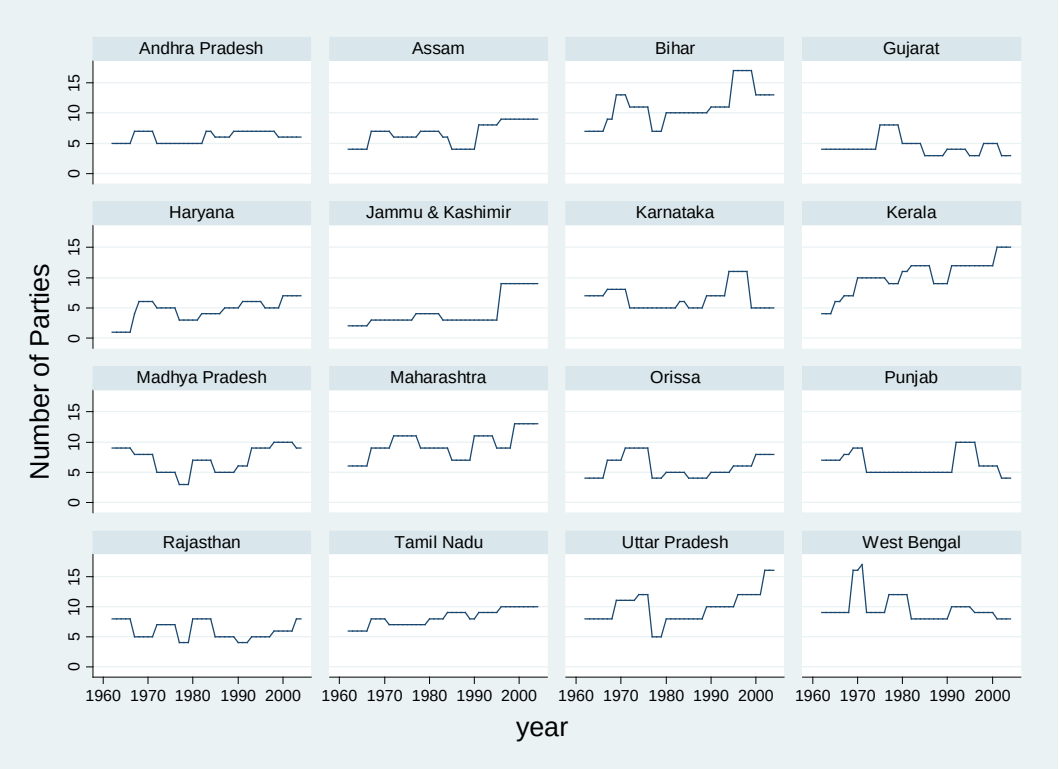
Figure 1. The number of parties with seats in the state legislatures.



Note: We have plotted the number of parties with seats in the state legislatures.

Figure 2. The fraction of seats won by the INC in state legislatures.

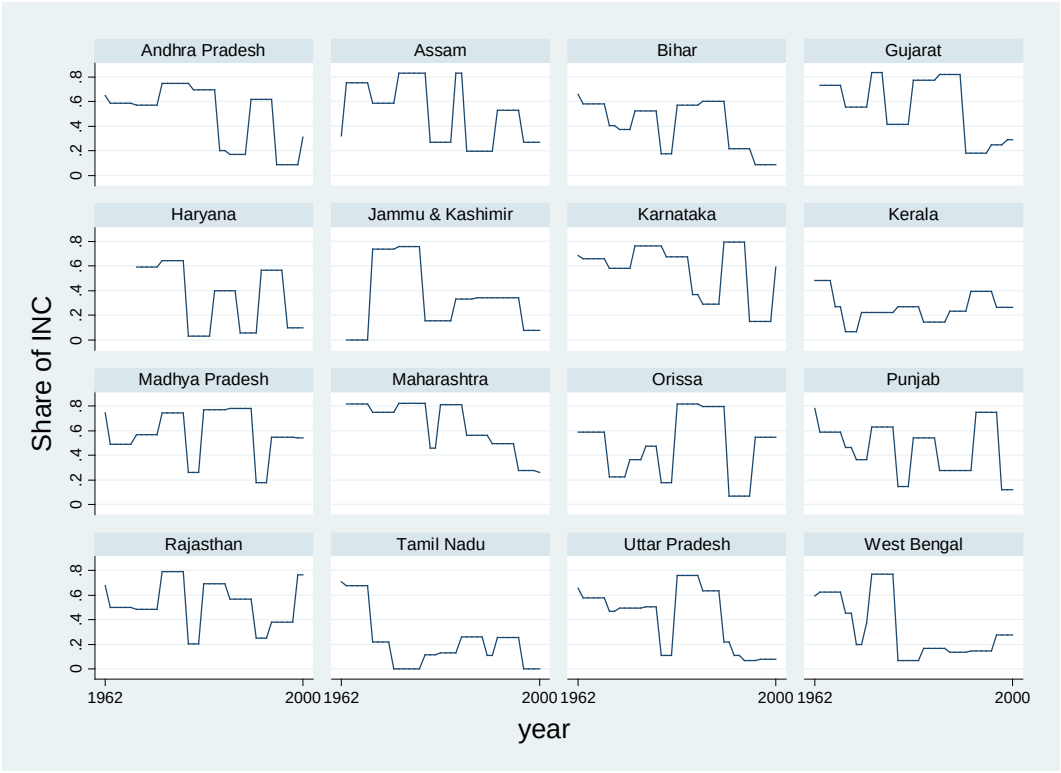


Table 1. Summary Statistics

Variable	Obs.	Mean	Std. Dev.	Min	Max
Political variable					
Fraction of seats won by non-INC parties	432	0.57	0.26	0.17	1
Fraction of seats won by RPs	432	0.16	0.24	0	0.94
Fraction of seats that had close elections between non-INC parties and INC	432	0.13	0.065	0	0.31
Fraction of seats that had close elections between RPs and non-RPs	432	0.045	0.057	0	0.27
Fraction of seats won by non-INC in a close election against INC	432	0.49	0.15	0	1
Fraction of seats won by RPs in a close election against non-RPs	432	0.46	0.24	0	1
Policy variable					
Share of development expenditure	432	67.49	5.75	36.29	79.80
Share of non-development expenditure	336	29.60	4.01	17.95	42.44
Share of education expenditure	410	21.24	4.11	8.55	36.63
Share of health expenditure	410	7.74	2.23	2.25	13.87
State characteristics					
Real per capita NSDP	432	12.989	5.347	4.813	32.461
Proportion of rural population	432	0.767	0.078	0.583	0.913
Proportion of SC/ST reserved seats	432	0.211	0.078	0.079	0.4

Table 2. Proportion of Seats Won by non-INC Parties and RPs Parties in a Close Elections and State Characteristics

Variables	(1)	(2)	(3)	(4)	(5)	(6)
	Non-INC parties against INC			RPs against non-RPs		
Proportion of seats reserved for SC/ST	-0.0356	-0.0851	-0.0247	-1.017	-0.919	-0.624
	(0.205)	(0.222)	(0.251)	(0.627)	(0.764)	(0.826)
Proportion of seats that had close elections in the past	-0.283	-0.237	-0.0402	2.339	2.020	2.929
	(0.470)	(0.490)	(0.528)	(1.474)	(1.765)	(1.822)
Proportion of seats won by non-INC parties/RPs in the past	-0.228	-0.279	-0.306	-0.159	-0.115	-0.259
	(0.140)	(0.168)	(0.186)	(0.339)	(0.378)	(0.362)
Turnout	0.0430	0.0485	0.0890	0.0387	0.0193	0.144
	(0.191)	(0.190)	(0.204)	(0.421)	(0.419)	(0.460)
Rural population share	-0.342	-0.460	-0.468	0.515	0.593	0.454
	(0.301)	(0.340)	(0.342)	(0.635)	(0.687)	(0.829)
Real state domestic product per capita	0.600	-0.0682	1.353	7.988	9.079	5.473
	(3.680)	(3.671)	(4.341)	(7.681)	(8.926)	(12.75)
Newspaper circulation per capita		-0.339	-0.355		0.301	0.365
		(0.411)	(0.425)		(0.827)	(0.832)
Head count index (rural)			0.214			0.506
			(0.179)			(0.365)
Head count index (urban)			-0.126			-0.627
			(0.174)			(0.428)
Observations	96	96	92	95	95	91
R-squared	0.081	0.085	0.107	0.081	0.085	0.096

Note: Dependent variable: proportion of non-INC parties and RPs that won in a close election per state and election year. Sample is limited to state elections that were close. Robust standard errors are shown in parentheses.

Table 3. First-Stage Regression

(a) Dependent Variable: Fraction of seats won by non-INC parties

Dependent Variables in the Second Stages	(1) Development Expenditure	(2) Nondevelopment Expenditure	(3) Education or Health expenditure
Fraction of seats won by non-INC parties in a close election against INC	0.339+	0.307+	0.344*
	(0.185)	(0.158)	(0.173)
Fraction of seats that had close elections between non-INC parties and INC	-1.076**	-1.239**	-1.063**
	(0.299)	(0.391)	(0.299)
Proportion of rural population	0.388	-2.389	0.315
	(1.577)	(2.326)	(1.603)
Real per capita NSDP	-0.00318	-0.00149	-0.00288
	(0.00882)	(0.0105)	(0.00894)
Proportion of SC/ST reserved seats	-2.099*	-3.065*	-2.141*
	(1.013)	(1.193)	(1.019)
Observations	432	336	410
R-squared	0.569	0.623	0.580

Note: Robust standard errors clustered at state-election units are reported in parenthesis. +, *, and ** denote statistical significance at 10%, 5%, and 1%, respectively. All specifications include state and year FEs.

(b) Dependent Variable: Fraction of seats won by RPs (excluding INC)

Dependent Variables in the Second Stages	(1) Development Expenditure	(2) Nondevelopment Expenditure	(3) Education or Health expenditure
Fraction of seats won by RPs in a close election against non-RPs	0.0862*	0.101*	0.0865*
	(0.0386)	(0.0405)	(0.0396)
Fraction of seats that had close elections between RPs and non-RPs	1.753**	1.600**	1.738**
	(0.462)	(0.449)	(0.461)
Proportion of rural population	0.943	1.460	0.835
	(1.134)	(1.193)	(1.159)
Real per capita NSDP	0.0138*	0.0167**	0.0136*
	(0.00569)	(0.00586)	(0.00551)
Proportion of SC/ST reserved seats	-0.0753	0.232	-0.0703
	(0.512)	(0.539)	(0.516)
Observations	432	330	333
R-squared	0.786	0.801	0.804

Note: Robust standard errors clustered at state-election units are reported in parenthesis. +, *, and ** denote statistical significance at 10%, 5%, and 1%, respectively. All specifications include state and year FEs.

Table 4. Party Systems and Government Expenditures

(a) Fraction of seats won by non-INC parties and Government Expenditure

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Dependent Variables	Development Expenditure		Nondevelopment Expenditure		Education Expenditure		Health expenditure	
Method	FE	IV	FE	IV	FE	IV	FE	IV
Fraction of seats won by non-INC parties	4.066+	4.888	-0.781+	-4.835*	-1.148	7.035+	0.581	9.825
	(2.110)	(8.557)	(0.420)	(2.002)	(0.851)	(3.869)	(1.116)	(6.560)
Fraction of seats that had close elections between non-INC parties and INC	11.07+	12.11	-0.245	-5.680+	-8.573**	2.386	2.748	15.21
	(6.591)	(13.70)	(1.509)	(3.135)	(2.843)	(5.784)	(5.007)	(10.09)
Proportion of rural population	88.60**	88.09**	-5.466	-9.281	-7.214	2.336	-54.10	-40.79
	(27.82)	(26.23)	(9.518)	(11.79)	(16.71)	(23.64)	(34.28)	(38.73)
Real per capita NSDP	0.349*	0.351*	0.0679	0.0719	-0.272+	-0.273	-0.414*	-0.427*
	(0.161)	(0.152)	(0.0487)	(0.0487)	(0.158)	(0.168)	(0.201)	(0.202)
Proportion of SC/ST reserved seats	2.258	4.156	-6.403	-18.60*	-19.24+	6.146	8.512	37.42
	(22.09)	(28.89)	(5.864)	(8.979)	(10.26)	(14.71)	(21.40)	(27.57)
Observations	432	432	330	330	333	333	336	336
R-squared	0.650	0.649	0.281	0.093	0.343	0.087	0.609	0.462

Note: Robust standard errors clustered at state-election units are reported in parentheses. +, *, and ** denote statistical significance at 10%, 5%, and 1%, respectively. All specifications include state and year FEs. Instrument variables in IV regression are the fraction of seats won by non-INC parties in close elections.

(b) Fraction of seats won by regional parties and government expenditure

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Dependent Variables	Development Expenditure		Nondevelopment Expenditure		Education Expenditure		Health expenditure	
Method	FE	IV	FE	IV	FE	IV	FE	IV
Fraction of seats won by RPs	1.411	-39.98*	2.660	24.21*	1.957	-3.241	1.459+	4.223
	(3.299)	(19.82)	(3.840)	(10.09)	(1.871)	(6.826)	(0.873)	(3.072)
Fraction of seats that had close elections between RPs and non-RPs	2.360	86.62+	4.909	-39.51+	1.450	12.01	-2.377	-7.995
	(11.73)	(52.59)	(7.923)	(21.86)	(5.187)	(15.51)	(2.407)	(6.393)
Proportion of rural population	83.40**	137.6*	-58.09+	-103.8*	100.0**	106.3**	5.229	1.887
	(26.61)	(55.43)	(34.32)	(40.52)	(22.71)	(23.49)	(7.841)	(8.056)
Real per capita NSDP	0.310+	0.828**	-0.497*	-0.831**	0.0532	0.116	-0.0795*	-0.113*
	(0.184)	(0.283)	(0.201)	(0.250)	(0.106)	(0.128)	(0.0350)	(0.0526)
Proportion of SC/ST reserved seats	-8.722	6.570	4.540	-8.352	-4.283	-2.511	1.545	0.603
	(20.31)	(21.56)	(18.73)	(17.58)	(13.26)	(13.46)	(6.571)	(5.960)
Observations	432	432	336	336	410	410	410	410
R-squared	0.633	0.158	0.617	0.430	0.783	0.769	0.823	0.809

Note: Robust standard errors clustered at state-election units are reported in parentheses. +, *, and ** denote statistical significance at 10%, 5%, and 1%, respectively. All specifications include state and year FEs. Instrument variables in IV regression are the fraction of seats won by RPs in close elections.