

# The Political Determinants of the Duration of State Governments: An Empirical Analysis from the Major States of India

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## Abstract

This paper attempts to explain the duration of governments in days through the analysis of data from the 14 major states of India for the years 1967-68 to 2004-05. The focus of the paper is to explain the duration of Indian state governments by the analysis of legislative party system, the nature of a government, and the role of opposition. A significant amount of variation in the duration of Indian state governments is explained with the variables that measure parliamentary (the state assembly in this case) fractionalization, the size of anti-system parties, fractionalization in the pro-system parties, single party government, majority government, governmental fractionalization, and fractionalization among the opposition parties. The empirical findings show that the parliamentary fractionalization and the majority government variables are the crucial factors that significantly affect the duration of a government.

**Keywords:** Duration Analysis, Panel Data Models, Cluster Analysis

## Introduction:

The democracies across the world portray a varied picture of different structural forms and attributes. One such attribute is the concept of “political stability”. A study of political stability or cabinet stability has relevance and importance for policy purposes. The government has to introduce and implement different policies for the wellbeing of its citizens. It is usually observed that a stable government has the ability to provide large investment-oriented capital goods (e.g. infrastructure). On the contrary, an unstable government provides mainly visible goods or

club goods (e.g. subsidies, salaries etc.). Hence, the policies undertaken by the government are linked with political stability. There are many indicators in the literature to measure political stability. One of the important indicators is ‘the duration of a government’. However, the duration of a government depends on various political factors (e.g. incumbency (Chhibber et al. (2004)), provision of public goods (Uppal (2009)) along with characteristics of government (e.g. role of leadership ((Shastri (2019)), governance (Mishra and Attri (2020)). It is also true that the determining factors can

vary across study regions or study periods.

The paper attempts to explain the duration of a government through the analysis of political data on the 14 selected states. The data set consists of the 14 major states of India for the years 1967-68 to 2004-05. The duration of a government is measured by the number of days that a government lasts in the cabinet/chamber/state assembly. In this paper, a total of 229 governments are studied. The state-level political variables are considered as independent variables in the analysis. The state-level political variables considered in the study are: parliamentary (the state assembly in this case) fractionalization, the size of anti-system parties, fractionalization in the pro-system parties, majority government, single party government, governmental fractionalization, and fractionalization among the opposition parties. The objective of the analysis is to explain the duration of Indian state governments (in terms of number of days) with the aforesaid political variables.

Now, brief outline of the paper is as follows. Section 2 summarizes the empirical literature on the determinants of government durability in the context of both developed and developing countries. Section 3 provides a description of the data set used in the analysis. Section 4 discusses the methodology used and empirical results obtained. Section 5 concludes the discussion.

### Review of Literature

This section summarizes the literature on the determinants of cabinet stability or political stability both in the context of developed and developing countries. Lowell (1896) in his book *Government and Parties in Continental Europe* says that the parliamentary system can provide a strong and efficient government to a country

only when a single party achieves a majority along with the presence of a united opposition. Blondel (1968) analyses the relationship between party system and pattern of government by using data from 17 Western democracies for the period 1945-1966 and comes to the conclusion that “coalition, whether small or large, appears directly antagonistic to stable government...” Moreover, Blondel’s (1969) analysis based on his book<sup>1</sup> indicates that on an average, majority party<sup>2</sup> systems generate more durable cabinets<sup>3</sup> than multi-party<sup>4</sup> cabinets. Again, Taylor and Herman (1971) observe that government stability is positively associated with one party government and majority government by considering 196 governments from 19 countries<sup>5</sup>. Moreover, the number of parties in the parliament, the size of anti-system<sup>6</sup> (principally the traditional Communist) parties, and the fragmentation in the pro-system<sup>7</sup> parties are negatively associated with

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<sup>1</sup> *An Introduction to Comparative Government* on party system and pattern of government

<sup>2</sup> Majority party parliament refers to any parliament with a majority party.

<sup>3</sup> If there is no change in the parties within the cabinet, the cabinet is called ‘durable’.

<sup>4</sup> If there is no majority party in the parliament, it is called multi-party parliament.

<sup>5</sup> The 19 countries are Sweden, Australia, Canada, New Zealand, Austria, Ireland, Norway, U.K., Germany, Luxembourg, Iceland, Israel, Netherlands, Denmark, Japan, Belgium, Italy, Finland, and France.

<sup>6</sup> ‘Anti-system Parties’ means simply Communist parties (CPI, CPI (M) and CPI (ML) L).

<sup>7</sup> ‘Pro-system Parties’ means simply those parties from which the government must be built.

the duration of a government<sup>8</sup>. On the other hand, Dodd (1974) concludes that a cabinet may be durable even in the presence of multi-party parliament. The durability of the cabinet depends on the coalitional status of the cabinet and hence on the bargaining conditions<sup>9</sup> (among the political parties) that exist within a parliament by using data from party systems of 17 European and Commonwealth countries for the period 1918-1972.

Hurwitz (1971) examines 20 countries<sup>10</sup> over the period 1945-1969 to write a methodological note on an index of democratic political stability<sup>11</sup>. His analysis shows that the duration of a government is inversely related with civil violence / civil disturbance (a form of protest (e.g. violent deaths and aggressive behaviors) against major socio-political problems). Strom (1985) has examined the performance of 323 postwar governments in 15 parliamentary democracies. The author observes that the traditional foresight regarding the performance of minority government is not always correct and concludes that minority government can be

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<sup>8</sup> The duration of a government is measured by the number of days that a government lasts in the cabinet / chamber.

<sup>9</sup> The bargaining conditions are: (1) whether the parties are fully informed and (2) whether the parties are willing to bargain.

<sup>10</sup> The 20 countries are: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany (West), Great Britain, Iceland, Ireland, Israel, Italy, Japan, Luxembourg, Netherlands, New Zealand, Norway, Sweden, and the United States.

<sup>11</sup> The index of democratic political stability is composed of two basic indicators: a persistence of pattern index and an index of legitimacy / system support. The persistence of pattern index is itself a composite index, the component parts being an index of government persistence and an index of legislative agreement / election frequency.

a better cabinet solution. Using Storm's (1985) dataset<sup>12</sup>, King et al. (1990) use an event-history method for analyzing government duration. They observed that majority government increases the duration of government whereas the existence of extremist opposition parties leads to frequent termination of the government.

Bernhardt and Ingberman (1985) develop a model to explain how voters' expectations regarding candidates affect the election result. They report that incumbents who work consistently with good reputation (i.e., fulfills voter's expectation) have higher chance for being re-elected than challengers. On the other hand, Browne et al. (1986) present a model of cabinet dissolution using political data of twelve Western democracies from 1945 to 1980. According to them, the dissolution of cabinet is determined by a stochastic process (more specifically by a Poisson process). However, in case of parliamentary democracies, Strom et al. (1988) have criticized the stochasticity of cabinet dissolution.

Laver (2003) provides a review of recent studies on government termination which includes both theoretical modeling and empirical research studies. According to him, in the context of government termination literature, both government duration and government durability are two important concepts which are similar in nature but not identical. He comes to the conclusion that the first one is an empirical concept and the later one is the theoretical.

Brancati (2004) explores the effect of regional parties on government instability through a large-*N* analysis of 20 parliamentary

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<sup>12</sup> The performance of 323 postwar governments in 15 parliamentary democracies are analyzed.

democracies across the World. She argues that regional parties increase government instability in three different ways: first, by raising the fragmentation in the legislature, second, by increasing the size of the government and third, by mounting the ideological diversity in the government. However, a recent study has been done by Morini and Cilento (2020) on new parties, fractionalization and duration of government on the basis of data from 28 EU member countries during the period 1997-2018. They conclude that the index of fractionalization on the basis of effective number of parliamentary parties is the best predictor of the duration of government. However, the success of new parties does not significantly affect the duration of government.

Somer-Topcu and Williams (2008) explore government duration in post-communist Europe and come to the conclusion that the type of government, effective number of parties in the parliament and policy outcome such as inflation play important role in the duration of a government. However, according to Laver and Schofield (1990), strength of the policy depends on the nature of legislature and coalition government. According to them, a median legislator is expected to take strong policy decision. Moreover, a recent analysis by Blockmans et al. (2016) try to explain the role of bargaining complexity on the duration of government on the basis of 2012 Flemish municipality election.

The literature addressing the determinants of government / cabinet / political stability in India is very limited. Brass (1968) studies the coalition politics in three north Indian states – Bihar, Uttar Pradesh, and Punjab. In the paper, Brass discusses how political power is transferred from the Congress to multi-group coalitions in the selected states after the death

of Nehru in 1964 and the General election in 1967. Specifically, the stability of north Indian politics and governments is exposed mainly by the looseness in the system due to the absence of strong party identifications.

Brass (1977) explains the duration (in number of days) of Indian state governments through the analysis of data from 21 states of India. 127 governments are analyzed during the period 1952 to March 27, 1974. Most of the principal hypotheses from the Taylor and Herman study (1971) are tested by Brass (1977) with the Indian data. All the hypotheses tested by Brass are supported by the Indian data but at a lower level of significance compared to Taylor and Herman. The main conclusions of Brass's analysis are as follows. The duration of a government is correlated negatively with the number of parties holding seats in the parliament ( $N_P$ ) (called parliamentary fractionalization); the percentage of seats held in the legislature by the anti-system parties ( $C_P$ ) (principally the traditional Communist parties); governmental fragmentation<sup>13</sup>; and the number of parties in the cabinet<sup>14</sup>. The percentage of seats held by the "longest party" (i.e. dominant party) in the legislature ( $P_P$ ) is correlated positively with government stability. Moreover, the duration of coalition governments depends on the structure of legislature (measured by the multiple correlations of  $N_P$ ,  $P_P$ , and  $C_P$ ). But, this explains only 17 percent of the variation in the stability of coalition governments.

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<sup>13</sup> The majority governments are more stable than the minority governments.

<sup>14</sup> The single-party governments are more stable than the coalition governments.

Provision of public goods determines government duration through fulfilling voter's expectation/requirement ((Chhibber and Nooruddin (2004), Chhibber et al. (2004), Nooruddin and Chhibber (2008)). Based on post-election survey data and macro-economic data for the period 1967-1997, Chhibber and Nooruddin (2004) explain the importance of party system for performance of state governments in India. On the other hand, Chhibber et al. (2004) discuss how citizens depend on state governments for the provision of public goods by using all-India survey data during 2001-02. Especially, rural citizens significantly depend on local governments for their basic requirements of public goods. Nooruddin and Chhibber (2008) explains how fiscal space affects electoral volatility that influences the duration of a government by using data from the 15 major Indian states during the period 1967 to 2004.

Using state assembly election data for the period 1975-2003, Uppal (2009) measures the role of incumbency factor for any candidate in the next election result. He concludes that there is an inverse relationship between incumbency effect and availability of public goods. Another study by Saez and Sinha (2010) found that election timing and political factors play important role in raising public expenditure on education, health, agriculture, and education by using state level data from India during the period 1980-2000.

Recent studies done by S. Shastri (2019) and Mishra and Attri (2020) on India are important in this field. S. Shastri (2019) explores how longevity of government is increased by good leadership on the basis of data from National Election study 2019. Mishra and Attri (2020) tries to focus on how good governance affects duration of government by making trust on

government on the basis of survey based data of 24 Indian states between 2016 and 2018.

Given this background, this paper intends to analyze the effects of political variables on the duration (in number of days) of Indian state governments. My work is directly linked to the paper by Brass (1977) who also uses Indian data to test the causes of cabinet instability. The political variables that this study considers are the degree of fragmentation in the state assembly, the composition of the government and the characteristics of the opposition. Whereas he uses Lok Sabha electoral data from 1952 to 1974, this paper considers Vidhan Sabha electoral data from 1967-68 to 2004-05. Thus, even if our goal is similar (to analyze cabinet stability from the point of view of the Indian state governments), my work differs from his work in terms of independent variables and data set.

## Data

This paper attempts to explain the causes of cabinet/state assembly instability through the analysis of data from the Indian state politics. The data set consists of the 14 major states of India and 38 financial years, 1967-68 to 2004-05. The duration of Indian state governments (number of days in the assembly) serves as dependent variable and the state-level political variables are considered as independent variables in the empirical analysis.

The dependent variable is the duration of a government in the state assembly. The dependent variable is measured by the number of days that the government lasts in the cabinet/chamber/ state assembly. My definition of a government follows Blondel's (1968): "... any administration was considered as one government which fulfilled two conditions: that of being headed by the same prime

minister, and that of relying on the support of the same party or parties in the chamber”<sup>15</sup>. Table 1 of Annexure I presents the descriptive statistics of the dependent variable.

This paper explains the causes of cabinet instability or political instability by using Vidhan Sabha electoral data. The measures of various aspects of the legislative party system, the government, and the opposition are considered as explanatory variables in the analysis. Three variables related to the legislative party system are considered. The legislative party system variables are the parliamentary (the state assembly in this case) fractionalization, the size of anti-system parties<sup>16</sup>, and the fractionalization in the pro-system parties<sup>17</sup>. Three variables related to the government are considered. The governmental variables are the majority government<sup>18</sup>, the single party government<sup>19</sup>, and the governmental fractionalization. One variable related to opposition<sup>20</sup> is used. The opposition variable is the fractionalization among the opposition parties. All of these variables (both dependent and independent) are measured at the state level and collected principally from the *Election Commission of India*

<sup>15</sup> Refer to section 2 Review of Literature of this paper.

<sup>16</sup> As per the traditional literature, ‘Anti-system Parties’ means simply Communist parties (CPI, CPI (M) and CPI (ML) L).

<sup>17</sup> As per the traditional literature, ‘Pro-system Parties’ means simply those parties from which the government must be built.

<sup>18</sup> The ‘Majority Government’ is a government who gets at least 50 percent of the seats in the legislature.

<sup>19</sup> The ‘Single Party Government’ is a government which is formed by a single party in the legislature.

<sup>20</sup> ‘Opposition Parties’ are simply all the parties holding seats in the legislature but not in the government.

(<http://www.eci.nic.in>), supplemented by various issues of ‘The Hindu’ and ‘Hindustan Times’ newspapers, and *The Statistical Abstract of India*.

Now, let us briefly explain the construction of the aforesaid explanatory variables one by one in the following way. First, consider the variable *Parliamentary Fractionalization* (denoted by  $F_P$ ).  $F_P$  is computed on the basis of the standard fractionalization measure that uses the Herfindahl index.  $F_P$  is defined as  $F_P^{p21} = 1 - \sum_{i=1}^{N_P} p_i^2$ . Where,  $N_P$  is the number of parties in the parliament /state legislature.  $p_i$  is the proportion of seats held by the  $i^{\text{th}}$  party in the state legislature. Specifically,  $p_i$  is the number of seats held by the  $i^{\text{th}}$  party divided by the total number of seats in the legislature. All other fractionalization variables ( $F_s$ ,  $F_o$  and  $F_G$ ) are constructed in a similar way.

The variable *Size of Anti-system Parties* is defined as the ratio of number of seats held by the Communist parties to total number of seats in the state legislature. *Majority Government* (denoted by  $MG$ ) is a zero-one variable that equals one, if the government gets at least 50 percent of the seats in the legislature, otherwise zero. *Single Party Government* (denoted by  $SPG$ ) is also a zero-one variable that equals one, if a single political party forms the government, otherwise zero.

All of these variables remain constant throughout the period between two state legislative assembly elections. A single observation of one of these variables is the value it takes during one government.

<sup>21</sup>  $F_P$  varies between 0 and 1.  $F_P = 0$ , when there is a single party in the legislature.  $F_P = 1$ , when there is an infinite number of parties in the legislature.

However, there is a possibility that a government remains unchanged after an election. In that scenario, the value of each variable for that government era is defined as a weighted average of its values in the eras before and after the election, the weights applied are corresponding to the lengths of those periods. Let us illustrate with a hypothetical example. Presume that a single government lasts for a total of 100 days, 60 of them before an election, and 40 days after it, and suppose that the variable in question is  $F_P$  (*Parliamentary Fractionalization*), which takes the value 0.75 before the election, but 0.80 after it (the election causes larger fragmentation in the parliament). Then, for this government,  $F_P$  takes the value  $0.75 \cdot 60/100 + 0.80 \cdot 40/100 = 0.77$ . Table 2 of Annexure I shows the descriptive statistics of independent variables analyzed in this study.

### Methodology and results

This section looks at the effects of various political variables at the state level on the duration of Indian state governments. In order to provide an explanation of government durability, this paper proposes some hypotheses derived from Taylor and Herman study (1971) and test their validity in the Indian context using state-level political data. Here, regression analysis to test the proposed hypotheses is used. Table 3 of Annexure 1 illustrates the regression result. This section describes the proposed hypotheses and the regressions results through validation of the proposed hypotheses.

Three variables related to the legislative party system and another three related to characteristics of government other than one variable to capture the nature of opposition parties are considered here. Some of the

important variables are parliamentary fractionalization (denoted by variable  $F_P$ ), size of anti-system parties (denoted by  $ASP$ ) and pro-system parties (denoted by  $F_s$ ). Hypotheses related to legislative party system are as follows:

H.1. *The duration of a government is negatively correlated with parliamentary fractionalization.*

H.2. *The duration of a government is negatively correlated with the size of anti-system parties.*

H.3. *The duration of a government is negatively correlated with the fractionalization in the pro-system parties.*

Hypotheses related to characteristics of government are as follows:

H.4. *The single party governments are more stable than the coalition governments.*

H.5. *The Majority governments are more stable than the minority governments.*

H.6. *The duration of a government is negatively correlated with the fractionalization in the government.*

Finally, hypothesis related to opposition parties (fractionalization among the opposition parties denoted by  $F_o$ ) is as follows:

H.7. *The duration of a government is negatively correlated with the fractionalization among the opposition parties.*

In order to analyze the effects of all the legislative party system variables, the governmental variables, and the opposition variable on the duration of a government, I estimate the following linear regression equation:

$$D_G = \alpha + \beta_0 \cdot F_P + \beta_1 \cdot ASP + \beta_2 \cdot F_s + \beta_3 \cdot SPG + \beta_4 \cdot MG$$

$$+ \beta_5 * F_G + \beta_6 * F_0 + u$$

Where  $D_G$  is the duration of a government;  $\alpha$ ,  $\beta_0$ ,  $\beta_1$ ,  $\beta_2$ ,  $\beta_3$ ,  $\beta_4$ ,  $\beta_5$ , and  $\beta_6$  the regression coefficients and  $u$  is an error term (assumed to be normally distributed with zero mean and constant variance). The regression also includes state specific dummies for unobserved state specific effects. It is found that  $F_P$ ,  $ASP$  and  $F_S$  variables significantly affect the duration of a government.

The regression result shows that the fractionalization in the parliament significantly decreases the duration of a government. So the first hypothesis holds true for the Indian Vidhan Sabha electoral data and the result is similar to Taylor and Herman study. The size of anti-system parties increases the duration of a government. Hence the second hypothesis is rejected in the Indian context for the given set of data. This result is very interesting in the sense that the sign of the correlation coefficient is positive. It can be argued that in spite of variation in the strength of the Communist parties across various states; the 'theoretical and traditional' "anti-system" character of the Communist parties is not prominent in India<sup>22</sup>. On the other hand, the Communist parties of India are not always excluded from alliances with other parties or from participation in coalition government. It is also observed that the coefficient on the fractionalization among the pro-system is positively signed but it is statistically significant. Hence the third

hypothesis is rejected in the Indian context for the given set of data.

$F_G$  and  $MG$  along with other variables significantly affect the duration of a government. It is found that majority government variable ( $MG$ ) significantly affects the duration of a government with a positive sign. This implies that the duration of a government increases if the government is a majority government. So, this hypothesis is also accepted by the Indian state-level electoral data. Again, the fractionalization in the government variable decreases the duration of a government but fails to attain statistical significance. Moreover, although the single party government is positively signed as expected from the theory but it fails to attain statistical significance. Finally,  $F_0$  is negative but the coefficient is not statistically significant. All the variables together explain only 25 percent of the variation in the duration of a government. Table 3 depicts the regression result.

Although the aforesaid political variables are important theoretically, the Indian Vidhan Sabha electoral data cannot explain significantly the variation in the duration of a government. However, most of the regression coefficients turn out to be statistically significant. One of the possible explanations may be the large size of the sample used for the analysis.

### Conclusion

The objective of this paper is to explore the linkage between the durability of a government and political factors and to identify some important political factors which have significant influences on the duration of a state government in the Indian context. Using data from the 14 major states of India during the

<sup>22</sup> In Europe, after World War II, France and Italy have excluded the Communist parties from the government. The West European Communist parties, despite their revolutionary rhetoric, have also operated in terms of the rules of the parliamentary game and they have been kept out of governments because of the real or alleged fears of their opponents concerning the dangers of Communist participation.



period 1967-68 to 2004-05, the impact of selected state-level political factors on the duration of a government is analyzed. The important determinants identified in the study are the parliamentary fractionalization, the size of anti-system parties, the fractionalization in the pro-system parties, the majority government, the single party government, the governmental fractionalization, and the fractionalization among the opposition parties. The empirical analysis shows that the aforementioned political variables significantly affect the duration of a government in the states of India. Specifically, it is observed that if the number of parties in the parliament (i.e. parliamentary fractionalization), in the government (i.e. governmental fractionalization), and in the opposition (i.e. fractionalization in the opposition) increases, then there is a lower chance for a state government to stay in power for a longer period. It is also found that the duration of a state government increases significantly if the government is a majority government, if the fractionalization in the pro-system parties increases, and if the size of anti-system parties increases. All these results (except the result on the size of anti-system parties) are consistent<sup>23</sup> with the findings by Taylor and Herman (1971) in the context of developed countries. This study is the first empirical work in the Indian context to measure the role of selected political factors on the stability of government using Vidhan Sabha electoral data.

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<sup>23</sup>All the results are discussed in the section 4 of this paper.

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I, hereby confirm that there is no 'conflict of interest' with respect to the research, authorship and /or publication of this article.

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**Annexure 1**

**Table 1: Descriptive statistics of dependent variable**

States	Duration of governments				No. of Govt.
	Mean	SD	Max	Min	
States	796	860	8538	4	229
Andhra Pradesh	849	839	3178	31	16
Bihar	504	504	1843	4	26
Gujarat	702	605	1854	83	18
Haryana	751	794	2748	4	18
Karnataka	878	531	2112	251	15
Kerala	853	739	2364	32	16
Madhya Pradesh	743	883	3653	12	18
Maharashtra	811	638	2908	150	17
Orissa	1021	986	3468	88	13
Punjab	834	597	1870	82	13
Rajasthan	951	580	1833	14	14
Tamil Nadu	982	971	2754	5	13
Uttar Pradesh	488	241	1004	19	25
West Bengal	1859	3036	8538	87	7

In Table 1, the mean and standard deviation of the duration of the governments are measured in number of days (author’s own calculation).

**Table 2: Descriptive statistics of independent variables**

States		SP G	FG	MG	FP	ASP	PSP	FO
Andhra Pradesh	Mean	1.00	0.00	1.00	0.51	0.05	0.95	0.95
	SD	0.00	0.00	0.00	0.08	0.02	0.02	0.01
Bihar	Mean	0.60	0.22	0.69	0.71	0.08	0.92	0.94
	SD	0.50	0.30	0.46	0.09	0.03	0.03	0.05
Gujarat	Mean	0.75	0.10	0.75	0.52	0.00	1.00	0.92
	SD	0.44	0.20	0.44	0.15	0.00	0.00	0.06
Haryana	Mean	0.39	0.22	0.89	0.56	0.00	1.00	0.95
	SD	0.50	0.23	0.32	0.13	0.01	0.01	0.04
Karnataka	Mean	1.00	0.00	0.92	0.53	0.01	0.99	0.94
	SD	0.00	0.00	0.28	0.12	0.01	0.01	0.04
Kerala	Mean	0.00	0.71	0.88	0.83	0.35	0.65	0.96
	SD	0.00	0.09	0.34	0.04	0.09	0.09	0.03
Madhya Pradesh	Mean	0.94	0.03	0.94	0.45	0.00	1.00	0.95
	SD	0.24	0.12	0.24	0.10	0.00	0.00	0.03
Maharashtra	Mean	0.50	0.20	0.94	0.63	0.02	0.98	0.94
	SD	0.51	0.26	0.24	0.16	0.01	0.01	0.04
Orissa	Mean	0.73	0.14	0.85	0.55	0.02	0.98	0.93
	SD	0.45	0.23	0.35	0.20	0.02	0.02	0.04
Punjab	Mean	0.62	0.16	0.77	0.58	0.06	0.94	0.91
	SD	0.51	0.24	0.44	0.11	0.04	0.04	0.07
Rajasthan	Mean	0.88	0.04	0.89	0.55	0.01	0.99	0.95
	SD	0.31	0.13	0.28	0.11	0.01	0.01	0.03
Tamil Nadu	Mean	1.00	0.00	0.92	0.57	0.05	0.95	0.95
	SD	0.00	0.00	0.29	0.08	0.02	0.02	0.02
Uttar Pradesh	Mean	0.58	0.20	0.80	0.63	0.02	0.98	0.92
	SD	0.50	0.27	0.41	0.13	0.01	0.01	0.04
West Bengal	Mean	0.43	0.29	0.57	0.67	0.37	0.63	0.89
	SD	0.53	0.36	0.53	0.15	0.17	0.17	0.09

In Table 2 and Table 3,  $F_p$  is parliamentary fractionalization,  $ASP$  is the size of anti-system parties,  $F_s$  is fractionalization in the pro-system parties,  $SPG$  is single party government,  $MG$  is majority government,  $F_G$  is governmental fractionalization,  $F_O$  is fractionalization among

the opposition parties, and  $D_G$  is the duration of a government (dependent variable). All the regressions also include state dummies.

**Table 3: The effects of all the legislative party system, the government, and the opposition variables on the duration of a government**

				$D_G$
Fp				-2755.638 (-2.35) <sup>f</sup>
ASP				4770.909 (1.79) <sup>b</sup>
Fs				2246.852 (1.79) <sup>b</sup>
SPG				-51.54 (-0.17)
MG				339.43 (3.19) <sup>a</sup>
Fg				-863.98 (-1.57)
Fo				-1478.60 (-0.83)
N				224
R <sup>2</sup>				0.25

The absolute  $t$ -ratios given in parentheses are based on robust standard errors that correct for clustering at the state level;  $b$  denotes significance at 10 % level,  $c$  denotes significance at 5 % level, while  $a$  denotes significance at 1 % level.

The Tables are based on state-level Vidhan Sabha electoral data over the period 1967-68 to 2004-05. The data are available from the webpage of Election Commission of India (<http://eci.gov.in>), supplemented by various issues of *The Hindu* and *Hindustan Times* newspapers and the *Statistical Abstract of India*.