

Federal Dimensions of India's Response to the Covid Pandemic

Challenging the Idea of the “Flailing State”

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Abstract

This paper examines India’s responses to the Covid-19 pandemic, from the perspective of its federal structures. It first summarizes different institutional components of India’s federal system. Next, it outlines the responses to the pandemic, both over time, and across different levels of government. The main contribution of the paper is a new evaluation of the federal dimensions of India’s governmental responses at different levels. It is argued that, while the national government did well in some respects, and there was considerable coordination across levels of government, there were key failures, both in the manner of the initial abrupt and drastic national lockdown in March 2020, and in the lack of preparation and national response to the deadlier second wave of the pandemic in 2021. By contrast, subnational governments, both state and local, did better than might have been expected, especially in the face of limited resources and information. It is argued that India’s pandemic experience contradicts the “flailing state” idea that was devised to explain the country’s governmental performance in recent decades. The paper also questions the applicability of the concept of “cooperative federalism” to the Indian case. It argues that India’s federal system proved quite resilient, but can be made more effective by strengthening capacity at the local level.

Keywords: Federalism, Covid-19, coronavirus, pandemic, India, centralization

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I Introduction

The Covid-19 pandemic that emerged globally in 2020 was the world's greatest public health crisis in a century. Compared to previous crises of this nature, technological advances enabled a rapid analysis of events as they unfolded, including collection and analysis of large amounts of data, instantaneous dissemination of results, global comparisons of policy and public health responses, and of the impacts of those responses, as well as of the pandemic itself. Tens of thousands of research papers and books have been written in a relatively short period of time.

Aside from purely epidemiological studies, numerous analyses focused on the policy responses of governments to the pandemic, and their economic and social impacts. In particular, non-pharmaceutical interventions (NPI) such as lockdowns and other mobility restrictions, social distancing guidelines, and mask mandates all had consequences beyond their primary goals of arresting the spread of the virus, reducing mortality rates, and protecting healthcare systems from overload or collapse. Within this category of studies of policy responses, the specific impact of federal structures of governance in countries with such systems also received concentrated attention (e.g., Chattopadhyay, et al., (eds.), 2022; Greer, et al. (eds.), 2021; Steytler (ed.), 2022), including countries across a range of levels of income and economic development.

Broadly, federal systems have some constitutionally-protected spheres of autonomy for subnational governments, distinguishing them from other tiered systems of governance. Key dimensions along which federal systems can vary include:

- the assignment of powers to different levels of government, including revenue-raising and expenditure authorities;
- the organization of bureaucracies at each level;
- accountability mechanisms at each level, such as elections and referendums; and
- mechanisms for adjudication or bargaining between different levels, or across subnational units, including formal and informal political and administrative institutions, as well as the courts.¹

The three compilations referenced above captured the experience of the first year or so of the pandemic.² Chattopadhyay, et al. (2022) emphasize the complexity of federal vs. unitary systems of governance, the resulting importance of intergovernmental cooperation in circumstances such as the pandemic, and the great variation in effectiveness of that cooperation across their 24 case studies. They classify the cases into three categories: national dominance, strong collaboration across levels, and weak collaboration across levels.

Across all the case studies, some of the common threads that they identify are a centralizing impulse initially, denser interaction among political leaders, an emergence of local governments as key actors, erosion of subnational fiscal capacity, and a certain degree of resilience of the existing structures of governance. Arguably, these common threads are broadly consistent with what might be viewed as a typical response to a sudden and pervasive crisis.

The cases in Steytler (ed.) (2022) provide a broadly similar set of lessons. With respect to intergovernmental relations (Saunders, 2022), there was variation in the degree of central dominance, structures that were too top-down ran into problems, formal consultation and coordination mechanisms did not always get used, and institutional and fiscal capacities – which mattered at all levels -- came under stress, as did transparency and accountability. In all of this variety, geography, size, and level of development all were important contextual factors.

Steytler (2022) further notes the importance of the details of political institutions, such as the nature of party systems, and how divisions associated with diversity were overcome or exacerbated, depending on the initial extent of inequality and polarization. On the whole, federal structures bent but did not break under the strain of dealing with the pandemic, despite some national government overreach, including pressures on democratic institutions such as legislatures. Other components of government, such as legal and judicial systems, also held up fairly well, despite the novelty of some of the challenges posed by pandemic-induced policy responses.

Greer et al. (ed.) (2021) look at a somewhat broader set of cases than the two just discussed, since they consider political systems and politics more generally, beyond cases involving formal federations. One might argue that highly centralized federations such as Russia are not much different from unitary states, so greater breadth of cases might not expand significantly the set of outcomes and lessons. Greer, et al. do go beyond issues of structures of levels of governance, to analyse the interaction of health policies and social policies.³ At the same time, they note that this interaction became more challenging in federal systems “because of the different allocations of health and social policy authority to governments on different levels.” (p. 617)

They also argue that authoritarian regimes did not do better than democratic ones in handling the pandemic response, which has some of the same tenor as findings that centralization was harmful beyond a point. Indeed, decentralization appeared to support experimentation and resilience, as some theories of governance and federalism would suggest.

The case of India is included in all three collections, but with varying assessments of how policy responses played out in that country. Therefore, one contribution of this paper will be to provide a fresh evaluation of the Indian experience in the context of its federal institutions and structures. To do so, we will draw on a variety of India-specific studies that include considerations of governance and the nature of policy responses. The next two sections lay the groundwork for this evaluation, with summary accounts of India's federal institutions, and of the response to the Covid pandemic over time, across different levels of government and different geographies.

The fourth section is the main contribution of this paper, considering the different federal dimensions of India's responses to the pandemic, and providing a fresh evaluation of those policies and their implementation. Our case is that India's federal institutions were relatively resilient, especially at the subnational level.

In particular, we argue that the responses to the pandemic at different levels of government lead one to challenge, or even reject, the concept of a “flailing state” introduced by Pritchett (2009).⁴

Pritchett argued “*that India is today a flailing state – a nation-state in which the head, that is the elite institutions at the national (and in some states) level remain sound and functional but that this head is no longer reliably connected via nerves and sinews to its own limbs.*” He described a situation in which “*the everyday actions of the field level agents of the state – policemen, engineers, teachers, health workers – are increasingly beyond the control of the administration at the national or state level.*” His prime example was of India’s health system, where he argued that elaborate official accounts of the country’s health system, including falling immunization coverage and slow reductions in infant mortality.

By contrast, India’s response to a health crisis displayed a very different form of subnational response, one which was superior to that of the centre in many respects, though not uniformly so. The final section offers a summary conclusion, including these perspectives on the so-called flailing state in the context of India’s overall federal system and the challenges it faces.

II India’s Federal Institutions⁵

India has a constitutionally mandated federal system, as part of a democratic political system. There are direct first-past-the post elections to the “lower” or people’s house (Lok Sabha) of the national parliament, and to the legislative assemblies (“lower” houses) of the states, which are the main subnational units of the federation. The national government is typically referred to as the Union or central government, and almost never as the federal government. The national parliament also has an indirectly elected “upper” or states’ house (Rajya Sabha), for which the voters are the members of the state legislatures, rather than individual citizens. The Lok Sabha is dominant in terms of the conduct of parliamentary legislative business, with the prime minister, the head of government, typically being a member of that body.⁶ State governments are led by chief ministers.

The nation also has a formal head of state, the president, who is indirectly elected by members of the national parliament and state legislatures. The presidency is mostly a ceremonial office, but it has some constitutional powers that can be, and have been, exercised in rare circumstances. Each state also has a corresponding titular head, with the title of governor. Governors are appointed by the central government, and often act as agents of the centre, in circumstances such as contests over legislative majorities at the state level, or when the state legislature is suspended. In such circumstances, there can be “governor’s rule,” or, more commonly “president’s rule,” but in both cases, the governor acts as the agent and ally of the national government in controlling the state administration. There are some centrally-administered subnational units, called union territories, which are headed by lieutenant governors. Finally, the national capital territory of Delhi is in a category of its own, and has a chief minister and an elected legislature.⁷

The population scale of India needs to be kept in mind when considering its federal structures. Its most populous state, Uttar Pradesh, is close to Brazil in terms of the number of people, though

covering a much smaller area. Even a smaller state like Punjab has a population greater than that of Australia. India's four most populous states together have more people than the European Union.

Administrative units below the state level include districts, of which there are over 750, which may be further sub-divided into blocks, as well as villages, towns, cities. Since the early 1990s, local government forms a third tier of governance with its own constitutional status, in terms of definition of jurisdictions, expenditure and revenue authorities, and elected representatives. However, local governments remain under the constitutional authority of state governments, which constrains their autonomy in practice.

Overall, India is a relatively centralized federal system, from two perspectives.

- Purely politically, the constitutional arrangements endow the centre with considerable overarching powers. For example, it is relatively easy for the central government to reshape state boundaries, at least legislatively, if not always politically. States have been divided and merged at various times in India's seven decades as a constitutional republic. Most recently, Jammu & Kashmir was stripped of its status as a state, and reclassified as a union territory, with its northeast region of Ladakh being separated as a union territory on its own. At various times, the central government has also used president's rule quite liberally, for purely political reasons as well as concerns about internal security.
- The other dimension of centralization is in fiscal matters. The mismatch between expenditure and revenue authorities at the state level has meant that the states rely on transfers from the central government for as much as half their budgets. Some of these transfers are formulaic tax sharing, but others are more or less discretionary. The fiscal imbalance between the states and local governments is much more severe, making the latter functionally quite weak in many respects.

Various informal and institutional mechanisms for managing intergovernmental relations have been used in India at different times. Overlapping political authorities at the central and state levels have often been dealt with through intra-party bargaining. More recently, explicit bargaining and discussion have occurred through the Inter-State Council (ISC), which was created in 1990, as a forum where some political and economic issues of joint concern can be collectively discussed and possibly resolved.⁸ In practice, the ISC also reflects some aspects of intra-party hierarchies, depending on the extent to which the ruling party at the centre and various states is the same.

India's relative political centralization is also reflected in bureaucratic and judicial institutions. The national Indian bureaucracy is provided constitutional recognition. There are also provisions for independent bureaucracies in each state. However, the key component of the bureaucracy is the Indian Administrative Service (IAS), whose members are chosen by a centralized process and trained together. They are initially assigned to particular states, and may serve varying proportions of their careers at the state and national levels.

There are various perspectives on the effectiveness of the bureaucracy, with increasing concerns about competence and corruption leading to active consideration of civil service reform. However,

bureaucratic functioning in India is relatively transparent and rule-bound. The Indian Police Service (IPS) is another important component of the bureaucracy, with national and state level presence. Both the IAS and IPS can augment their ranks laterally by appointment from the state civil services – for the IAS, such appointments accounted for slightly more than a quarter of its total strength in 2021.

The judiciary is a constitutionally distinct branch of government at both national and state levels, though the legislative/executive branch exerts influence through appointments and budget allocations. At the local level, IAS members are vested with some judicial authority. The Supreme Court, at the top of the judicial hierarchy, has powers that include broad original and appellate jurisdiction, and the right to rule on the constitutionality of laws passed by the national parliament.

There have been disputes between the Supreme Court and the central government over the scope of these powers, but in specific issues of center-state relations concerning taxation and property rights, the basic centralizing features of the constitution have tended to tilt the Court's interpretations towards the centre.⁹ Recently, the Court has also tended to engage in some forms of judicial activism in enforcing laws, even at the local level. At the state level, below the Supreme Court, the High Courts superintend the work of all courts within the state, including district and other subordinate courts, but they have relatively little say in matters involving federal relations.

III Response to the Covid Pandemic¹⁰

India's first case of Covid-19 was recorded at the end of January, 2020, in Kerala. The initial response of the national government was one of warnings and monitoring of international arrivals, but the implementation has been characterized as inadequate (A.K. Singh, 2022). Very few cases were reported in the country throughout February, but in March, the pandemic's presence in India started to become more apparent. Meanwhile, Kerala and some other states had begun to declare social distancing rules and guidelines, but enforcement was spotty.

On March 14th, after the number of confirmed cases crossed 100, the central government declared a national health emergency. This was followed by a curfew on March 22, and then the well-known total lockdown, announced with just a few hours' warning, on March 24. This action halted almost all economic activity, and mobility of any kind, including domestic road, rail and air transport, in addition to finally halting international passenger flights.

Both the centre and the states were acting under legislative frameworks involving governmental response mechanisms for epidemics and for disasters of any kind. These emergency response mechanisms override some of India's constitutional assignments, in which health is a state subject; this means that once the central government asserted its authority, state governments were required to follow its lead.

At the time of the initial lockdown, there were still only about 500 cases, and cases and deaths both remained low for some time thereafter. The initial lockdown was for three weeks, but it was extended in stages, through the end of May, when a phased relaxation began. Whereas the initial lockdown had

been uniformly severe, by this time, the states were initially given somewhat more autonomy, particularly in the pace and details of their “unlocking.” It has also been argued the states had more say in the prolonging of the lockdown after the initial phase, through regular meetings of the prime minister and chief ministers.

As the restrictions began to be eased, beginning somewhat in late May, though more so in June, case counts and deaths began to rise. At first, these trends followed exponential curves, but they began to flatten in July and August, and cases and deaths peaked in September, declining thereafter, and reaching relatively low levels by the beginning of 2021. By this time, multiple Covid vaccines had been created, and began to be administered in India as well as many other countries.

India's ability to create and produce vaccines domestically gave it an advantage over many other developing countries, and the national government even began promising to send vaccine doses to other nations. Complacency, and even triumphalism on the part of the central government at this time, marked by allowing numerous large religious and political gatherings, was destroyed by a new variant that led to a much more rapid rise in cases and deaths, beginning in March 2021 and peaking in May.

These peaks were more than four times as high as the 2020 peak, and it is likely that the overwhelming of the healthcare system at this time led to an increasingly severe undercounting of cases and deaths.¹¹ Despite the far greater severity of India's second wave, there was no national lockdown, and there was much greater reliance on state and local containment through curfews, mobility restrictions, and other social distancing measures.

The reason for not repeating the approach taken in the first lockdown was, of course, the severe negative economic consequences that it had. In addition to the reduction in overall economic activity (among the largest declines among all countries), the first national lockdown was particularly harsh for vulnerable populations, especially migrant workers. They were initially trapped without access to social services, since transport systems were abruptly shut down, and then, even when they could return to their places of origin, remained in economically precarious situations, since conditions in those places had led to their migration for work in the first place. There has been ample criticism of the initial lockdown on the dimension of impacts on migrants and other vulnerable population segments.¹²

Another reason for not repeating the style and substance of the initial lockdown in response to the second coronavirus wave was that many state and local governments had proved themselves in the face of the first shock. While the central government forced Kerala to reverse some of its relaxation of restrictions in April 2020, it soon became apparent that the pandemic was spreading unevenly across the country, and that some kinds of restrictions had to be tailored to local or regional situations. In particular, as restrictions began to be relaxed, it was somehow easier for the central government to allow states and localities to be stricter than a national minimum, rather than seeming to flout a strict national mandate, which is what seemed to matter to the centre initially.

Throughout the pandemic, there were examples of state and local governments, along with nongovernmental organizations, dealing with specific conditions in their jurisdictions. In a large metropolitan city such as Mumbai, the interventions were at an even more local level, such as the much-discussed case of Dharavi, the city's large slum area. While infrastructure, specifically sanitation conditions, in such slums made control of the pandemic more difficult (Tandel et al., 2021), there was enough local organizational focus to prevent explosive spread of the virus in these vulnerable areas.

The variation in the pandemic across different parts of India, and over time, was substantial. To some extent, what this variation also illustrated was the difficulty of controlling its spread, despite competent administration. For example, Kerala, which was early on viewed as a model of how to use various kinds of restrictions, education, and social protection measures, suffered significantly more in the second wave.

In general, it was difficult throughout the pandemic to sort out the extent to which outcomes were determined by random or exogenous factors, versus intentional measures taken by governments. In the case of India, internal movements also made it difficult to ascribe responsibility. If migrants from multiple cities in various states were all transported together to rural areas in their home state, it would be difficult to determine how and from where a subsequent spike or outbreak might have arisen.¹³ Testing was difficult early in the pandemic, even in developed countries, and contact tracing was much more challenging than public health experts might have imagined – the scale of India and the complexity of social life meant that resources for contact tracing were typically inadequate.

Other aspects of the Indian response to the pandemic include the performance of the healthcare system, and the nature of government support measures. India's public sector spends relatively little on health, even allowing for its per capita income level, and there were legitimate concerns that the pandemic would overwhelm the healthcare system. There were many examples of this fear being borne out during the second wave, but on the whole the system held up reasonably well.

As in many other countries, extraordinary efforts by healthcare professionals, as well as support from volunteers, played a significant role in this outcome, though often at severe cost to those on the frontlines. Also, as was the case in many countries without strong publicly-provided healthcare (including rich countries such as the United States), the poor bore the brunt of the pandemic, in direct treatment of the disease, other healthcare forgone, and economic and personal costs.

India's social protection efforts were somewhat mixed. Some of the general support, such as loan relief for small businesses, was not always well targeted or adequate, reflecting already existing inequalities in access to finance. On the other hand, existing welfare programs such as subsidized or free wheat and rice through a public distribution system, and the national employment guarantee scheme, could be mobilized and adapted to deal with the crisis. The national government also created a range of emergency programs, that provided some support, though likely not enough for those at the bottom of the pyramid.¹⁴

IV Evaluating the Federal Dimensions of Response

With the broad contours of India's pandemic responses having been outlined, we turn to evaluation of the manner in which the country's federal structures shaped those responses. There has been some variation in emphasis, and perhaps even some implicit disagreement, among previous assessments of the interaction between India's federalism and the way in which the pandemic was handled. Therefore, one goal of this section is to provide a new analysis and an integrated perspective.

The three collections of country studies discussed in the introduction all offer views on the Indian experience, along with their cross-country analyses. Chattopadhyay et al. (eds.) (2022) include India among those countries that exhibited strong collaboration and coordination among levels of government, as opposed to national dominance or weak coordination. They explain that this is not to be equated with complete agreement on all matters, but with continual engagement, including disagreements that had to be resolved by the courts. They emphasize increased intergovernmental interactions during the crisis, and the fact that there was no suspension or destruction of federal institutions during this process: executive actions were used within the framework of the constitution and other legislative frameworks and found support from the courts.

Steytler (2022), in the concluding chapter of his edited collection, offers a different perspective, one which emphasizes India's centralizing trends before the pandemic, and the dominance of the national government throughout the crisis, including support from the courts when serious disagreements arose. Saunders (2022), in a companion concluding assessment in this collection, especially emphasizes the central government's initial lack of consultation with the states, and its tendency for unilateral actions throughout the crisis. Furthermore, Steytler notes that some of the laws used for executive action date back well over a century, to the colonial era. He also discusses broader political considerations, which we return to later in this section.

Greer, et al. (2021) emphasize the size of India, which can pose significant challenges to the effectiveness of a unitary state. They tend to unfavourably contrast the initial disconnect between national policies for containment and social protection, which had severe negative consequences for many citizens, with the resilience of later decentralized responses. They also note the majoritarian bias of India's democratic structures, which permit a relatively strong executive.

The different India-focused narratives of pandemic responses, including the studies that provide the foundations for the assessments offered in the three collections discussed above, tend to be supportive of critical views of the national government's actions. The drastic initial lockdown is a major reason for this critical view.

Choutagunta, et al. (2021) compare infection rates and mobility for different states through the end of June 2020, and find that both varied widely across the states, with no apparent correlation between them. In other words, the national lockdown was a blunt instrument, which had impacts based on subnational administrative capacity and interpretation,¹⁵ rather than achieving effective targeting of methods for controlling the spread of the virus. For example, after comparing the

experiences of several smaller north-eastern states, the authors conclude (p. 1293), “*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.*” Specific subnational factors that were neglected by national policy were existing infection rates, healthcare and social protection infrastructure,¹⁶ and population vulnerabilities, and in many cases, intra-state mobility restrictions could have been left up to the states to phase in and out.

When the lockdown began to be relaxed in June 2020, the problems of the manner in which it had been implemented led to greater flexibility and autonomy for the states, but mostly in the direction of retaining restrictions for longer than the national minimum. One example of flexibility was in the manner in which subnational areas were classified. An initial categorization of districts into “red,” “orange,” and “green” had proved to be of relatively limited utility in managing subnational variation in pandemic conditions, and this was replaced by the more elastic concept of containment zones, which could be much smaller, down to the size of neighbourhoods. This is a more natural approach from a public health point of view, but it is difficult to determine how this local flexibility affected the spread of the virus, which continued accelerating until the first wave peaked in September 2020.

The variations in policies, implementation, and impacts across and within India’s states, and over the course of the pandemic, makes it difficult to extract general patterns, but political factors often played a role.

- Despite Kerala’s relatively effective initial handling of the pandemic, political wrangling between the state and the centre, and between the ruling and opposition parties within the state, created complications (Chathukulam and Tharamangalam, 2021).
- West Bengal’s initial struggles with its pandemic response were similar to many other states, due to inadequate health infrastructure and access to PPEs. Subsequently, however, state assembly elections in March-April 2021 became a major factor, not only in campaigning, but also earlier, with relaxation of social distancing in the festival season to appeal to voters (Mahmood and Chakraborty, 2022).
- In Uttar Pradesh, on the other hand, it is argued (Roy, 2022) that ideological factors led to suboptimal policy measures and data suppression, rather than objective measures of state capacity being the binding constraint.
- Odisha, despite social indicators far behind those of Kerala, was initially projected as a success story, based on cooperation between the state government and local governments (Patnaik, et al., 2020), but once the nationwide lockdown was relaxed, the return of migrant workers from Gujarat quickly led to an explosion of cases, overwhelming the state (Sahoo and Kar, 2021).

The lack of definitive knowledge about prevalence in the absence of universal or large-scale random testing, uniform reporting and treatment of cases, and the actual adoption of mask-wearing and social distancing, or enforcement of mobility restrictions, all combined, also makes it difficult to offer a general evaluation of the balance between centralization and decentralization in the latter part of 2020.

Some sense of how this balance evolved can be derived from the case of Punjab, where the author had access to the detailed daily approach of the state government. Punjab had begun a process of governance reform prior to the pandemic, meant to improve the transparency and efficiency of government functioning. The impetus for this came from the chief minister and senior bureaucrats, with inputs from academia and non-profit organizations. A cadre of governance fellows had been created for this purpose, and this group was largely redirected toward helping to map the pandemic in the state, and track and guide government responses.

Partially as a legacy of its recent political history, Punjab has relatively weak local governments, and operates in a manner where the IAS and IPS are particularly significant in governance, even more so than is generally the case in India. In a sense, these elite bureaucracies were designed for the kinds of situations that managing a crisis or emergency would entail. These are command-and-control, top-down decisions. In a smaller, geographically compact, and economically relatively homogeneous state like Punjab, this model is quite effective for a crisis, if not necessarily for enhancing long-run growth. Given the chaos created by the national lockdown, the state bureaucracy responded fairly well.¹⁷

In the state government, the governance fellows helped to produce detailed daily status reports, tracking cases, disease outcomes, and testing levels across the states of India (allowing a continual benchmarking of Punjab with its peers). Within the state, cases were tracked by age and gender, and by district. Helpline calls were counted, along with counts of migrants¹⁸ and disbursements of state disaster response funds.

Of course, it is difficult to be sure how this data was used, and whether it was useful at the local level, but the district-level bureaucrats seemed to be part of an effective hierarchical network for tackling the crisis, producing a uniform but adaptive response, all within the constraints imposed by the national government. For example, the initial lockdown included exemptions for agriculture, but it was up to state-level bureaucrats to find ways to adapt markets for harvesting machines after the sudden removal of migrant workers from the labour pool (Vatta, et al., 2020).

The Punjab experience illustrates an important component of the centralization-decentralization debate with respect to federalism in India. State and local bureaucracies are an important implementation arm of the subnational level, and details of policy making can also often be left to these subnational levels. States like Kerala have greater decentralization to the local level, so there are elected representatives and local officials in cities, towns and rural jurisdictions who have appropriate expertise and authority, but it is the collaboration between state and local bureaucrats and politicians that matters in such cases, whatever the details of local governance structures.¹⁹

Especially at the scale of India, state and local factors are difficult for those in the national government to evaluate and incorporate into policy design – the latter arguably more so than the former.²⁰ What is striking about the response to the pandemic in India is how poorly the flailing state concept fit what happened. If anything, what took place was the reverse. Many state, city, and even rural local governments made heroic efforts to manage the pandemic, instituting whatever measures they could manage in terms of contact tracing, local lockdowns, testing and so on.²¹

While early studies focused on mobility data to measure how central and state policies affected social distancing and economic activity, the ultimate test of the effectiveness of subnational pandemic response policies might be differences in excess mortality across states. A broad measure of excess mortality would also capture the effect of pandemic control measures on other causes of death, although it would not capture other health impacts such as on nutrition or severe but non-fatal illness.

Given the implausibility of India's official Covid death statistics, numerous attempts have been made to estimate excess mortality (or sometimes Covid deaths specifically), and all arrive at figures which are several times the official data – in the range of 2 to 4 million deaths, as against an official number of around 0.5 million (e.g., Banaji and Gupta, 2022; Jha et al., 2022; Leffler, et al., 2022). These studies use data from individual states and aggregate, but their estimates and relative mortality rankings for different states vary widely, and do not seem to be reliable enough to judge state-level performance, even if one can control for relevant initial conditions.

One might also examine the variation across states in terms of the other human costs of measures meant to save lives. The loss of livelihoods as the economy shut down had differential impacts, hurting the poor disproportionately more (e.g., Kesar, et al., 2021), as also women (e.g., Abraham, et al., 2021). Districts with pre-existing capabilities and experience under the national workfare scheme (MG-NREGA) were able to cushion the economic shocks better than others, though the distribution of benefits was again not uniform (Afridi et al., 2021).

Most empirical analyses that use national data do not call out variations across states, but an exception is the study by Azim Premji University (2021). This study finds that, for the period September-December 2020, employment losses varied directly with caseload (Figure 3.3., p. 58), but there were significant outliers, with Delhi, Haryana, Uttar Pradesh, and Kerala having job losses well above the regression line, and Karnataka, Odisha, and West Bengal doing better than expected. However, this period does not include the severe 2021 wave, nor does it capture policy changes over time, and differences in undercounting of cases. All these factors imply that tracing a chain of causality from policy design and implementation to outcomes remains problematic.

One important area where the federal dimension came into play was education. India halted in-person education at every level for longer than almost any other country in the world. The resulting learning losses were significant, and highly unequalizing (Schmall and Yasir, 2022).²² Since primary and secondary education are the constitutional responsibility of the states, there were varied responses, but overall, states were quick to shut things down (e.g., DNA Web Team, 2022; India Today Web Desk, 2022), and slow to reopen (contrasting with their approach to festivals and political campaigning).

It is difficult – and somewhat early – to map variations in length of school closures to learning losses and other negative impacts, but one can argue that the centre could have done more to guide states on optimal policies, and to provide support to them for keeping schools open. As an example, the central government prevented Delhi's own government from reopening schools in early 2022

(Mogul and Sud, 2022), and states may still be overreacting to new subvariants of the coronavirus (Zaman, 2022).

Returning to the role of institutional structures in the pandemic response, we have argued for the importance of cooperation between bureaucrats and politicians, and between officials (elected and appointed) at different subnational levels. The traditional use of the term cooperative federalism is reserved for national governments and the level below them (typically, states or provinces). The concept itself tends to be somewhat elastic,²³ and that seems to apply in the Indian pandemic response case as well.

Saxena (2022) is quite positive about the term and its applicability to interactions between the centre and the states during the pandemic response. This is in keeping with the national government's own rhetorical promotion of the term in different contexts. By contrast, Datta and Grover (2021) argue that the response to the pandemic involved an erosion of cooperative federalism. One of their proposed corrective mechanisms is greater use of the Inter-State Council, but the problems with Indian federal structures are possibly deeper than how and when the ISC is used, as we discuss below.

Interestingly Sahoo and Ghosh (2021, p. 19), after detailing the many challenges of intergovernmental relations during the pandemic, still conclude that "*Notwithstanding a series of blanket measures and many centralized decisions from the Centre, the management of COVID-19 has largely moved in the spirit of cooperative federalism.*"

At some level, the applicability of the term "cooperative" to Indian federalism, during the pandemic or otherwise, may be just a semantic preference. What ultimately matters are the myriad details of action and coordination among different levels of government. Several of the India studies note that the central government did much of what it was supposed to in the first phase of the pandemic, seeking policies that would be beneficial at the national level, and acting where it had authority and comparative advantage, including managing emergency healthcare responses, production and procurement of personal protective equipment (PPEs) and medical supplies, and incentivizing development and production of vaccines. However, it tended to fail in aspects of detailed follow-up, especially when the states were involved.

This happened particularly after the national government seemed to prematurely declare victory over the pandemic, and allow a disorganized relaxation of restrictions, so that when the devastating second wave hit in March 2021, it was neither prepared itself, nor had given the states adequate foundations and resources for a proper response. There were shortages of medical equipment and supplies, and of healthcare infrastructure, and the vaccine rollout was also plagued by disagreements and lack of focus.

One way of understanding what happened is that the governance problem is a combination of centralization, defined as greater decision-making power at the centre versus subnational level, and a concentration of decision-making within the centre itself. The latter has been reflected in the manner in which decisions such as the 2016 demonetization have been made, involving a very few people at the centre. Contributing to concentration, the national parliament has eroded over time as an effective

legislative body, with the same process also happening at the level of state legislatures, though apparently with less significant impacts, because of the underlying centralization.²⁴

In addition, at the time of the pandemic, the central government was already engaged in a project of reshaping the concept of Indian citizenship, and it used the pandemic to push through controversial new laws that sought to reform agricultural marketing. This latter process involved diminishing the role of parliament, and encroaching on the states' constitutional assignments.

Whereas a national health emergency provided justification for centralization, no such case existed for agricultural reform. In fact, a massive protest by some sections of India's large population of farmers led to the farm bills being repealed, although this decision was arguably driven by political calculations as important state elections loomed. It was those state elections that contributed to the central government's laxity in dealing with the second wave. Arguably, hubris – which has a greater chance of coming into play if there is concentration – was a compounding factor in that failure to deal with the deadly resurgence of the pandemic.

In sum, India is undergoing a complex set of challenges to its democratic system (Ganguly, 2020; Mukherji, 2020; Purushottaman and Moolakkattu, 2021; Greer, et al, 2022), and the structure of its federal system is only one aspect of these ongoing dynamics.²⁵ The pandemic exposed more general issues of political economy in all countries (e.g., Boettke and Powell, 2021, and Kaplan, et al., 2021, for the U.S.), but India has its own specific process at work.

V Conclusion

The government response to the Covid pandemic in federal systems presented a range of case studies in intergovernmental relations, both coordination and conflict. The case for federal structures is based on trade-offs between factors such as economies of scale and internalization of externalities, which favour higher-level governments, and better information and accountability with respect to constituent preferences, which favour lower-level governments.

The pandemic required multiple types of responses with varying characteristics, some favouring centralized action, such as vaccine development, and others favouring decentralized action, such as local containment measures for hotspots. Matters were compounded by lack of initial lack of understanding of the virus and its transmission, subsequent mutations, and the economic and psychological costs of NPIs such as activity restrictions, masks, and social distancing, which made stable policy decisions and assignments across levels of government more difficult.

In many federal systems, there was pressure for greater centralization, and the Indian case seems to have been marked by relatively high centralization of responses, but this also reflected pre-existing trends toward centralization. However, at times, the Indian response relied more heavily on decentralized responses. This was initially because the national government realized that it did not have the capacity to monitor and enforce stringent national restrictions, but also that restrictions needed to adapt to local situations. Later in the pandemic, the national government seemed to focus

more on its strategic and tactical political objectives, leaving pandemic responses to subnational governments somewhat by default. At the same time, it did not always provide enough support in ways that were best accomplished or coordinated at the national level, including information gathering and sharing, enabling protective measures such as vaccination, and access to medical supplies or PPEs.

A characterization of the Indian response to the pandemic as one of inconsistent centralization seems more appropriate than an alternative view that it was a successful example of cooperative federalism. However, there were instances of joint decision-making or action that could be taken to warrant description as cooperative federalism.

Within the constraints of a centralized federal system, India also exhibited examples of a bureaucracy that functioned quite well in crisis mode, especially at the subnational level, and when acting in concert with politicians that saw themselves as accountable to their constituents. In several cases, such cooperation was enabled by the existence of a layer of numerous local-level elected officials, which did not exist three decades ago, prior to constitutional amendments for strengthening local governments. This newer subnational level of governance supplemented or filled in for the more traditional roles of bureaucrats from the elite administrative and police services.

One can argue that subnational governments did better than might have been expected, given their resource and other capacity constraints. At the national level, the situation was somewhat different, not because of lack of capacity or expertise, but because of over-concentration of decision-making and a tendency to focus on political objectives. All of this was the reverse of Pritchett's model of India's "flailing state."

In the Indian case, the federal system proved relatively resilient, in the face of a centralizing bias in the system, as well as recent trends toward a more executive style concentration of power. The central government might have achieved better outcomes through greater consultation, structures for more inclusive decision-making, and greater willingness to transfer resources to subnational governments for final allocation to those in need.

While these conclusions emerge from a crisis period, they may also apply to more normal circumstances in Indian federal governance. The lesson may be that lower level government organizations need to be given more responsibility, and the funds to carry out those tasks, so they can learn by doing in situations where citizens can hold them more directly accountable than is possible for a distant national government. Learning by doing builds the needed human and organizational capital at the local level, where it has not been allowed or enabled to develop in an adequate manner.

In any case, Pritchett's head and limbs metaphor can lead to thinking that forecloses the ability to imagine a real solution to the "flailing state" – more effective decentralization, especially to local governments, where implementation ultimately has to take place, for many everyday public services, and not just during crises. India has over a billion heads, each with a brain, and not just one.

References

- Abraham, Rosa, Amit Basole, and Surbhi Kesar (2021). Down and out? the gendered impact of the Covid-19 pandemic on India's labour market. CSE Working Paper, Centre for Sustainable Employment, February.
- Afridi, Farzana., Kanika Mahajan, and Nikita Sangwan (2021). Employment guaranteed? Social protection during a pandemic. Discussion Paper Series, IZA Institute of Labor Economics, Bonn, Germany, February.
- Azim Premji University (2021). *State of Working India 2021: One year of Covid-19*. Centre for Sustainable Employment, Azim Premji University, Bengaluru, India, August.
- Banaji, Murad, and Aashish Gupta (2022). Estimates of pandemic excess mortality in India based on civil registration data. *PLOS Global Public Health*. 2(12): e0000803.
<https://doi.org/10.1371/journal.pgph.0000803>
- Boettke, Peter and Benjamin Powell (2021). The political economy of the COVID-19 pandemic. *Southern Economic Journal*. 87, 1090– 1106.
- Chathukulam Jos and Joseph Tharamangalam (2021). The Kerala model in the time of COVID19: Rethinking state, society and democracy. *World Development*. January; 137:105207.
- Chattopadhyay, Rupak, Felix Knüpling, Diana Chebenova, Liam Whittington and Phillip Gonzalez (eds.) (2022). *Federalism and the Response to COVID-19: A Comparative Analysis*. New York: Routledge.
- Chattopadhyay, Rupak, Felix Knüpling and Diana Chebenova (2022). Impact of Covid-19 on the Comparative Practice of Federalism: Some Preliminary Observations. *Cadernos Gestão Pública e Cidadania*, 27 (87), e85110, 1-16.
- Choutagunta, Abishek, G.P. Manish, and Shruti Rajagopalan (2021). Battling COVID-19 with dysfunctional federalism: Lessons from India. *Southern Economic Journal*. 87, 1267– 1299.
- Datta, Ushashi and Adwiteya Grover (2021). Sparring Centre-States: How Centripetal Governance During a Pandemic Has Eroded Co-operative Federalism in India, *Rule of Law Journal*, 2, 1-28.
- DNA Web Team (2022). From Tamil Nadu to Delhi, THESE states have shut down schools amid COVID-19 surge. *DNA*, January 3, <https://www.dnaindia.com/india/report-from-tamil-nadu-to-delhi-these-states-have-shut-down-schools-amid-covid-19-surge-2926646>.
- Dreze, Jean, and Anmol Somanchi (2021). The Covid-19 crisis and people's right to food. Working Paper, May 31.
- Dutta, Anwasha and Harry W. Fischer (2021). The local governance of COVID-19: Disease prevention and social security in rural India. *World Development*, 138, 105234, 11 pp.
- Ganguly, Sumit (2020) Mangling the COVID Crisis: India's Response to the Pandemic, *The Washington Quarterly*, 43 (4), 105-120.

- Ghosh, Abantika (2021). Bihar detected only 1 in 134 Covid cases, UP 1 in 100, Kerala 1 in six, govt. data shows, *The Print*, July 30, <https://theprint.in/health/bihar-detected-only-1-in-134-covid-cases-up-1-in-100-kerala-1-in-six-govt-data-shows/705950/>.
- Gill, Navyug (2020), Essential before the Pandemic: Migrant Labour and the Politics of Language, *Economic and Political Weekly*, 55 (26-27), 19-21.
- Greer, Scott L., Holly Jarman, Michelle Falkenbach, Elize Massard da Fonseca, Minakshi Raj and Elizabeth J. King (2021). Social policy as an integral component of pandemic response: Learning from COVID-19 in Brazil, Germany, India and the United States. *Global Public Health*, 16 (8-9), 1209-1222, DOI: 10.1080/17441692.2021.1916831.
- Greer, Scott L., Elizabeth King and Elize Massard da Fonseca (eds.) (2021). *Coronavirus Politics: The Comparative Politics and Policy of COVID-19*. Ann Arbor: University of Michigan Press.
- Greer, Scott L., Elize Massard Fonseca, Minakshi Raj and Charley E. Willison (2022). Institutions and the politics of agency in COVID-19 response: Federalism, executive power, and public health policy in Brazil, India, and the U.S. *Journal of Social Policy*, 1-19, DOI: <https://doi.org/10.1017/S0047279422000642>.
- India Today Web Desk (2022). Schools closed amid Covid-19 surge: From Odisha to Gujarat to Delhi, check latest updates here. *India Today*, January 8, <https://www.indiatoday.in/education-today/news/story/schools-closed-amid-covid-19-surge-from-odisha-to-gujarat-to-delhi-check-latest-updates-on-school-closure-1897609-2022-01-08>.
- Jha, Prabhat, Yashwant Deshmukh, Chinmay Tumble, Wilson Suraweera, Aditi Bhowmick, Sankalp Sharma, Paul Novosad, Sze Hang Fu, Leslie Newcombe, Hellen Gelband, and Patrick Brown (2022). COVID mortality in India: National survey data and health facility deaths. *Science*, 375, 667–671
- Kaplan, Scott, Jacob Lefler and David Zilberman (2021). The political economy of COVID-19. *Applied Economic Perspectives and Policy*, 44, 477-488.
- Kesar, S., Abraham, R., Lahoti, R., Nath, P., and Basole, A. (2021). Pandemic, informality, and vulnerability: impact of COVID-19 on livelihoods in India. *Canadian Journal of Development Studies. / Revue canadienne d'études du développement*, DOI: 10.1080/02255189.2021.1890003, 20 pp.
- Kumar, Himangshu, Manikantha Nataraj and Srikanta Kundu (2022). COVID-19 and Federalism in India: Capturing the Effects of State and Central Responses on Mobility. *The European Journal of Development Research*, 34, 2463–2492. <https://doi.org/10.1057/s41287-021-00463-4>.
- Lefler, Christopher T., Joseph D. Lykins V, Saurav Das, Edward Yang, and Sneha Konda (2022). Preliminary Analysis of Excess Mortality in India During the COVID-19 Pandemic. *American Journal of Tropical Medicine and Hygiene*, 106(5), pp. 1507–1510.

- Mahmood, Zaad and Achin Chakraborty (2022).: The pandemic and the state: Interrogating capacity and response to COVID-19 in West Bengal, WIDER Working Paper, The United Nations University World Institute for Development Economics Research (UNU-WIDER), Helsinki.
- Mishra, Swasti Vardhan, Sk. Mafizul Haque and Amiya Gayen (2020), COVID-19 in India transmits from the urban to the rural. *International Journal of Health Planning and Management*, 35, 1623-1625, DOI: 10.1002/hpm.3047.
- Mogul, Rhea, and Vedika Sud (2022). After more than 600 days shut out, Delhi's students just want to go back to school. *CNN*, January 26, <https://www.cnn.com/2022/01/27/india/india-delhi-schools-reopen-600-days-intl-hnk/index.html>.
- Mukherji, Rahul (2020). Covid vs. Democracy: India's Illiberal Remedy, *Journal of Democracy*, 31 (4), 91-105.
- Pareek, Urvashi and Nagendra Ambedkar Sole (2021). Institutional Responses to the Management of Covid-19 Crisis: Lessons from the Bhilwara and the Ramganj Models of Rajasthan. *Indian Journal of Public Administration*, 67(3): 351–364,
- Pritchett, Lant (2009). Is India a Flailing State?: Detours on the Four Lane Highway to Modernization. HKS Faculty Research Working Paper Series RWP09-013, John F. Kennedy School of Government, Harvard University.
- Purushothaman, Uma, and John S. Moolakkattu (2021). The Politics of the COVID-19 Pandemic in India. *Social Sciences*, 10 (381). <https://doi.org/10.3390/socsci10100381>.
- Raj, Minakshi (2021). India's Response to COVID-19, in Greer et al. (eds.), *Coronavirus Politics: The Comparative Politics and Policy of COVID-19*, 178-195.
- Rao, M. Govinda, and Nirvikar Singh (2005), *The Political Economy of Federalism in India*, New Delhi: Oxford University Press.
- Rao, M. Govinda (2022), *Studies in Indian Public Finance*, Oxford, UK: Oxford University Press.
- Rao, Nitya, Nivedita Narain, Shuvajit Chakraborty, Arundhita Bhanjdeo and Ayesha Pattnaik (2020). Destinations Matter: Social Policy and Migrant Workers in the Times of Covid, *The European Journal of Development Research*, 32, 1639–1661. <https://doi.org/10.1057/s41287-020-00326-4>.
- Ray, Debraj, and S. Subramanian. (2020). India's lockdown: An interim report. NBER Working Paper 27282, May.
- Roy, Indrajit (2022). The social foundations of (in)effective states: Uttar Pradesh's response to the COVID-19 pandemic, WIDER Working Paper, No. 2022/61, The United Nations University World Institute for Development Economics Research (UNU-WIDER), Helsinki.
- Sahoo, Niranjan, and Ambar Kumar Ghosh (2021). The COVID-19 Challenge to Indian Federalism, *ORF Occasional Paper No. 322*, June, Observer Research Foundation.

- Sahoo, Niranjana, and Manas Ranjan Kar (2021). Evaluating Odisha's COVID-19 response: from quiet confidence to a slippery road. *Journal of Social and Economic Development*, 23 (Suppl 2): S373–S387.
- Saunders, Cheryl (2022). Grappling with the pandemic: Rich insights into intergovernmental relations, Chapter 20 in Steytler, (ed.), *Comparative Federalism and Covid-19: Combating the Pandemic*, 375-395.
- Saxena, Rekha (2022). Federalism and the COVID-19 crisis: Center-state apposite relations in India, in Chattopadhyay, et al., *Federalism and the Response to COVID-19: A Comparative Analysis*, 95-103.
- Schmall, Emily and Sameer Yasir (2022). India Schools Stay Closed, and Hopes Fade for a Lost Generation. *New York Times*, January 27, <https://www.nytimes.com/2022/01/27/world/asia/india-schools.html>.
- Singh, Abhijeet, Mauricio Romero and Karthik Muralidharan (2022). Covid-19 Learning Loss and Recovery: Panel Data Evidence from India. NBER Working Paper No. 30552. NBER, Cambridge, MA, October.
- Singh, Ajay Kumar (2022). Pandemic governance in India: The ongoing shift to 'national federalism,' Chapter 15 in Steytler (ed.) *Comparative Federalism and Covid-19: Combating the Pandemic*, 279-297.
- Singh, Balbir B., Mark Lowerison, Ryan T. Lewinson, Isabelle A. Vallerand, Rob Deardon, Játinder P. S. Gill, Baljit Singh and Herman W. Barkema (2021). Public health interventions slowed but did not halt the spread of COVID-19 in India, *Transboundary and Emerging Diseases*, 68, 2171– 2187. <https://doi.org/10.1111/tbed.13868>.
- Singh, Nirvikar (2007). Fiscal Federalism and Decentralization in India, background paper for World Bank Independent Evaluation Unit, September.
- Singh, Nirvikar (2021). The 'flailing state' revisited: States and city govts handled Covid pandemic better than Centre. *Financial Express*, May 3, available at <https://www.financialexpress.com/opinion/the-flailing-state-revisited-states-and-city-govts-handled-covid-pandemic-better-than-centre/2244565/>.
- Steytler, Nico (2022). Federalism under pressure: Federal 'health' factors and 'co-morbidities', Chapter 21 in Steytler (ed.), *Comparative Federalism and Covid-19: Combating the Pandemic*, 396-422.
- Steytler, Nico (ed.) (2022). *Comparative Federalism and Covid-19: Combating the Pandemic*. New York: Routledge.
- Tandel, Vaidehi, Sahil Gandhi, Shaonlee Patranabis, Luís M. A. Bettencourt and Anup Malani (2021). Infrastructure, enforcement, and COVID-19 in Mumbai slums: A first look. *Journal of Regional Science*, 62, 645–669.

- Thomas, Vineeth (2021). Who Manages What? Covid-19 and the Centre-State Division of Responsibilities in Indian Democracy. *Artha - Journal of Social Sciences*, 20 (3), 1-23.
- Vatta, K., Bhogal, S., Petrie, C. A., Greens, A. S., and Dixit, S. (2020). Impact of COVID-19-lockdown on Punjab agriculture. CDEIS Policy Brief Series on Punjab Economy, October.
- Yang, Junyun, Leiyu Shi, Haiqian Chen, Xiaohan Wang, Jun Jiao, Manfei Yang, Meiheng Liu and Gang Sun (2022). Strategies comparison in response to the two waves of COVID-19 in the United States and India. *International Journal for Equity in Health*, 21 (57), 12 pp.
<https://doi.org/10.1186/s12939-022-01666-9>.
- Zaman, Sumaila (2022). Covid-19 Sub-Variant BF.7 Detected In India; Will Schools, Colleges Close? *India.com*, December 22, <https://www.india.com/education/omicron-sub-variant-bf-7-latest-news-covid-19-advisory-issued-due-to-new-bf-7-variant-will-schools-and-colleges-close-check-latest-guidelines-here-5816537/>

Notes

¹ While there is an extensive literature on the characteristics of federal systems, for the present context, Spaulding (2022) and Steytler (2022) provide sufficient conceptual frameworks.

² Chattopadhyay, et al. (eds.) do provide a brief epilogue, covering 2021, a period including new waves of infection and vaccine rollouts.

³ They also consider a range of political, social and institutional issues such as populism, competition for taking credit or assigning blame,

⁴ These arguments were first presented in N. Singh (2021).

⁵ Additional detail on various aspects of India's federal system can be found in Rao and Singh (2005) and Rao (2022). The latter also includes a discussion of the public finance impacts of India's response to the pandemic.

⁶ Manmohan Singh served as Prime Minister while a Rajya Sabha member, but this reflected a unique and unusual set of political circumstances.

⁷ The union territories of Jammu & Kashmir and Puducherry both have elected legislatures. Until recently, Jammu & Kashmir was a state, with a special status that was supposed to grant it additional autonomy.

⁸ The ISC includes the Prime Minister, state Chief Ministers, and several central cabinet ministers as members. While the ISC is merely advisory, it has formalized collective discussion and approval of several important matters impinging on India's federal arrangements, including tax sharing and inter-state water disputes. When India had a national planning commission, a National Development Council served as a more specialized discussion and bargaining forum for resource transfers. When India moved to a unified VAT-style Goods and Services Tax (GST) it created a GST Council to bargain over and recommend on GST coverage and rates. It comprises the national and state finance ministers.

⁹ In the 1990s, the Court did make decisions checking the centre's ability in matters such as overriding subnational political authority by means such as dismissing state legislatures, but more recently, it has been more favourable toward central authority in various rulings.

¹⁰ This paper provides a summary narrative, aiming to highlight the general features of India's response to the pandemic. More detail can be found in Raj (2021), Sahoo and Ghosh (2022, Table 1), Saxena (2022), A.K. Singh (2022), and Yang, et al. (2022, Table 2).

¹¹ The accuracy of Indian pandemic data has been much debated, because of the weaknesses in mechanisms for recording deaths and causes of death. In general, various arguments have been made about proper attribution of cause of death, since Covid-19 sometimes stressed the body's systems in ways that led to cardiac events or other proximate triggers of mortality. Another issue is the impact of the lockdowns and shifting of healthcare resources on a wide range of other health conditions and mortality due to other causes. This is a technical discussion beyond the scope of this paper, and most of the arguments here do not depend on precise numerical counts, though the mortality issue is taken up later in the paper. Several of the references cited for detailed accounts of the pandemic's progress in India do not cover this second wave in 2021, but Sahoo and Ghosh (2022) and Yang, et al. both cover the second wave in 2021. Health economist Rijo John used seroprevalence survey data to estimate actual cases, and this exercise found enormous variation in undercounting across states, ranging from an undercounting factor of 6 in Kerala to 134 in Bihar, with a national average factor of 33 (Ghosh, 2021).

¹² In addition to this issue being discussed in the general narratives cited earlier, Ray and Subramanian (2020), Ganguly (2020), and Dreze and Somanchi (2021) provide some discussion of the national lockdown and its initial impacts.

¹³ Mishra et al. (2020) establish some early facts about the spread from urban to rural India, while B.B. Singh, et al. (2021) offer some conclusions on the extent to which public health interventions slowed the spread of the virus. Kumar, et al. (2022) and Choutanga, et al. (2022) measure the impacts of central and state lockdown measures on actual mobility, with implications for assessing how effective those restrictions were in practice.

¹⁴ Greer, et al. (2021) compare social policy in Brazil, Germany, India and the United States. Rao et al. (2020) document variation across Indian states in governmental support for migrant workers in the initial lockdown.

¹⁵ Kumar, et al. (2021) estimate indices of state restrictiveness that preceded the national lockdown, and show that these were correlated with the mobility impacts after the national lockdown, which implicitly captures differences in post-lockdown implementation quality and administrative capacity.

¹⁶ Rao, et al. (2021) establish the significant differences in the social policies accessible to migrants from Bihar across four different host states: Gujarat, Kerala, Maharashtra and Uttar Pradesh. Initial consultation with the states at the beginning of the pandemic might have made the centre aware of the issues associated with social protection of migrant worker populations in different parts of the country.

¹⁷ The often-mentioned case of Bhilwara district in Rajasthan, where strict pandemic control measures were implemented by the bureaucracy, had similar features (Pareek and Sole, 2021).

¹⁸ In many parts of India, migrants work in cities as domestic labour or construction workers, but Punjab's migrant laborers are mostly employed in agriculture: see Gill (2020) for an overview of their economic role, and some commentary on the impacts of the pandemic on them and on the rural economy of Punjab.

¹⁹ Again, for issues that matter in a sustained long-run manner such as education and local sanitation, a more decentralized governance structure may be better, since local officials and bureaucrats have more direct accountability than do those at the state-level (N. Singh, 2007), but in crisis situations this may be less of a factor.

²⁰ Several of the India studies make this point in various ways, including Raj (2021), Sahoo and Ghosh (2021), Saxena (2022) and A.K. Singh (2022).

²¹ For example, Dutta and Fischer (2021) use cases from Kerala, Odisha and Rajasthan to illustrate how responses to Covid-19 were “coordinated through a combination of low-level administrative authorities, elected village governments, and other state and civil society groups” (p. 10).

²² I am especially grateful to E. Somanathan for raising this issue, which deserves further analysis. Singh, et al. (2022) provide the results of an experimental program to reverse learning losses in the state of Andhra Pradesh. Programs like this can be important for the speed and character of India’s overall economic recovery.

²³ From a technical perspective, cooperative situations in strategic situations refer to ones where binding agreements can be signed. This would be akin to signing treaties between nations, and it is not clear what the corresponding legal mechanism is for the centre and states. Constitutional assignments typically do not provide enough specificity for individual situations. In formal strategic analysis, repeated interactions may support cooperative outcomes without binding agreements – the underlying game is noncooperative in that case. Thomas (2021) argues for more specificity in the constitution, but it is not clear if this can ever be achieved at an adequate level. Many situations involve unforeseen circumstances and ambiguity. This is analogous to the difficulty of writing complete contingent contracts in market settings.

²⁴ Greer, et al. (2022) analyse the consequences of this exercise of executive power in comparing Brazil, India and the United States.

²⁵ One centralizing aspect of Indian federalism that has always been important, but became more so during the pandemic, is the mismatch between revenue and expenditure authorities at different levels of government. During the pandemic, the central government, which collects the new joint Goods and Services Tax (GST) delayed giving states their shares, increasing fiscal pressures on them: see A.K. Singh (2022), for example.