

Consensus Democracy and State Performance:

Evaluating the Impact of Coalition Government on Indian States

Vandit D. Shah

University of Pennsylvania

Philadelphia, PA

April 2013

I. Introduction

“Complaints are everywhere heard from our most considerate and virtuous citizens, equally the friends of public and private faith, and of public and personal liberty, that our governments are too unstable, that the public good is disregarded in the conflicts of rival parties, and that measures are too often decided, not according to the rules of justice and the rights of the minor party, but by the superior force of an interested and overbearing majority” (Federalist 10, 1787).

More than two hundred years ago, the venerable James Madison in the course of arguing for the merits of the newly-formed United States Constitution noted a fundamental peril in the rubric of majoritarian democracies – the notion that a tyrannizing majority would effectively govern without keeping in mind the interests of the minority. As he duly stated, citizens were indeed skeptical about the inclusionary tendencies of an all-powerful government comprising solely of the “overbearing majority” that had no incentive to appease the minority. Over the years, this aspect of majoritarian systems has attracted enormous attention from theorists and practitioners in their quest for what constitutes an ideal democracy. After all, as Arend Lijphart (2012) argues, if democracy is defined as “government by and for the people”, it behooves us to ask “who will do the governing and to whose interests should the government be responsive when the people are in disagreement and have divergent preferences?” (p. 1). Furthermore, is a government really “for all the people” if it is simply constituted of the majority and excludes the minorities? This question of whether a majoritarian setup is optimal in terms of broad representation takes up on paramount importance in the context of power-sharing in deeply-divided societies whereby unqualified exclusion of segment(s) of the population from government can have potentially disastrous consequences. In fact, there have been several cases

throughout the history of democracy whereby instituting a majoritarian government, typically characterized by the concentration of executive power in single-party majority cabinets, has insinuated violent reactions from the “excluded”. This represents a rather intuitive outcome in places like, Nigeria and Iraq for example, where the populations are deeply divided across ethnic cleavages and a pure majority government formed by a single-party representing one of the ethnicities can easily incite the rest out of fears of exclusion and potentially biased and harmful policy-making.

An alternative prescription then to the majoritarian setup that has been put forth, both in theory and practice, is a consensual system of government whereby executive power is typically shared in broad multi-party coalitions. As Lijphart (1999) notes, “its [consensus model] rules and institutions aim at broad participation in government and broad agreement on the policies that the government should pursue...[it] tries to share, disperse, and limit power in a variety of ways...and is characterized by inclusiveness, bargaining, and compromise” (p. 2). This form of government, therefore, provides broader participation and a more accurate representation of the population in government potentially allowing for better protection of minority interests and alleviating the likelihood of the “tyranny of the majority”. In fact, in the context of deeply-divided places, this would appear to be a rather pleasant outcome whereby political parties representing different ethnicities would come together to form coalition governments, hence, ensuring broader representation of interests and minimal exclusion.

However, government is not simply about inclusion and participation; instead, one could argue that it is primarily about efficient and effective governance and how well the democracy functions. Notwithstanding the form of government in place, what really counts is how the state performs in the context of economic and social welfare outcomes. As Samuel Beer (1998) aptly

notes, “representative government must not only represent, it must also govern” (p. 25). Hence, the system of government prescribed ought not to be one that solely ensures broad and fair representation, but rather one that concurrently optimizes the performance of the state on measures such as economic growth, control of violence, alleviation of poverty and inequality, social sector expenditure, etc. This raises the question then of whether majoritarian governments, albeit not ideally representative, provide a more efficient form of governance vis-à-vis consensus governments. Perhaps it is the case that single-party majoritarian governments are best-suited for effective and decisive policy-making. In fact, Lowell (1896) asserted that “the larger the number of discordant groups...the more feeble and unstable the position of the cabinet” (Lijphart 1999, p. 64). Said differently, Lowell’s axiom states that multi-party coalition cabinets with their instability and inability to take strong decisions are not well-suited to effective policy-making. After all, conventional wisdom would have us believe that single-party cabinets are more effectual and decisive than multi-party cabinets that may be plagued by incessant negotiations and weak policy outcomes arising from a lack of compromise. This paper then focuses on this very question of whether single-party majoritarian systems do indeed provide better outcomes in terms of governance based on aforementioned measures. While single-party cabinets, especially in the context of deeply-divided societies, are not ideal for more accurate representation, participation, and protection of minority interests, do they compensate by providing better outcomes than multi-party cabinets on measures of economic growth, control of violence, and social welfare? Or, might it even be the case that consensus governments comprised of stable coalitions provide better social welfare and economic outcomes resulting from more coherent and widely-accepted centrist policies? This paper evaluates the impact of the form of government (single-party versus coalition cabinet) at the sub-national level in the context of

Indian provinces by studying state performance through four lenses, namely, economic growth, social sector expenditure, number of Hindu-Muslim riots, and number of crimes committed against Scheduled Castes and Scheduled Tribes (SC/ST). By running multivariate panel regressions on data from fifteen Indian states over a thirty year time period (1981-2010), this paper argues that majoritarian governments do not outperform consensual governments on measures of economic growth and civil peace. Instead, it appears that multi-party coalition governments in the context of Indian provinces have had a favorable impact on key aspects of democracy. The remainder of this paper is organized as follows. In Section II, we provide a brief review of the existing literature on the impact of majoritarian versus consensual governments on economic, civil peace, and social welfare outcomes at the national level. Section III, then, provides an overview of the fundamental features of Indian state politics and delineates the state governments in the sample as single-party governments or multi-party coalitions over time. Next, in Section IV, we present our arguments, hypotheses, and results from our four regression models, one each for economic growth, social sector expenditure, number of Hindu-Muslim riots, and number of crimes committed against Scheduled Castes and Scheduled Tribes (SC/ST). Finally, in section V, we draw broad-based conclusions from this empirical investigation and situate the results in the context of the larger debate between majoritarian and consensual systems.

II. Literature Review

As the theoretical debate about the merits and flaws of majoritarian versus consensus democracy rages on, the empirical question of whether the form of government has a significant impact on the performance of states becomes crucial. This issue of whether the divergence in economic, civil peace and social welfare outcomes between majoritarian and consensus democracies is

attributable to the form of government in place has been widely studied at the national level. The existing literature, akin to the empirical evidence, provides mixed answers on several different measures. Rose (1992) finds no significant impact of the form of federal government (majoritarian versus consensus) on economic growth, unemployment, and inflation, while Crepaz (1996) argues that consensual governments do actually have a significantly positive impact on inflation and unemployment among OECD countries. Roubini and Sachs (1989) demonstrate that multi-party coalition governments run larger budget deficits, noting that individual coalition partners with distinct electoral bases and interests make it extremely difficult to find issues which all members agree to cut expenses on. Concurrently, they point out that if the coalition government in place is contingent on the existence of the alliance, i.e., if one of the coalition parties walks away the government breaks down, then it increases the possibility of lock-jam and ineffectual policy-making in the light of incessant appeasement and compromise. In contrast, Echeverri-Gent (1998) in his study of coalition governments in India at the federal level argues that consensual governments have actually undertaken bolder reform measures and fared better than single-party governments. Lalvani (2005) attempts to explain this result by stating that a “fear of losing power could in fact be considered the biggest strength of a weak coalition” (p. 131). In other words, if a coalition government is in place with a slim electoral majority, members of the alliance try harder to get things done and take the measures needed to ensure that no party walks away. The fear of the government breaking down and consequently, losing power, ensures perhaps paradoxically that coalition members bridge their differences and shape effectual, centrist, and decisive policies. On the other hand, if a single-party government is in place with a large majority, it might not be as hard-pressed to take tough decisions and pass the requisite reforms given its comfortable control of power. In the context of civil peace, Powell

(1981) indicates that consensus democracies control violence better than majoritarian systems stating that “representational systems...performed very well on the riot measures” (p. 876). Finally, Lijphart (1999) in his study of thirty countries argues that “consensus democracies have a better performance record than majoritarian democracies, especially with regard to the control of inflation but also, albeit much more weakly, with regard to most of the other macroeconomic performance variables and the control of violence” (p. 274). Importantly, however, he notes that his results are not statistically significant when control variables and outliers are taken into account, and hence, his overarching conclusion instead is that “majoritarian democracies are clearly not superior to consensus democracies in managing the economy and in maintaining civil peace” (p. 274). This conclusion is mainly drawn to refute the notion that consensus governments, unlike majoritarian ones, are perennially at the negotiation table resulting in weak policy outcomes and indecisiveness. Instead, it might even be the case that due to various reasons, consensual governments actually have a significantly favorable impact on state performance vis-à-vis single-part majoritarian systems. In this paper, we study this question by applying robust statistical analysis at the sub-national level by looking at the performance of Indian provinces on key economic, social welfare, and civil peace measures. The following sections outline key features and results of our empirical study.

III. Indian State Politics

Post-independence in 1947, the Indian political arena was dominated by the Indian National Congress (INC) both at the federal and state level. This one-party dominant system existed for nearly two decades at the state level and for three decades at the federal level with the INC forming single-party majoritarian governments across the country. However, given the organization of Indian provinces along linguistic cleavages, several state and regional parties

began to emerge appealing to issues pertaining specifically to their states. The first coalition government at the state level was then formed in 1967 simultaneously across multiple states, while the first coalition government at the federal level was formed after the 1977 elections. In the course of the following years, the country has seen several coalition governments both at the state and federal level, leading us to the question of whether divergences in state performance are attributable to differences in the form of government. At the very outset, it was critical for our study to classify provincial governments as single-party or coalition. Moreover, we further categorized coalition governments into electoral and non-electoral coalitions, whereby an electoral coalition was defined as one that was formed in order to gain a majority in the State Legislative Assembly and a non-electoral coalition was defined as one that was formed due to reasons besides seeking a majority. In other words, if a state government was formed out of an alliance of two or more parties that had won a majority of the seats as a coalition, the state government was classified as an electoral coalition. That implied that if one or more members of the alliance left the coalition, the government would break down as no party had an outright majority. In contrast, a non-electoral coalition government included the party that had the dominant majority of seats (and could hence, still stay in power if the alliance broke down) alongside one or more other parties. In other words, a non-electoral coalition represents those state governments where parties formed an alliance not to form the government but rather for other reasons. We make this distinction in our study because arguably electoral and non-electoral coalition governments have different sets of incentives. An electoral coalition could possibly need more negotiation and compromise in order to ensure that no party walks away leading to potentially different outcomes from a non-electoral coalition where the dominant member of the coalition is not worried about losing power. It also speaks to the different incentives of the

parties within the non-electoral coalition whereby the minority party within the coalition without a power-veto would be more comprising in order to ensure its stay in power. Therefore, for the purpose of our study, state governments in India were classified into three groups – i) Single-party, ii) Electoral coalition, and iii) Non-electoral coalition.

In order to initially denote the form of state governments in place, we looked at the State Legislative Assembly Election results for fifteen states over thirty years from 1981 to 2010, for a total of 450 observations.¹ The fifteen states chosen for the purpose of this paper were Andhra Pradesh, Assam, Bihar, Gujarat, Haryana, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Orissa, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh, and West Bengal. State Legislative Assembly election outcomes in India are determined by a majority system whereby the party that wins more than 50% of the seats is invited to form the state government. The states chosen in our sample have all experienced competitive Legislative Assembly elections in the period in question seeing at least two, but typically more than two parties, fielding candidates. At this point, it is important to keep in mind that besides the three quintessentially national parties (Indian National Congress, Bharatiya Janata Party, and Communist Party of India), the several regional and state parties in existence typically substantially influence state elections. For example, in the state of Orissa, Biju Janata Dal (BJD) is an important state party that has performed considerably well over the last decade or so. In essence, therefore, national parties aforementioned when competing in state elections either contest by themselves or form an alliance with one or more of the state parties. It might even be the case that none of the national parties hold much sway in a given state allowing the state parties to gain a majority and form the government by themselves. For our paper, we looked at the election results and the form of state government that was established

¹ Historical data for State Assembly elections was obtained from the Election Commission of India website (Refer to www.eci.nic.in)

after each election for all fifteen states from 1980 to 2010. If a single party won a majority of the seats and formed the government by itself, the state government was coded as “Single”. However, if none of the parties individually won a majority of the seats but instead an alliance of parties together gained more than 50% of the seats and formed the government, the state government was coded as “Electoral”. Finally, if a single party even after winning a majority of the seats formed the government in an alliance with one or more other parties, the state government was coded as non-electoral. (Table I shows the classification of state governments in the sample from 1981-2010).

Hence, what we are really attempting to isolate is whether states that experienced such coalition governments (electoral or non-electoral) outperformed states that elected single-party governments. For the purpose of this paper, we built four multivariate regression models to isolate the impact of the form of government on four distinct dependent variables, namely, economic growth, social sector expenditure, number of Hindu-Muslim riots, and number of crimes committed against Scheduled Castes and Scheduled Tribes (SC/ST). In the following section, we present our four models and the results that were generated.

Table I: Form of Government by State - Single/Electoral/Non-Electoral (1981-2010)

State: Andhra Pradesh (1981-2010)		State: Bihar (1981-2010)		State: Gujarat (1981-2010)	
Year	Single/Electoral/Non-Electoral	Year	Single/Electoral/Non-Electoral	Year	Single/Electoral/Non-Electoral
1981	Single	1981	Single	1981	Single
1983	Single	1985	Single	1985	Single
1985	Single	1990	Electoral	1990	Electoral
1989	Single	1995	Non-Electoral	1995	Single
1994	Single	2000	Electoral	1998	Single
1999	Single	2005	Electoral	2002	Single
2004	Non-Electoral	2010	Electoral	2007	Single
2006	Single				

State: Haryana (1981-2010)

Year Single/Electoral/Non-Electoral

1981	Single
1982	Single
1987	Non-Electoral
1991	Single
1996	Electoral
2001	Non-Electoral
2005	Single
2009	Single

State: Karnataka (1981-2010)

Year Single/Electoral/Non-Electoral

1981	Single
1983	Single
1985	Single
1989	Single
1994	Single
1999	Single
2004	Electoral
2008	Single

State: Kerala (1981-2010)

Year Single/Electoral/Non-Electoral

1981	Electoral
1982	Electoral
1987	Electoral
1991	Electoral
1996	Electoral
2001	Electoral
2006	Electoral

State: Madhya Pradesh (1981-2010)

Year Single/Electoral/Non-Electoral

1981	Single
1985	Single
1990	Single
1993	Single
1998	Single
2003	Single
2008	Single

State: Maharashtra (1981-2010)

Year Single/Electoral/Non-Electoral

1981	Single
1985	Single
1990	Single
1995	Electoral
1999	Electoral
2004	Electoral
2009	Electoral

State: Orissa (1981-2010)

Year Single/Electoral/Non-Electoral

1981	Single
1985	Single
1990	Single
1995	Single
2000	Electoral
2004	Electoral
2009	Single

State: Punjab (1981-2010)

Year Single/Electoral/Non-Electoral

1981	Single
1985	Single
1992	Single
1997	Non-Electoral
2002	Single
2007	Electoral

State: Rajasthan (1981-2010)

Year Single/Electoral/Non-Electoral

1981	Single
1985	Single
1990	Electoral
1993	Single
1998	Single
2003	Single
2008	Single

State: Tamil Nadu (1981-2010)

Year Single/Electoral/Non-Electoral

1981	Non-Electoral
1984	Non-Electoral
1989	Non-Electoral
1991	Non-Electoral
1996	Non-Electoral
2001	Non-Electoral
2006	Electoral

State: West Bengal (1981-2010)

Year Single/Electoral/Non-Electoral

1981	Non-Electoral
1982	Non-Electoral
1987	Non-Electoral
1991	Non-Electoral
1996	Non-Electoral
2001	Electoral
2006	Non-Electoral

State: Uttar Pradesh (1981-2010)

Year Single/Electoral/Non-Electoral

1981	Single
1985	Single
1989	Single
1991	Single
1993	Electoral
1996	Electoral
2002	Electoral
2007	Single

State: Assam (1981-2010)

Year Single/Electoral/Non-Electoral

1981	Electoral
1983	Single
1985	Single
1991	Single
1996	Electoral
2001	Single
2006	Electoral

IV. A. Economic Growth and Form of Government

In order to evaluate whether the divergence in economic performance across Indian states was attributable to the form of government in place (single/electoral/non-electoral), we built a multivariate regression model with the following specifications. Our dependent variable that we used as a proxy for economic performance was growth in annual net state per capita income from 1981-2010.² All income figures were re-based at 2004-2005 levels in order to allow for meaningful comparisons across state and time over thirty years. Our major explanatory variable – form of government – was coded in the form of two dummy variables, given that the form of government can be one of three options (single/electoral/non-electoral). Hence, we used the (k-1) dummy variable specification with the presence of the intercept term in our regression. Our two dummy variables were “Electoral Coalition” and “Non-Electoral Coalition”, whereby both were switched off if the state government in place was a single-party government and one switched on if a multi-party coalition government was in place (depending on whether it was electoral or non-electoral). In our base one model, we included the two dummy variables as explanatory variables and added Log (Population) as a control variable. The control variable was added to control for the differing population sizes across the sample of states and given that the Census occurs every ten years, we used population figures from 1991 for the first half of our dataset and population figures from 2001 for the second half.³ Hence, the population variable is time invariant in our regression.

The results from our first base model show that having an electoral coalition government increases growth by 0.63% (statistically significant) while having a non-electoral coalition

² The data on net state per-capita income was obtained from the Reserve Bank of India database (Refer to www.rbi.org.in). Growth was computed using log differences.

³ The population data from the Census was obtained from India Stat (Refer to <http://www.indiastat.com/>)

increases growth by 0.28%. It is important to keep in mind that the base case in our model is a single-party government and therefore, the coefficients of our regression denote the change in growth when either one of the dummy variables for electoral and non-electoral coalition switches on (Refer to Table II for results from this model). Next, in our base two model, we include national per capita income growth as a control variable. This was done in order to control for nationwide growth shocks over time, i.e., to isolate state economic growth effects from spillovers of national growth. In other words, this control variable converts our base one model into a quasi-time fixed effects model whereby the effects of nationwide economic growth over time on state economic performance is controlled for. Our base two model results show that having an electoral coalition increases growth by 0.19% and having a non-electoral coalition increases growth by 0.26%.

In our third model specification, we included only two explanatory variables - the two dummy variables for electoral and non-electoral coalition and added state fixed-effects in order to isolate intertemporal variation in growth over time. In other words, adding state fixed-effects to our panel data allowed us to focus on the determinants of economic growth within each state over time.⁴ Our results indicate that having an electoral coalition government increases growth by 0.91% (statistically significant) while having a non-electoral coalition government decreases growth by 0.06%. Finally, we ran our model with state and time fixed effects to basically regress each data point in our sample. Our results show having an electoral coalition government increases growth by 0.47% while having a non-electoral coalition government increases growth by 0.15%.

⁴ State and time fixed effects in our models are implemented via (n-1) dummy variables where n is the number of states and (k-1) dummy variables where k is the number of years, respectively.

Table II: Economic Growth and Form of Government (Sample = 15 states)

<i>Explanatory Variable</i>	<i>Dependent Variable: Per Capita Income Growth (1981-2010)</i>			
	<i>Base (1)</i> <i>(n=450)</i>	<i>Base (2)</i> <i>(n=450)</i>	<i>With State Fixed Effects</i> <i>(n=450)</i>	<i>With Time & State Fixed Effects</i> <i>(n=450)</i>
Electoral Coalition (Yes)	0.63 (1.91)*	0.19 (0.64)	0.91 (2.22)**	0.47 (1.12)
Non-Electoral Coalition (Yes)	0.28 (0.68)	0.26 (0.69)	-0.06 (0.09)	0.15 (0.24)
National Per Capita Income Growth	---	1.07 (9.73)**	---	---
Log (Population)	0.68 (0.79)	0.66 (0.84)	1.00 (0.43)	0.91 (0.43)

*Statistically significant at the 10% level

**Statistically significant at the 5% level

Therefore, it is clear from our model that states with majoritarian governments at the provincial level in India do not outperform states with coalition governments. Instead, it appears that having a coalition government in place might actually have a positive impact on economic growth in Indian states. This is of course not a statistically significant result across all our model specifications but the direction of change appears to be rather clear. Hence, our results align with Lijphart's (1999) conclusions that consensual governments do not underperform majoritarian governments on measures of economic growth, while simultaneously providing broader representation. (Figure I shows how each state in our sample has performed on average in terms of economic growth and Figure II denotes how the states have performed on aggregate over time in the context of the form of government in place).⁵

⁵ Refer to the Appendix for individual charts for each state over time.

Figure I: State-wise Coalition Government and Growth (1981-2010)

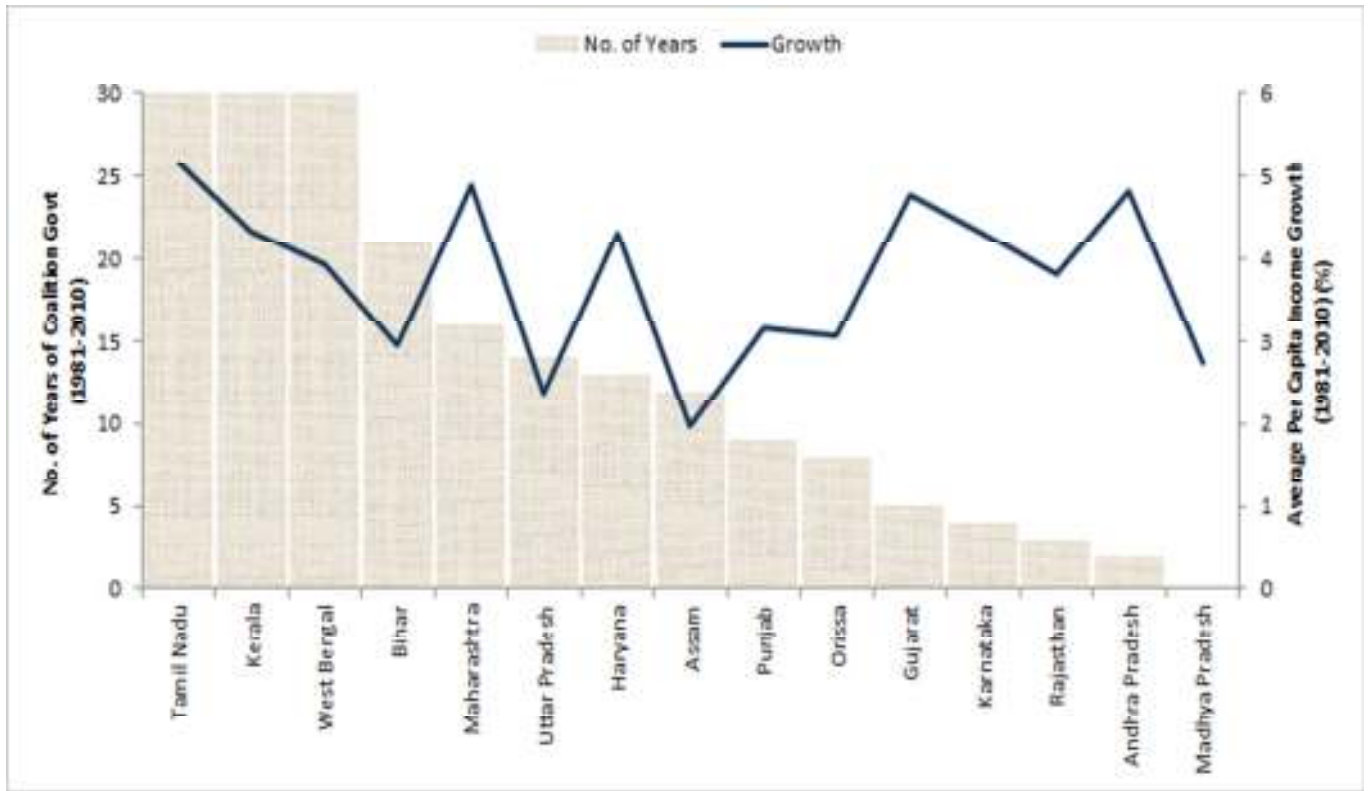
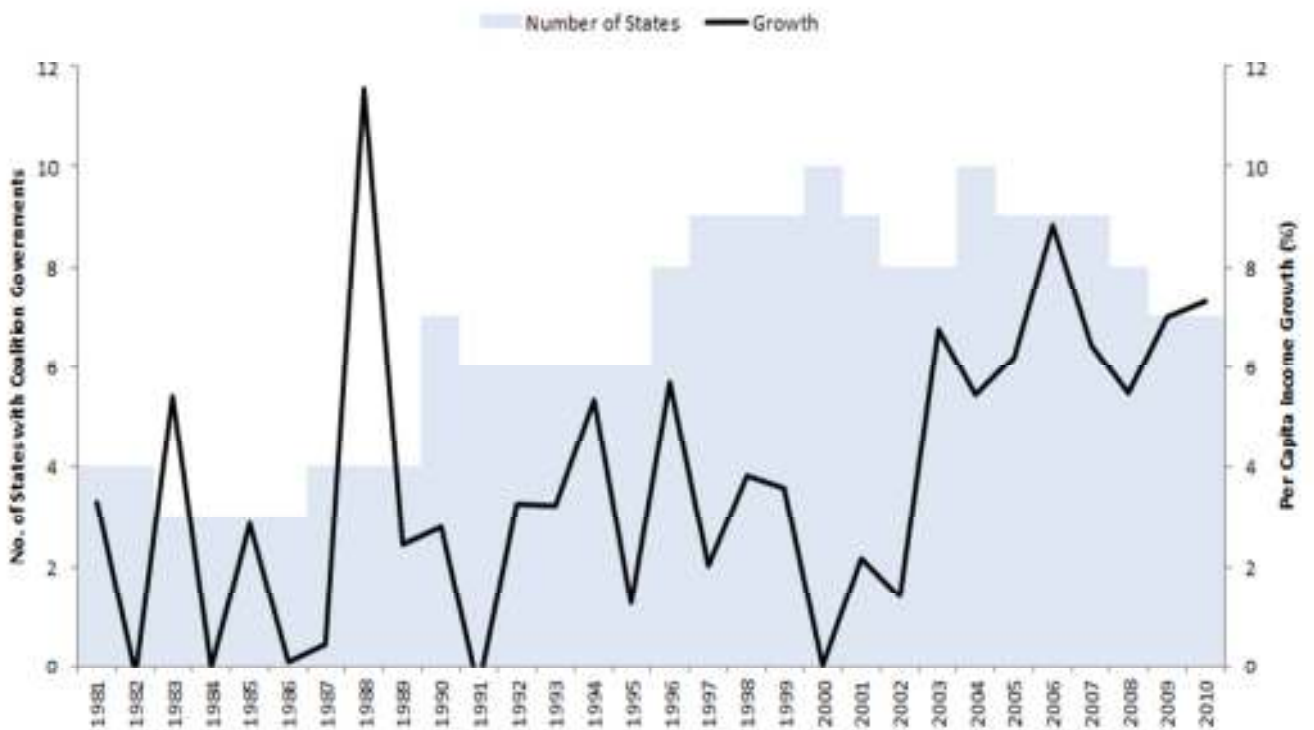


Figure II: Average Income Growth and Coalition Government (average across sample n=15)



IV. B. Social Sector Expenditure and Form of Government

In our second model, we looked at whether the amount of social sector expenditure made by each state over time is dependent on the form of government in place. Social sector expenditure includes all expenditure on social services, rural development, food storage, warehousing, capital outlays, loans and advances made by state governments. We built a similar multivariate regression model to the one mentioned above with the following specifications. Our dependent variable was the amount of social sector expenditure made by each state in billions of rupees from 2000-2010.⁶ Our major explanatory variable – form of government – was coded in the form of two dummy variables, “Electoral” and “Non-Electoral”, exactly like in the previous model.

In our base one model, in addition to our two dummy variables, we added two control variables – Net State Domestic Product (NSDP) and Log (Population). Net State Domestic Product was added to control for the level of wealth in each state, i.e., to control for the fact that wealthier states simply have more money for social sector expenditure than less well-off states.⁷ All NSDP numbers were re-based at 2004-2005 levels to allow for meaningful comparison across state and time. Log (Population), as before, was added to control for the differing population sizes across the sample of states (2001 Census) and was time-invariant in our model. Our results from our base one model interestingly show that having an electoral or non-electoral coalition government significantly reduces the level of social sector expenditure (statistically significant) while controlling for other variables (Refer to Table III for results from this model).

⁶ The data for Social Sector Expenditure was obtained from the Reserve Bank of India website and was available for the years 2000-2010 for all 15 states in our sample.

⁷ The data for Net State Domestic was obtained from the Reserve Bank of India website.

Adding time and state fixed effects to our base one model changed the coefficient marginally but the results mostly remained statistically significant.⁸

Table III: Social Sector Expenditure and Form of Government (Sample = 15 states)

<i>Explanatory Variable</i>	<i>Dependent Variable: Social Sector Expenditure (Billion Rupees) (2000-2010)</i>			
	<i>Base (1)</i> <i>(n=165)</i>	<i>Base (2)</i> <i>(n=165)</i>	<i>With State Fixed Effects</i> <i>(n=165)</i>	<i>With Time & State Fixed Effects</i> <i>(n=165)</i>
Electoral Coalition (Yes)	-13.82 (3.39)**	-9.87 (3.45)**	-18.03 (4.27)**	-15.95 (4.76)**
Non-Electoral Coalition (Yes)	-17.60 (2.84)**	-8.37 (1.91)*	-8.93 (1.65)*	-6.14 (1.42)
Net State Domestic Product	0.07 (18.60)**	0.06 (18.21)**	0.12 (25.26)**	0.08 (12.86)**
National Social Sector Expenditure	---	0.03 (13.03)**	---	---
Log (Population)	13.84 (1.23)	39.10 (4.85)**	---	---

*Statistically significant at the 10% level

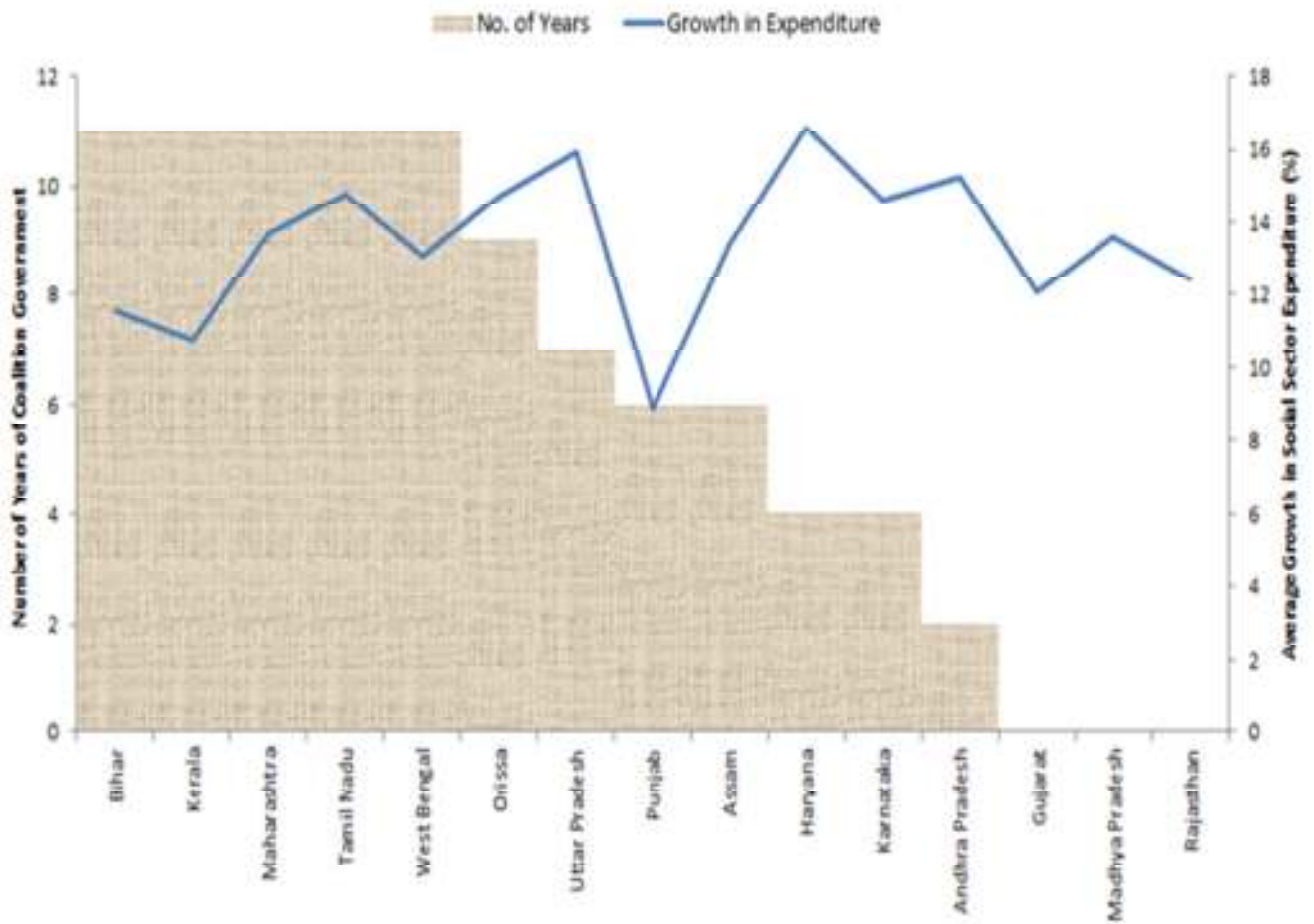
**Statistically significant at the 5% level

This result indicates that single-party governments actually tend to have higher social sector expenditure than multi-party governments at the provincial level in India. This is in stark contrast to the conventional wisdom that would have us believe that coalition governments formed from parties with different electoral bases would spend more rather than less to satisfy all the different constituents. Referring to an earlier discussion of coalition governments experiencing larger budget deficits (Roubini and Sachs, 1989), it would appear that if there was an alliance between the BJP and a state party, for example, the state party with its more local electoral base would want to spend more on the social sector in order to gain the support of state citizens and get re-elected. We hypothesize, however, by looking at the results that coalition governments having already secured the support of a broader electorate might pay less attention to social welfare than a single-party majoritarian cabinet aiming to gain the support of other groups through higher social sector expenditure. Therefore, the results from our model show that

⁸ Refer to the discussion in Section IV.A for the inclusion of time and state fixed effects. Log (Population) was excluded from these regression as it is time-invariant in our sample.

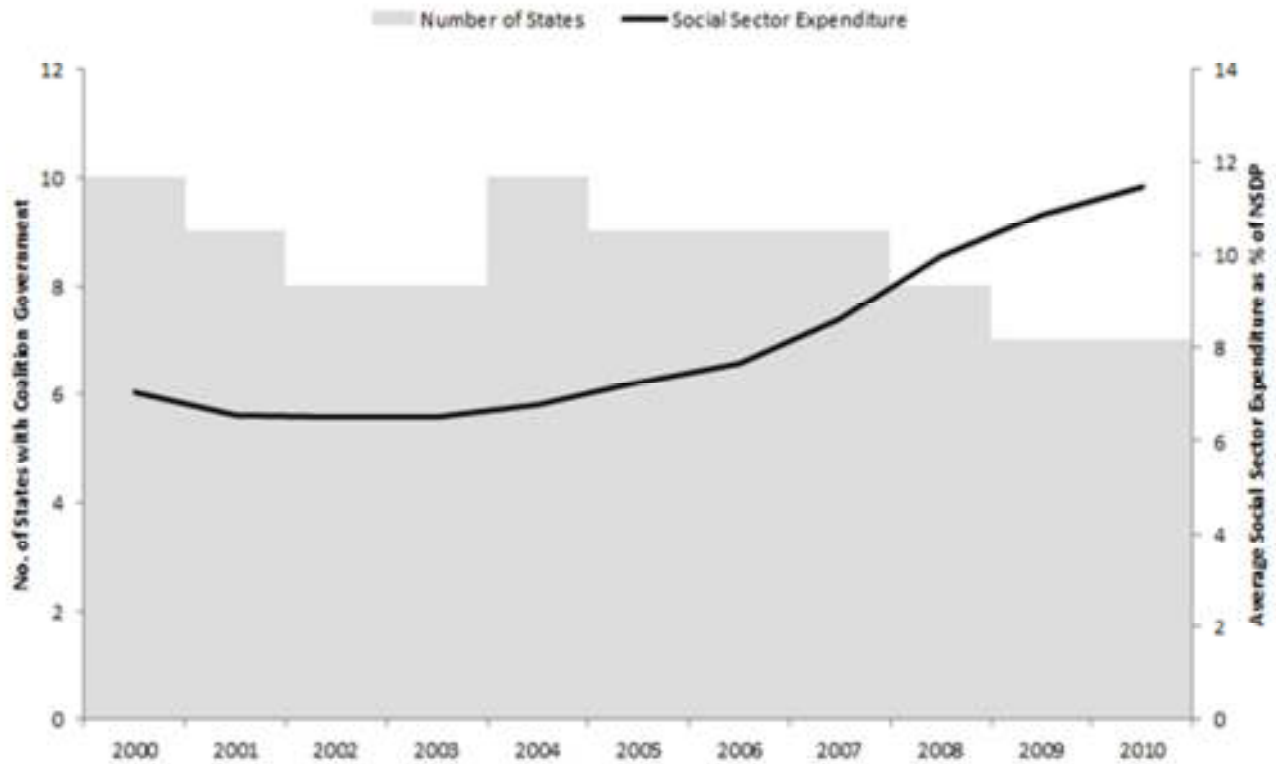
the divergence in social sector expenditure across states in India is indeed partly attributable to differences in the form of government and it appears that states that have instituted single-party governments have, on average, seen higher social sector expenditure than those with multi-party coalition governments. (Figure III shows how each state in our sample has performed on average in terms of social sector expenditure growth and Figure IV denotes how the states have performed on aggregate over time in the context of the form of government in place).⁹

Figure III: Average Growth in Social Sector Expenditure and Coalition Government



⁹ Refer to the Appendix for individual charts for each state over time.

Figure IV: Average Social Sector Expenditure as Percentage of Net State Domestic Product and Coalition Government (average across sample n = 15)



IV. C. Hindu-Muslim Riots and Form of Government

In our third model, we looked at whether the number of Hindu-Muslim riots in Indian provinces was affected by the form of government in place. We built a similar multivariate regression model to the ones mentioned above with the following specifications. Our dependent variable was the number of Hindu-Muslim riots in each state from 1981-1995.¹⁰ Importantly, we excluded Orissa and Punjab from this model as outliers given their extremely low Muslim population and absence of riots. Our major explanatory variable – form of government – was coded in the form of two dummy variables, “Electoral” and “Non-Electoral”, exactly like in the previous models.

¹⁰ The data for the number of Hindu-Muslim riots was obtained from Varshney and Wilkinson (2004) which contains data on Hindu-Muslim riots from 1950-1995.

In our base one model, in addition to our two dummy variables, we added four control variables – Number of Riots (t-1), Percent Muslims, Log (Population), and Percent Literate. Number of Riots (t-1) was added as a lagged dependent variable to control for the effects of riots spilling over from one year to the next. As Bohlken and Sergenti (2010) note citing Posen (1993), “riots may also follow previous riots as each riot strengthens existing fears and hatred and creates new desires for revenge, leading to a vicious cycle of continual rioting” (p. 595). Percent Muslims was included as a demographic control as different states have different proportions of Muslim populations which could potentially influence the number of riots.¹¹ We include Log (Population) again akin to the previous two models, while we also add Percent Literate as a control variable to account for the possibility that states with higher literacy and better socio-economic conditions might experience lower ethnic violence.¹² Percent Muslims, Log (Population), and Percent Literate are time-invariant variables in our sample given the Census occurs every ten years.

Our results from our base one model show that having a coalition government (electoral or non-electoral) marginally reduces the number of Hindu-Muslim riots (Refer to Table IV for results from this model). In our base two model, we add another control variable – state per capita income growth – to account for the possibility that states performing better economically might experience lower ethnic violence (Bohlken and Sergenti (2010) prove this relationship). The results from our model stay nearly the same with growth indeed having a statistically significant negative impact on the number of riots, a result that aligns with what Bohlken and Sergenti (2010) demonstrated. In our base three model, we add the number of riots nationwide as another control variable in order to account for nationwide shocks over time such as the

¹¹ The data for Muslim populations in each state was obtained from the 1991 Census.

¹² The data for percentage literacy in each state was obtained from the 1991 Census.

Ayodhya incident of the early 1990s. In other words, this control variable converts our base two model into a quasi-time fixed effects model whereby the effects of national agitation between Hindus and Muslims over time on the number of state riots is controlled for. Our base three model shows similar results as our base one and two models, except that the negative impact of having a non-coalition government on the number of riots becomes statistically significant at the 5% level. Finally, we add state and time fixed effects to our model specifications and continue to find that having an electoral or non-electoral coalition government marginally reduces the number of Hindu-Muslim riots.¹³

Therefore, it is clear from our model that states with majoritarian governments at the provincial level in India do not outperform states with coalition governments in the context of controlling violence. Instead, it appears that having a coalition government in place might actually have a positive impact on controlling Hindu-Muslim riots in Indian states. This is of course not a statistically significant result across all our model specifications but the direction of change appears to be rather clear. This result aligns with the conventional notion that minority interests, or in this case, minorities themselves, are better protected under consensual government systems. Hence, our results from this model also align with Lijphart's (1999) conclusions that consensual governments do not underperform majoritarian governments on measures of controlling communal violence while simultaneously providing broader representation. (Figure V shows how each state in our sample has performed on average in terms of the number of riots and Figure VI denotes how the states have performed on aggregate over

¹³ Refer to the discussion in Section IV.A for the inclusion of time and state fixed effects. Percent Muslims, Log (Population), and Percent Literate were excluded from these regression as they are time-invariant in our sample.

time in the context of the form of government in place. Figure VII shows the relationship between growth and the number of riots state-wise).¹⁴

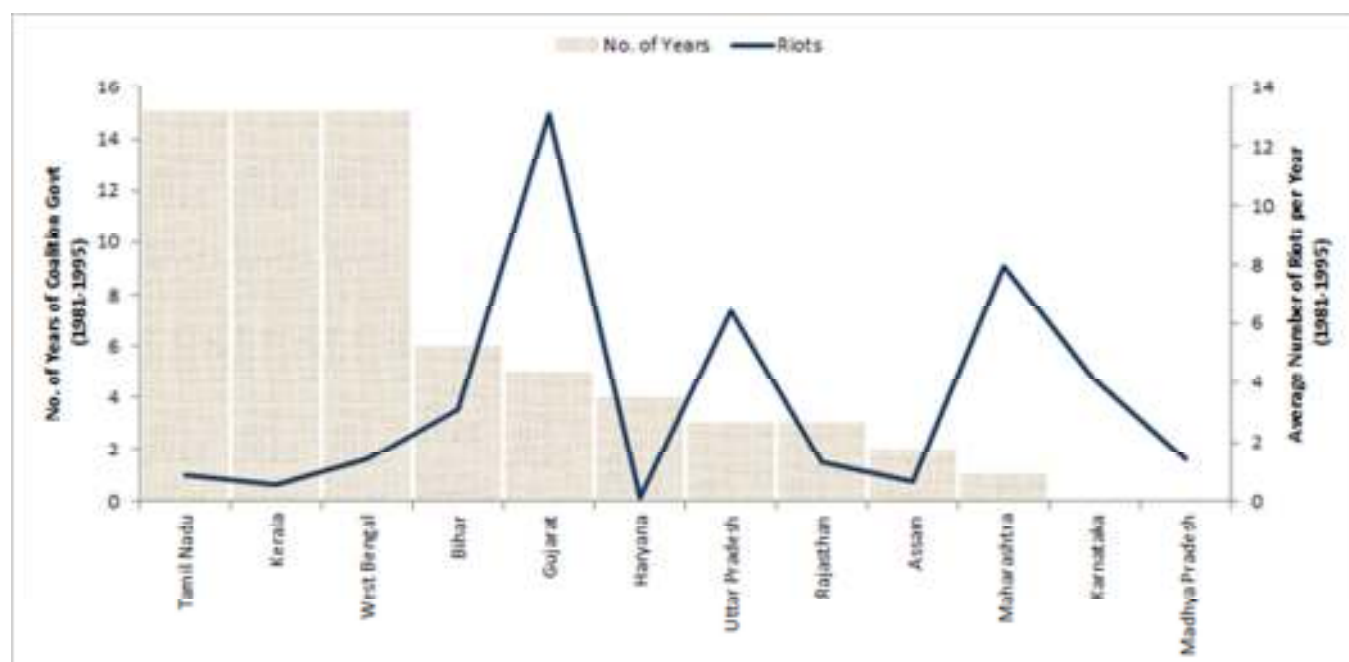
Table IV: Number of Hindu-Muslim Riots and Form of Government (Sample = 15 states)

Explanatory Variable	Dependent Variable: Number of Hindu-Muslim Riots (1981-1995)				
	Base (1) (n=195)	Base (2) (n=195)	Base (3) (n=195)	With State Fixed Effects (n=195)	With Time & State Fixed Effects (n=195)
Electoral Coalition (Yes)	-0.58 (1.03)	-0.55 (1.00)	-0.56 (1.10)	-0.14 (0.22)	-0.15 (0.25)
Non-Electoral Coalition (Yes)	-0.97 (1.88)*	-0.94 (1.87)*	-1.01 (2.16)**	-0.52 (0.44)	-0.87 (0.76)
Number of Riots, t-1	0.50 (7.85)**	0.50 (8.10)**	0.48 (8.37)**	0.32 (4.65)**	0.34 (4.97)**
Number of Riots Nationwide	---	---	0.06 (5.78)**	---	---
Percent Muslims	-3.70 (0.73)	-5.22 (1.05)	-5.04 (1.09)	---	---
Log (Population)	3.32 (1.95)*	3.33 (1.67)*	3.50 (2.27)**	---	---
Percent Literate	6.23 (1.83)**	6.94 (2.08)**	6.99 (2.27)**	---	---
State Per Capita Income Growth	---	-0.16 (3.06)**	-0.12 (2.44)**	-0.17 (3.39)**	-0.17 (3.13)**

*Statistically significant at the 10% level

**Statistically significant at the 5% level

Figure V: State-wise Coalition Government and Number of Hindu-Muslim Riots (1981-1995)



¹⁴ Refer to the Appendix for individual charts for each state over time.

Figure VI: Number of Riots and Coalition Government (sum across sample n=13)

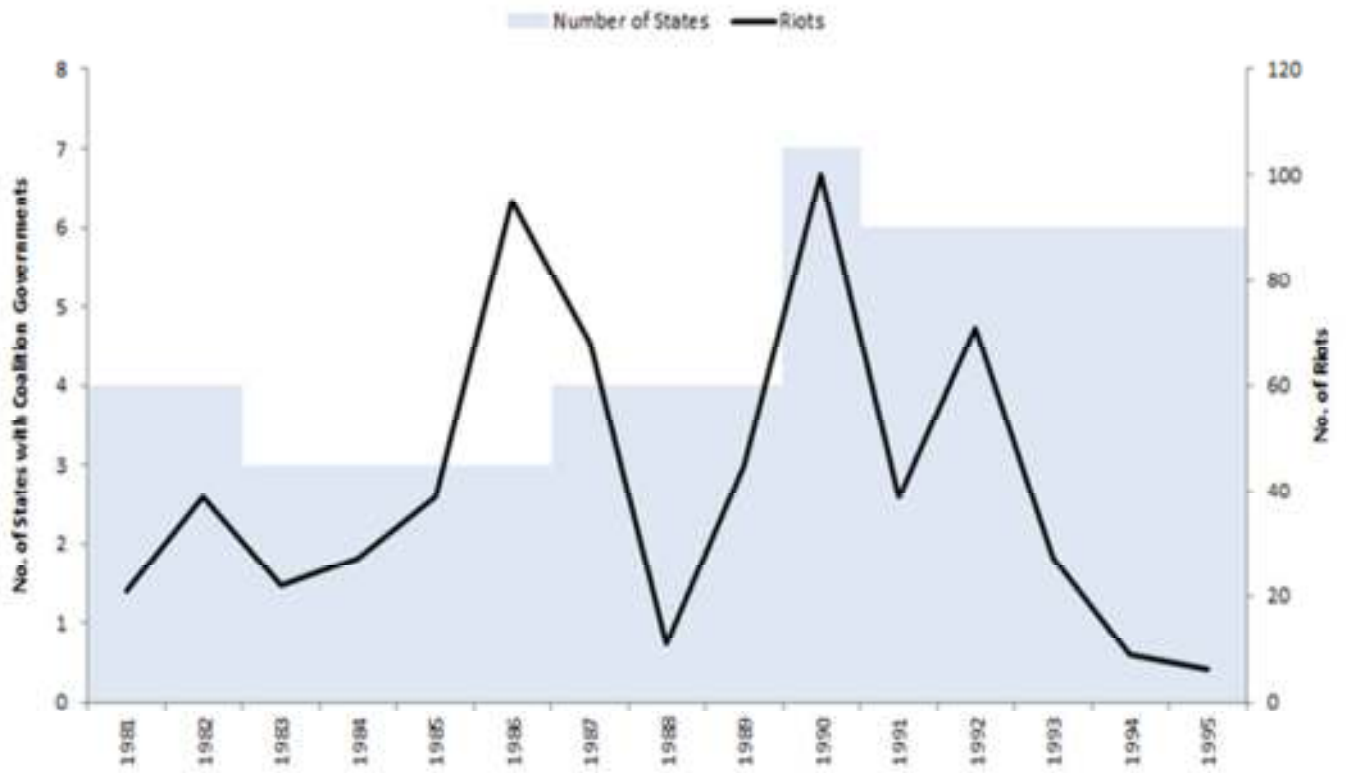
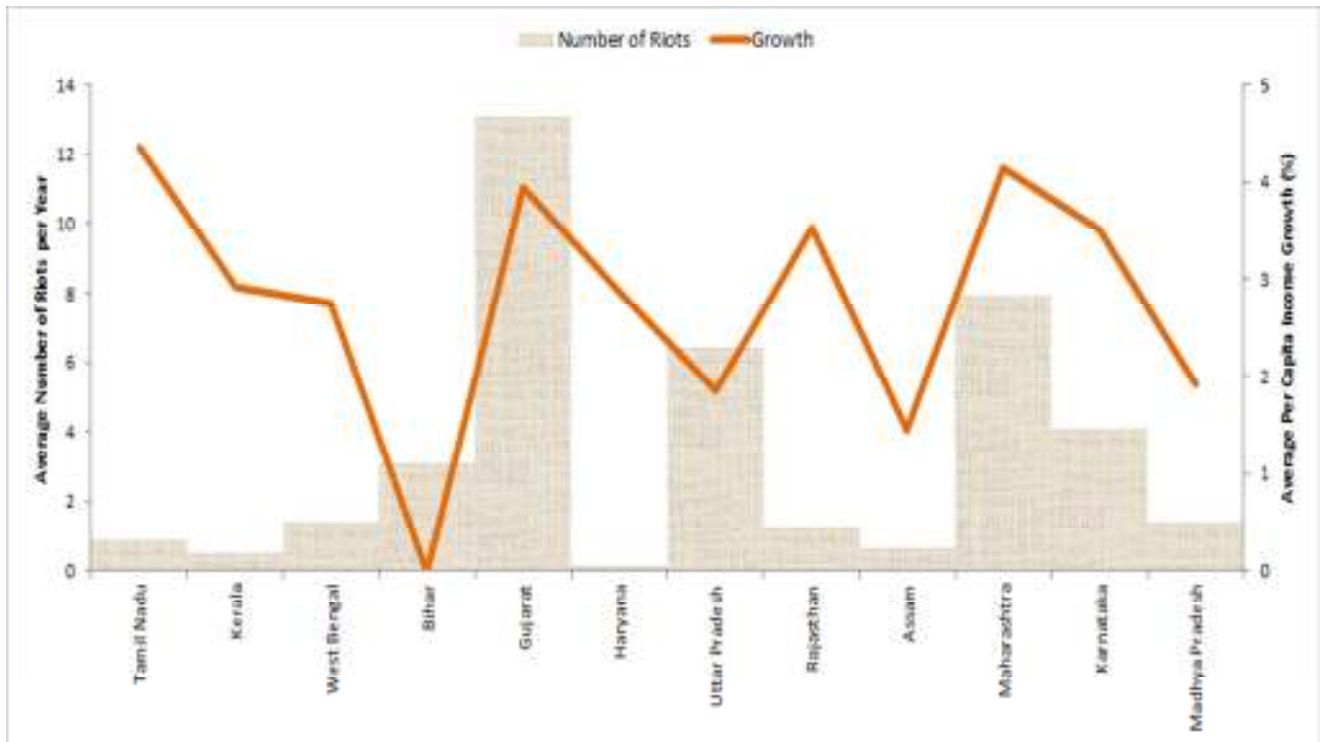


Figure VII: Growth and Number of Hindu-Muslim Riots (1981-1995)



IV. D. Number of Crimes against SC/ST and Form of Government

In our fourth and final model, we looked at whether the number of crimes committed against Scheduled Castes and Scheduled Tribes (SC/ST) in Indian provinces was affected by the form of government in place. Conventional wisdom in this instance would have us believe that broader representation and participation provided by consensual governments would result in better protection of minorities, akin to the previous case. To test this hypothesis, we built a similar multivariate regression model to the ones mentioned above with the following specifications. Our dependent variable was the number of crimes committed against SC/ST in each state from 1997-2010.¹⁵ Importantly, our sample fell to 11 states as we excluded Punjab, West Bengal, Haryana, and Assam as outliers. Our major explanatory variable – form of government – was coded in the form of two dummy variables, “Electoral” and “Non-Electoral”, exactly like in the previous models.

In our base one model, in addition to our two dummy variables, we added three control variables – Percent SC/ST, Log (Population), and Percent Literate. Percent SC/ST was included as a demographic control as different states have different proportions of SC/ST populations which could potentially influence the number of crimes.¹⁶ We include Log (Population) again akin to the previous three models, while we also add Percent Literate as a control variable to account for the possibility that states with higher literacy and better socio-economic conditions might experience lower crimes.¹⁷ Percent SC/ST, Log (Population), and Percent Literate are time-invariant variables in our sample given the Census occurs every ten years.

¹⁵ The data for the number of crimes against SC/ST was obtained from the India Stat website which has data on SC/ST crimes available from 1997-2012.

¹⁶ The data for SC/ST populations in each state was obtained from the 2001 Census.

¹⁷ The data for percentage literacy in each state was obtained from the 2001 Census.

Our results from our base one model show that having a coalition government (electoral or non-electoral) significantly reduces the number of crimes committed against SC/ST (Refer to Table V for results from this model). In our base two model, we add another control variable – state per capita income growth – to account for the possibility that states performing better economically might experience lower crimes. The results from our model stay nearly the same with our dummy variables for coalition governments still showing a significantly negative impact on the number of crimes. In our base three model, we add the number of crimes nationwide as another control variable in order to account for nationwide shocks over time. In other words, this control variable converts our base two model into a quasi-time fixed effects model whereby the effects of national agitation against SC/ST over time on the number of state crimes is controlled for. Our base three model again shows similar results as our base one and two models further demonstrating a robust statistical result. Finally, we add state and time fixed effects to our model specifications and continue to find that having an electoral or non-electoral coalition government reduces the number of crimes against SC/ST, although with the state and time fixed effects in place, the coefficients drop significantly and become statistically insignificant¹⁸

Table V: Number of Crimes against SC/ST and Form of Government (Sample = 11 states)

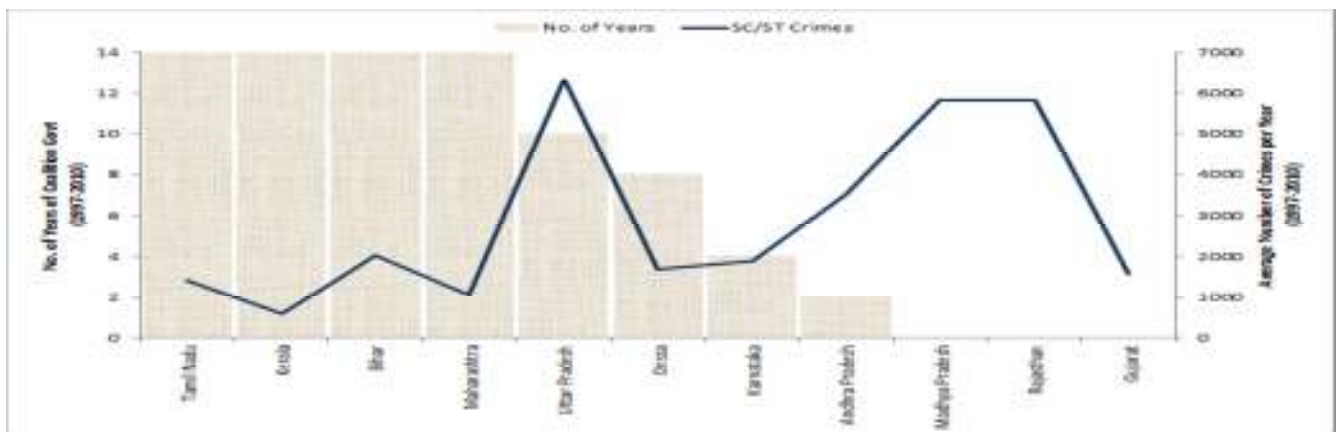
Explanatory Variable	Dependent Variable: Number of Crimes against SC/ST (1997-2010)				
	Base (1) (n=154)	Base (2) (n=154)	Base (3) (n=154)	With State Fixed Effects (n=154)	With Time & State Fixed Effects (n=154)
Electoral Coalition (Yes)	-499.92 (3.44)**	-485.69 (3.34)**	-487.43 (3.25)**	-15.09 (0.10)	106.61 (0.65)
Non-Electoral Coalition (Yes)	-831.19 (3.68)**	-839.14 (3.72)**	-755.70 (3.33)**	-253.62 (1.19)	-37.01 (0.16)
Percent SC/ST	13733.40 (6.63)**	13589.96 (6.57)**	13713.17 (6.70)**	---	---
Number of Crimes Nationwide	---	---	0.07 (2.03)**	---	---
Log (Population)	7668.21 (8.53)**	7554.83 (8.39)**	7581.20 (8.45)**	---	---
Percent Literate	2090.52 (1.37)	2077.13 (1.26)	2104.56 (1.29)	---	---
State Per Capita Income Growth	---	-29.45 (-1.35)	-37.38 (-1.71)*	-8.87 (0.62)	-16.40 (0.97)

*Statistically significant at the 10% level
**Statistically significant at the 5% level

¹⁸ Refer to the discussion in Section IV.A for the inclusion of time and state fixed effects. Percent SC/ST, Log (Population), and Percent Literate were excluded from these regression as they are time-invariant in our sample.

Therefore, it is clear from our model that states with majoritarian governments at the provincial level in India do not outperform states with coalition governments in the context of controlling crimes against minorities – a similar result as obtained from the previous model. Instead, it appears that having a coalition government in place might actually have a positive impact on controlling crimes against SC/ST in Indian states. This is of course not a statistically significant result across all our model specifications but the direction of change appears to be rather irrefutable. This result also aligns with the conventional notion that minority interests, or in this case, minorities themselves, are better protected under consensual government systems. Hence, our results from this model align with Lijphart’s (1999) conclusions that consensual governments do not underperform majoritarian governments on measures of controlling communal violence, while simultaneously providing broader representation. (Figure VIII shows how each state in our sample has performed on average in terms of the number of crimes and Figure IX denotes how the states have performed on aggregate over time in the context of the form of government in place. Figure X shows the relationship between growth and the number of riots state-wise).¹⁹

Figure VIII: State-wise Coalition Government and Number of Crimes against SC/ST (1997-2010)



¹⁹ Refer to the Appendix for individual charts for each state over time.

Figure IX: No. of Crimes against SC/ST and Coalition Government (sum across sample n=11)

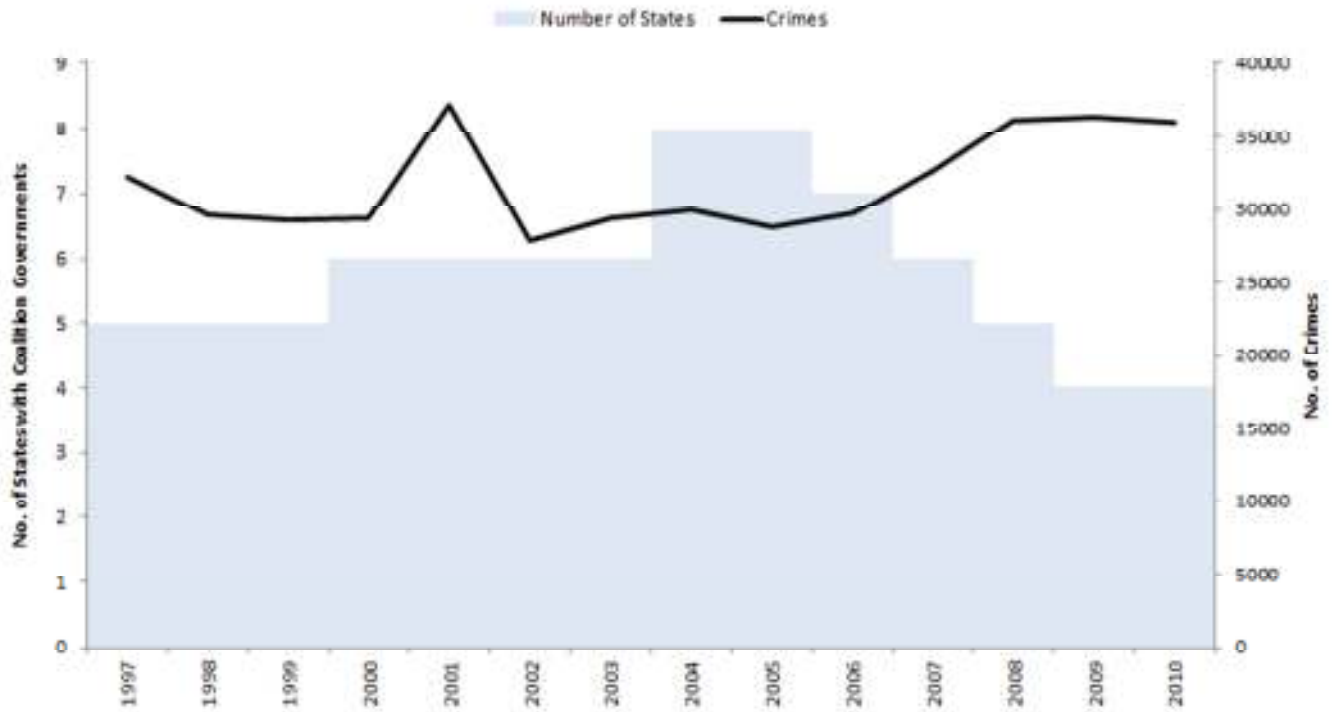
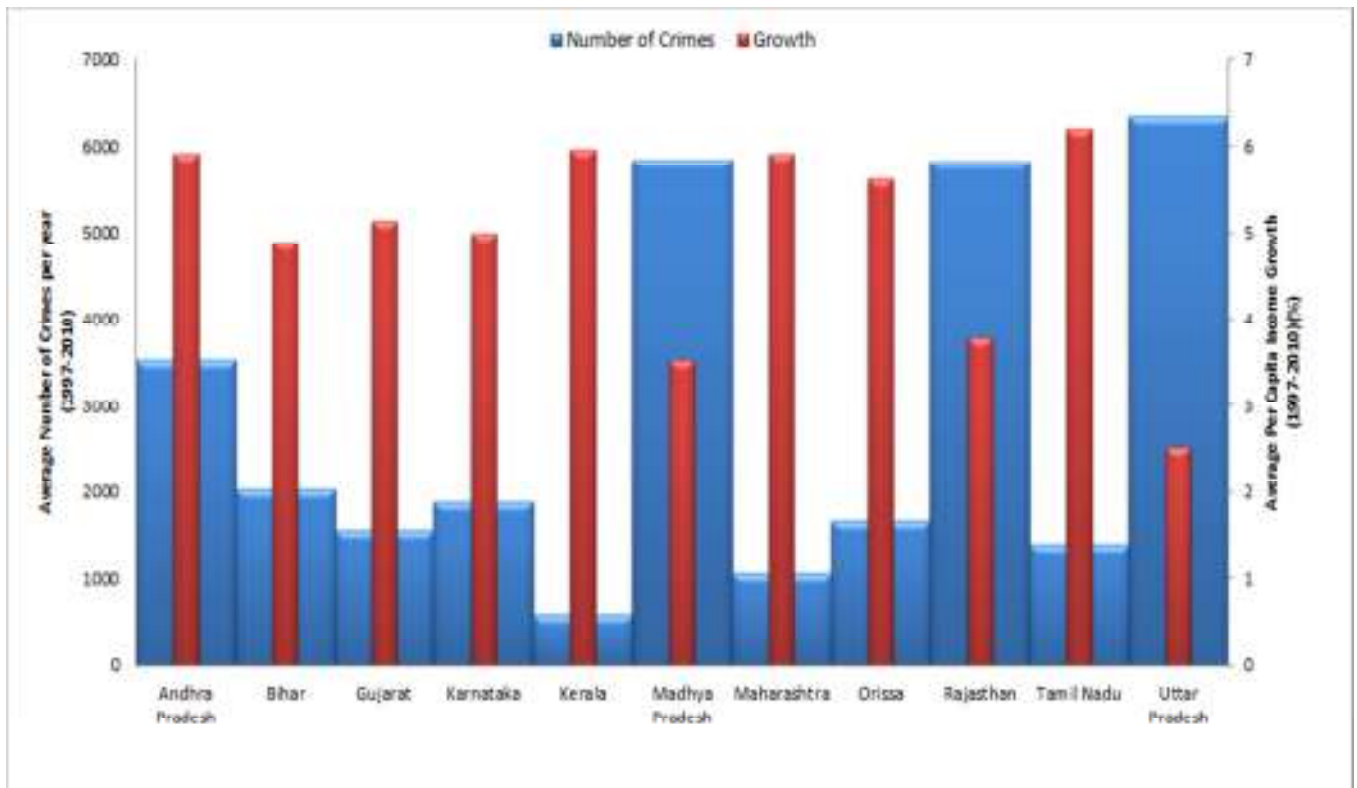


Figure X: Growth and Number of Crimes against SC/ST (1997-2010)



V. Conclusion

Through our empirical study, it appears that we can definitively draw a negative conclusion similar to Lijphart (1999) – single-party majoritarian governments do *not* outperform multi-party consensus governments on measures of economic growth and control of violence. It appears, therefore, that Lowell’s axiom which states that multi-party coalition cabinets are ill-suited for effectual policy-making does not hold true in the context of Indian provinces. More importantly, this empirical investigation helps us satisfy the aforementioned adage that representative government must not only represent, it must also govern. Given that consensus governments perform equally well, if not better, than majoritarian governments on different fronts, one can convincingly make the argument that consensual systems provide more accurate representation and broader participation without compromising on the quality of governance. Therefore, in conclusion, this paper via an empirical investigation of sub-national India, prescribes the formation of a consensual over a majoritarian government in deeply-divided societies.

References

- Beer, Samuel H. "The Roots of New Labor: Liberalism Rediscovered". *The Economist*. (1998)
- Bohlken, Anjali Thomas, and Ernest John Sergenti. "Economic growth and ethnic violence: An empirical investigation of Hindu—Muslim riots in India." *Journal of Peace Research* 47.5 (2010): 589-600.
- Crepaz, Markus ML. "Consensus Versus Majoritarian Democracy Political Institutions and their Impact on Macroeconomic Performance and Industrial Disputes." *Comparative Political Studies* 29.1 (1996): 4-26.
- Echeverri-Gent, John. "Weak State, Strong Reforms? Globalization, Partisan Competition and the Paradox of India's Economic Reform'." *Annual Meeting of the American Political Science Association, Boston MA*. 1998.
- Lalvani, Mala. "Coalition Governments: Fiscal Implication for the Indian Economy." *American Review of Political Economy* 3.1 (2005): 127-163.
- Lijphart, Arend. *Patterns of Democracy: Government forms and performance in thirty-six countries*. Yale University Press, 1999.
- Lowell, A. Lawrence. *Governments and Parties in Continental Europe*. Houghton Mifflin, 1896.
- Madison, James. "Federalist 10." *The Federalist Papers* (1787): 77-84.
- Rose, Richard. *What are the Economic Consequences of PR?*. London: Electoral Reform Society, 1992.
- Roubini, Nouriel, and Jeffrey D. Sachs. "Political and economic determinants of budget deficits in the industrial democracies." *European Economic Review* 33.5 (1989): 903-933.
- Powell Jr, G. Bingham. "Party systems and political system performance: Voting participation, government stability and mass violence in contemporary democracies." *The American Political Science Review* (1981): 861-879.
- Varshney, Ashutosh, and Steven Wilkinson. "Varshney-Wilkinson Dataset on Hindu-Muslim Violence in India, 1950-1995, Version 2. ICPSR04342-v1. Cambridge, MA: Harvard University, WCFIA [producer], 2004." *Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor]* (2006): 02-17.

Appendix

Table: List of states in sample (sorted by number of years of coalition government)

State	No. of Years of Coalition Govt. (1981-2010)*	Avg. Per Capita Income Growth (1981-2010) (%)**
1. Tamil Nadu	30	5.17
2. Kerala	30	4.34
3. West Bengal	30	3.94
4. Bihar	21	2.95
5. Maharashtra	16	4.89
6. Uttar Pradesh	14	2.38
7. Haryana	13	4.32
8. Assam	12	1.97
9. Punjab	9	3.16
10. Orissa	8	3.07
11. Gujarat	5	4.78
12. Karnataka	4	4.32
13. Rajasthan	3	3.81
14. Andhra Pradesh	2	4.82
15. Madhya Pradesh	0	2.75

* Includes electoral and non-electoral coalitions

** Calculated at base year 2004-2005

Table: List of states in sample (sorted by number of years of coalition government)

State	No. of Years of Coalition Govt. (1997-2010)*	Avg. No. of Crimes against SC/ST (1997-2010)	SC/ST Population (2001) (%)
1. Tamil Nadu	14	1414	20.04
2. Kerala	14	598	10.95
3. Bihar	14	2021	16.63
4. Maharashtra	14	1057	11.05
5. Uttar Pradesh	10	6341	21.16
6. Orissa	8	1681	38.66
7. Karnataka	4	1891	22.75
8. Andhra Pradesh	2	3523	22.78
9. Madhya Pradesh	0	5834	35.44
10. Rajasthan	0	5828	29.68
11. Gujarat	0	1574	21.85

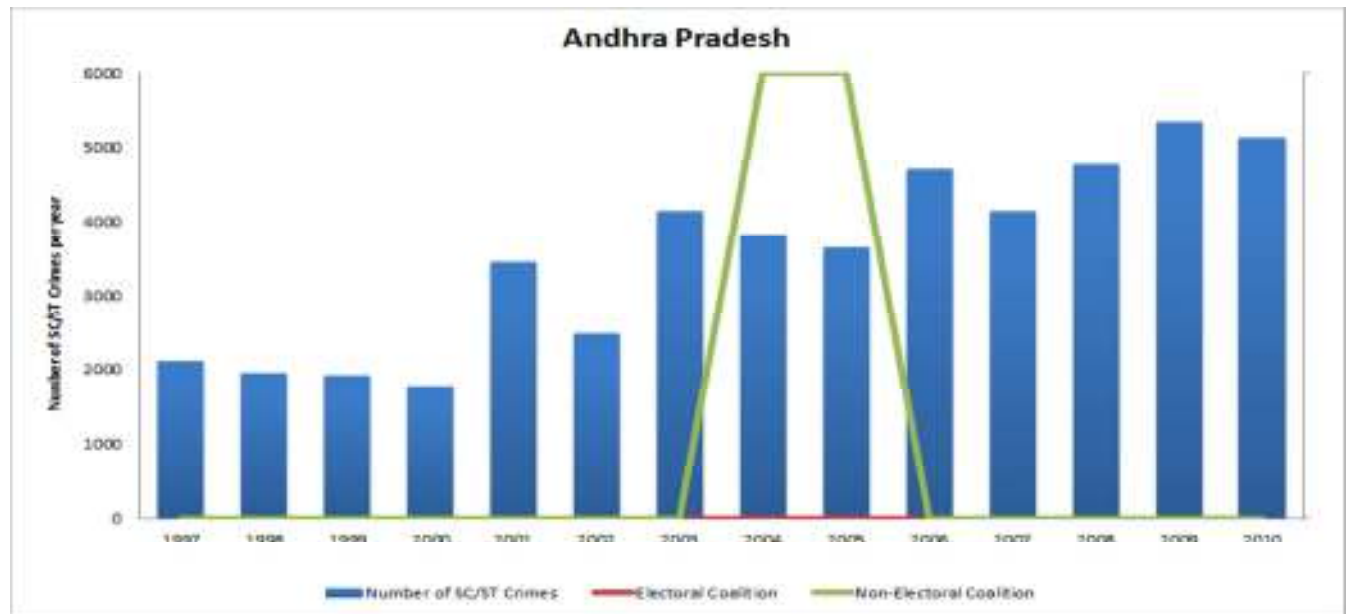
* Includes electoral and non-electoral coalitions

Table: List of states in sample (sorted by number of years of coalition government)

State	No. of Years of Coalition Govt. (1981-1995)*	Avg. No. of Hindu-Muslim Riots (1981-1995)	Muslim Population (1991) (%)
1. Tamil Nadu	15	0.87	5.47
2. Kerala	15	0.33	23.33
3. West Bengal	15	1.4	23.61
4. Bihar	6	3.07	14.81
5. Gujarat	5	13.07	8.73
6. Haryana	4	0.13	4.64
7. Uttar Pradesh	3	6.4	17.33
8. Rajasthan	3	1.27	8.01
9. Assam	2	0.67	28.43
10. Maharashtra	1	7.93	9.67
11. Karnataka	0	4.07	11.64
12. Madhya Pradesh	0	1.4	4.96
13. Orissa	0	0.4	1.83
14. Andhra Pradesh	0	0.07	8.91
15. Punjab	0	0	1.18

* Includes electoral and non-electoral coalitions

Figure: Crimes against SC/ST and Form of State Government – Andhra Pradesh²⁰



²⁰ Electoral and non-electoral coalition are zero if a single-party government is in place; non-zero if not. As an example, figure above shows that Andhra Pradesh experienced a non-electoral coalition government in 2004 and 2005 and a single-party government for all the remaining years implying no electoral coalition government was formed during these years. Similarly, the figure below shows that Bihar experienced a non-electoral coalition government from 1997-1999 and an electoral coalition government from 2000-2010, indicating that no single-party government was formed in Bihar in the 14 years from 1997-2010.

Figure: Crimes against SC/ST and Form of State Government - Bihar

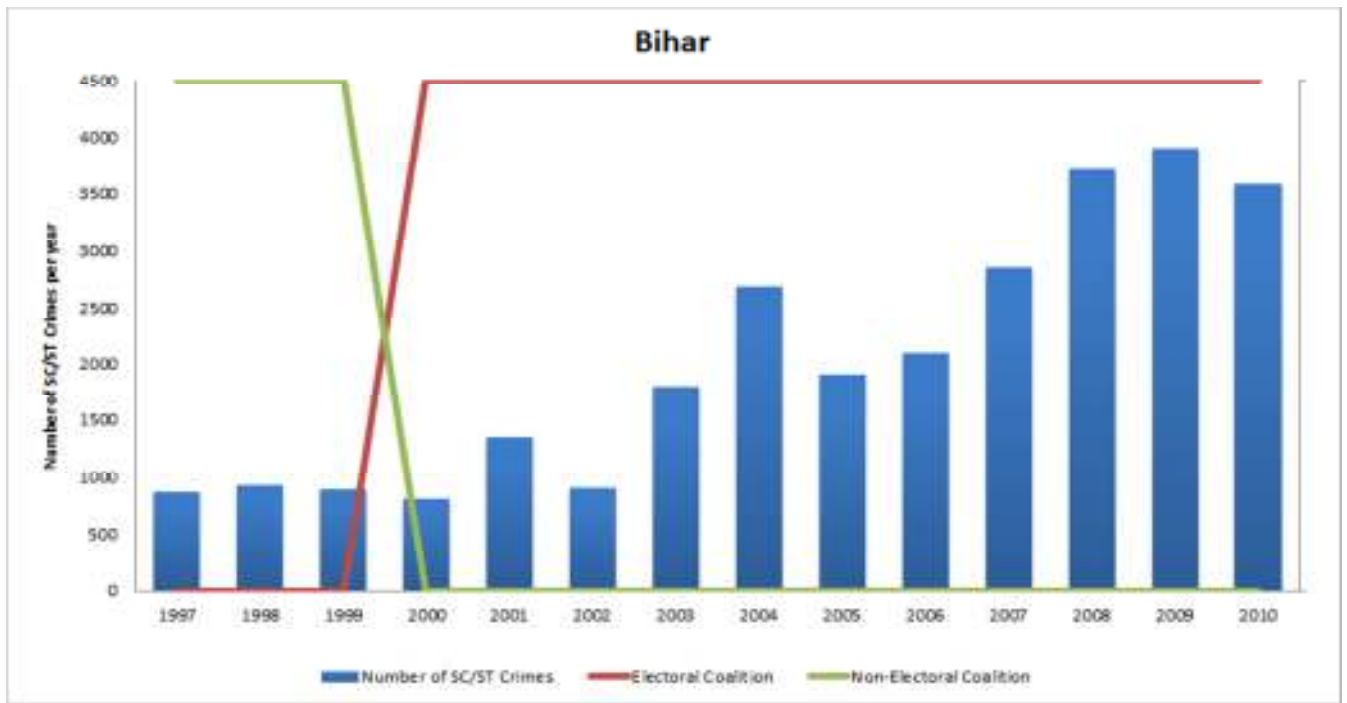


Figure: Crimes against SC/ST and Form of State Government - Gujarat

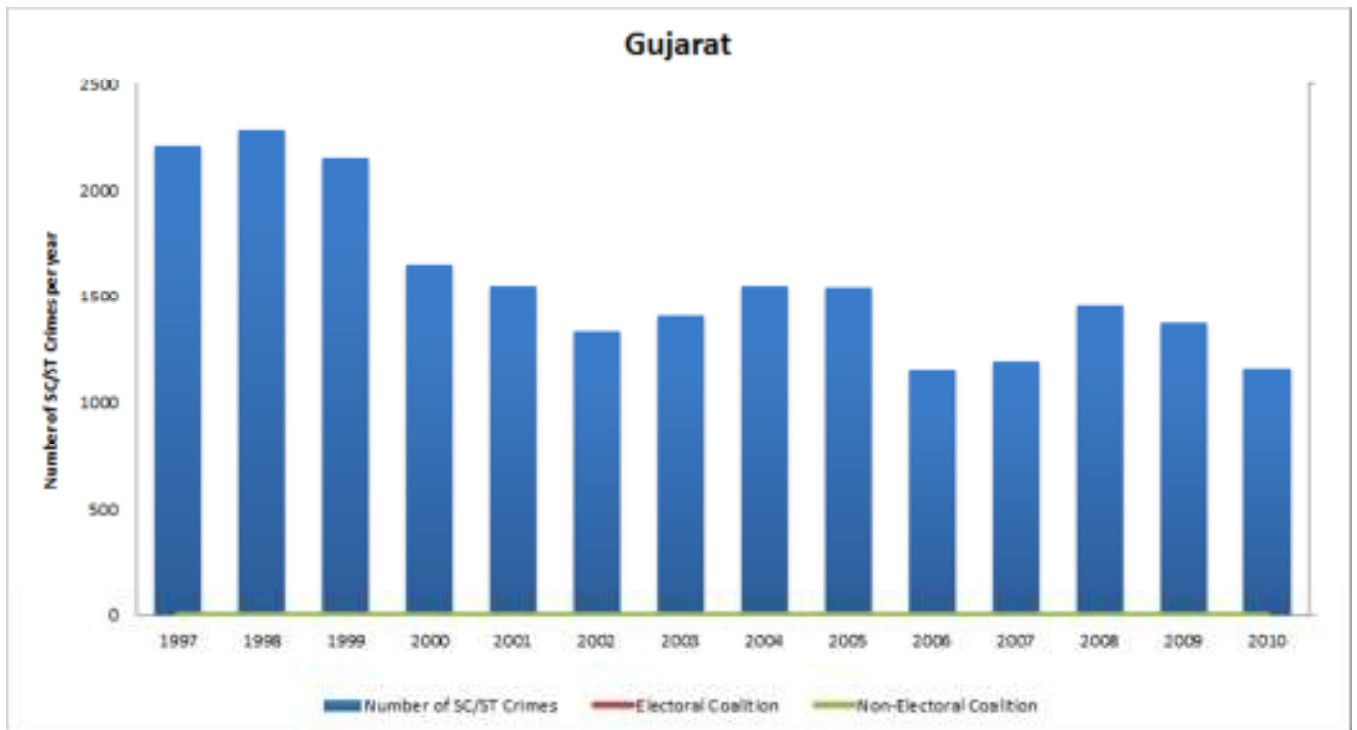


Figure: Crimes against SC/ST and Form of State Government - Karnataka

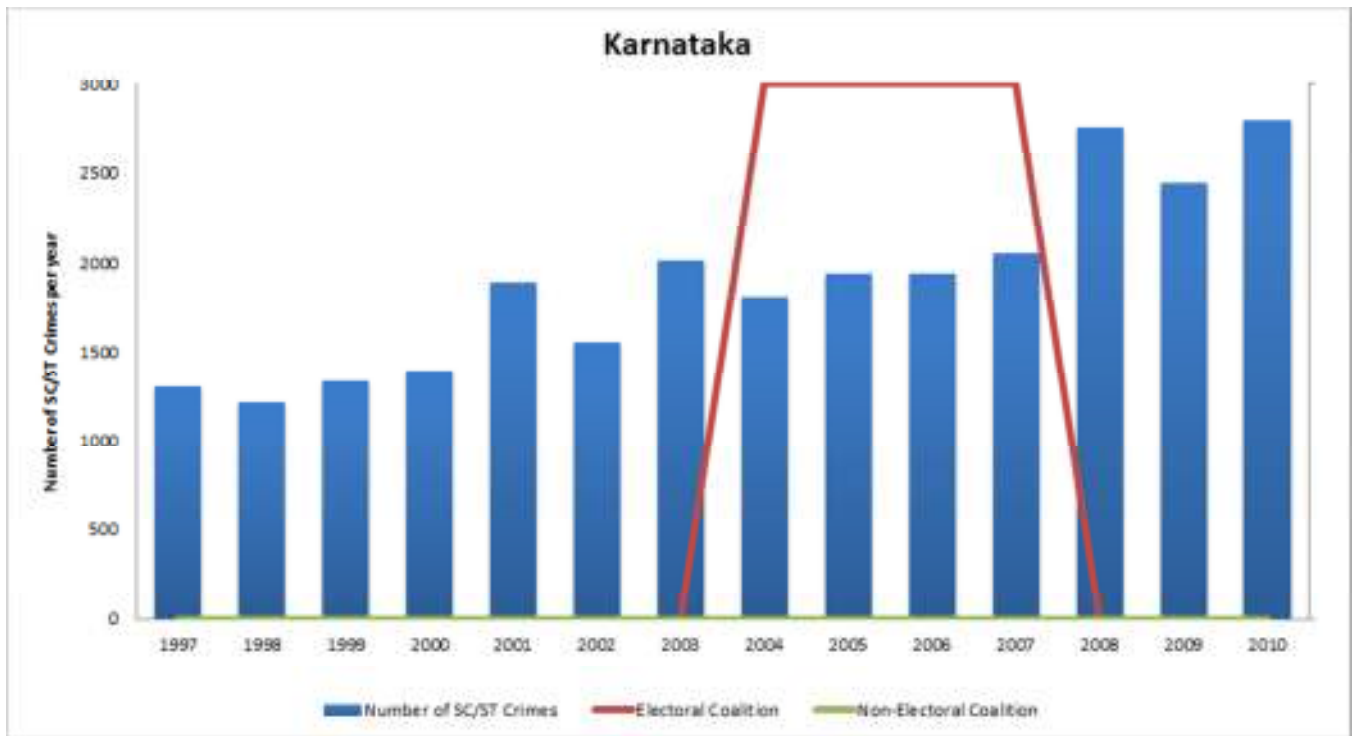


Figure: Crimes against SC/ST and Form of State Government - Kerala

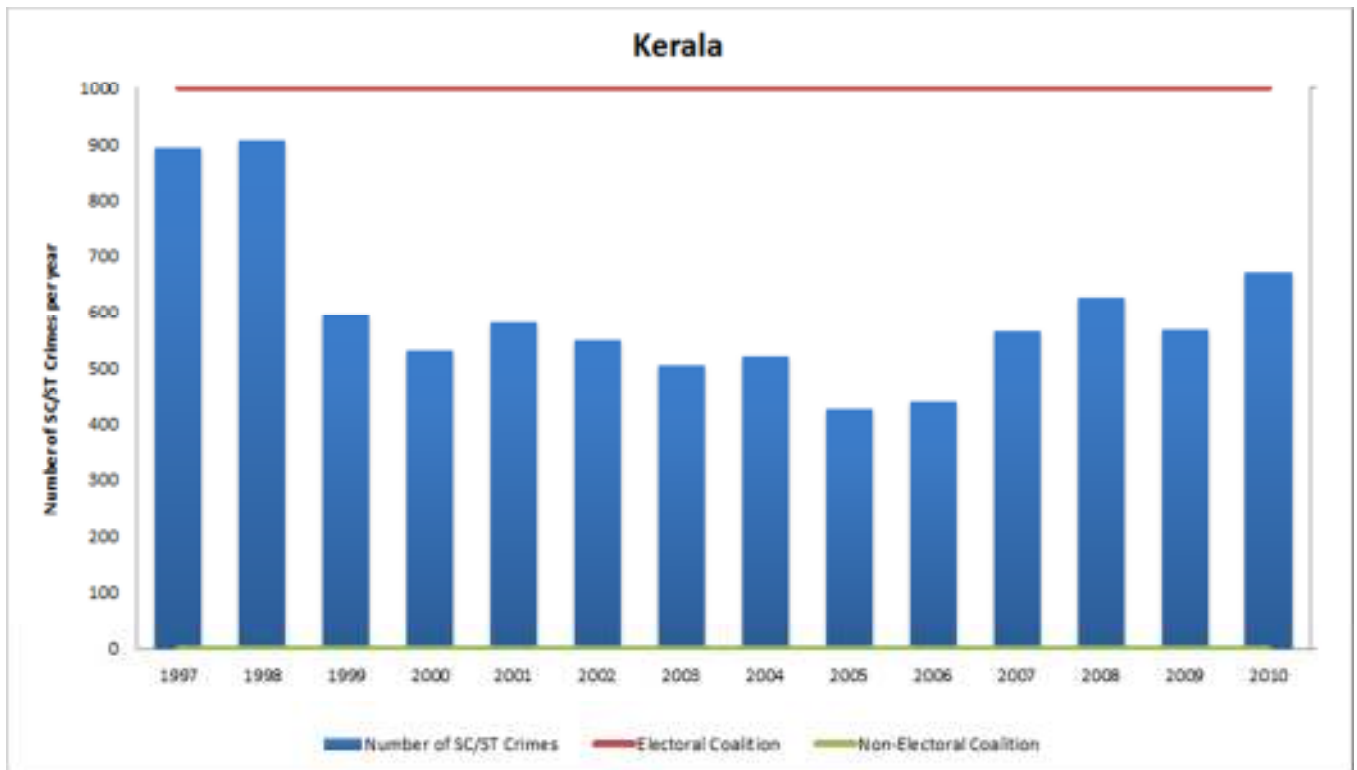


Figure: Crimes against SC/ST and Form of State Government – Madhya Pradesh

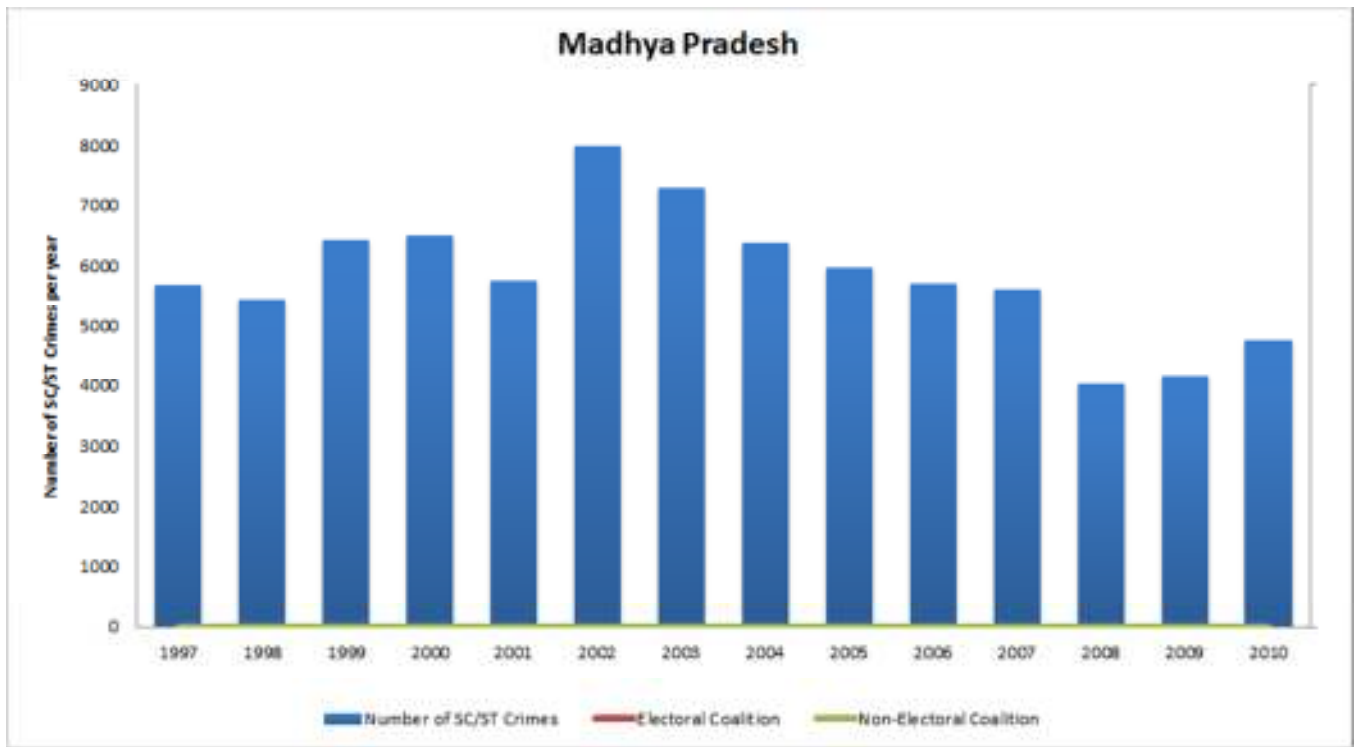


Figure: Crimes against SC/ST and Form of State Government - Maharashtra

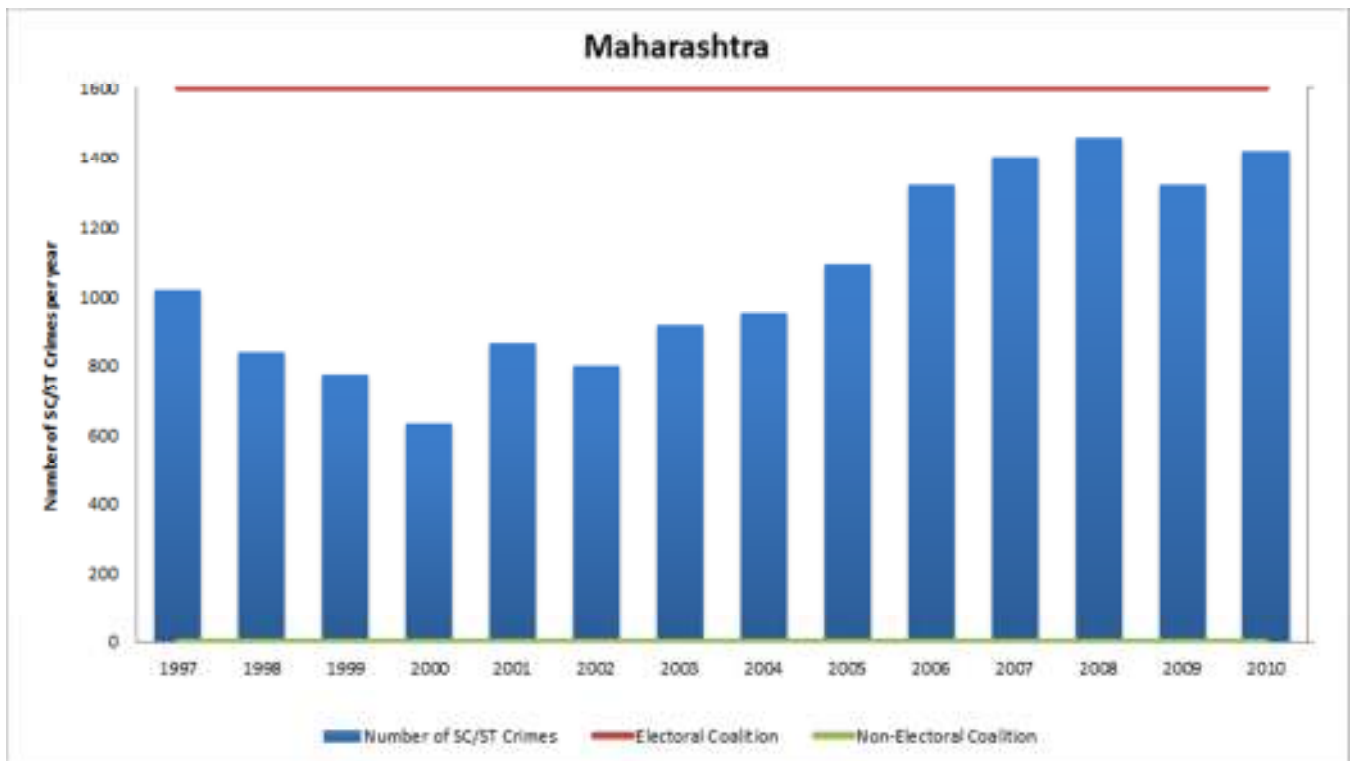


Figure: Crimes against SC/ST and Form of State Government - Orissa

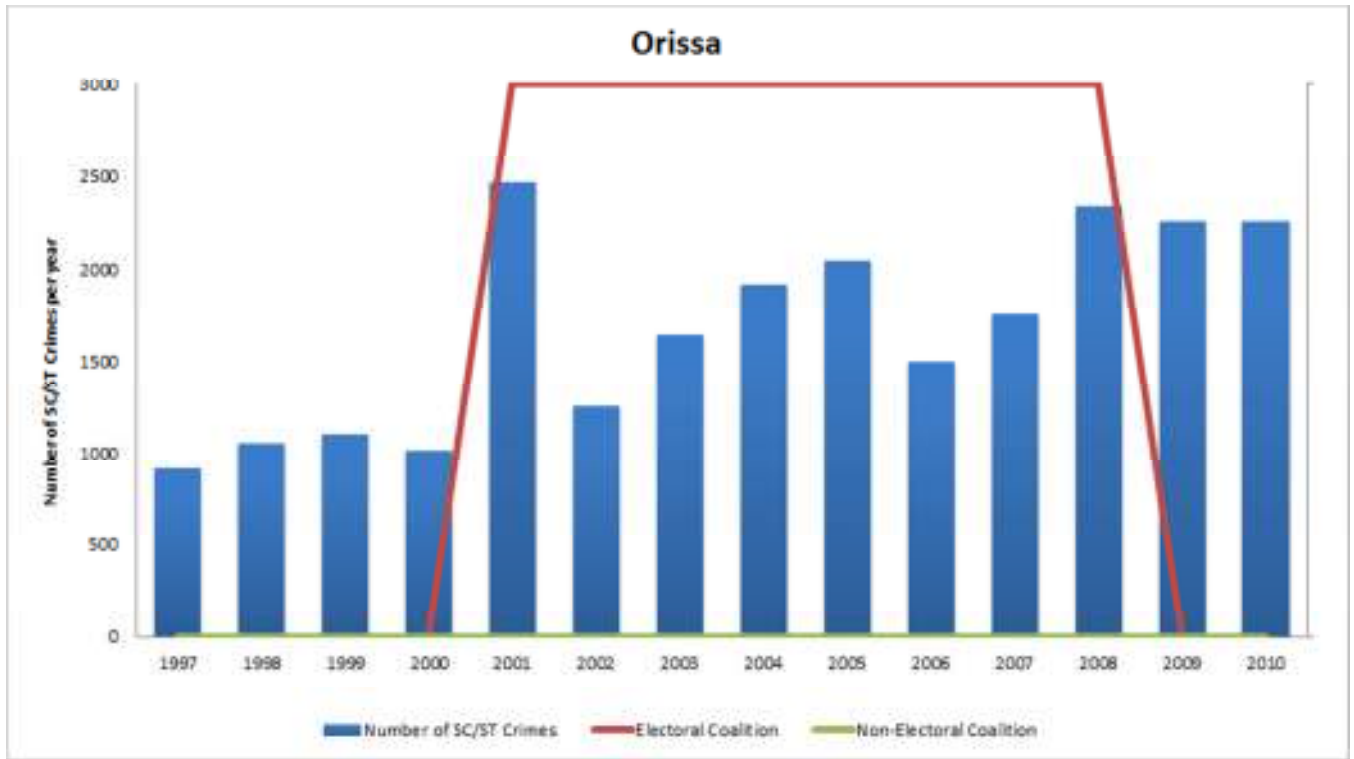


Figure: Crimes against SC/ST and Form of State Government - Rajasthan

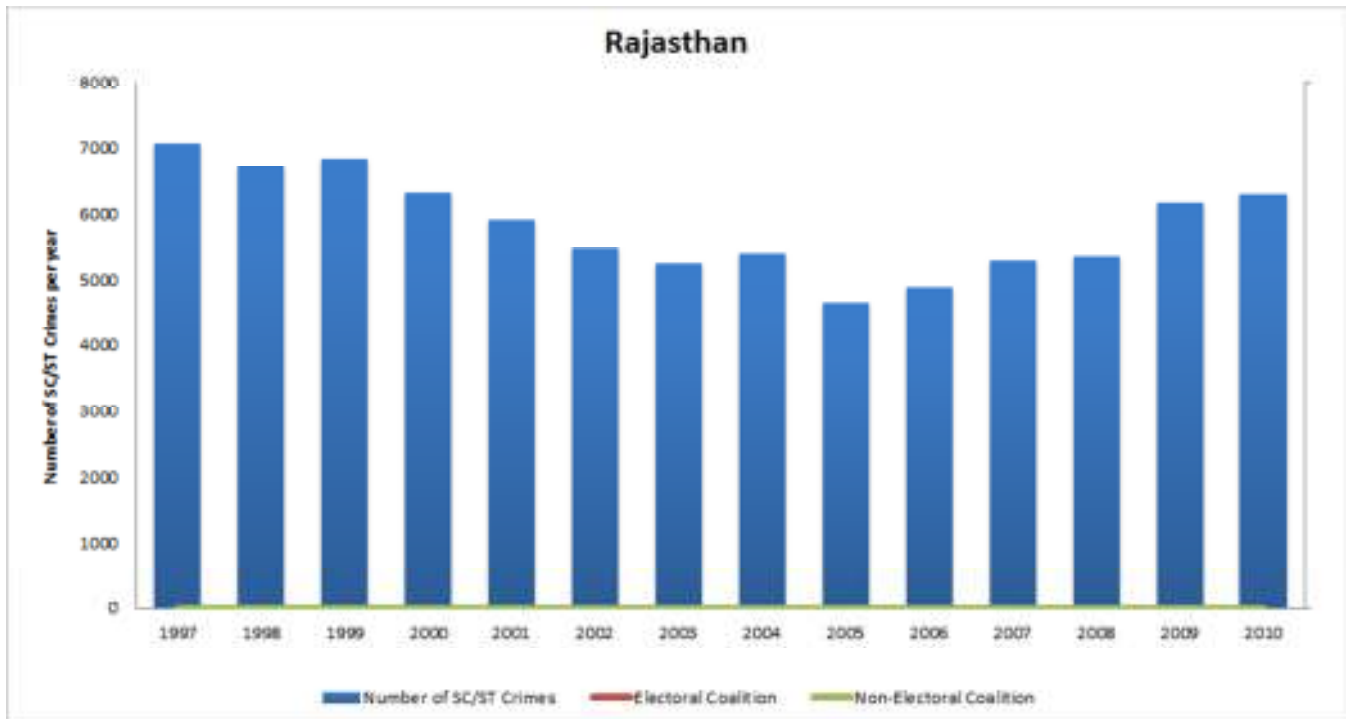


Figure: Crimes against SC/ST and Form of State Government – Tamil Nadu

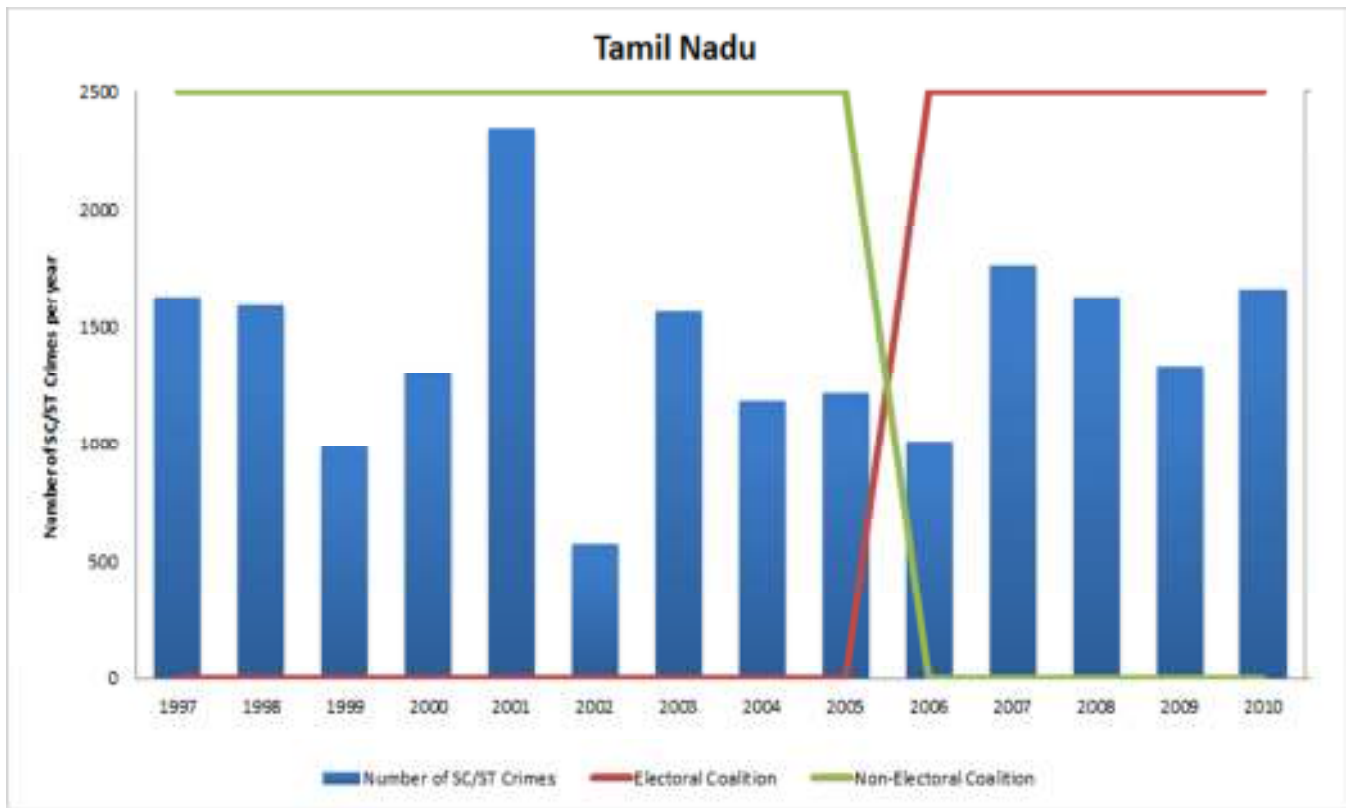


Figure: Crimes against SC/ST and Form of State Government – Uttar Pradesh

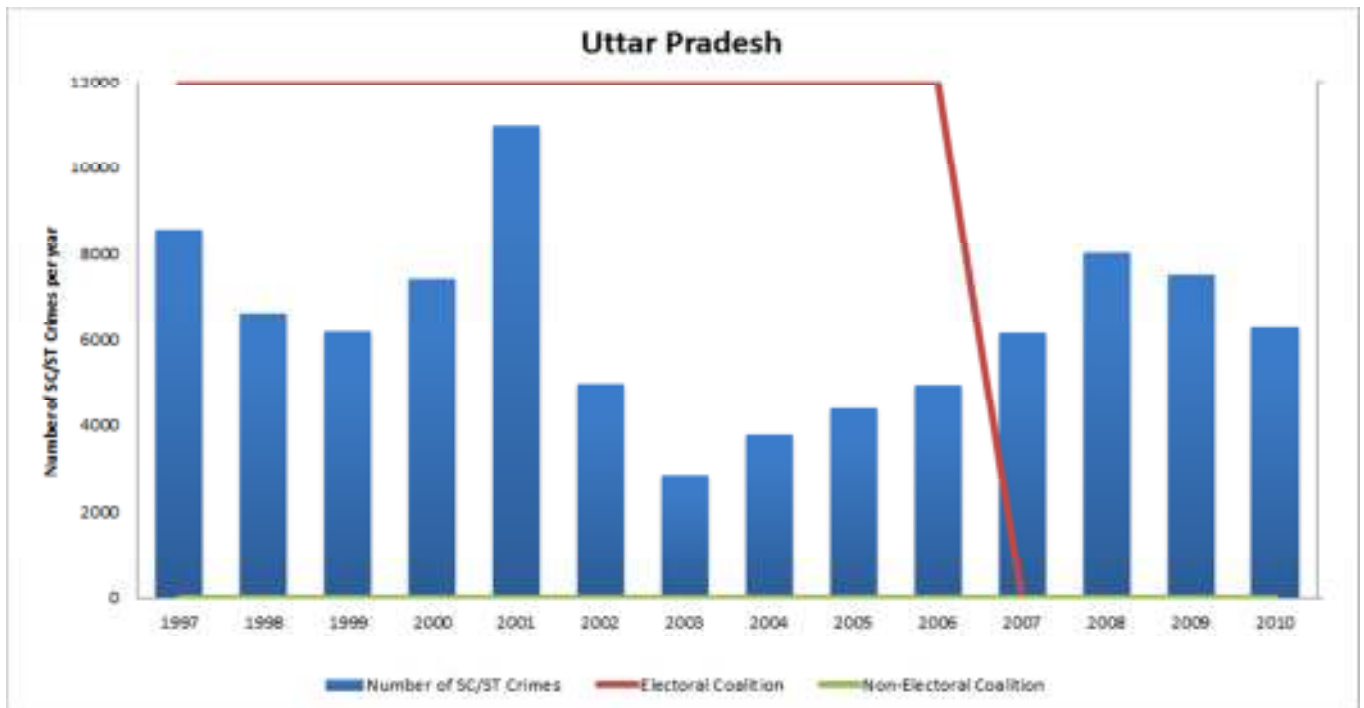


Figure: Hindu-Muslim Riots and Form of State Government - Bihar

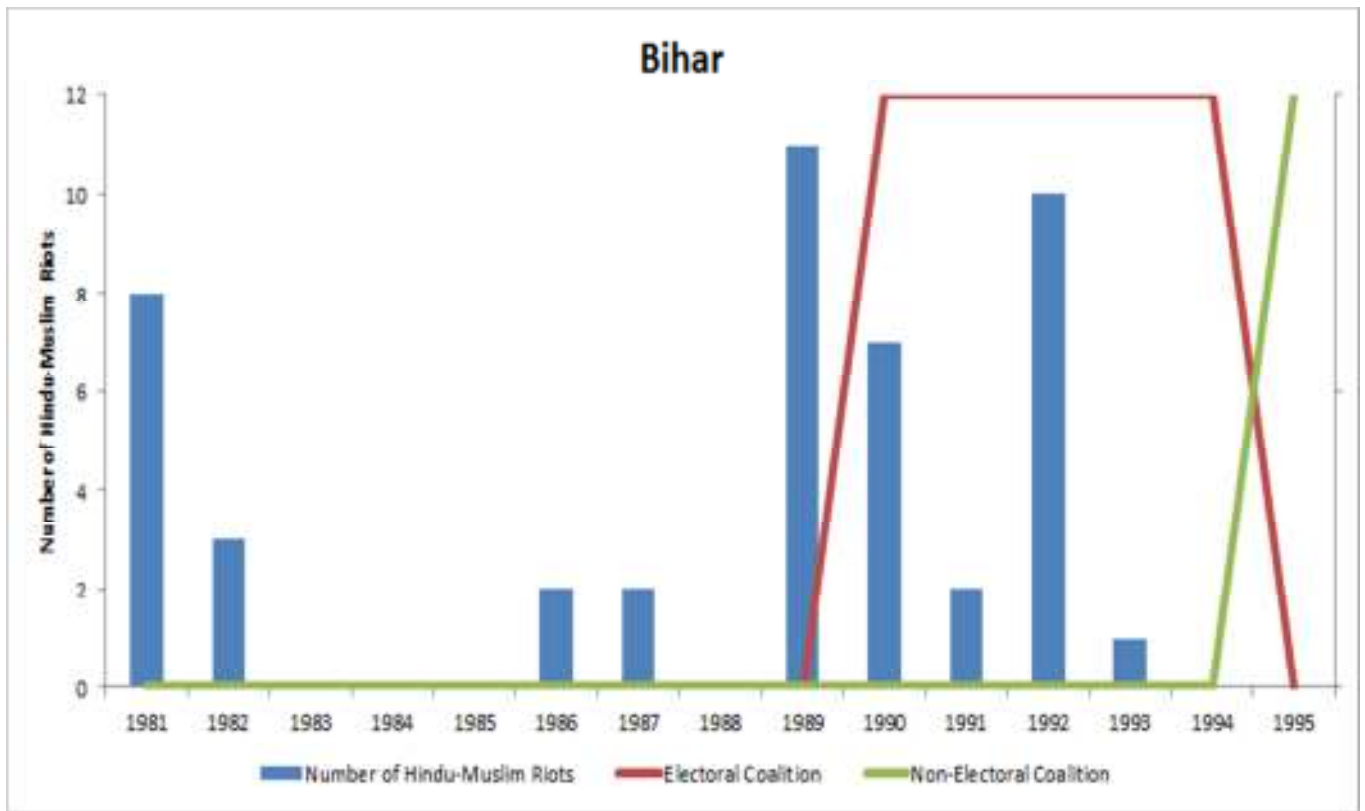


Figure: Hindu-Muslim Riots and Form of State Government - Gujarat

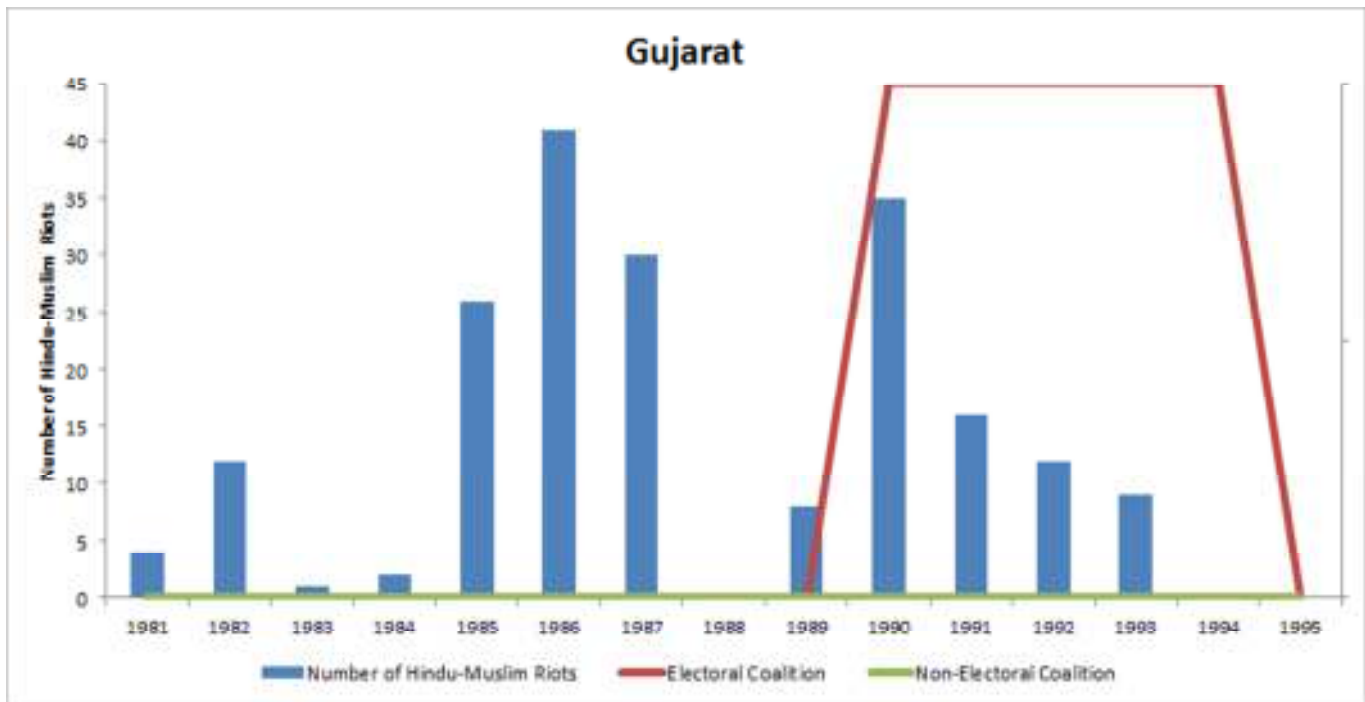


Figure: Hindu-Muslim Riots and Form of State Government - Karnataka

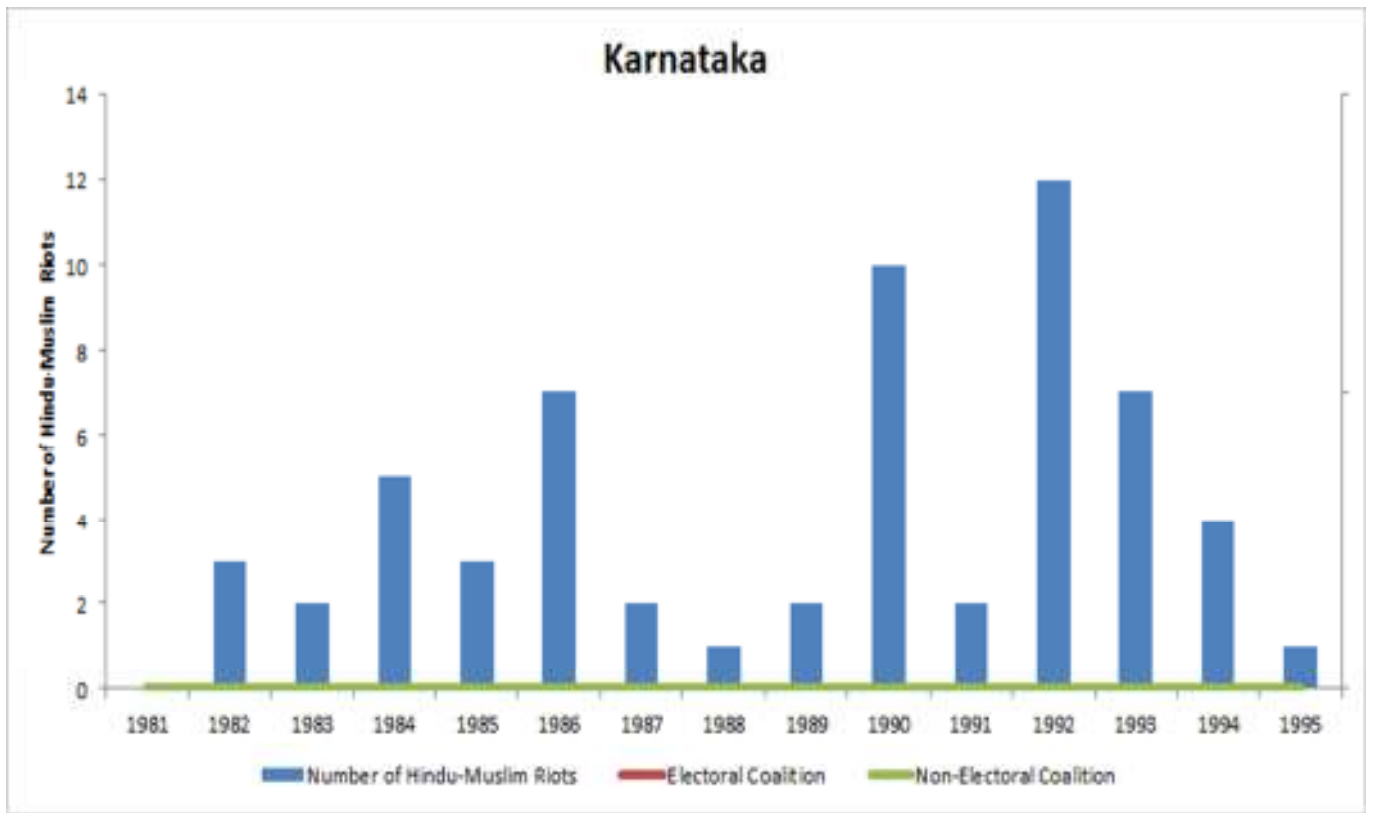


Figure: Hindu-Muslim Riots and Form of State Government - Kerala

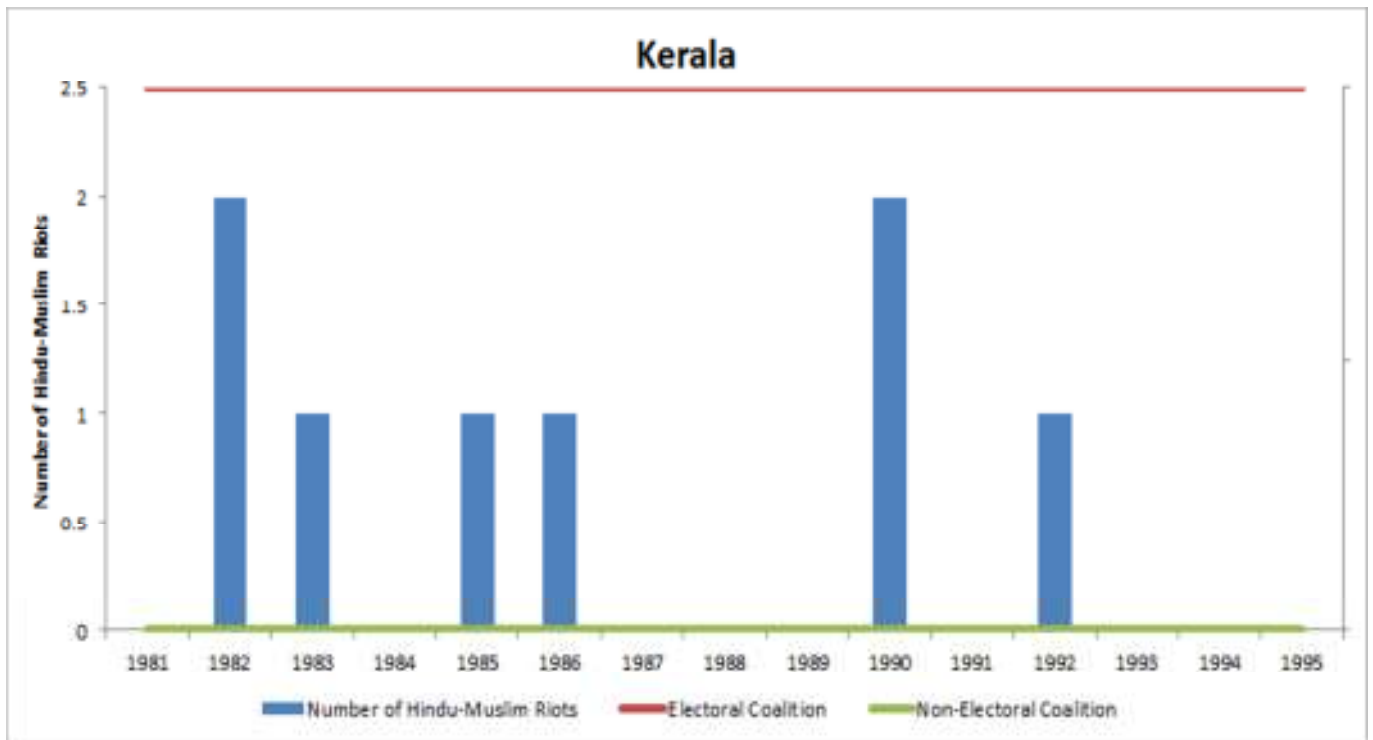


Figure: Hindu-Muslim Riots and Form of State Government – Madhya Pradesh

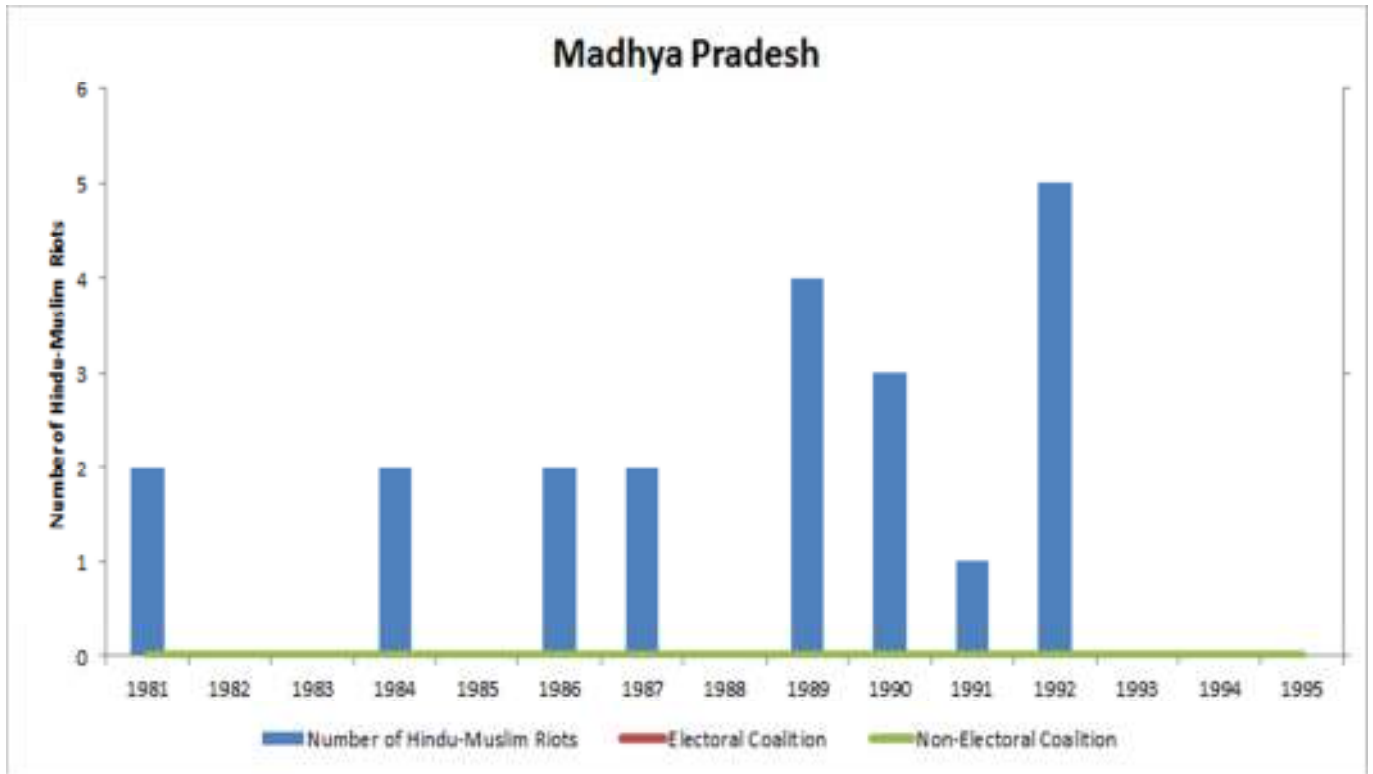


Figure: Hindu-Muslim Riots and Form of State Government - Maharashtra

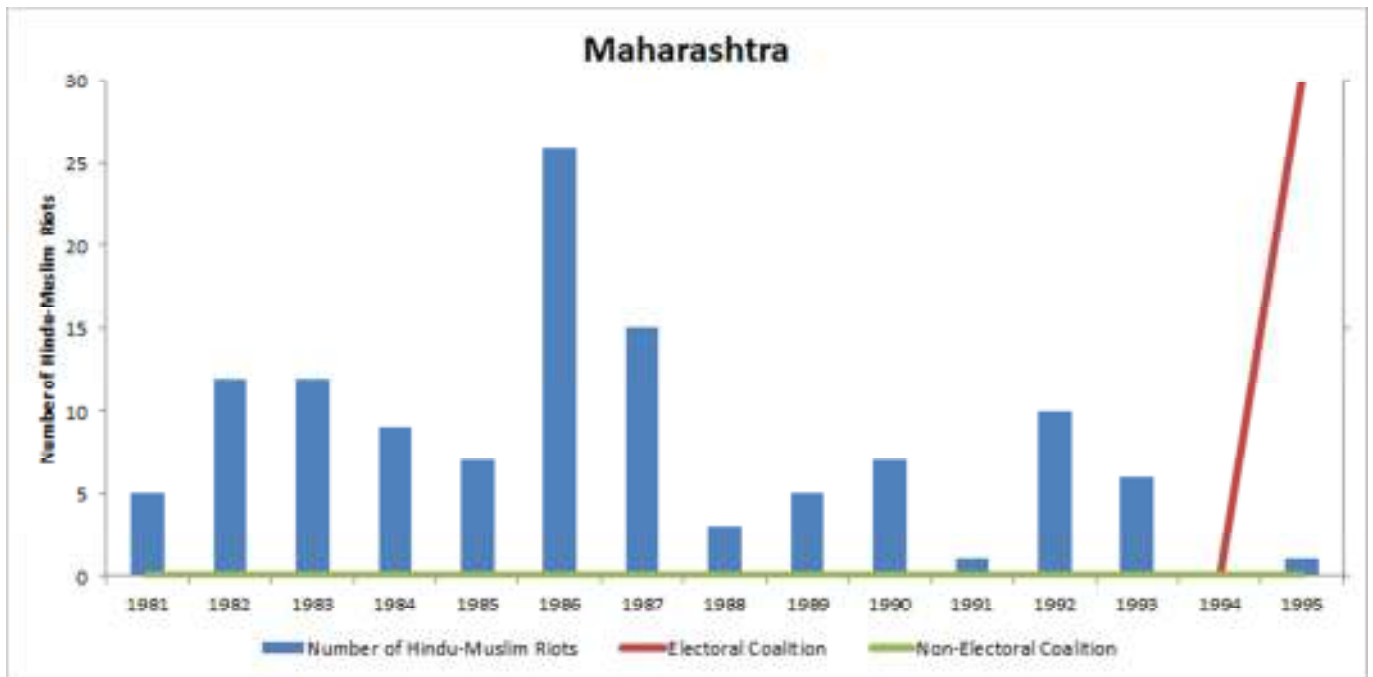


Figure: Hindu-Muslim Riots and Form of State Government - Rajasthan

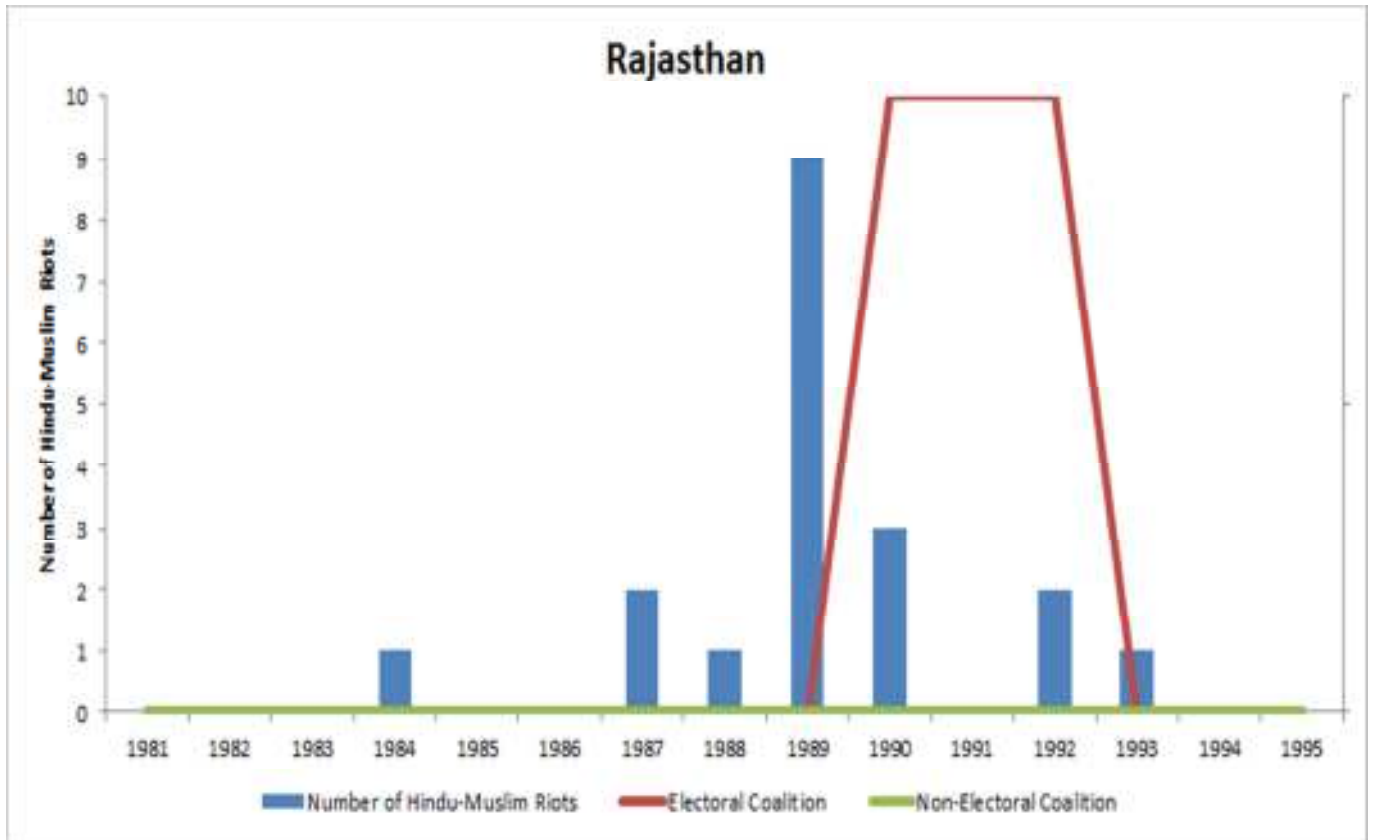


Figure: Hindu-Muslim Riots and Form of State Government – Tamil Nadu

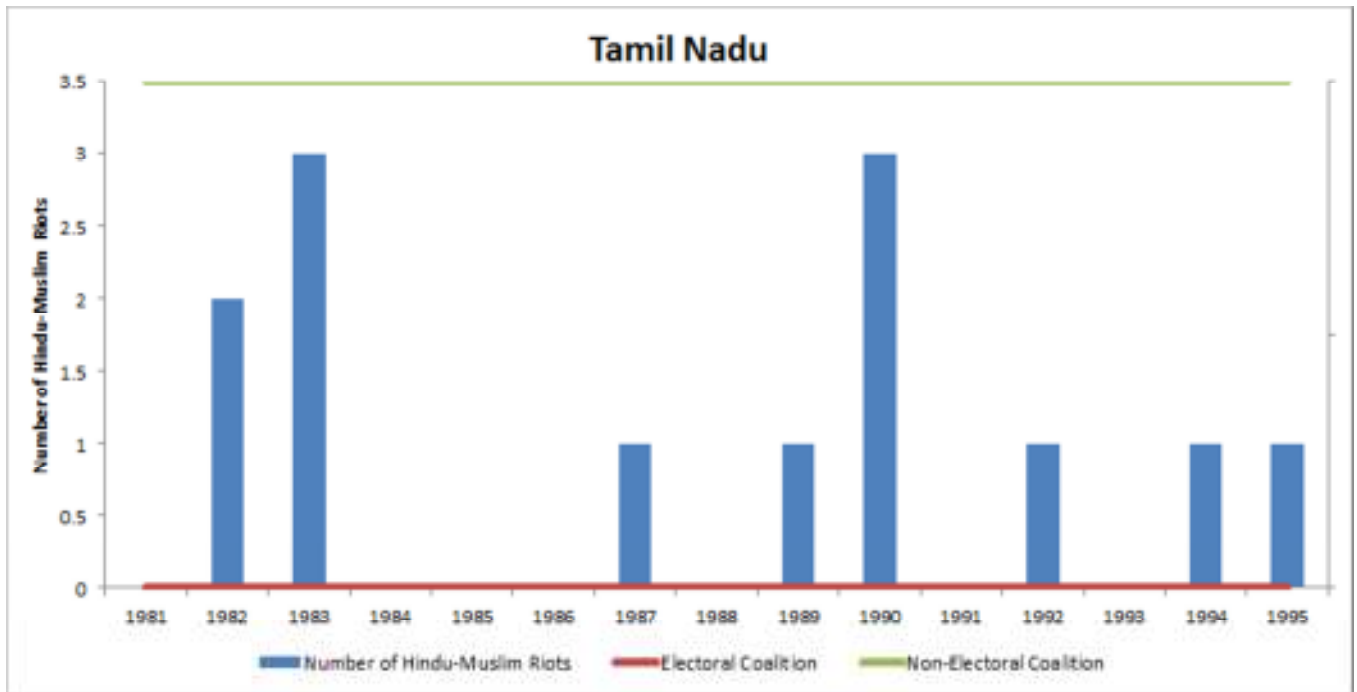


Figure: Hindu-Muslim Riots and Form of State Government – West Bengal

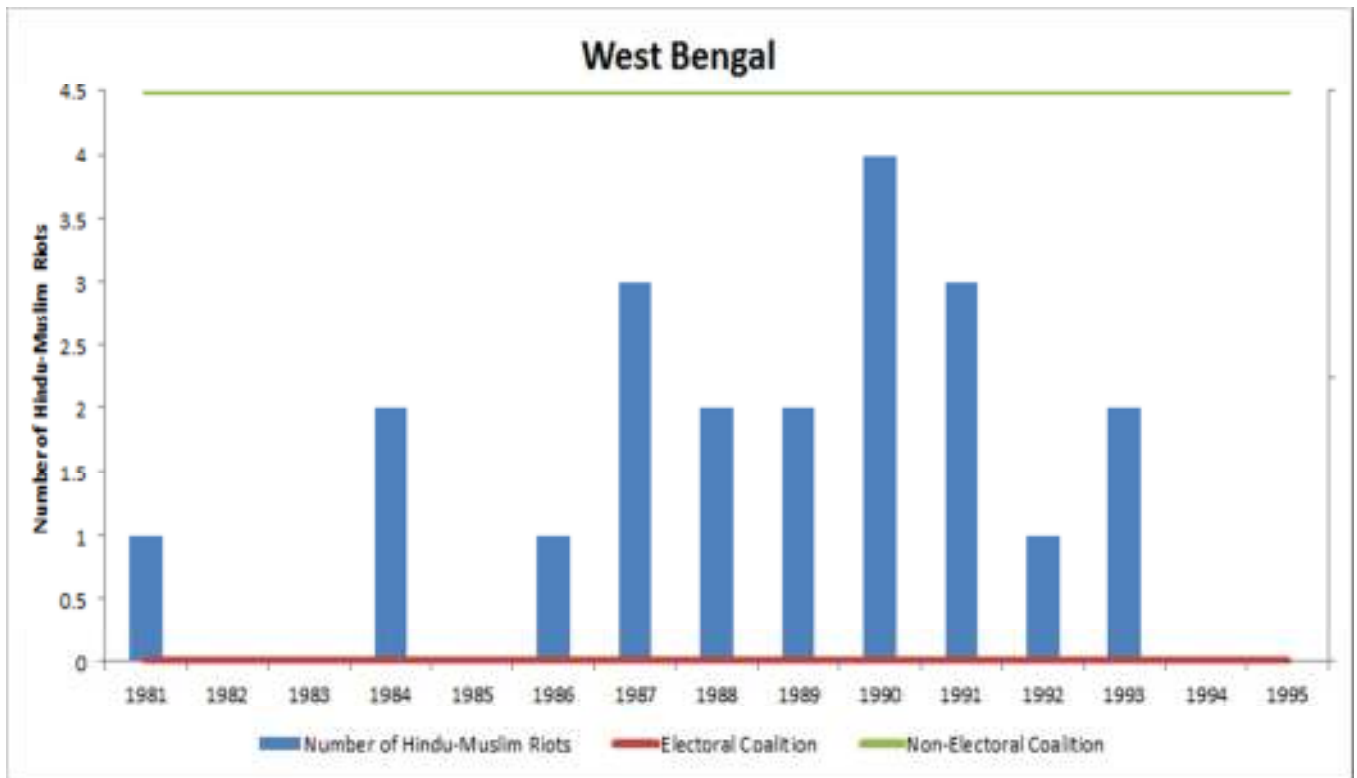


Figure: Hindu-Muslim Riots and Form of State Government – Uttar Pradesh

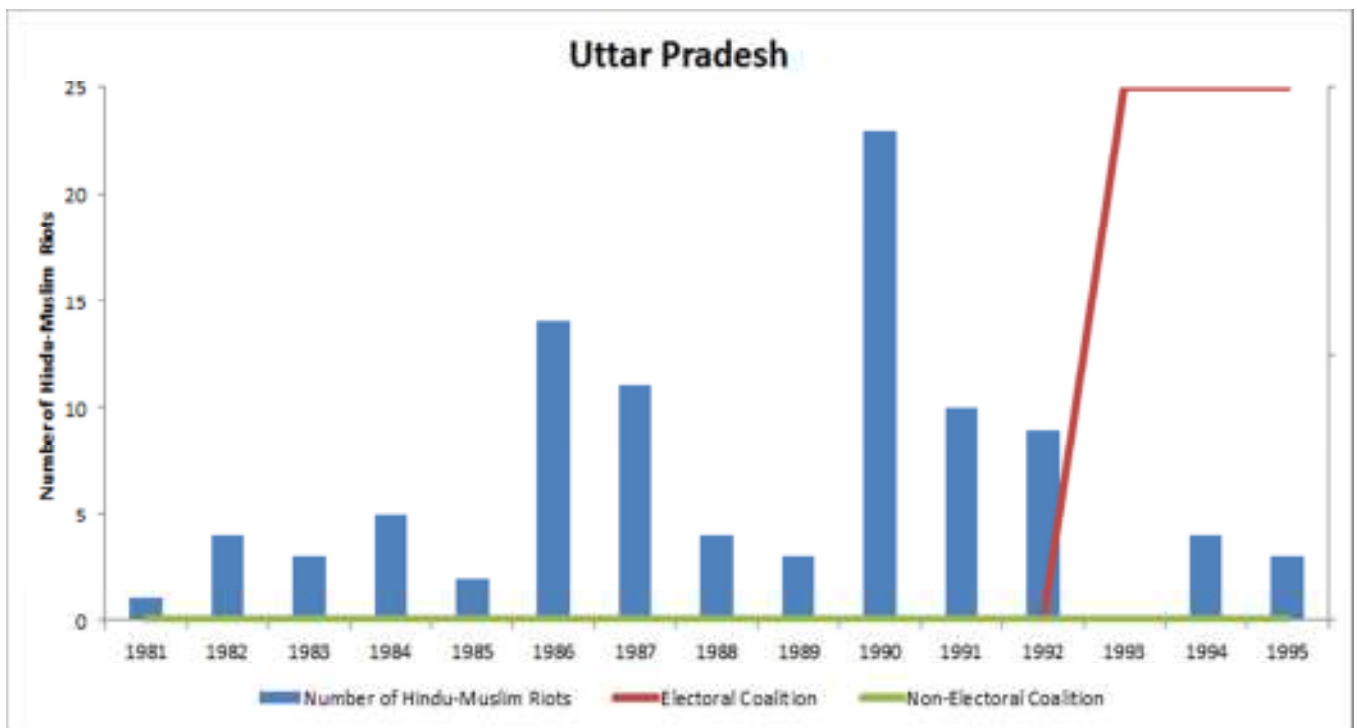


Figure: Hindu-Muslim Riots and Form of State Government - Assam

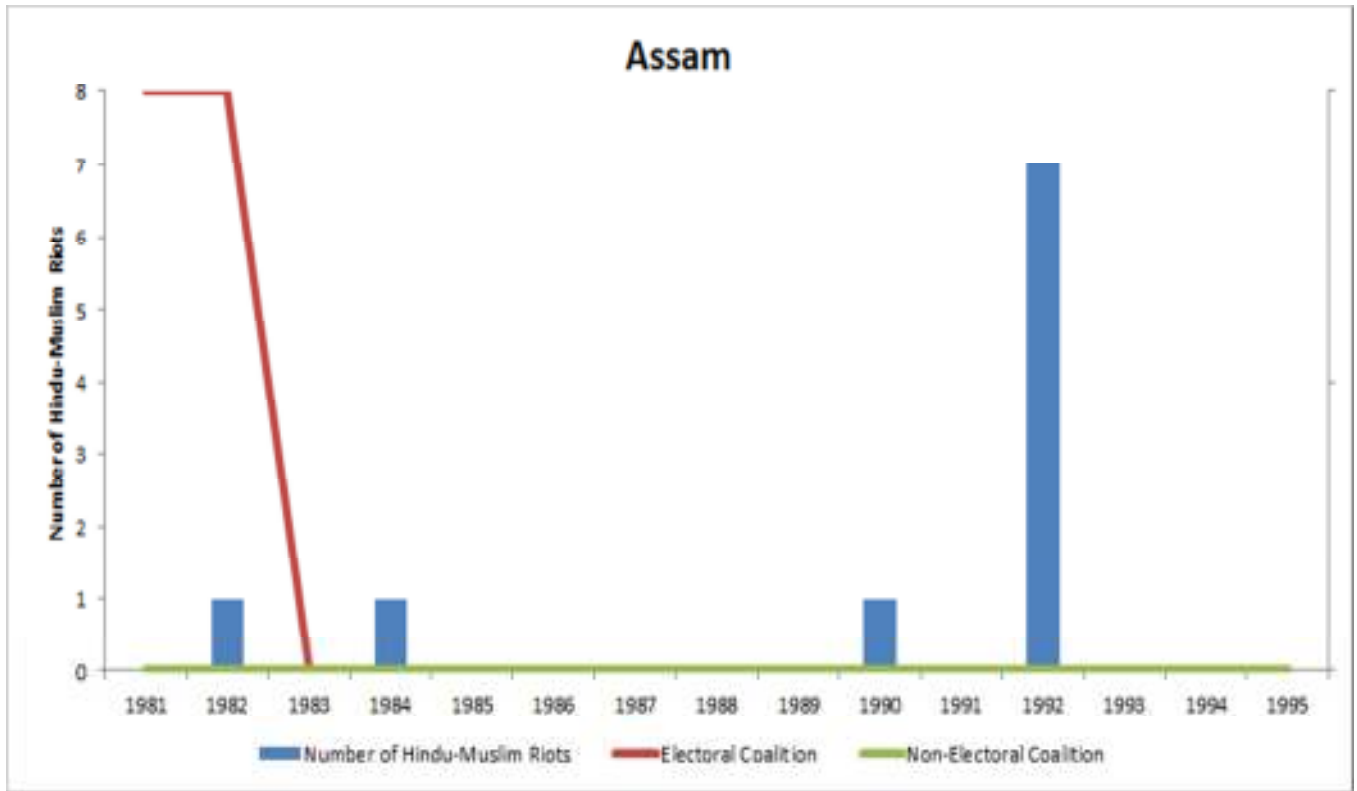


Figure: Per Capita Income Growth and Form of State Government – Andhra Pradesh

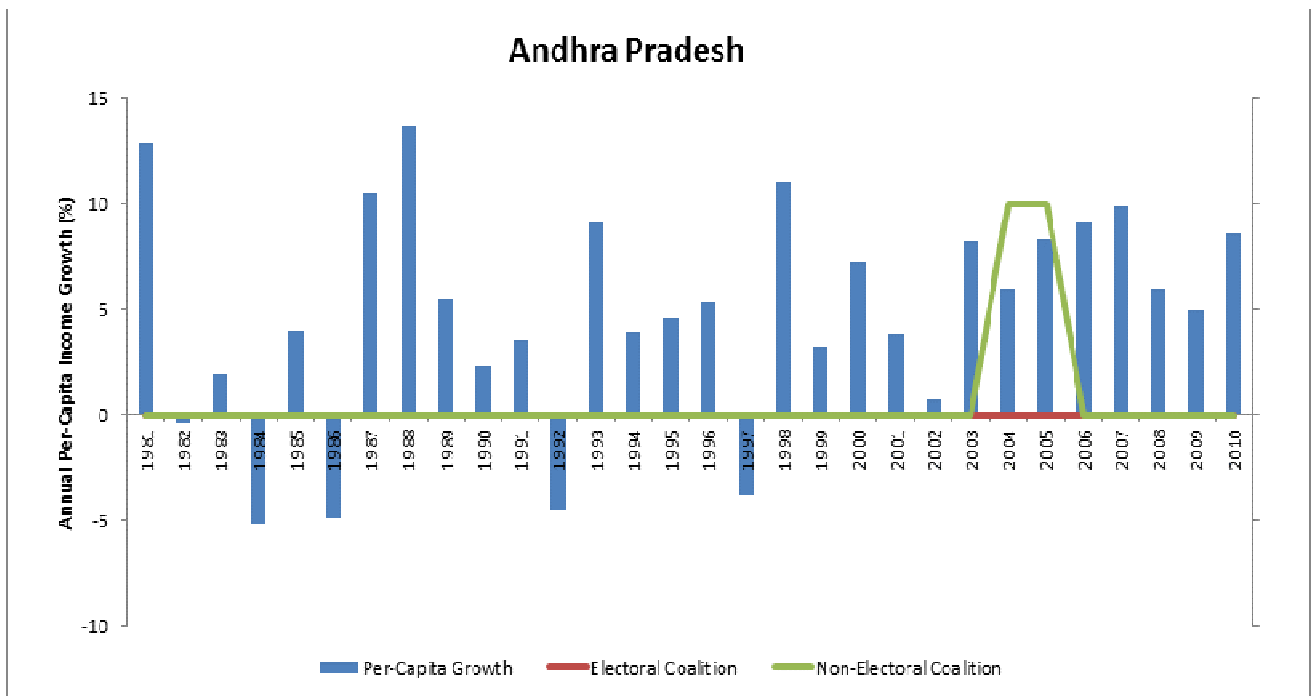


Figure: Per Capita Income Growth and Form of State Government – Bihar

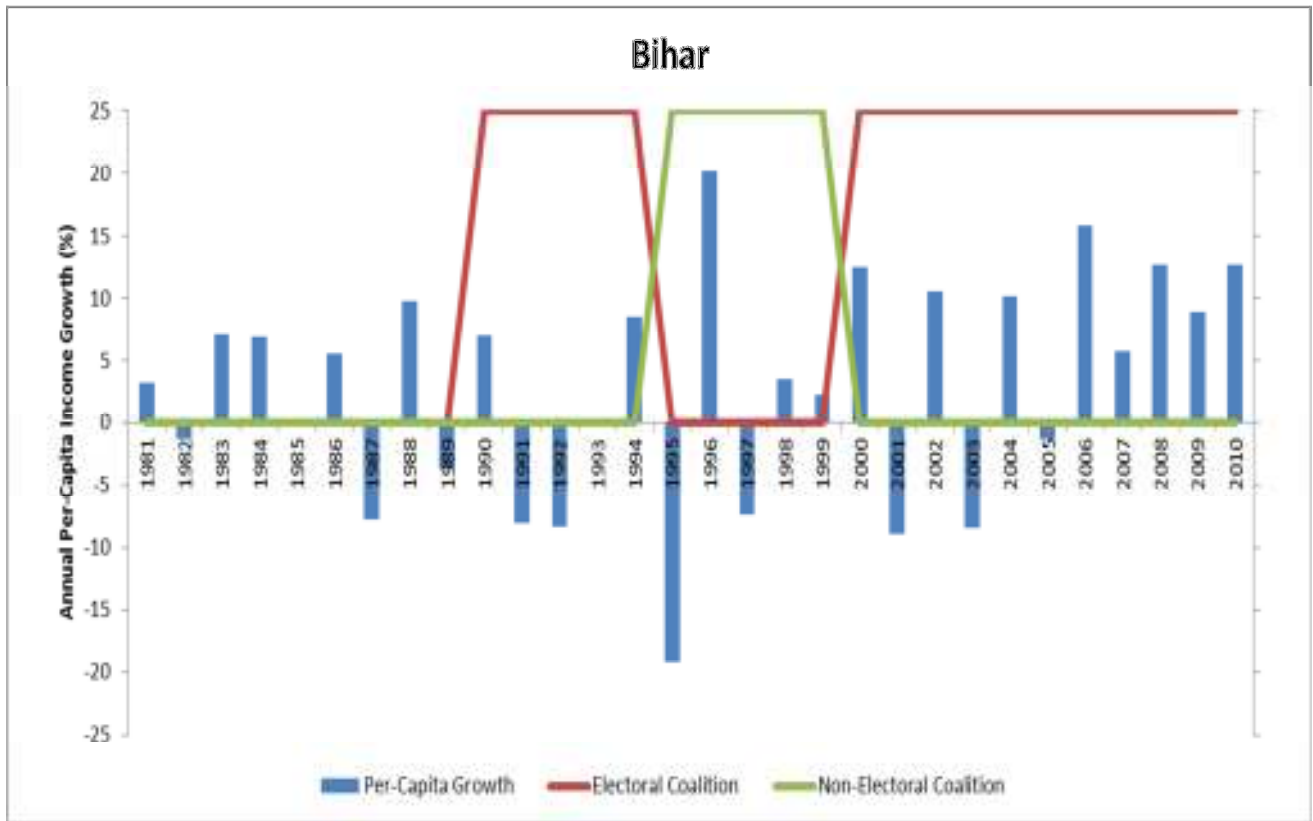


Figure: Per Capita Income Growth and Form of State Government – Gujarat

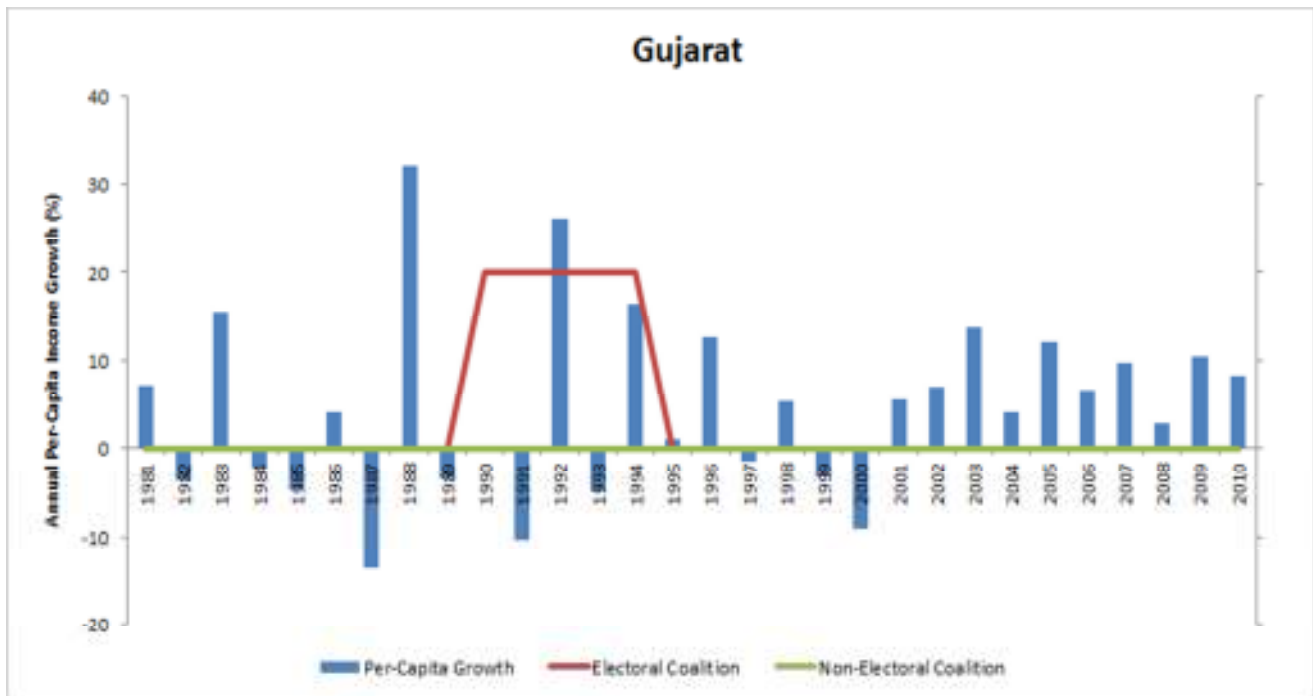


Figure: Per Capita Income Growth and Form of State Government – Haryana

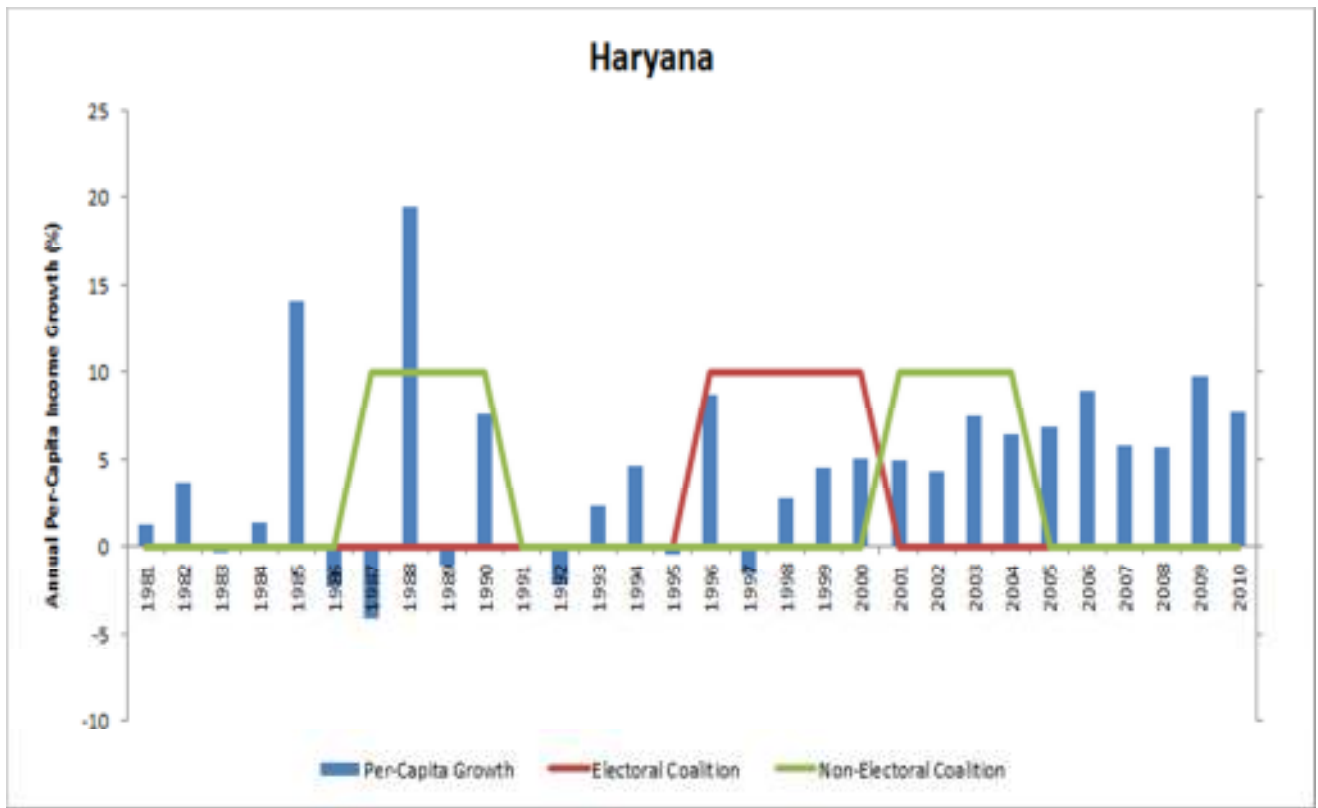


Figure: Per Capita Income Growth and Form of State Government – Karnataka

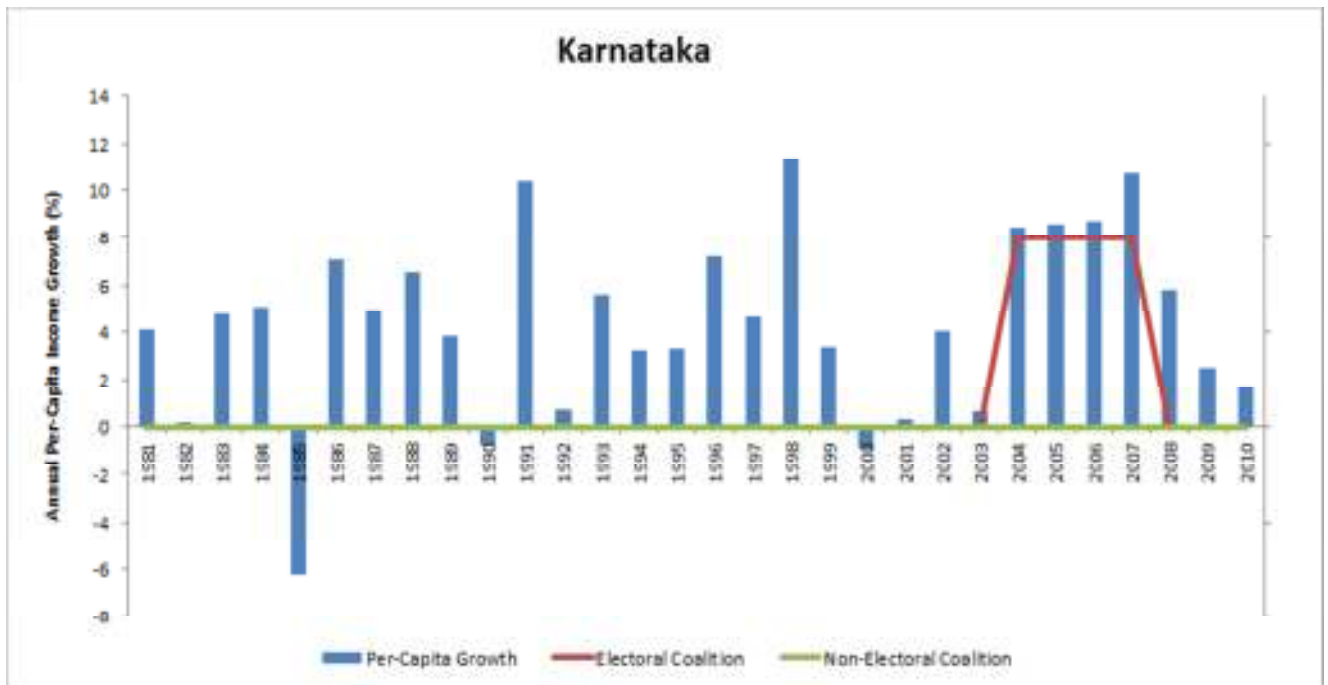


Figure: Per Capita Income Growth and Form of State Government – Kerala

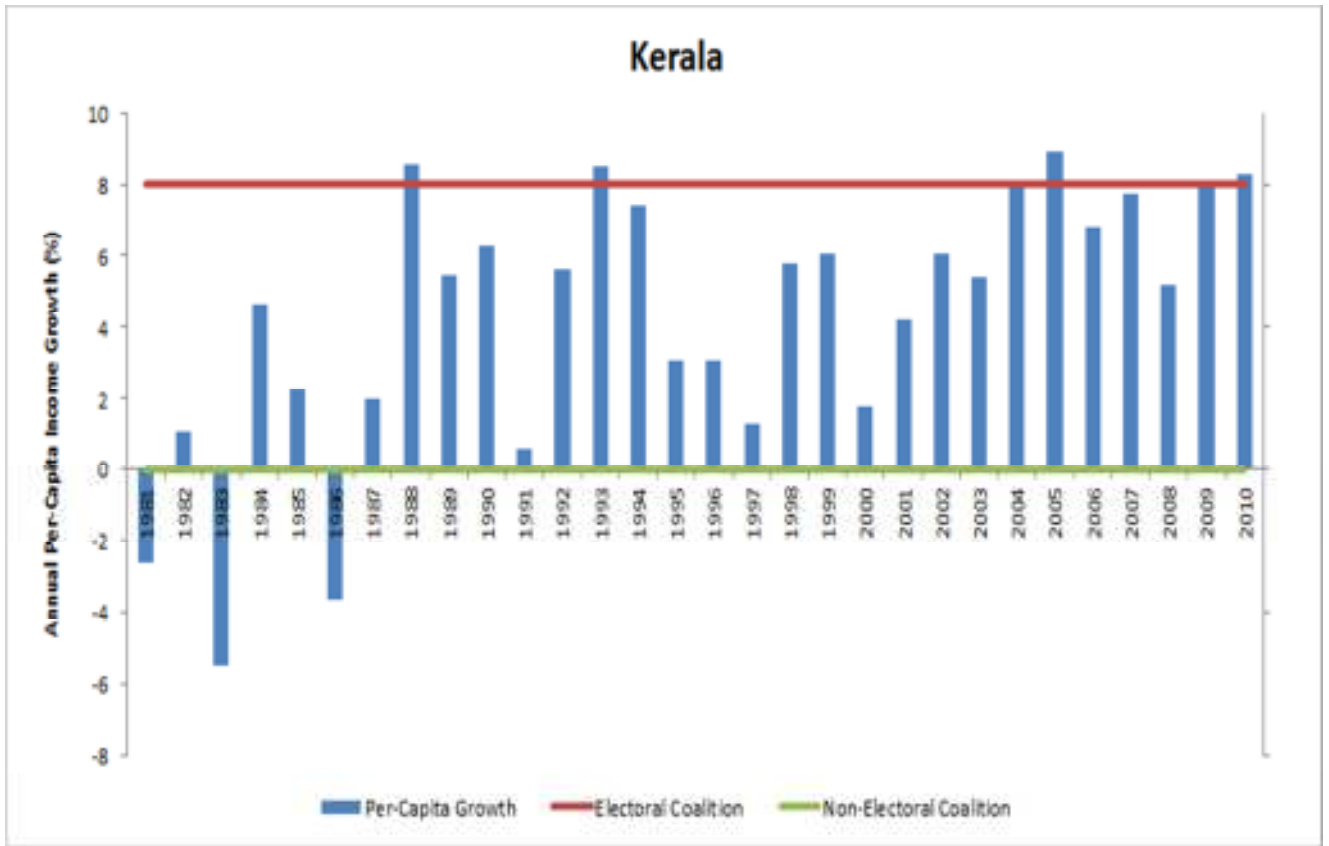


Figure: Per Capita Income Growth and Form of State Government – Madhya Pradesh

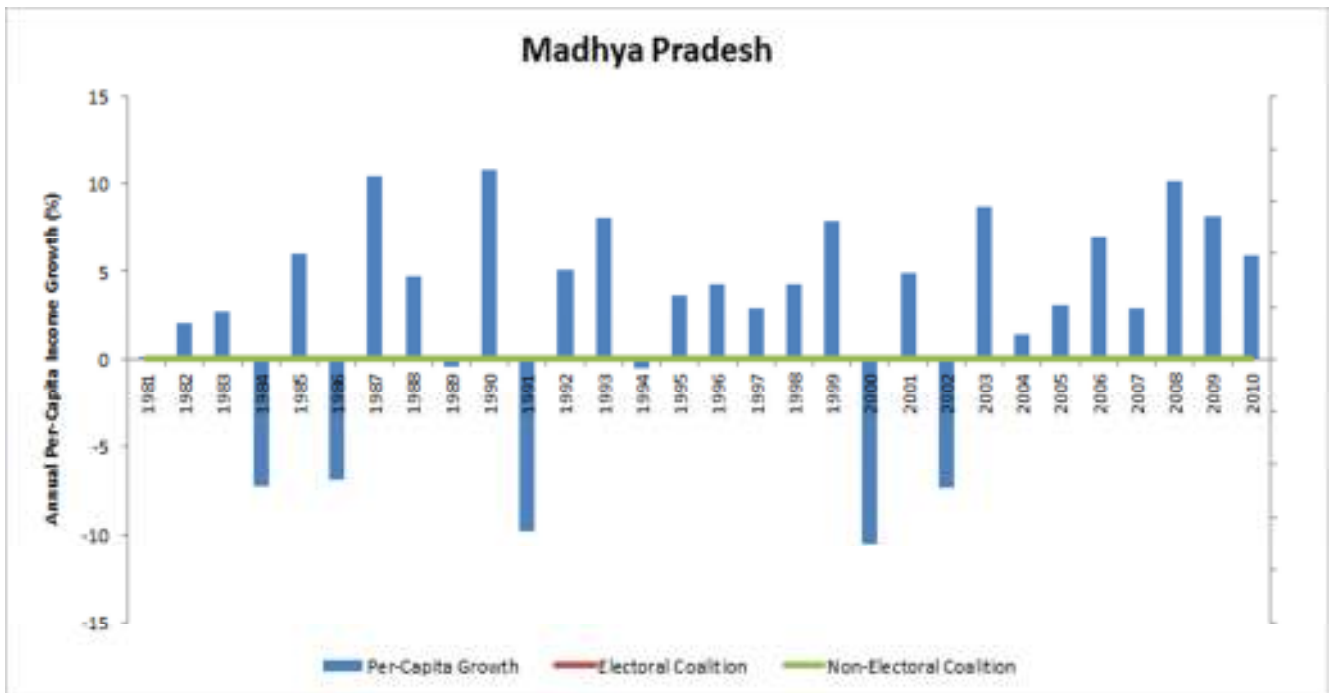


Figure: Per Capita Income Growth and Form of State Government – Maharashtra

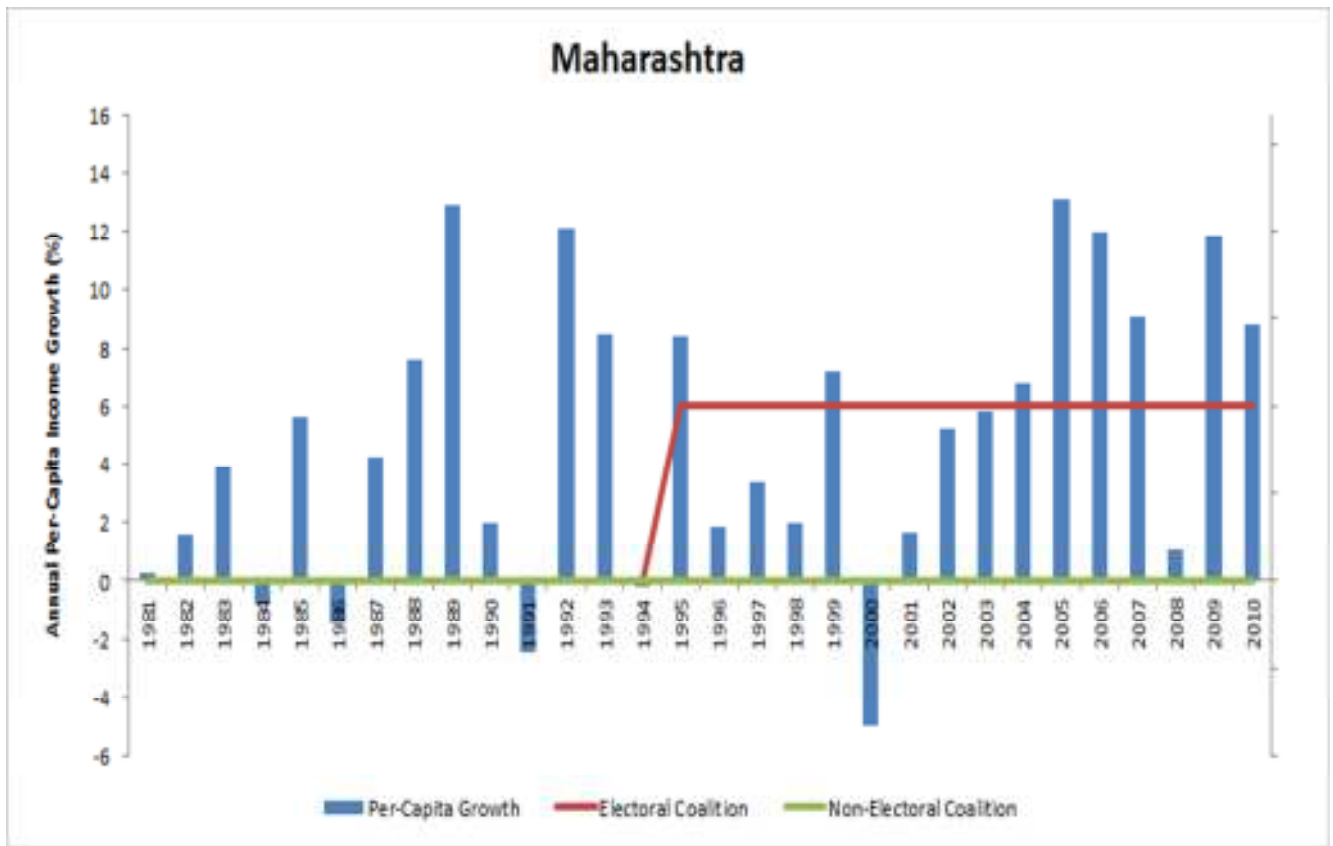


Figure: Per Capita Income Growth and Form of State Government – Orissa

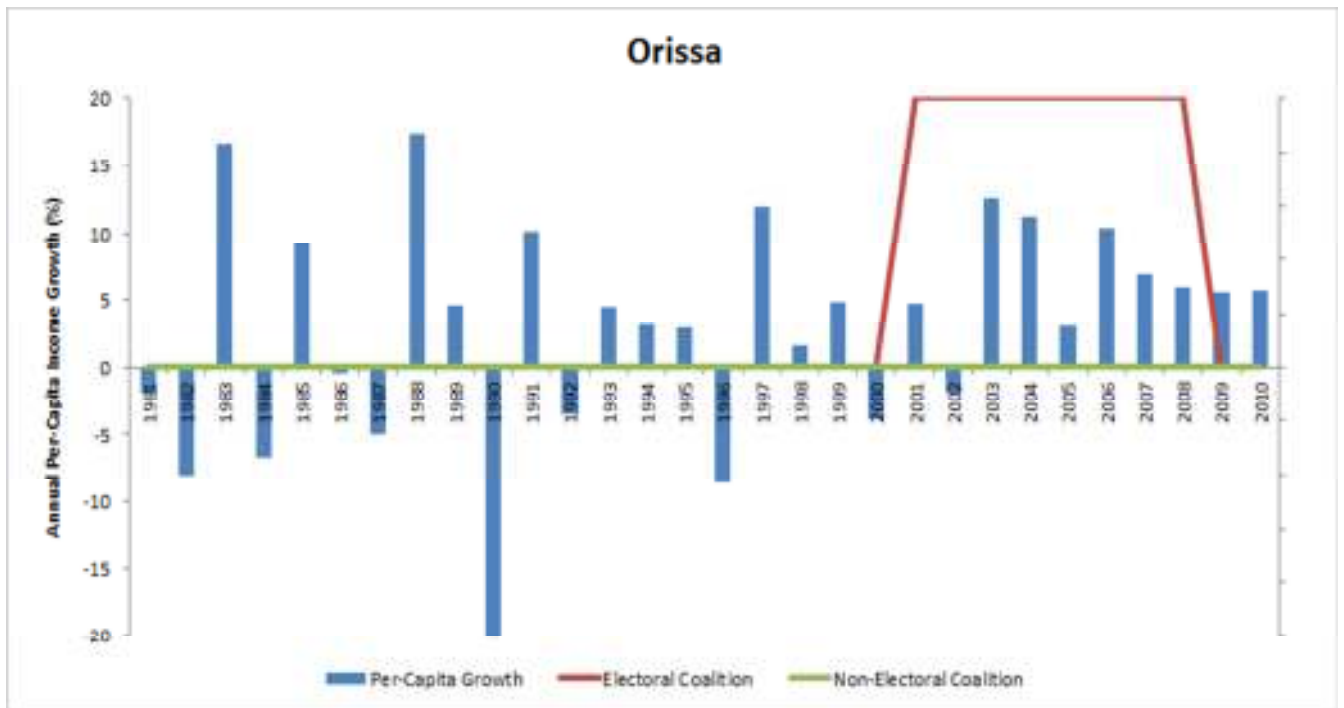


Figure: Per Capita Income Growth and Form of State Government – Punjab

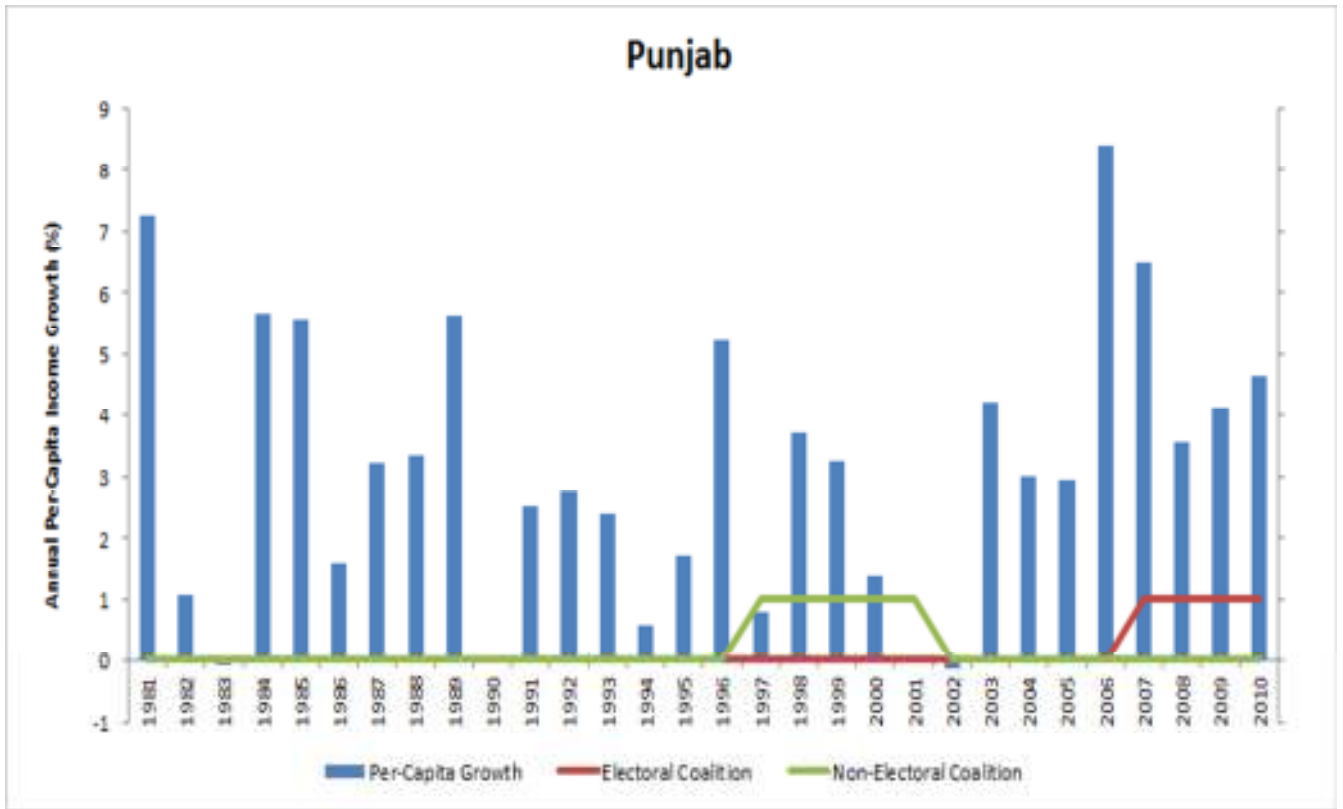


Figure: Per Capita Income Growth and Form of State Government – Rajasthan

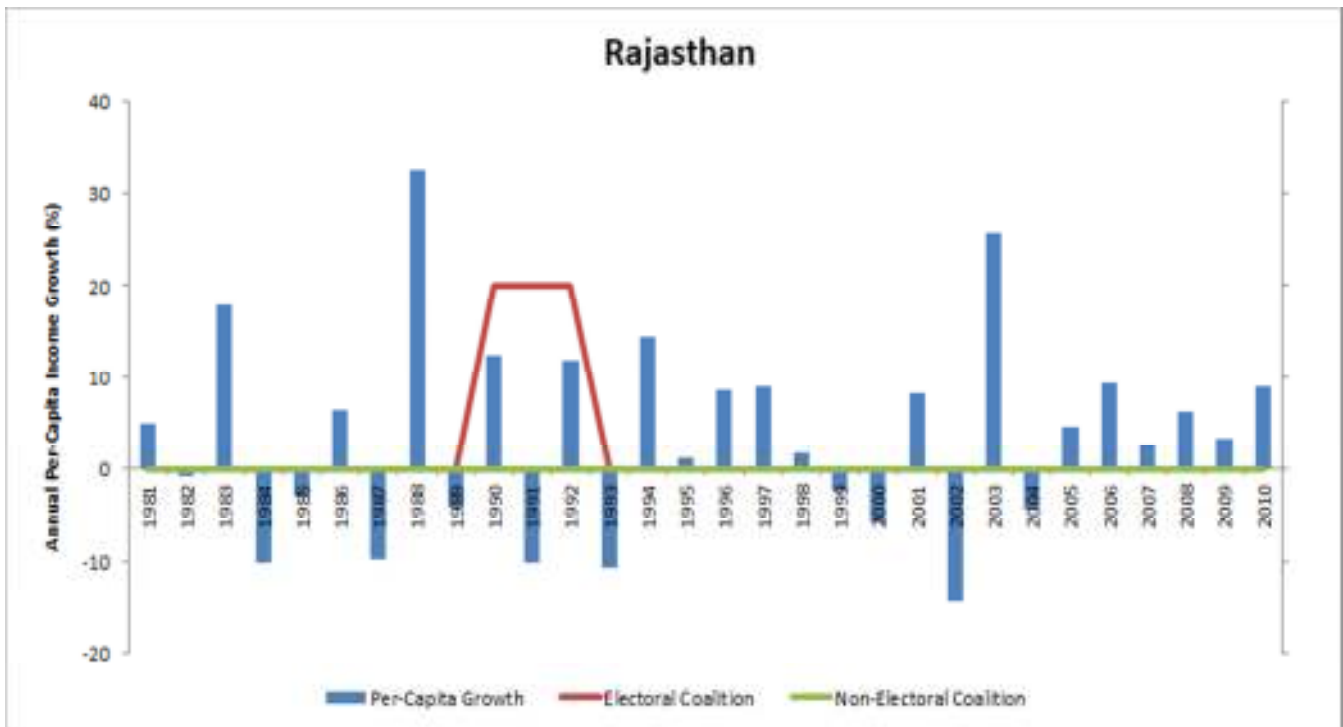


Figure: Per Capita Income Growth and Form of State Government – Tamil Nadu

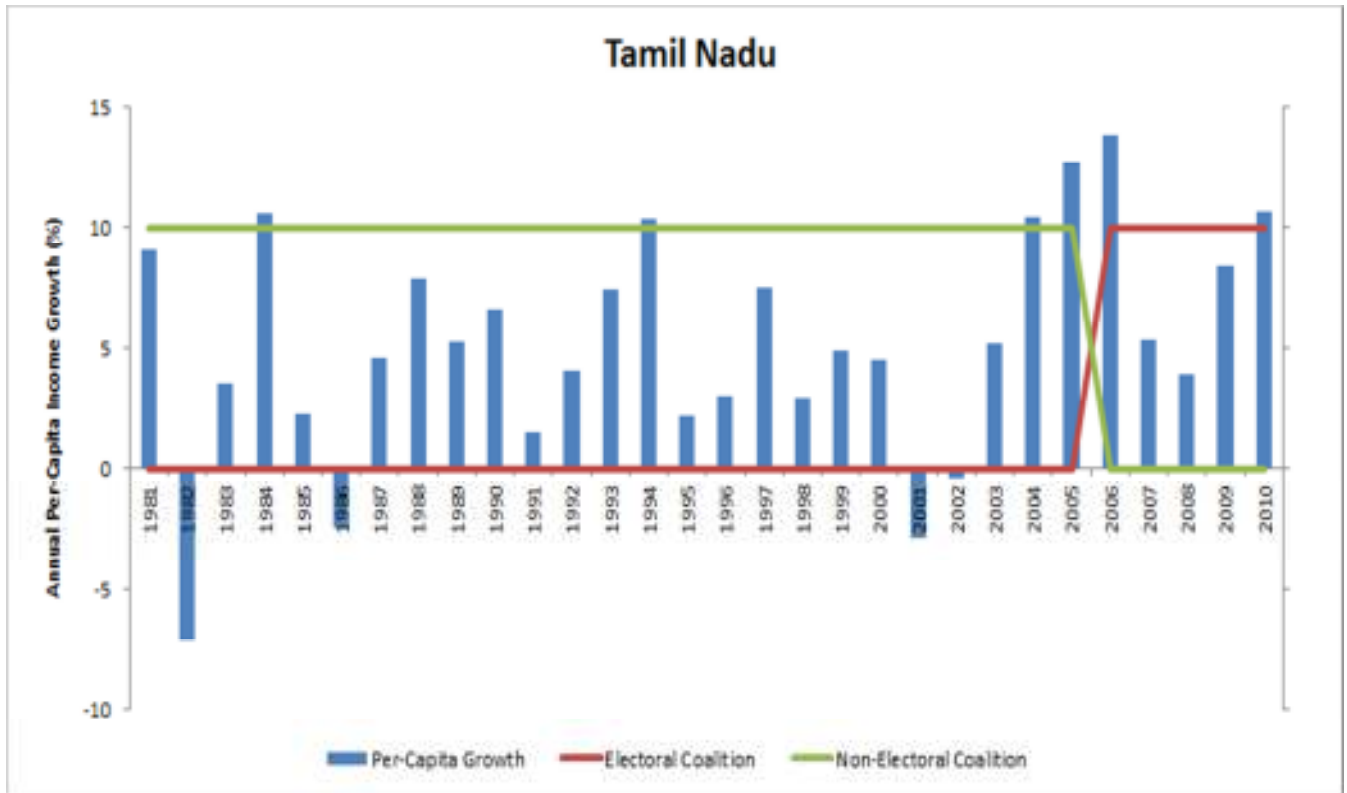


Figure: Per Capita Income Growth and Form of State Government – West Bengal

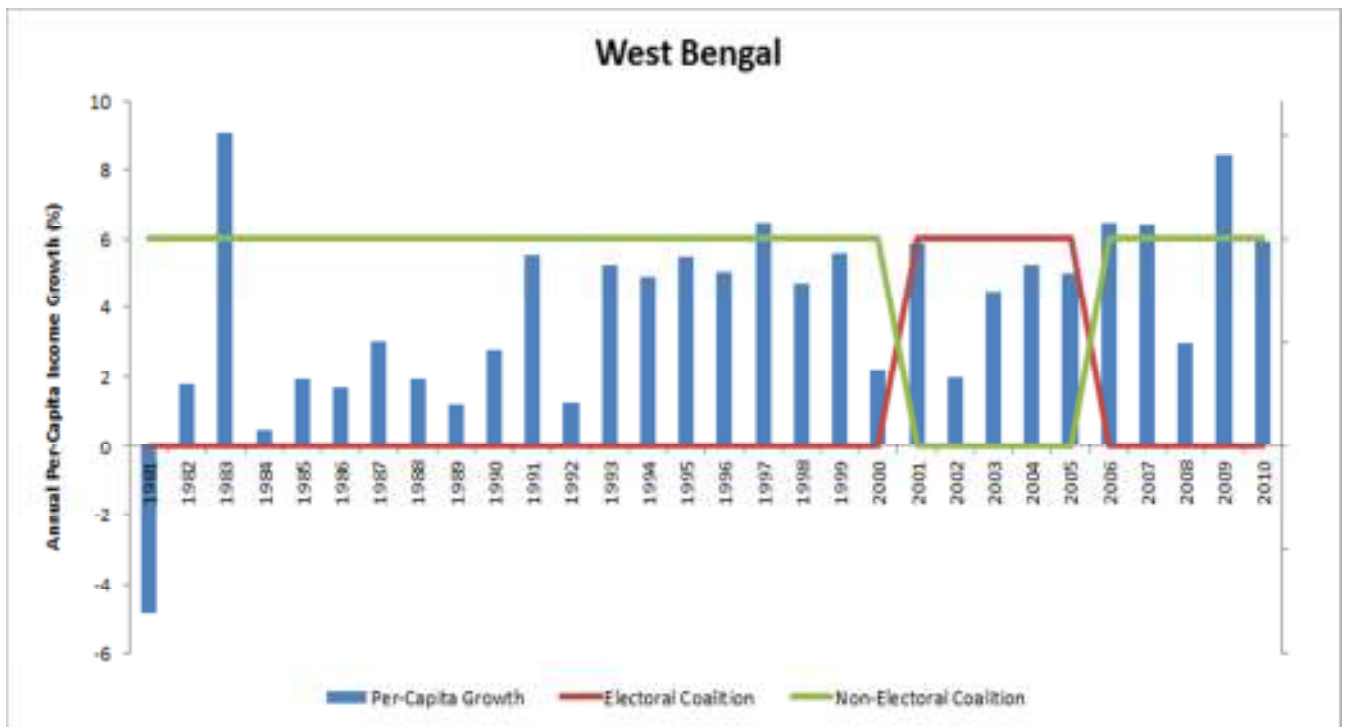


Figure: Per Capita Income Growth and Form of State Government – Uttar Pradesh

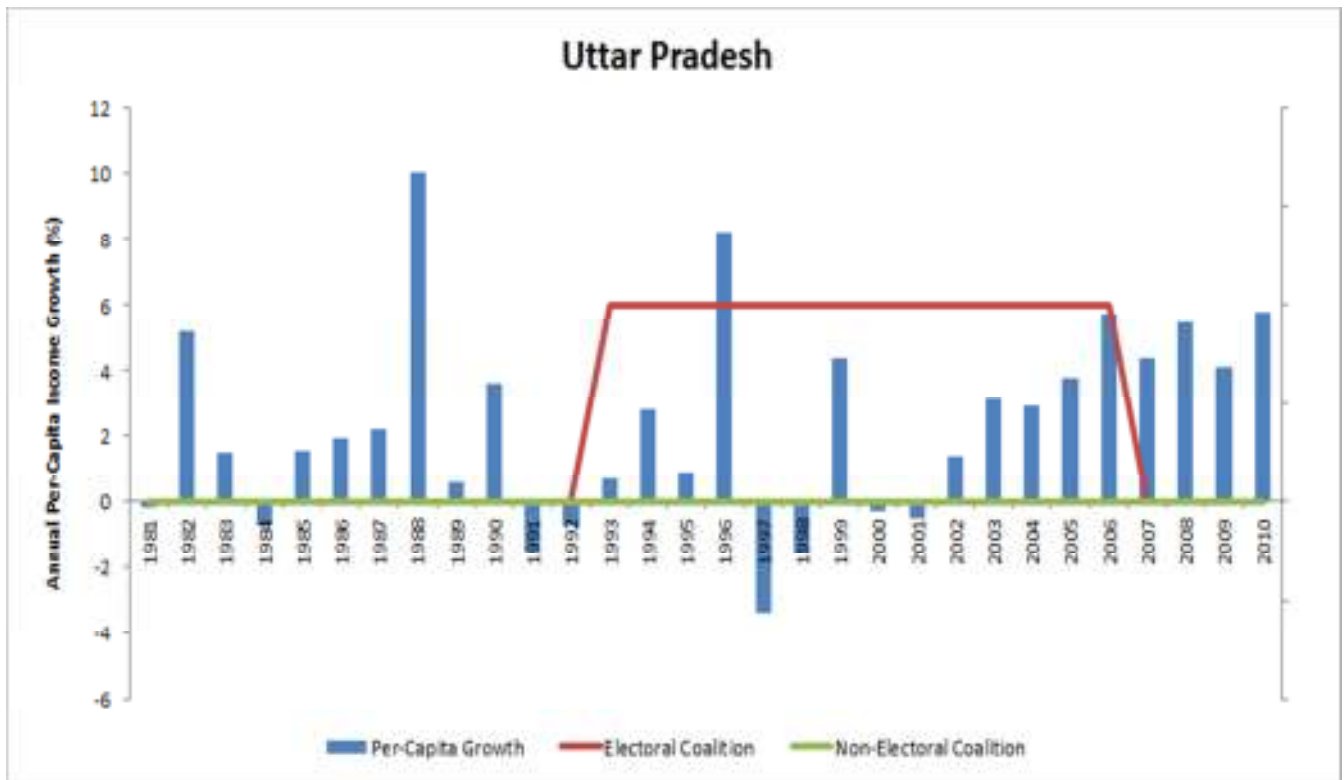


Figure: Per Capita Income Growth and Form of State Government – Assam

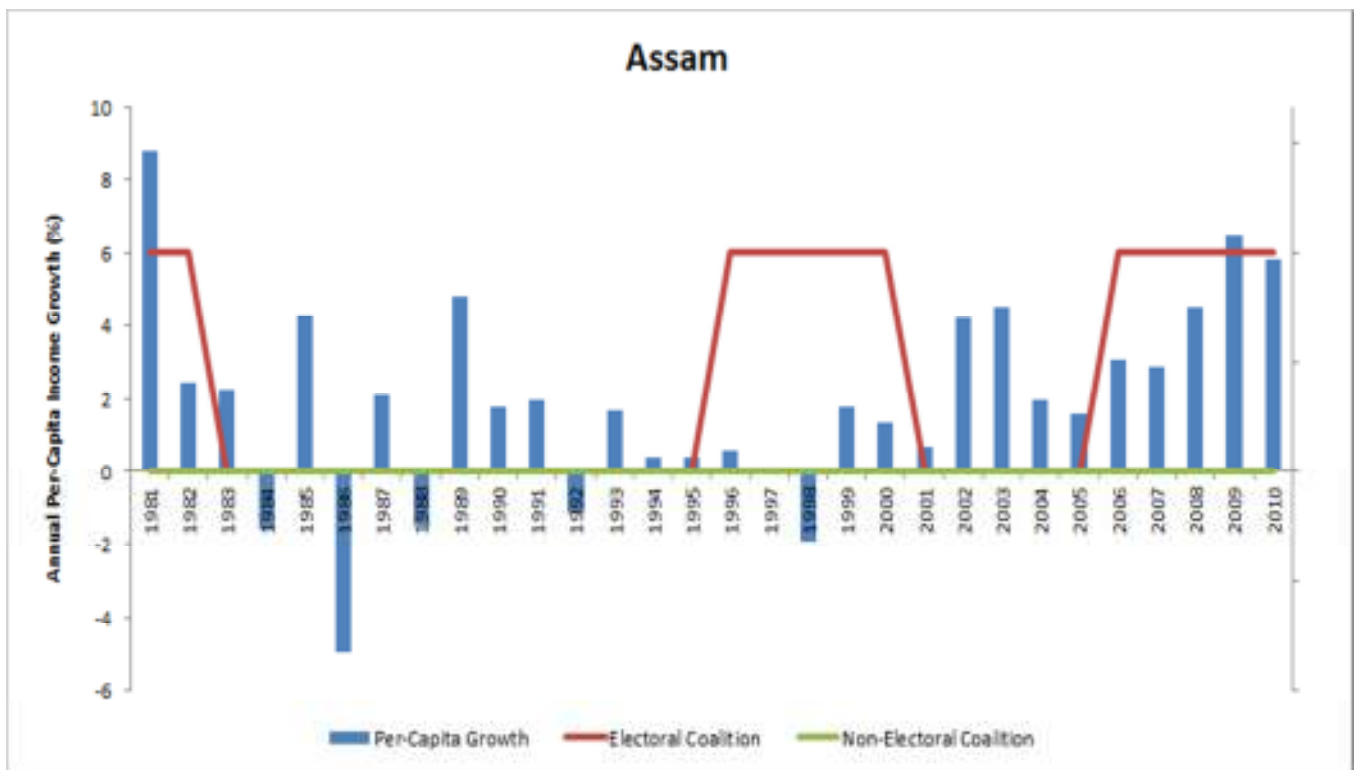


Figure: Social Sector Expenditure as Percentage of Net State Domestic Income (NSDP) and Form of Government – Andhra Pradesh (2000-2010)

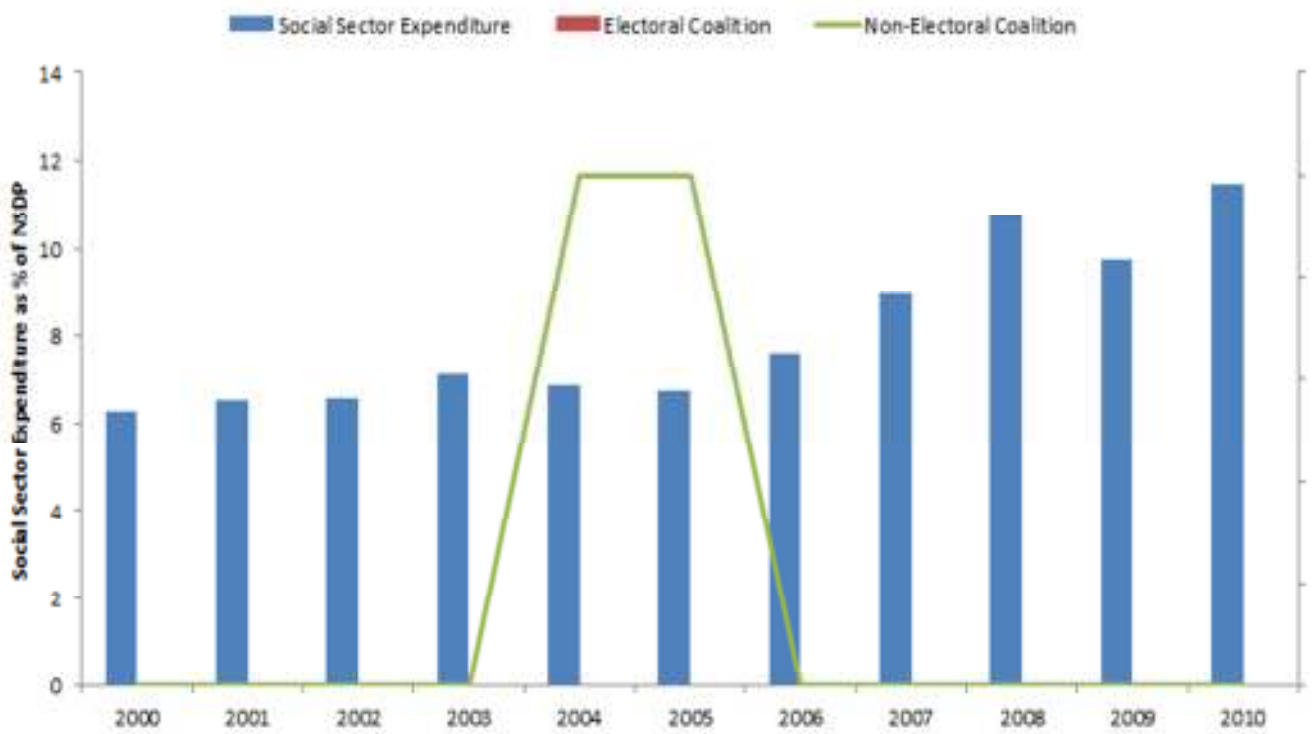


Figure: Social Sector Expenditure as Percentage of Net State Domestic Income (NSDP) and Form of Government – Bihar (2000-2010)

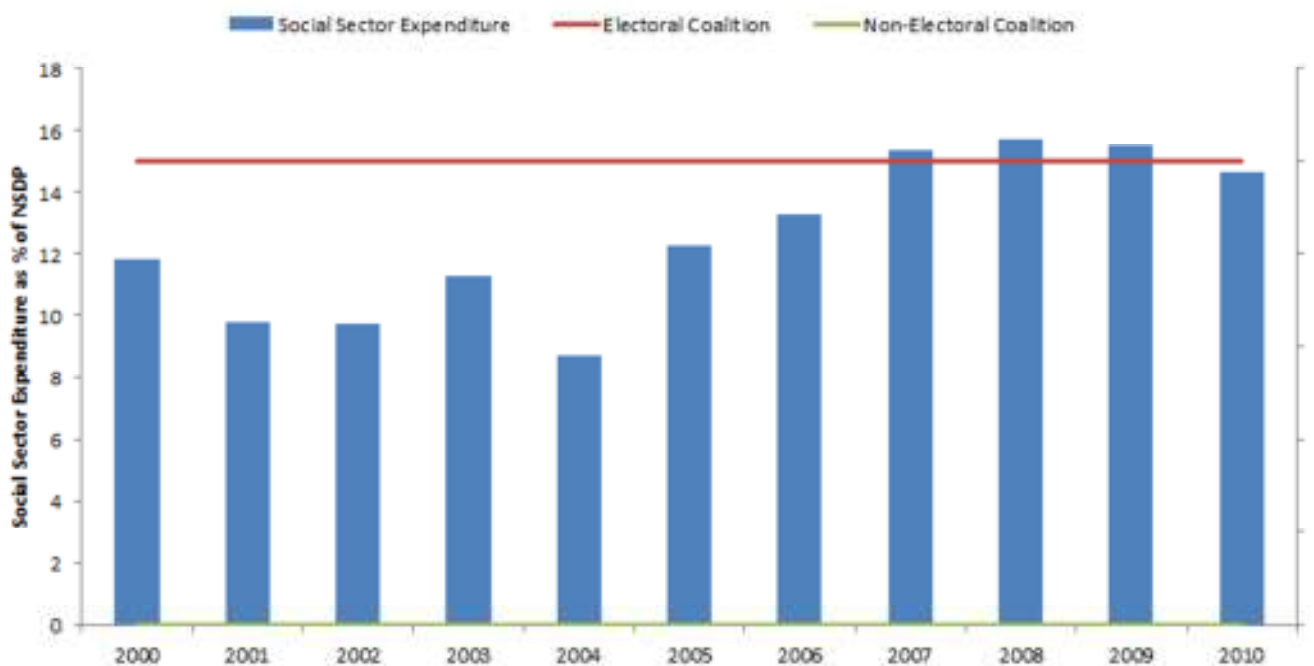


Figure: Social Sector Expenditure as Percentage of Net State Domestic Income (NSDP) and Form of Government – Gujarat (2000-2010)

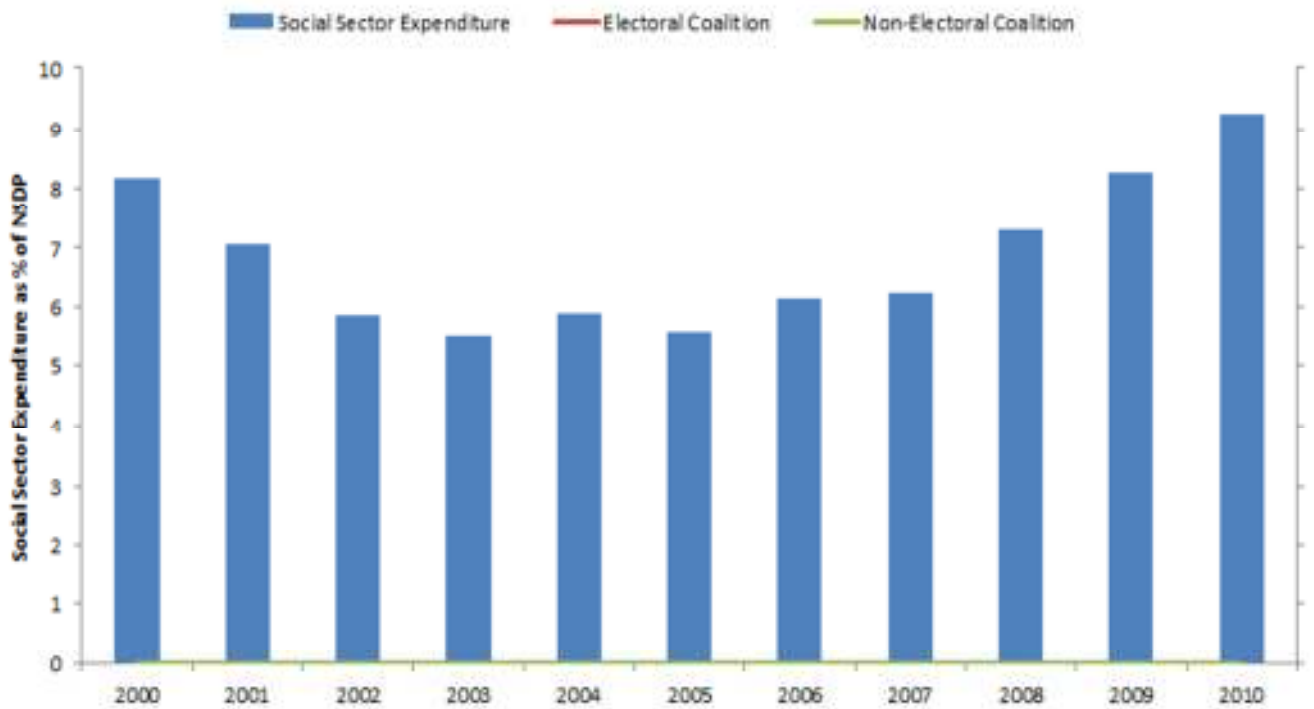


Figure: Social Sector Expenditure as Percentage of Net State Domestic Income (NSDP) and Form of Government – Haryana (2000-2010)

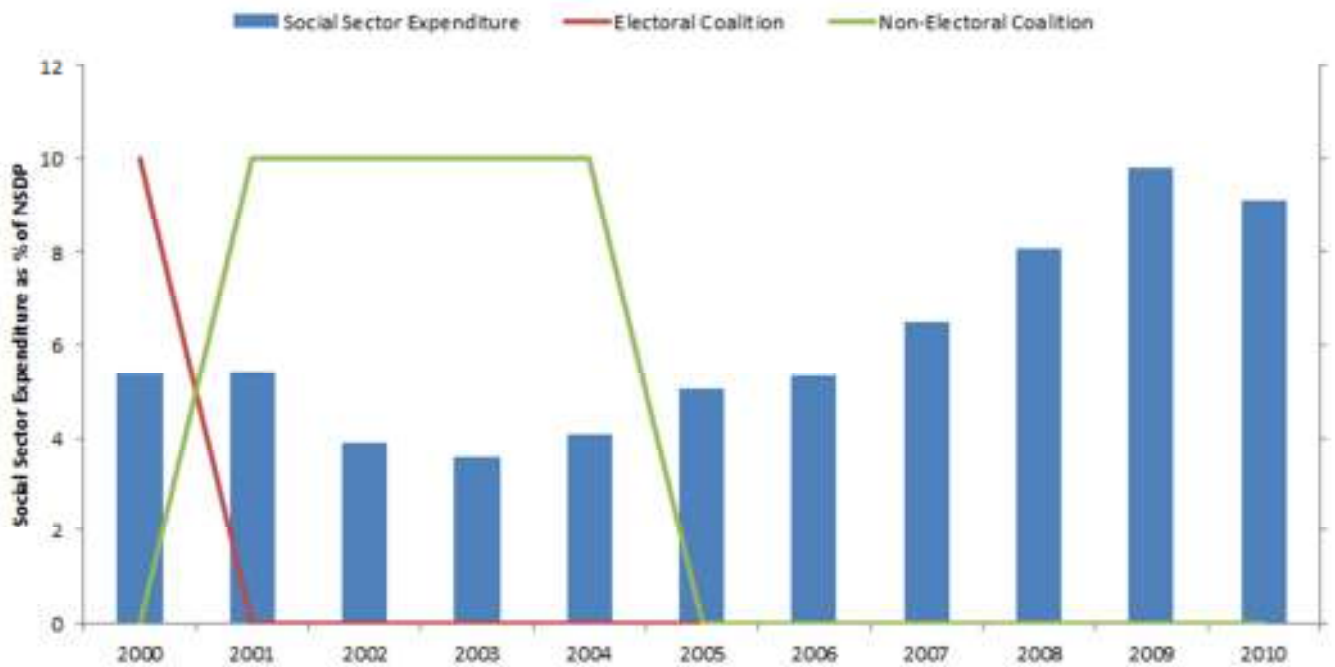


Figure: Social Sector Expenditure as Percentage of Net State Domestic Income (NSDP) and Form of Government – Karnataka (2000-2010)

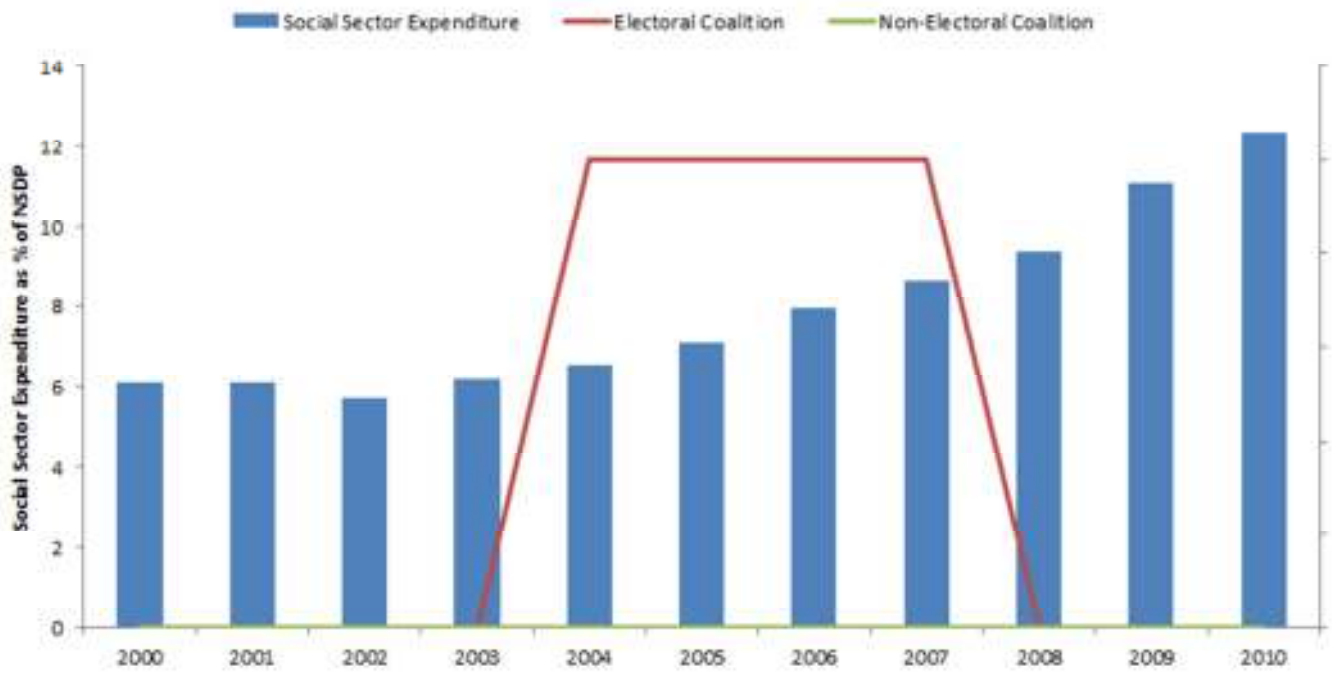


Figure: Social Sector Expenditure as Percentage of Net State Domestic Income (NSDP) and Form of Government – Kerala (2000-2010)

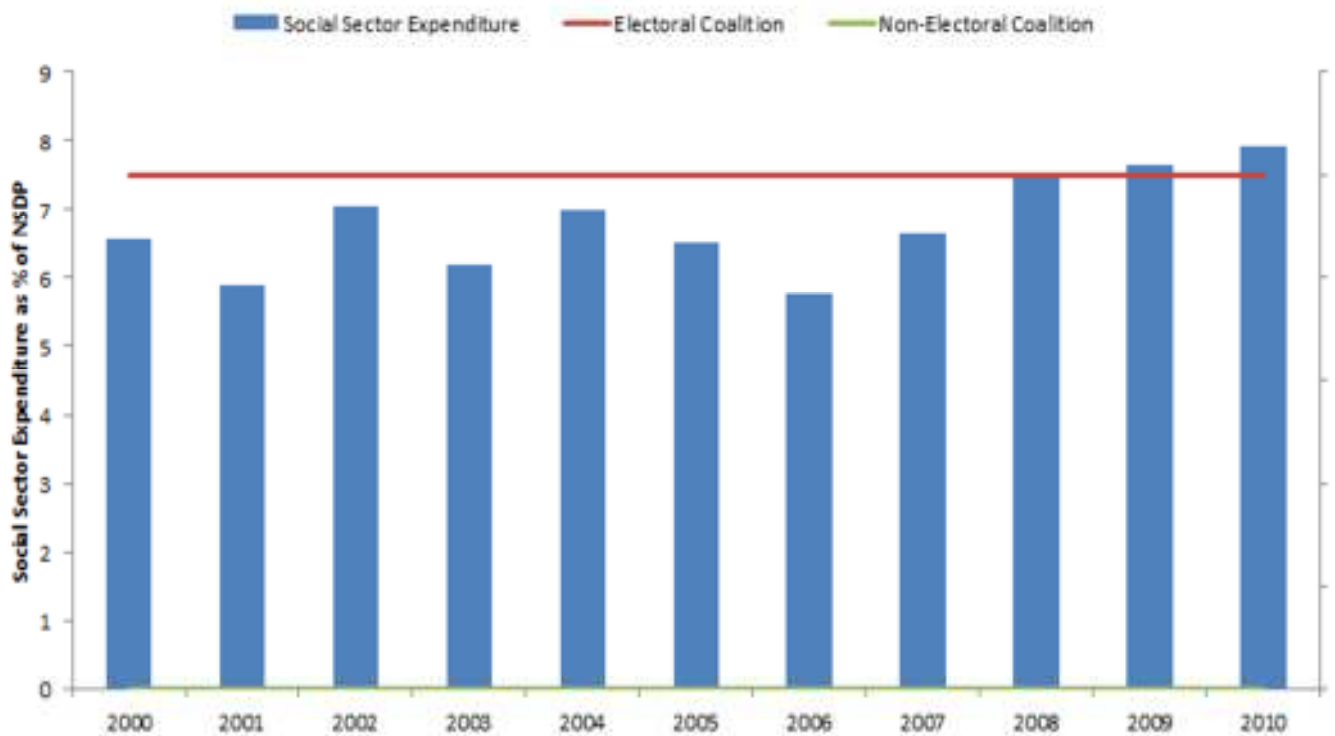


Figure: Social Sector Expenditure as Percentage of Net State Domestic Income (NSDP) and Form of Government – Madhya Pradesh (2000-2010)

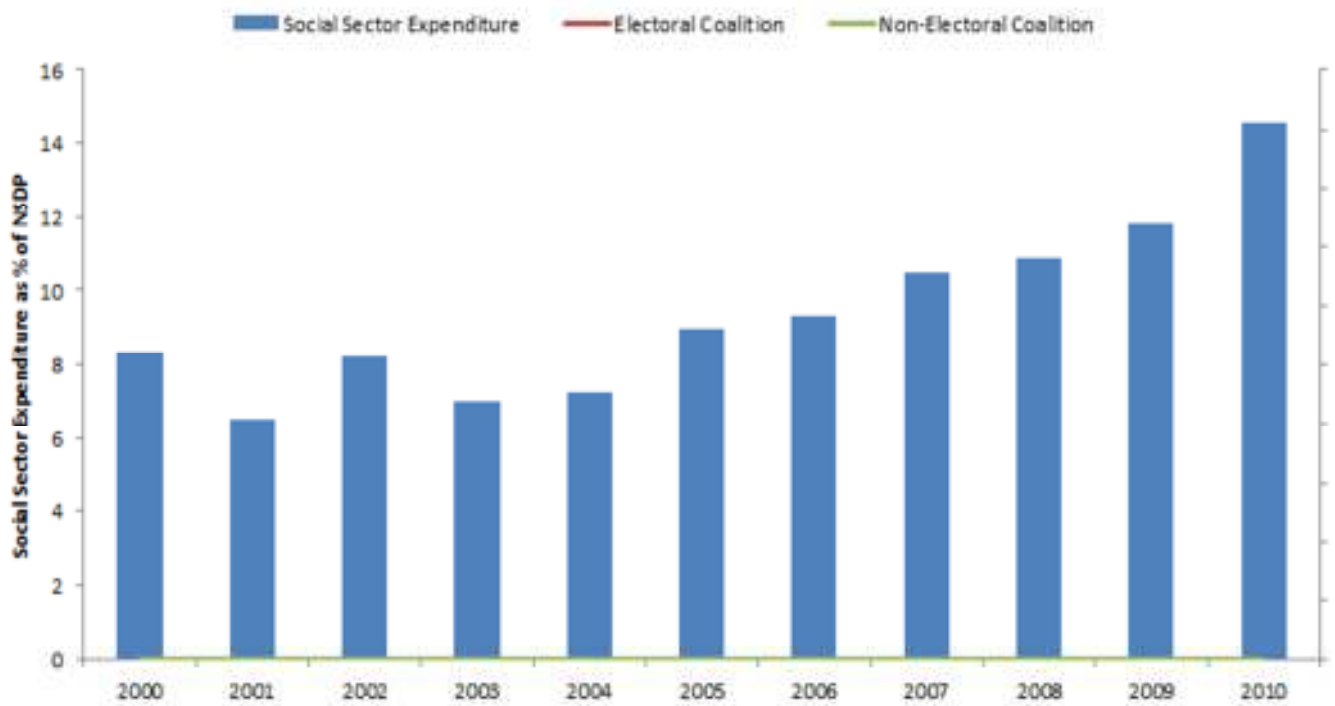


Figure: Social Sector Expenditure as Percentage of Net State Domestic Income (NSDP) and Form of Government – Maharashtra (2000-2010)

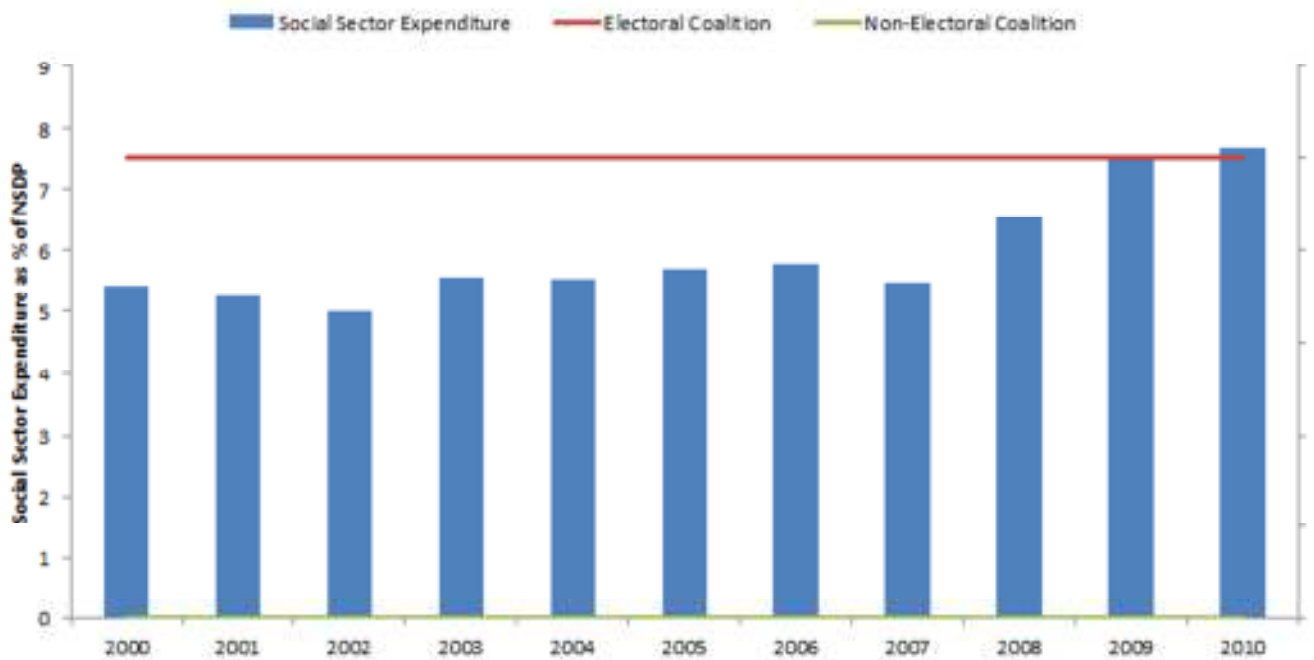


Figure: Social Sector Expenditure as Percentage of Net State Domestic Income (NSDP) and Form of Government – Orissa (2000-2010)

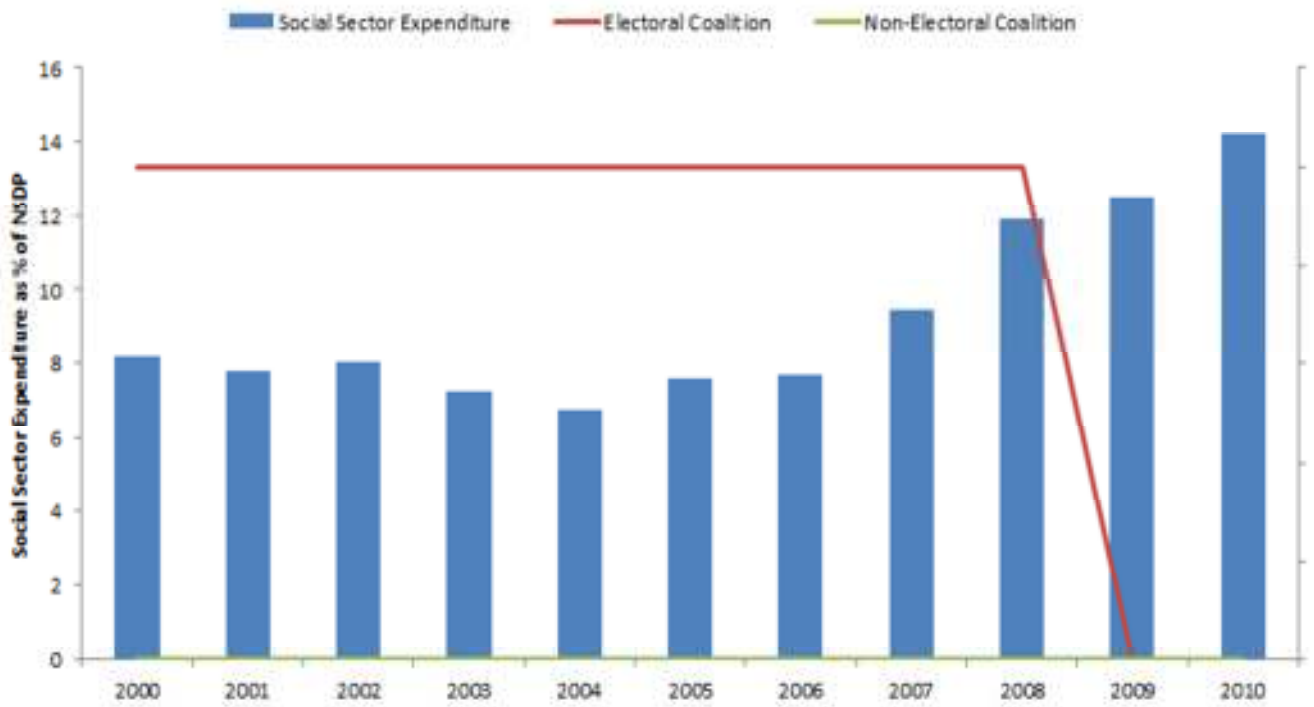


Figure: Social Sector Expenditure as Percentage of Net State Domestic Income (NSDP) and Form of Government – Punjab (2000-2010)

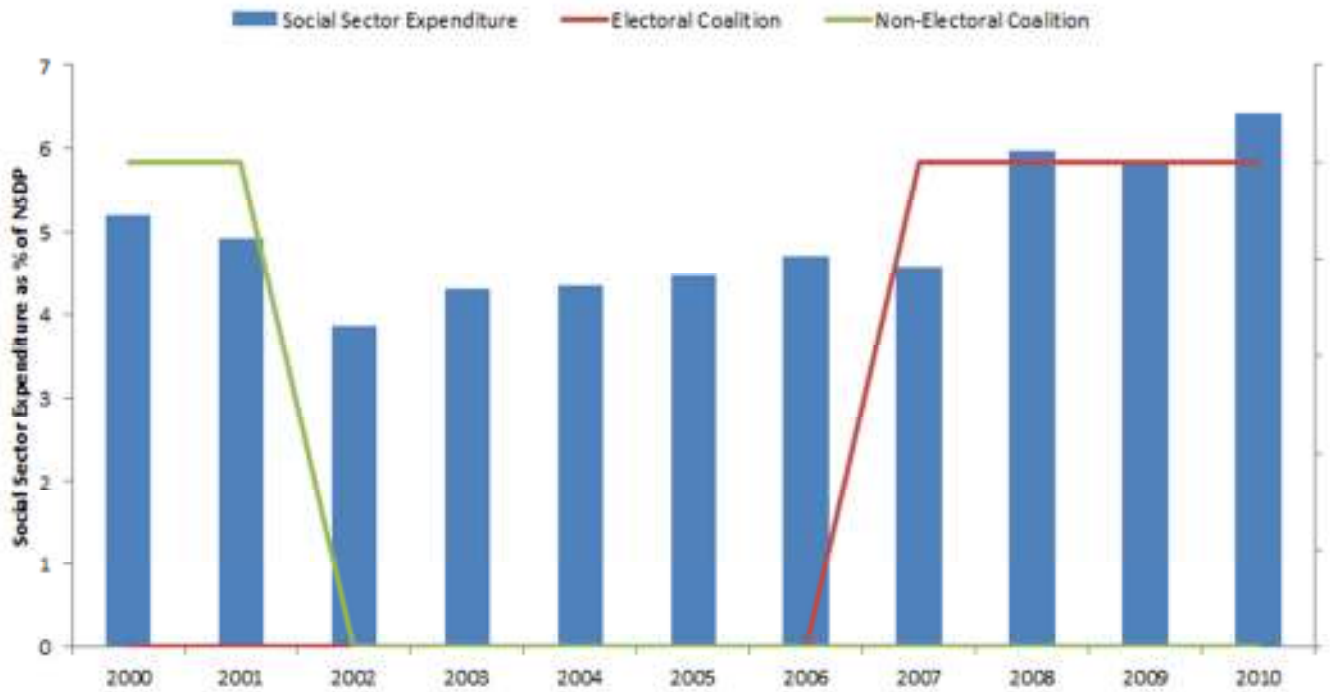


Figure: Social Sector Expenditure as Percentage of Net State Domestic Income (NSDP) and Form of Government – Rajasthan (2000-2010)

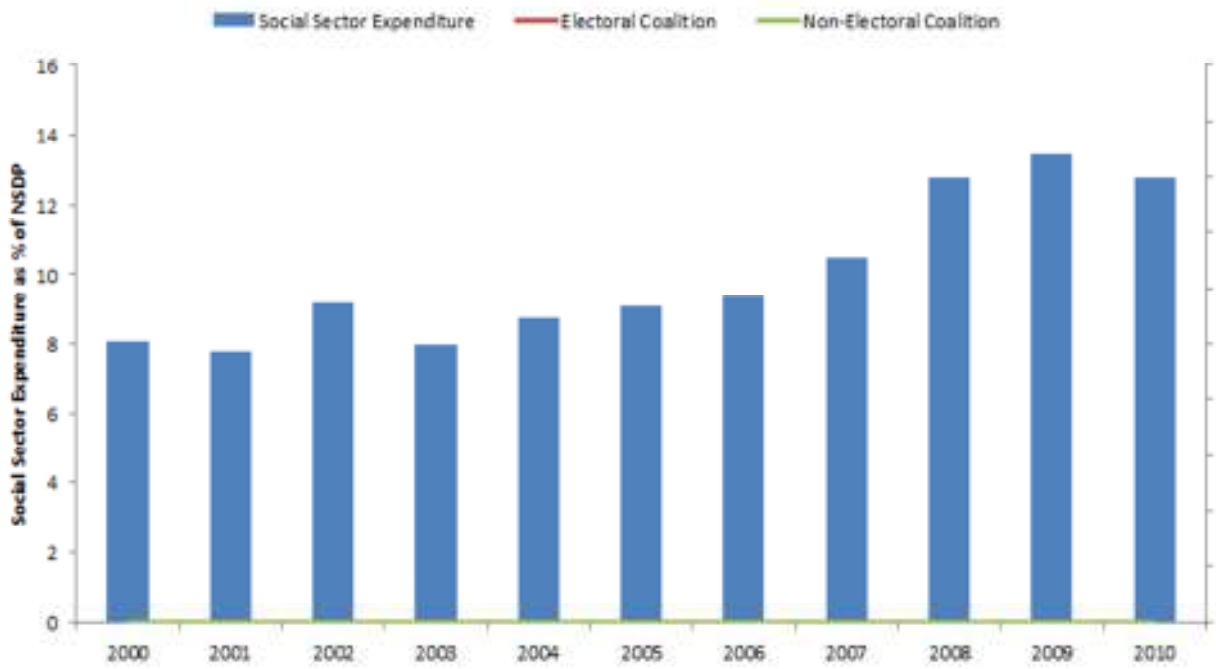


Figure: Social Sector Expenditure as Percentage of Net State Domestic Income (NSDP) and Form of Government – Tamil Nadu (2000-2010)

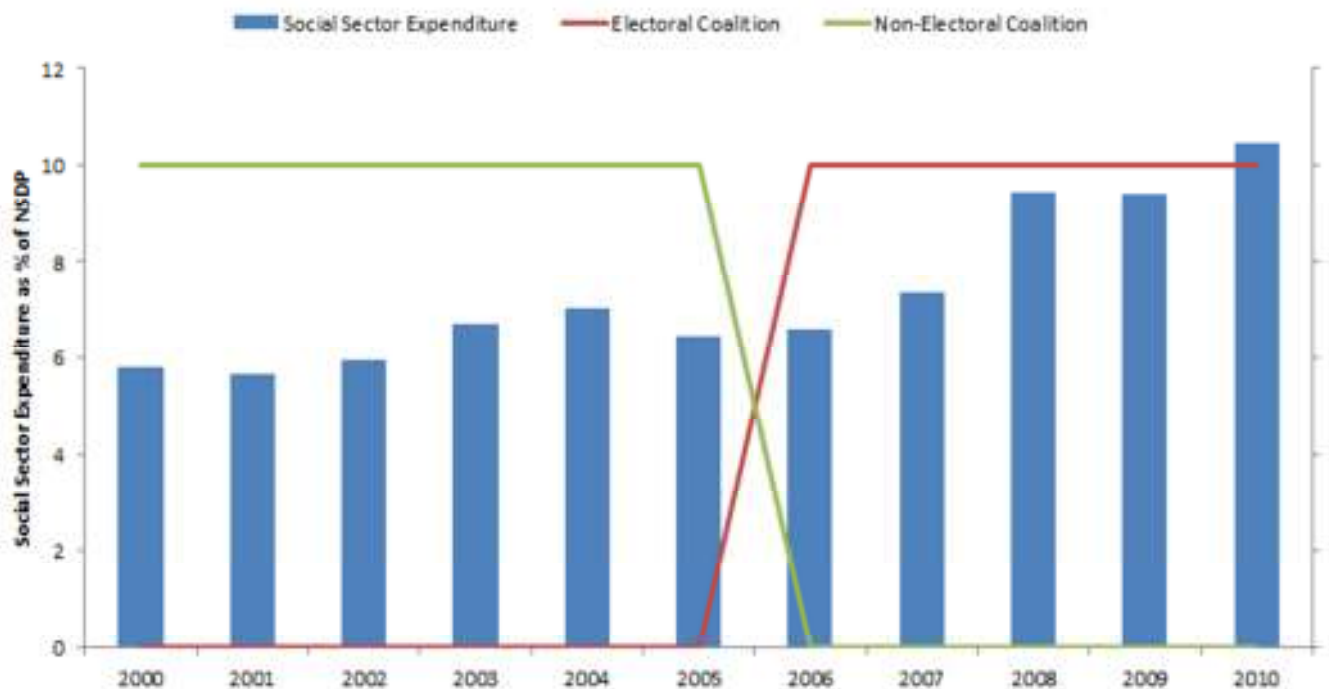


Figure: Social Sector Expenditure as Percentage of Net State Domestic Income (NSDP) and Form of Government – West Bengal (2000-2010)

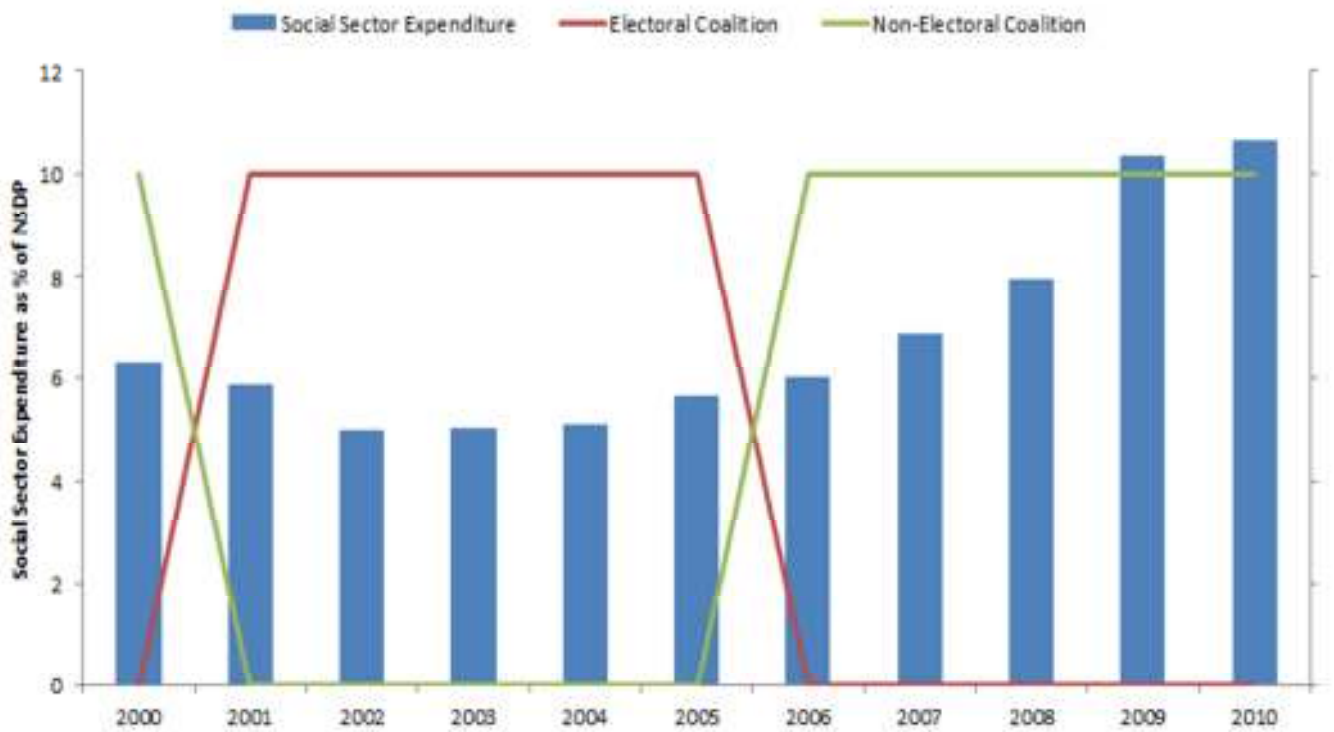


Figure: Social Sector Expenditure as Percentage of Net State Domestic Income (NSDP) and Form of Government – Uttar Pradesh (2000-2010)

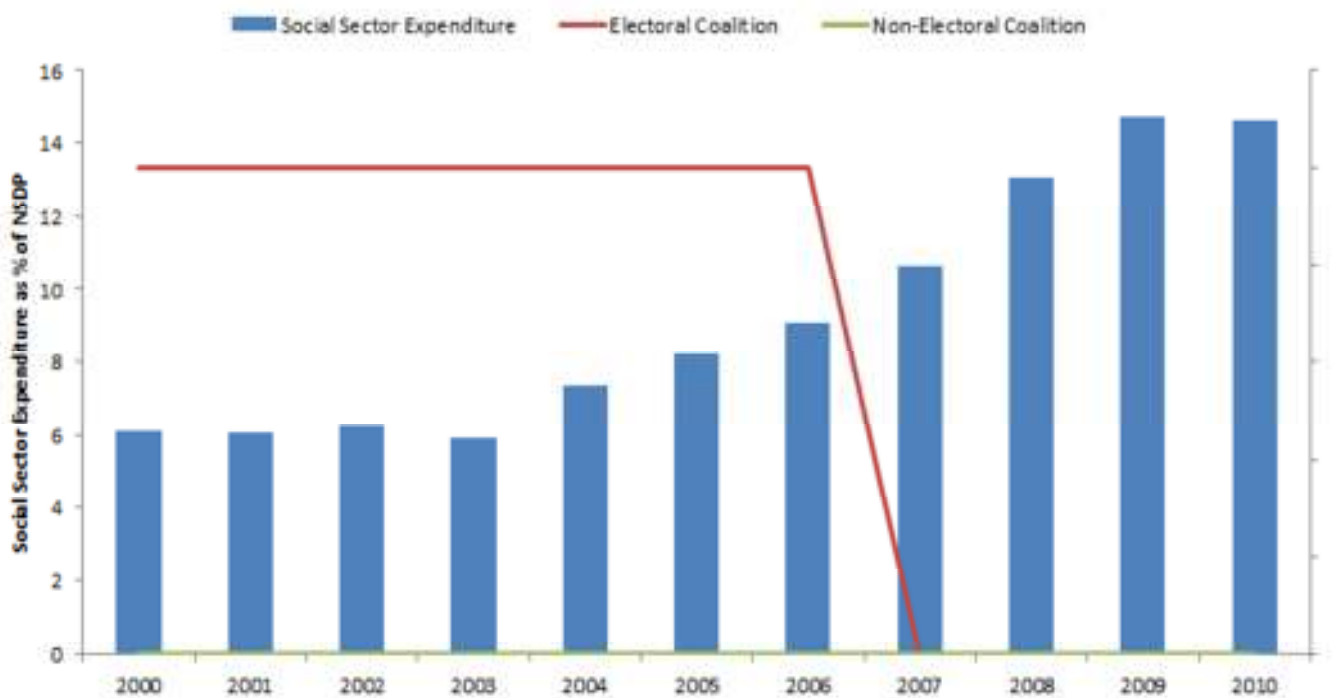


Figure: Social Sector Expenditure as Percentage of Net State Domestic Income (NSDP) and Form of Government – Assam (2000-2010)

