ESSAYS ON THE POLITICAL ECONOMY OF CENTRIPETAL FEDERALISM IN INDIA

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das Konzept /die Planung bei 33%

die Durchführung bei 60%

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Summary of the PhD Thesis

The thesis contains four chapters based on four independent research papers, each of which highlights an aspect of the impact of centripetal federalism on the functioning of central, state, and local governments in India.

After the introduction, which connects the chapters, the first chapter outlines the turbulent relationship between state and central governments in India. Based on empirical findings from a novel high-dimensional dataset on governmental strengths and coalitions, the chapter shows how democratically elected state governments are systematically subverted by impositions of the so-called "president's rule". Besides this, the chapter also outlines how Indian federalism is inherently centripetal both in terms of its *de jure* design as well as its *de facto* function.

The second chapter provides further evidence for the centripetal nature of Indian federalism by taking the COVID-19 crisis as a case study. This chapter argues that the severe country-wide lockdown imposed by the central government in India is a typically centripetal, one-size-fits-all response that does not consider variation in institutional capacity across different Indian states. The chapter argues that the COVID-19 crisis was not adequately dealt with because state and local governments were not sufficiently empowered with the authority, finances, or human resources to deal with the crisis.

The third chapter highlights the flaws in the constitutional design of Indian local governments; it shows how these flaws have led to ineffectual local governments that neither have the capabilities nor the finances to ensure effective delivery of public goods. The chapter argues that these flaws were allowed to perpetuate without any correctional constitutional amendments because they represent a political equilibrium between state and central governments. Centripetal federalism has allowed state as well as central governments to hold on to most of their fiscal as well as legislative powers while also creating the illusion of increased devolution.

The fourth chapter examines the relationship between political strength and inflation in Indian states. To do so, the study utilizes a monthly panel dataset on inflation and governmental strength in Indian states between 1991 and 2019 specifically constructed for the study. The results suggest that there is a positive relationship between central governmental strength and inflation in a state. The results also suggest that states whose governments are formed either by coalition arrangements or by regional parties generally experience higher inflationary pressures than single-party or non-regional-party led governments.

Zusammenfassung der Dissertation

Die Dissertation besteht aus vier Kapiteln, die jeweils auf eigenständigen Forschungsarbeiten basieren. Jede Forschungsarbeit beschäftigt sich mit einem bestimmten Aspekt des zentripetalen Föderalismus in Indien und dessen Auswirkung auf die Funktionsweise verschiedener Regierungsebenen.

Nach der Einleitung, die alle Kapitel verbindet, wird im ersten Kapitel die Beziehung zwischen den Regierungen der Bundesstaaten und der Zentralregierung in Indien beleuchtet. Die empirischen Ergebnisse einer Regressionsanalyse mit 16.000 Beobachtungen auf der Ebene der Bundesstaaten belegen, dass das Funktionieren der demokratisch gewählten Regierungen der Bundesstaaten durch die Einführung der so genannten "President's Rule" systematisch untergraben werden kann. In diesem Kapitel wird auch dargelegt, dass der indische Föderalismus sowohl in Bezug auf seine rechtliche Ausgestaltung *(de jure)* als auch auf seine faktische Funktionsweise *(de facto)* von Natur aus zentripetal ist.

Anhand der Covid-19 Pandemie, liefert das zweite Kapitel weitere Belege für den zentripetalen Charakter des indischen Föderalismus. In diesem Kapitel wird argumentiert, dass der von der indischen Zentralregierung verhängte, strenge landesweite Lockdown eine typisch zentripetale, einheitliche Reaktion ist, welche die Unterschiede in der institutionellen Kapazität der Bundesstaaten nicht berücksichtigt. In diesem Kapitel wird argumentiert, dass der COVID-19-Krise nicht angemessen begegnet werden konnte, weil die Regierungen der Bundesstaaten und Kommunen nicht über die notwendigen Befugnisse, Finanzmittel und Kapazitäten verfügten, um die Krise zu bewältigen.

Im dritten Kapitel werden die Mängel in der verfassungsrechtlichen Ausgestaltung der indischen Kommunalverwaltungen hervorgehoben; es wird aufgezeigt, wie diese Mängel zu ineffektiven Kommunalverwaltungen geführt haben, die weder über die Kapazitäten noch über die finanziellen Mittel verfügen, um eine wirksame Bereitstellung öffentlicher Güter zu gewährleisten. Das Kapitel argumentiert weiter, dass diese Mängel ohne korrigierende Verfassungsänderungen fortbestehen durften, weil sie ein Machtgleichgewicht zwischen Bundesstaat und Zentralregierung darstellen. Der zentripetale Föderalismus hat es sowohl den Bundesstaaten als auch der Zentralregierung ermöglicht, den größten Teil ihrer Steuer- und Gesetzgebungsbefugnisse zu behalten und gleichzeitig die Illusion einer verstärkten Dezentralisierung zu projizieren.

Im vierten Kapitel wird der Zusammenhang zwischen politischer Macht und Inflation in den indischen Bundesstaaten untersucht. Zu diesem Zweck verwendet die Studie einen eigens dafür konstruierten monatlichen Paneldatensatz zu Inflation und Regierungsstärke in indischen Bundesstaaten zwischen 1991 und 2019. Die Ergebnisse der Studie zeigen, dass es eine positive Beziehung zwischen der Stärke der Zentralregierung und der Inflation in einem Bundesstaat gibt. Die Ergebnisse deuten auch darauf hin, dass Bundesstaaten, deren Regierungen entweder durch Koalitionsvereinbarungen oder durch regionale Parteien gebildet werden, im Allgemeinen einem höheren Inflationsdruck ausgesetzt sind als Regierungen, die von einer einzigen Partei oder von überregionalen Parteien geführt werden.

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1. Introduction

> *I feel more and more that we must function more from below than from the top. The top is important of course and in the modern world, a large measure of centralization is inevitable. Yet too much centralization means decay at the roots and ultimately a withering of the branches and leaves and flowers.*
>
> Nehru (1987, p. 52)

Ever since its independence in 1947, India has had to deal with the issue of optimally balancing the distribution of legislative powers between states and the central government. The above quote is from a series of letters that India's first prime minister, Jawaharlal Nehru, wrote to his state chief ministers in July 1952; it succinctly captures the general vision of Indian federalism as well as its biggest problem, that of 'too much' centralization. Almost seven decades since, the debate on centralization is still very much topical in Indian politics (Tharoor, 2023).

To understand the current fissures in Indian federalism, it is important to understand its history and the context within which contemporary Indian federalism originated. This can be traced back to pre-independent India with the backdrop of World War I, when the Indian freedom movement, especially the demand for Indian home rule, was gaining a lot of momentum. In order to address the demands for greater participation of Indians in the governance of their own country, the Montagu Commission was established in 1917. Officially known as the Indian Constitutional Reforms Committee, the commission was meant to review the workings of the Government of India Act, 1915, and to consider further constitutional reforms for India. It was headed by, and named after Edwin Montagu, the then secretary of state for India, and Lord Chelmsford, who was the Viceroy of India. It was composed of both British and Indian members and was tasked with consulting various stakeholders in India and making recommendations on how to reform the Indian government.

The commission produced a report known as the Montagu-Chelmsford Report which led to the enactment of the Government of India Act 1919 in British parliament. The act established two significant features that could be considered as the first (limited) step towards a federally organized representative government in India. Firstly, it established a bicameral legislature at the

central level – the Imperial Legislative Council.[1] Secondly, it established a system of dyarchy in the provinces.[2] This was supposed to give Indians greater control over local government. However, in reality, the Imperial Legislative Council had extremely limited powers and the locally elected provincial government had powers that were easy to override by the provincial executive. In addition to these changes, the British government also declared that there would be a review of the effects of these constitutional reforms ten years after their implementation. To make this happen, the Simon Commission was set up in 1927. The commission, which had no Indian members, submitted its report to the British parliament in 1930 and recommended further constitutional reforms which furthered the 1919 Act's reach; most of the recommendations were brought into force by the British parliament as the Government of India Act 1935.

The 1935 Act was, ostensibly, the second step in establishing a limited system of federally organized representative government in India. But in reality, the act aimed to strike a balance between and appease three major political factions within India, the Muslim League (ML), the Indian National Congress (INC), and the princely states, as well as maintain the supremacy of British rule by introducing a federal structure of government. The act itself had three major features as far as federalism was concerned; firstly, it abolished the system of provincial dyarchy established by the 1919 Act and further empowered elected representatives in provinces by giving them legislative powers over residuary topics. Secondly, new provinces were carved out of older and larger provinces – this led to the creation of Sindh, Bihar, and Orissa. Finally, the act proposed to make India into a "Federation of Indian States". This was supposed to appease the leaders of the ML since they had demanded separate electorates and greater autonomy for Muslims in Muslim-majority areas, which they believed would protect their interests and ensure their representation in government.[3] The British parliament hoped that the INC would also be appeased since the act would eventually grant 'dominion status' to India.[4] Finally, the act also allowed for the Princely states to keep their governance systems while acceding to the

[1] Imperial legislative council situated in Delhi, the capital of the British India would consist of a lower house called the central legislative assembly and an upper house called the council of state.

[2] Dyarchy is a system where one part of the provincial government would be executives appointed by the British crown and another part of the provincial government would comprise of ministers chosen by the provincial governor from a pool of locally elected members of the provincial legislature. Here, provinces represent the parts of the Indian subcontinent that were directly under the rule of the British crown, this made up approximately two-thirds of the Indian population and half of its land mass. The other half of the population and a third of the landmass were administratively mostly under the control of princely states. There were approximately 560 princely states in India. Princely states were governed by native Indian rulers that were suzerain to the British crown. Apart from this, a very small part of the subcontinent was also held by the Portuguese (Goa) and the French (Puducherry).

[3] See M. A. Jinnah's fourteen points in Hardy (1972, p. 213).

[4] For details on demands that were put forth by the INC before the Simon Commission, see Coupland (1944).

federation of India. The reality however was that the 1935 Act failed to make a positive impression on any of the stakeholders that it intended to appease since it never actually fully ceded to a majority of stakeholders' demands, and also because it was never implemented in full. Only a small part of the act that gave limited autonomy to the provincial governments in some domains (agriculture, education, and public health) was ever implemented. The central government still retained significant control over many legislative topics concerning the provinces. Neither the provincial governments (that were freshly elected in 1937) were interested in passing legislative resolutions to join the federation, nor the Princely states were ready to cede a part of their power to the federation for various reasons including the outbreak of World War II.[5] The Indian freedom movement continued through the war and by 1945-46, it had become increasingly clear that India would be independent very soon, and a Constituent Assembly was set up to write India's constitution.[6]

After India gained independence, the Constituent Assembly of India modelled the federal design of the Indian constitution closely along the lines of the Government of India Act 1935.[7] It divided powers between the central and the state governments via lists that spelled out union, state, and concurrent legislative powers, a bicameral parliament was established, and more significantly electorates that were previously split on religious grounds were abolished. This said, the framers of the Indian constitution still endowed the central government with considerable legislative powers to override state governments when they deemed it necessary. The ostensible reason for such centrally organized power was to deter threats against the unity of the country and thwart secessionist movements. Because of this very feature, India is typified as a "quasi-federalism" by Wheare (1980), or as or as a federally organized country with a "centripetal bias" by Rao and Chelliah (1991, p. 18).

Another development that characterizes Indian federalism's centripetal nature took place immediately after independence. The provisional parliament of India, enamored by Soviet Russia's purported social and economic successes, set up the Planning Commission of India through a resolution passed in 1950. The Planning Commission was tasked with adopting a Soviet-styled approach to planning and economic policy implementation through five-year

[5] See Moore (1988, pp. 36–85) for a detailed analysis of why and how the implementation of an Indian federation (Ch. II Part II of the 1935 Act) failed.
[6] The Muslim League in protest (demanding the creation of a Pakistan) did not join the Constituent Assembly. This set in motion the Mountbatten Plan of 1947, which eventually led to the partition of India.
[7] The constitution of independent India departed from the 1935 Act by providing a bill of rights, abolishing the concept of separate electorates, and having the Prime Minister as the head of the government.

plans. It essentially became a body that dictated state governments on public expenditures, and what the acceptable mix of public and private investments were. The commission also set targets that were to be achieved in each of the five-year plans. Some of these plans had the explicit target of nationalizing industries and bringing them under the control of the central government (Rajagopalan, 2015). This method of top-down, centripetal policymaking continued for the next few decades through constitutional amendments and ultimately came to a head in 1975 during Indira Gandhi's prime ministership with the national emergency. It was only in the decades post the emergency that many of the problems with the Indian economy and its political makeup began to show. In the 1980s, regional parties started toppling INC-led state governments and slowly started making their way into the parliament. They also challenged many of the economic policies and it is this shift in power that can be attributed to the major economic reforms in the late 80s and the liberalization reforms of 1991 (Panagariya, 2004). This thesis focuses on these dynamics of political behavior and economic policymaking to gain further insights into the nature of federalism in India.

While research on Indian federalism has picked up on many of these political and economic phenomena, there are still many gaps when it comes to connecting the economic and political aspects of Indian federalism and analyzing it from a cross-disciplinary perspective. Rao and Singh motivate their book on the "Political Economy of Fiscal Federalism in India" by pointing out that most economic analyses of Indian federalism have not explicitly considered "the importance of institutions and incentives" in their analyses, and to understand Indian federalism in-depth, it is important to "analyze the strategic interplay of political and economic elements" (Rao & Singh, 2006). In other words, by focusing solely on fiscal aspects, economists tend to miss the broader political and societal context within which federalism works in India. For example, fiscal transfers between the central and state governments are important, but they do not fully capture the dynamics of power and influence between different levels of government. An analysis that incorporates the strategic behavior of political actors à la Buchanan and Tullock (1960) and takes into account the institutional structures that shape their behavior will provide a more complete understanding of how Indian federalism works. Rather than attempting to develop a single, all-encompassing theory that explains centripetal federalism in India, this thesis looks at partial mechanisms and focuses on specific aspects of centripetal federalism and their underlying factors.

Building on existing literature on the political economy of federalism, including Hamlin's (1985), Inman and Rubinfeld's (1997), Weingast's (1995, 2009), and Filippov et al.'s (2004) works, this thesis aims to enhance our understanding of the political economy of Indian federalism. It does so by addressing one central question: what are the effects of the central government's economic and political decision-making on a state government? In other words: what are the effects of centripetal federalism in India?

All four chapters address different aspects of centripetal federalism and the relationship between the central government and lower levels of government. Chapter 2 asks if "president's rule" is a tool used by the central government to capture weaker state governments. Chapter 3 shows how the central government can leverage its political position as well as its financial might to dictate highly centralized, one-size-fits-all policies to Indian state governments in response to the COVID-19 pandemic. Chapter 4 departs from the state-centre relationship and examines the role of local governments in India. It shows how state governments, when faced with the predicament of strengthening federalism at the grassroots level devolve the responsibilities for policy implementation but not the financial or functional power to carry out these responsibilities. Finally, chapter 5 examines the relationship between the strength of state and central governments and state-level inflation.

In addition to addressing the broad research question mentioned earlier, the papers included in this thesis also provide insights for researchers in at least four distinct areas of literature. Chapter 2 deals with the economic analysis of emergency constitutions as conceived by Bjørnskov and Voigt (2018). It is amongst the first empirical analyses of the effects of domestic emergency constitutions. Chapter 3 critiques India's response to the COVID-19 pandemic using the tenets of polycentric governance à la Ostrom (2010) and Congleton (2023) and offers a cautionary narrative to policymakers. Chapter 4 adopts a public choice perspective to examine local government reforms and argues that the 73rd and 74th amendments to the Indian constitution represent a political equilibrium that emerged from negotiations between elites at various levels of government who sought to secure their own power and interests. Chapter 5 draws on the works of Dornbusch and Edwards (1991), Edwards and Tabellini (1991), and Cukierman et al. (1992) on political instability and macroeconomic outcomes to show that governmental strength in a legislature as well as the nature of government formation can influence state-level inflation.

As far as research methods are concerned, this thesis is varied: chapter 2 and chapter 5 are empirical state-wise panel-data-based studies focused on measuring the effects of federalism,

while chapters 3 and 4 are descriptive case studies that attempt to understand the nature of centripetal federalism. While there are no explicitly stated assumptions about the behavioral model used in the papers, it is implied that the actors follow the assumptions of the bounded rationality model from the New Institutional Economics literature (Williamson, 2000). Moreover, all papers adhere to methodological individualism and strive to avoid the functionalist fallacy when analyzing the effects of federalism in India.

In terms of specific research methods, chapter 2 uses a conditional logit estimator following McFadden (1974) to estimate the likelihood of a president's rule being imposed in a state given a set of political determinants arising out of state and central government legislative behavior as well as other exogenous instability indicators. Chapter 5 meanwhile uses a least squares estimator to estimate the effect of political instability on inflation for 20 Indian states between the years 1990-2019. Since the paper uses monthly inflation as well as political instability data of Indian states for a 30-year period, appropriate robustness checks and methods to correct for estimator inefficiencies have been used following Driscoll and Kraay (1998) and Hoechle (2007). In chapter 3, to analyze how states reacted to central government COVID-19 lockdown policies, the paper uses data from the novel Google Mobility Reports, a database that publishes metrics on the number of visitors to certain categories of locations (such as grocery stores, parks, and train stations), and compares this data to the baseline days before the pandemic outbreak. Finally, chapter 4 combines the functional and contextual approaches of comparative constitutional law to understand the political bargaining processes behind the constitutional amendments that established local governments in India.

Apart from this, one of the major contributions of this thesis is a unique, high-dimensional dataset on state and central government positions and their coalitions in India between 1952 and 2019. This dataset is used in chapters 2 and 5 of the thesis. The dataset combines information from the statistical reports of the Election Commission of India, the archives of the Indian parliament, the websites of Indian state legislative assemblies and governors, as well as multiple secondary and news sources. The overarching aim of this dataset is to explore various understudied aspects of the Indian political economy, extending beyond the scope of the chapters presented in this thesis.

The thesis is structured in the following way: Chapter 2 presents empirical evidence obtained from a regression analysis consisting of 16,000 monthly observations at the state level. The evidence suggests that central governments possess the ability to deliberately hinder the

operation of democratically elected state governments. The paper underscores the innate centripetal nature of Indian federalism, both in its *de jure* configuration and in its *de facto* operation, and how legal remedies can curb rampant central government overreach.

The subsequent paper in chapter 3 furnishes additional proof of the centripetal tendencies inherent in Indian federalism using the management of the COVID-19 crisis as a case study. The paper posits that the nationwide lockdown enforced by the central government in India during the pandemic is a typical example of a one-size-fits-all centripetal response that disregards the heterogeneities in institutional capacities of various Indian states. It contends that the COVID-19 crisis was not effectively handled since state and local governments, which are in closer proximity to their constituents, lack the requisite power, financial resources, and capabilities to tackle pandemics.

Chapter 4 shows how centripetalism manifests itself when hierarchically higher levels of governments create new laws to improve governance at the grassroots. The paper posits that the flawed constitutional framework underpinning local governance in India is a product of a power bargaining equilibrium between state and central governments. This equilibrium allows both levels of government to retain their fiscal and legislative powers while creating an illusion of increased devolution. While the Indian constitution appears to grant significant autonomy to local governments on paper, in reality, their powers are often curtailed by state and central governments as well as parastatals.

Finally, chapter 5 focuses on exploring the connection between political strength and inflation across Indian states from 1991 to 2019. The results suggest two things: first, that central governments tend to have a larger influence on state-level inflation than state governments, and second, that states that have governments that are either in a coalition or are a regional party tend to experience higher levels of inflation.

2. Emergency powers and political capture in India[8]

Abstract

Emergency provisions allow governments to intervene swiftly, but also create opportunities for political capture. We analyze how this tension plays out in the largest federal republic in the world, India. Article 356 of the Indian constitution (known as president's rule) allows the union (federal) cabinet to dismiss a functioning state government and dissolve the elected state legislature if the federally appointed state governor recommends the dismissal due to political crises, natural disasters, riots, etc. Using an original panel dataset of Indian states from 1952 until 2019, we find that emergency provisions allow for political capture increasing federal dominance in India. We find that (1) the likelihood of invoking Article 356 is almost exclusively determined by the political strength of the parties in majority/coalition governments at the state level; (2) emergencies like riots and natural disasters are not significant predictors of invoking Article 356; and (3) judicial safeguards added in 1994 significantly reduced its imposition.

2.1 Introduction

Emergency provisions in constitutions weaken political constraints to allow governments to intervene swiftly to protect the lives and livelihoods of citizens. However, these constitutional provisions also create opportunities to abuse political power under the guise of dealing with an emergency. All emergency constitutions need to find a balance between enabling governments to act swiftly on the one hand and preventing governments from misusing the additional powers granted to them during a state of emergency (SOE) on the other. Federally constituted states face an additional challenge: they need to find a balance between the powers allocated to the federal level and those allocated to the states. When acting swiftly is key, additional powers could be (temporarily) allocated to the centre. Yet, here too, the possibility of misusing these powers looms large. In this paper, we analyze how this tension plays out in India, the world's largest federal republic.

The constitution of India allows the union (federal) cabinet to dismiss a functioning state government and dissolve the elected state legislature if the governor of the state appointed by the union cabinet recommends the dismissal which we refer to as a "state emergency" in this paper. A recommendation by the appointed governor must be made if "a situation has arisen in which the government of the state cannot be carried on in accordance with the provisions of this

[8] This chapter is joint work with Christian Bjørnskov, Shruti Rajagopalan, and Stefan Voigt

Constitution" (Article 356). Such breakdown in governance may be caused by natural disasters, domestic strife, communal riots, political crises like the inability to form a government, or non-compliance with the constitutional directives of the union cabinet. This arrangement is also known as "president's rule".

Granting extra powers and discretion to the union government and state governor appointed by the union government during an emergency may result in misuse, as it may motivate union governments to remove state governments formed by rival political parties. By granting the union government this emergency provision, the framers of the constitution wanted to ensure that state governments adhere to the constitution (Government of India 1988, p. 6.2.14; Sagar 2016). They were, however, aware of the potential trade-off between providing strong emergency powers to the union government and the possibility of it being misused for political gain. The Chairman of the Drafting Committee of the Constituent Assembly of India, B.R. Ambedkar (*Constituent Assembly Debates*, 1949, p. 177) explained, "I do not altogether deny that there is a possibility of these articles being abused or employed for political purposes … the proper thing we ought to expect is that such articles will never be called into operation and that they would remain a dead letter."

The provision has not remained a dead letter. Between 1950 and 2019, it has been used 116 times to impose direct union government rule in various states of India. Of the 28 Indian states, only two (relatively recently formed) states have never experienced a president's rule.[9] Every other state has experienced this kind of union government rule at some point (see Figure 1), sometimes for years on end. Not surprisingly, the political parties forming the union government have been criticized for frequently using and abusing president's rule (Reddy and Joseph 2004) and for undermining the federal structure of India.[10] Article 356 was invoked with an alarming frequency by the union government in the seventies and the eighties as a political tool to punish opposition parties forming state governments, a trend that even led to the creation of

[9] Since the state of Jammu & Kashmir was reconstituted as an administrative division governed by the Indian union government, i.e., union territory, in August 2019, the total number of states has come down from 29 to 28. However, for this paper, which looks at the period till 2019, the erstwhile state of Jammu and Kashmir will be counted as a state and not as a union territory. The two administrative regions in India never to experience president's rule are Chhattisgarh formed in 2000 and Telangana formed in 2014.

[10] This misuse or abuse of Article 356 is well documented, see Sarkaria et al. (1988). For instance, when the Janata Party formed a coalition government at the union, it imposed president's rule in nine states that were governed by its rival, the Congress party (Punjab, Rajasthan, Orissa, Haryana, Himachal Pradesh, Madhya Pradesh, Uttar Pradesh, West Bengal and Bihar). When the Congress party won elections in 1980, it retaliated and imposed president's rule in nine states with governments formed by rival parties (Punjab, Rajasthan, Orissa, Madhya Pradesh, Uttar Pradesh, Maharashtra, Bihar, Tamil Nadu, and Gujarat). A government commission on federalism, commonly known as the Sarkaria Commission, assessed in 1988 that only about one-third of the instances of president's rule were a legitimate use of the power and all others were an abuse of the emergency provision in the hands of the union government (Sarkaria et al., 1988) for political and partisan profit.

an expert committee on union and state relations that examined the article's use, the so-called Sarkaria Commission (Sarkaria et al., 1988).

President's rule was invoked frequently in the seventies and eighties followed by the infrequent use of president's rule since the mid-nineties, as shown in Figure 2. This trend has puzzled scholars since no changes in the procedure outlined in Article 356 of the constitution were passed. Brass (1994) and Jain (1994) argue that the decrease in the usage of president's rule after the 1990s is due to the Indian National Congress' dominance until then, followed by their decline as the dominant party. Singh (2001) and Sadanandan (2012) attribute the decline to the rise of regional parties and coalition governments. Noorani (2011) argues that the judiciary's safeguards imposed by *S. R. Bommai v. Union of India* (1994) [hereinafter *SR Bommai*] led to a decrease in the misuse of emergency powers. However, no comprehensive study has tested the alternative theories that could explain the reasons for the frequent use and abuse until the nineties, or the infrequent use of president's rule since the mid-1990s.

In this paper, we analyze the determinants of the use of president's rule and test the various explanations offered. To do so, we rely on Tsebelis' veto player theory (2002). Veto players are individual or collective decision-makers whose agreement is required for the change of the status quo. These veto players can be institutional or partisan, or both. We detail the individual and collective veto players in the Indian federal and parliamentary system, and their relative strengths or weaknesses, to explain the infrequent use of president's rule since the nineties. We construct a unique panel dataset containing monthly information on the political composition of the state and union-level legislatures and executives with all the potential veto players for 40 current and former Indian states between April 1952 and October 2019. Our dataset also contains events that could cause the breakdown of constitutional machinery (i.e., riots and natural disasters). We also explicitly control for important events, such as the governor ruling on president's rule in *SR Bommai*

Here are our main findings: We first find that in India, the power to invoke state emergency has been politically captured to destabilize the opposition, and not to deal with manmade or natural disasters. We find that union governments invoke it when it is less costly i.e. when confronted with weaker veto players. The likelihood of imposing president's rule is almost exclusively determined by the strength of the mandate of the ruling party in the state legislature; a five-percentage point smaller seat share is associated with a ten percent higher probability of the union government imposing president's rule.

Second, coalition governments in states are about three times more likely to experience president's rule than a state government formed by a single party. These findings are in line with Tsebelis (2002) who argues that in parliamentary systems, the veto players are equivalent to the number of political parties. In many countries, events that may look like real-world emergencies are used as the ostensible reason to impose SOEs (Bjørnskov et al., 2022). Our third finding is that in India, real-world emergencies like communal riots or natural disasters are not significant predictors of president's rule imposition. We observe that the only exogenous shock that consistently influences the likelihood of a president's rule imposition is the death of a state's incumbent chief minister, which causes a power vacuum within the state government leadership, and therefore weakens an important veto player in the office of the chief minister, creating room for politically opportunistic behavior by the union government. Our fourth finding confirms the insight that strong institutional veto players play an important role. We find that the constitutional safeguards provided by the governor in *SR Bommai* significantly changed the way in which president's rule is imposed on states. While we cannot rule out that the popular mandate of a ruling union government continues to affect the use of president's rule, it is no longer used systematically in the context of a coalition government.

This paper contributes to three different strands of literature. First, the literature on the use and abuse of Article 356 of the Indian constitution detailed in the Sarkaria Commission Report (Choudhry et al., 2016; Jain, 1994; Noorani, 2011; Sadanandan, 2012; Singh, 2001; Tummala, 1996). Second, the literature on veto players as the most crucial aspect explaining differences between parliamentary democracies (Cheibub & Limongi, 2002; Tsebelis, 2002). We also contribute to the literature on institutional veto players like the judiciary and the response of other branches of government to judicial review in India (Rajagopalan, 2016, 2021); and more generally in constitutional republics (Clinton, 1994; Feld & Voigt, 2003; Ferejohn & Weingast, 1992; Rogers, 2001; Vanberg, 2001).

The rest of the paper is organized as follows: In section 2.2 we detail the constitutional context within which Article 356 operates, in section 2.3 we elicit the veto players that are involved in its operationalization, in section 2.4 we list out our data, section 2.5 explains our empirical approach, section 2.6 presents and discusses the results, and finally, concluding remarks are in section 2.7.

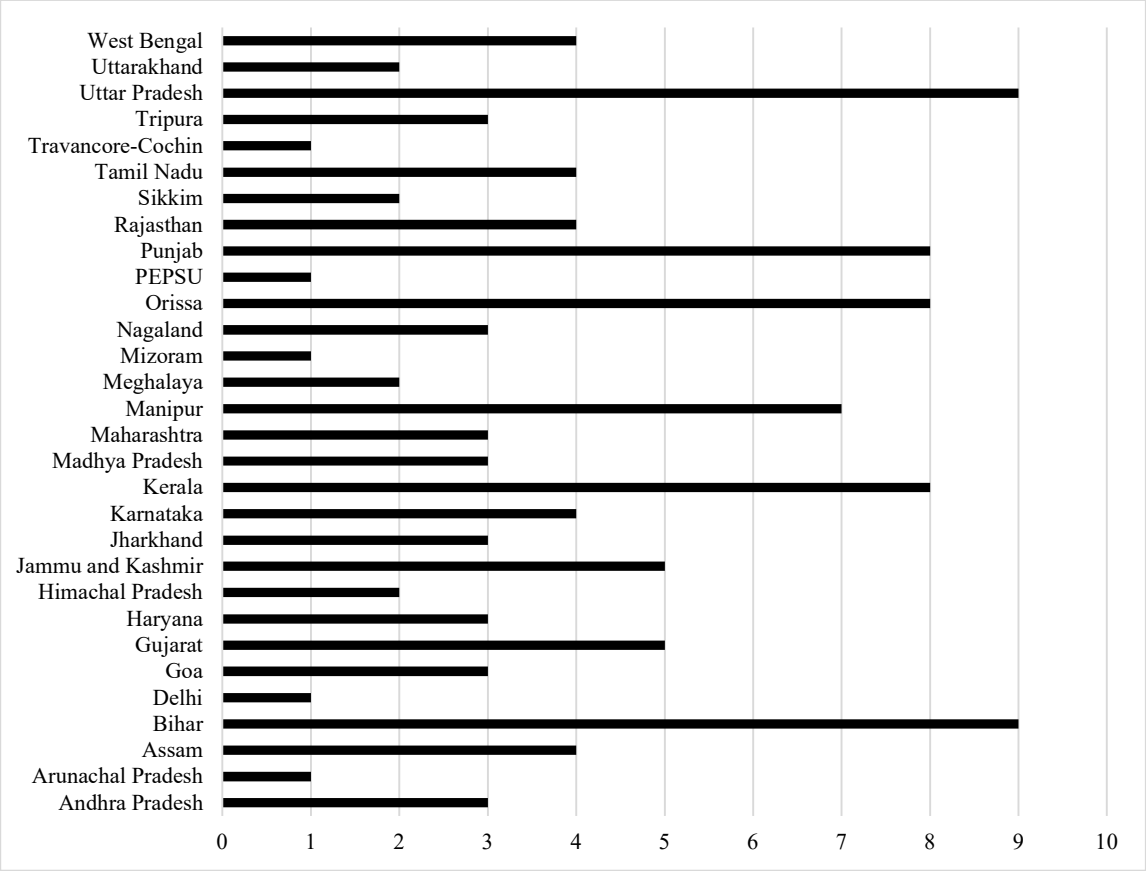


Figure 1 State-wise Incidence of president's rule (1951-2019)

Source: Own compilation based on Sadanandan (2012) and Shrinivasan (2016).

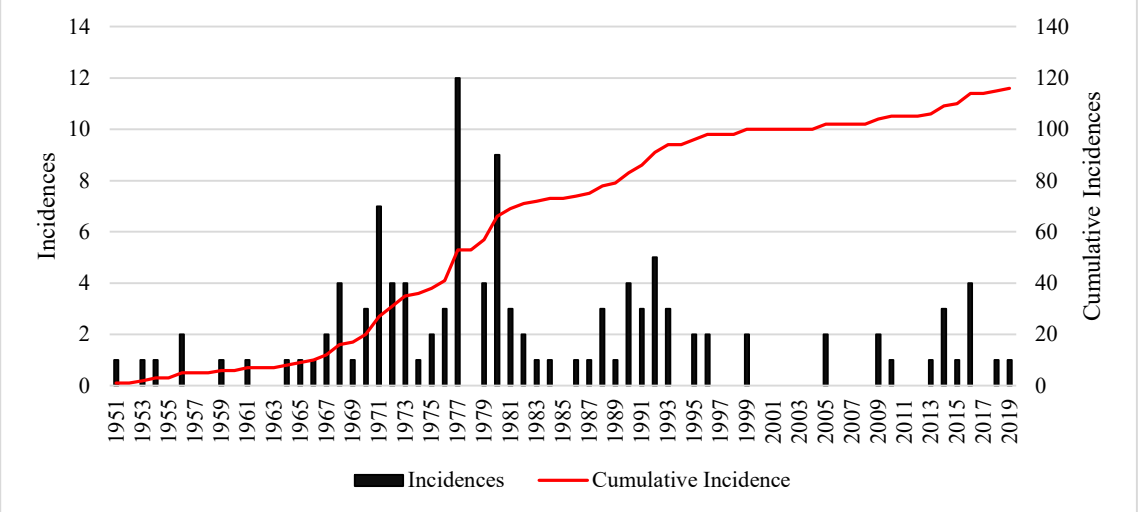


Figure 2 Incidences of president's rule by year (1951-2019)

Source: Own compilation based on Sadanandan (2012) and Shrinivasan (2016).

2.2 Article 356 (President's rule)

2.2.1 Constitutional context

India is the largest federal republic in the world with 1.4 billion people in 28 states and 8 union territories. The possibility of a federal government undermining states' political authority arises because the constitution clearly establishes two levels of government – the union level and the state level – where each level is assigned powers to be exercised within its jurisdiction. The emergency provision - Article 356 - allows the union government to take over the governance of a state when the latter is not able to carry out its duties "in accordance with the provisions of this Constitution."

India's constitution divides legislative powers into union powers, state powers, and concurrent powers (schedule VII). However, there are many clauses that enable the union to overrule or undermine the legislative competence and authority of the states enabling legislative centripetalism.[11] One rule establishing the dominance of the federal executive is that the governor of the state, in whom the executive power of the state vests (Article 154) is appointed by the union cabinet and serves at the pleasure of the president (Articles 155-6).

Additionally, India's governor determines the policies for appointment and transfer of judges, and overall judicial administration in state high courts.[12] The origin of Article 356 can be traced

[11] If there is any repugnancy or conflict between legislation by parliament and legislation by a state on a topic in the concurrent list, then the parliament will prevail (Article 254[1]), though the state law will prevail over the parliamentary law if the president saves the repugnant provision (Article 254[2]). The legislative powers of the union are further strengthened because the union has the residuary power for legislation. The lists in schedule VII, which document the areas of legislative competence for the different levels of government, are not exhaustive. Thus, parliament has exclusive power to make any law with respect to any matter not enumerated in the concurrent list or state list (Article 248 and Schedule VII, list I, entry 97). Moreover, the state list is not completely off-limits to the union government. If the council of states (upper house of the parliament) passes a motion that it is in the national interest that parliament should make laws with respect to any matter enumerated in the state list, then parliament may legislate on that subject (Article 249). This power is further expanded if a state of emergency has been declared, which enables parliament to legislate on any matter in the state list (Article 250). Parliament can also make laws on any subject in any jurisdiction if such laws are enacted as part of implementing any treaty, agreement, or convention with any other country or countries or any decision made at any international conference, association, or other body (Article 253). Finally, most of the provisions in the constitution can be unilaterally amended by parliament, without the requirement of ratification by the states. Of the 395 articles and 12 schedules in the constitution of India, only 30 articles and one schedule require state ratification for amendment.

[12] Article 217 of the Indian constitution, along with the memorandum of procedure for the appointment of high court judges, provides the process for appointing judges to Indian high courts. The chief justice of the high court consults with the two most senior colleagues on the bench to create a list of candidates at least six months before a judge retires. The high court chief justice submits the recommendations, including written opinions and relevant information, to the chief minister, who advises the governor. The governor forwards the recommendations to the union minister of law and justice within six weeks. The union law minister reviews the recommendations and sends them to the chief justice of India and a collegium of two senior-most

back to the colonial state.[13] It was written after the departure of the Muslim League from the Constituent Assembly when a bloody and violent partition was underway. India's leaders were afraid of potential secession, untamed violent ethnic conflict, and communist revolutions in certain states. This is why the constitution framers decided that the power to intervene when there was a breakdown of law and order, or constitutional governance, would lie with the union government and not the state governor.

2.1.2 Procedure to invoke Article 356 and impose president's rule

In principle, there are three reasons why Article 356 may be invoked by the union government: It can be invoked (1) in line with the goal spelled out in the constitution to deal with an emergency, (2) using an emergency as a pretext to increase the power of the union government, or (3) as a pretext to increase the power of the central government without any emergency occurring. To connect instances in the use of Article 356 with one of these reasons, we need to understand the process that determines the incentives of various federal and state actors in invoking Article 356. This will also help resolve the puzzle of why the frequent invocation of president's rule has ebbed since the nineties.

The formal procedure to invoke Article 356 is depicted in Figure 3. The process is kicked off by the appointed governor of a state sending a report to the union cabinet explaining why the state government is unable to function in accordance with the constitution. If the union cabinet concurs with the governor's report and recommends that the president invoke Article 356 in the state, the president has discretionary power to do so. However, the constitution is silent on what constitutes a failure of constitutional machinery or a constitutional emergency. The Sarkaria Commission Report (Government of India 1988), which examined federalism in India and specifically investigated the abuse of president's rule for political purposes in 1988, established a

supreme court judges. They consider the opinions of the high court chief justice and judges, any other supreme court judge familiar with that high court, and the government. Within four weeks, the chief justice sends the recommendations to the union law minister, who then forwards them to the prime minister within three weeks. Based on the prime minister's advice, the president appoints the judges. Under Article 222, the chief justice of India consults with the chief justices of relevant high courts when transferring judges. The chief justice and a collegium of four senior-most supreme court judges review all opinions and create a proposal. Judge consent is not necessary, but their circumstances and preferences are considered. The chief justice refers the transfers to the union law minister, who then recommends them to the prime minister. The president approves the transfers based on the prime minister's advice.

[13] The emergency provision in Article 356 can be traced back to the Government of India Act 1935, according to which, if the governor of a province believed the government of the province cannot be carried on in accordance with the provisions of this act, he may by proclamation assume to himself all or any of the powers of the ministry and the legislature, and discharge the functions thus assumed in his discretion (Section 93). The only exception was that he could not encroach upon the powers of the high court. Similar powers were conferred on the governor-general of India under Section 45, which was a part of the federal scheme. However, this part never came into operation.

non-exhaustive list of guidelines. This list includes a political crisis or a deadlock where no party can form a government coalition.[14] An internal subversion where the state government operates contrary to constitutional provisions, ranging from disregarding constitutional norms to plotting violent revolution with a foreign government.[15] The list further mentions a breakdown where the state government is unable to maintain law and order during communal riots, secession, or natural disasters.[16] Lastly, the list mentions non-compliance of a state government with the directions of the union government.[17]

There are several procedural safeguards in place regarding Article 356. The proclamation made under this article is only valid for two months unless it is approved by parliament. After approval, it can be extended for up to six months (Articles 356(3) and 356(4)). However, beyond one year, an extension is not permitted unless there is a national security emergency, and the election commission certifies that it is difficult to hold elections in the state assembly (Articles 356(5) and 356(6)). Furthermore, proclamations under Article 356 cannot be extended beyond three years, except in the state of Punjab.[18] It is important to note that Article 356 does not authorize the president (and thus the union cabinet) to assume any powers vested in or exercisable by a high court. The article only grants the president the executive and legislative authority of the state, but no authority over the state judiciary. In the *SR Bommai v Union of India* judgment of 1991, the governor placed additional limitations on the union cabinet's authority to use Article 356. This case was initiated by SR Bommai, who was dismissed as chief minister of Karnataka using Article 356.[19] The Court inquired into the following issues after the

[14] Political crisis as defined by the Sarkaria Commission arises when: 1) a party or a coalition of parties cannot gain an absolute majority to form the government, or 2) a government resigns or is dismissed for losing majority support; or 3) the party with majority refuses to form or continue the government, and all possible alternatives explored by the governor to form a government in such instances have failed.

[15] Internal subversion as defined by the Sarkaria Commission occurs when a state government 1) conducts its business beyond the constitutional mandate 2) deliberately brings the government to a standstill or creates a deadlock; 3) functions as a dictatorship; or 4) instigates a violent revolution, and all corrective measures to remedy such distortions have failed.

[16] Physical breakdown as defined by the Sarkaria Commission occurs when a state government refuses or is unable to deal with 'internal disturbance' or a natural calamity that paralyses administration and endangers the security of the state.

[17] Non-compliance with the directive of the union government as defined by the Sarkaria Commission arises when: the central government issues constitutional directions, especially when the state government fails to inform the central government of any public disorder threatening the security of the state, and the state government does not comply with such directions despite adequate warning and opportunity, the president can treat such non-compliance as a constitutional emergency.

[18] There, it can be extended for up to 5 years, due to an amendment to article 356(4).

[19] This question had been raised once before in 1977, but the Court refused to establish a standard for the president to invoke article 356. In the *State of Rajasthan v Union of India*, the court rejected the contention that ascertaining whether Article 356 ought to be invoked was a non-justiciable 'political question'. Concerning article 356, the relevant limit was that the president had to be *satisfied* that a situation had arisen where the government of the state *cannot* be carried on in accordance with the provisions of the constitution. Overall, the supreme court declined to establish a standard for satisfaction. As Justice Bhagwati explained: "The satisfaction of the president is a subjective one and cannot be tested by reference to any objective tests. It is deliberately and advisedly subjective because the matter in respect to which he is to be satisfied is of such a nature that its decision must necessarily be left to the executive branch of government. There may be a wide range of situations which may arise, and their political implications and consequences may have to be evaluated in order to decide whether the situation is

proclamation of president's rule in a state: (1) whether in fact conditions objectively existed, which rendered it impossible to carry on the governance of the state in accordance with the constitutional provisions and (2) whether the state's assembly was dissolved only after both houses of parliament approved the proclamation made by the president under Article 356.

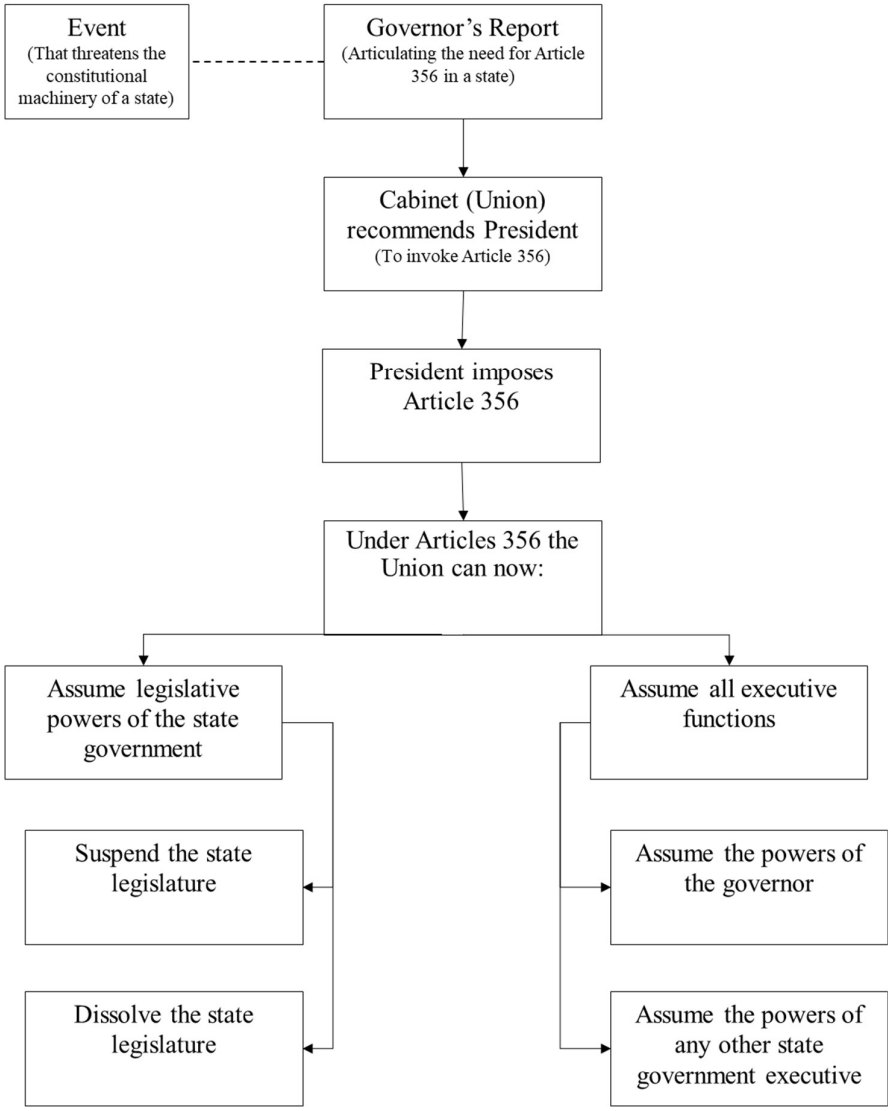


Figure 3 Process of invoking president's rule

The *SR Bommai* judgment determined that, even after obtaining approval from parliament, the issue will be open to review in both the high courts and the supreme court to determine independently whether the conditions truly justified the use of power. Once a prima facie case is

such that the government of the state cannot be carried on in accordance with the provisions of the constitution." Cited in Sagar (2016, p. 225).

established, the burden of proof falls on the government/union cabinet to justify the invocation of article 356. In the event of such a review, the supreme court ruled that the reviewing court is entitled to material evidence in the form of the governor's report to the cabinet, as well as records from the government containing the material on which the cabinet advised the president to invoke article 356. The *SR Bommai* judgment also granted courts the authority to order an interim stay on the exercise of power under Article 356, and if the proclamation was declared unconstitutional, the courts had the power to order the revival of the dissolved state assembly and the reinstatement of the dismissed state government. These provisions restrict the union cabinet's (and therefore the president's) authority by giving the judiciary a broad set of powers to reverse the actions of the union cabinet if they are deemed arbitrary and unconstitutional.

2.2 Veto players and their incentives

To understand the operation, implications, and consequences of Article 356, we analyze the incentives of individuals holding positions in or as union cabinet, parliament, governor, president, etc. We assume that political actors are pursuing their self-interest broadly defined.[20] The potential benefit of invoking Article 356 is to increase the power of the union government by bringing a state directly under its rule. Given this benefit, the lower the cost of invoking Article 356, the higher the expected net benefit and, in turn, the likelihood of its invocation.

According to Tsebelis (2002), a veto player is an individual or collective actor whose agreement is necessary to modify the status quo, in our case: to impose president's rule. Article 356 must be approved by the governor, the president, the union cabinet, and both houses of parliament and – since 1994 –by the judiciary. These are, hence, the potential veto players. Another key player is the state government, especially the office of the chief minister. We will take their political affiliation explicitly into account as constitutionally separate positions like the union cabinet, or the governor or the president may not be effective veto players if all of them belong to the same political party.

[20] Self-interest only requires that the interest of his opposite member(s) in the exchange be excluded from consideration. The individual legislator, judge, bureaucrat, or political entrepreneur can be motivated by various reasons. The motivation for president's rule may be that the individual legislator or cabinet member truly believes the state is being governed unconstitutionally. The pursuit of president's rule to dismiss a state government as an end, no matter how noble or legitimate the reasons, would be characterized as pursuing his self-interest. See Buchanan and Tullock (1960).

2.2.1 Union government (cabinet)

When the benefits of invoking president's rule in a state outweigh the political and organizational costs, the incumbent union government may do so. Article 356 is typically invoked to increase the power of the union ruling party in a state where it is currently not in government, weaken a rival party, or both, by dismissing the state government and bringing it under union government rule. The Immediate benefit is that after imposition of president's rule, fresh elections are announced which the union government party might expect to win. This is especially true because imposition of president's rule makes it more challenging for the destabilized party to win elections immediately after president's rule. In the 116 cases of president's rule imposition studied, the dismissed chief minister was only able to continue governing in 24 cases after the lifting of president's rule. The party that was dismissed using president's rule was able to form the government again in 44 instances after president's rule had been listed.[21] Therefore the big benefit to the union government actors is to destabilize the political trajectory of a state government party in the short term.

Destabilizing a political rival and capturing a state government also helps increase political power at the union level in parliament in the longer term, as the Rajya Sabha/upper house represents states proportional to the size of the state legislature. A majority in the upper house is essential to pass constitutional amendments and electing the president. The union government has two types of costs to consider. The first is the organizational cost of collective decision-making. Parliament is one of the veto players at the union level, and it is bicameral.[22] Passing the motion through requires a simple majority of members present and voting in each house of parliament (Article 100(1)). A minimum quorum of one-tenth of the members of the house (Article 100(3)) is also required.

If a government consists of a single party that has the majority in the Lok Sabha (lower house of parliament) and all its cabinet members are from the same political party, then there are fewer effective veto players. After a constitutional amendment in 1985 that created an official whip and prohibited legislators from voting against their party whip, further weakened individual

[21] The Indian National Congress party (INC) survived 29 out of the 44 instances, lending credence to the Brass (1990) dominant party hypothesis.

[22] Parliament comprises of two houses. The lower house (Lok Sabha) has a maximum strength of 552 members. The members of the lower house are directly elected to the union Legislature through the general elections. The Union government is directly formed by achieving a majority in the lower house by a single party or a coalition of parties. The upper house (Rajya Sabha) has a maximum strength of 250 members. The members of the upper house are chosen by an electoral college comprising members of state legislatures.

parliamentarians as effective veto players.[23] A union cabinet with a strong mandate within parliament is more likely to impose president's rule in a state. Conversely, a coalition government at the union level has more potential veto players and is less likely to impose president's rule in a state.

2.2.2 State legislature and chief minister

The second aspect to consider is the type of government at the state level. If the state is governed by a coalition and not a single party, then there are actors within the coalition who may benefit from the dismissal of the government, if they believe they have a stronger chance of winning a majority in reelection, making the likelihood of invoking president's rule is higher. Not all states were formed at the same time, and not all state political parties have the same experience in winning elections and governing a state. If president's rule is invoked by the union government to destabilize political rivals in the state, a more experienced political party will be harder to destabilize. The crucial veto player is the state chief minister. One reason is that most states in India have a unicameral legislature,[24] and the 1985 constitutional amendment creating an official whip also applies to state legislatures. The state executive, and often the office of the chief minister, is an important player. The more experienced a chief minister is, the less likely that president's rule will be imposed to destabilize his or her government.

Another factor by which the chief minister's office can prevent or lead president's rule, especially if the chief minister is experienced and politically powerful indicated by the number of times the chief minister's party formed the government in the state. If the incumbent chief minister dies in office, it increases political uncertainty and, possibly, instability caused by a power vacuum. This event may lead to an increase in the likelihood that the union government invokes

[23] To curb party-switching or political defections, Schedule X, commonly known as the anti-defection law, was inserted in the Indian constitution by way of the 52nd amendment in 1985. It lays down that a member of the parliament or state legislative assembly can be disqualified for: 1) voluntarily giving up his seat. This need not necessarily mean tendering a formal letter of resignation. It can also be inferred from the conduct of the member, for example, where a member publicly opposes one's own party or shows support to another party; 2) voting in a manner that is contrary to any direction given by the political party or the party whip. In a parliamentary democracy where the executive and legislature are not entirely distinctive, an anti-defection law will secure the complete deference of the Treasury benches regardless of what a legislator belonging to the ruling party may feel about an executive decision. It therefore prevents any challenge from legislators belonging to the ruling party, who are meant to be duty-bound to their constituents first and then their party, and therefore are required to keep a check on the executive. This problem is less severe in coalition governments, where the leader of the majority party can only persuade and not compel other parties in the ruling coalition to follow the diktat. In such cases, the majority party in the coalition runs the risk of losing its strength if its decision does not sit well with its allied parties. However, where a single party has a majority in the parliament, the anti-defection law leaves no room for any contrary view, however relevant and required as it may be, to emerge from the treasury benches.

[24] Twenty-one states in India have a unicameral legislature, and seven states have a bicameral legislature. Three of the eight union territories have a legislature, and all three are unicameral.

president's rule under the guise of stability, but where it is in fact motivated by simple power considerations. The above arguments lead us to the following hypotheses:

Hypothesis 1: Higher the seat share of the union government in parliament, the higher the likelihood of invoking president's rule in states.

Hypothesis 2 Higher the seat share of state governments in the state legislatures, the lower the likelihood of invoking president's rule.

Hypothesis 3: If the party forming the government in a given state is part of the coalition government at the union level, it will have a lower likelihood of president's rule invocation.

Hypothesis 4: The more years that a party forming the incumbent government has governed the state in the past, the less likely that president's rule is imposed.

Hypothesis 5: Political uncertainty at the state level caused by the death of important politicians, specifically the death of a chief minister in a state, increases the likelihood of invoking president's rule.

2.2.3 The governor

The procedure to invoke president's rule commences with the advice/securing the consent of the governor. The executive power of the state vests in the governor (Article 154), who acts on the advice of the council of ministers with the chief minister as the head, a group also known as the state cabinet (Article 163). Bills passed by the state legislature must be signed by the governor to become Acts, but the governor may also reserve a bill for the president's assent. In India, the president appoints governors (Article 155), who hold office at the pleasure of the president (Article 156). Essentially, the union cabinet is responsible for recommending whom to appoint as state governors to the president, making the governor of the state appointed by the union cabinet.

The governor serves at the president's discretion for five years, but their term may not align with the incumbent union government's term. Consequently, the incumbent union government may be working with governors appointed by previous governments, even political rivals. If the governor is an ally of the party (or parties) governing the union, it's easier to get a recommendation from the governor to invoke the rule.

The governor is responsible for appointing the chief minister of the state (Art. 164). The convention is that the leader of the largest parliamentary group is invited by the governor to choose the chief minister, but the governor has the final say, and the decision can't be challenged in the legislature or courts for review (Art. 164(1)).

Regarding the emergency provision, the governor has enormous power and discretion to decide if there is a constitutional crisis caused by a lack of political majority to form a stable government and recommend to the union cabinet to bring the state under president's rule. governors who cooperate with the union government may enjoy political benefits such as reappointment, appointments to the upper house of the parliament, positions in the permanent bureaucracy, or positions of power within the party.[25]

The governor has significant discretionary power, and their actions cannot be questioned in court, regardless of whether the emergency or crisis was caused by riots, natural disasters, or political turmoil.[26] The constitution framers intended the governor to be a neutral representative of the federal government (Chatterjee, 1992). However, the union cabinet has often appointed partisan individuals who use their discretionary powers, including the invocation of article 356, to benefit the union cabinet (Reddy & Joseph, 2004; Sarkaria et al., 1988). If the governor was appointed by the current union government or is of the same party as the union government, then despite the separation in constitutional roles, the governor is a much weaker veto player – if he is one at all.

Hypothesis 6: If the governor of a state was appointed by the incumbent union government, this increases the likelihood of invoking president's rule.

2.2.4 The president

The president of India is the head of state, while the prime minister is the head of government. The executive power of the union, and the supreme command of the defense forces of the union vests with the president (Article 53) who is indirectly elected by the upper house of the parliament for a period of 5 years (Articles 54 and 55).[27] The presidential term need not be

[25] Of the approximately 550 governors we have in our dataset from 1951-2019, we find that governors who were affiliated with any political party have served ~17% more months in power.
[26] The governor in *SR Bommai* held that the governor's report in itself was not justiciable, i.e. the court would not go into the question of determining the correctness or adequacy of the material, including the governor's report, which would be submitted for the consideration of the president. Even if part of the material is irrelevant, the court is still constrained from interfering as long as some material is relevant to the issuing of the proclamation.
[27] The president can only be removed from office by impeachment under the provision in Article 61.

synchronous with the union government term. Therefore, it is possible for the union government to serve a president who was elected during the term of a previous government, and perhaps by political rivals. If the president is a political ally of the governing party, it is easier to secure the president's consent to invoke the rule, making the president an unlikely veto player.

Some consider the office of the president a ceremonial position since the president acts on the aid and advice of the council of ministers. Therefore, the decisions and actions of the president are essentially the decisions and actions of the union cabinet. This extends to Article 356, which, though known as president's rule, is really rule by the union government. In practice, the power lies with the office of the prime minister. The president does not face any direct costs of imposing president's rule, as the decision cannot be challenged in court.[28] Similarly, there are no direct benefits as the president holds the highest office in the country with little possibility of future rewards. However, if the president is a member of or strongly affiliated with a political party, then his or her decision may promote the interests of that party. If the president, the union cabinet, and the governor all belong to the same political party, then despite the separation in constitutional roles, they are no longer effective veto players while invoking president's rule, lowering the cost of securing consensus.

However, there is a second possibility. An important incentive for any political party at the union level to invoke president's rule is to capture the state government, which will improve the representation of that party in the Rajya Sabha/ upper house which represents states proportional to the size of the state legislature and has twelve eminent members appointed by the president.

Since the president is elected by the upper house, which is the council of state legislature representatives; a union government party with higher representation increases the chances of choosing the president in the next election, which also increases power over the twelve presidential appointments. If the incumbent president is already aligned with the union government, there is less incentive to use president's rule to capture more seat share in the upper house. This gives rise to two opposing hypotheses:

[28] Concerning the president's proclamation, it is justiciable in court, to the extent of that the court will review the manner of making such a proclamation and not its merits. The governor held that it cannot interfere with the president's discretion, but can look into whether there was justification or sound basis in the form of objective material, which grounds the president's decision. Such material could be the governor's report, or any such material, which shows that the state government cannot carry on per the constitution.

Hypothesis 7: If the president was elected during the term of the incumbent union government, this increases the likelihood of invoking president's rule.

Hypothesis 7a: If the president was elected during the term of the incumbent union government, this decreases the likelihood of invoking president's rule.

2.2.5 The judiciary

In *SR Bommai*, the governor of India addressed three main questions: 1) if proclamations of president's rule could be reviewed by the courts; 2) the scope and limits on the powers of the president under Article 356 to dismiss state assemblies and impose president's rule; and 3) the consequences of declaring such a proclamation invalid after parliamentary approval. The majority in *SR Bommai* overruled the 1977 judgment and decided that proclamations under Article 356 could be reviewed by the courts and invalidated if found to be based on improper, *mala fide,* or irrelevant grounds. This made the higher judiciary an important, non-political, veto player.

When reviewing a proclamation, the court examines the material it is based on and whether it is relevant to the decision. The president's power to issue a proclamation is not absolute and must be based on relevant material, such as a governor's report or other information. The presence and reliance on such material are preconditions for proclaiming article 356.

Article 74(2) prevents courts from reviewing the advice given by cabinet ministers, but not the material the advice may be based on. Courts can examine if there was any relevant material for the advice given and if the president could have acted on it. One factor is whether the state government had a chance to prove its strength on the floor of the state legislature before president's rule was imposed. In *SR Bommai*, the majority opinion declared the imposition of president's rule in Karnataka unconstitutional because this condition was not met.

The Court decided that the power to review a proclamation and determine its constitutionality would be meaningless if it couldn't grant relief based on the proclamation being unconstitutional. The political impact of the *SR Bommai* ruling is significant: if the proclamation is declared unconstitutional, the court can reinstate the dissolved government even if parliament has approved the proclamation.

Though the language of Article 356 has not changed, *SR Bommai* introduced an additional check on the imposition of president's rule by allowing such decisions to be reviewed by the

Court. This made requiring judicial approval or ratification of the materials on which it was based. This decision made it more difficult for the union government to secure consensus for invoking president's rule.

Since *SR Bommai,* the judiciary is an important and strong institutional veto player with the ability to review as well as reverse procedurally faulty invocation of president's rule.

Hypothesis 8: The likelihood of invoking Article 356 and its misuse has decreased after the Bommai judgement in 1994.

2.2.6 Nonpolitical reasons for imposing president's rule

There are two types of factors that impact the invocation of president's rule that are not directly related to the strength of the mandate of the union and state governments. The first is situations like natural disasters that are not political and are unrelated to the strength of the government in the legislature. In the following, we therefore treat natural disasters as exogenous events.

The second is political turmoil, communal riots, etc., which may or may not directly impact the strength of the mandate of the union and state governments but are important political factors that may for example delegitimize the incumbent party. Therefore, we treat these as endogenous. Declaring president's rule after an endogenous event is likely to arouse more opposition or backlash from the public than invoking it after an exogenous event and, therefore, politically costlier. If this assumption is correct, then exogenous events might even constitute welcome pretexts to invoke president's rule.

Hypothesis 9: If the underlying cause of the emergency is a natural disaster, then there is a higher likelihood of invoking president's rule.

Hypothesis 10: If the underlying cause of the emergency is communal riots, then there is a higher likelihood of invoking president's rule.

2.3 Data

In the previous section, we have detailed the various veto players and the incentives of various government actors to impose/block president's rule and the corresponding implications which are testable. Since our goal is to understand the relevance of each of the different actors on the likelihood of imposing president's rule, we construct a monthly panel dataset of 40 current and

former Indian states between April 1952 and October 2019. This fine-grained monthly panel is constructed with every instance of president's rule in each state in every month and year since the founding of the Indian republic. Since the imposition of president's rule can be contemporaneous with other events and variables, these need to be controlled for.

Four broad categories or factors are explicitly considered and included in the dataset: (1) information on state-level legislative and executive positions; (2) information on union legislative and executive positions; (3) information on events that may have led to an emergency or the breakdown of constitutional machinery, like riots and natural disasters; and (4) spatial and economic controls. This data was compiled using official government sources, accredited news, and other information sources. A detailed list of sources on each of the variables is available in table A1. of appendix A.

Our dependent variable is binary and indicates whether president's rule was imposed on the particular state in a given month-year. A dataset of all president's rule impositions between 1950 and 2016 was compiled by Shrinivasan (2016), which is an extension of a pre-existing dataset compiled by Sadanandan (2012). Both these studies rely upon Lok Sabha records and newspaper reports for recording events. We have extended the dataset until October 2019 relying on newspaper reports as well.

Regarding independent variables, we first include the composition of both the state as well as the union legislature. We record the strength of the state government in terms of the percentage of seats held in the legislature by the party (or coalition of parties) in power during the time of a state election via the Election Commission of India (1951-2019) of the general election to the relevant state legislative assembly. We rely on news reports to check for changes in government strength as well as changes in the composition of coalitions until the next election cycle in the state. We collect the same information for the union parliament, which is our second variable of interest, for which we use the election commission's statistical reports of the general election to the Lok Sabha. For the union level, we also code the composition of the Rajya Sabha (upper house) using information from the Rajya Sabha website.

Data on governors' tenure, including their previous experience as governors of other states is recorded using government (especially Raj Bhawan/ governor's office) websites. We used news reports as well as biographies of the governors to check if they had had any current or previous political affiliations with the parties or the government at the union or the state level. We also

record if the governor had any political affiliation and if the governor is politically aligned with the union government.

Regarding violent disturbances within a state leading to an emergency, we first consider communal riots. The data on the riots that occurred between 1952 and 1995 relies on the Varshney and Wilkinson dataset. This dataset was later extended by Iyer and Shrivastava (2018) until 2006, and we extended it until October 2019 by using the newspaper archives of the New Delhi edition of the *Times of India*.

For political turmoil, we code whether a chief minister dies in office, which we think of as approximately exogenous. Data on such deaths was also collected using newspaper reports from the New Delhi edition of the *Times of India* newspaper.

For purely exogenous emergencies like natural disasters, we use EM-DAT, an international disaster database that contains event-based disaster damage records for events occurring since 1900 (Guha-Sapir et al., 2019). Within EM-DAT, we only consider naturally occurring extreme events happening in our study's time period within India since the database's technological disaster records might be subject to reporting bias. Extreme events include storms, floods, earthquakes, droughts, landslides, extreme temperature events, epidemics, wildfires, rockfalls, avalanches, and insect infestations. Events are aggregated across states and months. The variables of interest are the occurrence, number of occurrences, and the number of deaths due to these events. We do not consider the total number of people affected and total damage since they contain many missing values for the India sample. We base our analysis on a total of 40 current and former Indian states. Table 1 presents summary statistics for our variables.

Variable name	Mean	Minimum	Maximum	Variable Type	Observations
state ruling government seat share	57.67	0	100	percentage	18,029
state ruling coalition	0.375	0	1	binary	18,029
previous state governments of party	2.484	0	10	count	18,056
union ruling government seat share	54.09	8.471	78.60	percentage	30,010
union ruling coalition	0.508	0	1	binary	30,010
previous union governments of party	3.429	0	9	count	30,010
state-union ruling coalition	0.378	0	1	binary	18,056
governor's previous political affiliation	0.547	0	1	binary	18,657
governor appointed by centre	0.787	0	1	binary	18,663
president appointed by centre	0.755	0	1	binary	30,010
disaster	0.0668	0	1	binary	19,090
riot	0.0841	0	1	binary	19,090
state chief minister dead and replaced	0.0009	0	1	binary	17,023
president's rule	0.0541	0	1	binary	19,090

Table 1 Descriptive statistics

Finally, we code the periods before and after the *SR Bommai* case by constructing a categorical variable that captures the period from the beginning of the sample until March 1989 (i.e., before *Bommai)*, the period in which the case was being handled by the governor (between April 1989 and March 1994), and the post-*Bommai* period starting in April 1994. The entire dataset includes 40 (current and former) state governments observed for 811 consecutive months. Thus, a fully balanced panel would theoretically contain 32,440 variables. However, we do not code any political variables for a state if it has merged with another state, or any state government variables if the state is under president's rule. It is therefore primarily the absence of state government observations that limits the size of the data.

2.4 Empirical approach

For our empirical analysis, we employ a conditional fixed effects logit model following McFadden (1974). The choice of a fixed effects model effectively implies that all state-level factors that are approximately time-invariant, such as whether a state borders a foreign nation, has particular historical characteristics, is more prone to natural disasters, or is particularly large, are always controlled for. In addition, we prefer models that include time-fixed effects although we note that they are likely to capture potentially relevant changes at the federal level. Our dichotomous dependent variable takes a value of "1" for the occurrence of president's rule for a given month-year, and "0" for all other periods of observation. In addition to the percentage of seats held by the ruling party, we use the set of co-variates summarized in the above table. This includes several dichotomous and continuous variables on the nature of the relationship

within, and in-between governments, the legislatures, and the executives. As such, we estimate the following model specification:

$$P(y_{it} = 1 | x_{1_{it-1}}, x_{2_{it}}, \epsilon_{it}) = f(\beta_0 x_1{}'_{it-1} + \beta_1 x_2{}'_{it} + \omega_i + \mu_t)$$

where y_{it} indicates the occurrence of president's rule in a state *i* at time-period *t*, *f* is the cumulative distribution function for the logistic operator and ϵ_{it} is the composite error term. The terms $x_{1_{it-1}}$ and $x_{2_{it}}$ represent the vectors of our lagged independent variable of interest and other co-variates mentioned in the previous section; ω_i and μ_t represent the state and time fixed effects. Throughout, we report simple estimates but also illustrate the size of central estimates by calculating odds ratios. The question of whether *SR Bommai* changed the incentives in the Indian system and the likelihood of observing president's rule are handled by interacting our *Bommai* period variable with our central political factors as well as natural disasters and riots. Throughout, we report the conditional marginal effects of these factors for each of the periods, calculating marginal effects with conditional standard errors according to the Delta method of Brambor et al. (2006).

2.5 Results

Baseline estimates are presented in table 2. Results indicate that the share of seats that the incumbent state government controls strongly influences the likelihood of imposing president's rule. Odds ratios indicate that a five-percentage point smaller seat share is associated with approximately a ten percent larger probability of having president's rule imposed on a state. Consistent with this result, we also find that coalitions face a significantly larger probability of president's rule with odds ratios indicating that coalitions are about three times more likely to experience the rule. Therefore, we find substantial evidence to support hypotheses 2 and 3. Conversely, we do not find support for hypothesis 1, as a stronger union government mandate is not significantly associated with their likelihood of proclaiming president's rule.

We also observe that the potential experience and political influence of a particular government, indicated by the number of times a party had formed a government in a state in the past (variable: *previous state governments of party*$_{t-1}$) reduces the likelihood of president's rule being imposed in a state (hypothesis 4); i.e., experienced governments have less difficulty organizing a majority in a state's legislature, thus lowering the likelihood of a president's rule imposition.

We also find clear and significant support for fewer invocations of president's rule if the president was appointed during the term of the incumbent union government (hypothesis 7a).

When we explore further hypotheses in columns 2-6, we find little evidence that president's rule was imposed as a response to natural disasters or riots (hypotheses 9-10). Existence of riots for a given month-year does not influence the likelihood of the imposition of president's rule whereas the other variables remain intact. Riots are not predictors of the likelihood of a president's rule even though the Sarkaria explicitly mentions them as precursors. Natural disasters also do not play a significant role in the invocation of a president's rule either, implying that political capture is almost always endogenously devised within the state legislature and union government. The lag structure for both the riots as well as the disasters includes six months of events, which we believe is sufficient to capture full effects. The significant estimate indicating a higher likelihood of a president's rule half a year after a natural disaster is unlikely to reflect any immediate emergency associated with the disaster and is likely a random finding.

Finally, we find in columns 4 and 5 that the death of a chief minister significantly increases the likelihood of there being a president's rule imposition, causing temporary instability and the inability of state-level parties to form consensus, confirming hypothesis 5. The associated odds ratio indicates that it is highly likely that president's rule is declared when an incumbent chief minister suddenly dies, as the estimate indicates a 37 times higher likelihood than otherwise.

However, these estimates reflect averages since Indian independence and ignore the constitutional change that occurred with *SR Bommai*. We deal with this issue, relating to hypothesis 8, in Tables 3 and 4 in which we report the marginal effects of the main factors for the pre- and post-Bommai periods as well as the period in which the case was handled by the governor in 1989-1994. The pre-Bommai period is between April 1952 and March 1989, the during-Bommai period is between April 1989 and April 1994, and the post-Bommai period is between May 1994 and the end of the dataset i.e., October 2019. We compute the reported marginal effects by interacting dummies of pre-, during-, and post-Bommai periods with our variables of interest. In all cases, we must emphasize that the estimates become noisy because the number of instances of president's rule is small. Before *SR Bommai*, president's rule was invoked 81 times whereas it was invoked 16 times during the case and 26 times after the governor had made its verdict. These simple differences quite clearly indicate support for hypothesis 9, as they translate to simple probabilities of observing president's rule of .9 percent prior to *SR Bommai*, 1.2 percent during the case, and .3 percent after its conclusion.

	(1) Baseline	(2) Disasters	(3) Riots	(4) Death of CM	(5) Expanded Specification
state ruling government seat share$_{t-1}$	-0.022***	-0.021***	-0.022***	-0.021***	-0.021***
	(0.006)	(0.006)	(0.006)	(0.007)	(0.007)
state ruling coalition$_{t-1}$	1.065**	1.090**	1.086**	1.093**	1.138**
	(0.455)	(0.459)	(0.463)	(0.500)	(0.514)
previous state governments of party$_{t-1}$	-0.104*	-0.106*	-0.108*	-0.119*	-0.124**
	(0.061)	(0.061)	(0.060)	(0.064)	(0.063)
union ruling government seat share$_{t-1}$	0.024	0.025	0.023	0.024	0.022
	(0.025)	(0.026)	(0.025)	(0.026)	(0.027)
union ruling coalition$_{t-1}$	0.398	0.388	0.391	0.391	0.335
	(0.919)	(0.937)	(0.905)	(0.941)	(0.928)
union-state ruling coalition$_{t-1}$	0.022	0.020	0.003	-0.031	-0.044
	(0.328)	(0.333)	(0.328)	(0.374)	(0.379)
governors previous political affiliation	0.276	0.285	0.238	0.336	0.303
	(0.250)	(0.252)	(0.260)	(0.265)	(0.271)
governor appointed by centre $_{t-1}$	-0.183	-0.193	-0.204	-0.340	-0.382
	(0.310)	(0.316)	(0.314)	(0.330)	(0.340)
president appoint by centre $_{t-1}$	-1.092***	-1.076***	-1.089***	-0.996***	-0.975**
	(0.353)	(0.360)	(0.355)	(0.377)	(0.384)
disaster$_{t-1}$		-0.987*			-0.892
		(0.566)			(0.547)
disaster$_{t-2}$		0.162			0.104
		(0.329)			(0.312)
disaster$_{t-3}$		0.293			0.394
		(0.315)			(0.327)
disaster$_{t-4}$		-0.467			-0.483
		(0.583)			(0.620)
disaster$_{t-5}$		0.397			0.368
		(0.310)			(0.347)
disaster$_{t-6}$		0.624**			0.719***
		(0.270)			(0.267)
riots$_{t-1}$			0.347		0.392
			(0.307)		(0.336)
riots$_{t-2}$			-0.289		-0.224
			(0.266)		(0.263)
riots$_{t-3}$			0.281		0.143
			(0.444)		(0.461)
riots$_{t-4}$			-0.575		-0.522
			(0.379)		(0.394)
riots$_{t-5}$			-0.531*		-0.552*
			(0.305)		(0.305)
riots$_{t-6}$			0.014		0.011
			(0.354)		(0.397)
state chief minister dead and replaced$_{t-1}$				3.614***	3.951***
				(0.777)	(0.855)
Observations	16,743	16,627	16,627	15,762	15,646
Pseudo R squared	0.117	.125	.121	.125	.139
Log likelihood	-568.801	-562.495	-565.333	-526.317	-517.153
State Fixed Effects	Yes	Yes	Yes	Yes	Yes

Table 2 Baseline estimates

The estimates in Table 3 also indicate that the determinants of invoking president's rule have changed somewhat. The courts, since they are not political but institutional veto players, should reduce political opportunism. While the negative association between the strength of the state government and president's rule has become stronger after *SR Bommai,* i.e., it is even harder for the union government to destabilize a party with a strong electoral mandate forming the state government.

Adding disasters to the heterogeneous treatment simply confirms that disasters in India are not significant causes of invoking president's rule; the two negative estimates in the first months after a disaster during *SR Bommai* reflect that the rule was never invoked in the months after a disaster during the court case. The additional estimates in table 4 explore whether the non-effects of riots found in table 2 hide heterogeneous influences, and if the death of a state chief minister became more or less important after *SR Bommai*.

We find no evidence of any effects of riots and as in table 3, the weakly significant estimates during the case occur because there were no events at all two, three, five, or six months before a riot. Similarly, the negative estimate of the death of a chief minister during *SR Bommai* reflects the statistical problem that only a single event of this type happened during the case and not an actual effect. Conversely, the last estimate in the table suggests that the death of a chief minister has been a significant determinant of invoking president's rule after *SR Bommai*. As such, we find that the verdict changed the political determinants of invoking president's rule, while also substantially reducing the likelihood that it is used.

Overall, these results thus serve to emphasize the solid identification of *pre-Bommai* patterns around the invocation of president's rule in India that both indicate substantial misuse of Article 356 and the political effects of the decision in 1994. They nevertheless also indicate that some of the political problems around the use president's rule have not been entirely resolved although it is now used substantially less frequently than before *SR Bommai*.

VARIABLES	(1) Baseline	(2)	(3)	(4) Disasters	(5)	(6)
	Pre-Bom-mai	During Bommai	Post-Bom-mai	Pre-Bom-mai	During Bom-mai	Post-Bom-mai
state ruling government seat share$_{t-1}$	-0.0029*	-0.0025	-0.0082***	-0.0029*	-0.0019	-0.0076**
	(0.0018)	(0.0024)	(.0030)	(.0017)	(0.0019)	(0.0032)
state ruling coalition$_{t-1}$	0.2412*	0.0616	0.1232	0.2486**	0.0529	0.1236
	(0.1319)	(0.1018)	(0.1087)	(0.1249)	(0.1026)	(0.1019)
disaster$_{t-1}$				-0.1188	-0.7392***	-0.1941
				(0.1260)	(0.2505)	(0.1825)
disaster$_{t-2}$				0.0174	-0.7390***	0.1038
				(0.1090)	(0.2506)	(0.0909)
disaster$_{t-3}$				0.0175	0.0551	0.0627
				(0.0822)	(0.1105)	(0.0822)
disaster$_{t-4}$				-0.0394	-0.0455	-0.1923
				(0.1103)	(0.1436)	(0.1408)
disaster$_{t-5}$				0.0232	0.0487	0.1116
				(0.0838)	(0.1211)	(0.0885)
disaster$_{t-6}$				0.1305	-0.0277	0.1069
				(0.0956)	(0.1420)	(0.0695)
Observations	16,743	16,743	16,743	16,627	16,627	16,627

Table 3 Marginal effects for the expanded specifications

VARIABLES	(1) Riots	(2)	(3)	(4) Death of CM	(5)	(6)
	Pre-Bommai	During	Post-Bommai	Pre-Bommai	During	Post-Bommai
state ruling government seat share$_{t-1}$	-0.0026**	-0.0017	-0.0067	-0.0029*	-0.0016	-0.0081***
	(0.0013)	(0.0019)	(.0044)	(.0015)	(0.0030)	(0.0030)
state ruling coalition$_{t-1}$	0.2419***	0.0899	0.1042	0.2640**	0.0672	0.1195
	(0.0899)	(0.1032)	(0.0887)	(0.1149)	(0.1252)	(0.1222)
riots$_{t-1}$	-0.0267	0.1646	-0.0377			
	(0.0836)	(0.1854)	(0.1106)			
riots$_{t-2}$	-0.0180	-0.5563*	-0.0410			
	(0.0793)	(0.3154)	(0.0790)			
riots$_{t-3}$	0.0553	-0.5555*	0.0772			
	(0.0978)	(0.3152)	(0.1278)			
riots$_{t-4}$	-0.5649	0.0617	-0.0376			
	(0.4026)	(0.1498)	(0.1093)			
riots$_{t-5}$	-0.2019	-0.5548*	-0.0328			
	(0.1414)	(0.3151)	(0.0577)			
riots$_{t-6}$	-0.0877	-0.5557*	0.0971			
	(0.1054)	(0.3153)	(0.1145)			
state chief minister dead and replaced$_{t-1}$				0.3282	-0.7565***	0.5068*
				(0.2989)	(0.2850)	(0.2622)
Observations	16,627	16,627	16,627	15,762	15,762	15,762

Table 4 Marginal effects for the expanded specifications

2.6 Conclusion

India's constitution is highly centripetal in its design with respect to both the union-state government relationship as well as the union-state-local government relationship (Choutagunta et al., 2021), and in its centralized judiciary (Rajagopalan, 2021). Article 356 is one of the most misused provisions because of India's poorly designed federal structure. One implication of our results is that the centripetal design of the Indian republic more generally, and specifically Articles 356 and 357, weaken the checks required to maintain a balance between the union and state levels. Because constitutional checks and balances between the union and state governments are weak, there is greater reliance on political relationships to maintain this balance. We find evidence that this theoretical association plays out in Indian politics. Specifically, we find that the larger the majority of the state government in the state legislature, captured by the higher the percentage of seats of a state ruling party, and the more experience it has had forming past governments in the state, the lower is the likelihood of being dismissed through president's rule. We find evidence that it is more likely that the union government invokes president's rule against a coalition state government. The importance and strength of the chief minister is an important factor, as the death of a chief minister creating political instability is used as a reason to invoke president's rule.

The frequent use of president's rule and its decline since the nineties has been conflated with the decline of the Congress Party (Brass, 1994; Jain, 1994), the rise of coalition politics (M. P. Singh, 2001), and the increase of regional parties (Sadanandan, 2012). We find no evidence supporting Brass (1994) and Jain (1994) on the decline of the dominance of the Indian National Congress. Our results suggest that president's rule is not about any single party at the union level, but the relative strength and weakness of the parties forming state governments. We also find no conclusive evidence for Singh's (2001) argument that the coalition governments at the union level are the reason for the less frequent use of president's rule. For Sadanandan's argument, on the emergence of strong regional parties reducing the likelihood of president's rule, we find partial support. This is because the seat share of the party ruling the state government is the main factor, irrespective of regional or a national party. We also find very strong support confirming Tsebelis' insight, that in parliamentary democracies, it is the strength of political actors that provides the main veto or check. In the case of president's rule, the core issue is that the relative strengths of parties at the different levels of government is required to compensate for India's weak and centripetal federal structure.

3. Battling COVID-19 with dysfunctional federalism: Lessons from India

Abstract

India's response to the global COVID-19 pandemic was to impose a very severe country-wide lockdown using the mandate of the union (federal) government. This centralized one-size-fits-all diktat imposed enormous economic costs and pushed millions of Indians back into poverty, even in areas where there were few affected by the virus. State and local governments, meanwhile, did not take sufficient measures to improve healthcare capacity and prepare for the pandemic during the lockdown. In this paper, we argue that India's dysfunctional federalism is the reason for this enormous policy failure. The Indian federation is highly centripetal, and historically, this has left states without the requisite legislative and fiscal authority to take independent action and initiate policies of significance. This problem is even more severe at the local government level. Consequently, India has a dysfunctional federalism, where a strong union government cannot easily respond to local health, sanitation, and emergencies, and states and local governments that should ideally respond to these problems lack the authority, finances, and state capacity to tailor an appropriate policy response.

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3.1 Introduction

The first case of the novel coronavirus disease (COVID-19) was detected in India in the southern state of Kerala on January 30, 2020. Over the next few weeks, the disease spread through the country. The case count rose to over 100 by mid-March and reached 1635 by the end of the month. By March 25, two-thirds of all the states and union territories reported at least one confirmed case. The first death from the disease, a 76-year-old male patient in the state of Karnataka, was also reported in March. As India experienced the beginning of the pandemic, it was clear that India's healthcare capacity, which usually operates at full capacity even in non-pandemic times, would be insufficient to cope with the pandemic (Rajagopalan & Choutagunta, 2020). To flatten the curve, therefore, on March 24, 2020, Indian Prime Minister Narendra Modi imposed a sweeping, nationwide lockdown. This lockdown was highly restrictive and severe and was the broadest of the many lockdowns imposed around the world over the course of the pandemic, affecting the largest number of people.

At the time, the number of confirmed COVID-19 cases in India was doubling every 3 days. The general view in India was that, given the exponential growth of infections evidenced by the spread of the pandemic in China and Europe, and the fatality rate, some kind of government intervention was necessary. However, India's countrywide severe lockdown, which lasted for more than 2 months, is seen by most experts and commentators as excessive. What started as a 21-day lockdown to ramp up testing and healthcare capacity turned into a 40-day lockdown. This was followed by a continuation of the lockdown for 3 weeks but with relaxation for certain activities, especially in zones with a low rate of growth in COVID-19 cases. When the lockdown was imposed on March 24, 2020, there was enormous inter-state variation within India along three pertinent margins. First, states had vastly different historical resource constraints for battling the pandemic and could therefore implement different policy options. Second, there was a lot of variation in healthcare capacity across the different states of the country. And third, and most importantly, the incidence of COVID-19 infection and the spread as well as the growth of infection rates was not prevalent uniformly across the country but was restricted to a few dense pockets.

Given the significant variation among states on COVID-19 infection rates, and given their vastly different healthcare capacities, it was an odd choice to impose a severe and highly centralized countrywide lockdown; especially in a country as large as India, which has a federal structure with the administrative option to let states and even local governments determine their own local COVID-19 policies. In fact, in imposing a one-size-fits-all policy of a countrywide lockdown, India received little benefit, while imposing high costs on the economy. The burden of the lockdown was disproportionately borne by the poor, particularly the low-income urban migrants and those working in the informal sector. The benefits never quite materialized, as the transmission of the virus continued, with no major effort to increase healthcare capacity during the lockdown. Moreover, any slowdown in the spread of the infection in some affected areas went back up as soon as the lockdown measures were relaxed without measurably flattening the curve. So, the lockdown in India just postponed the problem of an increase in the spread of COVID-19. This is borne out in seroprevalence surveys, which show that India, especially in the urban areas, is moving toward herd immunity. Approximately one in 15 individuals aged 10 years or older in India had COVID-19 by August 18, 2020, and the adult seroprevalence increased approximately tenfold between May and August 2020 (Murhekar et al., 2021).

This raises an important question—why did India impose such a centralized lockdown for a federation with such high variation? In this paper, we argue that the reason for India's one-size-fits-all countrywide lockdown is its highly centripetal federalism, which has become dysfunctional. Due to India's centripetalism, state and local governments have not developed sufficient capacity, especially to deal with public health problems. As a result, all governments look to the highest level, even to solve local problems, leading to a situation like a countrywide lockdown. Our paper contributes to three important literatures. First, it contributes to the new but growing literature on the policy approaches to the COVID-19 pandemic in federal systems (Boettke & Powell, 2021; Coyne et al., 2021); the effectiveness of India's countrywide lockdown in containing the pandemic (Beyer et al., 2020; Goswami et al., 2021); and the literature on lockdown measures in other countries (Bylund & Packard, 2021; McCannon & Hall, 2021; Storr et al., 2021). Second, it adds to the literature on Indian federalism, in particular the literature that focuses on the centripetal and dysfunctional policies that are imposed on the states by the central government (Parikh & Weingast, 1997; Rajagopalan, 2017; Tripathi, 1974). And third, it contributes to the literature that makes use of aggregated mobility data in analyzing policy effectiveness (Praharaj & Han, 2020; Singh et al., 2021).

In section 3.2 we detail the variation between states along four margins—state resources, state healthcare, testing capacity, and COVID-19 rates before the lockdown. This variation makes it very clear that a one-size-fits-all COVID-19 response was neither necessary nor appropriate for India. In section 3.3, we explain how India's constitutional design is fundamentally centripetal, because of its constitutional structure and its lack of fiscal federalism. This prevents India from having genuine federalism and forces policymakers to resort to ad hoc decentralization of centralized policies. Because India deviates from standard models of federalism with its centripetal constitutional design and the lack of fiscal federalism, it is not unusual or atypical of its union government to institute a one-size-fits-all policy in response to a crisis. In section 3.4, we discuss the consequences of India's countrywide lockdown. We use mobility data to measure whether the central lockdown policy implemented at the local level was (a) successful in reducing mobility, and therefore (b) successful in containing COVID-19. We find very high variation across states and find evidence showing that lockdowns were, at best, partially successful in curbing the spread of COVID-19 in a handful of states. In the remaining states, either the lockdown policies were not successful in containing the transmission, or the lockdown was

completely unnecessary given that there was no increase in COVID-19 transmission despite the increase in mobility. In section 3.5, we conclude.

3.2 Variation in healthcare capacity across India

India is a union with 28 states and 8 union territories. Not surprisingly, there are significant differences between states in almost every aspect of development and governance. India's largest state, Uttar Pradesh, has the population of Brazil, while its smallest state, Sikkim, is closer in population to Bhutan. India's richest states, such as Goa, have a state GDP per capita comparable to that of Jordan, while the state GDP per capita of its poorest state, Bihar, is similar to that of Haiti. It would be surprising if there wasn't high variation between Indian states across various dimensions.

Indian states are divided on a linguistic basis, and therefore, in addition to geographical variations, there are also strong cultural differences that may affect health outcomes. States also vary in their resources as well as in the priority afforded to the healthcare sector. Even within states, there is a lot of variation between urban and rural healthcare capacity, partly driven by the fact that much of private-sector healthcare is in the larger urban areas. The private healthcare sector in India is four times bigger in overall capacity than the public sector, and it has 55% of the total hospital bed capacity, 90% of doctors, and 80% of ventilators (Rajagopalan & Choutagunta, 2020).

3.2.1 Pre COVID-19 variation in states' resources

Even before the COVID-19 pandemic, the variation in both the resources and the priority for healthcare across the different states becomes clear by studying the trends in three variables—GDP per capita, healthcare spending per capita by the union and state governments, and expenditures on healthcare as a percentage of the overall state budget. There is a strong relationship between GDP per capita and development outcomes, such as infant mortality and neonatal mortality rates. The Government of India's NITI Aayog (2019, p. 9) states that "the health outcomes of some states are comparable to that of some upper-middle-income countries and high-income countries (for example, Neonatal Mortality Rate (NMR) in Kerala is similar to that of Brazil or Argentina), while some other states have health outcomes similar to those in the poorest countries in the world (for example, NMR in Odisha is close to that of Sierra Leone)." Figure

4 shows the GDP per capita of the states in 2018-2019. Some of India's poorest states, such as Bihar, Uttar Pradesh, and Madhya Pradesh, are also its most populous states—a matter of concern in the context of a global pandemic. Their healthcare capacity, ability to quickly scale up such capacity, ability to socially distance and ensure that consumption levels do not drop during a pandemic, and economic slowdown are all directly related to GDP per capita. One consequence, however, of being poorer and farther behind on the development curve is that in these states high birth rates persisted for a longer time. Consequently, they are also the states with the lowest median age of the population in India.

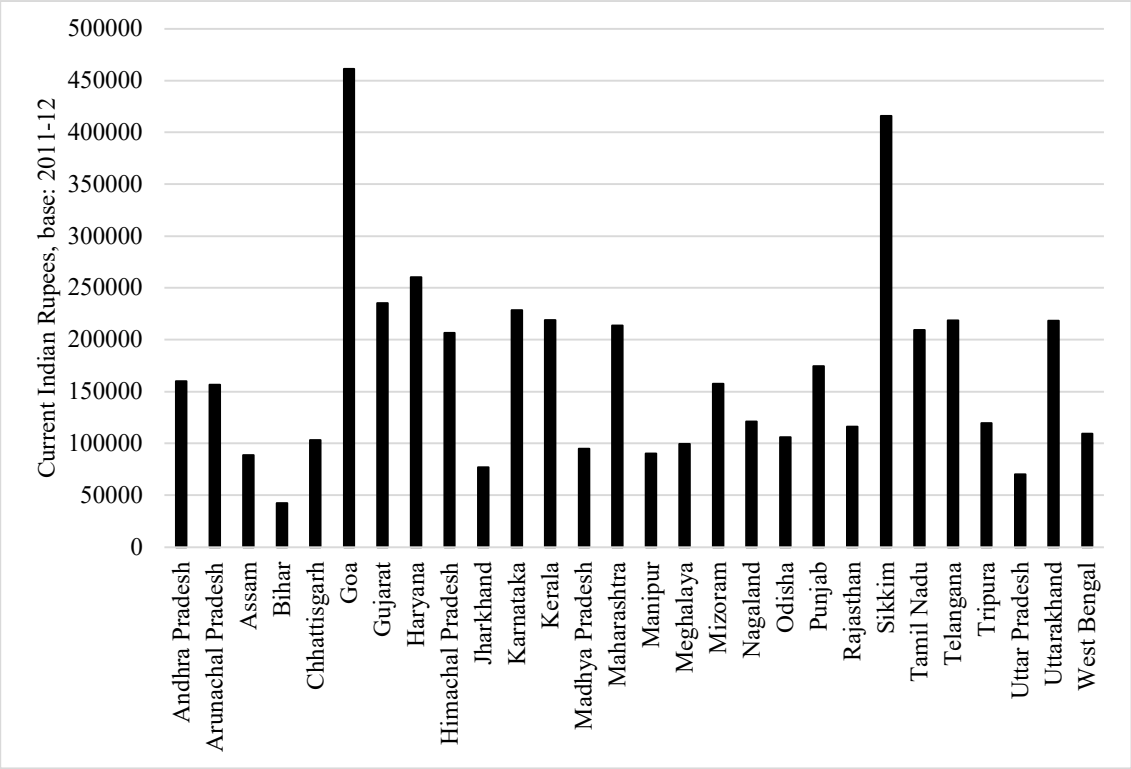


Figure 4 Per capita GSDP of Indian states 2018-19 (in current Indian rupees, 2011-12 base)
Source: Handbook of Statistics on Indian States, Reserve Bank of India (2020)

Variation in healthcare spending by states is caused by two factors: how each state prioritizes healthcare within its budget, and how the union government prioritizes spending in different states through its intergovernmental transfers for healthcare schemes. Not only is there variation across states on how much is spent on healthcare per capita, but the amount each state receives from the union government for healthcare expenditures also varies. Figure 5 shows the per capita healthcare expenditure by the state government and the union government in each state in 2014–2015. Union government funds are not distributed equally or proportionally

across states. Richer states, with more developed healthcare infrastructure and higher spending on healthcare, also receive more healthcare funding from the union government Another reason for the large variation in per capita spending is that poorer states also tend to prioritize healthcare less in their budget spending. Bihar and Uttar Pradesh, two of India's highly populous and poor states, have historically not prioritized healthcare, with only 5% of these states' budgets allocated for healthcare. Figure 6 shows healthcare as a percentage of the state budget.

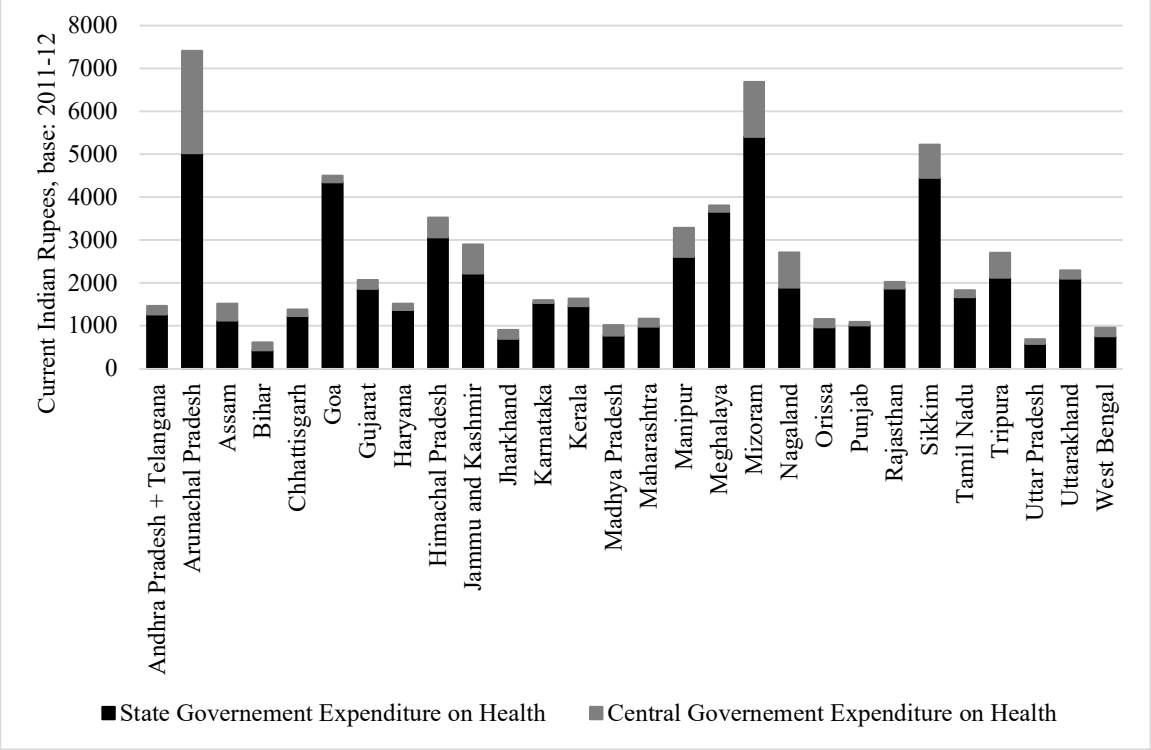


Figure 5 State-wise per capita expenditure by state and union governments on healthcare for 2014–15 (in current Indian rupees)

Source: Srinath et al. (2018)

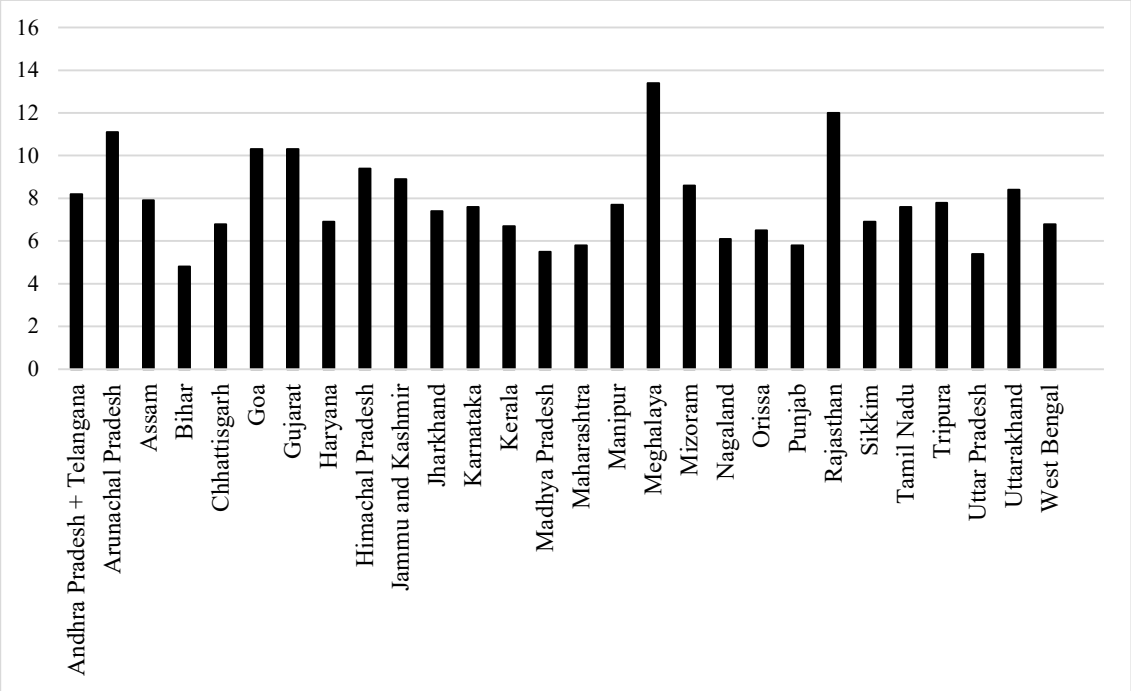


Figure 6 Public expenditure on healthcare (% of state budget expenditure, 2014–15)
Source: Srinath et al. (2018)

3.2.2 Pre COVID-19 variation in healthcare across states

Because of these three factors—the state GDP per capita, states' healthcare spending per capita, and the union government funding to states for healthcare—there is much variation in healthcare infrastructure across states. Poorer Indian states tend to have lower healthcare capacity on all margins: doctors, nurses, hospital beds, and testing centers. Starting with hospital beds, which became a major constraint during the pandemic, Rajagopalan and Choutagunta (2020) estimate[29] about 131 beds per 100,000 persons in India, with high variation across states in India, in Figure 7. In fact, government hospitals routinely report close to 100% use of the critical care units (Krishnan, 2020; Thacker, 2020). Once again, poorer states have fewer hospital beds across public, private, and charitable hospitals. A rich state like Maharashtra has six times the capacity of Bihar. There is also a lot of intra-state variation since larger urban and

[29] Rajagopalan and Choutagunta (2020) use Union government data for total government hospital beds in each state. Using the National Sample Survey (2019) 75th round, which reports hospitalization (excluding childbirth) in government, private, and charitable hospitals in each state, they determine the proportional size of the government, private, and charitable sectors in hospital beds. Combining the two measures, they calculate the private hospital and charitable hospital bed capacity for each state.

metropolitan areas have more and larger hospital facilities. Although Maharashtra has the highest absolute hospital bed capacity, a lot of it is in the Greater Mumbai metropolitan area.

Rajagopalan and Choutagunta (2020) estimate that India has an overall capacity of about 1.75 million hospital beds across India. Using other surveys suggesting Intensive Care Unit (ICU) beds at about 5% of the total number of beds in India, Rajagopalan and Choutagunta (2020) estimate total ICU capacity at 87,979 beds (p. 11). However, ICUs are concentrated in larger metropolitan areas and typically operate at full or close to full capacity because of high costs, and only a fraction of the existing ICU beds would have been available for COVID-19 patients. Second, hospital personnel, especially doctors and nurses (who cannot be increased in number quickly for a pandemic) also widely vary across states. Figure 8 shows the total number of registered doctors per 100,000 in each state, and Figure 9 shows the total number of registered nurses per 100,000; once again, there is a lot of variation. The poorest states like Bihar, Jharkhand, and Uttar Pradesh are the least served. Doctors and nurses gravitate to areas with good healthcare infrastructure. Seventy-five percent of the healthcare infrastructure is in the private sector, which tends to serve urban and peri-urban areas. The other reason some states like Andhra Pradesh, Kerala, and Goa have a lot of doctors and nurses is that Goa and Andhra Pradesh are known for large healthcare clusters, and patients tend to visit those hospitals for domestic and international medical tourism. They serve a demand beyond the patients within their states.

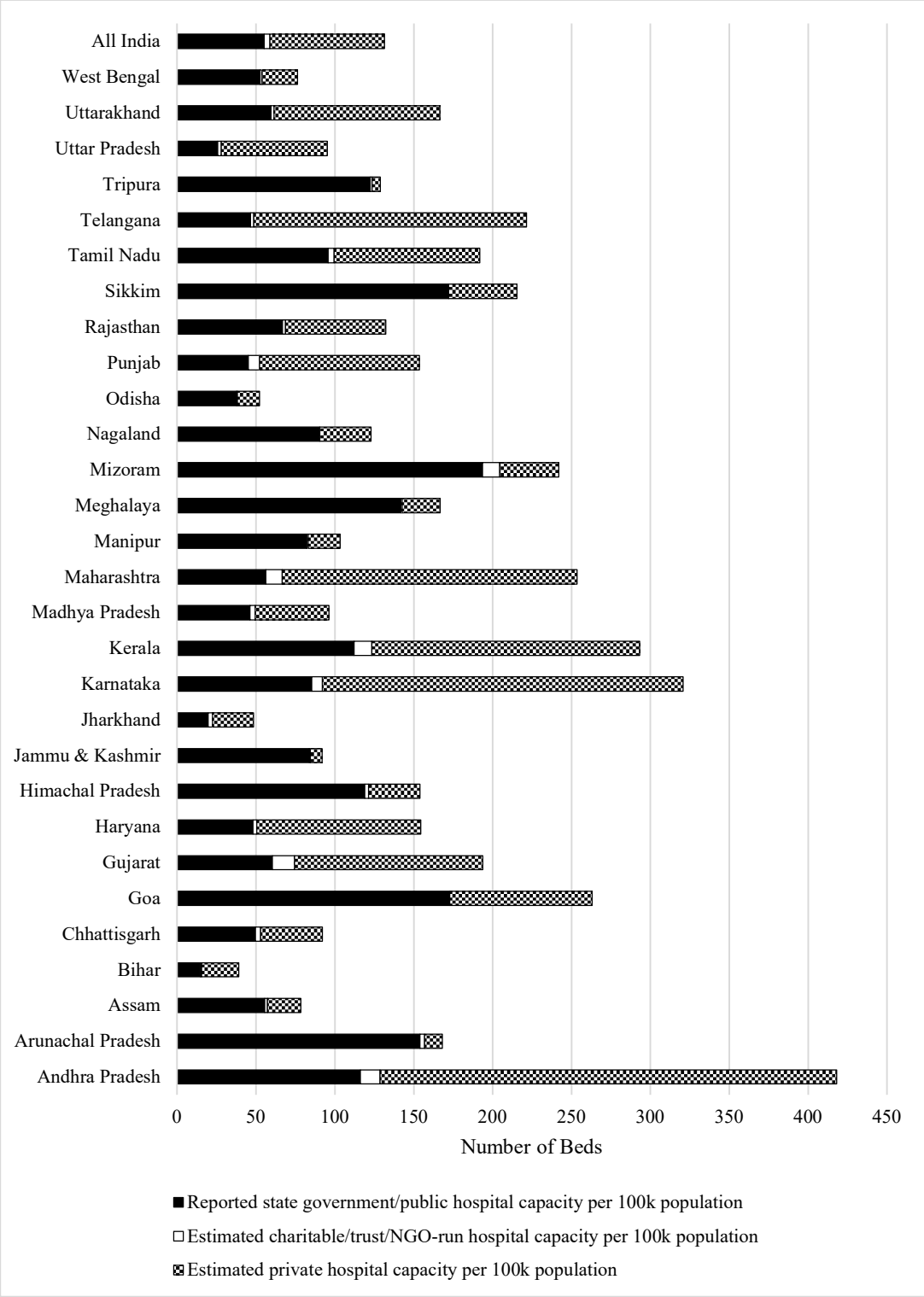


Figure 7 Beds available per 100,000 state population in state healthcare institutions

Source: Rajagopalan and Choutagunta (2020)

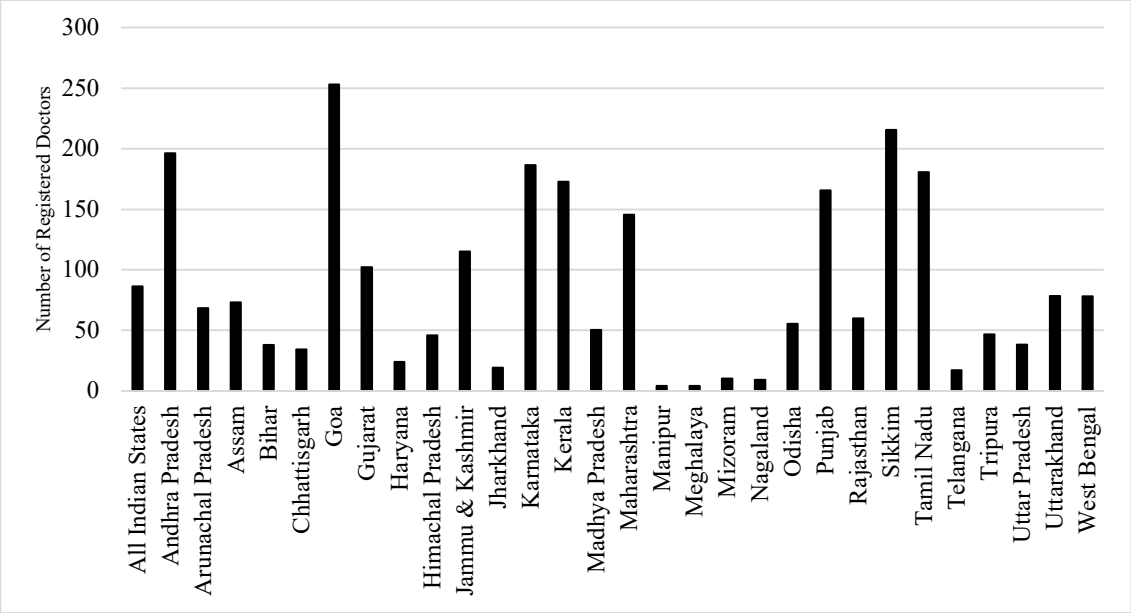


Figure 8 Registered doctors per 100,000 state population in 2018

Source: Central Bureau of Health Intelligence (2019)

And third, testing centers before the lockdown also showed a lot of inter-state variation. Unsurprisingly, most of the testing centers were in the richer states and concentrated in the urban areas within each state. As of March 6, there were only 52 testing centers in the country called Virus Research and Diagnostic Labs (VRDL) approved by the Indian Council of Medical Research (ICMR) that could test for COVID-19; these labs were owned and operated by the government. As of March 31, 2020, just after the government announced the lockdown, testing capacity increased but was still very low because the government had only approved 132 labs (public and private). Assuming equal capacity among all the 132 COVID-19 testing facilities in India listed by the ICMR as using the RT-PCR (real-time reverse transcription–polymerase chain reaction) method, then in terms of access, there was approximately one testing facility per 10 million in the population (0.0992 centers per million), with a maximum capacity of testing of 10,000 samples a day (Sheriff, 2020). And once again, this testing capacity was not spread evenly across the country. This number increased to 201 government-approved testing centers by April 21 and included 86 private testing facilities (ICMR, 2020). Before the pandemic hit India, almost all the states were underserved in their testing capacity by ICMR-approved government testing centers. Once again, richer states like Maharashtra and Tamil Nadu had 4–5 times the number of approved labs compared to most other states soon after the onset of the pandemic. Poorer states and geographically remote border states in the northeastern part

of India were particularly underserved. Some of this might have been a matter of urgency in approving testing facilities, as Mumbai had the highest number of cases with testing centers getting overwhelmed by mid to end of March. Nevertheless, the difference in testing capacity across states was significant. As shown in table 5, the testing capacity has increased in India, in every single state, as ICMR has approved more facilities, both public and private, and also approved antigen testing.

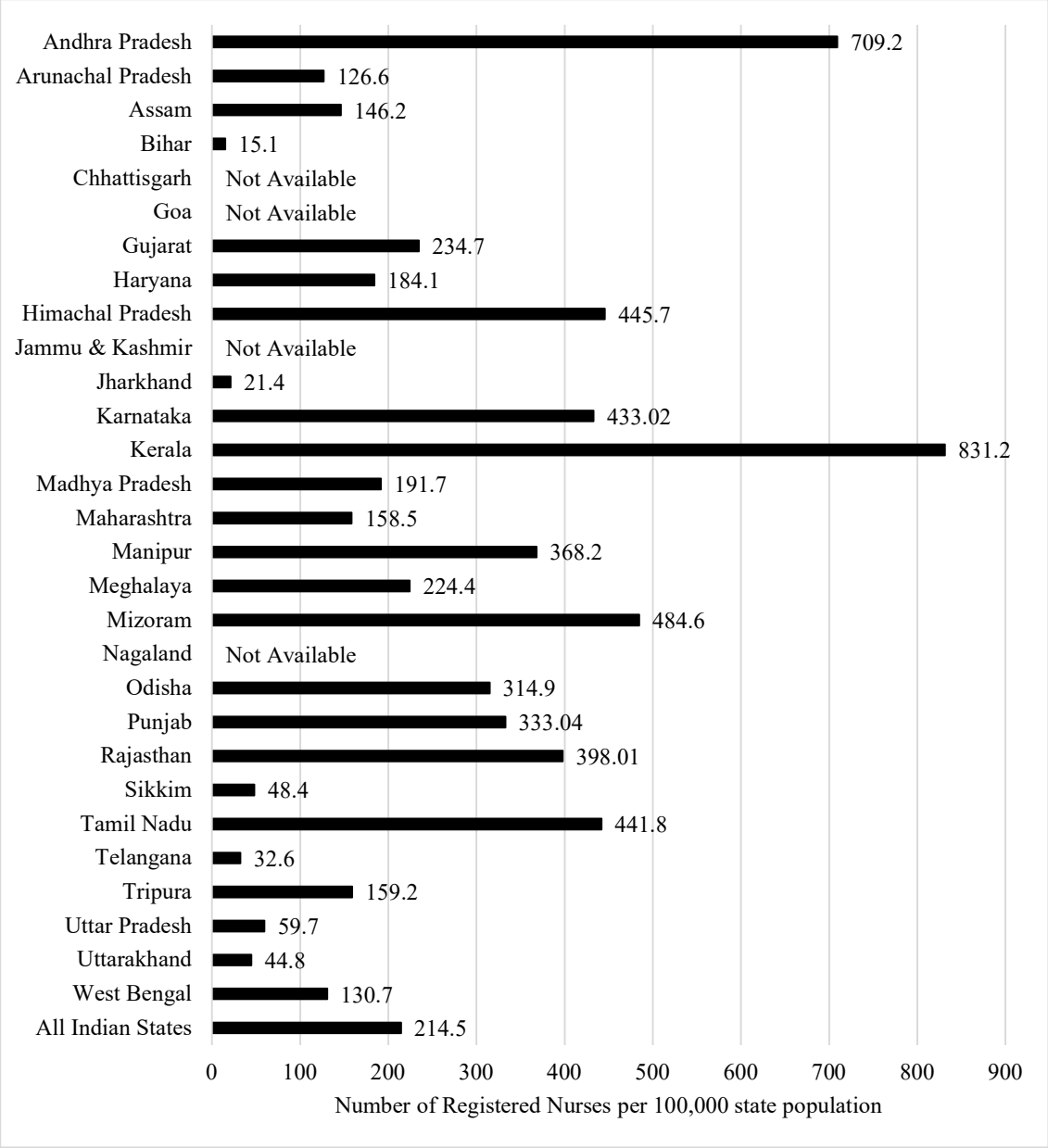


Figure 9 Registered nurses per 100,000 state population in 2018

Source: Central Bureau of Health Intelligence (2019)

State	March 6	April 20	July 6
Andhra Pradesh	3	7	60
Arunachal Pradesh	0	0	4
Assam	2	6	13
Bihar	1	6	44
Chhattisgarh	1	3	7
Goa	0	1	5
Gujarat	2	10	53
Haryana	2	6	23
Himachal Pradesh	2	3	11
Jharkhand	1	4	31
Karnataka	5	13	79
Kerala	3	13	42
Madhya Pradesh	2	10	79
Maharashtra	2	22	113
Manipur	1	2	5
Meghalaya	1	1	7
Mizoram	0	1	2
Nagaland	0	0	12
Odisha	1	6	22
Punjab	2	3	27
Rajasthan	4	9	29
Sikkim	0	0	2
Tamil Nadu	2	22	91
Telangana	1	8	34
Tripura	1	1	1
Uttar Pradesh	3	15	129
Uttarakhand	1	2	13
West Bengal	2	9	53

Table 5 Cumulative number of testing centers approved by ICMR across Indian states on select dates in 2020

Source: ICMR (2020).

3.2.3 COVID-19 in Indian states before March 24, 2020

As the number of COVID-19 cases was growing exponentially across the world, Indians witnessed an increase in COVID-19 cases starting in February, and by March 24, when the lockdown was announced, India had a total of 571 confirmed cases across the country.

Figure 10 shows the total number of confirmed COVID-19 cases in India from February 1 to March 24. The initial cases were almost entirely due to international travelers, and India imposed restrictions on international travel by early March. However, because of the high density of population, and some super spreader events, the number of COVID-19 cases started steadily rising, especially in the states of Delhi, Kerala, and Maharashtra. In parts of Kerala and Maharashtra (mainly Mumbai), the numbers were doubling roughly every 3–4 days. The most concerning was Mumbai, with one of the highest densities of population, in particular Dharavi, the world's largest slum with 30–40 times the population density of New York City.

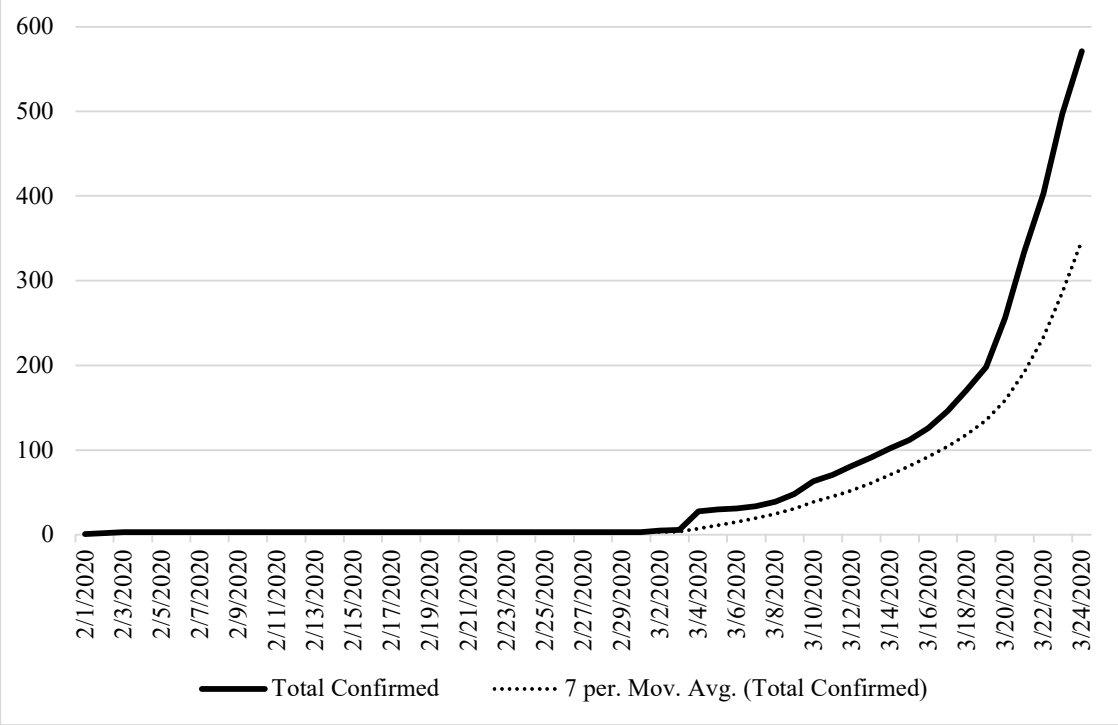


Figure 10 Total confirmed COVID-19 cases between Feb 1 and March 24, 2020
Source: COVID19INDIA (2020).

While this was alarming, especially given India's fragile healthcare capacity and high-density cities, India's cases per million at the end of March was far lower than the rest of the world. And no other country had imposed such a severe or such a widespread lockdown with these per capita numbers. Most interior states, and poorer states without major international airports, had virtually no reported cases when the lockdown was imposed. Figure 8 shows the total number of reported COVID-19 cases in each state before March 24, 2020. At the time the lockdown was announced, 8 of the 28 states and 4 of the 8 union Territories had zero COVID-19 cases. Of these only Arunachal Pradesh, Nagaland, and Sikkim did not have an ICMR testing facility.

It is important to note that this was the total number of cases in each state (not per million) when the lockdown was announced countrywide. While some states like Maharashtra had testing centers overwhelmed by requests, other highly populous and dense states like Bihar and West Bengal had known cases in the single digits. Furthermore, there was a lot of variation within each state. The worst affected, unsurprisingly, were larger cities, like Mumbai (101 cases), Kasargod (45 cases), Delhi (30 cases), and Chennai (12 cases).

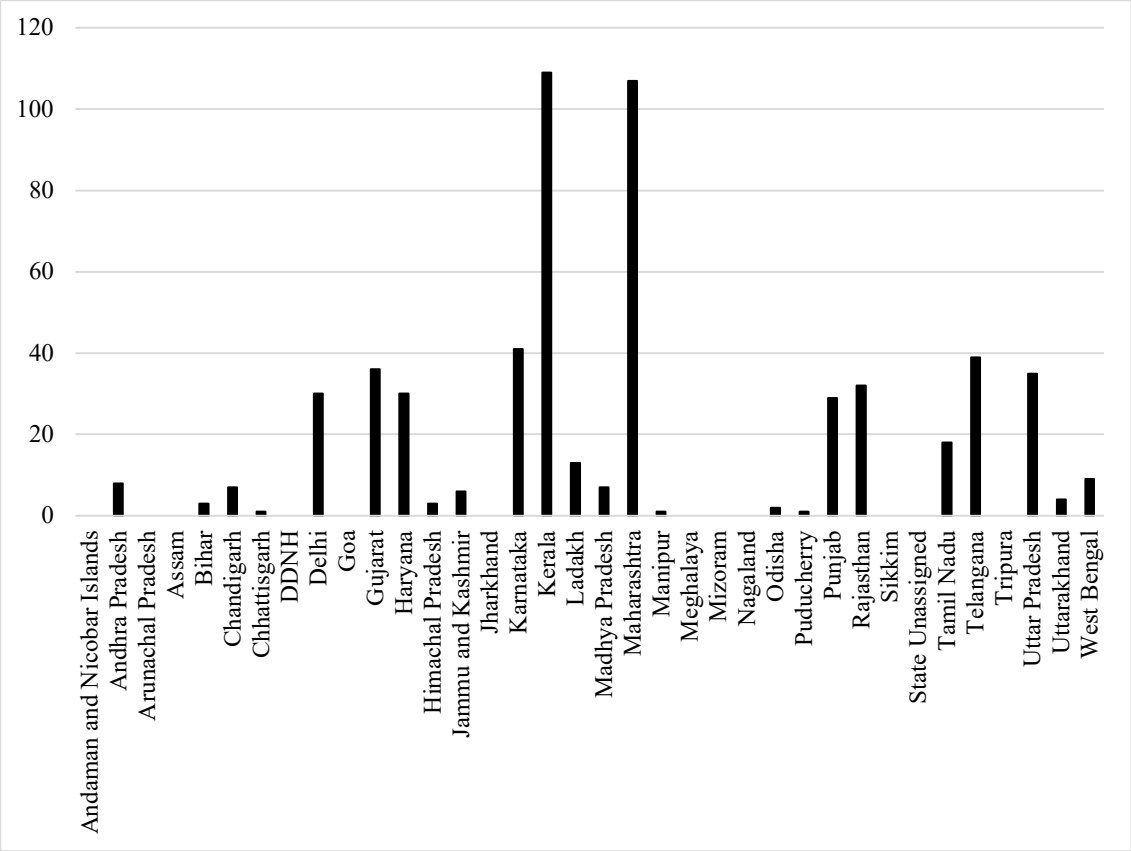


Figure 11 Total cases in Indian states and union territories as on 24 March 2020
Sources: COVID19INDIA (2020)

India allows for freedom of movement between its states. An important aspect of the lockdown was closing state borders and preventing mass travel from areas that were relatively more affected by the pandemic. But, aside from concerns over the inter-state movement of people spreading the infection, there was no other reason, supported by the facts on the ground, to impose a one-size-fits-all, countrywide lockdown, or to restrict intra-state mobility in most of

the states. In fact, only a few dense urban areas merited such severe restrictions. No other country in the world imposed such severe measures on its entire populace.

3.3 Why did India impose such a centripetal lockdown?

India is the world's largest federation, and the Constitution of India (1950) establishes dual centers of government (the union and the states), each assigned with powers to be exercised within its jurisdiction. It outlines various provisions for both vertical and horizontal power-sharing. Vertical power-sharing is the allocation of areas in decision-making to be handled by the various levels of government: union, state, and local. Horizontal power-sharing is the sharing of authority between the branches of government—legislature, executive, and judiciary—at the union and subnational levels.

However, as the constitutional scholar Tripathi (1974) noted, India is a quasi-federal republic and not a truly federal polity. Instead, it can be argued that India represents a case of centripetal federalism, displaying the characteristics of a decentralized polity without genuine autonomy at subnational levels. There are two main reasons why India is highly centripetal in its federalism. First, the constitutional design of India has given enormous powers to the union government to the detriment of the state governments. Second, the fiscal structure of the country means that India is not fiscally federal, but merely decentralized with the purse strings heavily controlled by the union government.

3.3.1 Constitutional centripetalism

The Indian constitution divides legislative power between the union and state legislatures; these powers are assigned in three lists in schedule VII of the constitution. The union list details the subjects on which parliament may make laws (schedule VII, list I); the state list details those under the purview of state legislatures (schedule VII, list II); and the concurrent list has subjects in which both parliament and state legislatures have jurisdiction (schedule VII, list III). Despite this separation of legislative power between the union and states through the lists in schedule VII, there are many clauses that enable the union to overrule or undermine the legislative competence and authority of the states. The following constitutional provisions reveal India's centripetal nature.

If there is any repugnancy or conflict between legislation by parliament and legislation by a state on a topic in the Concurrent list, then the parliament will prevail (Article 254[1]), though the state law will prevail over the parliamentary law if the president saves the repugnant provision (Article 254[2]). The legislative powers of the union are further strengthened because the union has the residuary power for legislation. The lists in schedule VII, which document the areas of legislative competence for the different levels of government, are not exhaustive. Thus, parliament has exclusive power to make any law with respect to any matter not enumerated in the concurrent list or state list (Article 248 and schedule VII, list I, entry 97).

Moreover, the state list is not completely off-limits to the union government. If the Council of States (upper house of the parliament) passes a motion that it is in the national interest that parliament should make laws with respect to any matter enumerated in the state list, then parliament may legislate on that subject (Article 249). This power is further expanded if a state of emergency has been declared, which enables parliament to legislate on any matter in the state list (Article 250). Parliament can also make laws on any subject in any jurisdiction if such laws are enacted as part of implementing any treaty, agreement, or convention with any other country or countries or any decision made at any international conference, association, or other body (Article 253). Finally, most of the provisions in the constitution can be unilaterally amended by parliament, without the requirement of ratification by the states. Of the 395 Articles and 12 schedules in the constitution of India, only 30 Articles and one schedule require state ratification for amendment.

The emergency powers given to the union can also undermine legislative and executive authority at the state level. Article 356 of the constitution allows the union government to take over the governance of a state when the government of the state is not “in accordance with the provisions of this constitution.” Under this emergency provision, also known as president's rule, the union can remove the chief minister and the cabinet of that state and also dissolve or suspend the Legislative Assembly of the state. Each proclamation in this regard has to be confirmed by both houses of the union's parliament. Proclamations of president's rule have been imposed for trivial reasons, and over the years, the provision has been invoked over 100 times, mainly to penalize state governments formed by opposition parties (Tummala, 2002).

This kind of constitutional structure has enabled the union government to legislate widely in areas originally reserved for the states. In the fifties and sixties, this was to enable socialist planning, which was partly done in tandem with the states, but also in a highly centralized

manner through parliamentary legislation (Rajagopalan, 2015, 2017). In recent times, any reforms or other measures are typically forced through the central government to ensure state compliance and prevent deadlocks (Hari, 2018). Emergencies like the COVID-19 pandemic, that do not have precedent, require a large amount of resources; and the need for swift action given the low state capacity of states and local governments is the excuse for a centripetal response.

3.3.2 Fiscal centripetalism

According to the principle of separation, the constitution of India assigns certain taxes exclusively to either the union government or to the states. While the constitution has assigned several broad-based taxes to the union government, the nature of the tax categories assigned to the states has meant that their revenue base is much smaller, with most of the revenue raised from the sale of goods and property. New reforms like the centralized Goods and Services Tax have placed states' revenues in an even more precarious position despite the constitutionally mandated compensation from the union to the states (Chakraborty, 2020). Rao and Singh (2006) find that the ability of the states to finance their current expenditures from their own sources of revenue has seen a long-run decline.

This growing inability to finance their own expenditures has led to the creation of significant vertical fiscal imbalances between the union government and the states, with over a third of state expenditures being covered by intergovernmental transfers (Rao & Singh, 2006). These intergovernmental transfers are "nonformulaic," that is, they are discretionarily disbursed upon need and are generally subject to a lot of political interference.[30] Khemani (2007) finds that these transfers are also distortionary and contrary to their welfare objectives since the ruling union governments favor states that are politically strategic to their interests. Intergovernmental transfers, though, are a secondary role of the finance commission. Its primary role is to devolve tax revenues to states based on a devolutionary formula that the Commission sets[31]; this formula, while updated and calibrated to partially reflect the changing statuses and needs of states,

[30] Rao and Singh (2007) demonstrate that an important variable determining the allocation of these funds to the various states is the political alignment of the party in power at the union and the party in power at the state level.

[31] The current, i.e., the Fifteenth Finance Commission, used the following criteria/weights while determining the share of states for devolution from the central pool or the divisible pool of taxes appropriated at the central level that can be devolved to the states: (a) 45% for the income distance, (b) 15% for the population in 2011, (c) 15% for the area, (d) 10%for forest and ecology, (e) 12.5% for demographic performance, and (f) 2.5% for tax effort.

has remained largely unchanged (Chakraborty, 2020). The share of revenue devolved to each state from the central pool varies, as shown in Figure 12.

With this revenue sharing system, there is a lot of variation in the amount of taxes devolved per capita from the union to the states, as shown in Figure 13. Richer states with high human development indices like Goa and Kerala have far lower amounts of tax revenue devolved per capita than poorer and densely populated states like Bihar and Uttar Pradesh. The greater the devolution from the union government, the less long-term control of the states over their own finances. In these states, the administrations' incentives are better aligned "above" to the union government than with their citizens and taxpayers.

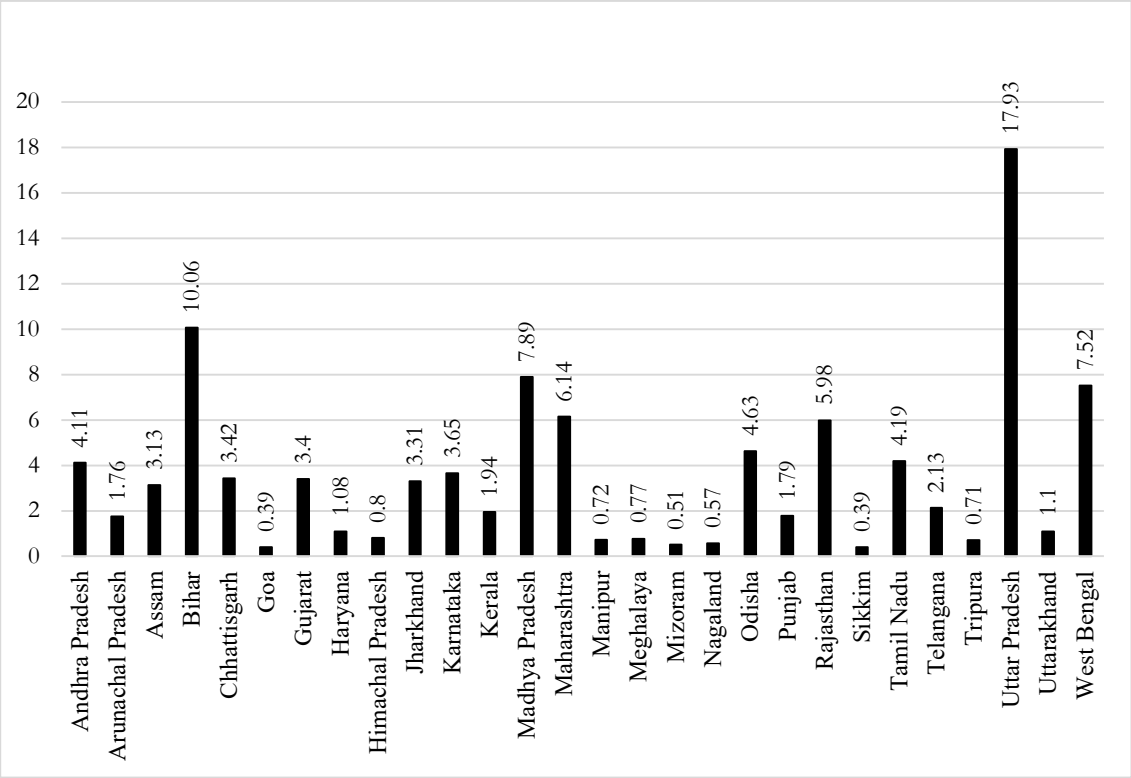


Figure 12 Share of revenue from the central pool (in %)

Source: PRS Legislative (2020).

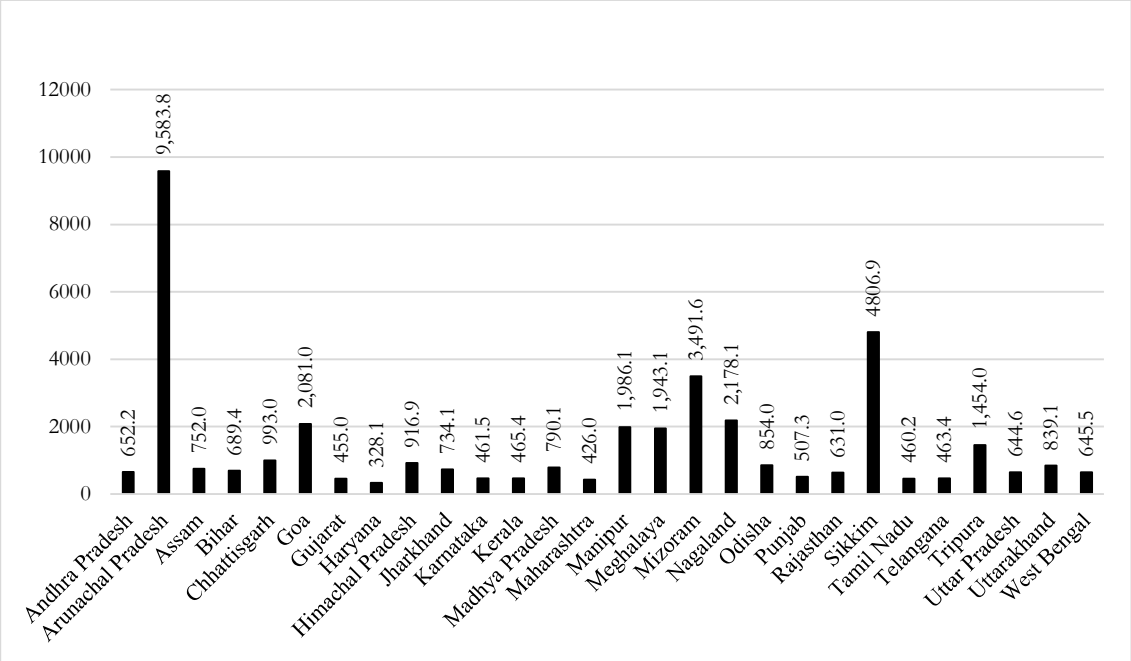


Figure 13 Per capita devolution in 2019-20 (in current Indian rupees)
Source: PRS Legislative (2020)

This variance in the amount of devolution per capita also has an impact on the ability of states to finance their expenditures from their own revenues. In the case of the poorer states like Bihar, as well as in the case of the geographically remote northeastern states like Mizoram and Manipur, for example, the percentage of own revenue as a share of the expenditure is in the low teens. Some of these states rely on intergovernmental transfers for more than 80% of their expenditures. Richer states, especially the southern states, on the other hand, raise more than two-thirds of their expenditures through their own revenue. Once again, there is an enormous amount of variation between states, as seen in Figure 14. This impacts the ability of poorer states to plan their expenditures in a fiscally sound way. It also aligns their incentives to cater to centrally chosen programs instead of designing and implementing locally suited policies.

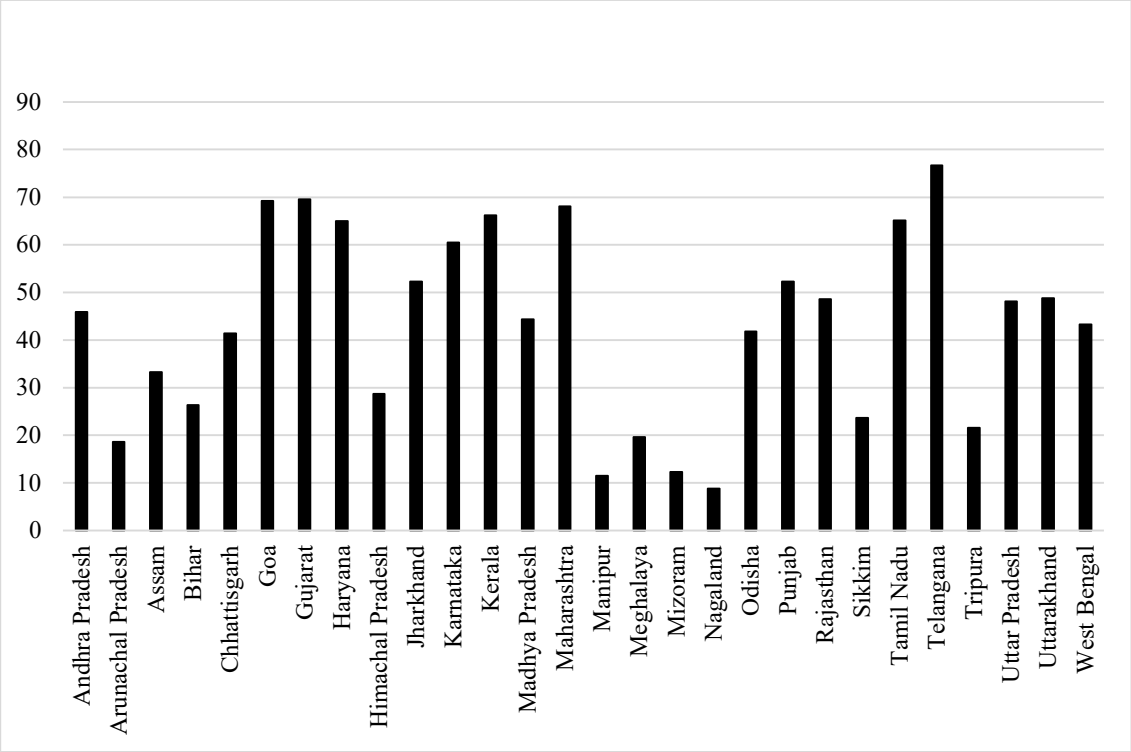


Figure 14 Proportion of own revenue in states' total revenue expenditure (in %, budget estimates for 2019-20).

Source: Reserve Bank of India (2019).

This kind of variation is seen not just in the devolution of taxes from the union government to the state governments, but also in the devolution from state to local (village and municipal) governments. Richer states, especially the southern states of Kerala and Tamil Nadu, devolve higher amounts per capita to their local governments. This is also true for the northeastern states. Poorer states like Assam and Chhattisgarh, meanwhile, devolve a few 100 rupees per capita to local governments, severely impeding the capacity of local governments to take on projects and function. Figure 15 shows the estimates (not actual spending) of the budget amounts allocated by the states to the functioning of rural and urban local governments for 2019–2020. The variation in this devolution is a direct indicator of variation in state capacity. This is because, in poorer states, local governments raise very little (to none) of their own revenue and therefore are unable to build their own capacity. India also has very little depth in the market for municipal bonds, or debt instruments, which is another roadblock in raising funds for long-term projects and developing state capacity in public health and sanitation.

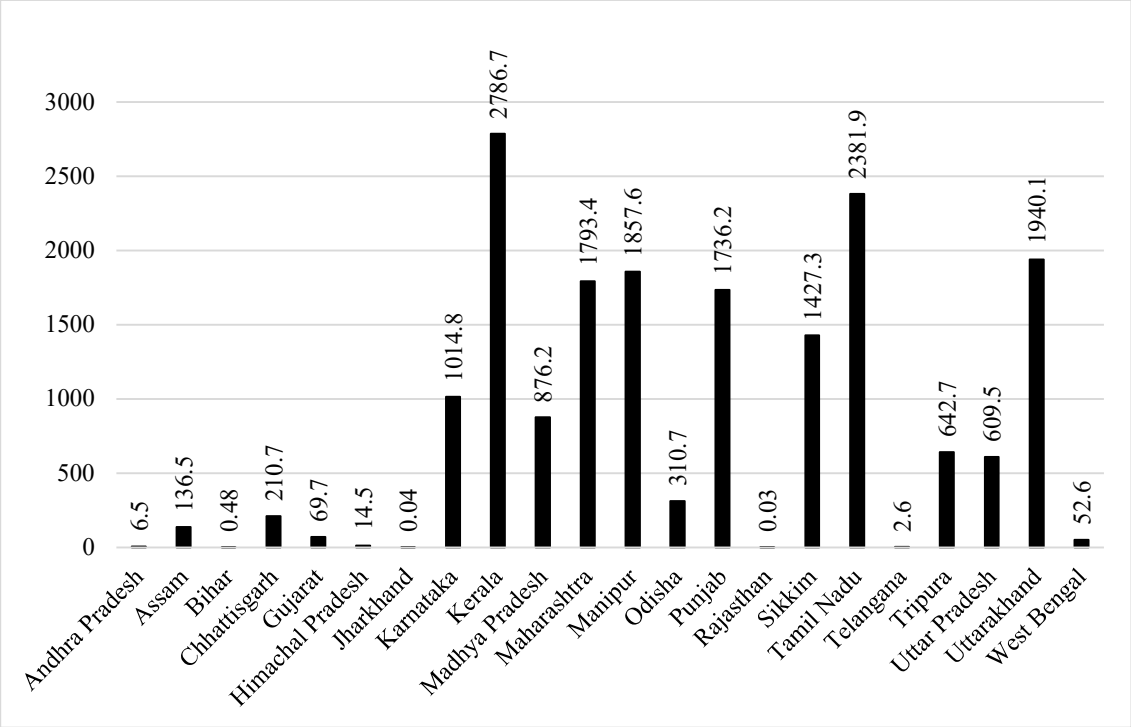


Figure 15 Per-capita budget estimates of compensations and grants in-aid to local bodies and Panchayati Raj Institutions for 2019-20 (in current Indian rupees)

Source: Reserve Bank of India (2019).

India seems to be caught in a vicious circle in its system of fiscal federalism. Without an increase in fiscal federalism, states and local governments cannot build long-term capacity and spend on resources that are actually relevant to the local population. Because local governments in these states are underdeveloped, it disincentivizes state governments from devolving funds. And given the weak and resource-starved state governments and local governments, the tendency in a crisis is to be more centripetal and to opt for the one-size-fits-all solution directed by the union government.

3.3.3 Federal or decentralized?

In an important strand of the literature on federalism, scholars have differentiated between federalism and decentralization (Bish & Ostrom, 1973; Eusepi & Wagner, 2010; Hayek, 1948a; Oates, 1972). This is an important distinction in the context of Indian federalism (Rajagopalan, 2017). The main conclusion of this literature is that while all federal systems involve decentralized political authority, not all forms of decentralization constitute federal autonomy (Eusepi &

Wagner, 2010). Thus, Parikh and Weingast (1997) argue that the defining characteristic of any federal system is that a hierarchy of governments with a delineated scope of authority (between the national and subnational governments) exists such that each government is autonomous within its own sphere of authority. Decentralization, on the other hand, means that while there is a hierarchy of governments, with delineated functions and scope, the lower levels of government do not have any autonomous spheres of authority.

Eusepi and Wagner (2010) also make a distinction between genuine and spurious federalism. They argue that genuine federalism entails competition among governments, which can create a framework wherein governmental power at one level restrains government at the other level. This form of federalism operates on polycentric principles of open competition where the pattern of activities among governments is an emergent product of that competitive process (Tiebout, 1956). A system of competitive federalism requires independent, competitive action among governments for votes and revenues from citizens. Spurious federalism, on the other hand, merely involves the decentralization of power; and does not entail genuine autonomy for the lower levels of government. Furthermore, decentralization implies that the power devolved by the higher-level government may be taken away, whereas genuine federalism requires that that power cannot be "given" to a subnational government by another higher level.

Decentralization without federal autonomy also has other effects on the overall polity. The first is that the union government can never possess enough information to tailor policies to specific local circumstances. This argument is essentially an extension of Hayek's scholarship on the knowledge problems associated with central planning (Hayek, 1948b). Greater centralization in the provision of public goods goes hand-in-hand with a larger, more intricate, and more unwieldy bureaucratic structure (Boettke et al., 2010; Coyne & Lemke, 2011).

Considering the various constitutional and fiscal factors that promote centripetalism within the federalist system of India, we can apply the above arguments and the insights of Parikh and Weingast (1997) and Eusepi and Wagner (2010) to federalism in India. Rajagopalan (2017) argues that while the structure of government in India bears the appearance of one that is federal, it is in fact so centripetal that there is no genuine power-sharing or much competition between union and subnational and local jurisdictions. Thus, while India looks federal on paper and might also be federal per the narrow literature of decentralization, the inherent centripetal tendencies within the system imply that state and local governments are unable to develop significant capacity and do not have the ability to develop spheres of authority that are truly

autonomous. As a consequence, many states, especially during a national emergency like the outbreak of the pandemic, look for centralized policy solutions.

3.4 The costs and benefits of the all-India lockdown

In response to the rising COVID-19 case count in March 2020, governments at both the state and union levels soon began taking steps to try and curb the spread of the disease. Given the nature of Indian federalism, all local and state governments, while taking some action, looked to the union government, specifically the Prime Minister's Office, for direction.

3.4.1 The all-India lockdown (March to June 2020)

The first step was taken by the union government, when it banned the entry of foreigners into the country for a month, starting March 13. Some state governments also acted in response to the virus: on March 13 the Government of Odisha declared COVID-19 a disaster and proceeded to order educational institutions, cinema halls, public swimming pools, and gyms to shut down immediately. Similarly, on March 16, the local government of Delhi ordered all gymnasiums, spas, nightclubs, and theaters to close till the end of the month. The next step was taken by the union government, when it enforced a 14-hour-long "Janata (People's) Curfew" on March 22. During this daylong curfew imposed on a Sunday, most businesses and educational and recreational institutions were closed, with only individuals delivering certain essential services allowed out of their homes (Kumar, 2020).

Next, in an address to the nation on March 24, 2020, and with no advance warning, the Prime Minister of India, Narendra Modi, announced the start of a nationwide lockdown for a period of 3 weeks, set to start from midnight of that day. The order was sweeping and broad in scope, touching every aspect of life in the country. All transportation services, whether by air, rail, or road, were immediately suspended, with exceptions made only for some essential goods and emergency services (Ministry of Home Affairs [MHA], 2020). All educational institutions in the country, along with all places of worship, were ordered to close immediately; and all social gatherings, whether for political, recreational, sporting, or academic purposes were banned with immediate effect (MHA, 2020, p. 3). With a few exceptions made for essential goods and services, all commercial and industrial firms, as well as the entire hospitality sector, were forced to close (MHA, 2020, p. 2–3). The only sector of the economy that escaped a broad lockdown

was the agricultural sector, with the order of the union government explicitly allowing "farming operations by farmers and farm workers in the field" (MHA, 2020, p. 2), and also making special exemptions allowing for the continued production and movement of agricultural inputs (MHA, 2020, p. 2–3).

This nationwide lockdown in India imposed restrictions that were far more stringent than those that were imposed by most countries in the world over the course of the COVID-19 pandemic. Once the lockdown went into effect on March 25, India's score on the Government Response Stringency Index, constructed by Hale et al. (2020), which was rising through the month of March, hit the maximum level of 100. This meant that, at the height of its lockdown, India's score on the Stringency Index was higher than the corresponding figures for other countries such as Italy, Belgium, and Peru which also imposed very severe lockdowns. At its peak, Italy's score on the Stringency Index was 93.5 (on April 12), whereas those for Belgium and Peru were 81.48 (on March 22) and 96.30 (on May 1), respectively.

While the initial lockdown was set to expire on April 14, it was extended first to May 3, and then through a set of orders to June 1. While these orders of extension also introduced some minor relaxations of the restrictions set in place in the initial order and India's score on the Stringency Index fell to 82 in early May, it remained close to that level throughout the rest of the month. For all intents and purposes, most businesses, as well as educational, religious, and recreational institutions, remained closed through most parts of the country for more than two months, from March 25 to June 1. Starting in early June, the union government commenced a more widespread relaxation of the various restrictions and introduced an "Unlock 1.0." This process of unlocking the economy was conducted in phases, and while each phase of this process eased a few more restrictions, the reopening process was sporadic at best in most parts of the country. Due to unlocking in fits and starts, and at a different pace in different parts of the country, India's score on the Stringency Index barely fell during the first few months of this reopening process. Thus, as late as September 20, India's score on the Stringency Index remained as high as 80. It was only in the month of October that this score declined significantly for India, to 64.3 on October 23.

3.4.2 Variation in lockdown measures across states

The overarching goal of the sweeping, one-size-fits-all lockdown introduced by the Indian government was to try and reduce mobility and contain the spread of COVID-19. Despite the

nationwide lockdown, transmission could not be contained. As seen in Figure 16, the number of new cases detected steadily increased over the months of April and May, with the 7-day rolling average of total active/confirmed cases climbing from 1255 on April 1 to 29,624 on April 30, and to 166,468 active/confirmed cases by the end of May.

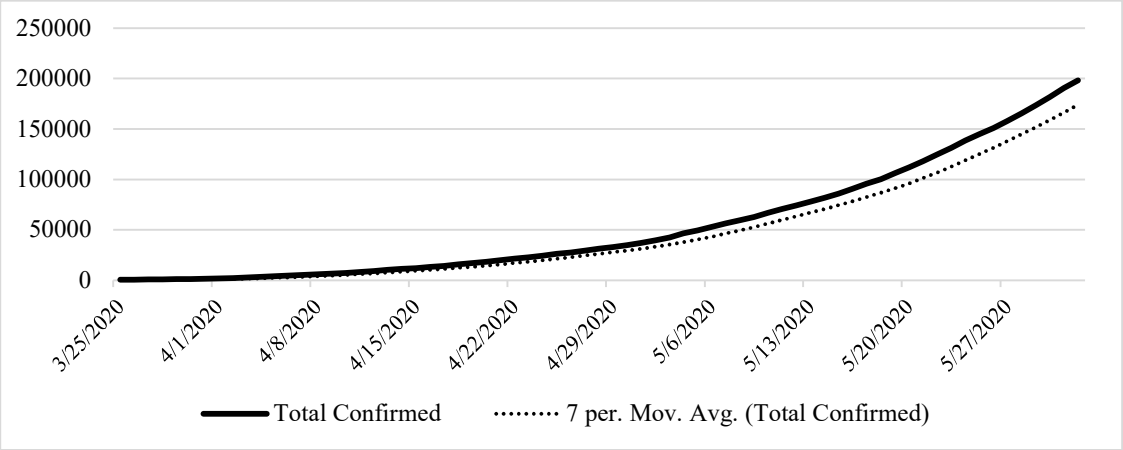


Figure 16 Total confirmed COVID-19 cases between March 25 and June 1, 2020
Source: COVID19INDIA (2020).

Moreover, this rising case count was not simply a reflection of higher levels of testing. Even though testing capacity steadily increased across India with ICMR approving more labs, the case positivity rate hovered around the 4% mark through most of April and rose to 5% by the end of May (Mukopadhyay, 2020). Furthermore, every single state saw an increase in testing capacity as ICMR approved more government and private testing facilities, as shown in table 5. However, not every state saw an increase in the number of confirmed COVID-19 cases. The trend in the weekly growth rate of new cases during the months of April and May also points to the fact that the lockdown was only partially successful in curbing the spread of COVID-19. While it saw a significant decline in the second half of April, falling from 87% on April 14 to 23.5% on April 30, the weekly growth rate reversed course and rose sharply in the beginning of May, to a figure as high as 78% on May 8, then declining to the 50% mark through most of the last week of the month.

Now, while the *de jure* rule, that is, a countrywide lockdown, was common to all the states, the ground reality in the various states was quite different. As detailed in section 3.2, there is an enormous amount of variation in resources and capacity across the different states of India. As a result, there was also significant variation in the ability of the different states to enforce the various rules and measures that were part of the all-India lockdown. Moreover, since it was

impossible for the union government to tailor the countrywide mandate to local circumstances, the state and local governments used a lot of discretion to enforce the union government's lockdown mandate. So, in effect, local-level officials were left to interpret and enforce the lockdown mandate given their resource constraints and local circumstances.[32] As a result, there was variation in how stringently the lockdown was enforced by state and local level officials, especially over the 70-day period between March 24 and June 1. In some states and districts, especially in the rural areas, anecdotal evidence suggests that the countrywide mandate did not impact daily life too much, while in other states it appears that it was hard to even buy groceries or get permission to travel to a hospital.

It is not easy to get an exact image of how the lockdown was enforced in different states and within each state. Moreover, it is also difficult to measure the exact impact the lockdown measures had on the extent of social distancing and the number of new cases in the different states. To solve this problem, we use data from the Google Mobility Report.[33] These data show how the frequency of visits to places, such as grocery stores and parks, changed in each geographic region over the course of the all-India lockdown. Moreover, the mobility trends show how the frequency of visits and the length of stay at different places changed as compared with a baseline. In our analysis of trends in mobility measures, we use the median value of a given measure for a given day of the week during the 5-week period between January 3 and February 6, 2020, as our baseline. Moreover, we compare the trend in mobility of one measure, that is, grocery shop and pharmacy visits, during the entire period of the lockdown from March 25 to June 1 in all 28 states and in Delhi, with the number of daily new cases per million in each state. In the 29 panels of appendix B, we show the variation in the two trends across the 28 states and the National Capital Territory of Delhi.

[32] While the *de facto* and the *de jure* rules of the lockdown were necessarily different in a country with the size and variation of India, this does not mean that the *de facto* rules were appropriately tailored for local needs. It only means that there was some discretion in the implementation of the rules. In fact, it goes to the root of our critique, that in a country like India, given that there is such high variation across states, the union government should not create one-size-fits-all policies, because (a) there is variation across states, and (b) the variation across states will mean that at the local level administrators who cannot possibly implement the rule will use discretion. But this does not mean that the original one-size-fits-all rule has no bearing on the de facto implementation.

[33] Google has developed these community mobility datasets with aggregated, anonymized sets of data from users who have turned *on* the location setting, which is *off* by default. These data are anonymized and aggregated and cannot be used to track individuals, since no personally identifiable information, like an individual's location, contacts, or movement, is made available at any point. So, this only tracks the mobility of a community within a region, using a baseline for the same region from an earlier date. For details on the dataset see Aktay et al. (2020). India has very high mobile phone penetration and has one of the highest 4G data network penetration and usage for a country at its income level. These mobility data are representative of movement during the lockdown, though it will fail to capture the poorest groups, below the poverty line, who do not have widespread access to cell phones.

The mobility data for visits to grocery stores and pharmacies, given how essential they are, is a good measure to understand the de facto restrictions imposed by the lockdown in each state. Furthermore, unlike locations like parks, or sites for seasonal recreational activities, grocery and pharmacy visits are not sensitive to seasonal or weather changes. While different kinds of mobility data (e.g., grocery store visits vs. park visits) have different implications for the transmission of infection, we believe curtailing mobility to access even the most essential services like grocery and pharmacy establishments is a good measure to compare against new cases, which measures the extent of transmission of COVID-19. Using daily new cases per million is a good measure of transmission of the infection. This, of course, only measures known or confirmed cases, which are constrained by testing capacity. Overall testing capacity increases as ICMR approves more labs and more private sector labs also get approved. Though all Indian states have increased the number of testing facilities (Table 5), the number of known cases has not increased in every single state. Furthermore, the overall test positivity rate remains stable (Mukopadhyay, 2020).

This side-by-side comparison of mobility and new COVID-19 cases per million helps us understand two important policy considerations. First, it helps us understand whether the lockdown successfully reduced mobility in a given region since all the union government mandates targeted mobility outside the residence. Second, in regions where the lockdown measures did successfully reduce mobility and congestion, it helps us understand whether the lockdown measures were successful in containing the transmission of infection as reflected in the daily new cases per million.

Unsurprisingly, there is a lot of variation across states in the level of mobility during the period of the all-India lockdown as compared with the baseline measure. But there is also a lot of variation in whether an increase in new COVID-19 cases goes hand-in-hand with changes in mobility. In each state, the changes in mobility and COVID-19 transmission play out differently, as seen in the mobility panel in Figure 14.

In Delhi and in states like Maharashtra, Tamil Nadu, Telangana, and Goa, all of which are (except for Goa) large and populous regions with densely populated urban areas, with the announcement of the lockdown on March 24, mobility plummeted to 60%–80% below the baseline. In the following days and weeks during the lockdown, mobility slowly improved, though it was still below the baseline. With this gradual increase in mobility, these states also experienced a slow increase in the number of COVID-19 cases during the lockdown. The increase in

daily COVID-19 cases suggests that either the lockdown was not sufficiently enforced, or even with a well-enforced lockdown, in extremely dense pockets like urban slums, mobility lockdowns and curfews could not contain transmission. However, once the lockdown ended, both the mobility trend and the number of cases per million rose sharply. Therefore, the lockdown was at least partially successful in these cases in terms of staggering and postponing the increase in cases per million.

In a second group of states including Gujarat, Andhra Pradesh, Karnataka, Odisha, and West Bengal there is a similar trend in mobility levels and the levels of transmission. However, the extent of the increase in the levels of transmission of COVID-19 during the lockdown was lower than the increase witnessed in the first group of states. Thus, these states saw small spikes in cases per million during the lockdown. Thereafter, there was an increase in both mobility and COVID-19 cases per million once the lockdown was relaxed. But the number of cases, post-lockdown, did not rise as sharply as it did in some of the states in the first group.

However, the lockdown in these states did not contain the transmission of the virus as demonstrated by the high rates of seroprevalence in some of these states. Cai et al. (2021) find that seroprevalence is extremely high in the densely populated urban slums (54.1%) compared with non-slum areas (16.1%) in Mumbai. Mohanan et al. estimate that in Karnataka, "31.5 million residents were infected, far greater than the 327 076 cases", in other words, the number of infected residents could be around 95 times greater than the actual reported number. In Tamil Nadu, Cai et al. (2021) estimate that "at least 22.6 million persons were infected by the end of November, roughly 36 times the number of confirmed cases.[34]

In a third group of states including Bihar, Jharkhand, Madhya Pradesh, Rajasthan, and Uttar Pradesh, the severe lockdown could have been completely avoided and replaced by less severe policies, perhaps, inter-state border controls but allowing intra-state movement. These states had few cases when the lockdown was announced. These are also some of the most populous and dense states in India, but with far less access to international flights, and therefore avoided the initial rise in cases witnessed in Maharashtra and Kerala, which are more internationally connected. In these states, immediately after the announcement of the lockdown, mobility dropped 60%–80% below baseline. However, from early April to May 3 (which marked the

[34] The following seroprevalence studies estimate the infection fatality rates in India: Cai et al. (2021); Mohanan et al.; Mohanan et al. (2021). They find that India has a lower infection fatality rate compared with seroprevalence studies from other higher-income countries. However, they do not discuss the reasons as to why the fatality rates are lower compared with other countries.

end of the first two phases of the lockdown), mobility slowly increased and returned to the baseline, with no effect on new COVID-19 cases per million, which was close to zero in the first few weeks of the lockdown and stayed in low single digits per million new cases throughout this period.

An even more interesting aspect of these states is that after the first two phases of the lockdown, the next two phases see a massive increase in mobility to grocery and pharmacy sites. For instance, in Bihar, it is almost 40%–50% above the baseline from May 3 to June 1, and in Jharkhand, Madhya Pradesh, Rajasthan, and Uttar Pradesh the mobility is about 15-20% above the baseline after the lockdown ended on June 1. Despite this increase in mobility, the number of new cases per million remains stable in the low to mid-single digits. These are states where such a severe lockdown could have been completely avoided because restrictions on mobility had no clear benefit on transmission levels of COVID-19. These states also have low state GDP per capita, and the economic costs were disproportionately borne by poor Indians in these states.

In a fourth group of states including Haryana, Himachal Pradesh, and Punjab, there was a 60%–80% decline in mobility immediately after the announcement of the lockdown. This measure then slowly goes back to pre-lockdown levels by June 1. However, other than a small spike in Punjab around May 3 (at the end of phase two of the lockdown), the number of new cases per million is in the low-single digits in all three states. Once again, preventing people from going about their basic everyday activities, like visiting the grocery shops, did not have any discernible impact on new cases. All three states are rich, agricultural states with a high state GDP per capita, and likely had the resources to adapt and enforce the lockdown to local circumstances, and in that sense, the adapted lockdown was successful. On the question of whether it was necessary, it is unclear, because even with an increase in mobility in June, above the baseline, there is not a very big spike in cases per million.

A fifth group of states including Chhattisgarh, Kerala, and Uttarakhand are excellent examples of how an adaptive lockdown approach was effective in the later stages of the lockdown. In all three states, immediately after the announcement of the lockdown, the level of mobility drops 60%–80% below the baseline. After the first two phases, around May 3, when the centralized lockdown restrictions were relaxed, these state governments adapted the rules to their local conditions. To avoid crowding at densely packed market sites, they announced rules to keep certain establishments open only on certain days of the week. The mobility data are highly volatile on a daily basis, reflecting this adaptive strategy. In all three states, there was no sharp

increase in daily COVID-19 cases per million during the lockdown, so the lockdown was well enforced and worked. After the four phases of the lockdown, there was a spike in new cases before going back to the trend. During this time period, Kerala performed well, because it was the first state to be hit by the pandemic and one of the worst affected states initially. But in addition to the adaptive strategies during the lockdown, the transmission was contained through contact tracing and quarantine.

Finally, in the northeastern states of Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, and Tripura the circumstances were different for three reasons: their remoteness, the hilly terrain, and very few international airports. For these reasons, these states were not initially affected when the pandemic broke out. Seven of the eight states had zero known COVID-19 cases before the lockdown and Manipur had only one known case before the lockdown. However, it is important to note here that Arunachal Pradesh, Nagaland, and Sikkim were the only states to not have an ICMR-approved testing facility before the lockdown, and testing capacity increased subsequently, as seen in table 5. As soon as the lockdown was announced, the level of mobility in all eight states dropped 60% – 80% below the baseline.

Throughout the entire period of the lockdown, Mizoram experienced zero new COVID-19 cases per million, and Sikkim reported 1.4 cases per million even though during the lockdown both had approved new testing facilities. But in Sikkim, mobility never returned to baseline and was 20% below baseline even after the end of the lockdown. Mizoram, on the other hand, was able to implement an adaptive approach after the first two phases of the lockdown, and mobility returned to the baseline, without a single confirmed COVID-19 case. Both states saw an increase in the number of cases after the lockdown ended, likely from migrants entering from other states. In both these states, simple border closure would have been sufficient a measure, while allowing intra-state mobility. Meghalaya had a sharp drop in mobility initially that did not return to baseline even after the end of the lockdown. But Meghalaya also had very few cases during the lockdown and no spike or increase in cases after the lockdown despite increased mobility. Thus, Meghalaya is another example of a state with low intra-state transmission, making the lockdown unnecessary. On the other hand, Tripura experienced a big spike during the lockdown in the last two phases, as mobility slowly increased in the state. After the lockdown, there was a big spike, but the adaptive approach post-lockdown in the Unlock phase saw a reduction in daily COVID-19 cases per million.

In Assam, Arunachal Pradesh, Manipur, and Nagaland, there were very few cases during the lockdown. But in each of these states, as mobility returned to baseline toward the end of the lockdown, there was a spike in COVID-19 cases immediately after the end of the lockdown in early June. In all these states an adaptive approach with slowly phased out border controls and other measures like contact tracing would have been better suited than a sweeping lockdown.

The difference in mobility patterns as well as in the number of new cases per million in each of these states shows the massive variation across the states of India during and immediately after the lockdown. In places like Mumbai, which has one of the highest densities of population in the world, even visiting grocery stores would lead to some transmission of infection. On the other hand, in Bihar, especially in the rural areas, there was little risk of transmission attached to allowing most essential activities; and that states like Sikkim and Mizoram even had a lockdown imposing such great costs on its residents for no reason is astounding.

3.4.3 Economic impact of the all-India lockdown

While the lockdown only had limited success in curbing the spread of COVID-19, and disproportionately punished residents of states with few to no COVID-19 cases, its impact on the Indian economy was nothing short of devastating. During the second quarter of 2020, India's GDP fell by 23.9% as compared with the same quarter from the previous year (Beniwal & Nag, 2020). This was the biggest slump in output recorded among the major economies during this time period, and also the sharpest decline recorded since 1996, when India began publishing quarterly GDP figures (Beniwal & Nag, 2020).

The decline in output over the 3 months leading up to June hit nearly every sector of the economy: manufacturing output fell by 39.3%, construction output by 50%, the output of the mining sector by 23.3%, and that of the trade, hotels, transport, and communications sectors fell collectively by 47%. Meanwhile, the output of the financial services sector, which comprises the biggest component of the Indian services sector, declined by 5%. Only the agricultural sector managed to escape this general malaise, with the output of this sector increasing by 3.4% compared with a year before over the course of the second quarter of 2020 (Beniwal & Nag, 2020).

The heavy impact of the lockdown was also picked up by other measures of output. The Index of Industrial Production (IIP), which tracks the output of the industrial sector in India, also fell by 36% during the 3-month period between April and June of 2020 compared with the same

period from the previous year (Vyas, 2020b). The index fell sharply in April, soon after the imposition of the lockdown, declining by 54.3% during this month. Although it turned course and started rising in May and June, it was still 20% lower at the end of June as compared with where it was in the month of February (Vyas, 2020b).[35]

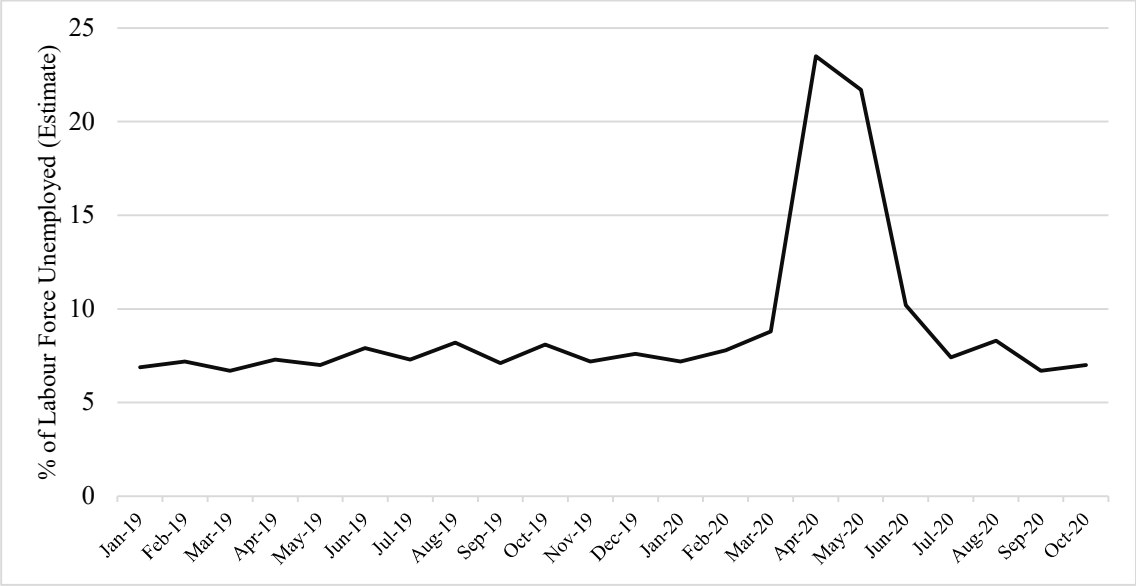


Figure 17 Unemployment rate in India between January 2019 and October 2020
Source: Consumer Pyramids Household Survey (2020).

This sharp decline in employment was reflected in the loss of income suffered by households across the income distribution during the month of April. Using data from the CPHS, Bertrand et al. (2020) found that 84% of households in India reported a fall in income during the period between April 18 and April 30, 2020. However, there was a regressive pattern to this decline in household income. As Figure 18 below shows, based on pre-lockdown monthly per-capita household income, households in the top quintile of the income distribution reported the smallest decline in income, with 66.3% of households in this quintile witnessing a loss of income during this period in the second half of April. This was lower for urban areas of the country, with only 54.7% of households reporting a loss in income. In stark contrast, more than 84% of households reported a loss in income in quintiles one through four.

[35] Using energy consumption and night lights data Beyer et al. (2020) also find a sharp decrease in consumption and overall economic activity during the lockdown.

As Bertrand et al. (2020) argue, the regressive pattern of the losses in household income reflects the pattern of job losses inflicted by the lockdown. Thus, the lower figures for the upper quintile, especially in the urban areas reflects the fact that many individuals in households in this income bracket held stable, salaried jobs, and were able to work from home during the lockdown. The higher incidence of income losses in the other quintiles, especially in households in the bottom three quintiles, meanwhile, reflects the harsh impact of the lockdown on small traders, hawkers, and daily wage laborers. As Vyas (2020a) notes, despite accounting for only 32% of all employment, workers in these sectors of the economy accounted for 75% of all jobs lost in the aftermath of the lockdown. Thus, of the 121.5 million jobs lost during the month of April 2020, as many as 91.2 million jobs were lost by small traders, hawkers, and daily wage laborers.

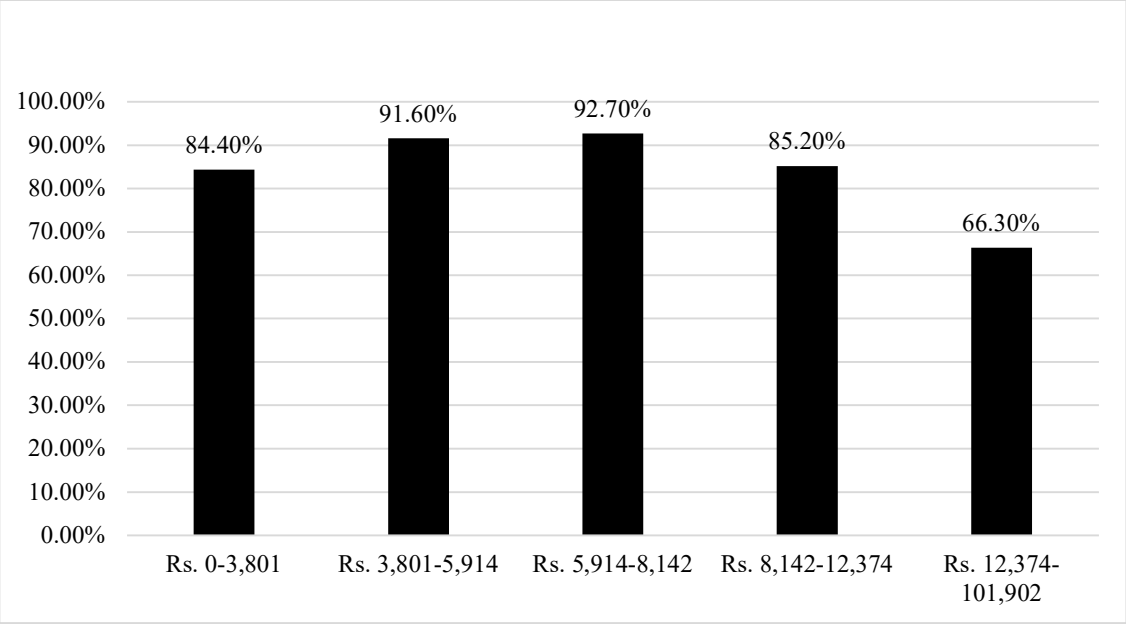


Figure 18 Reported loss of income by quintiles of household income in April 2020
Source: Bertrand et al. (2020).

3.5 Conclusion

In this paper, we demonstrate the enormous variation across Indian states across many margins. First, states have vastly different resource constraints. Second, states show a lot of variation in healthcare capacity. And third, and most importantly, the incidence of COVID-19 infection and the spread as well as the growth of infection rates was not prevalent across the country but initially restricted to a few dense pockets. Given this information, it was an odd choice to

impose a severe and highly centralized countrywide lockdown, especially in a country as large as India, which has a federal structure. Why, then, did India choose this kind of draconian one-size-fits-all policy? The answer lies in the fact that India is not a genuinely federal state, but highly centripetal in its federalism, giving its union government an enormous amount of power to dictate centralized policies to Indian states.

There are two main reasons for India's historical centripetalism, which has led to dysfunctional federalism in present-day India. The first is that as part of its constitution design, at the founding of the republic, the union government was given much more power, especially residual power, relative to the states. Second, because of the constitutional structure, India is not very fiscally federal, with the union government controlling most of the revenues. This trend has continued even in the relationship between state and local governments. Consequently, India's centripetalism has led to stunted state capacity for Indian states and local governments.

Because of its historical legacy of centripetalism, India imposed the most stringent countrywide lockdown for almost 70 days, devastating its economy, pushing hundreds of millions into unemployment and poverty, and burdening its most vulnerable citizens—economic migrants working in the informal sector. The benefits were small and limited to a few states. As shown by the mobility analysis, we find evidence showing that lockdowns were successful in curbing mobility and therefore the spread of COVID-19 only in a handful of states. In the remaining states, either the lockdown policies were unsuccessful in containing the transmission, or the lockdown was completely unnecessary given that there was no increase in COVID-19 transmission despite the increase in mobility.

In the future to prevent one-size-fits-all policies like the countrywide lockdown, and have more locally suited policies, India must not only formulate better policies at the top but also recognize the need for structural change and reform required to make India a genuinely federal union, as opposed to practicing centripetal or spurious federalism.

4. Constitutionally destined decay of local governments in India

Abstract

In 1992, through two constitutional amendments, the union government of India created a new class of local self-governments and placed them at the forefront of delivering an extensive set of public goods and services to citizens. While doing so, the union government also passed the key task of devolving crucial fiscal and functional powers to state governments. What transpired over the next few decades is a story of paralysis and decay. Local governments were never endowed with requisite fiscal or functional endowments by state governments, and they now function as institutions that are constantly underequipped to meet the needs of complex, and ever-expanding social sector schemes. This study argues that the creation of such institutions is a typical product of the centripetal federalism in India where higher-tiered governments driven by the desire to maintain their power and influence, delegate essential responsibilities to local governments without providing them with adequate fiscal and functional support.

4.1 Introduction

Federalism relies on one of the most basic tenets of polycentric governance, where multiple tiers of governments are accountable to citizens for the provision of public goods and services within their own well-defined sphere of authority. Federalism can incentivize governments at different tiers to compete with each other for resources to provide public goods to their constituents. This competition also ensures the quality and efficient delivery of public goods (Breton, 1996; Oates, 1972; Tiebout, 1956). Thus, it follows that if lower tiers of governments are politically and economically autonomous, then they will have pareto-superior resource allocation. With these considerations in mind, many nations have successfully pursued 'decentralization' policies and have devolved fiscal and political powers to the lower tiers of governments to achieve higher levels of economic growth (Martinez-Vazquez et al., 2017). However, it is important to note that a mere promise of decentralization, and half-hearted delegation of roles and responsibilities is not a recipe for economic prosperity. Various cross-country studies, e.g., Baskaran and Feld (2013), and Baskaran et al. (2016), have shown that there is no clear effect between development and decentralization. The success of federalism lies in cultivating an equitable and sustainable environment of political and fiscal devolution (Voigt & Blume, 2012).

While many governments tend to have grand decentralization and tax devolution policies with huge sums of money being devolved to local governments for delivering public goods, what is frequently observed in federally organized developing countries is that a large portion of these funds are devolved only on conditional bases. These conditional transfers either award funds

for purposes that might not be relevant for the local governments (Martinez-Vazquez and Searle 2007), or merely serve to woo a voter base rather than for the optimal delivery of public goods (Arulampalam et al., 2009). Eusepi and Wagner (2010) characterize these setups as 'spurious' federalisms. In a 'spurious' federal framework, local governments become mere policy implementation agents of the higher-tiered governments and do not have substantive powers of taxation or governance. Spurious federalism generally leads to top-down governance and knowledge problems that are very hard to disentangle and eventually lead to poor public goods targeting[36]. India is a classic example of 'spurious' federalism since the decentralization of power has left local governments with neither financial autonomy nor political autonomy from higher levels of government.

This paper aims to underscore the ineffective nature of Indian federalism by shedding light on how political and financial powers have been devolved to local governments in India. To show this, the study will rely on the legal bases of local governments in India, i.e., the 73rd and 74th constitutional amendment acts of India (CAAs), the state-level local government acts passed since the amendments, and the extent of functional and financial devolution of powers made to local governments in lieu of the state-level acts. While many studies look at the economic effects of centre-state disparities[37], and state-local disparities[38] in India, there are very few studies that explicitly look at the legal framework behind local governance as a source of these disparities. Examining the legal framework of local governments allows us to better understand the nature of the problems and map them to existing theories in the political economy of federalism (Weingast, 1995).

The study highlights two significant findings. Firstly, it shows that the CAAs mandated by the union government compelled state governments to establish a local government tier despite the fact that many states lacked the capacity and financial resources for its establishment. Secondly, due to the absence of specific guidelines within the CAAs, the state governments transferred all governmental responsibilities to the local tier without granting them the necessary powers to effectively fulfill these responsibilities. Based on these findings and considering the shared motivation of both state and central governments to appease lower-tiered political elites in order to maintain their power, the paper argues that these two findings represent a political

[36] See also Bardhan and Mookherjee (2006) for an extensive survey of the problems related to public good provisioning and, Anderson et al. (2015) for clientelism in public good delivery.
[37] See Rao and Singh (2006), Rangarajan and Srivastava (2011) and Srinivasan (2002)
[38] See Rajaraman and Vasishtha (2000) for the case study of Kerala. Similarly, Sahasranaman (2012) provides a comprehensive survey of three villages in Tamil Nadu.

equilibrium reached between political elites at the state and union levels within a top-down, centripetally organized federalism.

In doing so, the paper contributes to two distinct strands of literature. Firstly, it contributes to the literature on the political economy of Indian federalism developed by Rao and Singh (2006). Within this strand of literature, the study builds on Rajaraman (2003), Rajaraman and Sinha (2007), Raghunandan et al. (2016), and Alok (2021) by pointing out the design issues that exist in the devolution of financial and functional powers to local governments. Secondly, it also contributes to the broader literature on federalism and decentralization as developed by Brennan and Buchanan (1977), Buchanan (1995), Eusepi and Wagner (2010), Enikolopov and Zhuravskaya (2007), and Weingast (1995) by highlighting the impediments that exist in the constitutional reform of federally organized countries. The rest of the paper is organized into four parts; the second and the third parts briefly outline the structure of relations between centre-state, and state-local governments in India. This sets the context for the fourth part of the study, describes the issues that exist between power sharing amongst the three tiers of government, and briefly discusses how and why these issues exist. The fifth part of the paper concludes by discussing the fallout of these design issues and the direction for reform.

4.2 Centre-state relations in India

The Republic of India operates as a federal union comprising states with dual centers of power at the union and state levels (*The Constitution of India*, 1950).[39] The president holds the *de jure* position as the head of the republic, while the prime minister serves as the *de facto* head of the union government and the parliament. This organizational structure is mirrored to some extent in the states, with the governor serving as the *de jure* head and the chief minister as the *de facto* head of the state government. This section explores the interactions between the state and union tiers of government, highlights the roles and responsibilities of various governmental actors, and also discusses the fiscal relationship that the state and the union governments share in India.

4.2.1 Governance structure at the centre-state level

Figure 1 below puts the general administrative framework into perspective, it represents how the different actors in the two tiers of governments interact. It also introduces how federalism

[39] In this paper, the terms “union government” and “central government” are used interchangeably.

in India is broadly structured. The figure is divided into two domains, the union domain on top of the state domain below it. The decision-making authorities of the union government consist of the union executive and the union legislature (the parliament). The union executive is made up of the president, the prime minister, and the union cabinet[40]. The union executive is the ultimate decision-making authority of the nation, they are the first movers and the final signatories of all centrally made legislation in India. Parliament on the other hand is the forum where legislative matters are deliberated and voted upon. The parliament of India is a Westminster-type of legislature consisting of an indirectly elected upper house (Rajya Sabha/Council of States) and a lower house (Lok Sabha/House of the People) where the members are directly elected through general elections that take place quinquennially. The lower house introduces new bills and takes an initial vote on their approval, if the bill is passed by a simple majority, they are subsequently debated and voted upon by the upper house. After these two rounds of voting, the president can finally decide whether to pass it as a law or not[41]. The union executive together with the parliament are collectively referred to as the "central government". State governments in India are structured similarly. As seen in Figure 19, there is an executive branch and a legislative branch in the state government as well. The executive arm of the state consists of a governor[42], a chief minister (CM), and a state cabinet. Generally, Indian states have unicameral legislatures with members of state legislative assemblies (MLAs) directly elected through state elections which take place quinquennially (not coinciding with the parliamentary elections). The head of the state government is the chief minister, who is also an MLA. MLAs introduce and pass state legislative bills to the governor who then decides upon their assent as law[43]. This describes the governmental actors that exist in the different tiers of Government in India, the functional aspects of these governmental actors are laid out in Part XI, schedule VII, and Part XII of the constitution.

[40] The union cabinet of India is an empowered group of parliamentarians who, along with the prime minister aid and advise the president of India on legislative matters. For more, see Article 74 of the constitution.
[41] The president can send a bill back to the parliament only once, if the same bill reaches the president a second time, then the president must accept the bill (Art. 152).
[42] The governor of a state is appointed by the president of the union upon the recommendation of the union cabinet. Again, the president has *suspensive veto* powers under Art.152, but can only be exercised once.
[43] The governor's role is similar to the role of the president of the union.

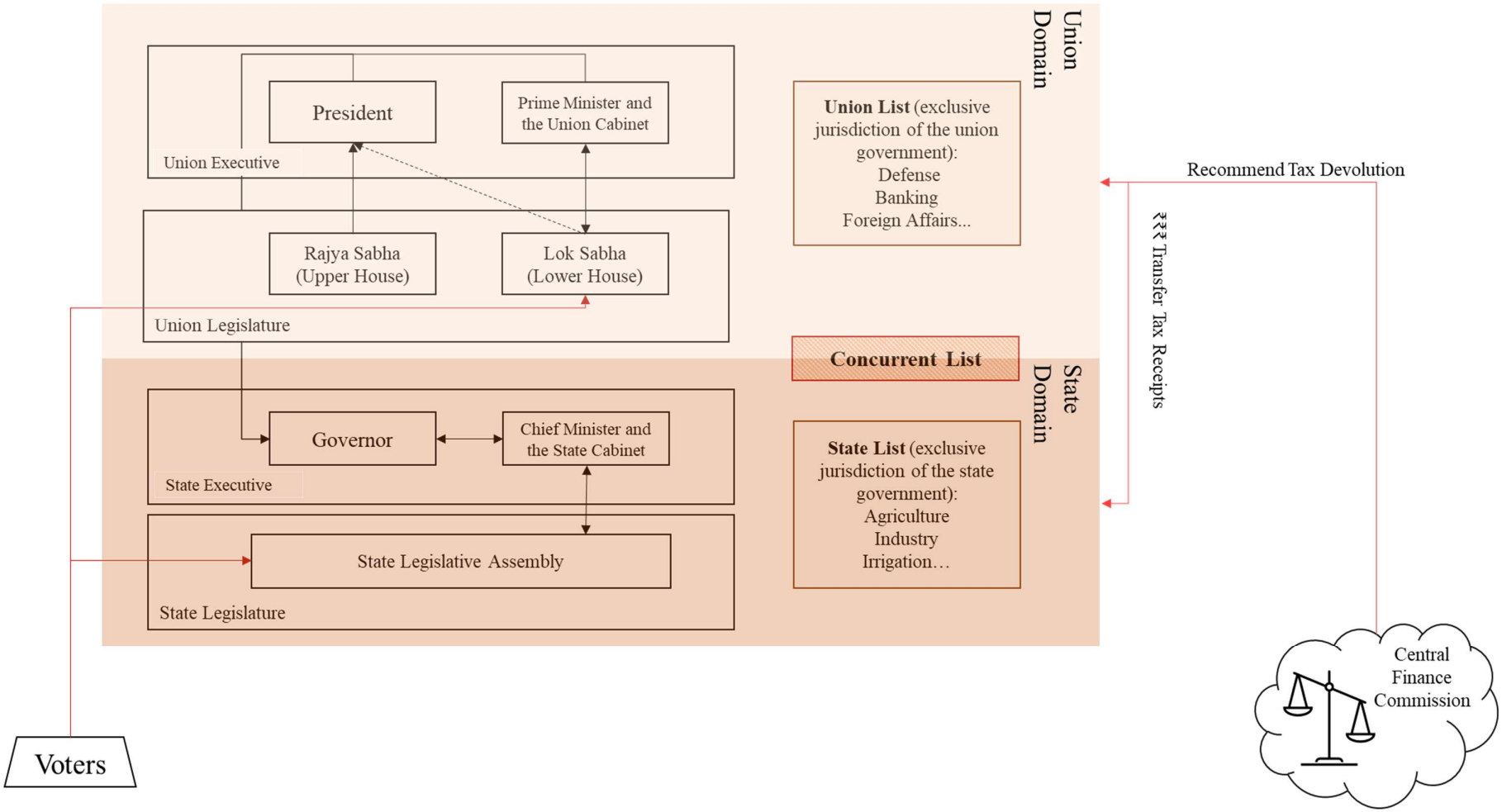


Figure 19 Centre-state governance structure in India

Source: Own illustration.

Part XI of the constitution (Articles 245 through 263) describes the roles, responsibilities, and obligations of the union and state governments; while doing so, the articles describe how legislative powers between the union and state governments are to be divided and the extent to laws that may be made by the two tiers of governments. Finally, the articles also consider exigencies, i.e., they a) describe the situations where the central government can override the state government, and b) describe the treatment of residuary powers that do not fall under either the union or the state governments' jurisdictions.

schedule VII contains the substantive jurisdictional demarcations between the centre and the states. The schedule essentially contains three lists; the first list is known as the "union list" and contains subjects upon which only the parliament has exclusive legislative powers. Topics in this list generally include subjects such as telecommunications, national defense, banking, international relations, etc. Then, there is the state list which contains all the matters upon which only the state legislatures have exclusive legislative rights. This list contains topics such as agriculture, police, public health, local governments, etc. Finally, the third list, known as the "concurrent list" contains subjects that both the union and state governments can jointly legislate upon; topics for e.g., include labour, trade unions, electricity, forests, etc.

While the Indian constitution spells out its 'federal' qualities in great detail, it is also very clear about the supremacy of the central government. This quality of the constitution is what concretely establishes centripetal federalism in India. This can be seen in – a) Art 245: where the union government keeps the exclusive right to make laws on items that do not appear in any of the three lists in schedule VII; b) Art 254, wherein the event of there being any repugnancy in law-making between the union and state governments on topics listed in the concurrent list, then the union will prevail; c) Art 257 where the executive power of the union shall extend to giving directions to the states and ensuring compliance.

4.2.2 Fiscal structure of centre-state finances

The way tax receipts and revenues are collected and distributed between the union and the states lays the groundwork for fiscal federalism. In India, tax assignments have two main dimensions: the first is with respect to the distribution of the powers of taxation, and the second is with respect to the distribution of tax revenue. The former is facilitated by way of articles 246, 248, and 265 in conjunction with the union and state lists of schedule VII, and the latter is specified

in chapters I and II of part XII of the constitution (between articles 264 and 293)[44]. According to Sarkaria et al. (1988), the rationale by which the constitution assigns powers of taxation is as follows; the powers are allocated to state governments if the taxes to be levied are "location-specific and relate to subjects of local consumption", if on the other hand taxes have an "inter-state base" or where "the place of residence is not a correct guide to the true incidence of tax" and "where uniformity in tax rate is desirable" the powers of taxation would be assigned to the union government. By design, tax assignments between the union and the states are mutually exclusive and are thus relatively immune to disputes.

The constitution also specifies that the revenues collected are to be deposited into the Consolidated Fund accounts of the union government or the states as per Article 266. Given the above, taxes accrued by governments can be categorized into major channels and exceptional channels of tax revenue. First, there are Tax heads in the union list that are levied, collected, and retained by the union. Second, there are tax heads in the state list, levied, collected, and retained by the states. Third, there are tax heads where the levy and collection happen at the union level but are then shared with the states (Article 270). In exception to these main channels, certain tax heads are on the union list but are instead collected by the states and net proceeds arising out of these taxes are allocated to the state within which they were collected (Article 268), this happens in the case of certain stamp duties and duties of excise. Then some taxes are to be levied and collected by the union but assigned to the states (Articles 269 and 269A), this happens in the case of goods and services taxes. Apart from the tax revenue that is assigned to states, the union government may by law provide grants-in-aid to states that the parliament determines need assistance (Article 275). Grants-in-aid constitute a large part of both union and state budgets since they are used to finance 'central sector schemes' of the union government and the jointly operated 'centrally sponsored schemes' (the government's flagship social and economic welfare empowerment programs).

To determine the shares of the states in duties, tax revenues, and grants-in-aid and their *inter* se allocations as per Articles 269, 269A, 270, and 275, and to ensure that these transfers are made in a fair and equitable manner, the constitution proposes the setup of an autonomous agency, the 'finance commission' (Article 280). The commission is set up every five years by the president of the country and it is the president who lays down the report of the finance commission

[44] Except for Article 246A which contains special provisions concerning goods and services tax. This is contained within Part XI of the constitution.

before each house of the parliament. The report is to play the pivotal role of an autonomous reviewer and recommender of tax distribution. This process ensures that there is a stable and sustainable fiscal environment between the centre and the states and that the vertical and horizontal fiscal imbalances between the centre and the states are kept in check. The report of the finance commission together with an explanatory memorandum as to the action taken is to be laid before each house of parliament (Article 281).

In terms of its other specific roles: the finance commission in its report mainly does three things: it a) recommends the percentage of tax income that may be devolved to the states and the percentage of tax income that may be retained by the centre[45] and b) recommends the criterion that is to be followed for the said devolution[46]. Besides this, the finance commission also recommends c) how grants may be awarded to states to cover up for the geographical, socio-economic, and demographic idiosyncrasies of each of the states. Apart from this, the finance commission has the power to give a portion of the central tax revenues to state governments as grants for specific purposes (Art 280). Figure 20 summarizes this; it depicts the channels by which devolution to state governments takes place. These devolved proceeds are then used by the state government to fund various development schemes of its own ministries or to contribute to centrally sponsored schemes in cooperation with the union government.

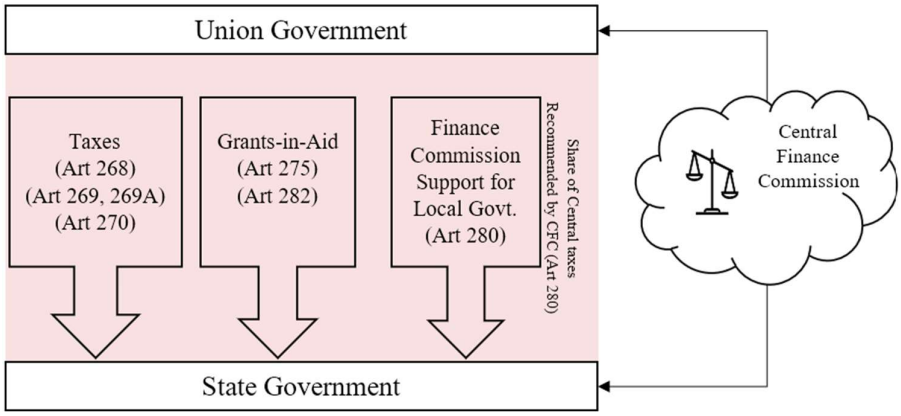


Figure 20 Centre-state fiscal structure in India

Source: Own illustration.

[45] For the period of 2021-26, the fifteenth finance commission recommended that 41% of central taxes may be devolved to each of the states.

[46] This formula to devolve central tax revenue to each of the states in 2021 as follows: 45% weight for income distance (the difference of a state's income from the state with the highest income), 15% weight for the population of a state (higher populations are rewarded), 15% weight for the area of a state (bigger states are rewarded), 12.5% weight for demographic performance (which is the inverse of a state's total fertility ratio), 10% weight for forests and ecology (forest coverage in total area is rewarded) and 2.5% for tax and fiscal efforts (ratio of the average per capita own tax revenue and the average per capita state GDP).

4.3 Local governments in India

While the framers of the Indian constitution envisioned India to be a welfare state where the governments would be responsible for citizens' social welfare and economic empowerment, they did not introduce any explicit legislation to give tangible shape to their local governance visions. While the framers believed that India needed to strengthen economically before such legislation on local governance could be meaningfully introduced and enforced, they did however give a broad outline of their vision in the form of articles 38 – 51 of the constitution. These articles make up the 'directive principles of state policy' and are closely modelled after the Irish constitution's directive principles. Amongst these principles, one article is central to the genesis of local governance in India – Article 40, which asserts that the 'state' (comprising of both the central and state governments) shall endow 'local governments' with "*powers and authority as may be necessary to enable them to function as units of self-government*". Even though Article 40 is a part of the original constitution brought into force in 1950, the directive principles of state policy in India are non-justiciable and this made it very convenient for union governments to shirk their responsibilities in creating legislation that mandated power to be devolved to the local governments.

It was only after repeated calls by autonomous commissions that investigated governmental affairs[47] that in 1992, the government finally passed statutory legislation that made state governments responsible for constituting local governments through the two constitutional amendment acts (CAAs)[48]. The primary roles and responsibilities of local governments are –to manage the local community's affairs and to plan and implement policies that bring about economic development and social justice in the local community. The first of the two amendments was the 73rd Amendment which dealt with rural self-governance (also known as Panchayati Raj Institutions or PRIs). The second amendment was the 74th Amendment which dealt with urban local governance (also known as Urban Local Bodies or ULBs). Together, the two constitutional amendments make up Article 243 of the Indian constitution.

Figure 21 below depicts the general structure of the different tiers of governments in India post the introduction of Article 243. Local governments in India generally[49] contain three tiers,

[47] See the reports of B. G. Mehta (1957), A. Mehta (1978), and the Sixty-Fourth Amendment Bill that failed to pass parliamentary muster in 1989.
[48] For a historical timeline of the development of local self-governments in India, see Ananthpur (2017).
[49] When a state's population is less than a million people, local governments are two-tiered without the presence of the intermediate government.

which are demarcated based on demographic or geographic considerations.[50] The highest tiers of the ULB system are municipal corporations (or Mahanagar Palikas). These governmental bodies are generally present in major cities. Below are the municipal councils (or Nagar Palikas), which are present in small cities or large towns. The lowest ULB-tiered governments are city councils (or Nagar Panchayats), which are found either in large rural villages or small towns present on the fringes of major municipalities.[51] Amongst rural local governments, the three-tiered categorization is as follows: district councils (also known as Zilla Parishads) are at the top, block councils (also known as Mandal Parishads) are in the middle,[52] and at the bottom lies the most basic block of the PRIs – the village councils (or Gram Panchayats).

The scale of the local government reforms of 1992 is noteworthy – before the amendments there were around 750 union government constituencies and around 4000 state government constituencies (in 25 Indian states) where regular elections were held. The amendments implicitly laid the groundwork for the obligatory creation of around 204,000 local bodies (consisting approximately of around 4000 ULBs and 200,000 PRIs) where elections would have to be organized every five years. To enable this, Article 243K stipulates that elections are to be conducted by the state election commission,[53] and voters, depending on their domicile, could vote candidates into one of the three local government tiers. To demarcate the jurisdictions of PRIs and ULBs from the jurisdiction of the state governments, the union government also inserted two schedules as a part of the 73rd and 74th CAAs. Schedule XI contains a list of matters where PRIs have exclusive legislative rights and schedule XI-A contains matters where ULBs have exclusive legislative rights.[54] However, it is important to remember that local self-government continues to be a subject in the state list. Thus, the two new schedules were nested inside the state list of schedule VII; and the way in which ULBs and PRIs are organized and elected is different in each state, following state laws.

[50] These considerations are made by the governor of the state in consultation with the state government. If a state government deems it necessary that a municipal corporation is required in place of a smaller government, then the state government may upgrade the said local government into a municipal corporation with the approval of the state governor.
[51] There is no uniform qualifying criterion for what makes up a ULB. In some states, a population criterion is used, in Andhra Pradesh, the population criteria is 40000 persons for an area to be classified as a municipality; in Himachal Pradesh, it is from 5000 to 50000 persons, in Tamil Nadu, it is above 30000 persons. Some states also use a density criterion, 10000 people per sq. km in Andhra Pradesh for qualifying as a ULB, 3000 and above in Karnataka, etc. The 65th CAA, precursor to the 74th CAA that had failed to pass the floor of the parliament specified a population range of 10 to 20000 for a Nagar Panchayat, 20000 to 300000 for a Municipal Council, and 300000 or above for a corporation. These were omitted in the 74th Amendment.
[52] The Intermediate Panchayat which stands between the village and district panchayats in the states where the population is above 2 million.
[53] State election commissions in India are also constitutional bodies that are set up by Articles 243K and 243ZA of the constitution.
[54] See appendix C.

4.3.1 Governance structure at the state-local level

Since the organizational composition of ULBs and PRIs are different, we start with ULBs and their highest tier of governance – the municipal corporation. Municipal corporations are made up of wards, which represent the territorial constituencies from which municipal councilors are elected to the corporation. The councilors then indirectly elect a mayor who happens to be the *de jure* head of the municipal corporation. The *de facto* head of a municipal corporation is known as a municipal commissioner, who is directly appointed by the state government. The structure of the lower-tiered municipal councils and city councils are similar, they are also divided into wards and the councilors elected from the wards choose a 'chairperson' who happens to be the *de jure* head of the administration, while the *de facto* head is also a municipal/city council commissioner appointed by the state government. Together, the *de jure* and the *de facto* wings of the ULB government are generally responsible for serving out the functions listed in schedule XI-A of the constitution.

The organization of PRIs is also three-tiered but more standardized than ULBs. The building block of a PRI is a gram panchayat (GP) and a gram sabha (or a Village Council). Generally, the area of a GP consists of a single village or a group of villages that are divided into smaller electoral constituencies called wards. Each ward elects a member to the GP through direct elections. The ward members then indirectly choose the head of the GP who is known as a 'Sarpanch'. The Sarpanch and the ward members are elected for five years. The elected members of a GP along with the Sarpanch are answerable to the gram sabha (village council) which is convened two to four times a year. This body is like a state legislature albeit in a reduced form – members of the body may ask the GP about their plans, and resolutions and can seek clarification on work done in implementing development schemes. A gram sabha consists of all persons above the age of 18 whose names are included in the electoral rolls of the GP and a permanent secretary who organizes the convention.

A group of GPs together form the third, higher tier, a block panchayat (BP, sometimes also referred to as a 'mandal panchayat'), these are the intermediate level of PRIs and are located at the block headquarters of districts and convene as the 'block council'. Since there are no direct elections held for BP seats, each GP nominates members to the BPs. Also, all the Sarpanches of the GPs in a block along with the local MP and MLA are automatically *ex officio* members of the BP. Members of a BP coordinate amongst themselves to choose a chairperson for the block. Finally, all the BPs in a state together form a zilla parishad (ZP or district councils). ZPs

follow a similar structure, each Block member under a ZP nominates members to the ZP who then choose a chairperson. The chairpersons of the BPs, the local MLAs, and the local MP are generally *ex officio* members of a ZP.

At the district level, the PRIs and ULBs of the district must create a 'district planning committee' as per Article 243ZD of the constitution. This committee has one primary responsibility – it must draft a plan for the district concerning development matters that are common[55] to all PRIs and ULBs. A similar planning committee is to also be constituted in metropolitan areas as per Article 243ZE. Since the main task of PRIs and ULBs is to provide public goods to the local populace, the elected legislators are assisted by an administrative wing staffed by state government officials. Generally, in ULBs, the head of the administrative wing is a city/town commissioner and in PRIs, it is a district/block/village development officer. These officials are generally tasked with the implementation of development plans and public good programs prepared by the local governments or schemes carried out by the union or state governments. Every state government has separate ministries for urban and rural development.

[55] Common issues generally involve spatial planning and sharing of water and other physical and natural resources.

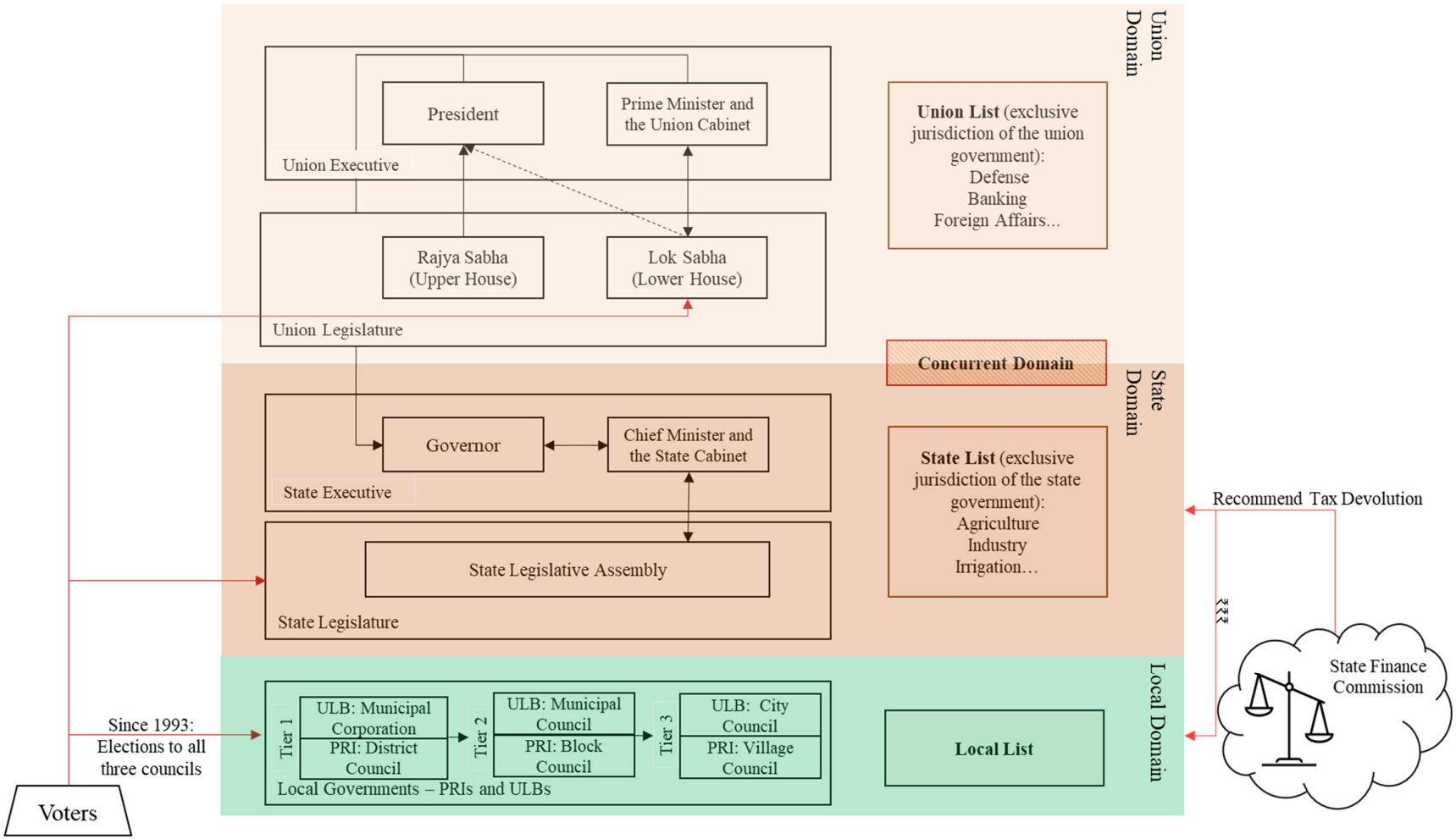


Figure 21 Centre-state-local governance structure in India

Source: Own illustration.

4.3.2 Fiscal structure of state-local finances

Since "the preparation of plans for economic development and social justice" and "the implementation of schemes" on matters listed in schedules XI and XII to local governments, are now responsibilities of the local governments, the constitution also mandates the state governments to provide these bodies the requisite fiscal space to perform their mandates. In this view, Article 243G and Article 243H state that PRIs and ULBs are to be given powers of levying and collecting local taxes, fees, duties, etc., for items that are specified in schedules XI and XII. Thus, local government revenues in India consist mainly of a) their own revenues, and when such revenues are not enough, and b) grants-in-aid from the state or the union governments.

To make these transfers efficiently and equitably, the governors of states are empowered to constitute State Finance Commissions (SFCs) per Articles 243I and 243Y of the constitution. The SFCs are set up for five years to review the financial positions of PRIs and ULBs and they are tasked by the governor to make recommendations to the state government on a) distributing between the state and the local governments the net proceeds of taxes, fees, tolls and duties that are charged by the state Government, b) allocating funds to local governments from the consolidated fund of the state and c) taking steps that strengthen the fiscal capabilities of local governments. Post the submission of the SFC's report, the state government is obliged to lay before the legislature, an explanatory memorandum on the action taken (or an Action Taken Report, ATR) by the state government on the recommendations of the SFC (per Article 243I(4) of the constitution). By and large, the functions of an SFC are identical to the functions of the central finance commission, except for the latter's power to issue grants from the central tax pool directly to the local government.

Figure 22 summarizes the channels by which functional and fiscal devolution from union and state governments to local governments take place post the introduction of the CAAs.

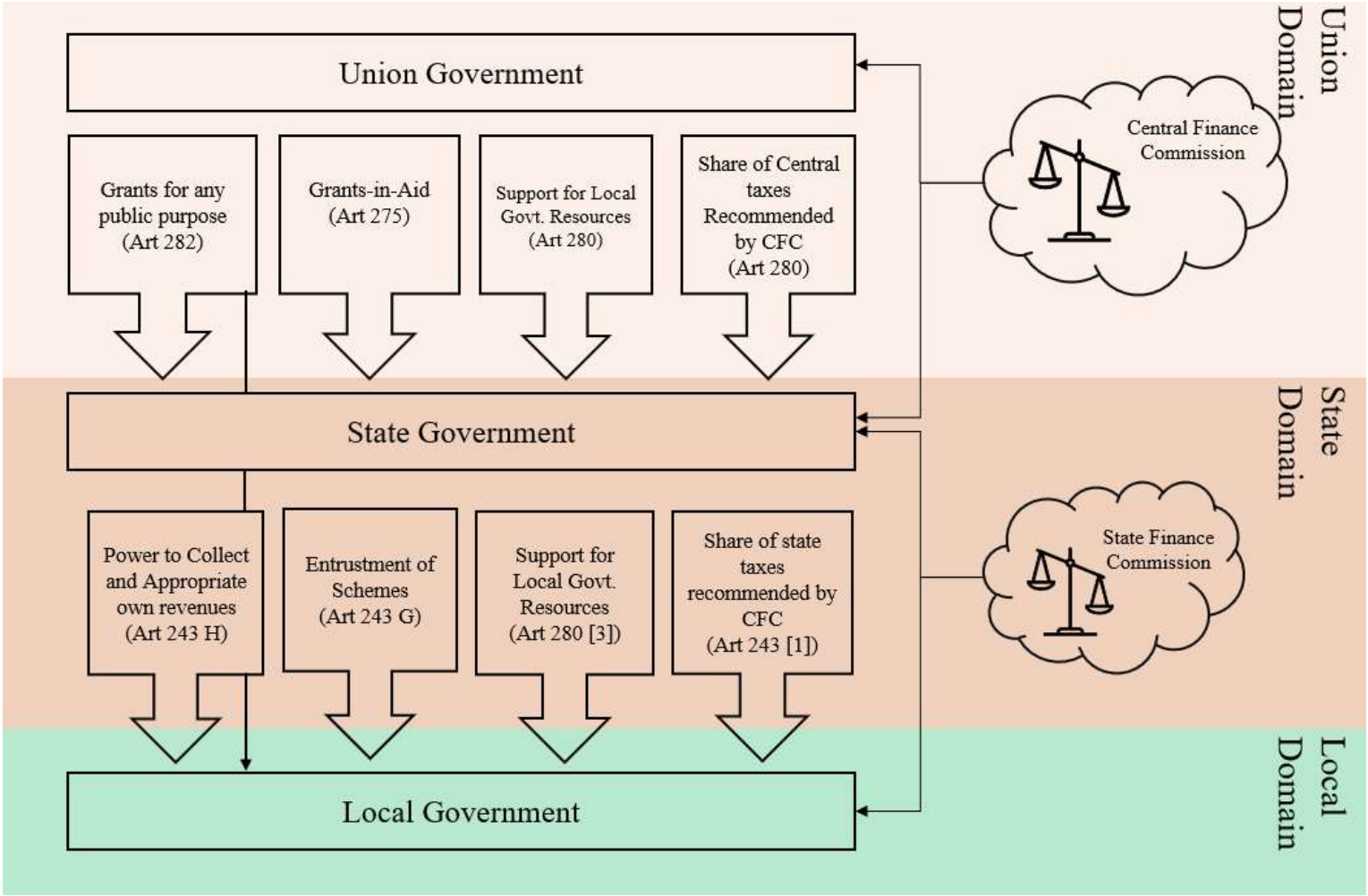


Figure 22 Centre-state-local fiscal structure in India

Source: Own illustration.

4.4 Implementation of the CAAs

While the passage of the 73rd and 74th CAAs and the establishment of local governments were initially welcomed by voters and policymakers, the institutions resulting from these amendments have failed to attain the same level of respect and authority as higher-level governments, despite being in existence for almost three decades. Instead, the CAAs have given rise to a category of local governments that consistently struggle to handle local affairs due to their limited capacity for governance, political influence, and financial independence. Moreover, these local governments are constantly at risk of being further dominated by higher-level governments that seek their subservience. This section explores how this situation has unfolded over the years and the reasons for the PRI acts' failure to launch.

To understand the current state of local governance institutions in India, it is necessary to trace how the CAAs were implemented in state law. After the CAAs were assented by the president, the state governments were given a one-year period of transition (one year post the 24th of April 1993 for PRIs, and the 1st of June 1993 for ULBs) to implement the CAAs in state law. This period was clearly not enough for many of the state governments since they had only made very minor progress in drafting and enacting the requisite legislation. Most state governments did the bare minimum required of the CAAs, i.e., they passed the state-level acts only in order to achieve *de jure* conformity with the CAAs. Meeting the bare minimum also meant that the newly enforced state-level PRI and ULB acts had very little variation between them and therefore took no state-specific differences into account. Table 6 below shows how the 73rd CAA was implemented by state governments. It can be seen that most Indian states (existing in 1994) enacted state-level PRI acts just days before the transition period for implementing the laws came to an end.

It was only in the years later that any of the substantive amendments that took into account state-level specificities were made at all. Here, substantive amendments mean changes that significantly impact the structure, functions, powers, and responsibilities of the PRIs and ULBs; for e.g., setting up of state election commissions to ensure that functionaries are regularly elected into office, ensuring that the governments have adequately assigned functions to carry out their tasks by defining them in the state-level acts, setting up state finance commissions to ensure that the local government bodies get adequate funds etc. Table 6 also shows when

substantive amendments were made to the PRI acts. Certain states like Andhra Pradesh, Manipur, Sikkim, and West Bengal were quick to make state-specific amendments to the acts, whereas other states such as Bihar, Gujarat, Haryana, and Rajasthan only did so in the 2000s. The case with ULBs and the 74th amendment is similar since many of the financial and electoral institutions that govern PRIs also concurrently govern ULB affairs. In fact, many of the substantive amendments concerning the ULBs were made by state governments only in the late 1990s.

The results of this are manifold. First, it has resulted in local government institutions having a lack of functions; here "functions" mean the roles, responsibilities, and powers of the local governments. Secondly, it is due to the lack of functionaries existing in the local government; "functionaries" are the elected representatives of the local government as well as appointed administrators of local governments. Finally, it is because of the lack of finances that local governments have; "finances" here refer to the revenues raised by the local governments themselves, as well as the revenues, compensations, and grants devolved or transferred by higher-tiered governments at the state or the central level. This section touches on the three problems highlighted above in detail and shows how each of them interacts with the other.

State	Act Name	Conforming Amendment	Substantive Changes	Total Amendments (1994-2019)
Andhra Pradesh[56]	The Andhra Pradesh Panchayat Raj Act, 1994.	21.04.1994	1995 and 1996	16 In 1995, 1996, 1997, 1998 [3], 2000 [3], 2001 [2], 2002, 2006[2], 2007, 2009,2011, and in 2018.
Arunachal Pradesh[57]	The Arunachal Pradesh Panchayati Raj Act 1997.	22.04.1994	1997	10 In 1997, 2001, 2002, 2003, 2015, and in 2018.
Assam	The Assam Panchayat Act, 1994.	22.04.1994	1997	10 In 1995,1997, 1999, 2000, 2001, 2002[2], 2008, 2011, and in 2018.
Bihar[58]	The Bihar Panchayati Raj Act, 2006 [1993].	04.1994	2006	12 In 1995, 2006, 2008, 2009, 2010, 2011, 2014[2], 2015, 2016[2], and in 2017.
Chhattisgarh[59]	The Chhattisgarh Panchayati Raj Avam Garam Swaraj Abhiniyam, 1993.	07.06.2001 [25.01.1994]	2001	5 In 2003, 2004, 2008, and in 2019 [2].
Goa	The Goa Panchayat Raj Act, 1994.	13.07.1994	1997 and 1999	13 In 1997, 1999, 2000, 2001[2], 2002[2], 2003[2], 2007, 2010, 2015, and in 2017.
Gujarat[60]	The Gujarat Panchayat Act, 1993.	26.08.1993	2001	13 In 1998, 2001[2], 2005, 2008, 2011, 2014[2], 2015[2], 2017[2], and in 2018.
Haryana	The Haryana Panchayati Raj Act, 1994.	21.04.1994	2000, 2001	16 In 1997, 1999, 2000[3], 2002, 2003, 2004[2], 2006, 2007, 2012, 2013, 2017[2], 2018, 2019, and in 2020.
Himachal Pradesh	The Himachal Pradesh Panchayati Raj Act, 1994.	23.04.1994	2000	16 In 1997, 1998, 2000, 2001[2], 2002, 2005, 2006, 2007, 2008[2], 2010, 2011, 2015[2], and in 2016
Jharkhand	The Jharkhand Panchayati Raj Act, 2001.	10.05.2001	2001	5 In 2002, 2003, 2006, 2010, and in 2017
Karnataka	The Karnataka Gram Swaraj and Panchayat Raj Act, 1993.	30.04.1993	1997	21 In 1995, 1996[2], 1997[3], 1998[2], 1999[2], 2000[2], 2001, 2003[2],2007, 2010,

[56] Act was also used by Telangana until 2019.
[57] 73rd CAAs instrumentalized through a legislative ordinance that was in effect until 01.01.1997.
[58] The Bihar Panchayati Raj Act, 1947 was subsequently amended to accommodate the 73rd CAA. The 1993 act was amended and replaced by the 2006 act, the year of enactment of the earlier act is in square brackets.
[59] The M. P. Panchayati Raj Avam Gram Swaraj Abhiniyam used until 2003. The year of enactment of the earlier act is in square brackets.
[60] The Gujarat Panchayats Act 1961 was amended in 1993 to accommodate the 73rd CAA.

				2011, 2014, 2015[2], and in 2017
Kerala	The Kerala Panchayat Raj Act, 1994.	23.04.1993	1995	13 In 1996, 1998, 2000, 2001, 2003, 2005[2], 2007, 2017, 2018[3], and in 2019
Madhya Pradesh	The Madhya Pradesh Panchayat Raj Avam Gram Swaraj Adhiniyam, 1993.	24.01.1994	1997	22 In 1994[2], 1995, 1997[3], 1998, 1999[2], 2000, 2001[2], 2004, 2005[2], 2006, 2007, 2011, 2012, 2013[2], and in 2014
Maharashtra[61]	The Maharashtra Village Panchayats Act, 1959.	23.04.1994	1997 and 1999	34 In 1994, 1995, 1996, 1997[3], 1998, 1999, 2000[3], 2001, 2002[2], 2003[3], 2005[3], 2006, 2007, 2009, 2010[3], 2011[2], 2012, 2013, 2016[2], 2017, and in 2018.
Manipur	The Manipur Panchayati Raj Act, 1994.	23.04.1994	1996	7 In 1996, 1997, 1998, 2005, 2008, and in 2012[2],
Odisha[62]	The Orissa Panchayat Samiti Act, 1959.	18.04.1994	1997 and 2001	12 In 1994, 1995[2], 1997, 2001[2], 2003, 2004, 2009, 2011, and in 2016[2].
Punjab	The Punjab Panchayati Raj Act, 1994	21.04.1994	1998	10 In 1998[2], 2000, 2002, 2008, 2011, 2012, 2014, 2017, and in 2018.
Rajasthan	The Rajasthan Panchayati Raj Act, 1994.	23.04.1994	2000	19 In 1995, 1999, 2000, 2004, 2005, 2007, 2008[2], 2009, 2010, 2011, 2013, 2015[4], 2016, 2018, and in 2019.
Sikkim	The Sikkim Panchayat Act, 1993.	18.10.1993	1995 and 2007	11 In 1995, 1997, 2001, 2004, 2005[2], 2007, 2010, 2011, 2017, and in 2018.
Tamil Nadu	The Tamil Nadu Panchayats Act, 1994.	22.04.1994	1998 and 1999	88 In 1994, 1995[3], 1996[3], 1997[5], 1998[7], 1999[8], 1999[5], 2000[5], 2001[3], 2002[5], 2003[4], 2004[4], 2005[4], 2006[6], 2007[6], 2008[9], 2009[4], 2011[4], 2012[3], 2014[1], 2017[2], 2018[3], and in 2019.
Telangana[63]	The Telangana Panchayat Raj Act, 2018.	29.03.2019 [21.04.1994]	-	1 In 2019.

[61] Amendments include both the Village Panchayats Act, and the Zilla Parishad and Panchayat Samitis Act.
[62] The Orissa Panchayat Samiti Act, 1959 was amended in 1994 to accommodate the 73rd CAA.
[63] The AP Panchayat Raj Act, 1994 was the *de jure* PRI act until 2019. The year of enactment of the earlier AP Panchayat act is in square brackets.

Tripura	The Tripura Panchayat Act, 1993	07.11.1993	1998	7 In 1994, 1998, 2003, 2009, 2010, and in 2018.
Uttarakhand[64]	The Uttarakhand Panchayati Raj Act, 2016.	07.04.2016 [16.06.2002]	2016	4 In 2002, 2006, 2016, and in 2019.
Uttar Pradesh[65]	The Uttar Pradesh Panchayat Raj Act, 1947.	22.04.1994	1995	11 In 1995, 1998, 1999, 2000, 2001, 2004, 2002[2], 2005, and in 2007[2].
West Bengal[66]	The West Bengal Panchayat Act 1973.	22.04.1994	1995	20 In 1995, 1997[2], 2001, 2003[2], 2004, 2006[3], 2007, 2008, 2010, 2012[2], 2014[2], 2015, and in 2017[2].

Table 6 Amendments of Panchayati Raj Institutions' acts in states

Sources: Own compilation based on bare acts retrieved from the PRS Legislative Research (2023) and Indiacode (2023) databases. Note: The number in square brackets indicates the number of times the said act was amended in the corresponding year.

Apart from this, table 6 also shows that there is a large variance in the way the state-level acts are amended. Some states have amended their PRI act over 20 times, for e.g., Karnataka (22x), Maharashtra (34x), and Tamil Nadu (88x); but meanwhile, other states have done so less than 10 times in the same period, for e.g., Assam (10), Manipur (7) and Tripura (7). Therefore, while most states started off with relatively similar PRI acts, their subsequent amendments have introduced significant variation in the content of the acts over time.

While this may be so, it is worth looking specifically at the design and contents of the CAAs as well as the state-level acts to understand how it leads to deficiencies in functions, functionaries, and finances of local governments.

4.4.1 Functions of local governments

Firstly, it is worth noting that the central government phrased the CAAs in a manner that gave a lot of discretionary legislative powers to state governments. The phrase *"the Legislature of a State **may**, by law"* is repeated a total of twenty-seven times in the 73rd and 74th CAAs. This phrase is used with respect to '*providing'* (243A, 243C [5a], 243D [4], etc.) ULBs and PRIs

[64] The Uttar Pradesh Panchayat Raj Act and the Uttar Pradesh Kshetra Panchayat and Zila Act had a "Uttaranchal Adaptation and Modification Order" to make it applicable to the state of Uttarakhand in 2001. The year of enactment of the earlier Uttaranchal Panchayat act is in square brackets.
[65] The 1947 act was amended to conform with the 73rd CAA by Uttar Pradesh Act No. 9 of 1994.
[66] The 1973 act was amended to conform with the 73rd CAA by West Bengal Act XVIII of 1994.

with the requisite representation, term limits, finances, etc., or for *'making provisions*' (243B, 243C, 243G, 243J, etc.) for the ULB and PRIs' with respect to their constitution, their elections, their powers, and responsibilities, etc. The following is the list of articles where such phrasing is used:

a) Composition of Panchayats and Municipalities (243C, 243S)
b) Disqualification of Panchayat and Municipality Members (243F, 243V)
c) Powers and Responsibilities of Panchayats and Municipalities (243G, 243W)
d) Powers to impose taxes […] of, the Panchayats and Municipalities (243H, 243X)
e) Constitution of finance commission to review financial position (243I, 243Y)
f) Audit of accounts of Panchayats and Municipalities (243J, 243Z)
g) Elections to the Panchayats and Municipalities (243K, 243ZA)

While Article 243C(3) mandates states to constitute three tiered panchayats, it does not specify how powers (or jurisdictions) are to be divided up amongst the three local tiers. A preliminary look at the manner in which powers are devolved to these bodies shows us that many functional powers are concurrently held by all three levels of panchayats in most Indian states. This has led to jurisdictional disputes amongst the three tiers of rural local governments becoming commonplace.[67] This can be further observed in table 7 which shows how state governments have devolved functional powers pertaining to revenue appropriation (under 30 revenue heads) to PRIs. The 30 revenue heads are broadly based on schedule XI of the constitution (see appendix D) and are compiled by Alok (2021).

[67] This issue has become so commonplace that Kerala has made provisions in its PRI Act to set up ombudspersons for local governance to adjudicate disputes arising between local governments, the same was also discussed by Karnataka. See Sivanandan (2014).

State	Functional Powers			
	Exclusive to Village PRIs	Joint with Block and District PRIs	Exclusive to non-Village PRIs	Undelegated
Madhya Pradesh	13	0	2	15
Maharashtra	11	0	0	19
Andhra Pradesh	10	4	1	15
Odisha	10	0	0	20
Goa	9	0	1	20
Karnataka	9	0	0	21
Punjab	8	3	1	18
Uttar Pradesh	8	2	0	20
Himachal Pradesh	7	0	0	23
Tamil Nadu	7	0	2	21
Assam	6	4	2	18
Haryana	6	0	0	24
Kerala	6	1	0	23
West Bengal	5	5	2	18
Chhattisgarh	4	8	5	13
Bihar	3	4	4	19
Jharkhand	3	4	2	21
Rajasthan	3	1	3	23
Sikkim	2	7	0	21
Gujarat	0	6	0	24
Uttarakhand	0	0	0	30

Table 7 Revenue appropriation powers of PRIs per schedule XI of the constitution

Source: Own compilation based on Alok (2021). Notes: See appendix D for the source data.

From table 7, one can observe that on average, more than half of the revenue heads that PRIs can technically have powers on are not delegated to them by the state governments. While some states like Madhya Pradesh, Maharashtra, and Andhra Pradesh have devolved powers under many revenue heads, others like Gujarat and Uttarakhand have devolved no exclusive revenue powers to Village-level PRIs. What can also be observed is that in many cases, revenue appropriation powers are devolved such that they are either concurrent to higher-tiered PRIs or are exclusively the domain of higher-tiered PRIs. This can be observed in states like Chhattisgarh, Sikkim, and Gujarat that almost exclusively devolve revenue powers on concurrent bases (i.e., multiple tiers of PRIs have the power to appropriate revenues for the said purposes) or exclusively to block- or district-level PRIs. Such devolution of powers generally leads to conflict between the different PRI tiers and ultimately leads to no meaningful revenue generation.

Revenue Heads	Exclusive Gram Panchayat	Joint with Block and District Panchayats	Exclusively non-Gram Panchayats	Undelegated
House/property tax	15	4	0	2
Duty on transfer of property	5	1	1	14
Tax on agricultural land for specific purposes	3	0	0	18
Cess on land revenue or surcharge	4	1	2	14
Tax on professions, trades, calling	10	2	1	8
Entertainment tax	7	0	3	11
Pilgrim tax or fees	4	2	0	15
Tax on advertisements	1	1	0	19
Tolls	2	2	2	15
Development tax	0	0	2	19
Tax for clearing private latrines and drainage	3	1	0	18
Vehicle tax	6	2	0	13
Fee on vehicles (other than motor vehicles)	2	3	1	15
Animal tax	3	0	1	17
Conservancy rate	6	0	0	15
Lighting rate	7	5	0	9
Water rate	6	8	1	6
Drainage rate	5	1	0	15
Tax for community civic services or works	1	1	0	19
Fee (Sanitary arrangements at pilgrim fairs)	0	3	0	18
Fees for a license for hat or market	8	2	4	7
Fees for dangerous and offensive trades	0	0	1	20
Fees for a license for fair or mela	0	0	2	19
Fee for bullock-cart stand	2	2	0	17
Fee for registration of animals sold in fairs	10	1	0	10
Fee for grazing cattle	5	1	0	15
Taxes for income from fisheries	3	0	0	18
Fee for the use of sarais, dharamsalas, slaughterhouses, and encamping	4	1	1	15
Service fee	4	4	0	13
Ferry rentals	3	1	3	14

Table 8 Revenue appropriation powers of PRIs per schedule XI of the constitution

Source: Own compilation based on Alok (2021)

Table 8 shows the above problem from a different viewpoint, it shows how different revenue appropriation powers are devolved by state governments to PRIs. It can be observed that many have not devolved revenue powers for many item heads. These include revenue powers for providing vital public goods such as drainage (maintenance of culverts and sewers), conservancy (removal and disposal of garbage, cleaning of public spaces, etc.), animal taxes, and fees from vehicles entering villages (for the maintenance of roads, etc.). Meanwhile, powers

for fairly miniscule sources of revenue such as profession taxes and fees for the registration of animals sold in fairs are the revenue heads that are mostly devolved by state governments. This is also reflected in a Centre for Policy Research (2014) study which surveys 12 Indian state governments and shows that almost all of them have a poor devolution track record since they have not devolved powers in more than half the subjects mentioned in schedule XI, while only a handful of states have actually devolved powers in all the 29 subjects in the schedule (Centre for Policy Research, 2014). Even if the state's PRI ministries pass orders (GOs)[68] directing other ministries to devolve powers to local governments on matters in schedules XI or XII, the concerned ministries or departments can then hold up the process of transferring powers by not conducting activity mapping exercises or doing them in a drawn out, tedious manner (Oomen, 2017).

4.4.2 Functionaries in local governments

Besides not devolving functional powers properly or drawing up institutional boundaries in a sensible manner, many state governments also regularly hold back the devolution of functionaries to local governments. Articles 243K and 243ZA state that the state government needs to set up a "state commission" which ensures that elections are regularly held in panchayats and municipalities. In reality, both PRI and ULB elections in most Indian states are often delayed or postponed because of administrative and bureaucratic hurdles imposed by incumbent state governments that prevent the election commissions from carrying out their duties.[69]

State	1st Elections	2nd Elections	3rd Elections	4th Elections	5th Elections	6th Elections
Andhra Pradesh	Mar 1995*	Jul 2001 (+16 Months)	July 2006	July 2013	Apr 2014	Feb 2021 (+82 Months)
Arunachal Pradesh	Mar 2003 (+106 Months)	Apr 2008	May 2013	Dec 2020 (+91 Months)		
Assam	Dec 2002 (+103 Months)	Jan 2008	Jan 2013	Dec 2018		
Bihar	May 2001 (+84 Months)	May 2006	May 2011	May 2016	Aug 2021	
Chhattisgarh	Jan 2005 (+42 Months)	Dec 2010	Jan 2015	Jan 2020		

[68] GOs or Government Orders are inter-ministerial memos that request devolution of powers to local bodies within states. These circulars are often issued by the state's PRI or ULB ministries. PRI ministries request departments within other state government ministries to relinquish their powers (on local government matters) to the local governments.

[69] For more on how administrative delays are extended by state governments, see the Gujarat Local Authorities (Temporary Postponement of Elections) Act of 1994, and the cases of Devshankeracharya and Ors. v. State of Gujarat and Ors. [1994 GLH (2) 573], and Gujarat Pradesh Panchayat Parishad and Ors. v. State Election Commission and Ors. [2005 GLH (1) 248].

Goa	Jan 1997 (+33 Months)	Jan 2002	Jun 2007 (+5 Months)	May 2012	Jul 2017 (+2 Months)	Aug 2022 (+1 Month)
Gujarat	May 1995 (+13 Months)	Sep 2001 (+17 Months)	Oct 2005	Oct 2010	Oct 2015	Oct 2021 (+12 Months)
Haryana	Jan 1995 (+9 Months)	Apr 2000	Apr 2005	May 2010	Jan 2016 (+8 Months)	Sept 2022 (+20 Months)
Himachal Pradesh	Dec 1995 (+18 Months)	Dec 2000	Dec 2005	Dec 2010	Dec 2015	Jan 2021 (13 Months)
Karnataka	Mar 1995*	Mar 2000	Nov 2005 (+8 Months)	May 2010	May 2015	Dec 2020
Kerala	Sep 1995 (+5 Months)	Sep 2000	Sep 2005	Oct 2010	Nov 2015	Dec 2020
Madhya Pradesh	Jan 2000 (+68 Months)	Jan 2005	Jan 2010	Feb 2015	Jul 2022 (+28 Months)	
Manipur	Jan 1997 (+33 Months)	Sep 2002 (+8 Months)	Sep 2007	Sep 2012	Sep 2017	Sep 2022
Odisha	Jan 1997 (+33 Months)	Feb 2002	Feb 2007	Feb 2012	Feb 2017	Feb 2022
Punjab	Jun 1998 (+50 Months)	Jun 2003	Jun 2008	May 2013	Dec 2018	
Rajasthan	Jan 2000 (+69 Months)	Jan 2005	Jan 2010	Feb 2015	Dec 2020 (+10 Months)	
Sikkim	Feb 1998*	Oct 2002	Oct 2007	Oct 2012	Nov 2017	Nov 2022
Tamil Nadu	Oct 1996 (+30 Months)	Oct 2001	Oct 2006	Oct 2011	Dec 2019	
Telangana	Jan 2019					
Tripura	Jul 1999 (+68 Months)	Jul 2004	Jul 2009	July 2014	Jul 2019	
Uttar Pradesh	May 1995 (+13 Months)	Jun 2000	Aug 2005 (+3 Months)	Sep 2010	Dec 2015	Apr 2021 (+4 Months)
Uttarakhand	Apr 2003 (+8 Months)	Sep 2008 (+5 Months)	Jun 2014 (+9 Months)	Oct 2019 (+6 Months)		
West Bengal	May 1998*	May 2003	May 2008	Jun 2013	May 2018	

Table 9 Timing of village-level PRI elections post the 73rd CAA

Source: Source: Own compilation based on news and state election commission websites.

Notes: Andhra Pradesh, Karnataka, Sikkim, and West Bengal had pre-existing village-level PRIs before the 73rd CAA was enacted. Data for Maharashtra is omitted since it has asynchronous local government elections which are conducted as and when the term of the local government expires. The first PRI elections after the CAAs were conducted in March 1995 (with an 11-month delay).

This has happened for e.g., in Bihar, where the state government managed to postpone elections to PRIs for around seven years. It was only in 2001 after many legal battles,[70] that elections were held (Kumar 2001). Even recently, in the case of Andhra Pradesh, the state legislature changed the way in which the chief election commissioner of the state was appointed such that it would suit their electoral needs. The high court of Andhra Pradesh termed this act by the state government as "fraudulent".[71] Table 9 above shows the timing of PRI elections in 24 Indian states post the 73rd amendment. What can generally be observed is that the 1st PRI elections in most states were held after a long delay which ranges between 8 months (Uttarakhand) and 106 months (Arunachal Pradesh). Most of these delays are attributable either to the fact that the state election commissions (SSEC) were not constituted (or enacted) alongside the enactment of the core PRI laws, or to the fact that the SEC was not able to carry out elections due to administrative hurdles.

Issues with respect to elected officials lead us to the next element that interferes with the governance structure of PRIs and ULBs – the presence of unelected members of the state governments. Unelected officials are usually appointed due to two reasons, because a) ULB and PRI acts mandate the presence of state government officials as ex officio members, or because b) they are appointed as acting local governments by the state government when elections have not taken place, but the term of the previous local government has expired.[72] While these provisions are rational and are meant to act as safeguards, unelected officials often have unambiguous powers and therefore usually interfere with the functioning of local governments. Often, courts have to step in and resolve disputes relating to executive overreach in local governments. In this vein, responding to a batch of writ petitions (this included 32 separate cases filed before the same court by different PRIs), the Madras high court clearly stated in a judgement that "the elected body was completely side-lined" by the executive appointed by the state government and that the executives appointed by the state government "had no regard" for the functioning of the PRIs.[73]

Another type of unelected functionaries that affect local self-government are parastatals. Parastatals are unelected, autonomous, or semi-autonomous bodies (or agencies) that are fully or

[70] See Prof. Rabindra Nath Singh vs State of Bihar and Ors. [2000 (2) BLJR 1352] for a slew of writ petitions that were filed at the Patna high court for delayed elections.
[71] See "Andhra Panchayat Raj Ordinance is actuated by fraud: high court" in The Hindu dated 30 May 2020
[72] These are usually district collectors, District/Block/Village development officers, revenue/executive officers, etc. These officials generally belong to the revenue or rural/urban development ministries of state governments.
[73] For more details, see the case of Mamimala v. Director, Rural Development & Panchayat Raj Department and Ors. [2020 SCC Online MAD 2915]

partially managed by the union or state government. These bodies are generally formed by an act of the state legislature or by the parliament to perform the task of delivering specific services or for implementing specific schemes of the state or union governments. These schemes or services are generally a part of central schemes or centrally sponsored schemes connected to the state and union governments. Over the past few years, several prominent parastatals have emerged, usually in the form of "District Rural Development Agencies" that take on the role of overseeing the implementation of different poverty alleviation schemes in rural areas, and "Urban Development Authorities" that take on the role of providing "better infrastructural facilities" in urban areas.[74] If the roles of these parastatals are read along with the schedules XI or XII, then it becomes very clear that they are taking on the roles of the local government and are essentially offshoots of centralized policy agencies in the grassroots that exist alongside local governments. Parastatal authorities with such power are fundamentally antithetical to local 'self' governance.

Since the many functionaries involved in local government do not have a harmonized communication framework, there are often coordination failures in public goods delivery. For e.g., if one local authority installs streetlights and another local body supplies them with electricity, in the absence of an official communication channel, it often is the case that streetlights are installed but are never supplied with electricity. Multi-departmental projects (such as the laying of roads) are often side-stepped since one local government authority assumes that it is the duty of the other to initiate these tasks. Finally, with parastatals also in the mix, it is common for state government officials to take action without informing the locally elected governments.[75]

4.4.3 Finances of local governments

Given the proximity of the government to their voter base, ULB and PRIs generally tend to have the most knowledge about local public good preferences, they can thus construct optimal taxation mechanisms to fund these public goods. But what we observe in the previous sections is that higher-tiered governments do not devolve 'enough' fiscal powers to the local

[74] See http://haryanarural.gov.in/en/role-functions-of-the-district-rural-development-agency for the roles and functions of district rural development agencies in states and the Andhra Pradesh Capital Region Development Authority Act, 2014 for the powers and functions of officials in urban development authorities.

[75] This can be seen in Uppiliyapuram Panchayat Union v. District Collector and Ors. [2020 SCC Online Mad 20012] where the district collector failed to inform the locally elected government about roadworks. It is also seen in the case of Gujarat Pradesh Panchayat Parishad v. State of Gujarat [2007 7 SCC 718] where a state government official ignored orders from the District Panchayat in matters concerning administration, particularly relating to appointment, transfer, promotion, posting, etc., of Panchayat employees.

governments such that they have the financial autonomy to carry out their tasks. Usually, Indian local governments either rely heavily on budgetary transfers by higher-tiered governments or remain ineffectual when these transfers are absent. On average, union and state governments spend around 15–20 times more per capita than local governments, and the central government spends revenue more per capita than all the state governments combined (Kapur, 2020).

This shows that devolution of finances has not happened uniformly and that even two decades after large-scale local government reforms, most of the fiscal authority still lies with the state and union governments. There is a wide level of disparity in the way state governments devolve finances as well. Figure 23 shows that on average, Indian state governments tend to devolve between 2-4 percent of their total revenues to local governments. Some state governments of states that have prioritized devolution to local governments (such as Tamil Nadu) tend to devolve 2-3 times more than the average state government. Besides this, it is also worth noting that these are miniscule annual per capita amounts, on average Indian state governments devolve approximately 955 rupees per capita every year to local governments, and states such as Tamil Nadu devolve more than 2-3 times the national average.

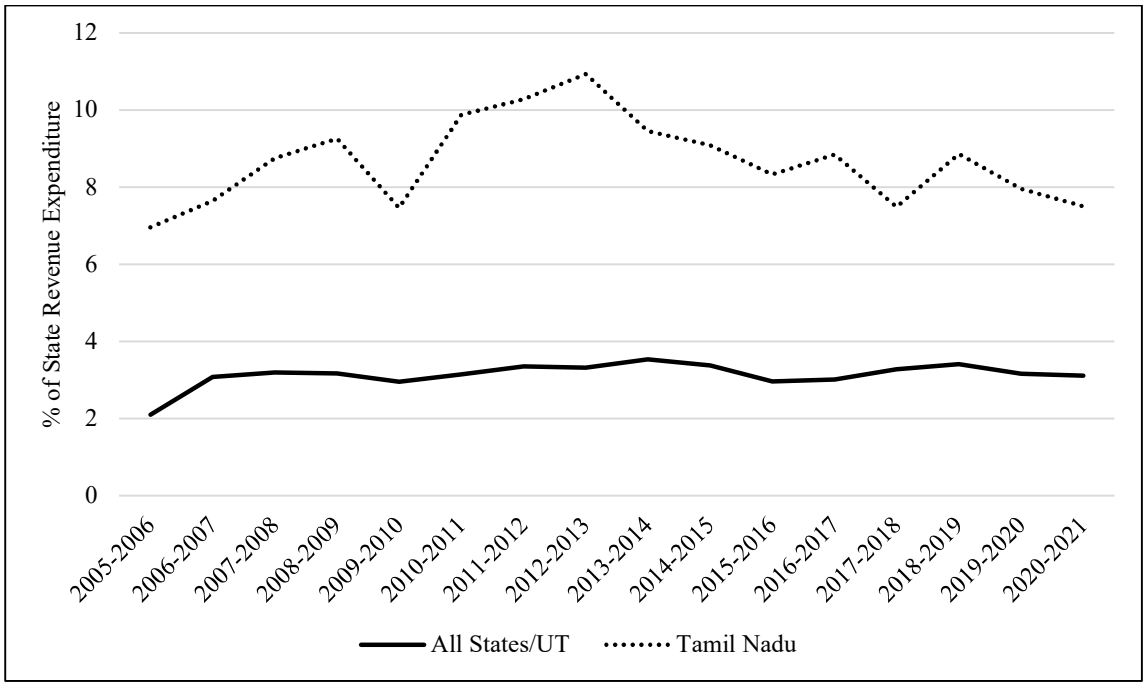


Figure 23 Compensations and assignments to local government institutions (as a percentage of total state revenue expenditure)

Source: E-STATES Database, Reserve Bank of India (2023).

Apart from this, the previously mentioned problem of ill- or undefined functions spills over onto the finances of local governments. Since there are many domains where all three tiers of local governments have authority over the same revenue head, the collection of these revenues becomes difficult since there is often a lack of coordination and clarity regarding the roles and responsibilities of each tier. This leads to inefficiencies, overlapping jurisdictions, and disputes over revenue collection. This is another way in which many revenue streams of local governments have dried up over the course of time.

Even if the functional design issues that exist in PRIs and ULBs are fixed, they will still be perpetually cash-strapped with little means to carry out the tasks that they are constitutionally assigned. This is because most of the fees, cesses, and taxes collected by local governments are not buoyant. All local governments in India survive on compensations and transfers made by union and state governments. Most, if not all of these compensations and transfers are made on conditional bases. Conditional transfers essentially mean that a sum of money devolved by a higher government can only be used for a specific purpose (or a set of purposes) and nothing else. These 'conditional' grants have been recognized to be sub-optimal and inefficient by many economists (Islam, 1998; Rao & Rao, 2008) because they tend to constrain the spending behavior of local governments and as a result, reduce their autonomy. Oftentimes, these funds end up being unused and returned to the higher tier of government. Sometimes, if conditional grants are not used, they can also become potential targets for embezzlement by local officials (Pal, 2005). This is made even more redundant with the presence of parastatals who are generally endowed with better finances and authority than local governments; therefore, they often end up carrying out public good delivery tasks in place of the elected local governments.

Finally, even though Article 243I provides a constitutional safeguard to control unchecked fiscal imbalances between state and local governments by establishing SFCs, the reality is that SFCs have little to no role in the way state government finances work. SFCs in many states are not set up on time and there is often no connection between two consecutive SFCs since there is no permanent SFC secretariat in states. While SFCs submit fairly well-thought-out recommendations to the governments that appoint them, these recommendations never actually translate into action taken by the state governments (Gupta & Chakraborty, 2019).

4.5 Discussion

Considering the issues discussed in this paper, it is evident that the CAAs have not succeeded in accomplishing their intended goals of enhancing grassroots governance. Therefore, it is crucial to comprehend the reasons behind this failure and assess whether the stated objectives of the CAAs align with the intentions of the lawmakers responsible for enacting the legislation. When the CAAs were first being debated as the 64th constitutional amendment bill in 1989 (which subsequently failed to pass parliamentary muster), the Indian National Congress (INC) was entering a phase of political turmoil. Figures 24 and 25 succinctly depict this phenomenon. Figure 24 shows that since the late 1980s until today, the ruling party in the Lok Sabha has consistently had lesser legislative strength compared to the period between 1950 and 1980 whereas the strength of ruling parties of state governments has been relatively stable. Similarly, we can also observe in Figure 25 that state and parliamentary elections in India since the late 1980s have been won with smaller and smaller margins. There is also a distinct difference between the pre-1990s and post-1990s in the number of candidates contesting elections, the latter period seeing many more candidates.

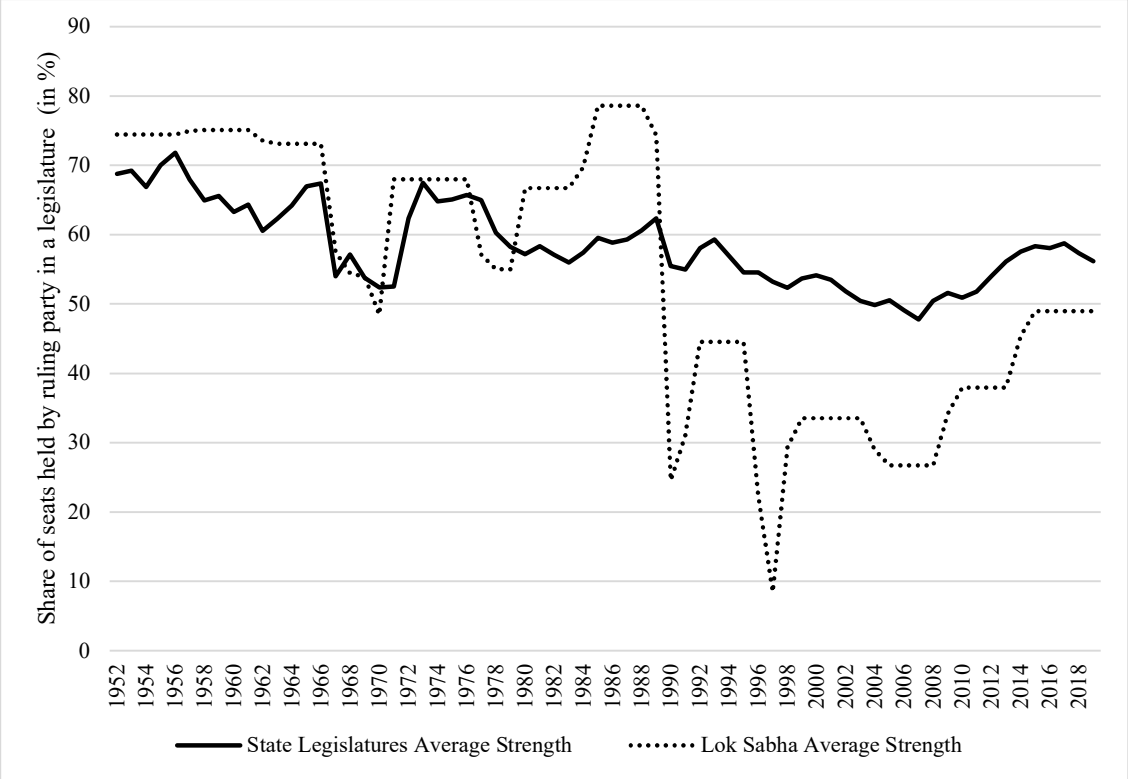


Figure 24 Strength of the ruling party in state legislatures and in the Lok Sabha between 1952 and 2018 (yearly averages from monthly data)
Source: Own compilation.

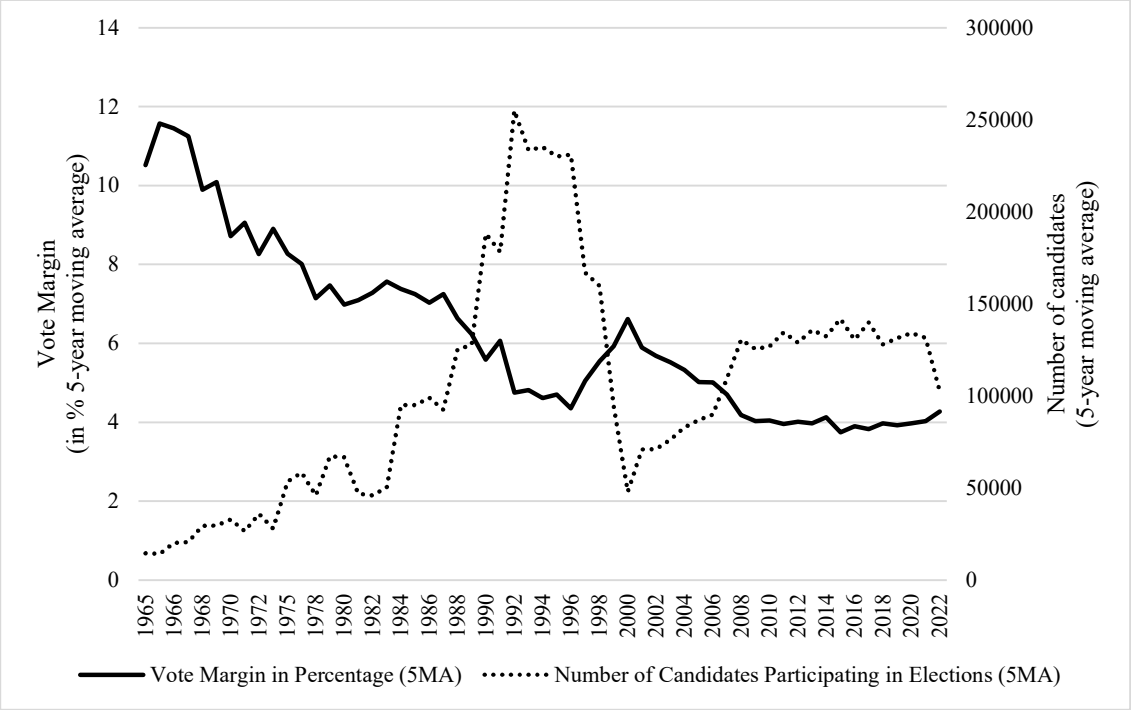


Figure 25 Vote margins and number of candidates participating in state and Lok Sabha elections between 1965 and 2018 (5-year moving averages)[76]
Source: Trivedi Centre for Political Data (2023)

On a more general note, the Rajiv Gandhi ministry of 1984-1989 was marked by political volatility, corruption scandals, and opposition from various quarters on several policy issues, including religious tensions, economic reforms, and the implementation of the Mandal Commission report on reservations; it was succeeded by even more fragile Chandra Shekhar, VP Singh, and Narasimha Rao ministries, each facing a unique set of challenges and navigating through significant political and economic developments, and the rise of regional parties in national politics. If the CAAs are looked at from this political perspective, it suggests that they could

[76] Trivedi Centre for Political Data (2023) defines vote margin as the "Difference in votes between a candidate and the next ordered candidate (ordered by position)" participating in an election.

have been influenced not just by the general centripetal features that shape Indian federalism, but also by the changing political landscape and dynamics in India during the late 1980s and the early 1990s.

Firstly, when examining the CAAs, it is possible to interpret them as a calculated maneuver by self-interested central governments. By utilizing the CAAs as a tool for political consolidation, the central government sought to strengthen its grip on power and regain public favor. Amidst their quest to preserve their position of supremacy, the central government may have devised the amendments as a means to amplify grassroots support. Their objective could have been to establish their own party's representatives or allies in local governments through the forthcoming elections. Secondly, the amendments can also be seen as an outcome of a power bargain struck between state and central governments. In exchange for greater political devolution to state governments, the central government would gain political support (and therefore stability) from different regional parties and factions of the state political machinery. This again allows the central government to maintain its overall political dominance.

Finally, since the CAAs allowed state governments to have significant control and discretion in shaping the implementation of state-level laws, it could be expected that the state government, also in a self-interest maximizing move, would utilize this discretion to advance their own political agenda and consolidate their power within the state. As seen from the previous section, this involves keeping all the powers with respect to functions, functionaries, and finances with themselves, while passing on the responsibilities of providing key public goods to the newly created local governments. When considering these factors collectively, it becomes apparent that the CAAs, along with the state-level PRI and ULB laws serve to maintain the existing political status quo of both the state and central governments.

4.6 Conclusion

India's pursuit of both 'cooperative' and 'competitive' forms of federalism is only a claim on paper, in reality, it pursues a centripetal form of federalism that is imposed upon states who then subordinate local governments. This paper has explored the ineffective nature of Indian federalism by examining the devolution of political and financial powers to local governments. The findings reveal that the constitutional amendment acts mandated the establishment of a

local government tier, but without providing the necessary autonomy and resources for effective governance.

The lack of genuine decentralization in Indian federalism is evident in the limited autonomy and inadequate resources granted to local governments. Funds devolved to local governments are often conditional and may not align with the local needs, leading to suboptimal delivery of public goods. As a result, local governments become mere implementation agents of higher-tiered governments, lacking substantive powers of taxation and governance. This top-down governance approach hampers the efficient targeting of public goods and perpetuates the existing political status quo.

The failure of the CAAs to achieve their intended goals of enhancing grassroots governance can be attributed to various factors. Firstly, the political landscape and dynamics of the late 1980s and early 1990s likely influenced the design and implementation of the CAAs. These amendments may have been a calculated maneuver by self-interested central governments to consolidate their power and gain public favor. Moreover, a power bargain between state and central governments could have led to the devolution of political powers while maintaining overall political dominance at both levels. Additionally, the discretion provided to state governments in shaping the implementation of state-level laws allowed them to advance their own political agenda and consolidate power within the state.

To address these issues, reforms are necessary to cultivate an equitable and sustainable environment of political and fiscal devolution. It is crucial to revisit the design of the state-level acts, ensuring that local governments are granted the necessary autonomy, resources, and decision-making powers to effectively fulfill their responsibilities through mapping exercises.

5. Political strength and subnational inflation in India

Abstract

The effects of political behavior on inflation have been well studied using cross-country panels as well as national-level data. However, the subnational effects of political behavior on inflation rates have not been sufficiently explored. This paper attempts to shed light on the understudied phenomenon by considering the case of India. To do so, the study utilizes a novel monthly panel dataset of political standings and inflation for 20 Indian states between 1991 and 2019. Results suggest that an increased central government strength induces inflationary pressure in states. Meanwhile, an increase in state government strength is positively associated with inflation only when it is a coalition government. Finally, the paper also observes that stronger central governments lead to significantly more inflation in states than state governments.

5.1 Introduction

It is widely accepted that price stability is a vital component of sustainable economic growth. Stable prices promote investments that lead to growth and development; whereas volatile prices fuel pessimistic economic outlooks that ultimately wreak havoc upon the long-term developmental prospects of a country. To maintain price stability, central banks carry out regular monetary policy operations. However, the transmission of these monetary policy actions into the economy is largely dependent on the institutional framework of the country. Building a robust institutional framework where policy actions directly translate into policy outcomes requires strong governments with long-term initiatives that may sometimes be antithetical to a government's survival and short-term goals. Weak governments may skimp on institution building and rather focus on their survival leading to poor macroeconomic controls and volatile price levels. Given this context, this paper asks if strong, stable governments tend to have less volatile price levels.

This paper adds to the pre-existing work on the political economy of the institutions that guide inflation, and the debate surrounding governmental behavior and inflation. While previous studies rightly hypothesize the existence of political institutions as push and pull factors of inflation (Bernholz, 2015); and also observe that unstable political regimes experience higher levels of inflation (Aisen & Veiga, 2006, 2008), they fail to take note of the existence of political heterogeneity and temporal sensitivity of inflation within a country. Even though numerous studies have shown that price levels tend to be vastly different in different parts of a country (Ha et al., 2019), and that regional inflation differentials often exhibit high temporal variation (Nagayasu,

2011), there are no studies that contribute to the regional dynamics of governmental strength and inflation. This study fills this gap in the literature by analyzing a large monthly panel of Indian regional (state-wise) legislative positions and Consumer Price Indices (CPI). The study finds that an increase in the strength of a central government is associated with a positive change in state-level inflation whereas state governments tend to have no meaningful effect on the same. These effects occur with a lag of 3-12 months.

The rest of this article is organized in the following manner: the subsequent section draws upon existing literature on the association between governmental strength and fluctuations in overall price levels, also emphasizing the significance of examining this relationship specifically in the context of India. Section 5.3 formulates the hypotheses to be assessed and describes the dataset employed for this study. In section 5.4, the econometric findings are presented, and lastly, section 5.5 concludes.

5.2 Political behavior and inflation

Self-interested politicians compete against other political groups to stay in power and the simplest method by which incumbent governments can enhance prospects of staying in office is by using economic policy to their advantage and appeasing citizens (Wagner, 1977). Governments can design and implement fiscal policy measures that increase either the private welfare of citizens, or the supply of public goods; for e.g., they can announce debt waivers, give direct cash subsidies, etc., and contribute to private welfare enhancement, or they can fund mass employment guarantee programs, hospitals, etc. and contribute to general social welfare. Both these measures mean that governments have an inherent “inflationary bias” due to the many opportunity cost trade-offs that they face (Bernholz, 2015, p. 12). Brender and Drazen (2008) show how such policies, especially in developing countries, are effective in enhancing re-election prospects. But these measures, when not carefully designed and implemented, generally lead to fiscal profligacy, and have negative consequences for the general economic well-being of a country.

Dornbusch and Edwards (1991) using the examples of Chile and Peru in the 1970s and the late 1980s respectively, show how fiscal measures devised by governments with the singular aim of appeasing citizens with high economic growth and income redistribution in the short run rather than improving their long-run economic welfare have often resulted in economic

collapse. The collapse is due to increased governmental borrowings, blown-up budget deficits, as well as a fall in the local currency's value due to poor external account controls. Dornbusch and Edwards term this phenomenon "macroeconomic populism" and contend that it is only after a new political regime takes over that a successful stabilization program is pursued.

Edwards and Tabellini (1991) further expand on this idea, suggesting that when a government operates with "myopia", inflation can be seen as an intentional result of politicians' strategic actions. Edwards and Tabellini (1991) also propose the theory that "weak governments" contribute to inflation as they face challenges in maintaining their power while competing against other political factions. In this sense, the level of macroeconomic populism that a government engages in depends upon the amount of *de facto* authority that a government holds over the political class of the state. Meanwhile, it could also be the case that if a government does not wield enough authority over institutions that implement economic policies or enforce contractual rules, they then lose their credibility and become 'weak' governments. For example, if a government-appointed market regulator is not able to enforce contracts efficiently, it will lead to distorted clearing prices and eventually high inflation.[77]

Both these forms of governmental behavior leading to an unstable political environment were theorized and empirically tested by Edwards and Tabellini (1991);[78] through a panel of 76 countries between 1971-1982, they find that countries with an unstable political environment tend to have higher levels of inflation. Another paper by Cukierman et al. (1992) develops a similar empirical framework to show fundamentally unstable regimes have inefficient tax structures and thus, higher levels of seigniorage. Aisen and Veiga (2006) take up the same family of arguments and hypothesize that unstable governments have weak institutions and inefficient tax collection mechanisms and thus experience higher inflation taxes. They develop better indicators and incorporate a larger dataset to study the same phenomenon. Using a system GMM model on a panel of 100 countries between the years 1960-99, they show that a higher degree of political instability, measured by governmental turnover is associated with higher inflation. Similar studies with a narrower scope have been conducted that find political instability as a cause of inflation volatility. Khan and Saqib (2011) use a GMM model and find a positive association between political instability and inflation in Pakistan between 1957-2007.

[77] Carmignani (2003, p. 21) examines the theoretical predictions concerning the role of political instability and uncertainty affecting macroeconomic outcomes.

[78] In an earlier paper, Paldam (1987) also argues along similar lines.

Barugahara (2015), using a GARCH model, finds a statistically significant effect of political instability on inflation volatility in a panel of 49 African nations between 1985-2009.

While there are a considerable number of studies examining the role of political instability and inflation, there are some aspects that the literature has yet to examine closely. Firstly, most studies measure political instability using various indicators such as tracking the number of cabinet changes in a year, the number of times in a year a new head of government is named, the collapse of political authority, political violence events, etc. However, they do not consider the strength (or conversely the weakness) of a government measured by the proportion of seats that they hold in a legislature (Taylor & Herman, 1971). Secondly, most of the studies on the question of political stability and inflation have concentrated on presenting evidence only at national or cross-country levels even though most countries (esp. federally organized ones) have significant policy variation and political diversity at regional or subnational levels (Karch, 2007). Finally, the literature also fails to take into account the temporal dynamics of both political stability and inflation. Studies conducted generally use annual time series for a single country or yearly-panel datasets for cross-country studies. This fails to account for the sudden changes in price levels or political stability. Again, it is a known fact that inflation persistence has been declining in many major economies over the last few decades (Mishkin, 2007), and that electoral performance in general also shows a lot of temporal variation (Barreiro, 2008).

Given these gaps in the literature, the current study focuses on analyzing the sub-national effects of governmental strength and inflation in Indian states. This study examines the case of Indian states to delve into the research question at hand. Indian states offer an intriguing subject for investigation due to two main factors.

Firstly, it is because of India's federal system, where both the state and central governments possess certain powers and responsibilities in shaping fiscal policies and making legislative decisions. Fiscal authority is divided between the state and central governments, with each having control over specific areas of taxation and expenditure. The central government holds the power to impose and collect taxes at the national level, such as income tax and customs duties. On the other hand, state governments have the authority to levy and collect taxes on goods and services within their respective jurisdictions, known as state goods and services tax (SGST). This division of fiscal authority creates a complex interplay between the two levels of government, influencing resource allocation and policy implementation.

Secondly, it is because of the inherent volatility of government formation in Indian states. Since the post-emergency era of the mid-1980s, Indian politics saw a rise in the popularity of regional parties and a decline in the popularity of older national parties, mainly, the Indian National Congress. Between 1985 and 2005, the effective number of parties in India tripled (Kumar, 2010), and many of the parties that fueled this growth in political competition were smaller regional parties that usually functioned within the confines of a state. Regional parties also happened to form state governments, generally via large coalitions which either consisted of other regional parties, or sometimes in conjunction with national parties. Governments formed by these coalitions and regional parties were generally very weak and fragmented. For example, it is estimated that between 1967-72, around 50 percent of all elected legislators in the country defected (Kumar, 2003); similarly, the state of Karnataka has only had 3 chief ministers (CM) who have survived the full term in office.

Given the above consideration, this study predicts that states with stronger governments, characterized by stability, effective policy implementation, and the ability to navigate political complexities, will exhibit lower inflation rates. In contrast, states with weaker governments, facing challenges in governance and policy implementation, may experience higher levels of inflation. Therefore, the first hypothesis is formulated as follows:

> H1: *There is a negative relationship between the share of seats held by the ruling party in the state legislature and the state-level inflation rate.*

Next, given India's federal structure, central governments are endowed with much greater financial resources than state governments. A politically opportunistic central government can utilize this fiscal might and implement expansionary policies that prioritize immediate political advantages over long-term economic stability. This, while strengthening the central government's influence in state governments can potentially contribute to inflation at the state level. Thus, the second hypothesis is formulated as follows:

> H2: *There is a positive relationship between the share of seats held by the ruling party in the Lok Sabha and the state-level inflation rate.*

Also, since coalition governments involve multiple parties with varying policy preferences and priorities, these governments can take populist policy decisions that prioritize short-term gains or cater to specific coalition partners' interests, even if they might not be conducive to long-term economic stability. Alternatively, since coalition governments can be formed with narrow

majorities, and can also have frequent shifts in coalition partners, they can create an atmosphere of policy uncertainty. This can adversely impact investor confidence, economic planning, and implementation and lead to increased inflation. Given this, the third hypothesis is as follows:

> H3: *States governed by state-level coalition governments will exhibit higher inflation rates compared to states with single-party governments.*

While this may be so, certain state governments may also exist that are in coalition with the ruling party of the government at the centre. Since these governments have the political backing of a resource-rich central government, it is expected that they will experience lesser inflationary pressure than state governments that are not in coalition with the ruling party of the central government. Given this, it can be hypothesized that:

> H3a: *State governments in a coalition with the ruling party of the central government experience lower inflation rates compared to states that are not.*

Finally, regional parties in India have proliferated because of increased political competition as well as a general fall in the popularity of large national parties in the post-emergency era. These governments were either weak minority governments or often came into power by forming highly fragmented coalitions with many other political parties. The political survival of these governments always depended on appeasing their political allies and the general electorate; therefore, it is expected that they lead to an environment that is more inflationary than a non-regional party. Given this, it can be hypothesized that:

> H4: *States governed by regional parties exhibit higher inflation rates compared to states governed by non-regional parties.*

5.3 Data and method

To test the above hypotheses, the study uses data on consumer price indices and combines it with a novel dataset on legislative positions of state and central governments.

The inflation statistic is a continuous variable that captures the change in the consumer price index of a given Indian state. The price index that is used to compute the inflation statistics is the "State-wise General Index for Agricultural Labourers" (CPI-AL), with 1986-87 as the base year. The data was sourced from the Databank of the Labour Bureau, a specialized office of the union ministry of labour and employment, in charge of constructing price indices (Labor

Bureau, 2023). While there are other Consumer Price Indices computed in India, the choice of using CPI-AL instead of the other series is a pragmatic one, as the alternate indices do not have the same broad coverage as the series used by the study.[79] CPI-AL is broadly accepted as a reliable index for measuring prices since it is used to set some very important benchmarks for employment and social welfare in India; for e.g., to set minimum wages in agriculture occupations, to estimate rural poverty rates, and also to fix minimum support prices for major agricultural crops.[80] The series represents a significant basket of goods, that measures a relatively consistent set of staples using a sampling strategy that takes into account the vast agricultural base of the Indian economy (Verma, 2016).

The independent variables include a set of measures that capture political strength measured by the legislative strength of a government in its respective legislature. Here, legislative share is defined as the percentage of seats a ruling party holds in the legislature. While many definitions of 'ruling party' exist, in this case, a 'ruling party' is defined as the party to which the chief minister of a state or the prime minister of the country belongs. Apart from this, three binary variables indicating the coalition agreements between parties within a state government, coalition with the ruling party of the central governments, as well whether the ruling government is from a regional party are used in the analysis. Sources for the legislative positions as well as the binary variables are listed in table A1. of appendix A (shared appendix for dataset).

The dataset covers monthly data for 20 Indian states for 344 months for the period between March-1991 to October-2019. The unrestricted sample contains 6880 observations. Table 10 summarizes the sample statistics. In the table, "party legislative share" is defined as the percentage of seats held by the party of either the state CM or the national PM. Thus, "CM Party Legislative Share" is the percentage of seats that are held by the party to which the state CM belongs; similarly, "PM Party Lower House Legislative Share" is defined as the percentage of seats held by the party to which the PM belongs, in the parliament's lower house. Next, there are a few binary variables that the study considers. The variable "coalition (within) state assembly" is a binary variable that takes the value 1 if the state CM's party belongs to a coalition. The

[79] Other CPI measures include the Industrial Workers (CPI-IW) series from the Labour Bureau, the CPI for urban non-manual employees (CPI-UNME), and the CPI (General/Rural/Urban) series from the National Statistics Office. While the CPI-IW and CPI-UNME series have long time-series starting from the 60s, the state-wise decomposition of the index is not available; the CPI (General/Rural/Urban) series are relatively newer indicators developed by the NSO that do not have state-wise data dating back to the early 2000s.

[80] Minimum Support Price (MSP) is a price intervention mechanism that was implemented by the Government of India to protect farmers against adverse risks. MSP is defined as the price at which the government purchases certain major staple crops from the farmers, whatever may be the price for the crops.

variable "state-centre coalition" takes the value 1 if the state CM's party is in a coalition with the PM's party.[81] Finally, "CPI-AL YoY Inflation" represents the year-on-year percentage change in the consumer price index (CPI-AL).[82] Table 10 contains summary statistics for the data used; tables E1 and E2 of appendix E contain detailed descriptive statistics that describe the panel characteristics of the data.

Variable	Obs.	Average	Std. Dev	Min	Max
CM party legislative share (ST_LEG) (in %)[83]	6,633	52.35	15.75	0	86.29
PM party legislative share (NAT_LEG) (in %)	6,880	36.23	10.64	8.471	48.99
Coalition (within) state assembly[9]	6,633	0.548	0.497	0	1
State-centre coalition	6,880	0.429	0.494	0	1
Regional party[84]	6,633	0.310	0.462	0	1
CPI-AL YoY inflation (in %)	6,248	6.53	5.703	-18.66	37.32

Table 10 Summary statistics

It is also important to note that there is substantial temporal and spatial variation in all the above parameters. In Figure 26, one can observe the changes in the mean rate of inflation in the panel. In general, monthly inflation in the sample hovers between 5 and 15 percent, except for three significant peaks in the series, these are due to a) the twin deficit crisis in February 1991; b) the Asian financial crisis of 1998, and finally c) the global financial crisis in 2009. While this gives us a rough picture of the inflation series, detailed state-wise graphs are available in figure E1 of appendix E.[85]

[81] Changes of all these variables are mapped on a monthly basis, at the end of each month, and thus if a change happens twice within the span of a month, then the final value of the binary variable is taken into consideration.

[82] As an example: Year-on-year percentage change in CPI-AL (represented as π_{it}) for January 2020 is calculated as $\pi_{it} = 100 * \left(\frac{CPI_{Jan-2020} - CPI_{Jan-2019}}{CPI_{Jan-2020}}\right)$. This value represents the change accumulated over the year.

[83] The number of observations here are lesser than PM legislative share observations because observations were not recorded for the periods when a state's legislature was dissolved.

[84] Regional party is a "state party" as defined by the Election Symbols (Reservation and Allotment) Order, 1968.

[85] Here, one can see the variation that exists between states in the panel, while some states like Maharashtra, Gujarat, and Andhra Pradesh experienced around 40 percent YoY inflation in the beginning of 1991, other states were relatively more stable during the same period.

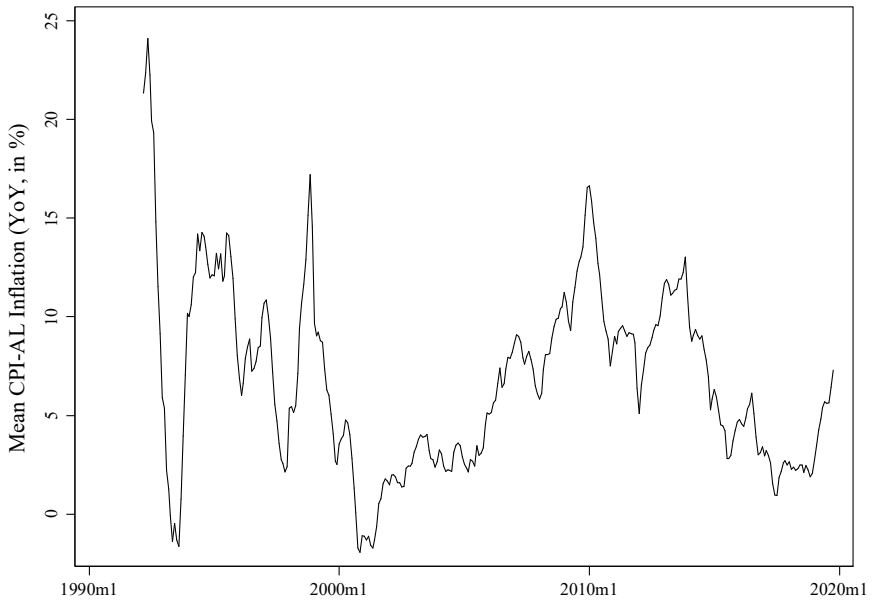


Figure 26 Mean monthly inflation in the panel for 20 Indian states between 1999-2019.

Figure 27 shows the changes in the average legislative standings of state governments and the legislative shares of the principal opposition parties. A detailed panel-data line plot is located in figure E2 of appendix E; here one can observe the variation between states and notice that there is a lot less variation over time, but there are still substantial differences between states.

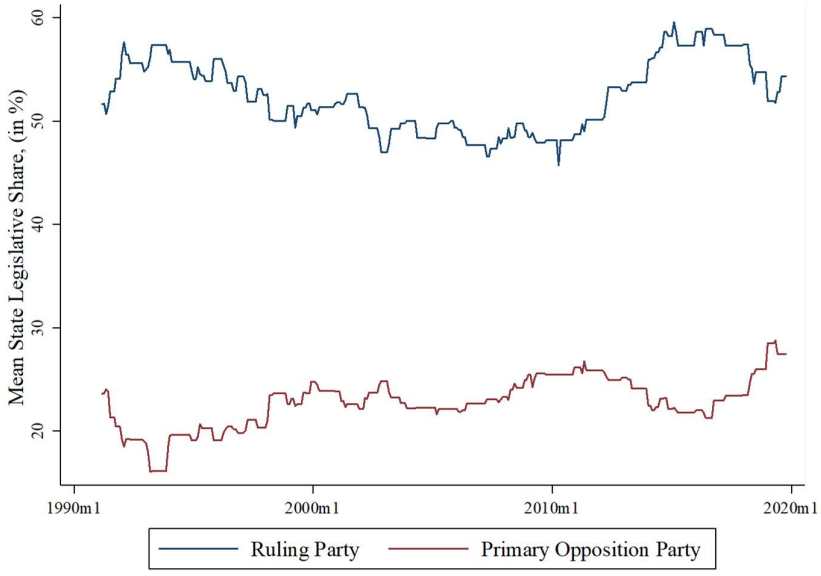


Figure 27 State governmental strength for 20 Indian states between 1999-2019.

Finally, it is worth noting that the number of time periods for which the dataset records observations is relatively large (344 months); in these types of datasets, there can be shocks that can have contemporaneous effects across all cross-sections (in our case, different states), i.e., cross-sectional dependence. For a preliminary check, an overlaid graph of state-wise CPI inflation has been plotted in figure E3 of appendix E. Here, one can observe that the inflation series of most states move within a band and this by itself indicates that there is some cross-sectional dependence in the panel. To concretely check for cross-sectional dependence, the Pesaran (2015) cross-sectional dependence test programmed by Ditzen (2018) is conducted, the results of which are also presented in appendix E. Results indicate the presence of cross-sectional dependence that needs to be considered when performing regressions.

The following equation is used to estimate the regressions:

$$\pi_{it} = \alpha_0 + \beta_n NAT_LEG_{it-k} + \ ST_LEG_{it-k} + \ \epsilon_{it}$$

where the cross-sections representing the different states are denoted as *i*, and time-periods representing the different months are represented as *t*. Therefore, π_{it} represents the CPI-AL inflation experienced in state *i* at time *t*. K_{it-k} and L_{it-k} are monthly state and central government legislative shares respectively. ϵ_{it} is the error term. The above equation is estimated from three months up to twelve months of K and L to account for the time it takes for a change in legislative shares to affect the inflation series of a state.

The reasons why the study considers three- to twelve lags of the legislative shares of the union and state governments are two-fold: a) the lags with which the general price level reacts to changes in political processes in India is not known, the reaction could be instantaneous or it could happen in the next three or four quarters.[86] b) the effect is not likely to be uniform over time, while the effect may be large over the short term, it may decay over subsequent months. Once the coefficients of the lags are estimated, their coefficients can be summated to obtain the combined effect of political strength on inflation.

The above equation is estimated using a pooled OLS estimator with state-month fixed effects, (separate) year dummies, and standard errors clustered at the state level. The basic assumption for computing standard errors with a pooled OLS estimator is that $E[\epsilon_{it}|K_{it}] = 0 \ \forall \ i, t = 1 \ldots N$; i.e., the error term is not correlated with any of the lags of the regressors, and that all the

[86] Monetary policy transmission lag in India is estimated to be around two to four quarters; see Acharya (2017). The transmission lag is not the same across states or at any given point in time; see Khundrakpam (2017).

regressors are assumed to be strictly exogenous. But, as stated above (and in appendix E), the sample that the study uses displays cross-sectional dependence based on the Pesaran (2015) cross-sectional dependence test. Hoechle (2007) shows that ignoring the cross-sectional dependence and using a standard pooled OLS model with fixed effects can lead to consistent but inefficient estimates. He proposes using the Driscoll and Kraay (1998) method (DK) to robustly estimate standard errors in the presence of cross-sectional dependence. Therefore, apart from computing state-clustered standard errors, DK standard errors are also computed to avoid measurement errors.

5.4 Results

Tables 11 and 12 contain the summated regression coefficients of the lags of K and L from Equation 1. This gives us the combined effect of the lags of union and state government legislative shares on inflation. Two types of estimates are posted in the tables, first are the estimates of pooled OLS regressions with month-fixed effects and state-clustered standard errors (C-SE), and the second are the pooled OLS estimates with month-fixed effects and DK-corrected standard errors. The combined coefficients of the former estimators are in the odd-numbered columns and the combined coefficients of the latter estimator are represented in the even-numbered columns of Tables 11 and 12 respectively. In the tables, "ST_LEG" represents the state government legislative share, and "NAT_LEG" represents the union government legislative share.[87] Starting with table 11, which contains the combined effects of three to seven-month lags, one can observe in Column (1) that a 100 basis points increase in the legislative share of the ruling party in the central government for three lagged months results in approximately 10.6 basis points rise in the state CPI-AL inflation rate in the current month. This effect increases as the lagged periods increase, going up to 25.8 basis points with seven months of lags, this is seen in columns 3, 5, and 7 of table 11.

While this is the case with the C-SE estimates, the corrected DK estimates paint a similar story but with lesser confidence. There is a noticeable difference between the C-SE and the DK standard errors. While the former shows effects of NAT_LEG that are significant at a 1-percent confidence level, the latter produces insignificant coefficients with higher standard errors. In

[87] ST_LEG is the same as "CM Party Legislative Share" and NT_LEG is the same as "PM Party Lower House Legislative Share" from table 10.

the DK estimates, only the cumulative effect of six, and seven months of lags of the central legislative shares are statistically significant, supporting hypothesis H2. The effect sizes between the two estimation techniques are identical. The regression tables for the full specification are available in appendix F. Table 12 contains the combined effect of eight- to twelve periods of lags of ST_LEG and NAT_LEG. Here, it becomes more apparent that the legislative share of the state government does not have a major role in influencing the inflation rate of a state, therefore we find no evidence for H1, whereas the legislative share of the central government has a major role in influencing states' inflation rates. The cumulative effect of NAT_LEG on inflation remains significant and stabilizes with eight months of lags and remains at approximately 30 basis points increase in inflation for 100 basis points change in NAT_LEG, lending more support to hypothesis H2.

Contradictory to the expectation in hypothesis H1 is the positive sign on state legislative share on inflation. This can be observed in columns representing the cumulative effects of 11 and 12 months of lags of the state legislative share on inflation (see columns 8 and 10 of table 12). In other words, a hundred basis points increase in the legislative share of the state government with eleven and twelve months of lags leads to a 1.6 to 1.7 basis points increase in the inflation rate of a state. In terms of magnitude, this is a very small effect and is significant only at a 10 percent confidence level. This could be explained by the fact that opportunistic state governments also tend to be inflationary. To explore this further, we now look at split-sample regressions of state governments in coalitions.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	3-Month Lags		4-Month Lags		5-Month Lags		6-Month Lags		7-Month Lags	
NAT_LEG	0.106***	0.106	0.117***	0.117	0.132***	0.132	0.164***	0.164*	0.258***	0.258***
	(0.0245)	(0.0651)	(0.0245)	(0.0728)	(0.0241)	(0.0809)	(0.0255)	(0.0907)	(0.0317)	(0.0688)
ST_LEG	0.00370	0.00370	0.00550	0.00550	0.00700	0.00700	0.00848	0.00848	0.0105	0.0105
	(0.0104)	(0.00981)	(0.0102)	(0.00956)	(0.0103)	(0.00935)	(0.0104)	(0.00927)	(0.0105)	(0.00931)
Standard Errors	C-SE	DK	C-SE	DK	C-SE	DK	C-SE	DK	C-SE	DK
Observations	6,029	6,029	6,010	6,010	5,991	5,991	5,972	5,972	5,953	5,953

Standard errors in parentheses.
*** p<0.01, ** p<0.05, * p<0.1

Table 11 Summary of results (3-7 lags of inflation).

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	8-Month Lags		9-Month Lags		10-Month Lags		11-Month Lags		12-Month Lags	
NAT_LEG	0.346***	0.346***	0.346***	0.346***	0.348***	0.348***	0.344***	0.344***	0.332***	0.332***
	(0.0367)	(0.0606)	(0.0372)	(0.0647)	(0.0367)	(0.0792)	(0.0359)	(0.0821)	(0.0352)	(0.0876)
ST_LEG	0.0124	0.0124	0.0137	0.0137	0.0152	0.0152	0.0165	0.0165*	0.0174	0.0174*
	(0.0109)	(0.00933)	(0.0112)	(0.00937)	(0.0117)	(0.00951)	(0.0120)	(0.00962)	(0.0122)	(0.00975)
Standard Errors	C-SE	DK	C-SE	DK	C-SE	DK	C-SE	DK	C-SE	DK
Observations	5,934	5,934	5,914	5,914	5,894	5,894	5,875	5,875	5,856	5,856

Standard errors in parentheses.
*** p<0.01, ** p<0.05, * p<0.1

Table 12 Summary of results (8-12 lags of inflation).

Tables 13 and 14 report the results of two sub-samples of the dataset restricted based on whether or not a given state government is in a coalition.[88] The results are estimated with state, month-fixed effects, and the standard errors are corrected using the DK method. The odd-numbered columns represent the sample where the state government is not in a coalition, whereas the even-numbered columns represent the sample where the state government is in a coalition. Here, one can observe that a 100 basis points change in the strength of a state legislature leads to an increase in state-level inflation between 4 to 5 basis points in the 3-12 months horizon; this shows that state-level coalitions are inherently inflationary and confirms hypothesis H3. To further corroborate this finding, one can also observe that state governments that are not in a coalition do not exhibit this inflationary bias, coefficients on almost all ST_LEG lags are insignificant. The signs on the 3rd and 4th month lags of ST_LEG are likely a random finding given the restricted sample size.

Additionally, in tables 13 and 14, we can observe that an increase in the strength of the national legislature also tends to increase inflationary pressure only on particular states. One can also see that the coefficient for NAT_LEG lags is consistently greater for the sub-sample of state governments that are in a coalition than for the sub-sample of state governments that are led by a single party. Again, this points towards an opportunistic central government that can use economic policy to influence state-level politics.

Tables 15 and 16 show another aspect of this relationship. They report the results of a sub-sample restricted based on whether or not the ruling party of the state government is in a coalition with the ruling party of the central legislature (called centre-state coalition henceforth). The results are again estimated with state, month-fixed effects, and the standard errors are corrected using the DK method. The odd-numbered columns represent the sample where the state government is not in a coalition, whereas the even-numbered columns represent the sample where the state government is in a coalition.

[88] Note: a state-level coalition implies that the state government was formed via a coalition agreement with different parties that also held seats in the state legislature. This is in contrast to a state-centre coalition which essentially indicates whether the ruling party in the central government (Lok Sabha) is a political ally of the ruling party in the state government.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	3-Month Lags		4-Month Lags		5-Month Lags		6-Month Lags		7-Month Lags	
NAT_LEG	0.0716	0.128*	0.0779	0.143**	0.0880	0.159**	0.116	0.193**	0.217***	0.0282**
	(0.0683)	(0.0663)	(0.0775)	(0.0722)	(0.0870)	(0.0785)	(0.100)	(0.0857)	(0.0829)	(0.0623)
ST_LEG	-0.0303*	0.0409***	-0.0291*	0.0428***	-0.0283*	0.0442***	-0.0272	0.0455***	-0.0260	0.0478***
	(0.0162)	(0.0106)	(0.0165)	(0.0108)	(0.0167)	(0.0112)	(0.0171)	(0.0118)	(0.0175)	(0.0124)
Observations	2,627	3,383	2,624	3,367	2,621	3,351	2,618	3,335	2,615	3,319
State Coalition	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes

DK Standard errors in parentheses.
*** p<0.01, ** p<0.05, * p<0.1

Table 13 Summary of results for state coalitions (3-7 lags of inflation).

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	8-Month Lags		9-Month Lags		10-Month Lags		11-Month Lags		12-Month Lags	
NAT_LEG	0.315***	0.362***	0.311***	0.364***	0.303***	0.381***	0.300***	0.377***	0.290***	0.366***
	(0.0571)	(0.0571)	(0.0759)	(0.0617)	(0.0913)	(0.0743)	(0.0952)	(0.0760)	(0.101)	(0.0804)
ST_LEG	-0.0244	0.0500***	-0.0226	0.0509***	-0.0200	0.0520***	-0.0175	0.0531***	-0.0148	0.0533***
	(0.0178)	(0.0130)	(0.0182)	(0.0134)	(0.0184)	(0.0137)	(0.0185)	(0.0139)	(0.0186)	(0.0141)
Observations	2,612	3,303	2,609	3,286	2,606	3,270	2,603	3,254	2,600	3,238
State Coalition	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes

DK Standard errors in parentheses.
*** p<0.01, ** p<0.05, * p<0.1

Table 14 Summary of results for state coalitions (8-12 lags of inflation).

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	3-Month Lags		4-Month Lags		5-Month Lags		6-Month Lags		7-Month Lags	
NAT_LEG	0.0542	0.158**	0.0638	0.171**	0.0779	0.186**	0.104	0.222**	0.192***	0.318***
	(0.0511)	(0.0770)	(0.0574)	(0.0850)	(0.0640)	(0.0936)	(0.0765)	(0.100)	(0.0652)	(0.0702)
ST_LEG	-0.00355	0.00913	-0.00208	0.0120	-0.000724	0.0145	0.000692	0.0168	0.00248	0.0204
	(0.0142)	(0.0135)	(0.0141)	(0.0136)	(0.0139)	(0.0140)	(0.0138)	(0.0146)	(0.0137)	(0.0151)
Observations	3,388	2,622	3,382	2,609	3,376	2,596	3,370	2,583	3,364	2,570
Centre-State Coalition	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes

DK Standard errors in parentheses.
*** p<0.01, ** p<0.05, * p<0.1

Table 15 Summary of results for centre-state coalitions (3-7 lags of inflation).

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	8-Month Lags		9-Month Lags		10-Month Lags		11-Month Lags		12-Month Lags	
NAT_LEG	0.277***	0.404***	0.269***	0.415***	0.258***	0.458***	0.254***	0.455***	0.243***	0.450***
	(0.0508)	(0.0702)	(0.0534)	(0.0720)	(0.0654)	(0.0743)	(0.0683)	(0.0880)	(0.0733)	(0.0929)
ST_LEG	0.00461	0.0234	0.00646	0.0247	0.00897	0.0254	0.0112	0.0263	0.0132	0.0265
	(0.0135)	(0.0155)	(0.0135)	(0.0157)	(0.0136)	(0.0159)	(0.0137)	(0.0162)	(0.0139)	(0.0166)
Observations	3,358	2,557	3,352	2,543	3,346	2,530	3,340	2,517	3,334	2,504
State Coalition	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes

DK Standard errors in parentheses.
*** p<0.01, ** p<0.05, * p<0.1

Table 16 Summary of results for centre-state coalitions (8-12 lags of inflation).

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	3-Month Lags		4-Month Lags		5-Month Lags		6-Month Lags		7-Month Lags	
NAT_LEG	0.0934	0.124*	0.105	0.136*	0.122	0.149*	0.155*	0.180**	0.251***	0.269***
	(0.0643)	(0.0660)	(0.0703)	(0.0741)	(0.0764)	(0.0834)	(0.0884)	(0.0905)	(0.0737)	(0.0643)
ST_LEG	-0.00427	0.0477**	-0.00242	0.0520**	-0.000760	0.0557**	0.000633	0.0590**	0.00242	0.0621**
	(0.0150)	(0.0232)	(0.0150)	(0.0232)	(0.0149)	(0.0236)	(0.0148)	(0.0238)	(0.0148)	(0.0242)
Observations	4,060	1,950	4,051	1,940	4,042	1,930	4,033	1,920	4,024	1,910
Regional	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
Party										

DK Standard errors in parentheses.
*** p<0.01, ** p<0.05, * p<0.1

Table 17 Summary of results for regional parties (3-7 lags of inflation).

	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	8-Month Lags		9-Month Lags		10-Month Lags		11-Month Lags		12-Month Lags	
NAT_LEG	0.342***	0.353***	0.331***	0.369***	0.320***	0.403***	0.313***	0.402***	0.297***	0.399***
	(0.0620)	(0.0600)	(0.0626)	(0.0689)	(0.0732)	(0.0857)	(0.0761)	(0.0875)	(0.0807)	(0.0937)
ST_LEG	0.00382	0.0659***	0.00496	0.0685***	0.00660	0.0694***	0.00822	0.0703***	0.00983	0.0701***
	(0.0147)	(0.0245)	(0.0146)	(0.0249)	(0.0147)	(0.0256)	(0.0147)	(0.0262)	(0.0149)	(0.0268)
Observations	4,015	1,900	4,006	1,889	3,997	1,879	3,988	1,869	3,979	1,859
Regional Party	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes

DK Standard errors in parentheses.
*** p<0.01, ** p<0.05, * p<0.1

Table 18 Summary of results for regional parties (8-12 lags of inflation).

Here one can observe that states with a centre-state coalition experience significantly higher inflationary pressure in the 3-6 month lagged period than those state governments that are not in a centre-state coalition. The coefficients for 3-6 lags of NAT_LEG for state governments without a centre-state coalition are insignificant. In the 7-12 month lagged period, we see that states which are in a centre-state coalition consistently experience higher inflationary pressure than the states that are not in a centre-state coalition. While this is not in line with what is expected from hypothesis H3a, they still are a set of observations that point towards an opportunistic central government.

Finally, the results in Tables 17 and 18 are for a sub-sample of state governments that are led by regional parties. This is compared to a sub-sample of state governments that are not regional parties. Here we see results that confirm hypothesis H4. State governments that are led by regional parties exhibit significantly higher inflationary pressure than state governments that are not led by regional parties. For the non-regional party led state governments, the ST_LEG coefficients consistently remain insignificant (odd columns of Tables 17 and 18) while the ST_LEG coefficients of the regional party led state governments are consistently positive and significant (even columns of Tables 17 and 18). Again, we see that the NAT_LEG coefficient for the regional party sub-sample is consistently higher than the non-regional party sub-sample, again hinting at an opportunistic central government. What can also be observed is that the inflationary push of a regional party led state government is consistently at least an order of magnitude smaller than the inflationary push of central governments. This is likely due to the superior financial resources that are available to central governments.

Taken together, the results confirm hypotheses H2, H3, and H4; and reject hypotheses H1 and H3a (where an opposite effect is observed). The regression tables used to generate the linear combinations of lags in Tables 2-9 are available in appendix F.

5.5 Conclusion

This article hypothesizes that the political strength of a government can have effects on inflation. The study tests this hypothesis using a monthly panel of 20 Indian states between the years 1990-2019. The results suggest the following: firstly, central governments generally induce long-term inflationary pressures on states. This is likely due to the fact that ruling parties of central governments often want to establish their presence in state politics. Secondly, the

inflationary push of state governments is much smaller than that of central governments. Thirdly, state governments that are in a coalition are generally more inflationary than single-party state governments. Contrary to expectations, if a state government is in a coalition with the party leading the central government, then the state experiences higher inflationary pressure induced by the central government. Finally, state governments that are led by regional parties also contribute to increased inflation in a state.

Given that an association between political strength and inflation in Indian states exists and is positive, some follow-up questions come to mind; first, do different kinds of products in the price basket react differently to changes in political instability? If so, prices of which kind of products are most sensitive to political changes? Second, what kinds of political events are most likely to influence changes in prices? To answer these follow-up questions, a sub-national event study that looks at a particular type of political events and the prices of a set of goods (tradables versus non-tradables) should be analyzed.

Appendix A

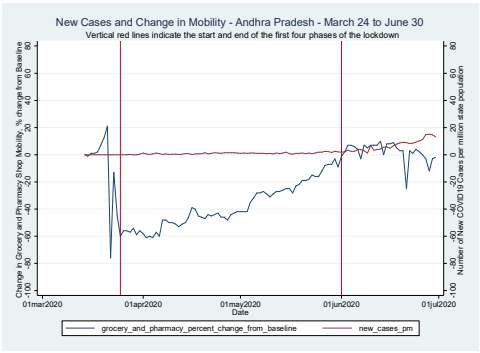
Variable name	Sources
state ruling government seat share	Election Commission Statistical Reports (1951-2019)
state ruling coalition	News Reports (ProQuest Times of India Archives, Factiva)
previous state governments of party	Election Commission Statistical Reports (1951-2019) and News Reports
union ruling government seat share	Election Commission Statistical Reports (1951-2019)
union ruling coalition	News Reports (ProQuest Times of India Archives, Factiva)
previous union governments of party	Election Commission Statistical Reports (1951-2019) and News Reports
state-union ruling coalition	Election Commission Statistical Reports (1951-2019) and News Reports
regional party	Reports on Recognized State Parties (1951-2019)
governor's previous political affiliation	Governor Biographies from Raj Bhawan Websites/News Reports
governor appointed by centre	Governor Biographies from Raj Bhawan Websites
president appointed by centre	Election Commission of India, Press Information Bureau
disaster	EM-DAT by Guha-Sapir et al. (2019)
riot	Database Compiled Iyer and Shrivatsava (2018), Factiva
state chief minister dead and replaced	ProQuest Times of India Archives, Factiva
president's rule	Database Compilation by Shrinivasan (2016), Factiva

Table A1. Data sources

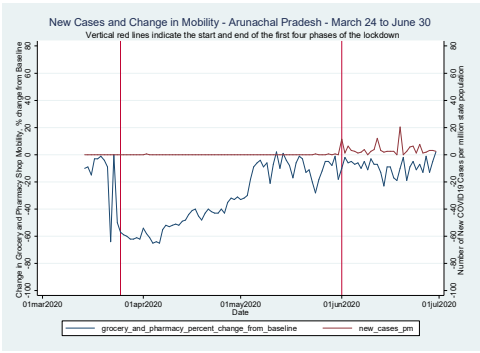
Appendix B

A Panel of 28 states and Delhi: New cases per million state population and change in mobility between March 24 and June 30, 2020. Black vertical lines on the graph for March 25 and June 1 indicate the start of Phase I and the end of Phase IV

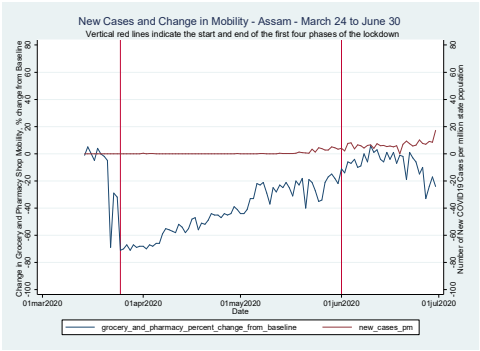
Sources: Google (2021) and COVID19INDIA (2020)



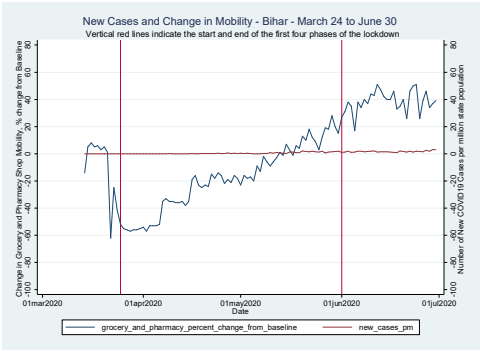
(i) Andhra Pradesh



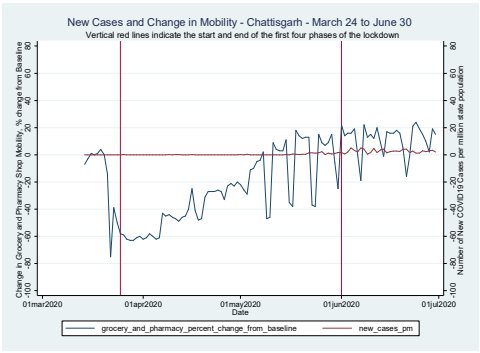
(ii) Arunachal Pradesh



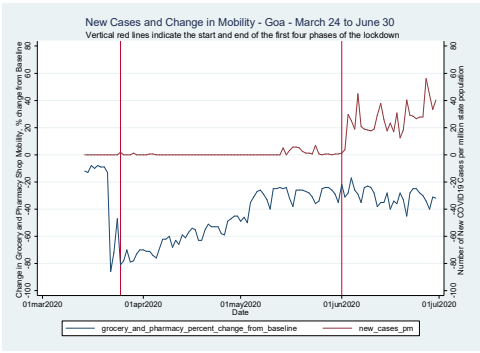
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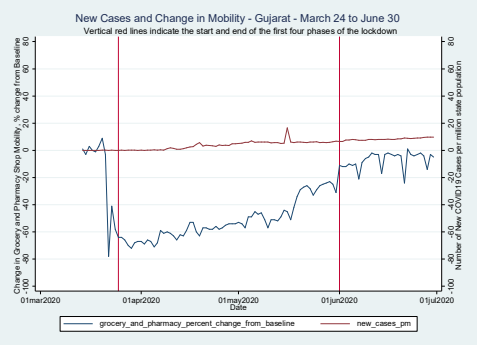
(iv) Bihar



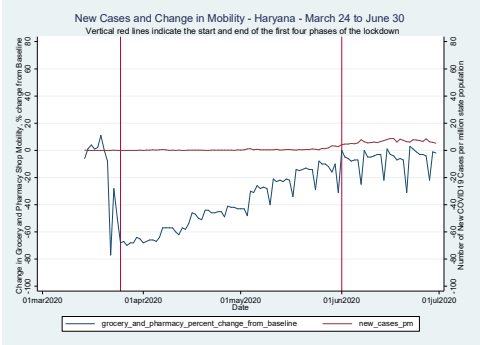
(v) Chhattisgarh



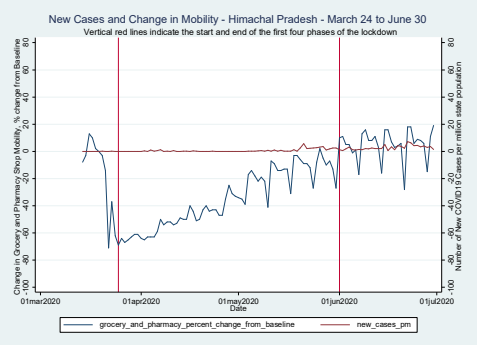
(vi) Goa



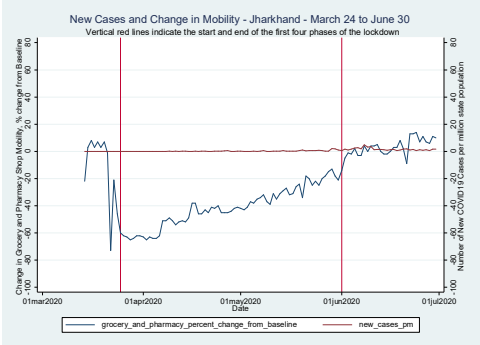
(vii) Gujarat



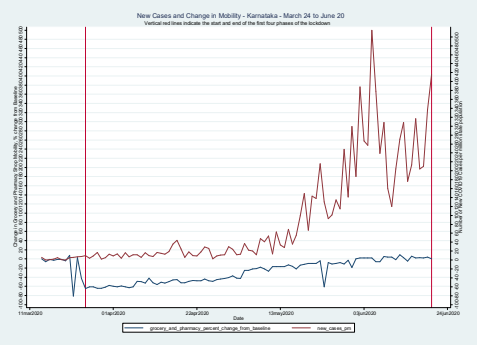
(viii) Haryana



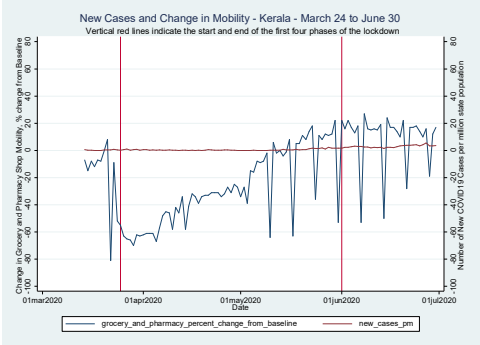
(ix) Himachal Pradesh



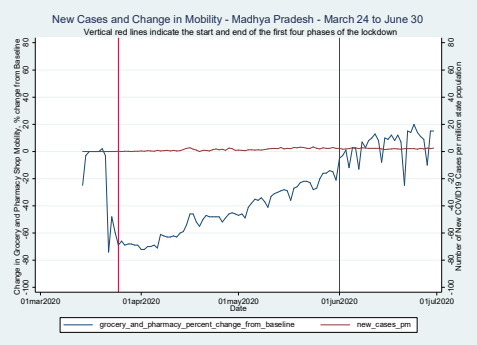
(x) Jharkhand



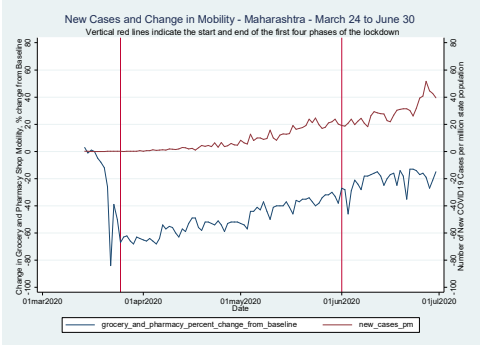
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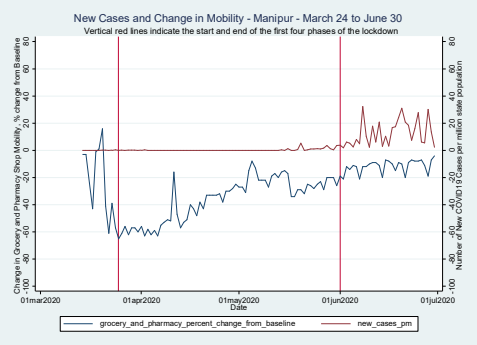
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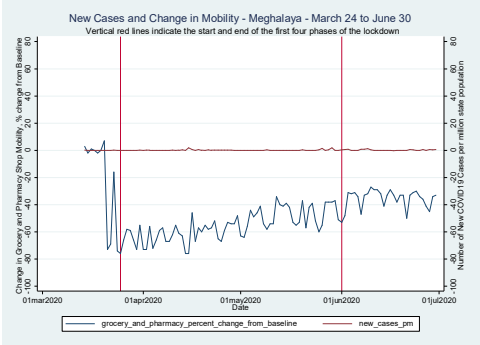
(xiii) Madhya Pradesh



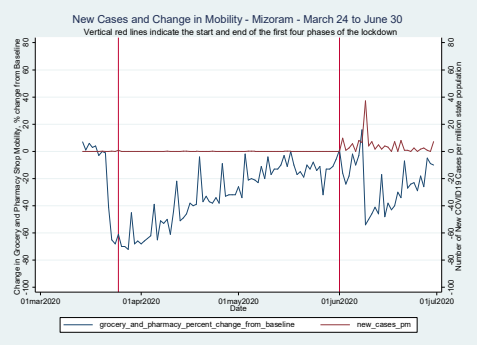
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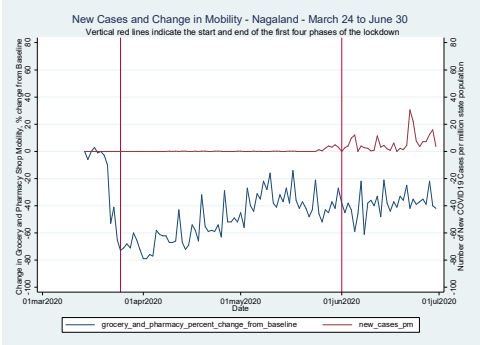
(xv) Manipur



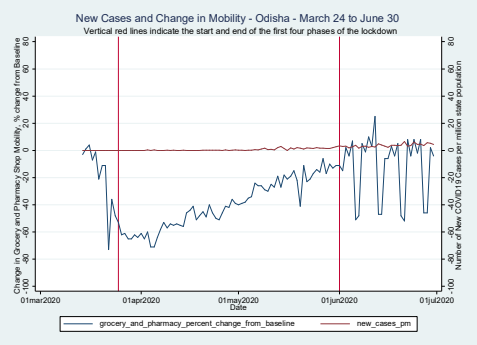
(xvi) Meghalaya



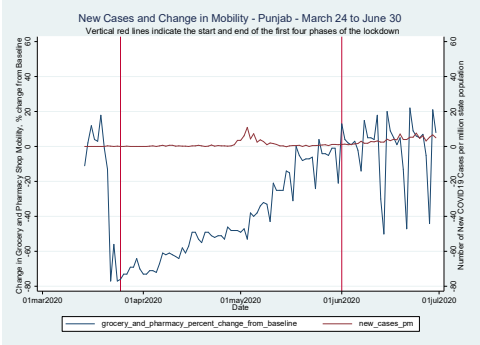
(xvii) Mizoram



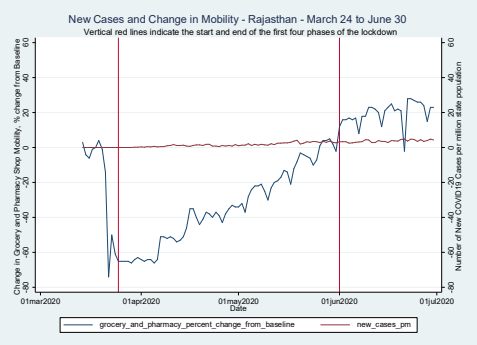
(xviii) Nagaland



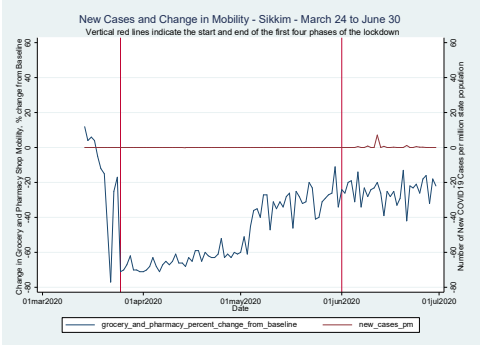
(xix) Odisha



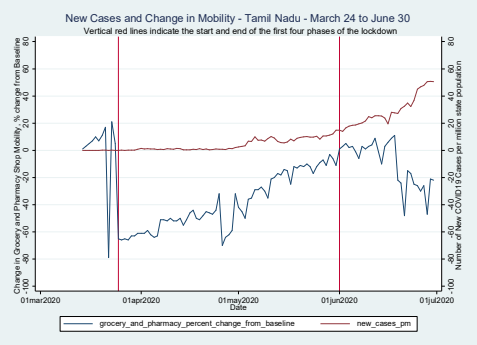
(xx) Punjab



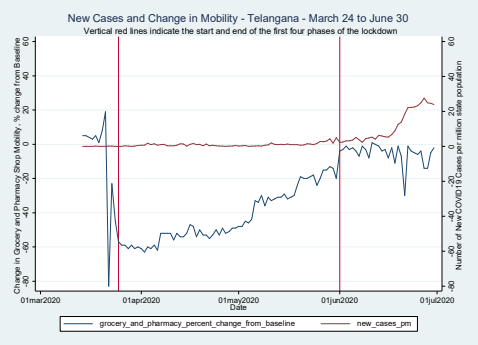
(xxi) Rajasthan



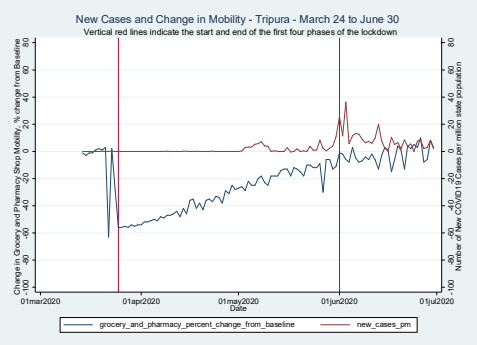
(xxii) Sikkim



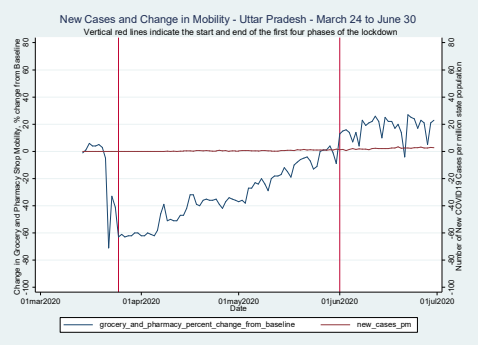
(xxiii) Tamil Nadu



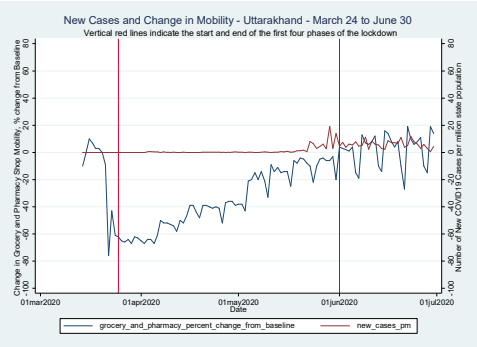
(xxiv) Telangana



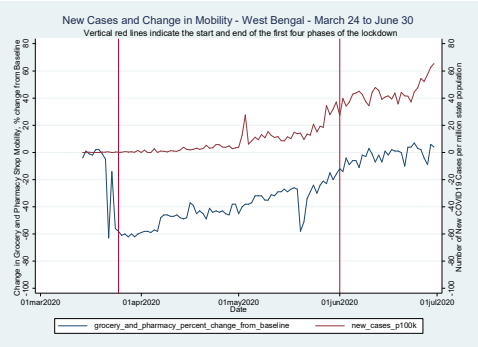
(xxv) Tripura



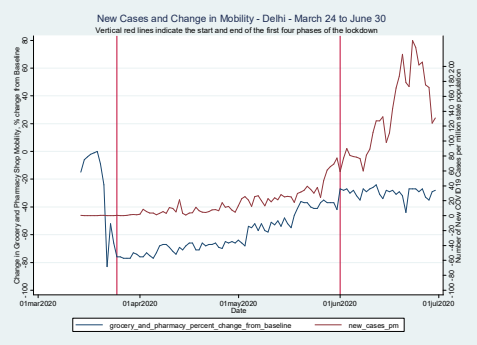
(xxvi) Uttar Pradesh



(xxvii) Uttarakhand



(xxviii) West Bengal



(xxix) Delhi

Appendix C

Schedule XI: Items that PRIs can legislate upon. Items on the schedule XI corresponding to Article 243G of the Constitution:

1. Agriculture, including agricultural extension.
2. Land improvement, implementation of land reforms, land consolidation, soil conservation.
3. Minor irrigation, water management and watershed development.
4. Animal husbandry, dairying, and poultry.
5. Fisheries.
6. Social forestry and farm forestry.
7. Minor Forest produce.
8. Small scale industries, including food processing industries.
9. Khadi, village and cottage industries.
10. Rural housing.
11. Drinking water.
12. Fuel and fodder.
13. Roads, culverts, bridges, ferries, waterways and other means of communication.
14. Rural electrification, including distribution of electricity.
15. Non-conventional energy sources.
16. Poverty alleviation programme.
17. Education, including primary and secondary schools.
18. Technical training and vocational education.
19. Adult and non-formal education.
20. Libraries.
21. Cultural activities.
22. Markets and fairs.
23. Health and sanitation, including hospitals, primary health centres and dispensaries.
24. Family welfare.
25. Women and child development.
26. Social welfare, including welfare of the handicapped and mentally retarded.
27. Welfare of the weaker sections, and, of the Scheduled Castes and the Scheduled Tribes.
28. Public distribution system.
29. Maintenance of community assets.

Schedule XII: Items that ULBs can legislate upon. Items on the schedule XII corresponding to Article 243W of the Constitution:

1. Urban planning including town planning.
2. Regulation of land-use and construction of buildings.
3. Planning for economic and social development.
4. Roads and bridges.
5. Water supply for domestic, industrial and commercial purposes.
6. Public health, sanitation conservancy and solid waste management.
7. Fire services.
8. Urban forestry, protection of the environment and promotion of ecological aspects.
9. Safeguarding the interests of weaker sections of society, including the handicapped and mentally retarded.
10. Slum improvement and upgradation.
11. Urban poverty alleviation.
12. Provision of urban amenities and facilities such as parks, gardens, playgrounds.
13. Promotion of cultural, educational, and aesthetic aspects.
14. Burials and burial grounds; cremations, cremation grounds; and electric crematoriums.
15. Cattle pounds; prevention of cruelty to animals.
16. Vital statistics including registration of births and deaths.
17. Public amenities including street lighting, parking lots, bus stops and public conveniences.
18. Regulation of slaughterhouses and tanneries.

Appendix D

Taxes/States	AP	AS	BH	CH	GA	GJ	HR	HP	JH	KA	KL	MP	MH	OD	PB	RJ	SK	TN	UHK	UP	WB
House/Property Tax	VB	V	V	VB	V	VN	V	V	V	V	V	V	V	NA	V	V	V	V	NA	VD	V
Duty on transfer of property	VBD	NA	NA	B	NA	NA	V	V	NA	NA	NA	NA	NA	NA	V	NA	NA	V	NA	NA	V
Tax on agricultural land for specific purposes	V	V	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	V	NA
Cess on Land Revenue or Surcharge	VBD	B	NA	D	NA	NA	NA	NA	NA	NA	V	V	V	V	NA	NA	NA	NA	NA	NA	NA
Tax on Professions, trades, calling and so forth	NA	VB	V	V	V	VND	NA	V	V	NA	V	V	V	NA	V	B	NA	V	NA	NA	NA
Entertainment Tax	V	NA	NA	B	V	NA	NA	NA	NA	V	V	B	NA	NA	V	NA	NA	B	NA	V	V
Pilgrim Tax or fees	NA	NA	NA	VB	V	VN	NA	NA	NA	V	NA	NA	V	NA	NA	V	NA	NA	NA	NA	NA
Tax on Advertisements	V	NA	NA	VBD	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tolls	V	BD	BD	VB	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	V	NA	NA	VBD
Development Tax	NA	NA	NA	B	NA	NA	NA	NA	NA	NA	NA	D	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tax for clearing private latgrines and drainage	NA	NA	NA	V	NA	NA	NA	NA	NA	NA	NA	V	NA	NA	NA	NA	VD	NA	NA	V	NA
Vehicle Tax	VD	NA	NA	NA	V	VN	NA	NA	NA	V	NA	NA	NA	V	NA	V	NA	V	NA	V	NA
Fee on Vehicles (other than motor vehicles)	V	NA	VBD	VB	NA	NA	NA	NA	VB	NA	NA	V	NA	NA	B	NA	NA	NA	NA	NA	NA
Animal tax	V	V	NA	B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	V	NA
Conservancy rate	NA	V	V	NA	NA	NA	NA	NA	V	NA	NA	NA	NA	V	V	NA	NA	NA	NA	NA	V
Lighting rate	V	VD	VBD	V	V	NA	NA	NA	VBD	V	NA	V	V	V	VB	NA	NA	NA	NA	NA	VD
Water rate	NA	VBD	VBD	VB	NA	NA	V	V	VBD	V	NA	V	V	V	VB	D	VD	NA	NA	VB	VBD
Drainage rate	NA	NA	NA	V	NA	NA	NA	NA	NA	NA	NA	V	NA	V	NA	NA	VD	NA	NA	NA	V
Special tax for community civic services or works	NA	NA	NA	NA	NA	NA	NA	V	NA	NA	NA	NA	NA	NA	NA	VBD	NA	NA	NA	NA	NA
Fee (Sanitary arrangments at Pilgrimage fairs)	NA	VD	VBD	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	VB	NA	NA	NA	NA	NA	NA
Fees for license for hat or market	NA	V	BD	NA	V	VND	NA	NA	BD	V	V	V	V	V	V	NA	VD	B	NA	NA	B
Fees for running dangerous and offensive trade	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	B
Fees for license for fair or mela	NA	NA	D	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	D	NA	NA	NA	NA	NA
Fee for bullock-cart stand	NA	NA	NA	VB	NA	VND	NA	NA	NA	NA	NA	V	V	NA	NA	NA	NA	NA	NA	NA	NA
Fee for registrastion of animals sold in the sabha area	V	V	NA	NA	NA	NA	V	V	NA	**V**	**V**	**V**	**V**	**V**	NA	NA	VD	NA	NA	V	NA
Fee for grazing cattle	NA	NA	NA	VB	V	NA	NA	NA	NA	V	NA	V	V	NA	NA	NA	V	NA	NA	NA	NA
Income from fisheries	V	NA	NA	NA	NA	NA	V	NA	NA	NA	NA	NA	NA	NA	V	NA	NA	NA	NA	NA	NA
Fee for the use of sarais, dharamsala, slaughter houses and encamping grounds	V	NA	B	NA	NA	NA	NA	NA	NA	NA	NA	V	NA	V	NA	NA	VD	NA	NA	V	NA
Service Fee	NA	NA	NA	NA	NA	NA	V	V	VBD	NA	VBD	NA	V	NA	NA	NA	VD	NA	NA	V	VBD
Ferry rentals	D	NA	NA	NA	D	NA	NA	NA	BD	NA	NA	NA	NA	V	V	NA	NA	V	NA	NA	VBD

Legend:

Exclusive powers

1. V: Exclusive powers with village-level PRIs.
2. B: Exclusive powers with block-level PRIs.
3. D: Exclusive powers with district-level PRIs.

Joint powers (with village-level and one other PRI tier)

1. VB: power shared by village and block-level PRIs.
2. VN: power shared by village and Nagar-level PRIs.
3. VD: power shared by village and district-level PRIs.

Joint powers (with village-level and two other PRI tiers)

1. VBD: power shared by village, block, and district-level PRIs.
2. VND: power shared by village, block, and Nagar-level PRIs.

Joint powers (with non-village-level PRIs)

1. BD: power shared by block and district-level PRIs.

Appendix E

State	Mean	Obs.	Max	Min	Std. Dev.
Andhra Pradesh	7.30	332	37.14	-8.49	6.51
Assam	5.28	276	16.10	-2.52	3.90
Bihar	6.11	332	24.29	-8.05	5.63
Gujarat	6.93	332	37.32	-9.23	6.33
Himachal Pradesh	5.49	276	16.06	-3.34	3.87
Haryana	6.62	276	23.84	-2.22	4.71
Jammu and Kashmir	6.71	332	21.30	-2.02	4.46
Karnataka	7.26	332	27.46	-8.96	7.10
Kerala	7.16	332	19.84	-2.53	4.92
Meghalaya	5.86	276	18.09	-4.46	4.08
Maharashtra	7.19	332	36.73	-18.66	8.39
Manipur	6.07	276	17.53	-5.45	5.01
Madhya Pradesh	6.29	332	27.21	-8.08	5.66
Odisha	6.20	332	19.72	-7.51	5.48
Punjab	6.35	276	22.78	-1.56	4.37
Rajasthan	7.22	332	28.57	-8.99	6.54
Tamil Nadu	7.37	332	22.14	-4.47	5.45
Tripura	6.02	276	22.78	-8.70	5.68
Uttar Pradesh	6.35	332	28.14	-7.94	6.02
West Bengal	6.25	332	28.97	-8.39	6.02

Table E1. State Wise Summary Statistics of CPI-AL Inflation

Variable		Mean	Std. Dev.	Min	Max	Observations
CPI-AL YoY Inflation (in%)	overall	6.534517	5.703289	-18.6603	37.32394	N = 6248
	between		0.623058	5.277436	7.368528	n = 20
	within		5.671602	-19.3109	36.93026	T-bar = 312.4
State Assembly Legislative Share (in %)	overall	52.35296	15.75333	0	86.28571	N = 6633
	between		10.59875	32.06323	68.94558	n = 20
	within		11.91415	-8.57453	83.20485	T-bar = 331.65
Lok Sabha Legislative Share (in %)	overall	36.23036	10.64128	8.471455	48.99083	N = 6880
	between		0	36.23036	36.23036	n = 20
	within		10.64128	8.471455	48.99083	T = 344

Table E2. Detailed summary statistics for inflation and legislative shares

STATE	AP	AS	BH	GJ	HP	HR	JK	KA	KL	ME	MH	MN	MP	OD	PB	RJ	TN	TR	UP	WB
AP	1.0000																			
AS	0.7193	1.0000																		
BH	0.6143	0.7374	1.0000																	
GJ	0.8541	0.7118	0.6135	1.0000																
HP	0.7121	0.7590	0.7337	0.7441	1.0000															
HR	0.7974	0.7623	0.7491	0.7781	0.7355	1.0000														
JK	0.5490	0.8077	0.7130	0.6297	0.7987	0.7868	1.0000													
KA	0.8398	0.7202	0.4834	0.7284	0.6296	0.7152	0.4958	1.0000												
KL	0.3816	0.5661	0.4341	0.3108	0.5156	0.6211	0.5394	0.4429	1.0000											
ME	0.6482	0.7670	0.6286	0.6501	0.6175	0.6497	0.7206	0.6149	0.4162	1.0000										
MH	0.7872	0.7262	0.3983	0.8384	0.5769	0.7071	0.3836	0.8028	0.1610	0.6155	1.0000									
MN	0.6204	0.7620	0.4268	0.5650	0.5432	0.5508	0.5857	0.5855	0.6546	0.6532	0.5986	1.0000								
MP	0.7731	0.7288	0.7090	0.8719	0.7036	0.8244	0.7292	0.6680	0.3802	0.7352	0.7669	0.5356	1.0000							
OD	0.5105	0.7571	0.7022	0.6006	0.6284	0.6823	0.6271	0.5462	0.5181	0.6542	0.5291	0.6645	0.6520	1.0000						
PB	0.8096	0.7597	0.7146	0.8066	0.7718	0.8922	0.8004	0.7250	0.5278	0.7354	0.7830	0.5458	0.8703	0.6366	1.0000					
RJ	0.4661	0.5920	0.6374	0.6688	0.6422	0.7374	0.6406	0.3272	0.3403	0.6193	0.4843	0.5097	0.8144	0.5227	0.7604	1.0000				
TN	0.7301	0.5884	0.4695	0.6599	0.5458	0.5386	0.5352	0.8307	0.5373	0.4064	0.6880	0.4795	0.6283	0.5452	0.5321	0.4006	1.0000			
TR	0.6071	0.6773	0.6451	0.5508	0.6414	0.5080	0.6463	0.4445	0.3889	0.6494	0.4827	0.5978	0.5550	0.5761	0.5056	0.4598	0.3293	1.0000		
UP	0.3571	0.6471	0.7373	0.5727	0.7030	0.7783	0.6777	0.2815	0.3278	0.6287	0.3964	0.3525	0.7347	0.6057	0.7620	0.7764	0.3814	0.5952	1.0000	
WB	0.4548	0.8050	0.6959	0.5684	0.6745	0.7716	0.6783	0.5113	0.4653	0.6533	0.4314	0.5066	0.6245	0.6813	0.7229	0.4566	0.5123	0.5324	0.6500	1.0000

Table E3. Pairwise correlation of CPI-AL inflation.



Figure E1. State-wise panels of CPI-AL inflation

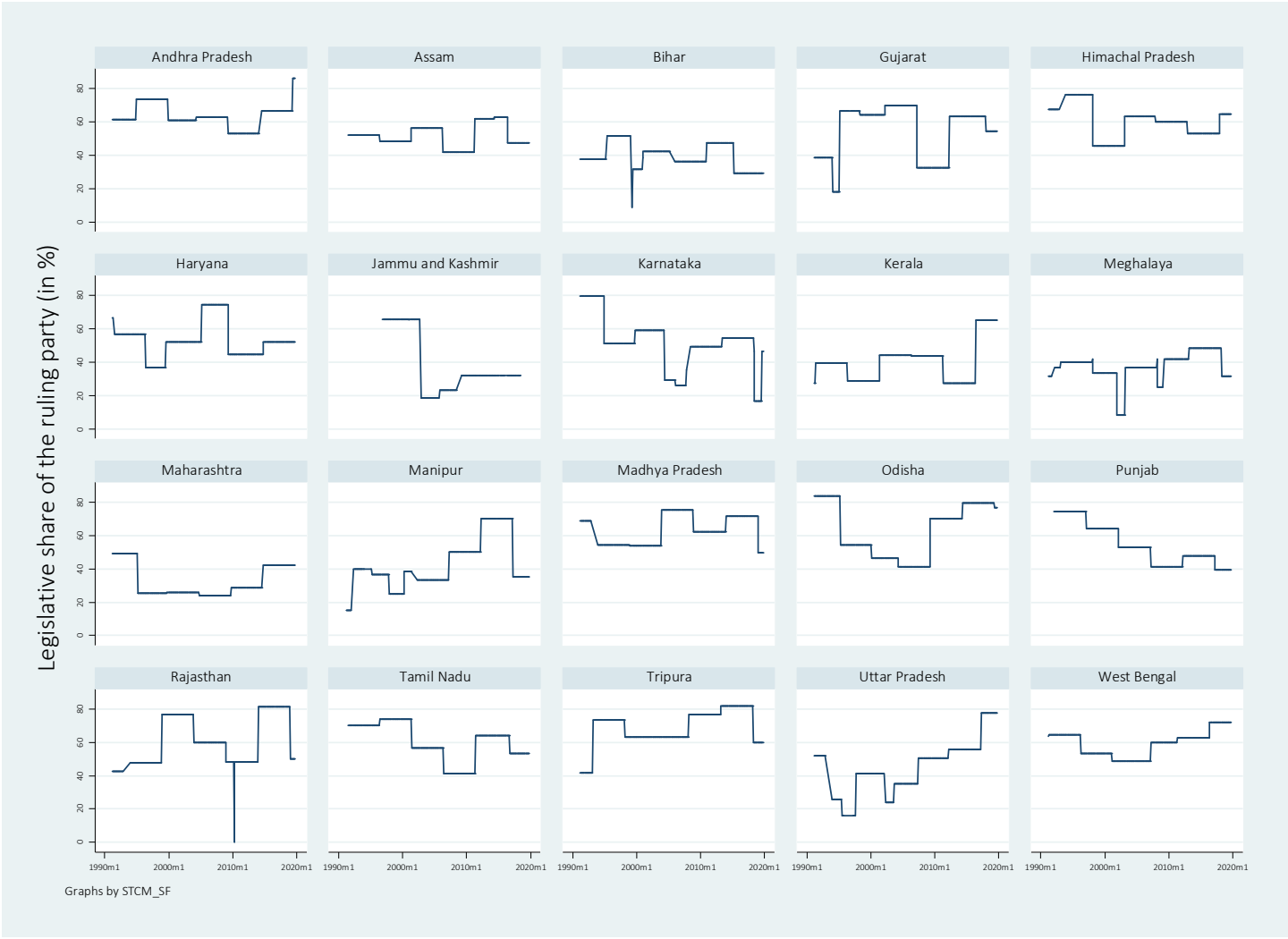


Figure E2. State-wise panels of ruling party legislative share

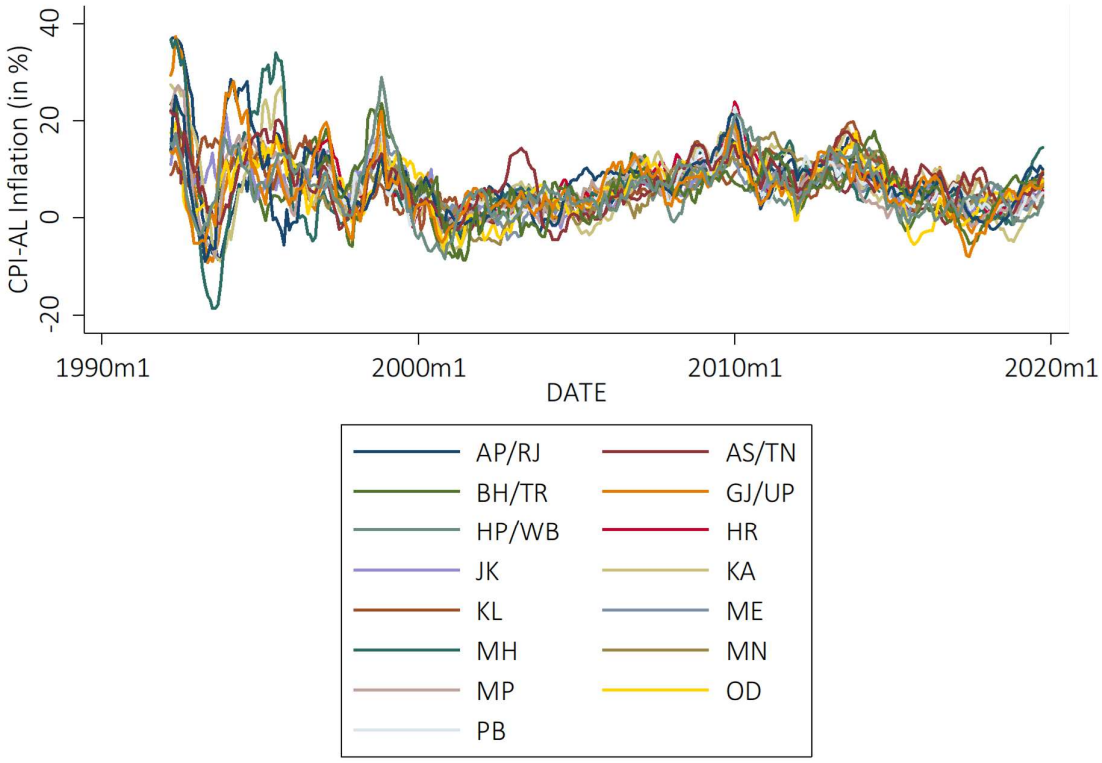


Figure E3. Cross-sectional dependence overlaid graph

Pesaran (2015) test for cross-sectional dependence: CPI-AL inflation

```
H0: errors are weakly cross-sectional dependent.
        CD = 99.986
   p-value = 0.000
```

Pesaran (2015) test for Cross-sectional dependence: state legislative shares

```
H0: errors are weakly cross-sectional dependent.
        CD = 30.784
   p-value = 0.000
```

Appendix F

. VARIABLES	(1) C-SE	(2) DK SE	(3) C-SE	(4) DK SE	(5) C-SE	(6) DK SE	(7) C-SE	(8) DK SE	(9) C-SE	(10) DK
L.ST_LEG	-0.0274	-0.0274*	-0.0273	-0.0273*	-0.0270	-0.0270*	-0.0270	-0.0270*	-0.0231	-0.0231
	(0.0206)	(0.0156)	(0.0205)	(0.0154)	(0.0203)	(0.0153)	(0.0202)	(0.0152)	(0.0184)	(0.0151)
L2.ST_LEG	-0.00243	-0.00243	-0.00799	-0.00799	-0.00833	-0.00833	-0.00828	-0.00828	-0.0125	-0.0125
	(0.00895)	(0.0115)	(0.00740)	(0.0117)	(0.00732)	(0.0117)	(0.00733)	(0.0117)	(0.00856)	(0.0122)
L3. ST_LEG	0.0335**	0.0335*	-0.00868	-0.00868	-0.0135**	-0.0135	-0.0140**	-0.0140	-0.0142***	-0.0142
	(0.0159)	(0.0187)	(0.00630)	(0.0114)	(0.00495)	(0.0113)	(0.00495)	(0.0114)	(0.00489)	(0.0114)
L4. ST_LEG			0.0495***	0.0495**	0.0207***	0.0207	0.0163**	0.0163	0.0163**	0.0163
			(0.0172)	(0.0212)	(0.00660)	(0.0130)	(0.00709)	(0.0121)	(0.00722)	(0.0121)
L5. ST_LEG					0.0351*	0.0351*	0.00162	0.00162	-0.000605	-0.000605
					(0.0200)	(0.0182)	(0.00801)	(0.0129)	(0.00744)	(0.0126)
L6. ST_LEG							0.0398*	0.0398**	-0.0116	-0.0116
							(0.0218)	(0.0183)	(0.00835)	(0.0135)
L7.ST_LEG									0.0561**	0.0561***
									(0.0253)	(0.0210)
L.NAT_LEG	-0.0243	-0.0243	-0.0249	-0.0249	-0.0249	-0.0249	-0.0235	-0.0235	-0.0203	-0.0203
	(0.0230)	(0.0464)	(0.0234)	(0.0457)	(0.0233)	(0.0456)	(0.0231)	(0.0443)	(0.0230)	(0.0391)
L2. NAT_LEG	0.0438***	0.0438	0.0530***	0.0530*	0.0517***	0.0517*	0.0509***	0.0509*	0.0512***	0.0512**
	(0.00859)	(0.0318)	(0.00886)	(0.0300)	(0.00878)	(0.0296)	(0.00900)	(0.0286)	(0.00884)	(0.0245)
L3. NAT_LEG	0.0870***	0.0870	0.0208	0.0208	0.0313***	0.0313	0.0298**	0.0298	0.0287**	0.0287
	(0.0140)	(0.0701)	(0.0122)	(0.0428)	(0.0101)	(0.0353)	(0.0107)	(0.0366)	(0.0103)	(0.0344)
L4. NAT_LEG			0.0684***	0.0684	-0.00444	-0.00444	0.00869	0.00869	0.00647	0.00647
			(0.0161)	(0.0632)	(0.0106)	(0.0341)	(0.00892)	(0.0222)	(0.00929)	(0.0289)
L5. NAT_LEG					0.0778***	0.0778	-0.0190	-0.0190	0.00862	0.00862
					(0.0226)	(0.0615)	(0.0139)	(0.0345)	(0.0138)	(0.0217)
L6. NAT_LEG							0.117***	0.117*	-0.0422**	-0.0422
							(0.0173)	(0.0678)	(0.0150)	(0.0849)
L7. NAT_LEG									0.226***	0.226***
									(0.0273)	(0.0798)
Constant	12.49***	(0)	11.91***	(0)	11.19***	-5.017	9.672***	0	5.336*	0
	(2.583)	(0)	(2.627)	(0)	(2.672)	(3.792)	(2.728)	(0)	(2.835)	(0)
Observations	6,029	6,029	6,010	6,010	5,991	5,991	5,972	5,972	5,953	5,953
R-squared	0.500		0.502		0.504		0.506		0.510	
Number of States	20	20	20	20	20	20	20	20	20	20

Panel Clustered Standard Errors or Driscoll Kraay Errors in parentheses as indicated in the column heads
*** p<0.01, ** p<0.05, * p<0.1

Table F1. Expanded regression results for table 11.

	(1)	(2)	(3)	(4)	(7)	(5)	(6)	(7)	(8)	(9)
VARIABLES	C-SE	DK	C-SE	DK	C-SE	DK	C-SE	DK	C-SE	DK
L.ST_LEG	-0.0226	-0.0226	-0.0222	-0.0222	-0.0217	-0.0217	-0.0229	-0.0229	-0.0220	-0.0220
	(0.0182)	(0.0151)	(0.0181)	(0.0151)	(0.0181)	(0.0151)	(0.0184)	(0.0151)	(0.0184)	(0.0152)
L2. ST_LEG	-0.00765	-0.00765	-0.00734	-0.00734	-0.00731	-0.00731	-0.00552	-0.00552	-0.00819	-0.00819
	(0.00744)	(0.0115)	(0.00745)	(0.0115)	(0.00745)	(0.0115)	(0.00764)	(0.0116)	(0.00733)	(0.0115)
L3. ST_LEG	-0.0190***	-0.0190	-0.0141**	-0.0141	-0.0140**	-0.0140	-0.0139**	-0.0139	-0.0118**	-0.0118
	(0.00568)	(0.0119)	(0.00513)	(0.0114)	(0.00519)	(0.0113)	(0.00523)	(0.0113)	(0.00553)	(0.0117)
L4. ST_LEG	0.0160**	0.0160	0.0111	0.0111	0.0130*	0.0130	0.0130*	0.0130	0.0131*	0.0131
	(0.00720)	(0.0120)	(0.00658)	(0.0121)	(0.00648)	(0.0119)	(0.00649)	(0.0118)	(0.00647)	(0.0118)
L5. ST_LEG	-0.00113	-0.00113	-0.00142	-0.00142	-0.00339	-0.00339	-0.000696	-0.000696	-0.000698	-0.000698
	(0.00759)	(0.0126)	(0.00773)	(0.0126)	(0.00897)	(0.0131)	(0.00753)	(0.0128)	(0.00754)	(0.0127)
L6. ST_LEG	-0.0120	-0.0120	-0.0121	-0.0121	-0.0122	-0.0122	-0.0148	-0.0148	-0.0108	-0.0108
	(0.00759)	(0.0135)	(0.00765)	(0.0135)	(0.00765)	(0.0135)	(0.00868)	(0.0140)	(0.00753)	(0.0135)
L7. ST_LEG	0.0186*	0.0186	0.0179**	0.0179	0.0176*	0.0176	0.0175*	0.0175	0.0136	0.0136
	(0.00890)	(0.0160)	(0.00853)	(0.0160)	(0.00853)	(0.0160)	(0.00856)	(0.0159)	(0.00906)	(0.0158)
L8. ST_LEG	0.0402*	0.0402**	0.0180	0.0180	0.0146	0.0146	0.0144	0.0144	0.0140	0.0140
	(0.0228)	(0.0201)	(0.0144)	(0.0159)	(0.0143)	(0.0159)	(0.0143)	(0.0159)	(0.0142)	(0.0158)
L9. ST_LEG			0.0239	0.0239	-0.00122	-0.00122	-0.00548	-0.00548	-0.00539	-0.00539
			(0.0219)	(0.0201)	(0.0107)	(0.0156)	(0.0103)	(0.0161)	(0.0103)	(0.0162)
L10. ST_LEG					0.0299	0.0299	0.00246	0.00246	-0.00140	-0.00140
					(0.0190)	(0.0232)	(0.00693)	(0.0152)	(0.00727)	(0.0156)
L11. ST_LEG							0.0325	0.0325	0.0183*	0.0183
							(0.0199)	(0.0219)	(0.00878)	(0.0134)
L12. ST_LEG									0.0185	0.0185
									(0.0201)	(0.0196)
L.NAT_LEG	-0.0175	-0.0175	-0.0170	-0.0170	-0.0181	-0.0181	-0.0200	-0.0200	-0.0220	-0.0220
	(0.0230)	(0.0365)	(0.0230)	(0.0366)	(0.0231)	(0.0369)	(0.0231)	(0.0374)	(0.0233)	(0.0379)
L2. NAT_LEG	0.0502***	0.0502**	0.0505***	0.0505**	0.0507***	0.0507**	0.0510***	0.0510**	0.0511***	0.0511**
	(0.00859)	(0.0220)	(0.00884)	(0.0221)	(0.00888)	(0.0222)	(0.00889)	(0.0223)	(0.00889)	(0.0225)
L3. NAT_LEG	0.0293**	0.0293	0.0290***	0.0290	0.0295***	0.0295	0.0295***	0.0295	0.0297***	0.0297
	(0.0103)	(0.0331)	(0.0101)	(0.0330)	(0.0103)	(0.0333)	(0.0103)	(0.0334)	(0.0103)	(0.0337)
L4. NAT_LEG	0.00596	0.00596	0.00621	0.00621	0.00558	0.00558	0.00616	0.00616	0.00613	0.00613
	(0.00911)	(0.0286)	(0.00912)	(0.0283)	(0.00888)	(0.0281)	(0.00912)	(0.0284)	(0.00913)	(0.0284)
L5. NAT_LEG	0.00479	0.00479	0.00448	0.00448	0.00487	0.00487	0.00428	0.00428	0.00461	0.00461
	(0.0134)	(0.0239)	(0.0134)	(0.0237)	(0.0135)	(0.0234)	(0.0135)	(0.0233)	(0.0135)	(0.0233)
L6. NAT_LEG	-0.0211	-0.0211	-0.0224	-0.0224	-0.0226	-0.0226	-0.0224	-0.0224	-0.0225	-0.0225
	(0.0147)	(0.0654)	(0.0141)	(0.0673)	(0.0142)	(0.0670)	(0.0142)	(0.0668)	(0.0142)	(0.0667)
L7. NAT_LEG	0.113***	0.113*	0.116***	0.116*	0.113***	0.113*	0.114***	0.114*	0.114***	0.114*
	(0.0211)	(0.0586)	(0.0194)	(0.0644)	(0.0202)	(0.0667)	(0.0202)	(0.0666)	(0.0201)	(0.0664)
L8. NAT_LEG	0.181***	0.181**	0.178***	0.178**	0.185***	0.185**	0.185***	0.185**	0.184***	0.184**
	(0.0204)	(0.0708)	(0.0196)	(0.0839)	(0.0167)	(0.0737)	(0.0169)	(0.0722)	(0.0167)	(0.0724)
L9. NAT_LEG			0.00160	0.00160	-0.0144	-0.0144	-0.0207	-0.0207	-0.0214	-0.0214
			(0.0220)	(0.0762)	(0.0168)	(0.0670)	(0.0161)	(0.0670)	(0.0162)	(0.0674)
L10. NAT_LEG					0.0146	0.0146	0.0878***	0.0878	0.0778***	0.0778
					(0.0243)	(0.0871)	(0.0142)	(0.0678)	(0.0148)	(0.0701)
L11. NAT_LEG							-0.0709***	-0.0709	0.0216**	0.0216
							(0.0169)	(0.0689)	(0.00851)	(0.0453)
L12. NAT_LEG									-0.0912***	-0.0912
									(0.0187)	(0.0757)
Constant	1.304	-14.94***	1.222	0	1.061	0	0.951	-15.07***	1.115	-14.60***
	(3.050)	(2.903)	(3.058)	(0)	(3.047)	(0)	(3.023)	(3.866)	(3.000)	(4.103)
Observations	5,934	5,934	5,914	5,914	5,894	5,894	5,875	5,875	5,856	5,856
R-squared	0.514		0.513		0.513		0.513		0.514	
Number of States	20	20	20	20	20	20	20	20	20	20

Panel Clustered Standard Errors or Driscoll Kraay Errors in parentheses as indicated in the column heads

*** p<0.01, ** p<0.05, * p<0.1

Table F2. Expanded regression results for table 12.

VARIABLES	(1)	(2)	(3)	(4)	(7)	(5)	(6)	(7)	(8)	(9)
L.ST_LEG	-0.0194	-0.0215	-0.0191	-0.0225	-0.0187	-0.0226	-0.0184	-0.0232	-0.0186	-0.0167
	(0.0223)	(0.0246)	(0.0223)	(0.0250)	(0.0223)	(0.0250)	(0.0224)	(0.0251)	(0.0224)	(0.0249)
L2. ST_LEG	-0.0123	0.00826	-0.0122	-0.00367	-0.0123	-0.00472	-0.0123	-0.00477	-0.0123	-0.0118
	(0.0133)	(0.0166)	(0.0133)	(0.0172)	(0.0134)	(0.0174)	(0.0134)	(0.0175)	(0.0134)	(0.0183)
L3. ST_LEG	0.00132	0.0541*	-0.0176	0.000232	-0.0175	-0.0115	-0.0178	-0.0127	-0.0177	-0.0133
	(0.0195)	(0.0292)	(0.0130)	(0.0178)	(0.0129)	(0.0186)	(0.0130)	(0.0190)	(0.0130)	(0.0191)
L4. ST_LEG			0.0197	0.0687**	0.0217	0.0219	0.0220	0.0112	0.0214	0.0109
			(0.0187)	(0.0343)	(0.0198)	(0.0243)	(0.0198)	(0.0235)	(0.0199)	(0.0235)
L5. ST_LEG					-0.00150	0.0612*	-0.00908	0.0156	-0.00863	0.00823
					(0.0216)	(0.0354)	(0.0162)	(0.0222)	(0.0160)	(0.0219)
L6. ST_LEG							0.00843	0.0593*	-0.00611	-0.00896
							(0.0233)	(0.0332)	(0.0134)	(0.0227)
L7. ST_LEG									0.0160	0.0794**
									(0.0227)	(0.0378)
L.NAT_LEG	-0.00560	-0.0381	-0.00586	-0.0387	-0.00555	-0.0396	-0.00441	-0.0395	-0.00158	-0.0360
	(0.0557)	(0.0466)	(0.0553)	(0.0462)	(0.0554)	(0.0457)	(0.0543)	(0.0438)	(0.0493)	(0.0393)
L2. NAT_LEG	0.0316	0.0535**	0.0367	0.0653***	0.0357	0.0645***	0.0353	0.0643***	0.0355	0.0627***
	(0.0450)	(0.0250)	(0.0433)	(0.0207)	(0.0426)	(0.0207)	(0.0419)	(0.0195)	(0.0372)	(0.0161)
L3. NAT_LEG	0.0456	0.113**	0.00987	0.0227	0.0160	0.0349	0.0150	0.0335	0.0153	0.0333
	(0.0991)	(0.0539)	(0.0645)	(0.0334)	(0.0594)	(0.0238)	(0.0603)	(0.0258)	(0.0579)	(0.0231)
L4. NAT_LEG			0.0372	0.0932*	-0.00828	0.00282	0.00201	0.0173	-0.000881	0.0155
			(0.0734)	(0.0543)	(0.0389)	(0.0279)	(0.0302)	(0.0139)	(0.0363)	(0.0220)
L5. NAT_LEG					0.0502	0.0967*	-0.0285	-0.00994	0.000213	0.0163
					(0.0702)	(0.0554)	(0.0405)	(0.0297)	(0.0299)	(0.0192)
L6. NAT_LEG							0.0968	0.128**	-0.0667	-0.0250
							(0.0774)	(0.0616)	(0.0944)	(0.0780)
L7. NAT_LEG									0.235**	0.215***
									(0.0950)	(0.0696)
Constant	-2.574	0	-2.952	-3.293	-3.477	0	0	0	-9.437**	-9.804***
	(3.421)	(0)	(3.772)	(3.273)	(4.150)	(0)	(0)	(0)	(4.108)	(2.840)
Observations	2,627	3,383	2,624	3,367	2,621	3,351	2,618	3,335	2,615	3,319
Number of States	16	17	16	17	16	17	16	17	16	17
State Coalition	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes

Panel Clustered Standard Errors or Driscoll Kraay Errors in parentheses as indicated in the column heads

*** p<0.01, ** p<0.05, * p<0.1

Table F3. Expanded regression results for table 13.

VARIABLES	(1)	(2)	(3)	(4)	(7)	(5)	(6)	(7)	(8)	(9)
L.ST_LEG	-0.0188	-0.0152	-0.0180	-0.0149	-0.0170	-0.0147	-0.0208	-0.0142	-0.0191	-0.0133
	(0.0224)	(0.0248)	(0.0225)	(0.0247)	(0.0225)	(0.0247)	(0.0247)	(0.0246)	(0.0246)	(0.0248)
L2. ST_LEG	-0.0123	-0.00383	-0.0123	-0.00292	-0.0123	-0.00284	-0.00690	-0.00273	-0.0135	-0.00324
	(0.0134)	(0.0169)	(0.0134)	(0.0167)	(0.0134)	(0.0167)	(0.0151)	(0.0166)	(0.0143)	(0.0166)
L3. ST_LEG	-0.0178	-0.0215	-0.0178	-0.0131	-0.0178	-0.0126	-0.0178	-0.0126	-0.0112	-0.0127
	(0.0130)	(0.0201)	(0.0130)	(0.0189)	(0.0131)	(0.0189)	(0.0131)	(0.0189)	(0.0154)	(0.0189)
L4. ST_LEG	0.0215	0.00999	0.0214	0.00142	0.0214	0.00405	0.0215	0.00421	0.0215	0.00420
	(0.0200)	(0.0232)	(0.0200)	(0.0233)	(0.0200)	(0.0233)	(0.0200)	(0.0233)	(0.0201)	(0.0232)
L5. ST_LEG	-0.00914	0.00733	-0.00915	0.00651	-0.00918	0.00354	-0.00921	0.00765	-0.00921	0.00792
	(0.0162)	(0.0220)	(0.0162)	(0.0221)	(0.0163)	(0.0230)	(0.0164)	(0.0224)	(0.0165)	(0.0222)
L6. ST_LEG	-0.00559	-0.0130	-0.00557	-0.0134	-0.00558	-0.0137	-0.00558	-0.0179	-0.00559	-0.0114
	(0.0133)	(0.0227)	(0.0133)	(0.0228)	(0.0133)	(0.0228)	(0.0134)	(0.0239)	(0.0136)	(0.0226)
L7. ST_LEG	0.00500	0.0317	0.00502	0.0296	0.00504	0.0294	0.00500	0.0292	0.00499	0.0229
	(0.0199)	(0.0229)	(0.0199)	(0.0231)	(0.0199)	(0.0232)	(0.0200)	(0.0229)	(0.0201)	(0.0230)
L8. ST_LEG	0.0127	0.0544	-0.0144	0.0363	-0.0145	0.0319	-0.0142	0.0310	-0.0142	0.0301
	(0.0315)	(0.0387)	(0.0187)	(0.0247)	(0.0188)	(0.0244)	(0.0189)	(0.0244)	(0.0190)	(0.0243)
L9. ST_LEG			0.0281	0.0213	-0.0161	0.00648	-0.0162	0.000743	-0.0159	0.000548
			(0.0257)	(0.0341)	(0.0249)	(0.0206)	(0.0248)	(0.0213)	(0.0249)	(0.0213)
L10. ST_LEG					0.0460**	0.0205	-0.0151	0.00826	-0.0153	0.00375
					(0.0223)	(0.0338)	(0.0207)	(0.0209)	(0.0208)	(0.0215)
L11. ST_LEG							0.0618***	0.0195	-0.00160	0.0261
							(0.0185)	(0.0298)	(0.0150)	(0.0192)
L12. ST_LEG									0.0644***	-0.00153
									(0.0196)	(0.0254)
L.NAT_LEG	-5.86e-05	-0.0317	0.000128	-0.0306	-0.000626	-0.0318	0.000444	-0.0351	0.00156	-0.0389
	(0.0466)	(0.0375)	(0.0465)	(0.0377)	(0.0465)	(0.0383)	(0.0464)	(0.0393)	(0.0461)	(0.0402)
L2. NAT_LEG	0.0353	0.0606***	0.0349	0.0612***	0.0351	0.0614***	0.0348	0.0619***	0.0348	0.0624***
	(0.0345)	(0.0142)	(0.0344)	(0.0143)	(0.0343)	(0.0146)	(0.0343)	(0.0147)	(0.0342)	(0.0150)
L3. NAT_LEG	0.0161	0.0325	0.0163	0.0323	0.0155	0.0330	0.0155	0.0331	0.0153	0.0332
	(0.0571)	(0.0224)	(0.0572)	(0.0224)	(0.0574)	(0.0226)	(0.0573)	(0.0227)	(0.0575)	(0.0230)
L4. NAT_LEG	-0.000841	0.0155	0.000761	0.0148	0.00104	0.0140	-5.90e-06	0.0145	-4.15e-06	0.0146
	(0.0362)	(0.0214)	(0.0356)	(0.0213)	(0.0359)	(0.0211)	(0.0363)	(0.0212)	(0.0363)	(0.0210)
L5. NAT_LEG	-0.00463	0.0133	-0.00640	0.0137	-0.00394	0.0136	-0.00348	0.0131	-0.00410	0.0128
	(0.0323)	(0.0198)	(0.0330)	(0.0194)	(0.0318)	(0.0192)	(0.0324)	(0.0191)	(0.0324)	(0.0188)
L6. NAT_LEG	-0.0434	-0.00556	-0.0419	-0.00804	-0.0443	-0.00776	-0.0409	-0.00834	-0.0408	-0.00770
	(0.0755)	(0.0577)	(0.0761)	(0.0605)	(0.0769)	(0.0602)	(0.0758)	(0.0601)	(0.0767)	(0.0601)
L7. NAT_LEG	0.116	0.110**	0.112	0.115**	0.112	0.114**	0.109	0.116**	0.112	0.115**
	(0.0762)	(0.0470)	(0.0825)	(0.0521)	(0.0861)	(0.0535)	(0.0865)	(0.0531)	(0.0854)	(0.0526)
L8. NAT_LEG	0.197**	0.167**	0.208**	0.155**	0.202**	0.174***	0.208**	0.171***	0.204**	0.172***
	(0.0825)	(0.0657)	(0.103)	(0.0724)	(0.0906)	(0.0657)	(0.0908)	(0.0622)	(0.0892)	(0.0628)
L9. NAT_LEG			-0.0120	0.0102	-0.000363	-0.0413	-0.0120	-0.0438	-0.00862	-0.0478
			(0.0813)	(0.0770)	(0.0959)	(0.0442)	(0.0955)	(0.0434)	(0.0962)	(0.0431)
L10. NAT_LEG					-0.0129	0.0521	0.0717	0.111*	0.0583	0.105*
					(0.100)	(0.0753)	(0.0783)	(0.0621)	(0.0799)	(0.0627)
L11. NAT_LEG							-0.0832	-0.0565	0.0178	0.0178
							(0.0739)	(0.0654)	(0.0475)	(0.0450)
L12. NAT_LEG									-0.101	-0.0720
									(0.0807)	(0.0728)
Constant	0	0	0	-13.62***	-13.75***	-14.46***	-13.79***	0	0	0
	(0)	(0)	(0)	(2.714)	(4.717)	(3.299)	(4.866)	(0)	(0)	(0)
Observations	2,612	3,303	2,609	3,286	2,606	3,270	2,603	3,254	2,600	3,238
Number of States	16	17	16	17	16	17	16	17	16	17
State Coalition	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes

Panel Clustered Standard Errors or Driscoll Kraay Errors in parentheses as indicated in the column heads

*** p<0.01, ** p<0.05, * p<0.1

Table F4. Expanded regression results for table 14.

VARIABLES	(1)	(2)	(3)	(4)	(7)	(5)	(6)	(7)	(8)	(9)
L.ST_LEG	-0.0151	-0.0767*	-0.0152	-0.0763*	-0.0150	-0.0763*	-0.0150	-0.0771*	-0.0151	-0.0663
	(0.0161)	(0.0448)	(0.0161)	(0.0446)	(0.0160)	(0.0444)	(0.0160)	(0.0443)	(0.0161)	(0.0466)
L2. ST_LEG	-0.0104	0.0206	-0.0128	0.00855	-0.0130	0.00887	-0.0129	0.00885	-0.0131	-0.00329
	(0.0143)	(0.0340)	(0.0149)	(0.0322)	(0.0149)	(0.0319)	(0.0149)	(0.0316)	(0.0150)	(0.0356)
L3. ST_LEG	0.0219	0.0653	-0.0110	-0.00608	-0.0122	-0.0179	-0.0125	-0.0177	-0.0124	-0.0176
	(0.0175)	(0.0416)	(0.0118)	(0.0334)	(0.0124)	(0.0312)	(0.0125)	(0.0310)	(0.0125)	(0.0308)
L4. ST_LEG			0.0369*	0.0858*	0.0182	0.0131	0.0173	0.00238	0.0168	0.00368
			(0.0197)	(0.0449)	(0.0151)	(0.0425)	(0.0153)	(0.0399)	(0.0154)	(0.0398)
L5. ST_LEG					0.0213	0.0868	0.00508	0.00156	0.00385	0.00175
					(0.0184)	(0.0536)	(0.0140)	(0.0347)	(0.0144)	(0.0331)
L6. ST_LEG							0.0187	0.0987*	-0.00720	-0.0255
							(0.0182)	(0.0519)	(0.0155)	(0.0340)
L7. ST_LEG									0.0296	0.128**
									(0.0212)	(0.0544)
L.NAT_LEG	-0.0378	-0.00759	-0.0391	-0.00668	-0.0388	-0.00859	-0.0377	-0.00798	-0.0354	-0.00489
	(0.0401)	(0.0551)	(0.0396)	(0.0551)	(0.0395)	(0.0551)	(0.0388)	(0.0530)	(0.0355)	(0.0470)
L2. NAT_LEG	0.0384	0.0493	0.0483	0.0586	0.0468	0.0600	0.0463	0.0580*	0.0467*	0.0579*
	(0.0292)	(0.0394)	(0.0305)	(0.0365)	(0.0290)	(0.0367)	(0.0288)	(0.0351)	(0.0261)	(0.0306)
L3. NAT_LEG	0.0537	0.117	-0.00991	0.0406	7.75e-05	0.0503	-0.00121	0.0516	-0.00126	0.0485
	(0.0611)	(0.0775)	(0.0397)	(0.0519)	(0.0325)	(0.0441)	(0.0330)	(0.0464)	(0.0312)	(0.0435)
L4. NAT_LEG			0.0646	0.0788	-0.00893	0.00441	0.00172	0.0182	-0.00128	0.0202
			(0.0540)	(0.0684)	(0.0353)	(0.0300)	(0.0270)	(0.0169)	(0.0323)	(0.0232)
L5. NAT_LEG					0.0788	0.0797	0.00119	-0.0296	0.0262	-0.00364
					(0.0520)	(0.0704)	(0.0218)	(0.0486)	(0.0296)	(0.0267)
L6. NAT_LEG							0.0942	0.131*	-0.0404	-0.0389
							(0.0636)	(0.0710)	(0.0692)	(0.0946)
L7. NAT_LEG									0.197***	0.238**
									(0.0592)	(0.0970)
Constant	-1.217	-4.579	-1.738	0	0	-6.126	0	0	0	0
	(2.803)	(3.635)	(3.037)	(0)	(0)	(4.342)	(0)	(0)	(0)	(0)
Observations	3,388	2,622	3,382	2,609	3,376	2,596	3,370	2,583	3,364	2,570
Number of States	19	16	19	16	19	16	19	16	19	16
Centre-State Coal.	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes

Panel Clustered Standard Errors or Driscoll Kraay Errors in parentheses as indicated in the column heads

*** p<0.01, ** p<0.05, * p<0.1

Table F5. Expanded regression results for table 15.

VARIABLES	(1)	(2)	(3)	(4)	(7)	(5)	(6)	(7)	(8)	(9)
L.ST_LEG	-0.0148	-0.0663	-0.0143	-0.0649	-0.0136	-0.0638	-0.0148	-0.0628	-0.0134	-0.0619
	(0.0162)	(0.0463)	(0.0163)	(0.0463)	(0.0165)	(0.0463)	(0.0167)	(0.0462)	(0.0170)	(0.0462)
L2. ST_LEG	-0.0131	0.0135	-0.0131	0.0132	-0.0130	0.0132	-0.0109	0.0132	-0.0148	0.0133
	(0.0150)	(0.0310)	(0.0149)	(0.0310)	(0.0149)	(0.0311)	(0.0151)	(0.0311)	(0.0150)	(0.0311)
L3. ST_LEG	-0.0127	-0.0336	-0.0128	-0.0170	-0.0130	-0.0171	-0.0129	-0.0170	-0.00984	-0.0169
	(0.0125)	(0.0333)	(0.0125)	(0.0310)	(0.0125)	(0.0310)	(0.0125)	(0.0310)	(0.0131)	(0.0311)
L4. ST_LEG	0.0168	0.00392	0.0169	-0.0127	0.0169	-0.00759	0.0167	-0.00786	0.0170	-0.00801
	(0.0154)	(0.0397)	(0.0153)	(0.0380)	(0.0153)	(0.0403)	(0.0153)	(0.0402)	(0.0152)	(0.0402)
L5. ST_LEG	0.00339	0.000787	0.00334	0.00115	0.00343	-0.00408	0.00352	0.00405	0.00325	0.00380
	(0.0145)	(0.0330)	(0.0144)	(0.0330)	(0.0144)	(0.0357)	(0.0143)	(0.0353)	(0.0143)	(0.0352)
L6. ST_LEG	-0.00870	-0.0225	-0.00888	-0.0227	-0.00895	-0.0228	-0.00873	-0.0314	-0.00861	-0.0182
	(0.0163)	(0.0329)	(0.0163)	(0.0331)	(0.0163)	(0.0332)	(0.0162)	(0.0362)	(0.0161)	(0.0352)
L7. ST_LEG	0.00269	0.0619*	-0.000435	0.0650*	-0.000894	0.0667*	-0.000991	0.0675*	-0.000734	0.0542
	(0.0214)	(0.0354)	(0.0217)	(0.0355)	(0.0215)	(0.0358)	(0.0215)	(0.0359)	(0.0213)	(0.0377)
L8. ST_LEG	0.0310	0.0657	-0.000821	0.0661	-0.00549	0.0606	-0.00584	0.0612	-0.00615	0.0616
	(0.0258)	(0.0410)	(0.0221)	(0.0411)	(0.0227)	(0.0395)	(0.0227)	(0.0395)	(0.0226)	(0.0395)
L9. ST_LEG			0.0366	-0.00345	-0.0113	0.0264	-0.0157	0.0189	-0.0155	0.0193
			(0.0265)	(0.0312)	(0.0231)	(0.0216)	(0.0238)	(0.0220)	(0.0237)	(0.0220)
L10. ST_LEG					0.0549*	-0.0262	0.00675	-0.0179	0.00269	-0.0273
					(0.0307)	(0.0274)	(0.0192)	(0.0259)	(0.0191)	(0.0265)
L11. ST_LEG							0.0541*	-0.00147	0.0150	0.0366
							(0.0285)	(0.0345)	(0.0176)	(0.0282)
L12. ST_LEG									0.0443*	-0.0300
									(0.0254)	(0.0349)
L.NAT_LEG	-0.0342	0.000334	-0.0339	0.00101	-0.0348	5.00e-05	-0.0347	-0.00263	-0.0339	-0.00597
	(0.0339)	(0.0434)	(0.0339)	(0.0433)	(0.0342)	(0.0438)	(0.0340)	(0.0443)	(0.0338)	(0.0451)
L2. NAT_LEG	0.0467*	0.0543*	0.0463*	0.0542*	0.0465*	0.0544*	0.0466*	0.0549*	0.0462*	0.0552*
	(0.0242)	(0.0277)	(0.0241)	(0.0280)	(0.0240)	(0.0284)	(0.0239)	(0.0284)	(0.0238)	(0.0285)
L3. NAT_LEG	-0.000298	0.0492	-1.95e-05	0.0497	-0.000811	0.0480	-0.000894	0.0480	-0.000735	0.0485
	(0.0297)	(0.0422)	(0.0299)	(0.0430)	(0.0298)	(0.0424)	(0.0297)	(0.0427)	(0.0299)	(0.0430)
L4. NAT_LEG	-0.00160	0.0188	-0.000465	0.0186	4.48e-05	0.0203	-0.000697	0.0199	-0.000773	0.0198
	(0.0318)	(0.0231)	(0.0315)	(0.0228)	(0.0317)	(0.0232)	(0.0318)	(0.0225)	(0.0318)	(0.0225)
L5. NAT_LEG	0.0220	-0.00552	0.0207	-0.00477	0.0222	-0.00508	0.0229	-0.00486	0.0225	-0.00659
	(0.0265)	(0.0323)	(0.0272)	(0.0314)	(0.0263)	(0.0310)	(0.0262)	(0.0311)	(0.0265)	(0.0300)
L6. NAT_LEG	-0.0214	-0.0179	-0.0199	-0.0226	-0.0210	-0.0223	-0.0194	-0.0229	-0.0190	-0.0213
	(0.0541)	(0.0726)	(0.0543)	(0.0769)	(0.0550)	(0.0775)	(0.0540)	(0.0776)	(0.0544)	(0.0784)
L7. NAT_LEG	0.104**	0.113*	0.0975*	0.125*	0.0952	0.127*	0.0938	0.130*	0.0951	0.130*
	(0.0520)	(0.0641)	(0.0569)	(0.0731)	(0.0590)	(0.0756)	(0.0595)	(0.0755)	(0.0588)	(0.0752)
L8. NAT_LEG	0.161***	0.192**	0.180**	0.163**	0.173**	0.197***	0.176**	0.192***	0.174**	0.196***
	(0.0612)	(0.0800)	(0.0876)	(0.0758)	(0.0770)	(0.0701)	(0.0774)	(0.0658)	(0.0769)	(0.0668)
L9. NAT_LEG			-0.0209	0.0307	-0.00541	-0.0597	-0.0136	-0.0607	-0.0116	-0.0677
			(0.0701)	(0.0850)	(0.0667)	(0.0519)	(0.0648)	(0.0545)	(0.0650)	(0.0544)
L10. NAT_LEG					-0.0168	0.0982	0.0476	0.164*	0.0347	0.166*
					(0.0722)	(0.0915)	(0.0470)	(0.0944)	(0.0486)	(0.0925)
L11. NAT_LEG							-0.0632	-0.0634	0.0384	-0.0167
							(0.0604)	(0.0872)	(0.0411)	(0.0514)
L12. NAT_LEG									-0.102	-0.0469
									(0.0723)	(0.0798)
Constant	-11.68***	0	0	0	-11.13***	-18.97***	0	0	0	0
	(2.735)	(0)	(0)	(0)	(3.452)	(3.923)	(0)	(0)	(0)	(0)
Observations	3,358	2,557	3,352	2,543	3,346	2,530	3,340	2,517	3,334	2,504
Number of States	19	16	19	16	19	16	19	16	19	16
Centre-State Coal.	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes

Panel Clustered Standard Errors or Driscoll Kraay Errors in parentheses as indicated in the column heads
*** p<0.01, ** p<0.05, * p<0.1

Table F6. Expanded regression results for table 16.

VARIABLES	(1)	(2)	(3)	(4)	(7)	(5)	(6)	(7)	(8)	(9)
L.ST_LEG	-0.0275	0.0105	-0.0275	0.0134	-0.0273	0.0152	-0.0276	0.0166	-0.0229	0.0163
	(0.0167)	(0.0473)	(0.0168)	(0.0476)	(0.0167)	(0.0478)	(0.0168)	(0.0478)	(0.0166)	(0.0476)
L2. ST_LEG	-0.00361	0.00342	-0.00637	-0.0182	-0.00662	-0.0175	-0.00658	-0.0176	-0.0116	-0.0176
	(0.00936)	(0.0450)	(0.00983)	(0.0415)	(0.00990)	(0.0414)	(0.00993)	(0.0412)	(0.0110)	(0.0410)
L3. ST_LEG	0.0268*	0.0338	-0.0143	0.0188	-0.0160	-0.00168	-0.0163	-0.000904	-0.0167	-0.000930
	(0.0158)	(0.0673)	(0.0109)	(0.0425)	(0.0114)	(0.0371)	(0.0116)	(0.0368)	(0.0117)	(0.0364)
L4. ST_LEG			0.0458***	0.0381	0.0191	0.0252	0.0178	0.00592	0.0177	0.00642
			(0.0173)	(0.0717)	(0.0145)	(0.0495)	(0.0148)	(0.0453)	(0.0149)	(0.0448)
L5. ST_LEG					0.0300	0.0345	0.00468	0.0150	0.00313	0.0111
					(0.0185)	(0.0748)	(0.0133)	(0.0478)	(0.0135)	(0.0453)
L6. ST_LEG							0.0287	0.0399	-0.00615	-0.0296
							(0.0195)	(0.0607)	(0.0141)	(0.0419)
L7. ST_LEG									0.0390*	0.0763
									(0.0220)	(0.0613)
L.NAT_LEG	-0.0260	-0.0218	-0.0265	-0.0225	-0.0265	-0.0225	-0.0253	-0.0216	-0.0226	-0.0174
	(0.0461)	(0.0488)	(0.0456)	(0.0479)	(0.0455)	(0.0479)	(0.0444)	(0.0466)	(0.0401)	(0.0411)
L2. NAT_LEG	0.0421	0.0456	0.0528*	0.0553*	0.0517*	0.0541*	0.0509*	0.0537*	0.0512**	0.0533**
	(0.0292)	(0.0348)	(0.0279)	(0.0331)	(0.0272)	(0.0327)	(0.0267)	(0.0314)	(0.0232)	(0.0269)
L3. NAT_LEG	0.0773	0.100	-0.000600	0.0330	0.0106	0.0423	0.00977	0.0407	0.00956	0.0392
	(0.0657)	(0.0749)	(0.0475)	(0.0466)	(0.0375)	(0.0396)	(0.0384)	(0.0420)	(0.0372)	(0.0387)
L4. NAT_LEG			0.0793	0.0700	-0.0135	0.0106	-0.00101	0.0240	-0.00326	0.0228
			(0.0555)	(0.0669)	(0.0357)	(0.0306)	(0.0254)	(0.0170)	(0.0314)	(0.0245)
L5. NAT_LEG					0.0994*	0.0645	-0.00235	-0.0252	0.0248	-6.55e-05
					(0.0563)	(0.0672)	(0.0244)	(0.0510)	(0.0343)	(0.0276)
L6. NAT_LEG							0.123*	0.108	-0.0303	-0.0483
							(0.0697)	(0.0669)	(0.0804)	(0.0868)
L7. NAT_LEG									0.222***	0.220**
									(0.0694)	(0.0913)
Constant	0	8.794*	0	0	-5.026	7.193	-6.616	0	0	0
	(0)	(4.551)	(0)	(0)	(3.723)	(5.093)	(4.218)	(0)	(0)	(0)
Observations	4,060	1,950	4,051	1,940	4,042	1,930	4,033	1,920	4,024	1,910
Number of States	18	14	18	14	18	14	18	14	18	14
Regional Party	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes

Panel Clustered Standard Errors or Driscoll Kraay Errors in parentheses as indicated in the column heads

*** p<0.01, ** p<0.05, * p<0.1

Table F7. Expanded regression results for table 17.

VARIABLES	(1)	(2)	(3)	(4)	(7)	(5)	(6)	(7)	(8)	(9)
L.ST_LEG	-0.0224	0.0169	-0.0222	0.0192	-0.0217	0.0202	-0.0229	0.0187	-0.0217	0.0195
	(0.0166)	(0.0474)	(0.0167)	(0.0473)	(0.0168)	(0.0475)	(0.0172)	(0.0472)	(0.0173)	(0.0476)
L2. ST_LEG	-0.00578	-0.0176	-0.00533	-0.0177	-0.00527	-0.0177	-0.00334	-0.0160	-0.00617	-0.0181
	(0.00956)	(0.0408)	(0.00942)	(0.0408)	(0.00941)	(0.0409)	(0.00968)	(0.0410)	(0.00950)	(0.0410)
L3. ST_LEG	-0.0226*	-0.000946	-0.0165	-0.000963	-0.0164	-0.00101	-0.0163	-0.00110	-0.0140	0.000598
	(0.0129)	(0.0359)	(0.0115)	(0.0358)	(0.0115)	(0.0358)	(0.0115)	(0.0358)	(0.0120)	(0.0358)
L4. ST_LEG	0.0172	0.00657	0.0111	0.00656	0.0133	0.00657	0.0134	0.00653	0.0136	0.00645
	(0.0148)	(0.0443)	(0.0148)	(0.0442)	(0.0147)	(0.0442)	(0.0146)	(0.0442)	(0.0146)	(0.0442)
L5. ST_LEG	0.00265	0.0102	0.00208	0.0105	-9.87e-05	0.0105	0.00310	0.0104	0.00322	0.0104
	(0.0136)	(0.0450)	(0.0136)	(0.0449)	(0.0140)	(0.0449)	(0.0137)	(0.0449)	(0.0136)	(0.0449)
L6. ST_LEG	-0.00699	-0.0299	-0.00709	-0.0299	-0.00731	-0.0301	-0.0104	-0.0302	-0.00539	-0.0302
	(0.0144)	(0.0402)	(0.0144)	(0.0403)	(0.0144)	(0.0404)	(0.0150)	(0.0404)	(0.0144)	(0.0404)
L7. ST_LEG	0.0166	0.0353	0.0145	0.0330	0.0143	0.0351	0.0140	0.0358	0.00909	0.0363
	(0.0181)	(0.0380)	(0.0185)	(0.0391)	(0.0184)	(0.0394)	(0.0183)	(0.0395)	(0.0184)	(0.0396)
L8. ST_LEG	0.0251	0.0454	0.00505	0.0722	0.00272	0.0629	0.00257	0.0646	0.00184	0.0653
	(0.0243)	(0.0617)	(0.0189)	(0.0466)	(0.0192)	(0.0445)	(0.0191)	(0.0445)	(0.0189)	(0.0447)
L9. ST_LEG			0.0233	-0.0243	-0.000411	0.000184	-0.00317	-0.0117	-0.00304	-0.0106
			(0.0215)	(0.0510)	(0.0180)	(0.0372)	(0.0187)	(0.0369)	(0.0187)	(0.0370)
L10. ST_LEG					0.0276	-0.0173	-0.00204	-0.0184	-0.00478	-0.0346
					(0.0217)	(0.0501)	(0.0157)	(0.0399)	(0.0159)	(0.0393)
L11. ST_LEG							0.0334	0.0117	0.00497	0.0668*
							(0.0227)	(0.0485)	(0.0145)	(0.0394)
L12. ST_LEG									0.0322	-0.0417
									(0.0227)	(0.0450)
L.NAT_LEG	-0.0200	-0.0154	-0.0197	-0.0149	-0.0209	-0.0155	-0.0228	-0.0176	-0.0249	-0.0192
	(0.0383)	(0.0386)	(0.0382)	(0.0389)	(0.0386)	(0.0394)	(0.0386)	(0.0398)	(0.0391)	(0.0399)
L2. NAT_LEG	0.0504**	0.0530**	0.0512**	0.0529**	0.0512**	0.0529**	0.0518**	0.0531**	0.0517**	0.0532**
	(0.0210)	(0.0248)	(0.0207)	(0.0252)	(0.0209)	(0.0255)	(0.0212)	(0.0251)	(0.0217)	(0.0249)
L3. NAT_LEG	0.0100	0.0393	0.00961	0.0394	0.0105	0.0394	0.0102	0.0394	0.0104	0.0398
	(0.0361)	(0.0379)	(0.0358)	(0.0380)	(0.0365)	(0.0381)	(0.0368)	(0.0380)	(0.0370)	(0.0379)
L4. NAT_LEG	-0.00328	0.0221	-0.00297	0.0218	-0.00403	0.0219	-0.00287	0.0219	-0.00314	0.0216
	(0.0314)	(0.0238)	(0.0310)	(0.0239)	(0.0307)	(0.0238)	(0.0313)	(0.0239)	(0.0313)	(0.0241)
L5. NAT_LEG	0.0206	-0.00252	0.0196	-0.000831	0.0205	-0.00116	0.0196	-0.00104	0.0211	-0.00102
	(0.0311)	(0.0344)	(0.0312)	(0.0333)	(0.0309)	(0.0331)	(0.0312)	(0.0331)	(0.0309)	(0.0332)
L6. NAT_LEG	-0.0107	-0.0275	-0.00847	-0.0333	-0.00866	-0.0328	-0.00756	-0.0338	-0.00800	-0.0339
	(0.0642)	(0.0648)	(0.0638)	(0.0699)	(0.0639)	(0.0703)	(0.0630)	(0.0710)	(0.0623)	(0.0713)
L7. NAT_LEG	0.123**	0.0960	0.114*	0.111	0.113*	0.112	0.111*	0.115	0.111*	0.116
	(0.0571)	(0.0605)	(0.0610)	(0.0695)	(0.0628)	(0.0727)	(0.0624)	(0.0731)	(0.0615)	(0.0733)
L8. NAT_LEG	0.171***	0.188**	0.200**	0.147*	0.193**	0.176**	0.196**	0.171**	0.192**	0.175***
	(0.0612)	(0.0841)	(0.0891)	(0.0747)	(0.0767)	(0.0700)	(0.0763)	(0.0660)	(0.0755)	(0.0672)
L9. NAT_LEG			-0.0326	0.0457	-0.0198	-0.0264	-0.0303	-0.0254	-0.0275	-0.0333
			(0.0741)	(0.0809)	(0.0618)	(0.0695)	(0.0612)	(0.0704)	(0.0613)	(0.0711)
L10. NAT_LEG					-0.0140	0.0775	0.0678	0.133	0.0541	0.134
					(0.0729)	(0.1000)	(0.0535)	(0.0896)	(0.0548)	(0.0922)
L11. NAT_LEG							-0.0803	-0.0535	0.0251	0.000566
							(0.0596)	(0.0822)	(0.0359)	(0.0604)
L12. NAT_LEG									-0.105	-0.0541
									(0.0658)	(0.0890)
Constant	-15.14***	-14.64***	0	0	0	0	0	0	-13.55***	-17.06***
	(3.161)	(3.297)	(0)	(0)	(0)	(0)	(0)	(0)	(4.002)	(4.960)
Observations	4,015	1,900	4,006	1,889	3,997	1,879	3,988	1,869	3,979	1,859
Number of States	18	14	18	14	18	14	18	14	18	14
Regional Party	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes

Panel Clustered Standard Errors or Driscoll Kraay Errors in parentheses as indicated in the column heads

*** p<0.01, ** p<0.05, * p<0.1

Table F8. Expanded regression results for table 18.

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